

THE ABSOLUTE ADVANTAGE



THE ANNUAL MAGAZINE OF FINANCE AND INVESTMENT CELL
ARYABHATTA COLLEGE, UNIVERSITY OF DELHI



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"It is our mind's ability to embrace the beauty of the unexpected; for it is in the uncertainty that humans truly find the treasures hidden in plain sight "

ABOUT ARYABHATTA COLLEGE



Aryabhata College, named after the legendary mathematician and astrologer who, among his many inventions, blessed us with the discovery of 0 and laid the foundations of modern mathematics more than two millennia ago, is quickly rising the ranks of Delhi University and becoming a force to be reckoned with.

It is becoming a top choice for undergraduate study for students all over the country, having been accredited with an A+ by NAAC, being located in the posh and central location of South Campus, Anand Niketan, and providing students with state-of-the-art facilities and specializations in multiple fields of Science, Commerce, and Humanities. Aryabhata College, founded in 2014-15, has already established a reputation for generating exceptional graduates from varied backgrounds and skill sets. Apart from the rigorous academic schedule, the college also focuses on the overall development of the student, providing students with a variety of options ranging from sports to societies and seminars hosted by some of the country's most prominent personalities with backgrounds in economics, finance, business, commerce, sports, and so on.

To summarize, despite being one of Delhi University's youngest colleges, Aryabhata College has become one of the most sought-after colleges for Delhi University aspirants due to its ability to maintain a perfect education-co balance for students, earning a grade higher than most other colleges, and providing a plethora of options for personal and professional growth.

ABOUT FINANCE AND INVESTMENT CELL



Finance and Investment Cell is a body founded by, operated by and for the benefit of college students. It is a dynamic society that bridges the gap between theoretical learning and application-based usage of the curriculum. Active in every well known college, FIC also helps in the interconnectivity of colleges associated with them, even in the opposite corners of the country.

FIC Aryabhata, founded in 2017, has already achieved great success in a short period. FIC Aryabhata offers it all: pan-India events, personality-led speaker conclaves, a mind-boggling magazine, and charity efforts to help the destitute. The society, made up of both experienced seniors and curious freshmen, is an excellent place for students to hone their research, content, design, and connectivity skills, but it is also a meeting place for all finance enthusiasts to connect and discuss finance, economics, geopolitics, and a variety of other topics.

With Finomena 2023 being a giant success, the society aims to have a flawless remainder of the year by providing charitable services under Project Samarth, the launch of their annual flagship magazine The Absolute Advantage and ending on a high note with Euphony, a pan India event attracting over 10,000 students.

To conclude, FIC Aryabhata is the perfect place for freshers and finance enthusiasts alike to develop in related topics and learn new skills and hone existing ones.



ABOUT THE ABSOLUTE ADVANTAGE

The annual magazine of the Finance and Investment Cell, The Absolute Advantage covers topics from Economics, Business, Commerce, Geopolitics, History, Current Affairs, to — you guessed it right — Finance. Acknowledged by The Foreign Ministry of Mexico, The Absolute Advantage is one of the few magazines in the country to receive such acclaim in such a short period.

The content of the magazine, from text to design, is done by the society's associate members, under the leadership and guidance of the core team members, making it a wonderful platform for students to learn and share their opinions about the world. The magazine also invites several prominent personalities from the country and beyond to share their two cents on various themes in the form of an interview or an article, encouraging interaction between students and veterans from various industries and making it an excellent learning platform for the readers.

To sum it up, The Absolute Advantage is a one-stop destination for college students to read, learn and expand their horizons. Most importantly, it is an excellent opportunity for the members to hone their skills and present their thoughts through a recognised publication.



PRINCIPAL'S MESSAGE

It is with great pleasure and enthusiasm that I address you through this edition of the Finance and Investment Cell's esteemed magazine. Finance has always played a major role in determining the success of an economy. Basic financial understanding, especially amongst the youth, is a necessity for fulfilling the dream of a better future. In today's rapidly changing world, where financial literacy and prudent decision-making are paramount, it becomes imperative for us to delve deeper into the realm of finance and investment.

As future leaders, it is crucial for each of you to develop a comprehensive understanding of financial matters. The ability to manage personal finances, make informed investment decisions, and comprehend the intricacies of the global economy will undoubtedly serve you well throughout your lives. We, at Aryabhata College, stand for inclusive growth and believe in providing ample opportunities to our students to assist them in discovering their potential appropriately. As a value-based institution, we are dedicated to cultivating a desire to evolve into responsible human beings. Finance and Investment Cell, Aryabhata College was set up with an aim to mobilise novel opportunities to educate and inspire members to explore real-life business practices, analyse complex challenges in the

world of Finance and strive towards becoming leaders who harbour transformative financial acumen. Over time, this platform established itself as one of the leading FICs in the university. The Cell has been outdoing its efforts and contributions each year through professionalism in its economic, geopolitical analysis and financial research.

I am pleased to congratulate the Finance and Investment Cell on the publication of the third issue of its annual finance magazine, 'The Absolute Advantage'. I commend the vigour of all the students who have been working tirelessly to come up with such a comprehensive project in the form of a magazine. I extend my gratitude to all the guest contributors for their insightful submissions and wish them success in their future endeavours. I hope the magazine is a huge success and fulfills its purpose. It is wonderful to watch FIC excel with time, and I wish them all the very best for the future.



PROFESSOR
MANOJ SINHA

FACULTY'S MESSAGE

PROF. J.K SINGH
CONVENOR



It brings me immense pleasure and a deep sense of pride to acknowledge the remarkable achievement of the Finance and Investment Cell at Aryabhata College, as they unveil the much-anticipated third edition of their annual magazine, aptly titled "The Absolute Advantage". The growth and impact demonstrated by the Finance and Investment Cell within a relatively short span of time is truly commendable. The relentless commitment of the students involved in this initiative has consistently transcended the mere dissemination of knowledge. Instead, they have forged a path towards robust discussions encompassing the realms of Finance, Economics, and Geopolitics. Their proactive approach to fostering learning, both theoretically and practically, sets them apart. Moreover, their ability to attract some of the brightest minds in the nation as esteemed guests and collaborators for their magazine and online series is a testament to their dedication.

In the previous year, the Finance and Investment Cell embarked on a journey of diversification, propelling themselves to greater heights. Their efforts were rewarded when the magazine earned recognition from the Foreign Ministry of Mexico—an achievement that underscored their international impact. In this current edition, they return with fresh insights into the nation's evolving landscape and the intricacies of the global economy. By offering their readers a comprehensive and engaging perspective on the dynamic world of finance, they exemplify their commitment to knowledge dissemination.

I would also like to take a moment to extend my heartfelt appreciation to every member of this society. Their persistent and praiseworthy endeavors exemplify their unwavering dedication to expanding the horizons of their diverse and enriching pursuits. Their contribution resonates as a testament to their sense of responsibility and their relentless pursuit of excellence.

As we delve into the pages of "The Absolute Advantage", let us embrace the wealth of knowledge it offers. May this magazine serve as a source of inspiration, propelling us towards a deeper understanding of the intricate tapestry that is the world of finance. Let us recognize the Finance and Investment Cell's efforts as a beacon guiding us towards enlightenment in an ever-changing financial landscape.

FACULTY'S MESSAGE

DR. PRITIKA DUA
CO-ORDINATOR

The inception of the Finance and Investment Cell at Aryabhata College was driven by a visionary goal—to nurture and disseminate financial knowledge among students. This platform serves as a vibrant hub where ideas are shared, discussions are sparked, and debates flourish. Since its establishment in 2017, this cell has demonstrated a relentless upward trajectory, expanding its influence with each passing day.



The students have consistently demonstrated their remarkable prowess in translating their aspirations into action. Their dedication to facilitating growth through the exchange of knowledge has been truly inspiring. The evolution of the cell has been a journey marked by continuous efforts to broaden its scope. From its humble beginnings, it has now embraced competitive events, conclaves, and an engaging online series, all contributing to its dynamic nature.

The launch of the third annual edition of "The Absolute Advantage," the cell's flagship magazine, is a testament to its prowess. With this endeavor, the Finance and Investment Cell at Aryabhata College has once again proven its mettle, positioning itself not just as a participant, but as a contender on par with renowned institutions within the University of Delhi. "The Absolute Advantage" embodies the culmination of extensive and factual research undertaken by the young minds within the cell.

This magazine delves into a myriad of topics, offering insights into Finance, Business, Economics, Geopolitics, Fintech, Sustainability, and Policy. The breadth of coverage showcases the depth of exploration undertaken by these driven individuals. My heartiest congratulations go out to the entire Finance and Investment Cell for embarking on this new endeavor. As they stand on the cusp of future challenges, I extend my best wishes to every member. May your journey be marked by continued growth, exploration, and meaningful contributions.



PRESIDENT'S NOTE

I would like to present to you the much-anticipated third edition of "The Absolute Advantage," the annual publication of the Finance and Investment Cell of Aryabhata College. As the President of this exceptional team of over 100 talented individuals, it is with great enthusiasm and intellectual fervour that I present to you the culmination of our collective efforts.

The third edition of "The Absolute Advantage" is a testament to our continuous endeavours in the realm of finance and investment, and we are immensely grateful for the support we have received from our principal, Prof. Manoj Sinha sir, our convener, Prof. JK Singh sir, our coordinator, Dr Pritika Dua ma'am and our dear advisory team. Their unwavering guidance, belief in our vision, and encouragement have been instrumental in our journey.

But The Absolute Advantage is more than just a publication. It embodies the spirit of teamwork and the vibrant energy of our student community and even the occasional setbacks that have shaped us into the individuals we are today.

I extend my deepest gratitude to my co-core members and very talented team for their unwavering support and intellectual brilliance. Their intellect, and tireless efforts have been the driving force behind the success of this publication. It is through their collaborative spirit and unwavering commitment to excellence that we have been able to push the boundaries of knowledge and create something truly remarkable.

As you delve into the depths of "The Absolute Advantage," I am sure that you will embark on an intellectual voyage filled with discovery and inspiration. Let the research, analysis, and innovative ideas presented within these pages stimulate your intellect, challenge your perspectives, and ignite your passion for the world of finance.



VICE PRESIDENT'S NOTE



Finance and Investment Cell has always stood as a symbol of excellence and innovation. The cell is unique because of its members who are constantly and dedicatedly working to take the cell to new heights.

The third edition of our Annual Magazine, The Absolute Advantage reflects the values and spirit that define our organization, highlighting the collective growth and progress we have achieved together as a team.

Within these pages, you will find a bundle of experiences, insights, and accomplishments that demonstrate the impact that we as a team are trying to create. From inspiring success stories of entrepreneurs to groundbreaking hard work of Civil Servants, from thought-provoking articles to glimpses into the projects, events and initiatives that we have undertaken, this magazine captures the essence of our society.

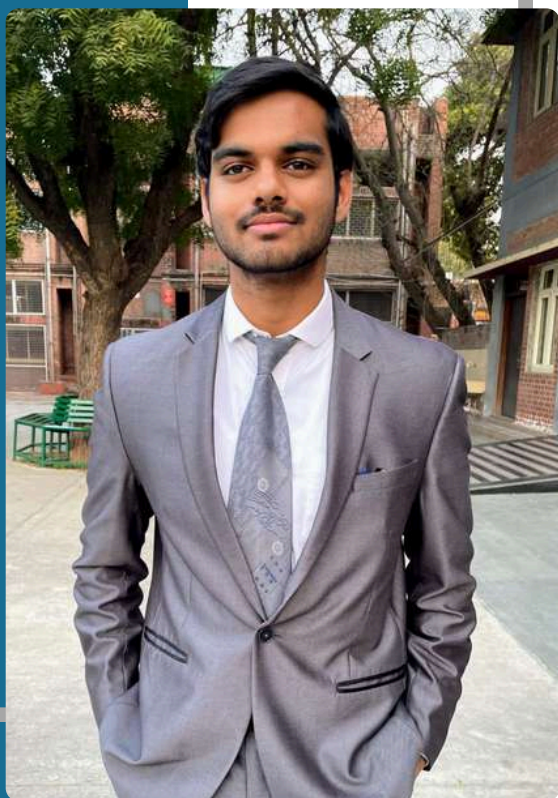
As the Vice President of this Cell, I would like to express my deepest gratitude to the editorial and designing team for their relentless dedication and commitment in bringing this magazine to life. Their efforts have ensured that each article, photograph, and design element reflects the highest standards of quality, creativity, and professionalism.

I also extend my heartfelt appreciation to all the contributors whose valuable insights and experiences have enriched the pages of this publication. It is through your words and stories that has made us stand apart. The collective efforts of our team will definitely inspire current and future generations of members to strive for excellence and make a meaningful impact through FIC.





STRATEGIC DIRECTOR'S NOTE



Financial literacy is the cornerstone of economic empowerment and personal financial well-being. It equips individuals with the necessary skills and knowledge to make informed decisions, navigate complex financial landscapes, and secure a prosperous future. The third edition of our annual magazine, "The Absolute Advantage", recognizes the urgent need for financial literacy and strives to bridge this knowledge gap through its insightful content. It is the culmination of our team's unwavering dedication and hard work. Every article, interview, and analysis featured in this edition is a testament to their relentless pursuit of excellence. Their commitment to producing high-quality and informative content is truly inspiring. Through our magazine, we aim to educate, enlighten, and inspire our readers. The magazine covers a diverse range of topics, including personal finance management, economics, geopolitics and emerging technologies. Our articles provide practical insights, expert opinions, and real-life examples, making complex financial concepts accessible to all.

"The Absolute Advantage" is a manifestation of our belief in the transformative power of knowledge. It serves as a platform to empower individuals to take charge of their financial future and make informed decisions. We hope that this edition will serve as an inspiration for our readers to explore and expand their financial literacy. I extend my heartfelt gratitude to our principal, Prof. Manoj Sinha sir, our convener, Prof. JK Singh sir, our coordinator, Dr Pritika Dua ma'am for their continued support and valuable guidance which have helped us reach the heights we reached today.

Together, let us embark on a journey of financial empowerment and exploration with "The Absolute Advantage" as our guiding light.



THE MAGAZINE TEAM 2023

EDITOR'S NOTE



ANANT AGGARWAL

Embarking on a journey beyond the realms of the ordinary, this annual magazine invites you to dive into a landscape of boundless inspiration and profound insight. With every article meticulously penned, each image artistically captured, and every design element thoughtfully placed, our pages come alive as you read through them. I, in my role as Editor-in-Chief, am profoundly honored to present a compilation that encapsulates the diverse tapestry of contemporary narratives.

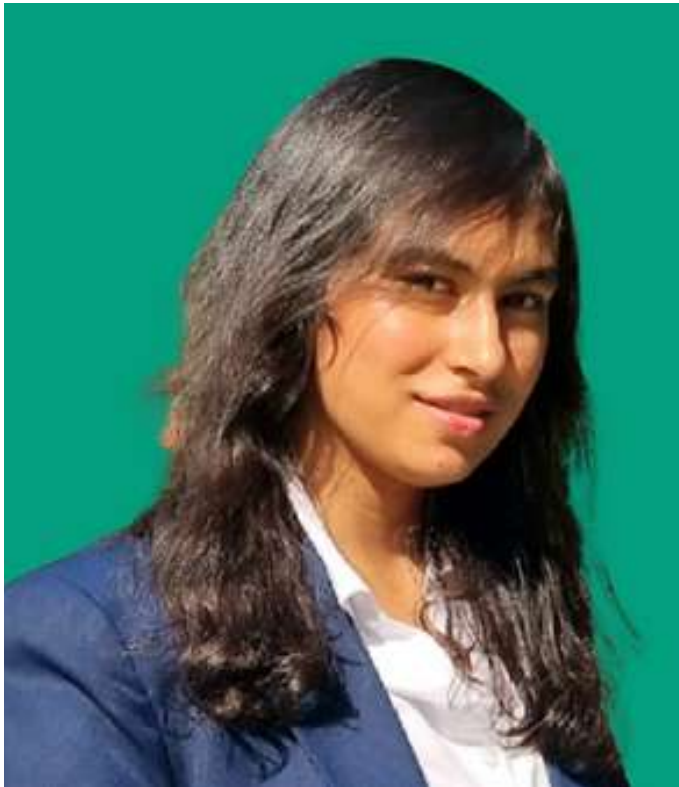
This magazine serves not only as a mirror to our times but also as a canvas where creativity finds its voice and intellect its expression. The pages within stand as an unrelenting commitment of our team. Each member's

contribution, whether grand or subtle, has harmoniously blended to create a composition that resonates with brilliance.

In extending my gratitude, I am reminded of the saying that a journey is best measured in the company you keep. To my remarkable team, your passion has ignited a flame that radiates through these pages. Your ingenuity has transformed ideas into tangible works of art. Your collaborative spirit has shaped this magazine into an embodiment of collective brilliance. It is with immense pride that I share this creation with our readers, hoping that it sparks imagination, stimulates thought, and stands as an eternal memento of intellect and creativity entwined.

As we immerse ourselves in the myriad stories and insights offered within these pages, let us not only celebrate the power of human expression but also the beauty of shared accomplishment. Thanking entire team for tireless dedication, countless hours, and immense belief in the vision that has manifested before us. This magazine belongs to each one of us—a collaborative masterpiece reflecting the very essence of our collective journey.

EDITOR'S NOTE



TRIGUNA JAIN

I am thrilled to present to you the latest edition of our Finance and Investment Cell's magazine. As we launch this publication, I am reminded of the countless hours of dedication and hard work put in by our team to bring you insightful articles, expert opinions, and the latest trends in the world of finance and investment.

In a world marked by constant change and uncertainty, as we navigate through the complexities of global economies, it is imperative that we stay informed and adapt to the evolving landscape. This magazine aims to be your trusted companion on this journey, providing you with valuable insights and knowledge that can help you make informed

decisions and seize opportunities.

One of the highlights of this edition is the youth's perspective on India in 2030. Furthermore, we have interviewed industry leaders and professionals who generously shared their experiences and wisdom with us. These interviews provide a unique perspective on the challenges and opportunities in the finance and investment sector, making them an invaluable resource for our readers.

As the editor-in-chief, I am particularly proud of the teamwork and dedication exhibited by our Finance and Investment Cell members. Their passion for finance and their commitment to delivering quality content is truly commendable. I would like to extend my gratitude to each member of our team for their hard work and creativity.

In closing, I invite you to immerse yourself in the pages of this magazine, explore the articles, and gain insights that will empower you and provide you with different perspectives on a subject which you might consider mundane. Remember that knowledge is the key to success in the world of finance and investment, and we are here to provide you with the tools you need. I hope you find this edition both informative and inspiring, and it would help plant a seed of knowledge in the minds of our audience.



As the designers of the annual finance magazine, "The Absolute Advantage," we are thrilled to present this captivating publication, meticulously crafted by the Finance and Investment Cell. Our mission is to bring you a visually stunning and intellectually stimulating experience, delving deep into the realm of finance, investment, and beyond.

Within the captivating pages of "The Absolute Advantage," you will embark on a journey that uncovers the intricacies of the world of business, explores a vast variety of sectors and subjects, and showcases the triumphs and challenges faced by industry leaders. Through a harmonious blend of captivating visuals and thought-provoking design elements, we strive to captivate your imagination and provide you with an immersive reading experience like no other.

Our team of talented designers has poured their creativity, passion, and expertise into every pixel, color, and layout, ensuring that each page evokes a sense of elegance and sophistication. We have meticulously tried to curate a visual narrative that complements the insightful articles, interviews, and case studies within the magazine.

Thank you for joining us on this exciting journey. Enjoy the vibrant tapestry of "The Absolute Advantage" and let it guide you towards a future of financial success.

Best regards,
Aryan & Garv
Finance and Investment Cell

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INDIA भारत IN 2030

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JOURNEY TO INDIA 2030: CHARTING NEW HORIZONS

The underpinnings of India's current economic system are steeped in history, particularly during the nearly 200 year British colonial rule that began on August 15, 1947, and ended when India at last achieved independence. The sole aim of Great Britain's colonial administration in India was to prevent India from serving as a source of raw materials for its own quickly expanding modern industrial base. India's economy was independent before British rule began. However, the majority of the population made their money from agriculture, and the country's economy was characterised by several manufacturing sectors. India was well-known for its handicraft industry, including its work with cotton, silk, metal, precious stones, and other materials. Due to the admirable quality of materials used & the excellent craftsmanship present in all imports from India, these products enjoyed a global market. The colonial government of India's economic policies placed a greater emphasis on national security and the advancement of economic interests than on economic growth. The moment India gained its independence marked a turning point in its economic history. In the development plan put forth by former prime minister Jawaharlal Nehru, the state was envisioned as playing a dominant role as an all-pervasive entrepreneur and financier of private enterprises. A mixed economy was suggested in the 1948 Industrial Policy Resolution. India established the Planning Commission in 1950 to oversee all aspects of planning, including resource allocation, five-year plan implementation, and plan evaluation. The 5-year plans were centralised initiatives for social & economic development fashioned after USSR-era policies.

Introducing India's first five-year plan in 1951, Britain had exclusive control over India's imports & exports during the colonial era. However, India began its planned growth era in the 1950s. Import substitution was a significant component of India's trade & industrial policy at the time. India employed the tactic of substituting home production for imports in order to become a self-sufficient nation in some crucial industries. Trade in India's first 7 plans was marked by an inward-looking Trade Strategy, or Import Substitution as it is officially named. An acute recession brought on by a balance of payments crisis in 1991 was the catalyst for the measures. In order to make the Indian economy more market- and service-oriented & to increase the role of private & foreign investment, it was a year when it underwent liberalisation.



Presently, the Indian economy stands as the world's fifth-largest in terms of nominal GDP and the third-largest based on purchasing power parity. Future projections indicate a continued growth, and with appropriate policies and reforms, India possesses the potential to emerge as a prominent global economic powerhouse.

WHERE IS THE INDIAN ECONOMY HEADING TOWARDS : INITIATIVES

The Indian economy has been on a rollercoaster ride for the past few years, with various ups and downs. Where many big economies are struggling to grow, the Indian economy's growth rate has made it shine like a bright spot. The Indian government has set a target of becoming a \$5 trillion economy by 2025, which implies strong economic growth in the coming years. With the introduction of several initiatives like Make in India, PMJDY and Atmanirbhar Bharat, the economy is slowly but surely headed toward a more stable and self-sufficient future by aiming to boost investment, create jobs, and promote entrepreneurship, which are expected to contribute to the growth of the Indian economy.

GOI launched Pradhan Mantri Jan Dhan Yojana with an aim to provide banking facilities to all households in India by opening at least one bank account per household. It also provides overdraft facilities, insurance coverage, and a RuPay debit card. PMJDY has had a significant impact on the Indian economy. It has helped to increase financial inclusion in the country and has brought millions of people into the formal banking system. This has led to an increase in savings and investments, which has helped to boost economic growth. It has also helped to reduce poverty and improve the standard of living for many people in India.

Make in India is a flagship initiative launched by the Government of India in September 2014 to encourage multinational and domestic companies to manufacture their products in India. The initiative aims to boost job creation, enhance the skill set of the workforce, and promote foreign direct investment. According to recent data, the initiative has been successful in attracting foreign investment, which has helped in creating more job opportunities and boosting the manufacturing sector. In the financial year 2021-22, India received a total of \$83.57 billion in foreign direct investment, which is the highest ever in a financial year.

Aatmanirbhar Bharat on the other hand is a self-reliant India initiative launched in May 2020 to make India self-sufficient in sectors such as agriculture, defense, and

technology by promoting local manufacturing, reducing imports, and increasing exports. The initiative has led to a significant reduction in imports of various products, with India's total imports falling 3.5% to \$58.24 billion in the financial year 2021-22. India's overall exports in January 2022 increased by 36.76% over the same period last year and 38.90% over January 2020, resulting in a trade deficit of \$98.56 billion, the lowest in five years.

Government is also prioritising the promotion of entrepreneurship and startups in India. Several schemes like- Startup India Scheme, Mudra Yojana Scheme, Atal Innovation Mission etc have been launched by the government which provide funding in the form of loans and tax benefits to people as incentives.

These initiatives have received mixed reactions from various sectors of the economy. While some believe that these initiatives are crucial for India's economic growth, others argue that they may lead to protectionism and reduced competition, which could harm the economy in the long run.

Despite the criticisms, these initiatives have already started to show positive results. The manufacturing sector has witnessed a significant boost, and India has become a hub for various multinational companies. The government's push for local manufacturing has led to a reduction in imports and promoting imports which has helped to save foreign exchange reserves and improve the balance of payments. The initiatives have also encouraged entrepreneurship and innovation, which has led to the growth of the start-up ecosystem in India.

In conclusion, the Indian economy is heading towards a more self-sufficient and stable future with such initiatives. These initiatives have already started to bear fruit and if implemented effectively, they can help India achieve its goal of becoming a major economic power in the coming years. However, it is crucial to strike a balance between promoting local manufacturing and ensuring healthy competition in the global market to ensure that this does not lead to protectionism or monopolies that can harm consumers and the overall economy.

We (India) have to punch not above our weight, we have to punch not below our weight, we have to increase our weight and punch proportionately.

Ajit Doval
National Security Advisor



Image Source: AajTak

INTRODUCTION

The world of today is in no manner comparable to that of six to eight decades ago. Prior to this time, no one understood how to use a cell phone, a laptop, or an internet connection. Today, on the other hand, everyone—from children to adults—is aware that if they have a reliable cell phone and an internet connection, they can get through any scenario. The digitization process has been ongoing for a while, with the goal of creating a w

HISTORY AND ADVENT OF DIGITAL INDIA

On July 1, 2015, Prime Minister Narendra Modi unveiled Digital India, the government of India's flagship programme, with the intention of converting the nation into a knowledge economy and society that is supported by technology. "Power to Empower" is Digital India's tagline. A broad plan called "Digital India" includes several government Ministries and Departments. It combines a wide range of concepts and ideas into a unified, all-encompassing vision so that each one can be implemented as a component of a bigger objective. Each component is distinct in its own right while still contributing to the overall picture. The Department of Electronics and Information Technology (DeitY) will provide comprehensive coordination for the implementation of Digital India by the whole government. The main goals of this plan are to promote the use of Indian languages online and ensure that citizens have access to online government services. Plans for connecting rural areas to high-speed internet networks are also part of the effort. The creation of a secure and reliable digital infrastructure, the provision of public services online, and widespread digital literacy make up its three main parts.

9 PILLARS OF DIGITAL INDIA:

The goal of Digital India is to give the nine areas of growth—Broadband Highways, Universal Access to Mobile Connectivity, Public Internet Access Programme, e-Governance: Reforming Government through Technology, e-Kranti – Electronic Delivery of Services,

Information for All, Electronics Manufacturing, IT for Jobs, and Early Harvest Programmes—the much-needed impetus they require. These topics each involve a complicated programme that spans several Ministries and Departments.

BROADBAND HIGHWAYS:

One of the nine pillars of digital India is the broadband highway, which intends to expand broadband in metropolitan areas, connect rural areas to the internet, and create a national information infrastructure that unifies India's digital infrastructure.

UNIVERSAL ACCESS TO MOBILE CONNECTIVITY:

The goal of the campaign is to prioritise network penetration, close connectivity gaps in the nation, and ensure that the nation has better network coverage.

PUBLIC INTERNET ACCESS PROGRAM:

It includes the beginning of two segments in this programme. They are Common Service Centres and Post Offices acting as multi-service centres. The calibre and quantity of Common Service Centres would be improved. The conversion of 150,000 Post Offices to multi-service facilities is envisioned.

E-GOVERNANCE:

It includes the guiding concepts for updating and developing governance through the digital economy. Among the modifications are the streamlining of application forms, Utilisation of web resources, such as sales quotations software, to obtain necessary government record services.

E-KRANTI – ELECTRONIC DELIVERY OF SERVICES:

31 mission mode projects are currently at various stages of the e-government project lifecycle. Furthermore, The Apex Committee Has Added 10 New MMPs To E-Kranti. Technology For Education - E-Education, Technology For Health - E-Healthcare, Technology For Security, etc. are some of the significant modes.

INFORMATION FOR ALL:

The emphasis will be on the hosting of data on online websites, as well as on realistic participation in social media and web-based programmes like MyGov. The purpose of this programme is to make information accessible to citizens.

ELECTRONICS MANUFACTURING:

This programme calls for making an attempt to reduce electronic equipment imports to zero. Set-Top Boxes and VSATs are these things. FABS, mobiles, consumer electronics, and many more are also included. The government offers numerous forms of assistance to the device-making industry. These include tax breaks, start-ups, organisations, skill development, subsidies, etc.

I dream of a DIGITAL INDIA where access to information knows no barrier.

Shri Narendra Modi
Prime Minister



Image Source: The Indian Wire



IT FOR JOBS:

It enables the individuals to train for IT sector jobs. The individual is the ones from smaller villages or cities.

EARLY HARVEST:

The government intends to implement an Aadhaar-enabled fingerprint presence programme in all Delhi-based central government offices. A web-based application software system will provide online attendance documentation and involved stakeholder viewing. To Install Wi-Fi In Every College On The NKN By December 2015. All manuals will be electronic books with SMS-based disaster alerts and climate information.

ONDC AND DEVELOPMENT UNDER DIGITAL INDIA:

ONDC (Open Network for Digital Commerce), a Digital India initiative, aims to build an open digital ecosystem. ONDC focuses on the retail sector and offers game-changing Application Programming Interfaces. APIs provide coordination and integration between digital commerce platforms and service providers. ONDC intends to enhance competition, simplify entry procedures for new enterprises, and provide customers with a plethora of options for ensuring their data privacy and security. ONDC assists new small and medium-sized businesses in competing with established e-commerce giants. All of this enables a diverse range of businesses to participate in the Digital India initiative, making it a win-win situation for all.

OPPORTUNITIES AND CHALLENGES

OPPORTUNITIES

Digital Infrastructure: Having a strong infrastructural base is integral for any developing country like India, and having a strong digital infrastructure is the need of the hour. This will not only help in bringing rural and urban areas closer but also provide opportunities to everyone.

Skills and Jobs: With the Internet reaching every nook and corner of the country, every single person will have access to the wonders of the Internet. Employers from the Northernmost parts of the country can hire employees from the southernmost part who learned skills from somebody living on the opposite end of the world.

Startup Ecosystem: Digital India not only gives a platform to initiate new startups but also brings them to a whole new market of customers who can avail the goods and services in a matter of few clicks.

THREATS

Lack of Resources: India is a huge country, and it would be virtually impossible to provide every district with high-speed internet speed without incurring monumental costs. Not to mention India recently became the most populous country in the world, so the government would also have to incur costs to spread awareness amongst the masses.

Linguistic and Regional Disparities: India is the land of languages. With 22 official languages and uncountable variations of these languages, the mammoth task of translating important information to each language arises.

Privacy and Security: Ranked 9th in the list of most cybercrime countries, India doesn't have a proper Digital Security System in order. This can result in the loss of millions and possibly billions from the economy.

CONCLUSION

To conclude, Digital India can be a major boon for the country if the entire economy and population unite, but the execution will be tricky and fragile. Even the smallest mistakes can result in billions, but if executed flawlessly and with a proper plan in mind, it will benefit the entire country. Digital India is a major area to work on for the government, and if they succeed in executing, we will see an entirely new Indian Economy by the end of this decade and will make India one of the strongest, if not the strongest, economy by the onset of 2030s.

युवाVichar 2030

देश के युवा की मन की बात

Q According to you, what changes do you think digital infrastructure like UPI, Aadhaar and Digilocker bring in India?

The digital infrastructure with the onset of the developing world and the country is extremely important. UPI, Aadhaar and digilocker are aiding in bringing uniformity and also helps in keeping everything safe. With Aadhaar, everything is linked up to a common id proof and hence can be used anytime, similar with UPI, which can be accessed anywhere.

Yashvardhan, Aryabhata College

Digital infrastructure like UPI, Aadhaar, and Digilocker have brought significant changes to India by enabling seamless and secure digital transactions, facilitating efficient identification and authentication processes, and providing a secure and convenient platform for storing and sharing digital documents.

Tisha Jain, Aryabhata College

Digital Infrastructure is useful as it is easy to access and easy to carry as we always have the softcopy of the important documents. Also, the hard copy will never misplace or get lost because the soft copy is always available in our phones. UPI can help in making quick payments without having the need to carry cash thus making India, a cashless economy.

Kshitij Gumber, Aryabhata College

Digital infrastructure has had a positive impact on India. It has

helped to increase financial inclusion, improve efficiency and transparency in government services, enhance security and convenience for citizens, and boost economic growth.

Rishi Agarwal, Aryabhata College



Credits: UPI

DigiLocker has helped in reducing dependence on physical documents and enabled easy and secure access to customer documents. UPI has helped enable the instant payments. It has reduced cash management expenses. Aadhaar has led to easy identity verification. Emphasis on financial literacy has made more Indians, especially from remote areas, adopt tech-based financial solutions and reduce the number of people that have limited access to them. All government schemes are given directly to the ultimate beneficiary reducing intervention of middle men. It has enhanced transparency and improved financial inclusion by making it easier for people to open bank accounts

Ananya Keshri, Lady Shri Ram College

Digital infrastructure like UPI, Aadhaar, and Digilocker have significantly transformed India. While UPI drives the shift towards a cashless economy, Aadhaar serves as a versatile nationwide proof of identity, and Digilocker liberates citizens by providing a

secure digital vault for easy access and sharing of vital information. These advancements enhance efficiency and security in the digital era.

Saniya Bassi, SRCC

Development of digital infrastructure has like Digilocker, UPI and ABHA have dynamically changed the way in which the G2C services are provided. It has led to the creation of centralized database thereby bringing financial inclusion, convenience and efficiency. It has led to a more transparent economy where crimes like tax evasion, corruption are easier to detect and harder to commit.

Simran, Kamala Nehru College

Q According to you what effect did India's early-decade G20 chairmanship have?

India's early-decade G20 chairmanship provided an opportunity for the country to showcase its growing economic influence and engage with other major economies on global issues. It helped India strengthen its international standing and contribute to shaping the global economic agenda.

Tisha Jain, Aryabhata College

The G20 summit in India at this stage of development where the world is able to recognise the strength and capabilities what India possess would play a crucial role in helping India build its profile stronger.

Tushar Nagpal, Aryabhata College

It can help India to make global connections and the opportunity to bring more foreign investments in India are high. This early-decade G20 chairmanship may take India to greater heights by 2030 as India's journey towards advancement goes on.

Kshitij Gumber, Aryabhata College

It provided India with a prominent platform to shape global economic discussions and policy agendas. As chair, India focused on issues such as inclusive growth, sustainable development, financial sector reforms, and combating corruption. Its leadership helped amplify India's voice on the global stage and fostered collaborative efforts towards addressing key global challenges.

Arpit Pathak, Aryabhata College



India has been recognised as a global leader in global politics. India's chairmanship helped to raise the profile of developing countries in the global governance arena. It helped to promote economic recovery and resilience, especially in developing countries. It also helped to advance the fight against climate change and promote sustainable development.

Ananya Keshri, Lady Shri Ram College

G20 will aid in boosting up the country's relations with other countries which are part of the global summit. India can benefit from the relations in terms of improving one's growth, establish trade connections and also derive long term benefits.

Yashvardhan, Aryabhata College

Q According to you what was Aatmanirbhar Bharat's effect on India's manufacturing sector?

Depending on Indian products as inputs for the production of various goods and services is an important aspect of Indian economy which helped in improvement in Indian economy. It increased employment, output and the production. It turned out to be positive for the Indian economy.

Janvi Arora, Aryabhata College

Significant increase in knowledge of domestically produced competitive goods in the eyes of the buyers of imported goods, hence increasing their demand. This has been met with a proportionate increase in production which has become easier for manufacturers due to the various incentives offered by the government.

Tejasvi Rawat, Ramanujan College

It has led to increased focus on domestic production, encouraging investments, technological advancements, and policy support for the manufacturing sector in India. The sector has seen a strong recovery in FY22 with a 22.32% increase in output. The sector currently contributes around 16-17% to the GDP.

Simran, Kamala Nehru College

Aatmanirbhar Bharat, aimed at self-sufficiency, increased emphasis on domestic production in India. This encouraged local production, attracted investment and encouraged the development of domestic industry, which increased the growth and sustainability of the manufacturing industry.

Aanya Babuta, Aryabhata college

India has become global export hub. Introduction of the production linked incentive scheme (PLI) has encouraged scaling up of industries and major boost provided to infrastructure helped in reducing transaction costs and improve ease of doing business, and supported the pace of recovery. The government's focus on import substitution and domestic production has led to

increased investment in the sector, which has created jobs and boosted economic growth.

Ananya Keshri, Lady Shri Ram College

The initiative aimed to reduce India's dependence on imports, particularly in critical sectors, by promoting domestic production. This focus on domestic manufacturing has encouraged investments in sectors such as electronics, pharmaceuticals, textiles, and defense etc.

Ishaan, Aryabhata college



Credits: Government of India

Aatmanirbhar Bharat, which translates to "Self-Reliant India," is an initiative launched by the Government of India to promote self-sufficiency and resilience in various sectors, including the manufacturing sector. Here are some effects of Aatmanirbhar Bharat on India's manufacturing sector: Boost to Domestic Manufacturing, Attraction of Foreign Investments, Strengthening of MSMEs.

Krish Soni, Aryabhata College

Q According to you what is the Future of India's economy and its GDP growth rate?

India's economy is booming and rapidly transforming at a rate much higher than developed countries. There is a steep learning curve because of the huge number of opportunities to increase knowledge and business.

Tejasvi Rawat, Ramanujan College

The Asian Development Bank (ADB) has projected growth in India's GDP to 6.7% in FY2024. Further, considering the world's economic recovery post covid, India's growth seems to be on

track or some consider it even better than predicted by some experts.

Simran, Kamala Nehru College

The future of India's economy and its GDP growth rate is very bright as with 7.2 percent growth rate, India may reach to the top three huge economies in the world in no time. With more focus on the sustainable development and green energies, India is aiming to be at the top by taking the sensitive considerations like environment into account.

Kshitij Gumber, Aryabhatta College

According to me, India is growing rapidly. A rapid increase in the manufacturing work as well as efficient use of resources by the industrial sector is not only developing the country in terms of GDP but also trying to build a sustainable future.

Aanya Babuta, Aryabhatta college

India has been one of the world's fastest-growing major economies in recent years, and it has significant potential for continued growth. The Indian government has been implementing various economic reforms to boost investment, ease regulatory hurdles, and promote entrepreneurship. Additionally, India has a young and dynamic workforce, a large consumer market, and a thriving technology sector that can contribute to economic growth.

Arpit Pathak, Aryabhatta College

The future of India's economy and its GDP growth rate hinge on multiple factors and uncertainties. However, India holds significant potential owing to its large consumer base, growing urbanization, and conducive environment for growth and investment. The Indian economy has also shown resilience to global shocks, which further suggests its capability for sustained and robust growth in the coming years.

Saniya Bassi, SRCC

India is a developing country,

which is slowly making its way to reach a point where we can say we are truly moving in a right direction. There are some big problems which loom as we grow but with the investments in AI, Healthcare, Education and the growing sectors, our GDP would continue to prosper. It is important to note that currently along with GDP, employment should also increase to have the growth a welfare for everyone.

Yashvardhan, Aryabhatta College



The future of India's economy depends on various factors, including government policies, global economic conditions, technological advancements, and social changes. With a large population and ongoing reforms, India has the potential for significant GDP growth, but specific growth rates in the next years will be increasing and positive as we are moving in the right direction.

Priyamvada Rajpal, Maitreyi College

Q What do you think about India's growing relationship with other countries and its free trade agreements?

The growing relationships of India with other countries is evidently advantageous for our country both in economic and social terms. It would not only lead in a better position in world economy but would also help in maintaining a peaceful and good relation amongst different countries of the World.

Janvi Arora, Aryabhatta College

India's growing relationships with other countries will help it to be a more powerful country in time.

Just like a student make connections to be a part of everything and to get recognition, similarly, with connecting with other countries, India aims to be at the top. With the free trade agreements, India is welcoming the external sector and with more foreign investments, it aims to increase its GDP.

Kshitij Gumber, Aryabhatta College

India's growing relationship with other countries and its free trade agreements signify its efforts to enhance global trade, attract investments, and strengthen diplomatic ties. These collaborations can open doors for economic growth, diversification of markets, and increased opportunities for Indian businesses.

Madhav Gulati, Aryabhatta College

India's growing relationship with other countries and its participation in free trade agreements can have several positive implications. These are:-

1. Access to New Technologies and Innovation
2. Strengthened Diplomatic and Strategic Relations
3. Challenges and Considerations
4. Diversification of Trade

Krish Soni, Aryabhatta College

India's growing relationship with other countries and its free trade agreements are indicative of its efforts to enhance economic cooperation and global integration. These initiatives can foster trade, investment, and cultural exchange, opening up opportunities for economic growth and mutual benefits.

Saanvi Bansal, Aryabhatta College

The growing relationships are something which are not only going to aid us in the short term by regular trades of import and export but also aid in the long term. Free Trade Agreements are also a boon for the economy as it is going to boost the trading process and bring in FDI in the Indian economy.

Yashvardhan, Aryabhatta College

BLOCKCHAIN TECHNOLOGY

REVOLUTIONIZING DIGITAL OWNERSHIP BY DAPPER LABS

CREDITS: GETTY IMAGES

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Vishal Gupta

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Introduction

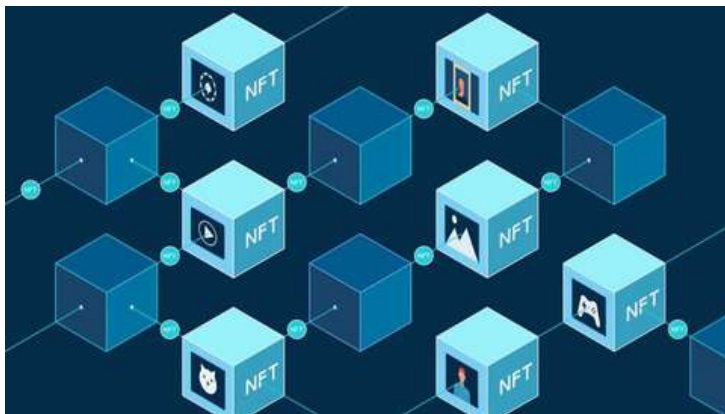
In the pursuit of sustainable development and combating climate change, India has emerged as a frontrunner in the global race towards renewable energy adoption. The country's commitment to harnessing clean energy sources is not only driven by environmental concerns but also by the need to meet the rising energy demands of its rapidly growing population. Through ambitious targets, innovative policies, and technological advancements, India is revolutionizing its energy sector and setting a shining example for the world. Under the visionary leadership of Prime Minister Narendra Modi, India has embarked on an incredible journey towards achieving its renewable energy goals. One of the landmark initiatives is the National Solar Mission, launched in 2010, which aimed to deploy 20 gigawatts (GW) of solar power capacity by 2022. However, surpassing all expectations, India achieved this target four years ahead of schedule. Buoyed by this success, the government revised its goal to 100 GW of solar power capacity by 2022 and later expanded it to 450 GW by 2030, showcasing its unwavering commitment to renewable energy.

Solar Energy: A game-changer

Solar energy has been a game-changer for India, with vast solar parks dotting the landscape and solar panels adorning rooftops across the country. The declining costs of solar power technology, coupled with favourable policies and financial incentives, have spurred massive investments and job creation in the sector. Moreover, Indian solar extends beyond its borders, as the International Solar Alliance (ISA), an initiative launched by India and France, seeks to mobilize resources for solar projects and facilitate the adoption of solar energy worldwide.

While solar power takes the center stage, wind energy also plays a vital role in India's renewable energy portfolio. With its long coastline and favorable wind conditions, India has become the fourth-largest wind power producer globally. The government has implemented supportive policies, such as feed-in tariffs and competitive bidding, to attract investments and boost wind energy generation. As a result, wind farms have sprouted across the country, contributing significantly to the renewable energy mix.

In addition to solar and wind, India is tapping into its vast hydroelectric potential. The country is endowed with numerous rivers and water resources, making hydroelectric power a viable and sustainable option. Large-scale hydroelectric projects and small-scale micro-hydel plants are being developed, enabling India harness the power of water and reduce its reliance on fossil fuels.



CREDITS: STANFORD.EDU

THE INVESTOR OUTLAY IN DAPPER LABS

Investor interest in Dapper Labs, the maker of NBA Top Shot and a major player in the non-fungible token (NFT) market, has significantly increased. They recently raised an amazing \$305 million at a \$2.6 billion valuation. They are currently raising another funding round, led by Coatue Management, with a valuation over \$7.5 billion, so their momentum is still strong. The valuation might rise much more if more investors decide to participate. The increased popularity of cryptocurrency-related businesses and Coinbase's successful public listing as indicators of current market trends have added to the heightened excitement surrounding Dapper Labs.

The success of Dapper Labs can be due to its original strategy for blockchain-based memorabilia and NFTs. The business runs NBA Top Shot, a well-liked marketplace for NFTs with a basketball theme, and also created the Flow blockchain, which is made to handle apps and games. Coatue, a hedge fund and active investor in startups, has taken notice of this because it understands the exceptional need for NFTs, and the authenticating capabilities offered by blockchain technology.

Famous investors including Venrock, The Chernin Group, and Andreessen Horowitz, the latter of which also made a sizeable investment in Coinbase, have already backed Dapper Labs.

The success of Dapper Labs and the expansion of the NFT market as a whole demonstrate the financial industry's potential for disruption by blockchain technology. This recent inflow of capital underlines the excitement surrounding the industry and the possibility of additional ground-breaking companies appearing in the future. It will be exciting to observe the continued advancements and developments within the blockchain and NFT landscape as the market continues to change.

IS THE FUTURE OF FINANCIAL SERVICES DISRUPTIVE BLOCKCHAIN TECHNOLOGY

The future of financial services might be substantially impacted by and transformed by disruptive blockchain technology. Blockchain can streamline and improve a variety of financial operations by offering decentralised, secure, and transparent transaction platforms. One of blockchain's main benefits is its capacity to do away with the need for middlemen in transactions, which lowers costs and boosts efficiency. Blockchain-based smart contracts make it possible for automated and self-executing agreements, which makes intricate financial arrangements simpler. Additionally, blockchain uses distributed consensus methods and cryptographic algorithms to improve the security and integrity of financial data.

The use of this technology could completely transform standard banking procedures as well as payment systems, remittances, and cross-border transactions. Cryptocurrencies built on blockchains, like Bitcoin, have already changed the financial landscape by providing a different decentralised form of digital money. Additionally, by offering services to the underbanked and unbanked communities and enabling their access to financial services via mobile devices, blockchain can increase financial inclusion. It is crucial to remember that there are obstacles to the banking sector's mainstream adoption of disruptive blockchain technology. For blockchain to realise its full potential, scalability, interoperability, and privacy issues must be resolved. However, given the disruptive potential of blockchain, it is likely to have a substantial impact on how financial services are developed in the future by improving accessibility, efficiency, and transparency while lowering prices and the need for middlemen.

PRODUCT /SERVICE OF THE COMPANY, VALUE PROPOSITION (PROBLEM THE COMPANY IS SOLVING)

Dapper Labs is a blockchain-based gaming and collectibles platform that provides a variety of goods and services. NBA Top Shot and CryptoKitties are the company's flagship products, which let users to buy, sell, and exchange digital collectibles.

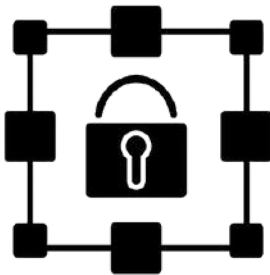
Dapper Labs' value proposition revolves around offering users with innovative and immersive experiences that use the benefits of blockchain technology. Dapper Labs is working to solve the following issues:

Traditional digital collectibles frequently lack proof of ownership and authenticity, but Dapper Labs solves this problem by utilising blockchain technology to build verifiable digital assets that are unique and related to particular users.

Dapper Labs makes limited-edition digital collectibles that are intended to be scarce, enhancing their value and generating collector demand through a sense of exclusivity and rarity enabled by blockchain technology.

COMPETITORS IN WORLD OF BLOCKCHAIN

Rivals to Dapper Labs, a well-known blockchain-based gaming and collectibles platform, include Immutable, which provides a decentralised gaming ecosystem through Immutable X and developed the game Gods Unchained, Enjin, which enables developers to create blockchain-based assets in games like Age of Rust and War of Crypto, Mythical Games, which focuses on player-owned economies in games with the Mythical Marketplace platform and the multiplayer game Bliss.



CONCLUSION

By providing decentralised, secure, and transparent transaction networks, blockchain technology has the potential to revolutionise the way that financial services are provided in the future. Blockchain lowers costs and boosts efficiency by doing away with middlemen, and smart contracts streamline intricate financial arrangements. Blockchain based cryptocurrencies already have changed the financial landscape and can increase financial inclusivity. But for widespread use, it is necessary to address issues with privacy, scalability, and legal issues. Despite these obstacles, Dapper Labs, a trailblazing startup that is changing digital ownership using blockchain and non-fungible tokens (NFTs), is an example of how blockchain has the capacity to disrupt sectors. Clients of Dapper Labs have access to special events, promoting market trust, immutability, and authenticity.

This demonstrates how blockchain technology has the enormous potential to disrupt many industries, including financial, by improving efficiency, transparency, and accessibility while removing middlemen.

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SUSTAINABLE DEVELOPMENT

CREDITS: GETTY IMAGES

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Yash Sandip Yeole

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INTRODUCTION

Sustainable development is a critical goal for nations worldwide, and India has emerged as a significant player in this global endeavor. With its rapidly growing population, diverse ecosystems, and expanding economy, India recognizes the need to balance economic progress with environmental conservation and social equity. The country has embarked on a transformative journey towards sustainable development, aiming to create a greener, more inclusive, and resilient future.

One of the key pillars of sustainable development in India is the promotion of renewable energy. Recognizing the urgent need to reduce carbon emissions and mitigate climate change, the country has set ambitious targets for renewable energy generation. The widespread adoption of solar, wind, hydro, and biomass energy sources has revolutionized the country's energy landscape and reduced its dependence on fossil fuels. India has become a global leader in renewable energy deployment, with the aim of achieving a significant share of its energy mix from clean sources.

Inclusive growth and social equity are integral components of sustainable development in India. The government has implemented programs to address poverty, promote rural development, and empower marginalized communities. Access to healthcare, education, and basic amenities has been improved, ensuring that all citizens can participate in and benefit from the country's progress. Efforts to bridge the gender gap and promote women's empowerment have also gained momentum, recognizing the pivotal role women play in sustainable development.

India's sustainable development journey extends beyond its borders. The country actively participates in international collaborations, sharing best practices, and contributing to global efforts to address climate change and achieve the Sustainable Development Goals (SDGs).

In the pursuit of **sustainable development**, India has taken significant strides to address environmental challenges and promote the use of renewable energy sources. The country has recognized the need to reduce carbon emissions and mitigate the impacts of climate change.

One notable aspect of India's sustainable development efforts is the significant increase in the share of renewable energy in its energy mix. By 2030, India has achieved its goal of generating a substantial portion of its energy from renewable sources such as solar, wind, hydro, and biomass. The government has implemented policies and provided incentives to encourage investments in renewable energy projects, resulting in a significant expansion of solar and wind power capacities.



India has also focused on energy efficiency and conservation measures. Efforts have been made to promote energy-efficient appliances, buildings, and industries. The adoption of green building practices and the use of energy-efficient technologies have become more prevalent across the country.



Environmental conservation has been given priority as well. India has implemented policies to protect and restore its ecosystems, including forests, wetlands, and rivers. Reforestation initiatives have been launched, aiming to increase forest cover and biodiversity. Efforts to combat air and water pollution have been intensified, leading to the implementation of stricter regulations and pollution control measures.



Promoting Renewable Energy:

India recognizes the urgency of transitioning to renewable energy sources to combat climate change and reduce its carbon footprint. The country has set ambitious goals for renewable energy generation and is rapidly expanding its capacity in solar, wind, hydro, and biomass energy. Investments in solar power have propelled India to the forefront of the global renewable energy revolution. Through innovative policies, such as feed-in tariffs and incentives for solar installations, India is fostering a thriving renewable energy sector that not only reduces greenhouse gas emissions but also drives economic growth and creates employment opportunities.

To **accelerate the adoption of renewable energy**, India has implemented several initiatives. The Jawaharlal Nehru National Solar Mission aims to achieve 100 gigawatts (GW) of solar power capacity by 2022, making it one of the largest solar power initiatives globally. The government has also introduced policies to encourage the use of wind energy, including competitive bidding and feed-in tariffs. In addition, hydropower projects and biomass-based energy generation have gained momentum in various parts of the country.

These efforts have borne fruit, as India's renewable energy capacity has witnessed exponential growth in recent years. By the end of 2020, India had already achieved a total renewable energy capacity of around 93 GW, with solar and wind energy contributing significantly to this achievement. With a strong commitment to clean energy, India is well on its way to achieving its goal of 450 GW of renewable energy capacity by 2030, a target that would significantly reduce carbon emissions and dependence on fossil fuels.

Environmental Conservation:

Preserving its natural heritage is a paramount focus for India's **sustainable development** agenda. The country boasts diverse ecosystems, ranging from pristine forests to fragile coastal areas. To protect these invaluable resources, India has implemented measures to conserve biodiversity, restore ecosystems, and combat pollution. Reforestation initiatives, stringent pollution control regulations, and the establishment of protected areas demonstrate India's commitment to environmental stewardship.

India is also actively addressing air and water pollution, which pose significant environmental challenges. The National Clean Air Programme aims to reduce particulate matter pollution by 20-30% in the next five years. Stringent emission norms have been implemented for industries, vehicles, and power plants, leading to the adoption of cleaner technologies and the reduction of harmful pollutants. In the water sector, the Namami Gange program is focused on rejuvenating the River Ganges, one of India's most sacred rivers, by tackling pollution, promoting waste management, and improving water quality.

Inclusive Growth and Social Equity:

Sustainable development in India is not limited to environmental considerations; it also encompasses social progress and inclusive growth. The government has implemented programs to eradicate poverty, improve access to healthcare and education, and empower marginalized communities. Initiatives such as the **National Rural Employment Guarantee Act (NREGA)**, which provides employment opportunities for rural households, and the Pradhan Mantri Jan Dhan Yojana, which promotes financial inclusion, aim to uplift vulnerable populations and reduce social disparities.

One of the key focuses of India's inclusive growth strategy is improving access to quality healthcare. The National Health Mission has been instrumental in expanding healthcare infrastructure, improving primary healthcare services, and enhancing maternal and child healthcare. Initiatives like Ayushman Bharat, the world's largest health insurance scheme, provide financial protection and access to healthcare for millions of vulnerable individuals and families.

ASPECTS OF SUSTAINABLE DEVELOPMENT IN INDIA BY 2030:

Green Transportation: India has made significant progress in transitioning towards greener transportation options. The government has promoted the adoption of electric vehicles (EVs) by providing incentives and establishing charging infrastructure. EVs have become more affordable and accessible, contributing to a reduction in carbon emissions from the transportation sector. Additionally, **public transportation systems have been improved**, with the introduction of electric buses and the expansion of metro rail networks in major cities, leading to reduced congestion and pollution.

Circular Economy: India has embraced the concept of a circular economy, aiming to minimize waste generation and maximize resource efficiency. **The government has introduced policies to encourage the recycling and reuse of materials**, promoting a shift from the linear "take-make-dispose" model to a more sustainable approach. Industries have been encouraged to adopt eco-friendly production processes and incorporate circular practices into their operations.

Sustainable Tourism: India has promoted sustainable tourism practices to preserve its cultural heritage and natural attractions. Emphasis has been placed on responsible tourism, minimizing the environmental impact of tourism activities, and supporting local communities. Eco-tourism initiatives have been developed, encouraging visitors to appreciate and protect the country's natural and cultural diversity.

Conclusion:

India's commitment to sustainable development is driving positive change across various sectors, from energy to environment and social welfare. By prioritizing renewable energy adoption, environmental conservation, and inclusive growth, India is forging a path to a greener future. The country's efforts to **balance economic growth with environmental preservation and social equity** provide a blueprint for sustainable development worldwide.

As India continues its journey towards sustainability, it serves as an inspiration and a catalyst for global action, demonstrating that a prosperous and equitable future is within our reach through sustainable development. By harnessing the power of renewable energy, conserving its natural resources, empowering marginalized communities, and collaborating with the global community, India is creating a model for sustainable development that other nations can emulate.

In a world grappling with the challenges of climate change, environmental degradation, and social inequality, India's unwavering commitment to sustainable development offers hope and a roadmap for a greener and more prosperous future for generations to come.

INDIA 2030

UNLEASHING ABSOLUTE ADVANTAGE FOR A VIBRANT FUTURE

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Ankit Dwivedi
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Introduction

As we stand on the cusp of a new decade, the spotlight is on India and its transformative journey toward 2030. With its vast potential, diverse population, and growing economy, India has the opportunity to harness its absolute advantage and emerge as a global powerhouse.

But more than its sheer size makes India a compelling subject of discussion. The potential it holds, the promise it carries, and the absolute advantage it possesses make India's Future all the more intriguing.

India, often called the world's largest democracy, has seen tremendous growth and development in recent years. Its economy has shown resilience and has become one of the fastest-growing globally. With a GDP projected to reach \$5 trillion by 2030, India aims to assert its position as the world's third-largest economy. Such ambitious goals are not mere dreams but are firmly rooted in the country's absolute advantage.

Absolute advantage, a concept popularized by economist Adam Smith, refers to a country's ability to produce goods and services more efficiently than other nations. And India possesses several factors that give it a unique advantage on the global stage. These factors range from its young and dynamic workforce to its rich natural resources, from its burgeoning entrepreneurial spirit to its rapid technological advancements.

This article delves into key areas where India can leverage its strengths, explores recent examples of progress, and highlights the data that supports the country's promising Future.

Economic Growth and Innovation

India's economic growth has been remarkable in recent years. With a GDP projected to reach \$5 trillion by 2030, the country aims to become the world's third-largest economy. One significant advantage lies in its thriving information technology (IT) sector. India has already established itself as a global IT services and software development hub, attracting major companies and investments. For instance, leading technology firms like Google, Amazon, and Microsoft have set up significant operations in India, indicating the country's prowess in technology and innovation. Moreover, the government's "Make in India" initiative aims to boost domestic manufacturing, making India a global powerhouse.

Furthermore, the startup ecosystem in India has witnessed tremendous growth, fostering a culture of innovation and entrepreneurship. Cities like Bengaluru, often called the "Silicon Valley of India," have become thriving hubs for startups and technology incubators. Indian startups have made their mark globally, especially in e-commerce, fintech, health tech, and agritech. Recent examples include companies like Flipkart, Paytm, Zomato, and BYJU'S, which have gained international recognition and attracted significant investments. The government's initiatives like Startup India and various incubation programs have provided crucial support and infrastructure to nurture these startups, promoting innovation and job creation.

India's economic growth is also driven by domestic consumption, fueled by a rising middle class and increasing urbanization. The development of e-commerce platforms, such as Amazon and Flipkart, has transformed the retail landscape, offering consumers convenience and a wide array of products. This shift towards digital commerce and a growing preference for online services have opened up new opportunities for businesses and entrepreneurs.

Recent data indicates an upward trajectory, with India becoming a leading destination for foreign direct investment (FDI) in the automobile, electronics, and renewable energy sectors.

Digital Transformation

India's digital transformation is rapidly reshaping various sectors, unleashing new opportunities for growth and development. With a vast population of digital natives and affordable internet access, the country is witnessing a digital revolution. Initiatives like the Digital India campaign and the National Digital Health Mission are transforming

governance, healthcare, and education. The rapid adoption of digital payments and e-commerce platforms redefines India's retail landscape. The latest data shows India has the second-largest internet users globally, offering a fertile ground for technological innovation and entrepreneurship. Notably, India's digital payments industry has grown exponentially, with mobile payment platforms like Paytm and PhonePe revolutionizing financial transactions and contributing to financial inclusion.

Renewable Energy Revolution

As the world grapples with climate change, India has embraced renewable energy as a critical driver for sustainable growth. The country aims to achieve 450 GW of renewable energy capacity by 2030, making it a global leader in clean energy. With abundant solar and wind resources, India has made significant strides in solar power generation, surpassing the 100 GW mark recently. The government's policies and incentives have attracted domestic and international investments, enabling the expansion of renewable energy infrastructure. These efforts contribute to India's energy security and position the country as a leader in combating climate change. India's commitment to the International Solar Alliance and its proactive measures in promoting electric vehicles demonstrate its dedication to a greener future.

Innovation in Healthcare

India's healthcare sector is witnessing a paradigm shift driven by innovation and technology. The COVID-19 pandemic highlighted the importance of a robust healthcare system, leading to accelerated reforms and investments. The launch of the National Digital Health Mission aims to create a digital healthcare ecosystem, enabling access to quality healthcare services for all citizens. Telemedicine, artificial intelligence (AI), and big data analytics are revolutionizing healthcare delivery, particularly in rural areas.

Recent data indicates a surge in healthcare startups focusing on personalized medicine, remote diagnostics, and AI-powered drug discovery. Additionally, India has emerged as a global leader in vaccine production, exemplified by its efforts in developing and manufacturing COVID-19 vaccines and supplying them to its citizens and other countries.

Skilling for the Future

Recognizing the importance of a skilled workforce, India has strongly emphasized education and vocational training. Initiatives like Skill India and The National Education Policy 2020 aims to equip the youth with the necessary skills to thrive in a rapidly evolving job market.

India's IT industry has been a prime example of skilled talent driving growth. Furthermore, recent data showcases the rise of ed-tech startups providing online learning platforms, upskilling programs, and vocational training courses, bridging the gap between education and employment. These efforts have empowered millions of young Indians, promoting entrepreneurship and fostering a culture of innovation.

India's digital transformation holds immense promise, and the world eagerly awaits its transformation into a powerhouse of digital innovation and progress. The time is ripe for India to seize the digital opportunity and lead the way in this transformative era.

Conclusion

India's digital transformation is ushering in a new era of possibilities, reshaping the country's economy, society, and governance. The Digital India campaign, coupled with favorable factors like a growing population of digital natives and affordable internet access, has propelled India into digital innovation.

From the surge in e-commerce to the widespread adoption of digital payments, from the transformation of education through tech platforms to the revolution in healthcare with telemedicine, India is embracing digital technologies across sectors. The latest data shows this remarkable growth and highlights India's readiness to harness technology for inclusive development.

However, India's digital transformation goes beyond sector-specific advancements; it permeates all aspects of life. With government initiatives, private sector participation, and a thriving startup ecosystem, India is paving the way for digital innovation, economic growth, and societal empowerment.

As India looks ahead to 2030, its digital prowess will be crucial in shaping its future trajectory. The data underscores India's progress and reaffirms its potential as a global leader in the digital space. Nonetheless, challenges remain, including bridging the digital divide and ensuring inclusivity for all segments of society.

To fully unlock the benefits of digital transformation, continued efforts are required to address infrastructure gaps, promote digital literacy, and nurture innovation. India's digital journey is not just about economic growth and technological advancements but about building a sustainable and equitable future for all.

With the power of digital technologies, India can forge a path of prosperity, innovation, and inclusivity. By leveraging its absolute advantage in the digital domain, India has the potential to emerge as a trailblazer in the global digital economy, contributing to worldwide advancements and realizing its vision of a digitally empowered society.

As we embark on India's digital revolution, ensuring that the benefits reach every corner of society is imperative. Collaborative efforts, innovation, and an unwavering commitment to inclusivity will pave the way for India's digital Future. Together, we can witness a nation that thrives on digital empowerment, innovation, and sustainable growth principles.





EMPOWERING MSMEs TO DOMINATE E-COMMERCE EXPORTS

CREDITS: BEHANCE

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Introduction

The Indian market has witnessed growth and establishment of the e-commerce industry, which has gained considerable traction and made significant progress in recent years. The swift expansion of the digital economy has resulted in the rapid advancement of the e-commerce sector, which was further propelled by the requirements and constraints brought about by COVID-19. The pandemic has led to a surge in business-to-consumer (B2C) oriented sales, specifically observed in the online market for medical supplies, essential household items, and food products.

India has recently surpassed the UK and emerged as the fifth-largest economy in the world. However, the global rank of India as an exporter is much lower, being the 18th largest merchandise exporter. Additionally, the current e-commerce export ranking of India is also significantly low.

Rajya Sabha's Report on "Promotion and Regulation of E-commerce in India" shows that more than 90% of the export firms are micro or small enterprises. Certain incentives and investments in the MSME sector can help the nation to leverage its strength in MSMEs to emerge as the largest e-commerce exporter. Broadly, the three major gaps faced by MSMEs are in terms of information, access to markets, and access to timely finance of their applications.

In the year 2021, in a speech to the heads of missions abroad, the Hon'ble Prime Minister of India emphasized some key priorities for international trade. They included achieving a major increase in India's inclusive exports that involves the participation of MSMEs and other stakeholders.

Challenges for SMEs:

Taking part in e-commerce exports presents several difficulties for MSMEs. Some of them are:

Limited Technology Infrastructure:

It is a problem for many MSMEs, making it difficult for them to conduct successful e-commerce operations. This covers topics like internet accessibility, dependable online platforms, and cost-effective access to digital technologies.

Logistics and Supply Chain Management:

Successful e-commerce exports depend on effective logistics and supply chain management. MSMEs may experience difficulties with last-mile delivery, packaging, shipping, and storage. Ineffective logistics networks can cause all customer unhappiness, cost increases, and delays.

Regulatory Compliance:

For MSMEs involved in cross-border e-commerce, navigating complicated regulatory frameworks and compliance requirements can be difficult. It might take a lot of time and resources to comprehend and abide by customs laws, tax laws, and international commerce restrictions.

Complexities of cross-border trade:

MSMEs frequently run into issues with cross-border trading, such as language obstacles, cultural differences, and inconsistent legal systems. Administrative burdens can be increased by import/export limitations, documentation requirements, and customs clearance procedures.

Market Knowledge and International Expansion:

MSMEs might not have the essential market expertise or awareness of global consumer tastes, demand trends, and competitive landscapes. Without the right help and advice, identifying target markets, performing market research, and building effective export plans can be challenging.

Recommendations to boost MSMEs' export presence:

The following steps can be taken to boost the export presence of the MSMEs:

Implementation of Digital Single Window System:

The process of making actions like streamlining paperwork, eliminating physical waiting in queues for customs, and similar tasks can be made more efficient and user-friendly by transitioning the entire process to electronic methods

Local Industry Association:

It is crucial to integrate local industry associations into the realm of digital commerce. It is vital to develop strategies that establish connections with industry associations and local or cluster-level organizations to enhance the mobilization of MSMEs.

Identification of MSMEs in Technology-enabled Trade:

To increase their export footprint, MSMEs involved in technology-enabled trade must be quickly identified. To assist MSMEs in accessing global markets and promoting economic growth, governments, industry stakeholders, and digital platforms must work together to define clear criteria, use data analytics, and offer customized support.

Raising the De Minimis Threshold for e-commerce trade transactions:

One important tactic to increase export presence is to increase the de minimis threshold for e-commerce trade transactions. The De minimis tax establishes the point at which a discount bond should be subject to capital gains tax rather than regular income. Governments can promote economic growth by lowering the complexity of customs, facilitating cross-border trade, and enabling small enterprises to engage more easily in global markets by raising the threshold.

Provisioning for the returned goods:

Although the customs provision already exists, it has to be more effectively implemented to encourage B2C exports via e-commerce. There is currently no established method for customs to identify returning items.

Comprehensive National E-Commerce Strategy:

It is imperative to create a thorough e-commerce strategy. The broad range of policy domains, including ICT, Customs, Tax Policy, and Payment Policy, that has an impact on technology-enabled trade should be identified in the strategy. It should draw attention to the e-commerce sector's prospects and develop a thorough plan to make exporting via e-commerce easier. Additionally, it should show the steps done by various institutions and entities individually or jointly to overcome the challenges experienced by MSME e-commerce exporters.

Open Network Digital Commerce (ONDC)

Open Network for Digital Commerce (ONDC) has been established with a core mission to empower grassroots-level entrepreneurship and drive the digital transformation of small, local retailers, enabling them to actively participate in India's thriving e-commerce revolution. The vision of ONDC is to establish open, inclusive, and competitive marketplaces online, creating choice and opportunity for everyone, by everyone. It is established to fundamentally reimagine and democratize e-commerce.

The small enterprises' biggest complaint regarding e-commerce in India is the lack of transparency. Platforms like Amazon and Flipkart, which have a duopoly in Indian digital commerce, do not treat all the products they sell with equal opportunity to appear on their search engine. They prefer their products or advertise products to appear first when a consumer searches for a product. This causes greater competition for small businesses along with unequal treatment for their products.

As the ONDC emerges, it is expected that smaller online businesses and new entrants will experience advantages as discoverability, interoperability, and inclusivity improve. This development will facilitate a higher volume of local goods trade in India, leading to increased investments and production for MSMEs. ONDC aims to revolutionize and democratize the online marketplace for numerous small and medium-sized businesses by granting them access to a decentralized network facilitated by a third party. This will offer new prospects for buyers and sellers alike.

The success of ONDC in transforming e-commerce in India has the potential to be significant, but it will hinge on meticulous planning and skillful implementation. For the successful implementation of the ONDC, the government must collaborate closely with industry stakeholders. This partnership should focus on effectively addressing the challenges at hand and ensuring that the ONDC is deployed in a manner that brings about favorable outcomes for all participants within the ecosystem.



CONCLUSION

E-commerce has played a phenomenal role in the rise of economies such as China. India has a high potential for growth of e-commerce exports, and compared to the other large countries, it must catch up fast with its domestic and export potential. To reach a \$5 trillion economy, the Government of India needs to enhance digitalization efforts, promote inclusivity measures that aid MSMEs, and enable small businesses to enter the online realm and expand their activities in the international market. The potential for economic growth and inclusive development is enormous when MSMEs are supported. By tackling the unique difficulties faced by Indian MSMEs, including their restricted access to technology, convoluted logistics, regulated obstacles, and financial limitations. Indian MSMEs can take advantage of opportunities in the international e-commerce industry through focused interventions, capacity-building programs, simplified laws, access to digital infrastructure, and market information. By leveraging MSMEs, India can become a dominant force in e-commerce exports, fostering long-term economic growth and establishing the country as a major player on the world stage.



INDIA'S JOBLESS GROWTH PROBLEM

UNVEILING INDIA'S PROSPERITY AND THE BATTLE WITH EMPLOYMENT CREATION



BY-
ASAD AHMAD

CREDITS: THE ECONOMIC TIMES

INTRODUCTION

According to world economic growth forecast India will be the fastest growing country of 2023 and by 2030 India will beat big economies like Japan and Germany. India will take the third spot of the largest economies behind China and the United States.

Edtech crash

But India suffers a big problem that is jobless growth in its economy recently we have seen in our IT industry many layoffs are going on. The reason behind this is mainly because of Unleash by the government of India. During the COVID-19 pandemic the Indian government suddenly introduced COVID lockdown which the workforce of the country had to do their work online. A big chunk of the sector affected was the Edtech platform. During the lockdown schools became online they were being conducted online. So was the preparation for entrance examinations like JEE Mains, NEET and other exams as well. This was a big opportunity for giants like BYJU's, PhysicsWallah and other platforms. So they raised capital from financial markets and did aggressive marketing strategies on the consumer which required huge capital and software infrastructure engineers from the IT sector who were employed to make user interface for education education platforms and to make the user interface handle more traffic at a time. But after the COVID lockdown restrictions were eased we saw many students started taking offline classes again as many students and teachers were of the opinion that real education happens in the classroom not in online video meetings. As a result of this Edtech platforms like BYJU's suffered losses due to unlock in the post lockdown period.

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- WESTERN DISTURBANCES
- PRIVATISATION MAY BE GOOD FOR THE ECONOMY BUT NOT FOR THE PEOPLE
- CONCLUSION

So in order to cut their losses short BYJU's started announcing layoffs of their workforce. Followed by other online Edtech platforms

Western disturbances

Recently, India has been a centre of economic growth. But the same cannot be said for the western countries. In the past we have seen Elon Musk taking over Twitter. The first thing he does after taking over the platform is announcing layoffs of its employees. This included exit of Twitter's India origin CEO Parag Aggarwal. Recently western economies have not been performing well economically. There is a banking crisis going on in the US. Most notable of them all is crash of Silicon Valley bank.

The main reason for the collapse can be traced to the recent interest rate hikes by the US Federal Reserve. This was done in order to tackle the spiralling inflation going in the US economy. The interest rates were hiked to control the demand of commodities in the US domestic market this made loans in the economy expensive in the country and gradually demand fell. This had a negative effect on the banking sector of the US. Silicon Valley bank mainly invested in US Bonds but their rates fell which caused a reaction in the banking sector of the US. Many Indian startups had their money deposited in the Silicon Valley bank but these startups may also suffer due to their deposits being at risk.



CREDITS: THE ECONOMIC TIMES

Recently major US companies like META, Microsoft, Accenture etc announced layoffs of their employees. It is a similar situation to what happened to Edtech companies in India during lockdown. When things were moving online these companies were growing steadily. But after people again started going offline these companies suffered some working losses so they have started cutting their workforce. Many of these tech giant employees are Indians. They also have their offices in India. Which is affecting jobs in India as well.

Privatisation may be good for the economy but not for the people

In the recent years we have seen the attitude of the government towards public companies it's. Whenever the government tries to fix a problem with its company its only response is to "Just privatise it" and all the problems with the company will go away. Though it is true that privatisation is good for the nation we witnessed substantial growth in our economy after 1991 economic reforms.

But our job growth is not increasing with our GDP as you can see in the image above.

Privatisation may be good for the rich but it is not good for the poor. The poor suffers high costs and job cuts by private companies. We also have to look for development of our own people. Which we have sidetracked in the past years. Railways are getting privatised. Railway exams are not being conducted by the government due to planned privatisation because of which students have been protesting in states like Bihar and Uttar Pradesh.

CONCLUSION

It is really a necessity for the government and the people to give as much importance to job creation as GDP growth. Privatisation is not all bad but it is necessary that we strike out a balance between Privatisation and socialism.



THE IMPACT OF THE SRI LANKAN CRISIS ON INDIA

EXPLORING THE MAJOR FACTORS THAT LED TO THE SRI LANKAN CRISIS



**BY-
SAANVI BANSAL
BMS**

CREDITS: TIMES OF INDIA

INTRODUCTION

Before I talk about how the Sri Lankan crisis impacted India, let's explore the major factors that led to the crisis in the first place.

Sri Lanka, being an island country, heavily relies on its foreign remittances and tourism industry for its foreign exchange. The first blow to the tourism industry was The Easter Sunday terror attacks in April 2019, the explosions targeted Christians in three churches and visitors staying in three luxury hotels, during which 250 people were killed, including at least 45 foreigners. This led to a major decline in tourism for the upcoming few months. It dropped by up to 70%.

The situation worsened with the onset of the Covid-19 pandemic, which brought the entire industry to a grinding halt due to travel restrictions and a global shutdown. Additionally, during the pandemic, remittances from foreign workers, which were Sri Lanka's largest source of US dollars, fell by 22.7 percent to just US\$5.5 billion in 2021. However, there was a notable increase in workers' remittances in the latter half of 2020, and December 2020 witnessed the highest monthly remittances ever recorded.

As a result of these challenges, Sri Lanka faced a problem of critically low foreign exchange reserves which had fallen about 70% in the two years to just \$2 billion at the end of February 2022, which was barely enough to cover just 2 months of its import requirement. Ultimately, the country had to declare a default on its entire foreign debt, totaling about \$51 billion, as a last resort.

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- THE STORY OF US
- IMPACT
- CONCLUSION

THE STORY OF US: INDIA AND SRILANKA'S RELATIONSHIP

Sri Lanka is a small neighboring country for India, hence the volume of trade between the countries is not significant, despite the fact that India stood as the third-largest contributor to Foreign Direct Investment (FDI) in Sri Lanka, with investments amounting to USD 139 million, trailing behind the United Kingdom and China. Indian investments primarily concentrate on sectors such as petroleum retail, manufacturing, tourism and hotel, telecommunication, real estate, banking, and financial services.

Some noteworthy Indian companies that have made significant investments in Sri Lanka include Indian Oil, Airtel, Taj Hotels, Dabur, Ashok Leyland, Tata Communications, Asian Paints, SBI, and ICICI Bank.

Furthermore, Sri Lanka's share of India's total exports has dropped drastically from 2.16 percent in FY15 to just 1.3 percent in FY22. Now they're nowhere near the 6.7 billion dollars in FY15. It was recorded as just 4.48 billion dollars in the first 10 months of FY22. Regarding imports, Sri Lanka's share only constituted about 0.16 percent of India's total imports.



CREDITS: PORT TECHNOLOGY

Moreover, India heavily relied on the port of Colombo, which is a transshipment port, for its export and import requirements. About 60% of the Indian cargo was handled by it. Not just this but the port itself was heavily dependent on India as 70% of its total volume was accounted for by India.

However, when the port faced challenges in cargo handling, India recognized the need for a reliable port and consequently decided to construct a port in Kerala to effectively address Indian traffic.

IMPACT

Industrial Implications

On 29 April 2021, the Sri Lankan government imposed a ban on the import of chemical fertilizers and any other agrochemicals with a vision of making the island country the first in the world to practice only organic agriculture.

It resulted in a significant decrease in paddy crop production, about 25 percent lower than what farmers had anticipated. Consequently, tea production, a vital foreign exchange earner for Sri Lanka, was also adversely affected.

Since Sri Lanka has been the world's largest supplier of orthodox tea, the sudden halt in its supply created a gap in global demand and supply. India was more than eager to plug the supply gaps; calls from foreign buyers came pouring into Indian planters and exporters. This gave the Indian tea exporters an opportunity to capture markets in countries that import orthodox tea. India could strengthen its footprint in Iran and expand into new territories like Turkey, Iraq, the US, China, and Canada.

During the Sri Lankan economic crisis, Siliguri businesses in West Bengal experienced certain benefits. Kamal Kishore Tewari, Chairman of the Siliguri Tea Auction Committee, highlighted the positive impact: "Amid the Sri Lankan Economic Crisis, their tea industry, one of their major businesses, got affected. Their export earlier hampered the Indian market. But the current crisis proved to be beneficial for our business."

As a result, last year at one of the Kolkata auctions, the average price for orthodox leaf saw a remarkable increase of up to 41 percent compared to corresponding sales the previous year.

The Indian textile industry also seized an opportunity for growth during the crisis. Sri Lanka's inability to fulfill orders due to prolonged power cuts, lasting up to two days, prompted importers who previously relied on Sri Lanka to turn to Indian apparel exporters. The apparel export industry accounted for about 44 percent of Sri Lanka's total exports, according to the US International Trade Administration.

Consequently, India received orders from the UK, Europe, and even Latin American countries where the Indian apparel industry had minimal or no presence. Several orders were placed with companies in Tirupur, the bustling textile industry hub in Tamil Nadu.

Geopolitical Opportunities

The Sri Lankan crisis also presented an opportunity for India to strengthen its diplomatic ties with the country, which had been showing signs of drifting apart due to its growing proximity to China.

Despite Sri Lanka's historically close ties with India based on geographical proximity and shared cultural and historical connections, its pursuit of improved

relations with China, which has immensely invested in the country's infrastructure projects like ports, highways, and power plants as part of the Belt and Road Initiative, had introduced a degree of complexity.

relations with China, which has immensely invested in the county's infrastructure projects like ports, highways, and power plants as part of the Belt and Road Initiative, had introduced a degree of complexity.

Sri Lanka has always sought to balance its relationship with both Asian powers. However, the disagreement with China on the fertilizer issue and India's subsequent delivery of fertilizer to Sri Lanka at the latter's request can be seen as a positive development in bilateral relations.

AID TO SRI LANKA: INDIA'S HUMANITARIAN SUPPORT

Recognizing its humanitarian responsibility towards its immediate neighbor, India extended a line of credit amounting to approximately USD 4 billion to fulfill Sri Lanka's essential requirements, including the import of medicine and food, during the peak of Sri Lanka's financial crisis in early 2022. Originally scheduled to end in March 2023, the credit line has been renegotiated and extended to USD 1 billion, and it will continue until March 2024. This aid has played a significant role in strengthening ties between the two countries like never before.

CONCLUSION

In conclusion, while the Sri Lankan crisis has brought hardships for the country, it has also created new opportunities for various Indian industries. The challenges faced by Sri Lanka, such as the decline in tourism, disruptions in agriculture, and power shortages, have opened doors for Indian tea exporters, textile manufacturers, and businesses. Additionally, the crisis has offered India a chance to enhance its diplomatic ties with Sri Lanka and demonstrate solidarity through aid and support. As the two nations navigate these circumstances, the resilience and collaborative spirit between them can lead to mutually beneficial outcomes.



THE MAURITIUS ROUTE

LEARNING THE MAURITIUS WAY : TRADE OPPORTUNITIES FOR INDIA



BY-
RAHUL SOOD

CREDITS: ADOBE STOCK

MAURITIUS AS AN FDI SOURCE FOR INDIA

Mauritius is a tiny Island nation in the Indian Ocean with a population of 1.3 Million. Despite being a small country with a GDP of a meagre 11.4 Billion USD, Mauritius has been one of the most significant sources of foreign investment for India in the past 2 decades. In the time period of 2000-2019, India received a total of 420 Billion USD in the form of FDI, with Mauritius contributing an enormous amount of 134 Billion USD (32% of the total FDI), surpassing countries like Singapore (20%), Japan (7%), UK (7%) and USA (6%). Mauritius also contributed to a major chunk of India's FPI (foreign portfolio investment) until 2016.

HOW IS MAURITIUS INVESTING SO HEAVILY IN INDIA?

The question arises that, how come a minor island country in the Indian Ocean, predominantly relying on its tourism industry, is able to invest so heavily in India as compared to the other paramount economies around the globe? There are multiple reasons for this, including both tax driven and commercial factors. The main reasons are the Double Tax Avoidance Agreement (DTAA) between the two nations, treaty shopping, round tripping and Mauritius being a tax haven (especially for capital investments).

Double Tax Avoidance Agreement (DTAA):

It refers to a treaty between two nations that eliminates the burden of double taxation, i.e., taxation in both nations during international trade. This treaty is used to promote and encourage trade and investments between two countries but it can also be exploited by some parties where there is lack of anti avoidance rules. India currently has a DTAA with 85 nations and it entered into this agreement with Mauritius in 1982.

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- STEPS TAKEN TO COUNTER TAX EVASION
- IMPLICATIONS OF DTAA AMENDMENTS

What makes Mauritius special is that the island nation has no capital gains tax, this paired with the presence of DTAA implies that capital gains accruing to foreign investments coming via the Mauritius route were exempt from taxation in India. This leads to problems like treaty shopping and round-tripping.

Treaty shopping refers to a phenomenon used by investors in a third country to exploit the international trade treaties or agreements between two nations for personal gains. It involved investors routing their cross-border investments from a third country to Mauritius by setting up a shell company. The benefit of 'capital gains tax on investments in India' was only available to residents of Mauritius, so investors who are non-residents of Mauritius set up shell companies within Mauritius, i.e, companies which have no actual purpose or operation and are just created for tax avoidance. They were then using said companies to exploit the DTAA between India and Mauritius and hence enjoying the benefit of zero capital gains tax.

Round tripping refers to money leaving the country through various channels and then making its way back into the source country as FDI or FPI, it is mainly done for money laundering and tax evasion. The corporate tax and capital gains tax policies in Mauritius made it a favourable option for investors using round-tripping. This method was so beneficial to an investor, that even Indian residents used it to take their money out of India and then invest it in India itself via Mauritius. The vast majority of FDI from the island nation is believed to be the effect of round tripping by Indian investors.



By using Treaty shopping and round tripping, investors could get the benefit of 'no tax on capital gains' as well as 'lower taxes on dividend income'.

Mauritius, a tax haven:

Apart from the tax treaty advantage, Mauritius also has a very low domestic tax rate. The country has a very investor friendly tax policy in the form of 0 capital gains tax, lower taxes on dividend income, etc. The corporate tax rate in this country is 15%, however some GBCs (Global Business Companies) were eligible to obtain deemed tax credit for the actual foreign tax incurred on income, making the effective tax rates 0-3%. There was

also a major lack of transparency in context of the source of these investments, giving more freedom and opportunities to investors and corrupt officials to launder money via The Mauritius Route.

STEPS TAKEN TO COUNTER TAX EVASION

The governments of the two countries have worked together and amended the tax laws in order to stop the evasion of tax and money laundering. The biggest step in the context of this goal was the amendment of the DTAA treaty in 2016. Other notable steps include introduction of General Anti Avoidance Rules (GAAR), OECD's Base Erosion and Profit Shifting (BEPS) tax planning strategies.

Amendment of DTAA:

After long discussions ranging over a decade, the two nations finally came to an agreement in 2016 regarding the amendment of the DTAA policy. This amendment allowed India to tax capital gains for investors based in Mauritius. The new policy gave India the rights to tax capital gains on shares of Indian companies acquired after implementation of the new laws. The pre-existing investments were grandfathered, i.e, investments made before the implementation of the new rules were exempt from tax in India irrespective of where they are sold.

GAAR were implemented by India in 2017 with the focus of checking double non taxation and illegitimate tax planning. GAAR gives India the powers to scrutinise the transactions specifically made with the purpose of not paying taxes in India, these rules directly target Indian residents who were earlier enjoying the benefits of round-tripping. The arrangements made for round tripping and tax avoidance in general involve complex corporate structures with the purpose of exploiting DTAA. GAAR provides safeguards against such attempts of round tripping and even treaty shopping. Anyone still trying to abuse the DTAA would hence leave themselves open to significant risk of litigation.

The organisation for economic co-operation and development introduced Base Erosion and Profit Shifting (BEPS). It refers to tax planning strategies used by multinational corporations that exploit gaps and mismatches in the tax system to avoid payment of tax dues. To counter BEPS, OECD has launched the BEPS Package which is an inclusive framework of over 135 nations which involves implementation of 15 measures to tackle tax avoidance. The BEPS package aims at establishing a modern international tax framework that is consistent across the participating nations in order to get rid of any anomalies within the existing tax structures and agreements between nations.

IMPLICATIONS OF DTAA AMENDMENTS:

The amendments in DTAA along with implementation of GAAR and BEPS has certainly dethroned Mauritius as

the leading foreign investor in India as is evident from recent data provided by the RBI. Mauritius has since been replaced by Singapore as the country with highest investments in India, however Mauritius is still at number 3 in the list (as per 2021 data provided by RBI). This is because Mauritius still has favourable elements that make it a suitable jurisdiction for investments in the sense that it is still a tax haven for investors. The amendments to the tax treaties only affects equity investments made in India, so companies can still operate and enjoy some tax benefits in Mauritius.

When it comes to debt investments, the protocol states that all entities based in Mauritius investing in debt instruments in India (including banks) must pay tax at a rate of 7.5% of the gross interest earned, which is less than the 10% (or higher in cases of unlisted debentures) that Indian citizens have to pay, making Mauritius the preferred route for debt investments in India.

While, there has been a significant decrease in equity investments in India via Mauritius, the debt investments have increased steadily since the introduction of new DTAA rules. Further, existing investors have been comforted as their investments were grandfathered in the DTAA amendment. This implies that even though the new laws have decreased equity investments and dethroned Mauritius as the top FDI source, India will still continue to receive healthy amounts of debt investments from the island nation. Hence, Mauritius will continue as a good source of foreign investment for India.



NAVIGATING THE BLUE POTENTIAL

OCEAN'S VITAL ROLE IN THE GLOBAL
ECONOMY



**BY-
TRIGUNA JAIN
ECO HONS.**

CREDITS: INÁCIO PIRES

INTRODUCTION

The oceans are a witness to the limitless potential of our planet. They are like a giant puzzle with most of its pieces missing, and from the genesis, have been a source of awe and inspiration for all who want to explore their depths. Water is what gave birth to all life forms that exist today and it is what continues to sustain it. Hence today, as ideas like green economy, sustainability and carbon footprint are gaining momentum, it is imperative that we control not just how we turn these ideas into reality, not just on land but also in water.

A green economy is often described as one that is low in carbon emissions, socially inclusive, and resource-efficient thereby promoting a sustainable future for everyone. However, an important facet of sustainable living we tend to miss out on is that of the 'blue economy.' The "blue economy" is the term used to describe all maritime-based economic activity. It encompasses a wide range of economic sectors, including fishing, aquaculture, tourism, shipping, tidal and offshore wind energy. The blue economy has the ability to save the ocean and its resources while simultaneously generating employment, food, and energy for a population that is expanding. Earth is also known as the blue planet. More than 70 per cent of its surface is covered by the oceans which play a significant role in shaping our climate. They support biodiversity and sustain human livelihoods. More than 80% of the world's oxygen is produced through oceans. Regardless, their contribution to the 'green' agenda has not been as prominent as it should be.

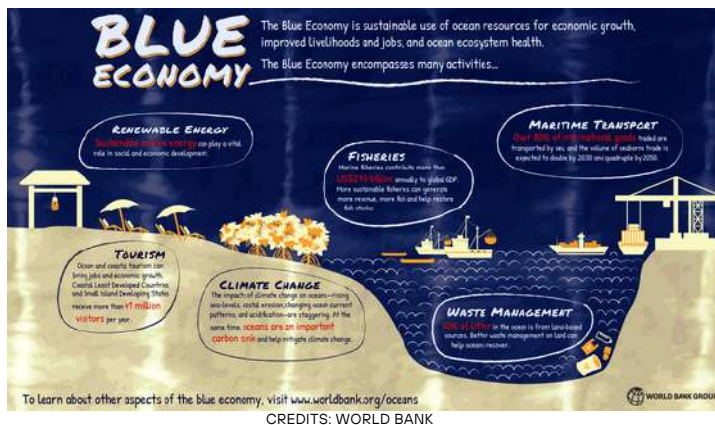
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- BLUE ECONOMY
- THE OCEAN'S VITAL ROLE
- INDIA'S BLUE ECONOMY
- THE PATH FORWARD

The blue economy is a vast and largely unexplored resource that has the potential to transform our world. But we must act now to protect and manage this resource wisely. Otherwise, we risk losing this precious opportunity to create a more sustainable future that could benefit humankind.

WHAT IS THE BLUE ECONOMY?

The term 'blue economy' was first introduced on the international stage during the 2012 United Nations Conference on Sustainable Development (Rio+20). It encompasses a wide range of sectors, including renewable energy, fisheries, maritime transport, tourism, climate change mitigation, and waste management. The World Bank and the United Nations, both define the blue economy as a concept that seeks to promote economic growth, social inclusion, and the preservation or improvement of livelihoods while ensuring environmental sustainability in oceans and coastal areas.



THE OCEAN'S VITAL ROLE

Apart from being an important part of the environment, they are a vital part of the global economy. Over three billion people depend on marine and coastal resources for their livelihoods. Oceans also serve as highways for 80% of the volume of international trade. Events like the blocking of the Suez Canal in 2021 or Russia blocking the Black Sea grain deal have only highlighted the fragility of our transport systems. Presently, in drought-stricken Panama, low water levels have prompted the Central American country to reduce the number of vessels that pass through the critically important Panama Canal.

INDIA'S BLUE ECONOMY

India encompassing a lively port metropolises along the Arabian Sea and Bay of Bengal, as well as serene coastlines in the Andaman and Nicobar Islands, also possesses an extensive and varied maritime expanse. The blue economy of the nation holds significant importance in propelling its economic progress and advancement.

The Indian economy aiming to become the third-largest economy by 2030 is continuously on the lookout for new ways to expand. Although it is one of the world's fastest-growing economies, there is significant untapped potential along the country's vast coastline, which stretches over 7,500 km along the Indian Ocean, as well as the vast Exclusive Economic Zones (EEZ), which covers more than 2.2 million square kilometers. This vast blue frontier with prospects in many areas holds the secret to India's future development.

The Indian seafood industry has grown at a remarkable and sustained rate of 10.87% per year from 2014 - 2015. In 2021-22, India achieved a record fish production of 161.87 lakh tonnes. However, the sector's growth has been hampered by its fragmented nature, which is characterized by artisanal fishermen who often lack access to credit and modern technologies. The aquaculture sector, which has vast potential, encounters similar challenges. While government initiatives like the Pradhan Mantri Matsya Sampada Yojana aim to promote sustainable fishing and provide financial support to farmers, the real catalyst for progress can only come from private sector investments.

Ports and maritime transport play a strategic role in economic growth. Infrastructure development remains a significant barrier to realizing the full potential of these industries. Privatization of such industries offers benefits such as greater efficiency and innovation, but it should be balanced with environmental considerations and the protection of marine life. India's blue economy goes beyond its core industries: Renewable energy, marine tourism and deep-sea mining offer further growth opportunities. The Department of New and Renewable Energy had identified significant potential for tidal and wave energy along the Indian coast. The country's extensive coastline and scenic beaches offer lucrative opportunities for maritime tourism. PM Narendra Modi asserted that the government is planning to invest in port and waterways infrastructure and that the Ministry of Port Shipping and Waterways has created a list of 400 investable projects while inaugurating the Maritime India Summit in 2021. The government has also launched the Indian Deep Ocean Mission whose aim is to unlock the Indian Ocean's vast mineral resources, including copper, nickel, cobalt and manganese.

THE PATH FORWARD

The ocean economy of India is a veritable mine of chances for economic development, food security, and long-term job creation. It can raise living standards and support the nation's economic expansion. It is made up of several different industries, including fishing, aquaculture, marine tourism, offshore wind energy, and seabed mining. A substantial portion of this business,

which is estimated to be worth more than \$1 trillion globally, could be dominated by India. Millions of people in India could find employment through the ocean economy, especially in coastal regions. It can also help to ensure food security by providing a consistent supply of protein. Additionally, it can help to safeguard the environment by reducing our reliance on fossil fuels.

Although, the Indian government is making progress, more needs to be done to boost the ocean economy. Building infrastructure, increasing funding for R&D, and fostering a supportive regulatory environment are all necessary. Additionally, we must increase public understanding of the ocean economy's potential.



CREDITS: NATIONALGEOGRAPHIC SOCIETY

CONCLUSION

We must strive to achieve the right balance if we want to reap the full benefits of the "blue economy." This necessitates concentrating on three primary objects: expanding our knowledge of the ocean, creating regulations governing its usage, and cooperating with other nations. Businesses can take advantage of the numerous economic opportunities that these waterways provide us if they exercise caution and sustainably use the ocean's resources. We can unlock the economic potential of the oceans without jeopardizing their health by promoting ethical and sustainable practices in ocean-related businesses.

Therefore, as we gather momentum towards a greener future, let us remember that the 'blue economy' is not a choice but a necessity. Its inclusion in the broader 'green' agenda is essential for addressing the complex challenges that humankind faces. With the International community's and India's commitment to reaching the 2030 Sustainable Development Goals, we still have a chance to set sail for a future that is more prosperous, inclusive, and sustainable—one that takes into account both the green and blue facets of our planet's economy.

FINANCE FALL OUTS NCIAL



WHAT'S INSIDE

Impact of COVID-19 on Global Financial Markets: Lessons Learned

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Transforming the Future of Finance

IMPACT OF COVID-19 ON GLOBAL FINANCIAL MARKETS

LESSONS LEARNED

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TOP TEN SUBMISSIONS
CALL FOR ARTICLES

Ubaid Ghazali

*Jamia Hamdard University,
New Delhi*

INTRODUCTION

The COVID-19 pandemic has caused unprecedented disruptions across the globe, affecting not only public health but also the global economy and financial markets. The financial markets experienced extreme volatility and uncertainty as the pandemic unfolded, leading to significant losses for investors and triggering a global recession. However, amidst the challenges, valuable lessons have been learned that can guide policymakers, investors, and market participants in navigating future crises. This article explores the impact of COVID-19 on global financial markets and highlights the key lessons learned.

MARKET VOLATILITY AND INVESTOR PANIC

The outbreak of the pandemic sent shockwaves through financial markets, leading to a period of intense volatility. Stock markets experienced historic drops in a matter of days, triggering panic selling among investors. The unprecedented speed and scale of the market downturn caught many off-guard, emphasizing the importance of preparedness and risk management strategies. The lesson learned here is that diversification, asset allocation, and maintaining a long-term investment perspective can help mitigate the adverse effects of market volatility

CENTRAL BANK INTERVENTIONS AND FISCAL STIMULUS

To stabilize financial markets and support the economy, central banks worldwide embarked on massive monetary easing measures. Interest rates were lowered, and quantitative easing programs were implemented to inject liquidity into the markets.

Furthermore, governments implemented fiscal stimulus packages to support businesses, workers, and households. These interventions played a crucial role in restoring confidence and preventing a complete collapse of the financial system. The lesson here is that coordinated and decisive actions by central banks and governments are vital during times of crisis to support the markets and the economy.

IMPORTANCE OF TECHNOLOGY AND DIGITALIZATION

The pandemic accelerated the adoption of technology and digitalization across various sectors, including financial services. With lockdown measures and social distancing protocols in place, online banking, digital payments, and remote trading became essential for businesses and individuals. Firms with robust digital infrastructure were better equipped to adapt to the new normal and maintain their operations. This crisis highlighted the importance of investing in technology and digital capabilities, as well as the need for regulatory frameworks that facilitate innovation and secure digital transactions.

RESILIENCE OF HEALTHCARE AND BIOTECH SECTORS

The pandemic underscored the importance of healthcare and biotech sectors, which played a pivotal role in combating the virus and developing vaccines. These sectors experienced significant growth, attracting investor interest and driving market performance. The crisis highlighted the potential of investing in areas that address global challenges, such as healthcare, biotechnology, and pharmaceuticals. This lesson reinforces the importance of diversifying investment portfolios and considering long-term trends and opportunities.

SUPPLY CHAIN VULNERABILITIES AND RESHORING

The pandemic exposed vulnerabilities in global supply chains, with disruptions in manufacturing and logistics affecting businesses worldwide. As a result, there has been a renewed focus on reshoring or diversifying supply chains to reduce dependence on a single region.

Investors and companies are now evaluating the resilience of supply chains and considering strategies to mitigate potential risks. This lesson emphasizes the importance of supply chain diversification and robust risk management practices.

ADAPTATION AND REMOTE WORKFORCE

The COVID-19 crisis forced companies to rapidly adapt their business models and embrace remote work on a large scale. Organizations that were able to quickly transition to remote work arrangements fared better during the crisis, maintaining business continuity and productivity. This experience highlighted the importance of flexible work arrangements and the need for companies to invest in remote work infrastructure, cybersecurity measures, and collaboration tools. Going forward, companies are likely to incorporate remote work options into their operations, recognizing the benefits of a more flexible and resilient workforce.

ECONOMIC INEQUALITY AND SOCIAL IMPLICATIONS

The pandemic exposed and exacerbated existing economic inequalities within societies. The economic fallout disproportionately affected vulnerable populations, including low-income workers, small business owners, and marginalized communities. This crisis highlighted the need for policymakers and businesses to address the social implications of economic shocks. Measures such as targeted fiscal support, social safety nets, and inclusive economic policies can help mitigate the impact on disadvantaged groups. Recognizing the social dimension of financial markets and considering broader societal impacts will be essential for building more equitable and sustainable economies.

RISK ASSESSMENT AND PREPAREDNESS

The COVID-19 pandemic demonstrated the importance of robust risk assessment and preparedness in financial markets. Many institutions were caught off-guard by the severity and rapidity of the crisis, highlighting the need for better risk models and scenario planning. Risk management practices need to be improved, incorporating more comprehensive stress-testing and contingency plans that account for systemic risks. Institutions should also enhance their monitoring and early warning systems to detect emerging risks and vulnerabilities. Strengthening risk assessment and preparedness can help mitigate the impact of future crises and increase the resilience of financial markets.

As we move forward, the lessons learned from the pandemic should guide policymakers, investors, and market participants in strengthening the resilience of financial markets. Adapting to new realities, implementing robust risk management strategies, and embracing technological advancements will be critical for



INTERNATIONAL COOPERATION AND COORDINATION

The global nature of the COVID-19 crisis emphasized the importance of international cooperation and coordination. The pandemic highlighted the interconnectedness of financial markets and the need for collaborative efforts to address global challenges. Countries and international organizations worked together to share information, coordinate policy responses, and provide financial assistance to affected economies. This crisis underscored the significance of international cooperation in crisis management, and the lesson learned is that policymakers and market participants must prioritize collaboration and information-sharing to navigate future crises effectively.

CONCLUSION

The COVID-19 pandemic has left an indelible mark on global financial markets, with profound lessons learned. Market volatility, central bank interventions, and fiscal stimulus have highlighted the importance of preparedness and decisive actions during crises. The accelerated adoption of technology and digitalization has underscored their significance in maintaining business continuity. The resilience of healthcare and biotech sectors has demonstrated the potential of investing in areas addressing global challenges. Lastly, the vulnerabilities in global supply chains have prompted a re-evaluation of sourcing strategies.



CREDITS: PETR KRATOCHVIL

TULIP MANIA

THE RISE & FALL OF AN EXTRAORDINARY
MARKET CRAZE



**BY-
PARTH
BMS**

INTRODUCTION

In the records of economic history, a few episodes have captivated the imagination of millions of people back then. And one of these episodes is the unsung story of one of the most dramatic economic collapses in history which was witnessed in the 17th century.

We live in the era of cryptocurrencies and bitcoins, which came into the public conversation lately in 2017. But there existed another akin trading unit, Tulip which became the bitcoin of the 1600s. The Dutch Republic in the 17th century was a thriving hub and an international port of trade, commerce, and innovation. Wealthy merchants were drawn to the city and eventually established their roots there. Always putting on airs, living in opulent mansions surrounded by flowers. The humble flower Tulip was considered exotic during the period.

HOW TULIPS BECAME WORTH MORE THAN DIAMONDS

These vibrant and multi-coloured flowers, introduced in the country by the ottoman empire, rapidly gained an impressive demand, and it was virtually impossible to walk down the roads in Amsterdam without encountering this blossom. The elite circles assigned crazy value to the flowers and began building insane wealth around them. Tulips eventually became as valuable as diamonds.

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These vibrant and multi-coloured flowers, introduced in the country by the ottoman empire, rapidly gained an impressive demand, and it was virtually impossible to walk down the roads in Amsterdam without encountering this blossom. The elite circles assigned crazy value to the flowers and began building insane wealth around them. Tulips eventually became as valuable as diamonds.

It reached a disgusting height when, in 1636, a single tulip bulb was worth 150 florins which is roughly around \$25,000 at present, 10 times what a skilled Craftsman made during the period. The cultivation of tulips became a status symbol, with the wealthy aristocracy and merchants desiring these exotic flowers as a sign of prestige and refinement. It's well said that sometimes the truth is stranger than fiction, and that's what happened with tulips in their journey from flowers to fads.

The craze went on, the merchants realised that the bulbs were more valuable because those bulbs were sturdy and didn't suffer damage as folks passed them around. On the other hand, trading the actual flowers would likely have slowed things down. The flowers were light and delicate, but the bulbs were durable and could take some punishment as they were traded around on the note of crazy trades.

The prices showed extreme fluctuation and the trend of generating financial gains from trading tulips escalated. It was the time for nothing better than something new coming along to change the entire game. It was the advent of a virus that caused pigmentation inside the flower's bulb. The petals developed some unique colours and patterns, which made the folks go crazy for diseased tulips fever. This trade didn't involve the exchange of physical bulbs but rather speculative contracts that represented ownership rights, contributing towards the rapid expansion of this market with a huge economic bubble waiting to burst.



CREDITS: DIANA VYSHNIAKOVA

The competition grew spectacularly fierce. Tulip contracts were highly complex, and their complex nature only added to the allure and mystique surrounding the tulip trade. A single bulb could change hands multiple times before it was even delivered, as traders engaged in speculation and re-selling of contracts.

THE TULIP BUBBLE BURSTS

These contracts allowed investors to participate in the market without having to pay the full price upfront, increasing the accessibility of tulip trading and amplifying the speculative nature of the market hence people started seeking inconsistent wealth before its honour. At the same time, people went gambling over these bulbs, which gradually turned this trading into a spectator sport where people bragged and exaggerated stories about how awesome their tulips were. It all started as a gentleman's game, but in no time it devolved into a series of barroom brawls, ruined friendships, and financial loss.

It was a crazy time to be alive. A regular tulip seed takes around seven to twelve years to become a bulb. By the time any of these tulips got to that point, the bubble reached its breaking point. The arena of this tulip trade began to collapse when a plague infection tiptoed around the city. The confidence of the investors in the city tulips shattered as no one wanted to be infected by a horrible disease when they could easily avoid it. The bubble popped, market sentiment shifted, panic ensued, prices declined terribly, and people scrambled to sell their tulip contracts at plummeting prices. The crash was swift and severe, causing widespread financial ruin and leaving many investors in ruinous debt. People all over the city were losing their homes and saving over the tulip bulbs.

Only government intervention could stabilise the situation, hence the government came to rescue the Dutch economy which was severely wounded after the collapse.

This tulip mania is a true cautionary tale that engulfed Europe in the 1600s. It serves as a compelling historical case study, offering valuable insights into the nature of speculative bubbles, the psychology of investors, and the broader economic implications of such phenomena. The episodes highlight the dangers of speculative bubbles driven by irrational enthusiasm but also give valuable insights into the functioning of the financial markets and the influence of human behaviour on economic outcomes. And that's why this tale continues to captivate our imagination to date.

RETHINKING CAPITAL PRICING MODELS

THE CAPITAL PRICING MODEL AND THE RESOLUTION OF INADEQUACIES



BY-
NEHA YADAV
CS (H)

CREDITS: BRIJITH VIJAYAN

INTRODUCTION

A framework for calculating the anticipated return on an investment is provided by the widely used financial model known as the Capital Pricing Model (CAPM). The CAPM, created by William Sharpe in the 1960s, is frequently used to calculate the proper risk-adjusted rate of return for an investment by taking the risk-free rate, market risk premium, and beta into account. The CAPM has been widely used in finance, but it has also come under fire for its shortcomings over time. This essay will examine the main elements of the CAPM, its shortcomings, and the efforts made to correct them.

OVERVIEW OF THE CAPITAL PRICING MODEL

The basis of the Capital Pricing Model is the presumption that investors are logical, risk-averse, and looking to maximise their wealth. The risk-free rate, market risk premium, and beta coefficient are taken into account in the model in order to quantify the expected return on an investment.

A) RISK FREE RATE

The CAPM bases its predictions on the idea that investors can obtain a risk-free rate of return by placing their money in a risk-free asset, which is typically represented by government bonds. Investors seek a return equal to the time value of money and the absence of risk, which is represented by the risk-free rate.

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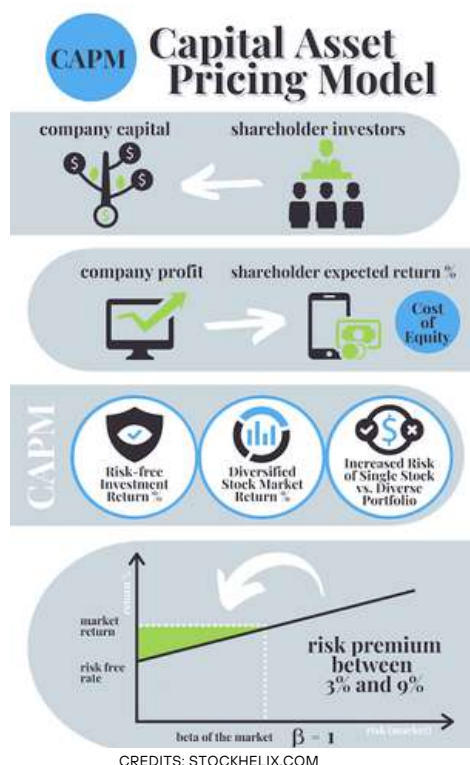
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B) MARKET RISK PREMIUM

The market risk premium is the extra return that investors need to make a decision to invest in a risky asset as opposed to a risk-free asset. It is determined by subtracting the risk-free rate from the market's expected return as a whole.

C) BETA COEFFICIENT

The beta coefficient calculates how sensitive the returns on an asset are to broad market fluctuations. It measures the systematic risk connected to a particular investment in relation to the market



CREDITS: STOCKHELIX.COM

INADEQUACIES OF THE CAPITAL PRICING MODEL

Despite its widespread use, the CAPM has faced criticisms and inadequacies over the years. Some of the key limitations include:

A) MARKET EFFICIENCY ASSUMPTION

The CAPM is predicated on the notion of market efficiency, which contends that asset prices reflect all pertinent information instantly. In practice, markets might not always function efficiently, which could result in incorrect pricing and variations from the model's forecasts.

B) SINGLE-FACTOR MODEL

Being a single-factor model, the CAPM only takes systematic risk, symbolized by beta, into account when estimating returns. Other elements that might affect asset prices, such as size, value, momentum, and liquidity, are not taken into consideration.

C) LIMITED APPLICATION

The CAPM makes the assumption that risk and return always follow a linear relationship, which may not always be true. The complexity of real-world markets, where nonlinear relationships and peculiar factors can have a significant impact on asset prices, may not be adequately captured.

RESOLUTION OF INADEQUACIES IN THE CAPM

A) MULTI-FACTOR MODEL

Researchers have created multi-factor models that include additional risk factors in response to the CAPM's shortcomings. The Fama-French three-factor model, which takes into account size, value, and market risk factors, is the most notable of them all. The model aims to provide a more thorough understanding of asset pricing and risk by including these extra variables.

B) BEHAVIORAL FINANCE

Arbitrage Pricing Theory (APT): APT is a complement to the CAPM and corrects some of its shortcomings. APT does not rely on a single-factor model or market efficiency assumptions like the CAPM does. Instead, it takes a number of risk factors into account and permits variations from market efficiency. With the help of a linear combination of various macroeconomic and firm-specific factors, APT offers a framework for estimating asset

C) USING OF BEHAVIORAL FINANCE PRACTICE

Using the behavioral finance perspective is another way to address the shortcomings of the CAPM. Behavioral finance acknowledges that investors are not always logical and that their choices regarding which investments to make may be influenced by cognitive biases and emotional factors. Researchers have created models that take into account investor behavior and its effects on asset pricing by incorporating insights from behavioral economics and psychology.

Nadu.

D) EMPIRICAL-RESEARCH

Over time, empirical research has exposed the shortcomings of the CAPM and prompted improvements. Researchers examined historical data to test the CAPM's hypotheses and found evidence of anomalies and deviations from their predictions. These discoveries have led to the development of substitute models and adjustments to the original CAPM formula.

E) ADVANCED RISK MANAGEMENT TECHNIQUES

These techniques have improved and helped address the shortcomings of the CAPM. Traditional risk indicators, like beta, have trouble capturing the full range of dangers that investors face. As a result, more sophisticated measures have been created, such as Value at Risk (VaR), Conditional Value at Risk (CVaR), and stochastic models, to provide a more thorough evaluation of risk and its effects.

F) INTEGRATION OF MACHINE LEARNING AND BIG DATA

Massive amounts of data are now readily available, and the development of machine learning has created new opportunities for enhancing asset pricing models. Large datasets can be analysed and machine learning algorithms can be used to find patterns, relationships, and other elements that were previously missed. The accuracy and robustness of asset pricing models, including the CAPM, could be improved by this integration.

CONCLUSION

The Capital Pricing Model (CAPM) has been a key tool in finance for calculating appropriate risk-adjusted rates of return and estimating expected returns.. Due to its presumptions and restrictions, it has been criticised and found wanting. The creation of multi-factor models, like the Fama-French three-factor model, the adoption of different methodologies, like the Arbitrage Pricing Theory (APT), and the incorporation of behavioural finance insights have all been attempts to address these shortcomings over time. The limitations of the CAPM have also been addressed through empirical testing, sophisticated risk measurement methods, and the integration of machine learning and big data.

Although these developments have deepened our understanding of risk and asset pricing, it's important to remember that no model is perfect. There are ongoing difficulties due to the complexity of the financial markets and the unpredictable nature of investor behavior. To capture the nuances and changing dynamics of the financial landscape, ongoing research and model improvement are therefore required. Researchers and practitioners can improve their capacity to make wise investment decisions and manage risks by working to address the shortcomings of the CAPM.



RBI'S CENTRAL CURRENCY ROLLOUT

UNVEILING INDIA'S FINANCIAL FUTURE



**BY-
KHUSHI DUDY
BCOM(H)**

INTRODUCTION

The Reserve Bank of India is a government body established on 1 April 1935. RBI has been granted extensive authority to oversee and regulate the commercial banking system under the RBI Act, of 1934, and the Banking Regulation Act, of 1949. It is India's central bank. A central bank is a financial institution that manages a country's monetary policy and regulates its banking system. Hence, RBI also does the same. It regulates India's monetary policy, issues currency, and manages foreign exchange reserves.

When we talk about currency, it is a particular type of money applicable in a specific country. Managing the currency is a crucial function of RBI by printing it and regulating its circulation in the economy. In the past, money has always had a significant impact on society. As a medium of exchange, it is used as a mode to carry out transactions. It helps identify the value of goods and services and presents them in monetary terms. Money has had a rollercoaster history. From the early days of barter exchange to metallic coins, paper notes, plastic currency, and digital currency; money has come a long way. Indeed money and finance have always gone hand in hand. India has made a notable development toward innovation in digital currency and digital payments. These digital payment systems are affordable, accessible, convenient, efficient, safe, secure, and available 24x7x365 days a year. The way people pay for things has changed because of new electronic payment systems like RTGS and NEFT, which make it easy to transfer money quickly and securely.

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Other new payment systems like IMPS, UPI, BBPS, and NETC have also made it easier to pay for things using your mobile phone. These changes have made a significant impact on the way people pay for something in the country.

CONCEPT OF CBDC

Money has evolved from physical to digital form, giving rise to a new type of digital money- Central Bank Digital Currencies (CBDCs). CBDC is money that can be issued and regulated only by a country's central bank. Advancements in technology have made it possible for the government and financial institutions to control fiat money digitally. Several countries have already launched their digital currency pilot project; many are still exploring and trying their hands at it.

CBDC IN INDIA

RBI launched two CBDC pilot projects last year. The first is its Wholesale CBDC, which began on 1 November 2022. The wholesale CBDC is designed for restricted access to financial institutions. It launched its other CBDC- retail digital rupee (₹-R) pilot on 1 December 2022. The retail project began with eight banks in four cities- New Delhi, Mumbai, Bengaluru, and Bhubaneshwar- and has now extended to 15 cities including Chandigarh. These banks include the State Bank of India, ICICI Bank, Yes Bank, and IDFC First Bank later joined by HDFC Bank, Kotak Mahindra Bank, Bank of Baroda, and the Union Bank of India. It would be available for use by all though no complete information about when it will be launched. Currently, around 50000 users among which approximately 5000 merchants. It also includes the nation's leading retail chain- Reliance Retail.



DESIGN OF CBDC BY RBI

RBI defines CBDC as similar to sovereign paper currency but in digitalized format and as a more secure payment method. It imbibes all the possible features of the physical currency and it cannot be physically damaged. There are two ways to manage CBDCs: Direct and Indirect. In the Direct model, the central bank is responsible for everything related to the CBDC system. In the Indirect model, the central bank works with intermediaries like banks to issue CBDCs to consumers. The intermediary handles any claims by consumers, while the central bank only handles payments to intermediaries. CBDC can take the form of either token-based under which it is presumed that whosoever holds the token at a particular point of time, would be its owner; or it can be account-based which would require maintenance of record of transactions to indicate the ownership. Currently, in the trial phase, CBDC has components from blockchain technology. For the purpose of CBDC deployment, technological considerations must be forward-looking and also of great concern for protection from cybersecurity and transparency to encourage people to switch to CBDC from the use of paper money. But nowhere it aims to replace physical currency. It aims to complement current forms of money by providing an additional payment option to the public.

CHALLENGES

People are confused between UPI and CBDC. UPI is an already existing cashless movement that transfers money from your bank account to a merchant's bank account while making a payment. But CBDC will ultimately remove the need for the bank as an intermediary. It will have all the features of physical currency without risks. CBDC could maintain cash-like anonymity which is not available in UPI. Unlike UPI, a person won't necessarily need a bank account to use CBDC, though this aspect needs to be tested. CBDC is also expected to incur lesser operational costs in comparison to UPI whose operating cost may exceed 8400 crores INR annually. If the citizens get comfortable with the concept of CBDC then it might replace UPI in the future.

INTERNATIONAL ASSISTANCE

CBDC has often been considered a great geopolitical weapon with the help of which one nation can gain an advantage over the other. CBDC, because of its digital format, will make it easy for the nation to get better international acceptance. CBDC could eliminate the high cost, slow speed, limited access, and insufficient transparency in international remittances. RBI's concept note called for central banks to incorporate cross-border considerations in their CBDC design in order to overcome challenges like exchange rate differences.



CONCLUSION

India is looking to coordinate global crypto rule-making involving several aspects of the CBDC Framework. Still, many things are to be figured out regarding this concept which will ultimately require a few more trials in the coming days before actually launching it nationwide. If CBDC makes it successfully into the economy, the process of carrying out transactions will be simplified up to a great extent.





CREDITS- AL JAZEERA

UTOPIA INC. – AN ELEGY FOR CASH

CALL IT GRUNGY, ALTMODISCH OR UNFASHIONABLE. CASH IS STILL AN IMPORTANT PUBLIC GOOD FOR THE RICH AND THE POOR ALIKE



BY-
SAHEJ VERMA
ECO (H)

INTRODUCTION

For innumerable years Marxist intelligentsia has grappled with the idea of a utopian society where transactions don't involve money as a medium of exchange. According to the conceptualizers Karl Marx and Friedrich Engels, money was merely an instrument of capitalist exploitation, supplanting human relationships and community bonds, even those within the family, with the so-called callous nexus of cash. As Marx later sought to demonstrate in his monumental *Das Kapital*, money was commoditized labor, the surplus generated by honest toil, appropriated and then reified in order to satiate the capitalist class's insatiable lust for accumulation and wealth concentration.

Such notions were misconstrued and rightfully, died hard. Yet until the recent 1970s, proscribed and outlawed factions and associations in Eastern European nations still were yearning for a moneyless world, as in the utopian diffusion from the Socialist Standard illustrating how the new interactors in the society would resemble their hunting and gathering ancestors who had trusted in a nature that had supplied them freely and often in abundance with what they needed to live, and who had no worry for the morrow.

Yet, despite the appeal of primitive communism, no communist state, not even the DPRK has found it ever to practically dispense with money. The erstwhile Albanian communist dictator Enver Hoxha in fact had hordes of these factions arrested and persecuted all across his country. Rightly so, even a passing acquaintance with real hunter-gatherer societies suggests there are considerable advantages to a world without cash, the most liquid and readily available and ubiquitous source of discharging debt

IN THIS ARTICLE

- INTRODUCTION
- DOWNSIDES OF CASHLESSNESS
- FUTURE OF
- TRANSACTIONS

DOWNSIDES OF CASHLESSNESS

Cash might be grungy, unfashionable, and corruptible in the modern day, but it is still a greatly powerful public good, imperative for the rich and the poor alike. In an economist's idealized free market, rational persons enter into monetary-exchange contracts with one another for mutual gain. One person, known as the 'buyer,' transfers money tokens to another, known as the seller,' who then transfers actual goods or services. So here I am, the drained individual wanting sugar reasonably. The market is in front of me, with fizzy drinks placed on a shelf and a vending machine functioning on behalf of the cola vendor. It's a submissive mechanical device bound by a simple market contract: if you contribute money to my owner, I'll give you a Coke. So why is it that this stupid computer refuses to get into this arrangement with me? This is an example of market failure.

To explain this failure, we must first recognize that we live in a world of two kinds of money. A system of physical tokens that are physically handed over to complete a transaction is called "cash". This first kind of money is open to the public. You could call it "government money".



CREDITS: SKODONNELL

In fact, we see the currency as an 'existing' public utility. It may look dingy and unattractive and is fraught with inefficiency and potential corruption, but it is, in principle, open to the public. It can be passed directly from the richest people in society to the lowest and vice versa.

The second type of money, fiat digital money, is primarily private and is based on an infrastructure jointly managed by for-profit commercial banks and a number of private payment brokers, such as Visa and Mastercard, affiliated with for-profit commercial banks.

I'm here. The bank account data label is not government funds. The ATM network is the primary method of exchanging bank deposits for pledged government money. Digital payment systems, on the other hand, are methods of transferring or redistributing these bank deposits between each other.

You may find that both forms are more or less useful in some cases. A major success story in this regard is the emerging but highly successful UPI (Unified Payments Interface) system in India, which is now being deployed or replicated elsewhere.

Yet, much like the yearnings of the Eastern European communists, if plastic manages to replace cash, all good and valuable will be lost. Architects of a 'cashless' society are now working to remove the option of resorting to state cash. They wish to completely privatize the movement of money tokens, pushing banks and private-payments intermediaries between all interactions of buyers and sellers.

The claim that a cashless society or a bank payments society is an inevitability, is naïve and disingenuous, emerging out of an anarcho-libertarian distrust of money. Any future cashless bank-payments society will be the outcome of a deliberate war on cash waged by an alliance of three elite groups with deep interests in seeing it emerge. First would be the banking industry which has a profit motive, second would be the digital payments provider industry whose USP is in itself, anti-cash and third quite strangely is the state or the political administration and its quasi-state entity, the central bank.

FUTURE OF TRANSACTIONS

The attempt to depict a cashless bank-payments society as a benefit to underprivileged people is, at best, shaky. Banks and payment intermediaries have little interest in prioritizing disadvantaged members of the informal economy, off-the-grid hustlers, or low-income precarious workers.

The activity that takes place in the peripheral cracks that constitute the basis of your livelihood will not be processed by the bank payments society. It is indeed intended to close certain areas.

That may be described as 'progress,' but we could also argue you're being shut out of the system in an act of economic cleansing. The underclass, the unwatched, the eccentric, and the untamed will be coercively brought into the hands of the state-corporate mainstream under the pretense of eradicating the "shadow economy."

One of the most undue advantages cash enjoys over other forms of money is not its extensive network but its resilience, which is of great importance, especially in a country like India. Political Economy and the social composition besides demographics also play a monumental role in impacting financial structures and demeanors across a region which may be dependent on historicity or other sociological factors and determinants

CONCLUSION

In the worlds of economics and finance, there is a very popular adage warning us to be careful for what we wish or ask for. Simple Economics sounds very pleasing yet establishes itself after a plethora of considerations and relaxations. Reality is too complex in itself to gauge situations demanding a finesse in all aspects financial and economic without distorting the cohesiveness of sociological factors. Yes, cash does come with its fair share of problems and criminals, but a simple agency of capital is any day better over a digital surveillance society spawning the horrors only envisioned in the ambits of art, fiction and videogames and it is unequivocally better that they stay constricted to those only.



TRANSFORMING THE FUTURE OF FINANCE

RBI'S DIGITAL RUPEE RESHAPING MONETARY PARADIGM



BY-
SHUBH CHOPRA
BCOM (H)

CREDITS: KANOK-ORN

INTRODUCTION

The Reserve Bank of India (RBI) in its annual report for 2022-23 released last month said that the results of the digital rupee (e-rupee) or the central bank's digital currency (CBDC) overall survey results have been positive and... as expected. With an aim to enhance financial inclusion and growth, the RBI launched a digital rupee pilot project on the wholesale and retail side last year. In response to cryptocurrencies, a top inter-ministerial group proposed e-rupee or CBDC in 2017.

The RBI set up a CBDC working group to make recommendations by 2020. In 2022, the central bank undertook digital rupee research projects in the wholesale and retail sectors. According to the annual report, currencies currently in circulation include notes, cash and digital rupees (₹). The cards are available at a cost of Rs. 2 to Rs. 2,000 when the amount comes to 50 paise, Rs. 1, Rs. 2, Rs. 5, Rs. 10, and Rs. 20. Groups. Digital rupees (₹-Retail) are introduced in churches, with 50 paise, Rs. 1, Rs. 2, Rs. 5, Rs. 10, Rs. 20, Rs. 50, Rs. 100, Rs. 200, Rs. 500, and Rs. 2,000 square feet. As of March 31, 2023, the total value of digital rupees in circulation is Rs 16.39 crore, including Rs 5.70 crore in the retail segment. 33,48,228 crore and gold Rs 30,242 crore. Now, let's delve deeper into the amazing nature of digital currency and explore how it has the potential to transform our transactional experiences.

IN THIS ARTICLE

- INTRODUCTION
- E-RUPEE
- BENEFITS
- RESERVE BANK OF INDIA'S DIGITAL RUPEE (₹) VS. UPI

E-RUPEE

E-rupee is the digital equivalent of Indian currency which we all know. It has the same security and reliability as its physical counterpart and is regulated by the Reserve Bank of India (RBI). E-money has the same legal tender status as physical money, allowing it to be used for financial transactions.

WHAT ARE THE BENEFITS?

E-rupee offers faster settlement times, coupled with round-the-clock service, making transactions faster and more accessible 24/7. According to information on the State Bank of India website, it is surpassing the speed of traditional banknotes. When it comes to transferring funds online or through other online channels, certain restrictions come into play, such as batch runs, clearing cycles in NEFT and RTGS, and unavailability of services on weekends or bank holidays but 24X7 service of e-rupee. The availability allows users to use it at any time, eliminating the need to wait for the issues to be resolved.



CREDITS: ETGOVERNMENT.COM

LOWER COST OF TRANSACTIONS: Transactions through digital rupees have reduced costs as compared to the methods of transactions involving physical currencies. The need for more storage space and the inconvenience of carrying virtual currencies pose real challenges. Moreover, the ever-increasing vulnerability of physical currencies to theft further increases the risks associated with their use. On the contrary, digital currency finds a secure place in a digital wallet maintained by a bank, providing a high level of security when stored and also, access to the digital rupee remains uninterrupted, allowing users to reap its benefits at any time.

NO HASSLES OF CHANGING SOILED NOTES: Cash has long been accepted as a form of transaction, due to its long existence and secrecy. Physical income, however, slowly deteriorates through use and can lead to distortion and even abandonment. In such cases, the balance must be exchanged in a bank account. Excessive damage or distortion can render the labels inaccurate and unusable. In contrast, digital currency eliminates these risks and remains immune to such tampering. Since digital currencies do not have physical assets, they bypass the potential threats that physical currencies may face and ensure their authenticity and utility over time.

FAKE NOTES RISK: Physical cash may be forged, and there is always the chance of being given one by a shady figure. According to the RBI, the number of cases of counterfeit Rs. 200 and Rs. 500 notes has grown between 2022 and 2023. The greater use of digital currency is intended to prevent the spread of counterfeit notes.

Quicker International Transfers: The e-Rupee is supposed to cut the time and costs associated with overseas transactions. The concept is now in its experimental phase, with nine banks participating. Five other banks are in the process of joining the pilot project: Punjab National Bank, Canara Bank, Axis Bank, Federal Bank, and IndusInd Bank.

UNVEILING THE DISTINCTIVENESS: RESERVE BANK OF INDIA'S DIGITAL RUPEE (₹) VS. UPI

Legal Status: e-Rupee as Legal Tender, UPI as a Payment Medium

One of the most significant distinctions between the e-Rupee and UPI is that the e-Rupee is a digital currency and legal tender that permits digital transactions, whereas UPI is just a platform through which digital transactions may occur.

e-Rupee Transcends Intermediaries, Banks No Longer Required

When engaging in digital transactions using UPI or internet-based banking methods like NEFT or RTGS, the involvement of a bank as an intermediary is essential. In contrast, with the e-Rupee, funds are directly transferred from one digital wallet to another.

The e-Rupee is not limited to just currency. Although it is a sort of money, the e-Rupee may be used for more than just payments. The e-rupee also functions as a "unit of account" and a "store of value." UPI, on the other hand, is more of an overlay infrastructure on top of any type of store of value, such as bank accounts (which use standard money), prepaid instruments, credit cards, and so on

e-Rupee transactions bring more anonymity

The primary feature of a currency is its anonymity. As a result, money may be utilised to maintain anonymity. Although the transactions are recorded in the central ledger, the owners of the wallets are unknown to the government or intermediaries in the ecosystem. In the case of UPI or other mechanisms such as NEFT or RTGS, the transaction occurs between two bank accounts and can be readily followed.

e-Rupee transactions require PAN after a certain limit

Currently, everyone making a cash transaction above a particular amount must provide their PAN. The same is true for e-rupee. According to existing laws, the CBDT made it essential last year in May for persons to reference their PAN card or Aadhaar card number for withdrawals or deposits of 20 lakhs or more from bank accounts, including current accounts, cooperative banks, and post offices, in a fiscal year. When depositing more than 50,000 in a single day, a PAN card number is also necessary. There is no necessity to submit or input PAN data for UPI transactions beyond a certain threshold value.



The **BUSINESS** *brew.*

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INDIAN FLIGHTMARES

WHY ARE OUR AIRLINES FAILING?

CREDITS: REUTERS

TOP TEN SUBMISSIONS
CALL FOR ARTICLES

Krishnendu J

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Introduction

Air transport is pivotal to India's transportation infrastructure in today's intricately globalised world. Since the momentous inaugural flight that took to the skies in February 1911, the Indian aviation landscape has witnessed a remarkable journey of growth and transformation. The visionary J.R.D Tata marked the birth of India's aviation industry by establishing Tata Airlines in 1932. From humble beginnings with a fleet of one single-engine aircraft, Tata Airlines later evolved into Air India, the nation's esteemed national carrier, following its acquisition by the government during the post-independence era. Today, the industry boasts over a thousand aircraft, being likely to place orders for 1,500 to 1,700 planes in the next one to two years. Despite its notable achievements, the Indian aviation industry has encountered significant hurdles, especially in recent years, as numerous industry players have succumbed to unsustainable operational costs, mounting debts, and soaring fuel expenses.

SUPPORTIVE FRAMEWORK

As the backbone of the aviation industry, airports play a pivotal role in facilitating seamless travel experiences. India boasts over 400 airports and airstrips, albeit with approximately 136 operational ones. Until 2013, the Airport Authority of India monopolised airport development. However, economic liberalisation opened doors for private sector participation, ushering in a new era of expansion and innovation. The government incentivised airport projects with a 100 per cent tax exemption for ten years in 2016, and foreign direct investment (FDI) received a boost, allowing 100 per cent FDI for greenfield projects and 79 per cent for brownfield projects.

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Recent Challenges

Despite the industry's upward trajectory, challenges and crises have emerged, testing the resilience of Indian airlines. The COVID-19 pandemic, in particular, cast a long shadow, leading to unprecedented disruptions and financial strain.

Go First, formerly known as GoAir, became a casualty of these turbulent times. The airline's struggles, including frequent delays in staff salaries, high attrition rates, and postponed listing plans, served as visible indicators of deeper operational malaise. In a surprising turn of events, Go First filed for voluntary insolvency resolution with the National Company Law Tribunal early in May, citing non-compliance from engine manufacturer Pratt & Whitney as a contributing factor. The grounding of a significant portion of Go First's fleet resulted in substantial revenue losses and additional expenses, painting a grim picture of the airline's financial health. While engine defects were highlighted as the prominent issue, industry insiders pointed to broader challenges, such as capital constraints and lack of profitability. However, other airlines like IndiGo and SpiceJet have managed to navigate similar issues with resilience and alternative capacity plans.

The aviation industry has also recently witnessed its fair share of legal battles, with the financial troubles of SpiceJet drawing attention. Aircastle, an aircraft lessor, pursued an insolvency application against SpiceJet, claiming a debt of 490 million Rupees. The National Company Law Tribunal (NCLT) adjourned the matter multiple times. SpiceJet's ongoing efforts to resolve the dispute and secure financial stability, including accessing the Emergency Credit Line Guarantee Scheme, underline the challenges airlines face in maintaining operations and managing relationships with creditors and lessors.

Recent Challenges

Kingfisher Airlines shut operations in 2012, its wings clipped by mounting debts, turbulent cash flows, and operational disruptions. Likewise, in 2014, SpiceJet found itself ensnared in the tangled web of financial

strains, unrelenting fuel price fluctuations, and cutthroat competition within the realm of low-cost carriers. Yet, SpiceJet summoned the strength to undergo strategic restructuring and secured government support, defying the odds and reclaiming its place in the Indian aviation landscape. Other airlines like Paramount Airlines and MDLR Airlines, entrapped by inadequate financial planning, anaemic market positioning, and internecine conflicts, shut down in 2010.

Amidst this turbulent backdrop, Air India, the nation's proud flagbearer, confronted a confluence of challenges. A bloated workforce, an avalanche of debt, and relentless rivalries in domestic and international markets acted as headwinds, propelling the airline into a downward spiral. Air India underwent a process of privatisation, with the Indian government selling its stake in the airline to Tata Group in 2021. Since doubling its revenue, the airline is currently undertaking its transformation plan named 'Vihaan.AI', which aims to reestablish Air India as a world-class global airline.

Jet Airways, once regarded as a stalwart in the Indian aviation industry, also faced a turbulent downfall a few years ago. Established in 1993, the airline experienced significant growth, becoming a dominant player both domestically and internationally. It boasted a vast network, luxurious services, and a loyal customer base. However, mounting financial troubles and mismanagement ultimately led to its demise. Jet Airways struggled with soaring operating costs, a heavy debt burden, and fierce competition from low-cost carriers. The airline's financial woes escalated, leading to a severe cash crunch, unpaid salaries to employees, and operational disruptions. In April 2019, Jet Airways suspended its operations, leaving passengers stranded and employees uncertain about their future. Despite efforts to revive the airline, including potential investment offers, Jet Airways failed to revive.

Charting a Course for the Future

The trials and tribulations faced by Indian airlines offer valuable lessons for the industry's future. The need for robust financial planning, crisis management strategies, and alternative capacity plans has become evident. Airlines must prioritise capital investments, profitability, and sustainable growth to successfully navigate the dynamic aviation landscape. Moreover, streamlined regulations and proactive measures from

aviation authorities can create an enabling environment for the industry to flourish.

The Indian aviation industry's growth trajectory has been remarkable, with its achievements and challenges shaping the nation's transportation landscape, from the pioneering efforts of J.R.D. Tata to the modern-day triumphs and setbacks, the industry has experienced soaring heights and turbulent skies. As the sector continues to evolve, it must embrace innovation, adaptability, and strategic planning to overcome obstacles and ensure a sustainable future. By learning from the past, Indian airlines can chart a course toward continued growth, resilience, and success.

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HOW TO ESCAPE THE MATRIX WHILE BEING A MUSICIAN?

EXPLORING THE WAYS IN WHICH MUSICIANS EARN
MONEY



**BY-
GAURAV SHARMA
BCOM (P)**

The place where pure silence resides
The place where human emotions can't go
A language that can't be described
But the language is understood by all
And the sorcerer who plays with sound
Nimble fingers and voices unbound
From giving you the best parties
To be with you on the darkest nights

INTRODUCTION

Ever wonder how these magicians earn their livelihood, We see all types of musicians one who tops the billboard, are world sensations, and have Millions of fans. But the magician's biggest fan is usually their mom, and she's not buying any concert tickets! But what about the magicians, who put on the most spectacular shows, yet are overlooked in the limelight?

We also see musicians alongside sidewalks performing for some penny. Magicians often use their skills to entertain and bring joy to people. They can often be found in parks, street corners, and other public places, putting on shows to earn a living. Their art is often overlooked and undervalued, yet they continue to entertain us with their amazing skills.

In the time before we were all not just addicted to this virtual world. But now that we're all stuck inside, it's like they're the only ones keeping us sane! It's even hard for musicians to earn money but as they are musicians their first love has always been music.

IN THIS ARTICLE

- INTRODUCTION
- MODERN DAY MUSIC
- CONCLUSION

During the 50s and 60s, the music culture started growing but very differently. This growth allowed musicians to explore and develop their creative expression, resulting in a diverse and innovative musical landscape that continues to evolve today. In Western culture, the music scene grows independently and we witness some of the biggest stars such as Elvis Presley, The Beatles, and more.

While in India, we have a rich history of classical and folk music. In the 50s 60s Indian music go alongside Bollywood we see the biggest hits of all time as a film track and many big names came such as LATA MANGESHKAR, KISHORE KUMAR, and many more. During this time the main income musicians have is performing in live shows of their own or performing at weddings or programs.

They also used to sell their Music copies and in Western music, the Buying of records is quite famous we witnessed The Beatles who sold over 600 million records lifetime. That's a lot of records! They must have had a really big living room to store them all.



CREDITS: FILMFARE

MODERN DAY MUSIC

Now, let's come to the modern world

For instance, now streaming music services have replaced buying records and CDs, with users able to access millions of songs through subscription services such as Spotify, Apple Music, and Amazon Music.

All these social media, digitalization, and the time to learn new things are the easiest. At present times, A musician can earn money in a lot of ways.

LIVE PERFORMANCES

A hefty income of musicians comes from various live performances such as personal shows, tours, Concerts, event performances, and music festivals. This is because they can create a direct connection with their fans, and they can also make a lot of money from ticket sales, merchandise, and sponsorships. Additionally, performing live allows them to tour and reach more people, which can lead to more record sales and downloads.

So next time make sure to buy your favorite artist's concert tickets.

STREAMING SERVICES

As time got digital the craze of the streaming platform is so immense. A streaming service is a digital platform that allows users to listen to and watch music, TV shows, and movies.

For example, Spotify came to India in 2019

Spotify has not released its yearly revenue in India, but it is estimated to be around Rs 100 crore (US\$13 million) in 2023. This is a significant increase from the Rs 16 crore (US\$2 million) it generated in its first full fiscal year in India, FY20.

With the growth of Streaming platforms royalties of streams become a stable income for artists.

Artists can even sell digital copies of their music on platforms like iTunes and Bandcamp.

MERCHANDISE

Musicians sell various merch such as T-shirts, Hoodies, and more personalized items during their tours or any big project launch. Artists also launch their fragrances like Billie Eilish, KING, etc.

Merchandise sales can be a substantial source of income for artists, particularly during tours.

LICENSING AND SYNC DETAILS

Musicians can earn money by licensing their music for use in commercials, TV shows, movies, video games, and other media. These licensing and synchronization (sync) deals provide artists with royalties and upfront payments, depending on the usage and popularity of their songs

CROWDFUNDING AND FAN SUPPORT

Some musicians turn to crowdfunding platforms like Kickstarter and Patreon to directly engage with their fans and raise funds for their projects. Through these platforms, artists can offer exclusive content, early access to music, and personalized experiences in exchange for fan contributions.

SPONSORSHIPS

As the artist gets popular brands also collaborate with them to promote their promote they can make music for them or act as an influence. As a musician got a big fan base the deals get equivalent to a big movie star and the influence of the artist will make win situation for both parties. But when the artist is not a big star, the deals usually involve a lot of paper plates and 10% off coupons! Artists can work in a commercial ad or on social media

LIVE PERFORMANCES

Very old practice musicians use to earn a stable income and due to digitalization artists can give their knowledge to all around the world and have a decent amount of money. Platforms like Skillshare, Udemy, or Coursera are very good platforms for musicians.



CREDITS: JASON KOERNER

COLLABORATIONS

Big brands also collabs with artists and make new and limited edition products. Like NIKE had a deal with Travis Scott, Billie Eilish. For example, Nike and Travis Scott released a limited edition of the Nike SB Dunk Low sneaker which sold out within minutes of its release. Adidas had a deal with Kanye. But Adidas and Kanye had a falling out, so Adidas decided to just make their version of the Nike SB Dunk Low and call it the "Yeezy Dunk Low-Ye."

King also had a deal with H&M.

The artists work closely with the design team of the brand and these goodies are released in a limited amount making them exclusive for fans and collectors.

BUSINESSES

Usually when the artist got popularity and fame they started expanding their niche, jumping in business, making their brands, running restaurants, and many more.

For example, Travis Scott has his brand "Cactus Jack" which offers shoes, tees, and more clothing apparel. In recent times King launched his perfume "BLANKO" DRAKE opened his restaurant "Fring's".

LABEL

Here come the most popular means by which the artist earns money, Record labels are the organizations that provide all the necessities to a musician and make profits with the record.

There are various types of deals a record label can do

- **RECORD DEAL** - The most traditional deals the record labels do. Here, the label will provide funding for recording, manufacturing, and distributing an artist's music. The label owns the right and handles the promotion and marketing of songs. In return, the artist gets the advance for the music and a share against the future sales of music.

- **360 DEAL** - Also known as a "multiple rights deal" or "360-degree deal," this type of agreement goes beyond just music sales. In a 360 deal, the label takes a percentage of the artist's income from various revenue streams, including record sales, live performances, merchandise, endorsements, and more.
- **DISTRIBUTION DEAL** - Instead of signing with a traditional record label, some artists opt for a distribution deal. In this arrangement, the artist has ownership of their recordings but partners with a label or distributor to handle the physical or digital distribution of their music. The artist typically receives a higher percentage of revenue compared to a traditional record deal, but they are responsible for funding the recording and marketing expenses themselves. So established artists consider these deals mostly.



CREDITS: MUSIC INDUSTRY

- **LICENSING DEAL** - A licensing deal involves granting a label the right to release an artist's music for a specific period. The label may pay the artist an upfront fee or advance and a percentage of the revenue generated from the licensed recordings. The artist retains ownership of their music, and the label is responsible for promoting and distributing the licensed material. Terry Pratchett, in his novel Soul Music, wrote: "In my experience, what every true artist wants, really wants, is to be paid."
- **Joint Venture Deal** - In a joint venture (JV) deal, the artist and the label form a partnership to release and promote music together. Both parties invest resources, finances, and expertise in the project and share profits. Joint venture deals can provide artists with more creative control and a greater share of the revenue compared to traditional record deals. At the end of the day, everyone goes home with an equal share of headaches.

CONCLUSION

So, in conclusion, we can see there are a lot of ways a musician can earn money. The only thing needed is a will to learn and work for it.

In the fast-paced world not even musicians but every individual should be updated with this dynamic environment and have a grip on the technology going around them. Technology is becoming an increasingly important part of our lives, from communication to entertainment. To stay competitive in the job market, it is essential to have a working knowledge of the latest technologies and trends. This is especially important for musicians, who need to be able to produce music quickly and efficiently to keep up with the ever-changing music industry.

A musician has to work hard for a long time before they get into a stable situation, so if you have a favorite underrated musician, please support them and let's make the world more euphony.





CREDITS: IGN INDIA

MARVEL: FROM FINANCIAL RUIN TO THE BIGGEST FILM FRANCHISE IN HISTORY

JOURNEY THROUGH THE UNLIKELY FINANCIAL TURNAROUND AND BLOCKBUSTER SUCCESS



**BY-
AVANTIKA
BBE**

"ITS NOT ABOUT HOW MUCH WE LOST, ITS ABOUT HOW MUCH WE HAVE LEFT" - MARVEL MEANT IT WHEN THEY WENT BANKRUPT IN 1996.

INTRODUCTION

Marvel Comics is a brand that is now one of the most famous movie franchises in the world. It all started in 1939 when the first issue of Marvel Comics was released, and it sold over 80,000 copies. The creators of the comics then launched the second edition, which started the beginning of a massive brand in today's world. Marvel has always been a big name in the entertainment industry and has created some of the world's most recognized superheroes. The Marvel Cinematic Universe (MCU) has 23 films and has made a lot of money. Marvel had a great time in the 60s through the 80s when comics were popular. However, as the world moved into the 90s, comic books became less popular because of advanced technology. Marvel always had the idea of movies, but they didn't focus on it too much. When the comic bubble of the 90s burst, Marvel went bankrupt in 1996, and over one-third of Marvel employees lost their jobs.

IN THIS ARTICLE

- INTRODUCTION
- THE EARLY DAYS OF MARVEL
- THE FALL OF MARVEL EMPIRE
- FROM BANKRUPTCY TO BILLIONS, THE REBIRTH OF MARVEL
- AN ERA OF MARVEL'S MARKETING FEATS
- WHAT MARVEL'S SUCCESS TAUGHT US ABOUT PERSONAL FINANCE

THE EARLY DAYS OF MARVEL

In the 1940s, when TVs were not common, Martin Goodman, an American magazine publisher, made Marvel Comics #1 to entertain people. It had characters like the Human Torch, the Masked Raider, and Ka-Zar the Great. When the first edition sold over 80,000 copies, he made more.

When sales went down, Marvel became Atlas Comics and Stan Lee became the editor. Stan Lee helped create Marvel's most famous characters Iron Man, Thor, and Hulk. He changed everything about Marvel, from superheroes to storylines.



THE FALL OF THE MARVEL EMPIRE

Marvel had many hits like The Incredible Hulk, Wolverine, and Infinity Trilogy. In the early 1990s, Marvel's success seemed to be at its highest. Ronald Perelman, a rich businessman, bought Marvel Entertainment Group. Marvel also bought 46% of ToyBiz's stock in 1993 to create and sell action figures for every character. Perelman offered 40% of the company's shares to the public in the same year.

In 1993, the comic book market crashed, and sales dropped by 70%. Marvel had unsuccessful releases including films like Howard The Duck which only grossed \$38 million at the box office. Even technology was working against them. Marvel filed for bankruptcy and barely stayed alive.

Perelman wanted to make movies with Marvel characters, but the investors fought with each other. Marvel made choices like going bankrupt, merging with Toybiz, and selling character rights including Ant-Man, Black Panther, Doctor Strange, Captain America, and of course, the Avengers. We all know now that these characters embody the Marvel universe and are some of the most popular movies released to date. These decisions made Marvel Entertainment owe a lot of money, \$250 million by the end of 1996.

According to a book by Wall Street Journal editor Ben Fritz, Marvel offered Sony the movie rights to Spider-Man and other characters like Thor and Black Panther for \$25 million.

FROM BANKRUPTCY TO BILLIONS, THE REBIRTH OF MARVEL

Marvel was almost out of money because Sony only wanted to buy Spiderman. But Marvel found a way to survive. They wanted to show Sony and everybody else that they could make money with the characters they had. Characters like Iron Man, Thor, and Hulk. Marvel Studios was made because they wanted to prove everyone wrong. Fox bought New World Communications in 1996 for \$2.48 billion to make Marvel Studios and Stan Lee was the chairman. Marvel proved that they could do great things even with the bad things that happened to them

Marvel made many hit movies, but it was hard to make more movies with new characters. David Maisel became the Chief Operating Officer of Marvel Studios and changed everything. He created the Marvel Cinematic Universe giving producers the idea to create crossovers between multiple storylines. Maisel had worked with movie and Broadway artists before, so he was creative. After the Iron Man movies were successful, Maisel helped sell Marvel to Disney for \$4 billion. He got a \$525,000,000 loan from Merrill Lynch, a financial company, but Marvel had to give up the right to ten characters if they didn't pay the money back in eight years. This was a big risk, but it helped Marvel a lot. Marvel made a deal with Paramount Pictures in 2005. They got the rights to important characters like Iron Man, Black Widow, and Thor. Kevin Feige became the President of Marvel Studios and helped Marvel recover from their losses.



AN ERA OF MARVEL'S MARKETING FEATS

While growing up Kevin Feige loved comics when he was young. He previously produced X-Men when he was 27. From there he produced Hulk, Daredevil, and Spider-Man. By 2007, he became the President of the production studio. He made Iron Man, which made \$585 million a huge success.

This was important because it started the cinematic universe idea that Maisel had. Disney bought Marvel for \$4.3 billion in 2009. Marvel made many movies and they were very popular. They made Iron Man 2 instead of trying a new superhero after the Incredible Hulk didn't do well. The first phase of Marvel witnessed the release of Captain America and Thor too.



After producing multiple big hits, the cinematic universe assembled all the Avengers for the first time. The Avengers turned out to be the third highest-grossing movie of all time. Marvel made many more movies and they were all popular. They learned from their mistakes and kept trying new things. They used to have a lot of debt, but now they are a multi-billion-dollar empire.

WHAT MARVEL'S SUCCESS TAUGHT US ABOUT PERSONAL FINANCE

Technology is always getting advanced and sometimes this makes old business models useless. Like for example Marvel's world transited into the 90s when more advanced technology was made available and comic books became a dying medium they were not prepared for it. This can happen very quickly. Investors should choose companies that can change and adapt or are always changing and trying new things. It is important for employees to keep learning and improving. Just like business models, some jobs can become less in demand. There is no job that is always going to be stable, so it is important to keep learning.





INTRODUCTION

The streaming industry has undergone a seismic shift in recent years, with digital platforms like Netflix and Hotstar dominating the market. However, Mukesh Ambani's JioCinema, an offering from Reliance Industries, has emerged as a formidable contender, challenging the status through its aggressive price fighting policy. This article delves into the disruptive strategies employed by JioCinema to compete with established players like Netflix and Hotstar, reshaping the streaming landscape in the process.

THE RISE OF JIO CINEMA

JioCinema, introduced by Reliance Jio in 2016, aimed to capitalize on the widespread reach of Jio's 4G network in India. The platform initially provided free access to a plethora of movies, TV shows, and short videos as part of its bundled services with Jio's telecom plans. Leveraging its robust infrastructure and extensive customer base, JioCinema soon embarked on a mission to challenge the dominance of existing streaming giants.

STRATEGIC PARTNERSHIPS AND ORIGINAL CONTENT

In addition to licensing content from major studios and production houses, Ambani JioCinema has also forged strategic partnerships and invested in original content creation.

IN THIS ARTICLE

- INTRODUCTION
- THE RISE OF JIO CINEMA
- STRATEGIC PARTNERSHIPS AND ORIGINAL CONTENT
- PRICE DISRUPTION AS STRATEGY
- EXPANDING CONTENT OFFERINGS
- DISRUPTING TRADITIONAL DISTRIBUTION CHANNELS
- SEAMLESS USER EXPERIENCE
- IMPACT ON INDIAN MARKET
- IMPACT ON NETFLIX AND HOTSTAR
- CONCLUSION

Collaborations with renowned directors, producers, and actors have allowed JioCinema to offer exclusive content to its subscribers. By focusing on producing high-quality original series and movies, JioCinema has been successful in creating a loyal user base that appreciates unique and compelling storytelling.

PRICE DISRUPTION AS STRATEGY

In 2018, JioCinema unveiled a game-changing move by launching the "JioCinema App Subscription." This subscription offered users exclusive access to an expansive content library comprising movies, TV shows, and original productions, all at an incredibly competitive price. JioCinema's subscription costs were significantly lower compared to those of Netflix and Hotstar, thus presenting an enticing alternative for cost-conscious consumers.

One of JioCinema's most significant competitive advantages is its aggressive pricing strategy. In its initial stages, JioCinema adopted a freemium model, allowing users to access a limited selection of content for free. This approach attracted a massive user base and enabled JioCinema to rapidly penetrate the market. Building upon this success, JioCinema subsequently introduced affordable subscription plans, directly targeting Netflix and Hotstar's customer base.

JioCinema's subscription plans are significantly cheaper than its competitors, making it an attractive choice for cost-conscious consumers. By offering a vast library of movies, TV shows, and original content at a fraction of the cost, JioCinema entices users who may have been hesitant to subscribe to other streaming services due to their higher price points.

Furthermore, JioCinema adopts a customer-centric approach by providing bundled subscriptions. JioCinema's subscription plans are often bundled with other Jio services such as JioTV and JioFiber, creating a seamless user experience across multiple platforms. This bundling strategy strengthens JioCinema's position as an all-in-one entertainment solution and increases customer loyalty.

EXPANDING CONTENT OFFERINGS

To fortify its position in the streaming market, JioCinema swiftly expanded its content portfolio. Initially focused on Indian content, the platform gradually broadened its horizons by incorporating international movies and shows, catering to a wider audience. While licensing popular content from major production houses and distributors, JioCinema also ventured into producing its original web series and movies, further enhancing its appeal.

DISRUPTING TRADITIONAL DISTRIBUTIONAL CHANNELS

JioCinema's disruptive pricing and extensive content library challenged the traditional distribution channels prevalent in the Indian entertainment industry. With its digital-first approach, JioCinema bypassed the need for physical media and eliminated the intermediaries involved in the distribution process. This empowered both content creators and consumers, offering a direct avenue for showcasing and accessing content.

SEAMLESS USER EXPERIENCE

JioCinema prioritized providing a seamless user experience to gain competitive edge in the market. The platform's intuitive interface, personalized recommendations, and user-friendly features, such as offline downloading, have contributed to its growing popularity. JioCinema also integrated its services with Jio's telecom offerings, allowing users to stream content without worrying about data usage.



CREDITS: REUTERS

IMPACT ON INDIAN MARKET

JioCinema's price disruption strategy has had a significant impact on the Indian entertainment market. It has intensified competition among streaming platforms, leading to more affordable pricing models across the industry. Established players have been forced to revise their strategies and offerings to stay competitive.

IMPACT ON NETFLIX AND HOTSTAR

Ambani's price fighting policy had a profound impact on Netflix and Hotstar. These established players faced the challenge of competing with JioCinema's significantly lower subscription cost. To counter this threat, they had to revisit their pricing strategies and introduce more affordable plans to retain their subscriber base.

This intense competition led to price wars and increased innovation in content creation and delivery. However, Netflix and Hotstar still maintained their premium offerings and focused on delivering exclusive and high-quality content to justify their relatively higher prices. They also capitalized on their international content libraries and invested in producing original content to maintain their competitive advantage.

CONCLUSION

Mukesh Ambani's JioCinema has disrupted the streaming market with its price fighting policy, challenging established players like Netflix and Hotstar.

By offering a vast content library at a significantly lower cost, JioCinema has attracted a large user base and reshaped the streaming landscape in India. This intense competition has pushed other players to reevaluate their pricing strategies and invest in content creation to stay ahead. As the battle for dominance continues, consumers stand to benefit from a wider range





MDH-FROM SHOP TO LEADING PRODUCER IN INDIA

THE LEGACY OF THE 'KING OF SPICES'



**BY-
MANSI KHURANA
ECO (H)**

CREDITS: PT JAVA AGRO

INTRODUCTION

In both Indian cooking and human existence, spices are a necessity. Spices enhance the flavour, taste, aroma, and depth of food. Spices serve as a colourful topping for foods. MDH Masala has become one of the top spice producers in a nation known for its many culinary traditions, providing a wide variety of premium spices to millions of homes throughout India. MDH Masala's success is a testament to its entrepreneurial spirit and dedication to quality, two characteristics that have contributed to its notoriety.

The historic history of MDH MASALA began in Sialkot, which is currently a part of Pakistan. Mahashay Chunnilal Gulati established MDH Masala in 1919 after first opening a small shop with a commitment to providing savoury, authentic, and genuine spices. In 1947, after the divorce, his family made the decision to relocate to India. Before going to Delhi, they later spent some time in Amritsar. After completing his education in Pakistan, Mr. Dhramapl Gulati gained proficiency in a variety of trades like carpentry and painting, but he never found success. His father hired him into his spice company as a form of retribution. As he walked away, he had 1500 rupees in his pocket. He spent that cash for a Tanga, which cost Rs 650. From Connaught Place to Karol Bagh, he used to provide transportation. Due to his dislike for it, he later sold it. In a little store in Delhi's Karol Bagh, Dharampal Gulati laid the foundation for his future spice empire, which is now valued at several billion dollars and is only expected to rise in value.

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- QUALITY ASSURANCE AND TRUST
- ISWOT ANALYSIS
- GLOBAL EXPANSION
- CONCLUSION

After five years, he built a second business in Delhi's Chandni Chowk after starting to generate a sizable profit with this one. As the business grew locally, it became known as "Deggi Mirch Wale."

QUALITY ASSURANCE AND TRUST

One of the defining factors behind MDH Masala's success has been its unwavering commitment to quality. Mahashay Dharampal Gulati personally supervised every stage of the production process, ensuring that only the finest ingredients were used and stringent quality standards were upheld. This dedication to excellence earned the trust and loyalty of consumers, establishing MDH Masala as a brand synonymous with authenticity and flavor.

SWOT ANALYSIS

A Swot analysis evaluates the brand by its strengths, weakness, opportunities, and threats.



STRENGTHS

The major elements of MDH Spices' business that provide it a competitive edge in the market are examined when examining the company's strengths. A brand's strengths can be influenced by a variety of factors, such as its first mover advantage (it was one of the first companies to realize the potential of ready-made masalas and it invented the idea of grinding spices and selling them in packets), MDH's emphasis on the traditional roots of India (hence the launch of its campaign "Asli Masale Sach Sach"), and their conscious effort to source whole spices from India for their spice blends. MDH possesses financial stability, an experienced team, automated machines that can produce 30 tonnes of packed spices per day, as well as intangible assets like brand value.

WEAKNESS

A brand's shortcomings are specific areas of its business that can be improved to strengthen its position. Some flaws can be described as qualities that the business lacks or in which the competition excels. One of its weaknesses is that the company has few options for raising equity to support its objectives because it does not have a public market listing. Although they have certain south Indian masalas like sambar masala, they are not authentic in flavor and primarily cater to north Indian tastes and recipes like rajma rice, shahi paneer, pav bhaji, or chole masala. Vegetarian spice mixes are MDH's primary area of expertise, and they are also underrepresented in the ready-to-eat market.

ore shelf space and cross-selling for its products, MDH has also entered the manufacturing and sale of incense sticks, Hing, toothpowder, and soy products.



THREAT

Any firm may face risks in the form of elements that could harm its operations. Competition is one of the main threats to MDH. Everest, MTR, Maiyas, aan, Eastern, Shakthi, and Aachi are a few of MDH's main rivals. The corporation will need to handle the trend of organic masala powders, which is one that many businesses are already attempting to push. Government involvement in the export and import of spices causes market disruptions, which have an impact on both demand and price. The corporation continues to be concerned about rising costs for fuel, services, raw materials, and other inputs.

OPPORTUNITIES

Any brand has the potential to improve in certain areas to grow its customer base. Opportunities for a brand can include regional expansion, product enhancements, and improved communication. MDH masala has a large possibility in the ready-to-eat food segment. For instance, as more women enter the job, they are likely to spend less time cooking. . There will be a rise in demand for processed and semi-processed food due to the willingness to spend money on ready-to-use products. Spice firms can readily target this market because there are currently not many similar Indian items available. The company will have access to a vast array of financial sources after being listed on a stock exchange. To strengthen its presence and promote more shelf space and cross-selling for its products, MDH has also entered the manufacturing and sale of incense sticks, Hing, toothpowder, and soy products.

MARKETING

MDH places a lot of focus on the packaging because it affects consumer happiness with the product, forms buying habits, and is a major factor in repeat business.

MDH pays close attention to the packaging of its goods, so much so that its assortment of 62 products has roughly 150 different types of packaging! At MDH, around 30 tonnes of spices in powder form are packaged each day in eye-catching consumer boxes that range in size from 10g to 500g. The product packaging is made to meet the various needs of customers around the world.

Typically, we see celebrities like Bollywood actors, singers, models, etc. endorsing certain products. But in terms of endorsement, MDH stood out. The owner appeared in their advertisements, eventually becoming one of the most enduring brand ambassadors.



CREDITS: MDHSPICES.COM

Every MDH ad portrayed Dharampal Gulati as the senior member of a huge Indian family, touching on the tradition of the joint family in India, which immediately resonated with viewers.

When the father-son duo of MDH, or Mahashian Di Hatti, first appeared, they were often known as "Deggi Mirch Wale" by the public. However, as their business expanded, they expanded their product line to include several different spices. MDH has a blended masala mix for practically every Indian cuisine, including Pav Bhaji, Sambhar masala, curry, and butter chicken.

Product variety helps build brand identification, expands consumer options to find value in the brand, and fosters customer loyalty. By periodically releasing a variety of new versions to its product line, MDH not only met Indian demand but also maintained its customer's loyal to the brand.

Since CSR, or corporate social responsibility, aids in firms projecting a positive brand image, Dharampal Gulati integrated his brand with a social purpose. It boosts staff engagement, customer retention, and investment prospects. Gulati, for example, provided PPE kits for Delhi's healthcare personnel during the time of COVID



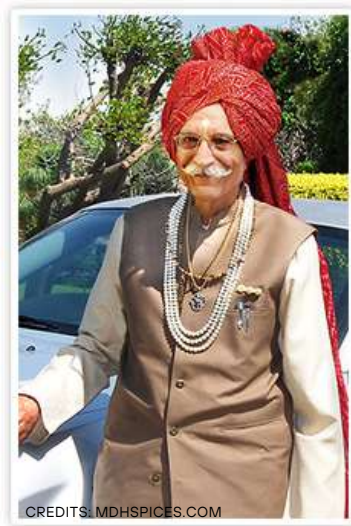
CREDITS: MDHSPICES.COM

GLOBAL EXPANSION

MDH Masala placed its sights on global expansion, encouraged by its success in the domestic market. Its products are exported to more than 100 nations, meeting the global culinary needs of all Indians. The brand embarked on a journey to bring the rich flavors of Indian cuisine to global audiences. MDH Masala, a global representative of Indian culinary heritage, is now sold in many nations. Despite its widespread distribution, MDH masala maintains a strong connection to its Indian roots and continues to be the best and most authentic option for millions of customers.

PHILANTHROPIST

In addition to their achievements in business, MDH Masala and its founder Mahashay Dharampal Gulati have shown a strong dedication to philanthropy. He founded the Mahashay Chunnilal Charitable Trust, which promotes several issues, such as community improvement, healthcare, and education. His charitable work has had an indelible impact on society, elevating MDH Masala above the status of a spice company. Mahashayji received the Padma Bhushan, India's third-highest civilian honour in 2019, for his efforts.



CONCLUSION

As India's top manufacturer of spices, MDH Masala has grown from a small business thanks to the foresight, tenacity, and everlasting commitment of its founder, MAHASHAY DHARAMAPAL GULATI. MDH's commitment to quality, creativity, and a touch of nostalgia continues to pique taste buds around the globe. MAHASHAY DHARAMAPAL GULATI would surely serve as an inspiration to modern businesspeople.





CREDITS: MOB.ORG

ANIME: THE BILLION DOLLAR INDUSTRY

UNRAVELING THE MULTIFACETED WORLD OF
JAPANESE ANIMATION



BY-
MEHEER BESOYA
BBE

INTRODUCTION

In a world, where entertainment reigns supreme, few industries have witnessed explosive growth, and “anime” is one of them. You all must have watched anime at least once in your life, knowingly or unknowingly. As cartoons or animation were a big part of our childhood, many of them were actually anime. We all watched many popular series like Pokemon, Shinchan, Doraemon, and many more without realizing that they were anime. So, the question arises, what is anime?

In simple terms, we can say anime is animation originated in Japan as it is a shortened form of the English word animation.

While there are many anime shows targeted towards kids, it is generalized as cartoons but it is important to clarify that anime is much more than a mere cartoon. The primary audience for most anime series is teenagers and young adults. Examples like “Death Note” and “Attack on Titan” illustrate this very well.

THE RISE OF ANIME

Anime has come a long way since its beginning with a remarkable journey throughout. It all started in early 20th century with the first known anime “Katsudo Shashin”, believed to have been created in 1907. This was the point which started it all. After that, many creators like Junichi Kouchi and Seitaro Kitayama, also known as the fathers of anime, started the wave in Japan. The real game changer for the industry was in 1960, which was the beginning of the modern anime.

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With series like Astro boy and Kimba the white lion, the industry gained a lot of popularity in America but the major global recognition was gained in 1980s by anime like "Dragon Ball" "and Sailor Moon", which continue to be cherished by many of the anime lovers worldwide. While it gained a global recognition throughout its journey, anime industry also faced numerous challenges, including the impact of 2nd world war and competition from foreign producers such as Disney. Despite all these obstacles, the anime industry emerged victorious and grew into a billion-dollar industry.

EXPLORING THE ANIME INDUSTRY

The extraordinary growth of the anime industry can be attributed to a combination of factors that have acted as catalysts for its success. One of the major factors has been the vast range of genres. From the action-packed adventure and heart-melting romance to mind-bending science fiction, there is an anime to suit every taste. This wide variety has allowed anime to capture the hearts of audiences all over the world. Another factor is the loyal fan base that has developed throughout its journey, with anime series like Naruto, One Piece, and Bleach known as the "Big 3", still being watched by millions of people.

Now, let's dive into the numbers. In 2022, the global anime market was valued at 28.61 billion US dollars and it is predicted to grow at a compound annual growth rate of 9.8% from 2023 to 2030. Revenue in the anime industry is generated by many segments but the major ones are merchandise, movies, TV, internet distribution, live entertainment, and music. Out of all these, the merchandise segment alone held the largest market share of 31% in 2022 and is expected to dominate the market in the future as well.



CREDITS: THE BIG BAD TOY STORE

This is primarily due to the rising demand among the younger population for products like t-shirts, figurines, posters, key-chain and many more. Although the merchandise segment has the largest share, the internet distribution segment is believed to experience the highest compound annual growth of over 13%. This growth is driven by the increasing sales of anime content through video games, manga, and online streaming platforms worldwide.

To gain a competitive advantage, online streaming services like Netflix and Nippon TV have formed partnerships to provide a widerange of anime titles for their platforms. In addition to streaming services, the industry has also benefited from anime conventions, such as Comic-Con which draws a massive crowd of fans from all around the world, allowing them to cosplay their favorite characters and meet other anime enthusiasts.



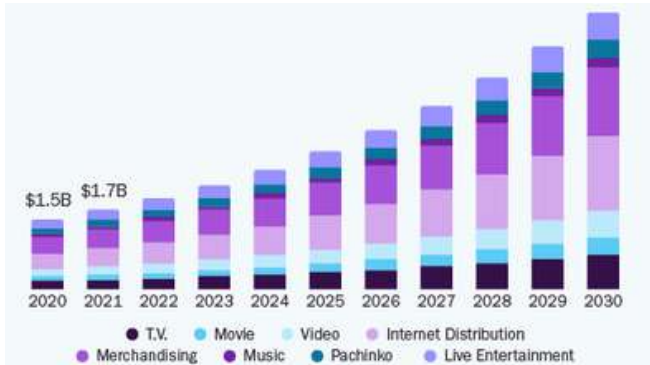
CREDITS: @Saiyanobe23G

The success of anime movies has also contributed to the industry's growth. Movies like "Your Name" and "Dragon Ball Super: Broly" have achieved massive success at the global box office. Many movies have represented anime on a global platform by winning various awards, one of them is "Spirited Away", which won The Academy Award for Best Animated Feature. Another notable movie is "Demon Slayer: Mugen Train", which holds the title of the highest-grossing movie in the history of anime, earning a total of 507 million dollars and ranking among the highest-grossing movies of 2020 worldwide. It also holds the record for the fastest-grossing anime movie, making 93.6 million dollars in just 10 days.

If we talk about the global revenue share, Japan held the largest revenue share of over 42% in 2022. With 600 anime studios in the country and 500 in Tokyo alone, this dominance is self-explanatory. The Asia Pacific region accounted for over 25% of the revenue share in 2022 and is expected to continue its growth, thanks to the rising popularity of anime among teenagers in China and India. On the other hand, North America is projected to have the highest growth rate of over 16% from 2023 to 2030. This is due to the increasing fan base and growing sales of anime merchandise in the region.

The COVID-19 pandemic also had a notable influence on the anime market. The arrival of COVID-19 led to the cancellation and delay of many anime TV shows and live performances. The implementation of strict lockdown measures in major cities further impacted theatre releases and live events. However, on the bright side, streaming services such as Netflix and YouTube experienced a rapid increase in popularity during and after the pandemic. All over the world, these platforms witnessed a significant increase in subscribers and viewership as people spent more time watching animated series and movies.

COVID - 19 IMPACT ON ANIME INDUSTRY



CREDITS: GRAND VIEW RESEARCH

CONCLUSION

The incredible rise of anime from its beginning to a billion-dollar industry is proof of its ability to capture hearts and spark inspiration. With its engaging stories, vibrant animation, and passionate fans, anime has become a significant presence in the entertainment world. As the industry continues to grow and evolve, one thing is clear: anime’s impact will continue to enchant and shape future generations, securing its position as a global cultural phenomenon.





SWIFTNOMICS: THE ECONOMICS OF TAYLOR SWIFT

TAYLOR SWIFT'S LIFE AND CAREER HAVE HAD A WILD IMPACT ON THE ECONOMICS AND BUSINESS WORLD OF THE US.



**BY-
KSHITIJ GUMBER
BBE**

CREDITS: KEVIN MAZUR (GETTY IMAGES)

INTRODUCTION

The US-based pop artist, singer and songwriter who is well known as 'The Music Industry' by her fans, Taylor Swift is also known as 'an economic genius'. This is mainly due to her strategies to make a profit out of her music. Taylor Swift's life and career have had a wild impact on the economics and business world of the US. According to a trade publication, Pollstar, 'if Swift was a country, she would be the 199th largest economy on Earth, which is similar to a small Caribbean island.' However, this latest scandal by Live Nation Entertainment owned, Ticketmaster, which involves Taylor Swift, has had a huge impact on the study of economics as well as the music industry.

THE MONOPOLY OF TICKETMASTER

On 1st November 2022, Taylor Swift announced her live concert called 'The Eras Tour'. The tickets for the tour were to be purchased online using the platform 'Ticketmaster' whose parent company was 'Live Nation Entertainment'. Due to her successful release of new albums and the cancellation of past concerts due to the pandemic, The Eras Tour gained huge popularity among her fans just after its announcement. It was already predicted by Swift and her team that the huge demand for tickets could lead to undesirable issues which might disinterest her fans, and that was what happened. On November 15, when her fans tried to purchase tickets, the Ticketmaster website crashed and they were not able to secure their tickets. Those who did, got kicked out of the process, once they checked out.

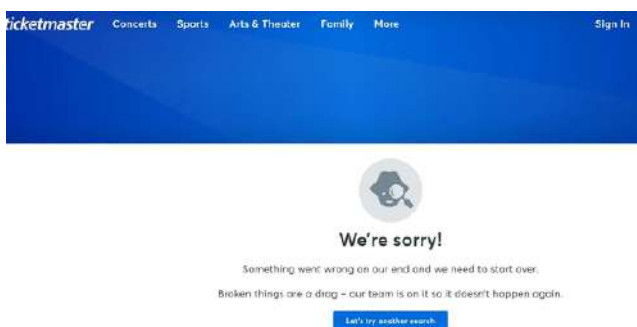
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According to the CEO of Liberty Media, a majority stakeholder of Ticketmaster, 'The site was supposed to be opened for 1.5 million verified Taylor Swift fans but we had 14 million people hit the site including bots'. This problem was so frustrating that Swift even spoke about it through her Instagram story in which she said that they warned the ticket-selling company about the huge demand.

Ticketmaster was playing with the prices of the tickets being the sole seller. The Price Rigging done by Ticketmaster is what it calls 'Dynamic Pricing'. This is done to slow down the resale of the tickets so that only 'verified and true fans' can get them. The principle behind it is to match the real market value of tickets. For example, if an artist is exceptionally popular, the tickets which were priced at, say, 50 bucks would be increased to 500 bucks just to match the demand. Even with sky-rocketed prices, the direction of the tickets was inelastic for those 'verified and true fans' but still some of those felt like it wasn't just and fair. According to the Yale School of Management, Ticketmaster holds over 70 per cent of the market for ticketing and live concerts. This demotes innovation and due to less competition, the company lacks in its services. The fans felt that Ticketmaster is misusing its power of being a dominating party in the live-music industry.

Ticketmaster has done this before when selling the tour tickets of Harry Styles and Bruce Springsteen. Swift and her team are known to demote the concept of Dynamic Pricing. But being in power and having a monopoly benefit, Ticketmaster was being unsupportive of consumers and was promoting what happens in a typical capitalist economy. The Justice Department started an investigation in November 2022 against Ticketmaster for breaking Consumer Protection and Antitrust laws. Many Swift fans along with an attorney sued the company for fraud misinterpretation and antitrust violation. Quoting Taylor Swift's lyrics, 'these things will change', things did change. In May 2023, members of the Massachusetts General Court introduced the 'Taylor Swift Bill' which requires the companies to fully disclose all the upfront ticket costs and outlaw dynamic pricing in the state.

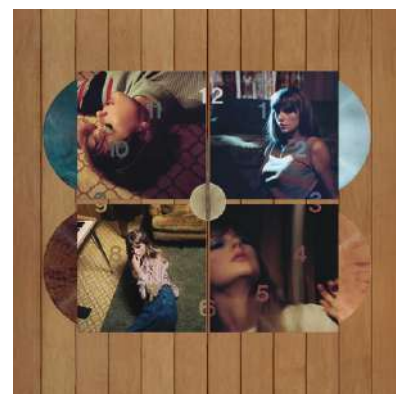


CREDITS: TICKETMASTER

THE MARKETING STRATEGIES

Taylor Swift recently released her tenth album known as 'Midnights'. The marketing of this album was a huge success. According to The Guardian, the album generated sales of around \$230 million. In fact, the sale of album vinyl was so high that it outsold the sale of CDs. This was the first time since the 1980s that the sales of vinyl had beaten the sales of CDs. The reason for it was the creativity of the vinyl. When joined together, the set of four vinyls formed a clock and that was the uniqueness of the vinyls which boosted the sales. She also released various remixes of her single, Anti-Hero, in collaboration with small artists which not only benefited her but also helped the other artists gain popularity. Even The Eras Tour was in collaboration with various emerging artists like Gayle, Phoebe Bridgers, Haim the Band etc.

Taylor Swift has mostly used the internet as a marketing tool. She knows how to bond with her fans. She is known to spread some kind of mysterious aura among her fans which is highly praised. Before releasing Taylor's Version of her albums, Fearless and Red, Swift posted a vault on Instagram which contained words and letters which when unjumbled, revealed the name of the songs and the featuring artists. Whenever she posts something on Instagram, there is always some kind of hint or easter eggs related to her next release. A month before releasing her latest album, Midnights, Swift started a series called 'Midnights Mayhem with Me'. In each episode she posted in a gap of two-three days, she revealed the name of a song track. This made her fans curious about what would be the next song name to be revealed. She also uses the internet to advertise her merchandise, to appreciate her fans' pages and to support other artists and celebrities.



CREDITS: @TAYLORNATION13 TWITTER

TAYLOR AS AN ENTREPRENEUR

According to Forbes, Swift's net worth in 2022 was \$570 billion. Recently, one of her cats named Olivia, has been titled the world's third wealthiest pet with a net worth of \$97 billion. Swift has created a fixed consumer base right from the initial years of her career and has got the right song for every mood.

She knows how to transition from one genre to another without losing people on the way and she has successfully created ten albums in 17 years of her life. One of her albums, '1989', which was her complete shift in genre from country to pop, sold 4 million copies in the US in its 12th week of release. She also has some of her lyrics trademarked in the same album. Taylor Swift has also done her Corporate Social Responsibility by talking about some social issues we are currently facing. She released a song called 'You Need to Calm Down' which was a fight for LGBTQ rights. She has also talked about the Black Lives Matter movement through social media.

One of the features of an entrepreneur is experimenting with the impossible. When most of the artists during the pandemic failed to release new music, Swift released two whole albums within a gap of five months. Her eighth album, 'Folklore' was released in July 2020 within a few hours of its announcement. Her decision-making has always been on point. Recently, she decided to re-record and re-release her first six albums due to copyright infringement. Now, she has re-released her albums, Fearless and Red, which also include the songs she created but never released before and it's been a huge success. She has been an example of innovation and initiative since her teenage years when she started putting her music on MySpace and now she owes no less than 12 Grammy Awards.



CREDITS: @TAYRIANAOUTDID TWITTER

SWIFTNOMIC CYCLE

In an economic cycle, the general state of the economy is depicted through four stages in a cyclical pattern. These stages are boom, recession, depression and recovery. It has been noticed that around the time of Taylor Swift's concerts, the US economy is generally in a booming stage which benefits various industries such as live concerts, travel, food, fashion, cosmetic, tourism etc. Major recovery in the music industry and the related fields has been seen during The Eras Tour when the economy was recovering from the effects of COVID-19. The two concerts in Las Vegas have benefitted the economic situation of the city.

Similarly, the three concerts in Tampa have boosted the situation of hotels, taxis, car-parking services etc. and the three nights in Houston has resulted in the highest number of hotel bookings in the city in 2023. The boom has also been seen in nightclubs and party areas where Swift's cultural impact has led to Taylor Swift-themed parties. In fact, in India, 'Swiftie Night' was held in various cities recently and was attended by a huge gathering.

CONCLUSION

Other artists may come and go but Swift will always have a substantial impact on the world economy and society. A concept known as 'Rockonomics' was devised by Alan Krueger, an economist who served as head of the White House Council of Economic Advisers. In it, he analysed the microeconomic impact of the music industry calling Swift, 'an economic genius'. He used her as an example of someone who played with strategies to boost concerts and product sales. Taylor Swift will always remain the sole artist whose fandom brought down a whole company. Her influence on her fans had even brought two political parties together opposing Ticketmaster as the fight against economic inequality and monopoly was fought.



CREDITS: BUSINESS TODAY

OTT PLATFORMS: A THREAT TO THE TRADITIONAL BOLLYWOOD INDUSTRY?

A DIVE INTO THE GEN Z WAY OF MEDIA
CONSUMPTION



BY-
PREKSHA AGGARWAL
ECO (H)

INTRODUCTION

OTT stands for 'Over The Top'; which refers to the technology that delivers streamed content over the internet. Earlier, consumers would take out cable subscriptions which was the only source through which consumers can access the content. Around 2000, a major change was introduced with the DTH; Direct To Home broadcasting service used by TV Industries that delivered content by satellite services directly to consumer households. This system of broadcasting uses a satellite system which is used to distribute multi-channel TV programs

Over the past decade, the rise of OTT Platforms has revolutionised the way we consume entertainment. With the availability of streaming services like Netflix, Amazon Prime, Disney+ Hotstar etc, viewers now have access to a library filled with amazing content which they can watch at their homes. This shift in consumer preferences has sparked a debate about whether OTT Platforms pose a threat to the Bollywood film industry or not.

Over the past decade, the rise of OTT Platforms has revolutionised the way we consume entertainment. With the availability of streaming services like Netflix, Amazon Prime, Disney+ Hotstar etc, viewers now have access to a library filled with amazing content which they can watch at their homes. This shift in consumer preferences has sparked a debate about whether OTT Platforms pose a threat to the Bollywood film industry or not.

IN THIS ARTICLE

- INTRODUCTION
- REASONS FOR GROWTH
- BUSINESS MODEL
- TYPES OF MODELS
- CONCLUSION

WHY GROWING AT SUCH A FAST PACE?

The growth of OTT Platforms has also been fueled by the increase in the availability of high-speed internet at the doorstep. In India, the development in 2016 changed this industry forever. Introduction to the availability of an abundance of data provided at the lowest rate in the world by Reliance Jio. This has resulted in the creation of a substantial user base for OTT Platforms, attracting investment and driving the production of high-quality content. This is why we have more than 40 OTT Platforms in India.

BUSINESS MODEL

The IPL's revenue model is unique in the world of cricket, as it allows for significant financial gain for all stakeholders involved. The BCCI and its member associations earn a significant share of the revenue generated by the league, which is then reinvested into the development of cricket infrastructure and grassroots programs.



CREDITS: APPLICASTER.COM

1. AVOD:

The first one is AVOD: Advertising - Based Video on Demand Model. This is the entry-level model for the OTT Platforms which may gather a huge audience for them. Under this, the viewers can watch the content for free but they will have to watch the advertisements in between the films or web series. When the platform gathers a huge amount of audience, they charge a good amount for advertising from the company. This type of model has been used by YouTube. This model earns around 50% of global OTT Revenue. The second model we have is SVOD: Subscription Video on Demand. This includes the subscription fee which has to be paid by the viewers in order to watch the content. This type of model is basically used by well-known and well-established OTT Platforms like Amazon Prime, Netflix etc. This model earns around 40% of the global OTT Revenue.

2. TVOD:

The next model is TVOD: Transactional Video Demand Model. This is also known as Pay-per-view. In order to

watch specific content over OTT, viewers have to pay a fixed fee for that respective content. This is used by iTunes, Reliance Big Flix, Amazon Prime etc. The fourth model is the Hybrid Model in which permutations and combinations of all these models are used. The most common of all is AVOD and SVOD, where the content is available for free with ads and if the viewer pays the subscription fee, they can access the ad-free content. YouTube and Hotstar are some of the prime example

OTT PLATFORMS VS. TRADITIONAL BOLLYWOOD: OPPORTUNITIES, CONCERNS, AND COMPETITION

While OTT Platforms have provided opportunities for filmmakers and actors to experiment with new content and reach a wider audience, there are concerns about their impact on the traditional Bollywood Industry. There is a potential loss of revenue for filmmakers and distributors due to the availability of more viewing options online, which has possibly declined the box office collection of Bollywood movies. Moreover, the rise of OTT platforms has intensified competition in the entertainment industry. With a plethora of content available on various platforms, filmmakers face the challenge of grabbing viewers' attention and standing out from the crowd. The traditional star power and marketing strategies that Bollywood relied upon may no longer be sufficient to ensure success.

OTT PLATFORMS AND BOLLYWOOD FINDING COMMON GROUND

While OTT Platforms have provided opportunities for filmmakers and actors to experiment with new content and reach a wider audience, there are concerns about their impact on the traditional Bollywood Industry. There is a potential loss of revenue for filmmakers and distributors due to the availability of more viewing options online, which has possibly declined the box office collection of Bollywood movies. Moreover, the rise of OTT platforms has intensified competition in the entertainment industry. With a plethora of content available on various platforms, filmmakers face the challenge of grabbing viewers' attention and standing out from the crowd. The traditional star power and marketing strategies that Bollywood relied upon may no longer be sufficient to ensure success.

OTT platforms also offer niche and unconventional content that may not find mainstream acceptance in Bollywood. This has given rise to a wave of fresh and diverse storytelling, expanding the horizons of Indian cinema. Filmmakers now have the freedom to experiment with bold narratives, tackle social issues, and

explore uncharted territories.

CONCLUSION

In conclusion, while OTT platforms have disrupted the traditional Bollywood model, they also present new opportunities for filmmakers and content creators. Rather than viewing OTT platforms as a threat, Bollywood should embrace them as a complementary distribution channel that can reach a wider audience and foster creative freedom. It is essential for the industry to adapt and evolve with changing consumer preferences to stay relevant in the digital era. By leveraging the strengths of both traditional cinema and OTT platforms, Bollywood can continue to thrive and entertain audiences in new and exciting ways.





CREDITS: BCCI/IPL

INDIAN PREMIER LEAGUE

A LUCRATIVE FINANCIAL MODEL FOR CRICKET'S
BIGGEST SPECTACLE



**BY-
ANSH KAPOOR
BMS**

INTRODUCTION

Cricket, often called "The Gentlemen's Game", originated back in the 16th century in England, though, its popularity rose in the 20th century. The game has produced many Legendary players over the years, Sir Donald Bradman, Viv Richards, Sachin Tendulkar, MS Dhoni and Virat Kohli to name a very few of the cricket legends.

The sport is particularly famous in India, Pakistan, Sri Lanka, Australia, England, and South Africa, and is a growing sport in countries like Afghanistan, Nepal, USA, UAE.

Traditionally, international cricket was the primary form of the game, and players represented their countries in various tournaments and series in the three formats of the game- Test Cricket, One Day and T-20I. Domestic cricket was played at the regional level, with teams representing different states or provinces within a country.

In India, cricket is not just a game or a sport, instead, cricket is an emotion for millions of people in India. People in India often term the game of cricket as a Religion. Many of the Indian great cricketers are considered heroes and role models by their fans. The origin of The Indian Premier League in 2008, further increased the popularity of the sport in India.

IN THIS ARTICLE

- INTRODUCTION
- INCEPTION & NEED OF IPL
- IPL'S REVENUE MODEL
- POPULARITY OF IPL
- CONCLUSION

INCEPTION & THE NEED OF IPL

The Indian Premier League since its inception has become a global phenomenon and one of the most popular tournaments in the world, attracting millions of fans and generating billions of dollars in revenue every year. The IPL was designed to capitalize on this demand by providing a platform for high-quality T20 cricket featuring some of the best players from around the world.

The need for the league arose from the increasing popularity of the shorter formats of the game, that is twenty-over cricket. The success of the inaugural T20I world cup in 2007 and India's victory were the prime reasons for the idea of the tournament.

IPL'S REVENUE MODEL

The IPL's revenue model is unique in the world of cricket, as it allows for significant financial gain for all stakeholders involved. The BCCI and its member associations earn a significant share of the revenue generated by the league, which is then reinvested into the development of cricket infrastructure and grassroots programs.



The franchise owners also stand to earn a significant return on their investment, with the value of IPL franchises having grown significantly since the league's inception. These IPL teams generate revenue from ticket sales, merchandise sales, sponsors and winning prizes. The franchise owners are responsible for the financial performance of their team, including the payment of player salaries and other operational expenses. Some of the famous team owners are Bollywood actor Shahrukh Khan (KKR), Bollywood actress Preity Zinta (PK), and Famous Indian businessman Mukesh Ambani (MI). Many of these team owners went on to buy teams in foreign T-20 Leagues as well. In the recently concluded South African Premier League, all 6 teams were owned by IPL franchise owners.

The players, too, benefit from the financial success of the IPL, with top international players earning significant sums of money for their participation in the league. At the 2023 IPL Auctions, Sam Curran from England fetched INR 18.5 Crores, becoming the most expensive buy ever, while the English cricketer earned around INR 14.5 Crores in 2022 for playing for his national team. In the same year, Australian all-rounder Cameron Green was bought by Mumbai Indians for a whopping INR 17.5 Crores. Afghanistan's spin maestro Rashid Khan was signed for INR 15 Crores by Gujarat Titans for the 2022 season, while his salary in the Pakistan Premier League was a maximum of INR 1.27 Crores. Indian All-rounder Yuvraj Singh fetched INR 16 Crores becoming the costliest Indian cricketer to be bought at the auction in the history of IPL. The IPL has also provided a platform for young Indian players to showcase their talent and earn a chance to represent the national team. 23 years old Indian wicketkeeper- Ishan Kishan was sold at 15.25 Crores in the 2022 IPL Auctions.

Many players have touched the riches from rags- Yashasvi Jaiswal who once used to sell Panipuri was bought for INR 2.4 crores by Rajasthan Royals. The story of Mohammed Siraj (son of an auto-rickshaw driver) is another inspiring story, who was retained at INR 7 crores by RCB in 2022 IPL Auctions. Players like Jasprit Bumrah, Surya Kumar Yadav, Hardik Pandya and many more were IPL sensations who went on to represent India at the highest level.

The financial success of the IPL has also had a significant impact on the Indian economy, generating millions of dollars in revenue each year. The league has created jobs in various industries, including broadcasting, hospitality, and sports management.

POPULARITY OF IPL

With the rise in popularity of women's cricket, BCCI launched WPL (Women's Premier League) for the first time in 2023. Smriti Mandhana has signed for INR 3.4 crore by the Royal Challengers Bangalore. Babar Azam, considered the top Pakistani batsman at the current time, his salary in PSL 2023 is INR 1.4 crore. The comparison between the two batsmen signifies the difference between the brand value of IPL and PSL and for that case any other foreign T20 League.

The higher brand value of the IPL is attributed to several factors, including the massive popularity of cricket in India, the presence of top international players in the league, and the involvement of prominent business entities in the ownership of the teams. The IPL also has a more extensive broadcasting network and higher viewership compared to other T20 leagues, which further enhances its brand value.

The tournament is backed by strong sponsors. Vivo had agreed to pay INR 484 crores for the 2022 season and INR 512 crores for the 2023 season. IPL provides big companies with a unique opportunity to reach a large and targeted audience, associate themselves with a successful sporting league, and generate revenue through advertising and promotional activities.

CONCLUSION

In conclusion, the IPL's business model has proved to be a lucrative financial model for cricket's biggest spectacle, providing a platform for high-quality T20 cricket while also generating significant revenue and economic activity. The league has revolutionized cricket in India and around the world, and it continues to grow in popularity and financially with every new edition.



THE DARK WEB'S IMPACT ON INDIAN BUSINESSES

UNMASKING THE DARK WEB'S STEALTHY IMPACT ON INDIAN ENTERPRISES



**BY-
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BCOM (H)**

CREDITS: TIMES OF INDIA

INTRODUCTION

The dark web has emerged as a major threat for corporations globally, including India. This hidden section of the internet, accessible only through specialised software such as the Tor browser, has become a fertile ground for unlawful operations, posing a significant danger to Indian enterprises. In this essay, we will look at the influence of the dark web on Indian enterprises and evaluate the various hazards they face.

UNDERSTANDING THE DARK WEB

Before getting into the specific impact on Indian enterprises, it is necessary to define the dark web. The dark web is a section of the internet that has been purposefully concealed and is inaccessible via regular search engines. It comprises of multiple encrypted networks and websites that must be accessed using special software. Because the dark web offers users a high level of anonymity, it is an appealing venue for unlawful activity.

RISE IN CYBERCRIME AND ILLEGAL ACTIVITIES

In recent years, the dark web has endured an enormous spike in illicit activity and unlawful activity. Criminals on the dark web engage in a variety of activities, including the trafficking of illegal items, narcotics, firearms, and stolen data, as well as the provision of cybercrime tools and services. According to cybersecurity experts, the dark web is responsible for a significant share of global crimes.

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- UNDERSTANDING THE DARK WEB
- RISE IN CYBERCRIME AND ILLEGAL ACTIVITIES
- AVAILABILITY OF STOLEN DATA AND CREDENTIALS
- RISE OF CYBERCRIME -AS-A-SERVICE
- FINANCIAL LOSS AND REPUTATIONAL DAMAGE
- LEGAL AND REGULATORY IMPLICATIONS
- THE ROLE OF DARK WEB MONITORING
- BUILDING A CYBERSECURITY CULTURE
- COLLABORATIVE EFFORTS AND PUBLIC-PRIVATE PARTNERSHIPS
- CONCLUSION

The dark web has become a haven for hackers and cybercriminals in India. According to reports, the dark web is the source of a major portion of assaults on Indian firms. Data breaches and identity theft are examples of these assaults, as are ransomware attacks and fraudulent transactions. Because of the growing availability of hacking services and harmful code insertion on the dark web, fraudsters are finding it simpler to attack Indian enterprises.



AVAILABILITY OF STOLEN DATA AND CREDENTIALS

The easy accessibility of stolen data and credentials is one of the most serious concerns posed by the dark web to Indian enterprises. On the dark web, cybercriminals sell a variety of stolen information, including credit card numbers, online banking credentials, social network credentials, and personal information. This data is reasonably priced, making it widely available to scammers and fraudsters.

Credential stuffing attacks, in which hackers exploit stolen usernames and passwords from data breaches to obtain unauthorised access to accounts, are a threat to Indian organisations. Businesses must be attentive and employ rigorous security measures to secure their data and systems in light of the availability of massive volumes of compromised credentials on the dark web.

RISE OF CYBERCRIME-AS-A-SERVICE

Cybercrime-as-a-Service (CaaS) is a thriving dark web sector that provides a variety of criminal services to people and organisations. This concept enables hackers to share their experience and tools with other criminals, allowing them to conduct cyberattacks without extensive technical capabilities. CaaS examples include phishing-as-a-service (PhaaS) and ransomware-as-a-service (RaaS).

The emergence of CaaS poses an enormous hurdle to enterprises in India. On the dark web, cybercriminals can simply purchase phishing campaigns, ransomware tools, and other dangerous services, allowing them to launch complex assaults with little effort. The accessible nature of these services at low cost makes it easy for even inexperienced criminals to participate in cybercrime, hence expanding the total threat picture for Indian organisations.

FINANCIAL LOSS AND REPUTATIONAL DAMAGE

The dark web's influence on Indian enterprises extends beyond financial loss. Due to stolen finances, data breaches, or ransom payments, a successful cyberattack can result in severe financial losses. Furthermore, firms may suffer reputational harm, which can have long-term implications for their operations and consumer trust.

A data breach or other cyber event can expose sensitive consumer information, diminishing customers' faith in the afflicted organisation. Rebuilding trust and repairing reputational harm may be a difficult and expensive task. To reduce the danger of financial loss and brand harm, Indian firms must prioritise cybersecurity solutions and regularly monitor the dark web for any potential hazards.



LEGAL AND REGULATORY IMPLICATIONS

The influence of the dark web on Indian firms extends to legal and regulatory concerns. As cybercrime becomes more prevalent, governments throughout the world are introducing tighter laws and regulations to address these dangers. The Information Technology (IT) Act and the Personal Data Protection Bill in India seek to secure people's data while holding firms liable for data breaches and cyber events.

To secure sensitive consumer data, Indian enterprises must maintain compliance with these standards and deploy comprehensive cybersecurity procedures. Noncompliance with legal requirements can result in serious fines and legal ramifications.

Monitoring the dark web for possible data breaches and being up to date on developing cybersecurity rules are critical actions for Indian enterprises to take to protect their operations.

THE ROLE OF DARK WEB MONITORING

Given the serious hazards posed by the dark web, Indian enterprises must take preventative measures to safeguard themselves. Dark web monitoring tools are critical for detecting possible risks and limiting the effects of cybercrime. These systems monitor the dark web for stolen data, compromised credentials, and other signs of a cyberattack using modern technology and human intelligence.

Dark web monitoring can reveal early warning signals of a possible breach, allowing Indian firms to take rapid action to safeguard their networks and limit the consequences. Businesses may keep one step ahead of hackers while safeguarding their sensitive data and digital assets by actively monitoring the dark web.

BUILDING A CYBERSECURITY CULTURE

While technology and monitoring solutions are important, so is fostering a strong cybersecurity culture inside Indian entities. Employees are crucial in avoiding intrusions and safeguarding sensitive data. Educating staff on best practises for cybersecurity, fostering a culture of awareness and vigilance, and creating rigorous security policies and procedures are critical measures in limiting the impact of the dark web on Indian enterprises.

Employees can benefit from regular training sessions, phishing simulations, and continuing awareness efforts to assist them recognise and report possible cyber risks. Furthermore, implementing multi-factor authorization, robust password restrictions, and frequent software upgrades will help Indian firms improve their overall cybersecurity posture.

COLLABORATIVE EFFORTS AND PUBLIC-PRIVATE PARTNERSHIPS

To counteract the impact of the dark web on Indian firms, joint initiatives and public-private partnerships are required. To tackle cybercrime, government agencies, law enforcement, cybersecurity corporations, and businesses must collaborate to share threat intelligence, discuss best practises, and develop successful tactics.

Public-private partnerships may give Indian firms with access to cutting-edge cybersecurity tools and skills, allowing them to remain ahead of dark web cyber threats. India can build a strong cybersecurity ecosystem that protects enterprises, individuals, and vital infrastructure from the mounting risks presented by the dark web by encouraging collaboration and information exchange.

CONCLUSION

With its role in fostering cybercrime and the availability of stolen data and passwords, the dark web poses a huge danger to Indian enterprises. The increase of cybercrime-as-a-service, as well as the possibility for financial loss and reputational harm, emphasises the importance of proactive cybersecurity measures.

Indian enterprises must prioritise dark web surveillance, establish a strong cybersecurity culture, and collaborate with government agencies and cybersecurity organisations. They may successfully limit the effects of the dark web and protect their operations, data, and consumers from cyber dangers by doing so.



FROM PIT TO PROFIT: THE ART OF MOTORSPORT FINANCE

UNFUELING ITS SUCCESS: AND NAVIGATING THE WORLD OF MOTORSPORT FINANCE



**BY-
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BMS**

INTRODUCTION

Motorsports captivate audiences worldwide with their speed, precision, and adrenaline-fueled action. Beyond the excitement, there lies a complex financial engine that drives the entire industry. This article delves into the captivating world of motorsport finance, unveiling the strategic maneuvers and financial tactics that propel the industry forward. Whether you're a dedicated fan or a business enthusiast, get ready to explore the intersection of money and motorsports.

UNDERSTANDING MOTORSPORTS

Motorsports encompass a wide range of competitive events involving motorized vehicles, from motorcycle racing to high-speed Formula 1. International governing bodies set the rules and regulations for each category, ensuring the smooth execution of these thrilling events.

THE MARKET VALUE OF MOTORSPORTS

The global motorsports market was valued at \$5.11 billion in 2022 and is projected to reach \$12.9 billion by 2028, with a compound annual growth rate (CAGR) of 10.2% during 2023-2028. The industry is witnessing transformative changes, adapting to the challenges posed by the COVID-19 pandemic. Virtual racing events and innovative business models have emerged to engage fans and create new opportunities within the motorsports market. Factors driving this rapid growth include enhanced safety features in racing cars, increased promotional efforts, and a rise in sponsor spending globally.

IN THIS ARTICLE

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- UNDERSTANDING MOTORSPORTS
- THE MARKET VALUE OF MOTORSPORTS
- REVENUE GENERATION IN MOTORSPORTS
- IMPACT OF TECHNOLOGY ON MOTORSPORTS
- GLOBAL FINANCIAL IMPACTS OF MOTORSPORTS
- CONCLUSION

Additionally, the growing partnerships between brands and television rights holders, the convergence of sports and entertainment, and the popularity of live sports on OTT and social media platforms are expected to fuel market expansion in the coming years.

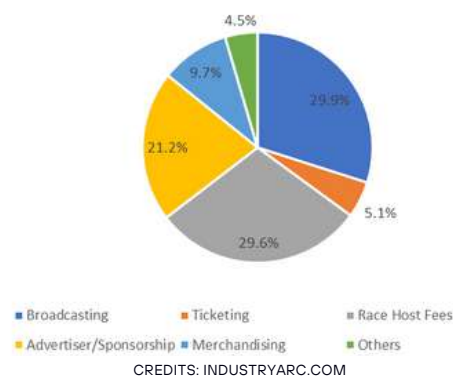
REVENUE GENERATION IN MOTORSPORTS

The financial success of motorsports hinges on various revenue streams that accelerate its success. Broadcasting rights represent a primary revenue source, with broadcasters investing substantial sums to secure exclusive rights to air motorsports events. Sponsorships and advertising also play a pivotal role, as racing teams and drivers form partnerships with corporate brands. These partnerships provide financial support in exchange for valuable exposure and marketing opportunities. Beyond financial backing, sponsors may contribute technical expertise, research and development resources, and additional promotional collaborations to the sponsored teams.

Advertising opportunities abound in motorsports, encompassing broadcasting rights, trackside billboards, team liveries, and digital platforms. Brands leverage these channels to reach a global audience, maximize exposure, and engage with consumers in the high-energy and immersive motorsport environment. The revenue generated from sponsorships and advertising contributes significantly to the industry's financial sustainability.

Ticket sales serve as another crucial revenue stream, with fans flocking to race tracks to witness the action firsthand. Organizers have introduced various ticket segments, including reserved grandstand areas that offer enhanced facilities and a luxurious experience. The revenue from ticket sales supports ongoing operations, infrastructure improvements, and the overall sustainability of the motorsport industry. Motorsport events offer unique opportunities for corporate partnerships and exclusive hospitality experiences. Luxury suites, VIP packages, and behind-the-scenes access provide businesses with opportunities to entertain clients, engage in high-level networking, and showcase their brands in a premium environment.

Furthermore, motorsports present a thriving platform for branding and merchandise sales. Fans eagerly embrace team apparel, driver memorabilia, and collectibles, forging strong connections with their favorite teams and drivers. Licensed products, ranging from video games and clothing lines to die-cast replicas and accessories, generate substantial income for both teams and motorsport organizers. Licensing partnerships expand the reach of motorsport brands beyond the racetrack, capitalizing on the passion and loyalty of fans and driving additional revenue.



IMPACT OF TECHNOLOGY ON MOTORSPORTS

The finance aspect of motorsports has been profoundly influenced by technological advancements. The continuous progress in technology and engineering within motorsports has not only revolutionized the sport itself but has also had a ripple effect across various industries. Automotive manufacturers are heavily invested in R&D to upgrade their vehicles and gain an advantage in the competition, and such investments create positive economies of scale contributing to the growth of players within the motorsport industry and other industries. The impact of motorsport on the electrification of the automotive sector should not be overlooked. For many years, electric and hybrid racing cars have been a mainstay of motorsport, and the technology developed for these vehicles has found its way into the production of automobiles. The use of technology in motorsports has also led to the development of new revenue streams, such as esports, which has seen significant growth in recent years. Technology plays a vital role in motorsports, encompassing data analytics, telemetry, virtual reality, and simulators. These technological advancements significantly enhance performance, optimize strategies, and improve safety measures in the sport. Moreover, the knowledge and expertise gained from these advancements have a wider impact, as they can be applied to other industries like aerospace, defense, and transportation, fostering innovation and progress in those sectors as well.

GLOBAL FINANCIAL IMPACTS OF MOTORSPORTS

According to the International Automobile Federation (FIA), the motorsport industry made a significant annual contribution of \$188.2 billion to the global economy as of July 2021, generating 1.5 million total paid jobs, while conducting 60,700 events. Motorsports events provide a livelihood to a lot of people, directly and indirectly. Global motorsports events help boost tourism in a country and support local businesses also.

In 2021, Europe emerged as a dominant force in the motorsports market, capturing a substantial market share of 38.4%.

This region is expected to continue its growth trajectory, with the market projected to reach a value of \$3609.4 million by 2027, exhibiting a compound annual growth rate (CAGR) of 8.2%. The International Automobile Federation (FIA) recently unveiled its strategic initiative to enhance motorsport in Africa. The plan aims to bolster motorsport development throughout the continent by focusing on strengthening operational frameworks for upcoming events, implementing long-lasting legacy projects, and fostering commercial partnerships. It will have a positive impact on developing the backward areas of the continent and also strengthening their culture and economy.

CONCLUSION

The motorsport industry's financial dynamics are as captivating as the races themselves. From broadcasting rights and sponsorships to ticket sales and merchandise, the revenue streams within the industry drive its financial growth and sustainability. As the motorsport world continues to evolve and adapt, the fusion of speed and finance ensures the industry remains at the forefront of both sporting excitement and financial success.



WHY DO INDIAN STARTUPS FAIL

ANALYSING THE FACTORS BEHIND INDIAN STARTUPS' FAILURE



BY-
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CS (H)

CREDITS: TRANSPARENT CAPITAL PARTNERS

INTRODUCTION

Despite India boasting the third-largest startup ecosystem globally, a staggering 80-90% of Indian startups face failure within the initial five years of their establishment.

The situation worsened with the onset of the Covid-19 pandemic, which brought the entire industry to a grinding halt due to travel restrictions and a global shutdown. Additionally, during the pandemic, remittances from foreign workers, which were Sri Lanka's largest source of US dollars, fell by 22.7 percent to just US\$5.5 billion in 2021. However, there was a notable increase in workers' remittances in the latter half of 2020, and December 2020 witnessed the highest monthly remittances ever recorded.

FAILURE OF STARTUPS

The startup landscape is a dynamic and ever-evolving space characterized by bold ideas, ambitious entrepreneurs, and groundbreaking innovation. While success stories dominate the headlines, it is essential to acknowledge that startup failures are a prevalent and intrinsic part of this ecosystem. Failure is an inherent risk that entrepreneurs face as they embark on their journey to disrupt industries, introduce new products or services, and bring their vision to life.

IN THIS ARTICLE

- INTRODUCTION
- FAILURE OF STARTUPS
- IMPORTANT FACTORS
- FINANCIAL RESOURCES
- CASE STUDY- BOUNCE
- CASE STUDY- RAW PRESSERY
- CONCLUSION

The failure of startups is not an indicator of incompetence or lack of effort. On the contrary, it is often a result of the inherent uncertainties and complexities of entrepreneurship. Startups operate in a volatile and competitive environment where even the most promising ideas can face unforeseen obstacles. Therefore, examining the reasons behind startup failures is crucial for fostering a culture of learning, resilience, and adaptability within the entrepreneurial ecosystem.

IMPORTANT FACTOR- LACK OF INNOVATION

Lack of innovation can indeed be a significant factor contributing to startup failures in India. While the Indian startup ecosystem has witnessed rapid growth in recent years, the ability to consistently innovate and differentiate oneself in the market is crucial for sustainable success.

Based on a survey, a significant majority of venture capitalists (77%) believe that Indian startups suffer from a dearth of innovation and unique business models. Findings from a study conducted by the IBM Institute for Business Value indicate that 91% of startups fail within the initial five years, with the lack of innovation being the predominant reason for their failure. There are valuable lessons to be learned from successful Indian startups such as ChaiPoint, Ola, Saathi, and Swiggy, all of which have been recognized as among the world's top 50 most innovative companies.



A lack of innovation in problem-solving can result in a weak value proposition and limited market relevance. Many startups in India tend to replicate successful business models from other countries or imitate what has worked in the Indian market.

FINANCIAL RESOURCES

Insufficient financial resources act as a significant obstacle that forces numerous startups to cease their operations. For those startups that receive seed funding, the inability to raise follow-on funds is one of the biggest reasons why startups fail. Startups often rely heavily on external funding sources to meet their financial needs.

While venture capital (VC) funding has grown in India, access to VC funding remains a challenge for many startups, especially early-stage ventures. Investors often prioritise startups with proven business models, traction, and a clear path to profitability. This leaves early-stage startups with limited options for securing the necessary capital to launch and grow their businesses. Without adequate funding, startups may face difficulties in hiring talent, developing their products, and expanding their operations.

INDIANS NOT BEING RESPONSIBLE CUSTOMERS

CASE STUDY- BOUNCE

One of the other major reasons responsible for the failure of startups is how Indian people themselves have failed as responsible citizens. Let's study the case of BOUNCE. Bounce introduced a unique dockless scooter-sharing model, allowing users to rent and pick up electric scooters from anywhere in the city using a mobile app. Users can locate nearby scooters, unlock them through the app, and drop them off at any designated parking location once their trip is complete. This flexibility and convenience have been instrumental in the company's success

While Bounce has revolutionised urban mobility in Bangalore, it has also faced challenges regarding the misuse of its services. One common issue with Bounce scooters is unauthorised parking. Users sometimes leave the scooters in inappropriate locations, such as sidewalks, blocking pedestrian pathways, or obstructing entrances to buildings. This misuse can cause inconvenience to pedestrians and create obstacles in public spaces. Instances of vandalism and theft have been reported with Bounce scooters. Some users have damaged the scooters intentionally, causing significant financial losses for the company. Additionally, thefts of Bounce scooters have been recorded, leading to a reduction in the available fleet and affecting service availability.

FAILURE TO UNDERSTAND MARKET AND CONSUMER PREFERENCES

CASE STUDY- RAW PRESSERY

One of the other cases of startup failures in India, if not done proper research is that of RAW PRESSERY. Raw Pressery, a brand that specialises in cold-pressed juices and beverages, was relatively popular and successful in its early years. However, if the brand experienced a significant decline or failure, there could be several possible reasons. Cold-pressed juices are generally more expensive than traditional juices due to the high-quality ingredients and specialised production process involved.

If Raw Pressery failed to effectively communicate the value proposition of their higher-priced products to consumers or if their pricing was perceived as too high, it could have resulted in a decline in sales. They failed miserably in understanding the Indian market and the Indian buyer mindset.

Consumer preferences can change over time, and what was once trendy may no longer resonate with the target audience. If Raw Pressery failed to adapt to evolving consumer demands, such as offering new flavours or incorporating functional ingredients, it could have lost relevance in the market.

Effective branding and marketing are crucial for attracting and retaining customers. If Raw Pressery struggled with building a strong brand identity, communicating its unique selling points, or differentiating itself from competitors, it may have impacted its ability to capture and maintain a loyal customer base.

CONCLUSION

India's startup ecosystem has experienced significant growth, but it is not impervious to failures. Various factors contribute to the failure of startups in India, including insufficient understanding of the market, limited access to funding, regulatory obstacles, difficulties in acquiring talent, inadequate infrastructure, and challenges related to scalability and profitability. To overcome these hurdles, a supportive ecosystem is needed. This ecosystem should address these challenges comprehensively by providing startups with the necessary resources, mentorship, regulatory reforms, and funding opportunities. By tackling these obstacles, India can foster a thriving startup culture that promotes innovation, drives economic growth, and generates employment opportunities.





CREDITS: REUTERS

RAINBOW CAPITALISM

CHASING PROFITS AT THE END OF THE RAINBOW: EXPLORING THE COMPLEXITIES OF RAINBOW CAPITALISM



**BY-
TANISHA
SAXENA
BCOM (H)**

LGBTQ+ rights have made great strides toward equality and inclusion in recent years. Once considered a radical protest, the Pride Parade is now a glamorous celebration of diversity and love. However, along with this progress, new phenomena have also emerged: Rainbow capitalism. This refers to the exploitation of LGBTQ+ identities and the commercialization of pride for profit. While some argue that raising awareness and corporate support is a positive development, others believe this is a cynical marketing ploy that undermines the essence of pride. This article examines the pitfalls of rainbow capitalism and its impact on the LGBTQ+ community.



CREDITS: USA TODAY

One of the main concerns under this is the commercialization of queer identities. Recognizing the economic potential of the LGBTQ+ market, companies jumped on the bandwagon by releasing limited-edition pride products and advertising campaigns. These companies show superficial support but often fail to address the organizational issues that affect their communities. It's not enough to have a rainbow logo on your product for a true ally. It requires meaningful action, such as supporting LGBTQ+ organizations, advocating for policy change, and promoting inclusion in the workplace. Companies often ignore the diversity within their communities while focusing on showcasing the more marketable and pleasing aspects of their communities. This selective display can perpetuate harmful stereotypes and exclude those who do not conform to mainstream expectations. By promoting only the most socially acceptable identities and ignoring intersectionality, companies are erasing the experience of transgender, people of color, and other marginalized groups within the LGBTQ+ community.

Additionally, rainbow capitalism can lead to pinkwashing, a term that refers to companies that use LGBTQ+ rights as a shield to divert attention away from unethical behavior. By associating their brands with pride, these companies create the illusion of being progressive while ignoring issues like labor exploitation, and environmental destruction, and supporting anti-LGBTQ+ politicians.

This performative activism not only fails to address the root causes of inequality, but also undermines the hard work of grassroots activists fighting for real change.

Critics argue that rainbow capitalism also commoditizes struggle and dilutes pride's historical significance. Pride was born in response to police brutality and government oppression of LGBTQ+ people. It was a political movement fighting for liberation and equality. But when you turn it into a marketable event, pride loses its true meaning. Vibrant parades and festivals are reduced to spectacles without a revolutionary spirit. This corporate takeover of Pride undermines its credibility and weakens it as a platform for action. While some large companies direct profits from pride-themed merchandise and sponsorships to LGBTQ+ charities, gay-owned smaller businesses compete in an increasingly commercial setting. As the focus shifts to big companies with big marketing budgets, the unique experiences and challenges faced by LGBTQ+ entrepreneurs are overshadowed and ignored. This inadvertently strengthens existing power relationships within the economy, and marginalized communities continue to face barriers to accessing financial resources and opportunities. In addition, financial institutions and governments have a role to play in combating rainbow capitalism. Regulation and transparency measures could be put in place to prevent companies from pinkwashing or profiting from superficial support for LGBTQ+ causes. Governments can also invest in efforts to support gay small businesses and provide financial resources to empower marginalized communities.

Moreover, it perpetuates the idea that LGBTQ+ equality can be achieved through consumption rather than institutional change. Purchasing rainbow-colored products and participating in Pride events are easy ways for individuals to show solidarity without deep discussions or concrete actions. This superficial support often distracts from ongoing issues facing the LGBTQ+ community, including discrimination, violence, and unequal rights. The illusion of progress is created, but real progress remains elusive. So how do you combat the pitfalls of rainbow capitalism? First and foremost, companies need to move beyond performance behavior and focus on substantive change. True allies require ongoing commitment, not just Pride Month. Businesses should support LGBTQ+ organizations, be proactive in creating an inclusive environment for their employees, and advocate for policies that protect the rights of LGBTQ+ people. Additionally, consumers can play a role by being critical of corporate motives, supporting gay-led businesses, and prioritizing true allies over superficial attitudes.



CREDITS: USA TODAY

In summary, while increasing awareness and corporate support for LGBTQ+ rights appears to be a step in the right direction, the phenomenon of rainbow capitalism raises concerns about credibility, selective representation, and performative activism. Pride should not be reduced to marketing opportunities or consumer-centric spectacles. It is important to recognize the underlying issues and strive for real change beyond rainbow logos and limited-edition products. Addressing these pitfalls can ensure that Pride remains a platform for action, celebration, and the pursuit of true equality for all.



BEYOND RATIONALITY: HOW BEHAVIORAL ECONOMICS SHAPE POLICY DESIGN

BEHAVIORAL ECONOMICS SHAPES EFFECTIVE POLICIES. OR DOES IT?

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Kumud Chaprana
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Introduction

Behavioral economics, these two words convey a whole lot of significance in terms of how human psychology creates a valley between the expected economical outcomes versus the actual outcomes. Behavioral economics is the field of study that examines how human behavior deviates from the assumptions of traditional economic theory. These deviations can be caused by a variety of factors, including cognitive biases, emotional influence, and social norms.

The approach is now consistent with modern behavioral findings. By understanding how people make decisions, we can design fundraising campaigns that are more likely to be successful.

" Let's embark on a journey through the fascinating realm of behavioral economics, empowering policy design with a deeper understanding of how people truly think and decide."

How are the policies designed?

The process includes a variety of actors and numerous complex actions. It starts with identifying the problem and then policymakers stepping in to develop potential solutions.

These solutions are then evaluated in terms of their feasibility, cost, political climate, resources, and the public's opinion.

Public opinion can significantly influence the design of government policies as governments often seek to align their policies with the preferences and needs of the public to maintain legitimacy, address public concerns and gain public support.

Public consultations: public consultants become part of the process to gather feedback, concerns, and suggestions from the public regarding policy. This is done in various ways such as town hall meetings, surveys, focus groups, or expert panels.

Advocacy and pressure groups: Public opinion can also be expressed through advocacy and pressure groups that represent specific interests or causes. These groups often engage in activities such as lobbying, campaigning, and public awareness efforts to shape policies in line with their members' opinions.

Media and Public Discourse: A well-known fact is public's opinion is vastly influenced by media, based on how media portray policy outcomes and actions taken by the government, an individual's brain perceives that information for decision-making for upcoming elections and the selection of policymakers.



The Nudge Theory

Nudge theory has gained significant attention in the realm of policymaking. The underlying principle is to guide individuals toward making better decisions by leveraging cognitive biases and heuristics that influence human behavior.

Nudges can take various forms, such as simplifying complex choices, providing timely information, adjusting default options, using social norms, or employing personalized feedback.

The strength of nudges lies in their ability to subtly alter the decision-making environment without restricting individual freedom. Nudge interventions can be low-cost, easily scalable, and adaptable to different contexts, making them attractive tools for policymakers.

However, it is crucial to ensure that nudges are ethically implemented and transparently communicated. Policymakers should also regularly evaluate the effectiveness and unintended consequences of nudges to ensure they achieve the desired outcomes.

For example, In many buffet or self-serve settings, using smaller plates nudges people towards taking smaller portions. Research has shown that when people are given larger plates, they tend to serve themselves more food, often leading to overeating. By providing smaller plates, individuals are encouraged to take appropriate portion sizes, promoting healthier eating habits.



Choice Architecture

It refers to the design of decision-making environments to influence people's choices predictably. Research has demonstrated that subtle changes in how choices are presented can have significant effects on decision outcomes. By strategically structuring the decision-making environment, policymakers can influence people's choices and steer them towards options that are in line with policy objectives.

Another aspect of choice architecture is the framing of options and information. The way choices and information are presented can significantly influence decision-making. Policymakers can frame options in a way that highlights certain attributes or emphasizes the benefits of specific choices.

Moreover, policymakers can utilize the concept of choice architecture to simplify complex decisions. People often struggle with making choices when faced with overwhelming information or numerous options.

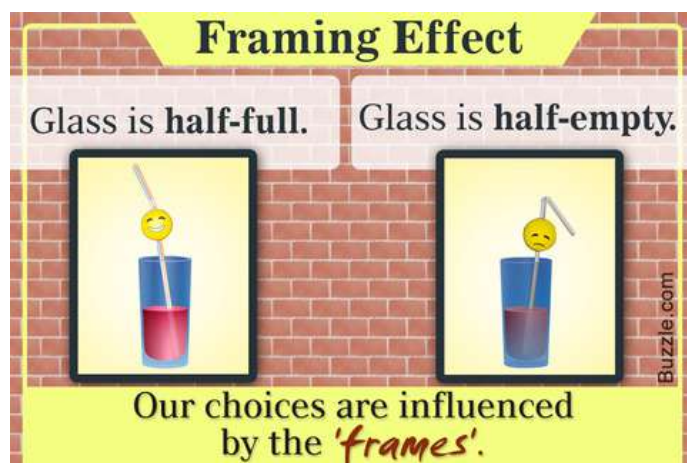
By simplifying the decision-making process and reducing the cognitive burden, policymakers can facilitate better decision outcomes.

For instance, in an effort to promote healthier eating habits, a government can make fruits and vegetables the default option in school lunches (Option A), requiring students to actively opt out if they prefer other choices. This nudges students towards healthier options by leveraging the default effect. In contrast, maintaining the current system where students actively choose their preferred food option(Option B) may lead to fewer healthy choices.

Framing Effects

Framing effects are a key concept that explores how the presentation or framing of information influences decision-making. This information is structured, emphasizing certain aspects and downplaying others, to influence how individuals perceive and evaluate options.

Various framing techniques can be employed in policy design. One common technique is positive framing or gain framing, which emphasizes the potential benefits or gains associated with a particular choice or policy. Research has shown that people are more likely to respond favorably to messages that highlight positive outcomes.



CREDIT - BUZZLE

Individuals may respond differently to various frames based on their background, values, and prior experiences. Policymakers consider the heterogeneity of their target audience and carefully balance multiple frames to accommodate diverse perspectives.

Public Behaviour and Policies in Ancient Times

The understanding of human behavior and decision-making processes was different during those periods. However, we can take into account how certain principles or strategies that align with behavioral economics might have been employed in policy-making in ancient civilizations.

Use of Rituals and Symbolism: Ancient civilizations often employed rituals and symbolism to reinforce desired behaviors and beliefs. These cultural practices could serve as a persuasive tool for policymakers to influence the public's mindset and encourage specific action.

Incentives and Rewards: while formal economic systems were not as developed in ancient times, policymakers likely recognized the power of incentives and rewards to motivate desired behaviors. Providing benefits or privileges to individuals who adhered to specific policies or contributed to the welfare of the community could serve as a form of incentivization.



CREDIT - QUORA

Public Communication and Persuasion: Storytelling, myths, proverbs, and moral tales were powerful tools used to convey values, norms, and desired behaviors. By framing policies and messages within compelling narratives, policymakers could evoke emotional responses and shape public perception.

Social Hierarchies and Power Dynamics: Ancient policymakers often held positions of authority or were part of ruling elites. They could leverage their power through laws, regulations, and enforcement mechanisms. Fear of punishment or desire for social approval and status may have been used in the government's favor.

Failures In the Implementation of Behavioral Economics

1.Despite efforts to regulate and reform the financial sector following the 2008 crisis, there have been instances where misaligned incentives and behavioral biases persisted.

Some argue that the complexity of financial products, combined with structures that reward short-term gains have led to questionable practices and potential risks within the industry.

2.Information disclosure policies, which aim to enhance consumer decision-making by providing transparent information, may not always yield the desired outcomes. Studies have shown that individuals may struggle to process complex information, ignore disclosures or fail to act upon them, limiting the effectiveness of such policies.

Conclusion

Policy design has been profoundly influenced by behavioral economics, by shedding light on nudge theory, choice architecture, and framing effects we understand how things can be manipulated by policymakers such that the public will choose the best in their favor. Ancient policymaking reflects early recognition of behavioral effects, shaping governance and societal systems by means of rituals, incentives, persuasion, power, etc considering cognitive biases, and addressing social dynamics. A few examples are introduced in this context to show how small negligence can lead to great impacts but by leveraging behavioral insights, policy design can enhance effectiveness and outcomes. However, continued exploration and refinement of this field can stimulate much better outcomes by delving deeper into underlying cognitive and psychological mechanisms that drive human behavior, thus paving the way for even more impactful and evidence based interventions





IMPULSE BUYING AND OVERSPENDING

IS MONEY RELATED TO HAPPINESS?



**BY-
AKSHITA
BMS**

CREDITS: TIMES OF INDIA

INTRODUCTION

The topic of money has been debated for years. Some believe money is the key to happiness, while others argue that money is not the same. One of the biggest problems with money is impulsive buying and overspending. Everyone has experienced it once. While walking through a shop, something suddenly catches your eye, and you don't need it. However, even though it is unnecessary, the temptation to own one leads to an impulsive purchase without even realizing it. You are happy now that you have bought it and your desire is fulfilled, but you will regret it at night, but the damage is already done.

With more money, you can buy more things, take more vacations, and gain more experience, so spontaneous shopping and spending can increase your happiness for a while. But beyond a certain point, it doesn't even matter. Research has shown that more money doesn't necessarily lead to more happiness. On the contrary, some studies have shown that people with less money are often happier than those who earn more.

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- CONCLUSION

In this article, we will learn more about the relationship between money and happiness and how impulsive buying and overspending can lead to emotional and financial distress.

First, consider the relationship between money and happiness. Money brings a sense of security, stability, and a more comfortable life. But research shows that more income doesn't make people happier when their basic needs are met. In fact, research shows that people are more satisfied with their prioritized experiences and relationships than with their money and material possessions.

This is where impulse buying and overspending come into action. Impulse buying and overspending can be triggered by many factors, including stress, anxiety, boredom, and low self-esteem. Social media and advertising can encourage impulse buying by creating a sense of fear of missing out and encouraging people to compare themselves to others.



Many people believe that the more money they have, the happier they are, so they impulsively spend more than they can afford. Such behavior creates a cycle of debt and financial stress that can seriously affect a person's mental health and overall well-being.

One of the reasons people overspend is the instant gratification of a purchase. Our society is constantly bombarded with advertisements and messages that state that we need modern gadgets, clothing, and other material possessions in order to be happy. The problem is that these things provide temporary gratification, and that euphoria quickly fades. This can lead to wanting more and more, leading to overspending and debt. Another reason people overspend is social pressure. We live in a society where we have a natural tendency to constantly compare ourselves with others. This leads to a desire to keep up with the riches, which can lead to overspending and debt. It's important to remember that everyone's financial situation is different, and what works for one person may not work for another.

Is there a direct relationship between money and happiness? The answer is a bit complicated. Money can give you a sense of security and stability, but it doesn't necessarily make you happier. In fact, overspending and debt can cause financial and emotional distress and have a significant impact on a person's mental health and overall well-being.

The good news is that there are ways to avoid impulse buying and overspending. The first step is to create a budget and stick to it. This will help you identify the key areas where you may be overspending and adjust accordingly. It is also essential to prioritize experience and experience.

Relations over material possessions. Instead of buying the latest gadgets and clothes, invest in experiences like travel and spending time with loved ones. These experiences can create lasting memories and a sense of fulfillment that material possessions cannot provide. Another way to avoid impulse buying and overspending is to practice mindfulness. Before you buy, take a moment to think about why you want the item and if it really makes you happy. Ask yourself if you really need the item or if you just want it right now. Practicing mindfulness can help you avoid impulse purchases that you may regret later.

Learning about personal money is also essential. Many people overspend because they need to learn how to manage their money correctly. Take the time to learn more about budgeting, saving, and investing. This knowledge will help you make informed decisions about your money and prevent overspending.

In summary, money can give you a sense of security and stability, but it doesn't necessarily make you happier. Impulse purchases and overspending can cause financial and emotional distress and significantly impact a person's mental health and overall well-being. By setting a budget, prioritizing experiences and relationships, practicing mindfulness, and learning about personal money, you can avoid overspending and achieve financial security and well-being. In summary, money can give you a sense of security and stability, but it doesn't necessarily make you happier. Impulse purchases and overspending can cause financial and emotional distress and significantly impact a person's mental health and overall well-being. By setting a budget, prioritizing experiences and relationships, practicing mindfulness, and learning about personal money, you can avoid overspending and achieve financial security and well-being.



BEYOND BOUNDARIES

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IMPACT OF THE RUSSIAN INVASION OF UKRAINE ON THE INDIAN ECONOMY

THE RIPPLE EFFECT ON A GLOBAL SCALE



**BY-SATVIK
ECO (H)**

INTRODUCTION

"No one wins a war. True, they vary in degrees of loss, but no one wins." There are no other ways to better describe Russia's invasion of Ukraine (headed by Vladimir Putin) as the entire world lost as the Russian Army successfully conquered areas of Ukraine after years of endeavors.

"No one wins a war. True, they vary in degrees of loss, but no one wins." There are no other ways to better describe Russia's invasion of Ukraine (headed by Vladimir Putin) as the entire world lost as the Russian Army successfully conquered areas of Ukraine after years of endeavors.

IMPACT OF COUNTERFEITING

The origins of this bleak chapter in history may be traced back to 1991, when the Soviet Union was dismantled into 15 sovereign governments, including Ukraine and Russia. Both Russia and Ukraine maintained good relations at first, but this was only the calm before the storm as the Russian Federation continued its efforts to seize control of Ukraine. The Crimean Peninsula was effectively conquered by Russia in 2014.

Things looked to have settled down after that, but in 2021, Putin started a "special military operation" to "demilitarise and denazify" Ukraine rather than conquer it militarily. The true purpose, however, was to prevent NATO from entering Ukraine and targeting Ukraine's President Volodymyr Zelenskyy. He was famed for saying, "The enemy has designated me as target number one; my family is target number two." This was also evident in Vladimir Putin's strategy, as his troops

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Background Picture Credits:
Tom Calver, Venetia Menzies, Rachel Lavin, Ademola Bello, Anna Lombardi, Ryan Watts, George Willoughby, Matilda Davies, Zehra Munir

attempted to conquer the capital city (Kyiv) and the presidential residence before withdrawing to colonize the Donbas industrial sector and other strategically significant places close to the Russian border.

The war (still ongoing as of May 2023) shows no signs of abating as the Russian army continues to invade parts of Ukraine. In March 2023, the International Criminal Court issued an international arrest warrant for Vladimir Putin on counts of war crimes, genocide crimes against humanity, and child abduction.

INDIA'S STAND ON THE SITUATION

This situation has been difficult for India to deal with because it has maintained defense links with Russia, but Russia's recent actions have constituted a breach of international law and Ukraine's integrity. Russia is also one of India's largest importing partners, and going against them would cost the country financially. When the United States and the transatlantic powers launched an economic war against Russia, the situation became more complicated.

Finally, India opted to remain neutral and not stand in Russia's way, maintaining trade ties with Russia, which disappointed Ukraine's Foreign Minister, who critiqued India, adding that the nation anticipated a more practical approach from India. The frequent visits of Ukrainian Ministers to India during the invasion indicated that the country anticipated India to be the mediator; nevertheless, much to their discontent, no aid was offered.

IMMEDIATE IMPACTS ON THE INDIAN ECONOMY

India and Russia have commercial ties that involve not just oil and petroleum, but also defense, diplomacy, technology, and nuclear energy. The following part of this section will go through each impacted sector.

Oil Prices

Russia is the world's second-largest exporter of oil and petroleum products. Because of the conflict, the price of one barrel of oil soared to \$139 in mid-war, up from \$89 before the war began. Combined with the recovering economy post-COVID, the demand for petroleum and related products was at an all-time low, and the war's long-term consequences were becoming visible.

Inflation

The impact on the Indian economy, notably in terms of inflation, commenced long before the war erupted. In anticipation of the conflict, Indian manufacturers raised their prices by 10% in January and February. The impact

on the oil sector was adequate to cause inflation to climb by 30 base points. The price to import goods in India rose, as the cost of manufacturing increased worldwide, causing a crisis in the global supply chain as one of the major economies had only one thing on the agenda, war.

Food Shortage

In anticipation of the war and the possible rise in demand and price of food, grains resulted in mass hoardings around the world. The conflicting countries are among the largest suppliers of food grains. The lack of major participants has put further strain on existing exporters such as India. Russia is India's biggest supplier of fertilizers, so it needed not only to supply more but also to find a solution to the fertilizer shortage. In the end, India was able to avoid this problem since the detrimental impact was minimal. It began boosting production and shipping to regular clients in Russia and Ukraine.

Education

In 2020, more than 18,000 Indian students were enrolled in Ukrainian education programs, the invasion threatened the safety of these students. The Indian government, in coordination with both countries, carried out an operation to bring the students back to safety. India's already overcrowded and competitive education system could not accommodate these students, resulting in them dropping out of college.

Depreciation of INR

India's economy is erratic because it is a developing nation. People typically de-invest in riskier investment instruments and switch to less risky ones during unexpected times, such as geopolitical issues. Holders of INR began selling it in anticipation of a loss because India had close diplomatic ties with Russia and was adopting a neutral stance in this entire crisis. High inflation, as was already said, is also responsible for all this.

LONG-TERM IMPACT ON THE INDIAN ECONOMY AND LAUNDROMAT

Though initially criticized for not placing the Russian economy on a blacklist, India is now reaping the benefits of its neutral stance by keeping cordial ties with both nations.

India expressed concerns regarding the territorial integrity and safety of Ukrainian civilians. India also supplied Ukraine with medical resources at a nominal rate and provided Ukraine with school buses and other resources. Seeing a mass loss of infrastructure, India also volunteered for the rebuilding of the same and provide economic aid. On the other hand, with Russia,

India maintained its trade relations and continued to trade oil and other important resources. During this time, when half of the world had black-listed Russia, India emerged as a lifesaver for both parties by becoming an intermediary.

India has been identified as one of five countries involved in a plan known as the "Laundromat," which involves importing Russian oil and selling processed products to European countries in order to circumvent European sanctions against Russia. According to the Centre for Research on Energy and Clean Air (CREA) research, India, along with China, Turkey, the United Arab Emirates, and Singapore, has increased its imports of Russian oil. According to the study, Indian vendors and European purchasers may be circumventing sanctions by purchasing crude from a refinery in Gujarat co-owned by Russian oil major Rosneft.

European countries are purportedly substituting oil goods bought directly from Russia with those that have been "whitewashed" in foreign countries and purchased at higher prices. India has become the largest oil product supplier to the "price cap coalition" countries, which include the EU, G7 countries, Australia, and Japan. India supplied over 3.8 million tonnes of oil products to these alliance countries in March 2023 alone, with diesel playing a substantial part in India-EU commerce. These findings provide light on the complicated dynamics surrounding oil trade and sanctions, spurring ongoing debates regarding their impact on international relations and measures to limit Russian oil exports in the midst of the Russia-Ukraine crisis.

CONCLUSION

To conclude, the Russian invasion of Ukraine has had both immediate and long-term consequences for the Indian economy. India faced immediate concerns such as rising oil prices, inflation, potential food shortages, and the need to repatriate students studying in Ukraine. The depreciation of the Indian National Rupee (INR) and global economic uncertainties added to the complexity

However, India negotiated the crisis by remaining neutral and engaging in diplomatic relations with both Russia and Ukraine. The Indian government expressed concern for Ukraine's territorial integrity, provided medical resources, and offered financial assistance for infrastructure reconstruction. Concurrently, India maintained its trading links with Russia, including imports of Russian oil and other key resources.

The involvement of India in the "Laundromat" plan, as highlighted by the CREA report, demonstrates the intricacies of international trade and the difficulties of bypassing sanctions. India, as one of the five countries engaged, has experienced increasing Russian oil imports and subsequent exports of processed products to European countries. This practice has called into

question the efficacy of European sanctions against Russia. As the crisis between Russia and Ukraine continues, the long-term impact on the Indian economy remains unknown.

However, India's impartial stance and diplomatic engagement with both sides have enabled it to preserve trade links while mitigating possible negative consequences. Overall, the situation highlights the complexities of global politics, economic interdependence, and the difficulties countries confront in balancing their interests while navigating international crises. The entire extent of the damage to the Indian economy and the conclusion of the Russian-Ukrainian conflict will be revealed in the coming years.



MIDDLE EAST CRISES AND USA INVOLVEMENT



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Akshay Kiran Wani
MBA; IIM Kashipur

OVERVIEW OF MIDDLE EAST CRISES:

The Middle East is a troubled, multifaceted area that has endured decades of political unrest, armed strife, and economic hardship. The Syrian civil war, the Yemeni civil war, and the Israeli-Palestinian conflict are just a few of the continuing conflicts that have contributed to the instability in the region. Millions of people have been displaced as a result of these hostilities, which have also severely damaged infrastructure and caused a serious humanitarian crisis. Another major issue in the area is political instability, with some nations frequently changing governments and lacking democratic institutions. The area experiences severe economic difficulties due to its heavy reliance on oil exports, high unemployment, and slow economic growth. Economic difficulties have also been exacerbated by political unrest and conflict, which has pushed numerous firms to shut down and discouraged international investment.

With tensions still high and the possibility of a military escalation, the ongoing confrontation between US and Iran has added another level of complication to the area. Overall, the Middle East's situation is still complicated, and a serious humanitarian catastrophe is a result of persistent hostilities, political unrest, and economic difficulties.

HISTORICAL CONTEXT:

US involvement in the Middle East extends back to the early 20th century when oil was discovered in the area and the Suez Canal was recognized for its strategic value. After World War II, US's interest in the Middle East grew as European powers started to leave the region. The Middle East's enormous oil reserves have been one of the main drivers of US interest in the region.

US actions in the Middle East in the past have resulted in serious consequences. To remove Mohammad Mossadegh, the democratically elected PM who had nationalized Iran's oil industry, the US and Britain organized a coup in Iran in the 1950s. As a result, Mohammad Reza Pahlavi's authoritarian rule rose to power, paving the way for the Iranian Revolution of 1979.

The US assisted Iraq in its conflict with Iran in the 1980s by giving Saddam Hussein dictatorship power. This backing contributed to the Iran-Iraq War, which claimed more than a million lives and left both nations in ruins economically. The US led a group of nations in the Gulf War, which was fought in the 1990s to drive Iraqi forces out of Kuwait. As a result, a no-fly zone was established over Iraq and kept in place throughout the 1990s and 2000s. The US invasion of Iraq in 2003, led to the overthrow of the Iraqi government and an increase in sectarian bloodshed.

The conflict also aided in the destabilization of the area and the emergence of extremist organizations like ISIS. The growth of authoritarian regimes, the destabilization of the area, and the loss of countless lives are just a few of the negative effects of US participation in the Middle East.

GEOPOLITICS AND GLOBAL COMPETITION

The USA's participation in the Middle East has enormous geopolitical ramifications, especially in light of the wider battle between the US, Russia, and China for influence. The area has become a crucial theatre of international power politics due to its strategic location, the wealth of natural resources, and political instability.

To maintain its power and ensure access to oil resources, the US has always taken the lead in the region. However, in recent years, Russia and China have stepped up their regional activity to bolster their influence and counterbalance the US's hegemony. Russia has been particularly active in Syria, supporting the Syrian regime militarily and expanding its influence there. Due to this, Russia has been able to challenge US influence in the Middle East and project its power across the region. China has also been more involved in the region, especially in terms of its trade and commercial ties with the Gulf States. China has made significant investments in regional infrastructure projects to establish itself as a major trading partner for Middle Eastern nations.

Global security and stability are significantly impacted by the US, Russia, and China's struggle for influence in the Middle East.

IMPACT ON THE GLOBAL FINANCIAL SYSTEM:

The US's engagement in the Middle East and the crises there have big direct and indirect effects on the world financial system.

The Middle East is a major producer and exporter of oil and is home to some of the greatest oil reserves in the

world. As a result, regional instability or interruptions in oil supply may have a big effect on world oil prices. Because higher oil prices can raise the cost of important economic activities, which could have wider effects on the global economy.

The Middle East crisis and US participation have had substantial indirect effects on the world financial system. Particularly in nations that are significantly reliant on oil imports or have a sizable amount of exposure to the region, political unrest and continuous conflicts in the region can increase the dangers to broader economic and financial systems.

Additionally, the struggle for influence among the region's major nations, including the US, Russia, and China, can heighten geopolitical tensions and put the world economy at risk. This may cause the financial markets to become more volatile and investors to feel more apprehensive.

Overall, there are major direct and indirect effects of the Middle East crisis and US participation in the region on the world financial system.

GEOPOLITICAL INSTABILITY:

The Middle East is a region that is characterized by ongoing conflicts and tensions. From the Syrian civil war to the Yemen conflict, these events have had significant impacts on the global financial system, particularly in terms of market volatility and disruptions to trade and supply chains. For example, the 9/11 terrorist attacks had a major impact on financial markets, causing drops in stock prices and increased market volatility. Similarly, tensions between the US and Iran in 2019 caused significant market volatility, with the price of oil spiking and stock markets around the world experiencing significant declines.

BANKING:

The Middle East is also significant to the global banking system. Many of the largest banks in the world have significant operations in the region, and disruptions to these operations can lead to significant losses for these institutions. The Dubai debt crisis in 2009, which saw Dubai World, a major state-owned company, default on its debt obligations, had significant implications for global banking institutions. Many banks around the world were heavily exposed to Dubai World's debt, and the default led to significant losses for these institutions.

PROSPECTS:

The Middle East is currently experiencing persistent political unrest, regional hostilities, and economic difficulties. A few instances of the region's continuous instability are the civil conflicts that are still raging in .

Syria and Yemen, and the tensions between Saudi Arabia and Iran. The persistent threat of terrorism and extremist organizations, which continue to constitute a serious security threat to the area and the world, is one of the main obstacles. The economies of the region also confront considerable obstacles, such as high rates of youth unemployment, corruption, and reliance on oil exports.

The Middle East offers a lot of potential, notably in terms of regional collaboration and economic development. Diversifying the region's economies and encouraging investment in non-oil industries like tourism and technology might spur growth in the region.

Prospects for the Middle East will be significantly shaped by US policy towards the region. The Biden administration has made it clear that it wants to move away from the "forever wars" of the past and put more effort into fostering regional stability.

However, the US will have to navigate the region's complicated geopolitical dynamics, which include rivalry with China and Russia as well as ongoing hostilities between significant regional powers like Saudi Arabia and Iran.

Overall, the Middle East's future remains hazy, but there are reasons for cautious hope. The region has the potential to become a significant player in the world as well as a hub for innovation and growth through fostering regional collaboration and tackling major problems. Policymakers will need to carefully balance opposing interests and try to promote stability and collaboration in the area as the US will play a crucial role in determining this future.

CONCLUSION

The Middle East's significance to the global energy market, as well as its geopolitical instability, banking, and environmental concerns, create significant systemic risks for the global financial system. While these risks cannot be eliminated, it is important for policymakers, businesses, and investors to be aware of them and to take steps to mitigate them where possible. As the global economy becomes increasingly interconnected, the impacts of events in the Middle East are likely to become more pronounced, underscoring the need for continued attention to these risks.





COUNTERFEITING AN ISSUE FOR WORLD ECONOMY

ELUCIDATING THE MAJOR CONSEQUENCES OF
COUNTERFEITING



BY-
GARV CHUGH
ECO (H)

INTRODUCTION

These days, counterfeit money is being circulated all over the world. While its circulation skyrockets the volume of money accessible to the public, it does have certain bad consequences for the economy.

Counterfeit money is counterfeit or imitation cash made with the intent to mislead. Producing counterfeit money is forgery or fraud since it is done without legal authority. There were multiple cases of metal cash counterfeiting before paper money was introduced around the globe. In massive denominations, with the intention of destabilising the economies of the countries. Even now, massive sums of counterfeit money are distributed across the world, some of it of very high quality.

Fake currency money has the greatest impact on the economy because it jeopardises the security of the genuine economy. When the powers that produce this phoney currency successfully get it into circulation by utilising it as legal tender, they obtain a genuine economic value for nothing. They did not earn the money that they are squandering.

IMPACT OF COUNTERFEITING

Counterfeit currency can have various negative effects on the economy. Here are some ways in which counterfeit currency can impact economic stability:

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- CONCLUSION

Counterfeit money is frequently associated with terrorist financing, helping insurgencies and left-wing extremism, trafficking in drugs, narcotic chemicals, and other contrabands, trafficking in people, and so on. It also causes the indigenous currency to lose confidence in foreign markets, resulting in negative socioeconomic consequences.

Fake money destroys public faith in the monetary system. When consumers detect counterfeit notes in circulation, they may become reluctant to receive currency, disrupting the economy's usual functioning. A loss of trust in the currency may lead to a drop in acceptance, hurting everyday transactions and the broader economy.



Inflation occurs when counterfeit money is pumped into the economy, increasing the money supply without increasing the amount of goods and services produced. This might result in a surplus of money chasing a limited supply of products, fueling inflationary pressures. When the money supply expands fast due to counterfeit cash, prices might rise, diminishing the buying power of legal money and harming individuals and companies.

Counterfeit cash frequently remains unnoticed during transactions, allowing crooks to avoid paying taxes. Governments may lose tax income as a result, making it more difficult to support public services and infrastructure development. It unfairly burdens honest taxpayers and may need higher tax rates to compensate for lost income.

Fake money has the potential to affect economic indices and financial data. For example, if counterfeit money is used to make purchases, sales numbers can be falsely inflated, leading to erroneous appraisals of economic development and performance. This might make it difficult for policymakers to make educated judgments and implement successful economic policies.

Counterfeit money has a significant influence on the global economy. In certain cases, states attempt to destabilise the economies of their political and economic adversaries by massively counterfeiting their money and moving it into their markets.

This undermines them not just economically but also socially and politically. If there is more demand than supply, the market price will rise rapidly.

Counterfeit money has the greatest impact on the economy because it jeopardises the security of the genuine economy. When the powers that produce this phony currency successfully get it into circulation by utilising it as legal tender, they obtain a genuine economic value for nothing. They did not earn the money that they are squandering.

In most situations, this value is exploited to promote their evil intentions. These malicious objectives may lead to bloodshed, instability, and a loss of trust in the currency. Further down the line, wherever the false currency note is discovered, the bearer of the note loses the value of their effort to the maker of fake money, who initially obtained the value he desired for nothing. As a result, genuine, hardworking, and honest individuals wind up supporting traitorous operations despite no fault or involvement of their own. This economic loss for the honest accrues unjust riches to the manufacturers of counterfeit currency, weakening the genuine, cash-based economy.

The quantity you spend is always proportionate to the amount you have. As a result, the more the economy's wealth, the higher the expenditure. When there is more money, there is more demand for products and services. This results in a general price increase, which we refer to as inflation. Although some inflation is necessary to fulfil development goals, severe inflation is every Central Bank's worst fear. This is precisely what counterfeit money accomplishes. It contributes to inflation. Central banks go to tremendous pains to keep the economy's money supply balanced. Even a few hundred crores in counterfeit money might be terrible.

The Indian textile industry also seized an opportunity for growth during the crisis. Sri Lanka's inability to fulfill orders due to prolonged power cuts, lasting up to two days, prompted importers who previously relied on Sri Lanka to turn to Indian apparel exporters. The apparel export industry accounted for about 44 percent of Sri Lanka's total exports, according to the US International Trade Administration.



CONCLUSION

To reduce the effect of counterfeit currency, governments and central banks use a variety of steps, including improving banknote security features, adopting advanced detecting technology, conducting public awareness programmes, and enforcing harsh punishments for counterfeiting offences. These measures attempt to retain public trust, defend the economy, and keep financial systems running smoothly.





THE FALL OF PETRODOLLAR AGREEMENT

FINANCIAL FUEL THAT SHAPES THE WORLD



BY-
AVADHOOT

INTRODUCTION

In global finance, the US dollar has long reigned as the dominant reserve currency. its statUS has provided the United States with immense economic influence. However, in recent years, various factors have contributed to the weakening of the US Dollar's grip on its reserve şcurrency status. This article explores the role of the petrodollar agreement and its implications associated with this shift in the global economic landscape.

UNRAVELING THE PETRODOLLAR AGREEMENT

Petrodollar agreement is a term used to describe the US Dollar's dominant positioning in the international oil trade. The petro-dollar system was born out of the 1970s Arab-Israeli war oil crisis when OPEC, the oil cartel, decided to quadruple oil prices. This created a significant problem for the US, which relied heavily on imported oil. To address this issue, the US government agreed with Saudi Arabia to ensure that oil would continue to be priced in US Dollars. in exchange, the US provided military protection to Saudi Arabia, and the two countries developed a strategic partnership that has lasted to this day. As a result, since the early 1970s, the US dollar has been the primary currency used to buy and sell oil globally.

The next question: what impact does the payment of oil in terms of USD make? This payment method has created a massive demand for US Dollars, making it the world's şreserve currency. oil-importing countries must hold significant amounts of US Dollars in reserve to ensure that they can pay for their oil imports. oil-importing countries need to accumulated substantial reserves of US Dollars to secure their energy supplies. The next question: what impact does the payment of oil in terms of USD make?

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- CRACKS IN FOUNDATIONS AND GEOPOLITICAL RIPPLES
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As a result, central banks worldwide hold significant amounts of US Dollars as foreign exchange reserves. This status confers several benefits, including reduced transaction costs, increased liquidity, and improved access to global financial markets for the United States. By creating a constant demand for US Dollars, the agreement helps to maintain the value and stability of the currency. This stability attracts foreign investors, who consider the US Dollar a haven for their investments. The petrodollar system has significant geopolitical implications, enhancing the United States' global influence. As the dominant currency for oil transactions, the US dollar plays a pivotal role in international trade and finance. This allows the United States to exercise considerable influence over global economic affairs, shaping financial policies, and exerting pressure on countries through the imposition of economic sanctions or restrictions on access to the dollar-based financial system. With a constant demand for US Dollars, foreign countries, including oil-exporting nations, are more likely to invest their surplus dollars in US treasury securities. This foreign investment helps finance the US budget deficit, allowing the government to sustain its spending levels while keeping interest rates relatively low.



CREDITS: BATAREYKIN/

GLOBAL DOMINANCE AND ACCEPTANCE

The petrodollar agreement offers several benefits to the world at large. By promoting stability in global energy markets, facilitating streamlined international trade, increasing liquidity in financial markets, and supporting development assistance and investments, the petrodollar system has contributed to global economic growth and integration.

However, the petrodollar agreement is under threat due to shifts in the dynamics of geopolitics and financial markets. Firstly, the US's growing debt and fiscal deficits are making it increasingly difficult for it to maintain global trust in US Dollars. The US has been running trade deficits for decades, meaning that it imports more goods and services than exports. This has led to a significant accumulation of debt, which currently stands at over a massive \$28 trillion.

Secondly, the rise of BRICS (Brazil, Russia, India, China, and South Africa) has played a significant role in the decline of the petrodollar agreement. BRICS nations have been actively challenging the dominance of the US-led global financial system and promoting alternative payment systems. BRICS nations have been working together to develop new financial institutions and promote the use of their currencies in international trade.

Finally, the growing popularity of cryptocurrencies, such as Bitcoin, is also challenging the petrodollar system. Cryptocurrencies are not tied to any government or central bank, meaning that they offer an alternative to traditional fiat currencies. Some countries, such as Iran and Venezuela, have already started using cryptocurrencies to bypass US sanctions and reduce their dependence on the US Dollar.

All these factors have eroded the dominance of the US dollar in the global energy and financial market and have created opportunities for other currencies, such as the euro, the yuan, or even a basket of currencies, to challenge its role. The fall of the petro-dollar could have significant implications for the global economy and politics. The loss of preference and reserve currency status for the US Dollar could reduce the US's economic and military power and influence. The increase of inflation and interest rates for the US, which could affect its growth and debt sustainability and the shift of global trade and investment patterns, which could create new alliances and rivalries among countries and regions.

CRACKS IN FOUNDATIONS AND GEOPOLITICAL RIPPLES

The fall of the petrodollar agreement could have significant outcomes for India, both positive and negative. On the positive side, India could benefit from lower oil prices and more diversified trade partners. India is one of the largest importers of oil in the world, and it spends a large number of foreign exchange reserves on buying oil from the middle east. If the petrodollar system collapses, India could have more options to buy oil from other countries, such as Iran, Iraq, or Venezuela, using its currency or other alternatives. This could reduce India's dependence on the US dollar and save its foreign exchange reserves.

On the negative side, India could face increased volatility and uncertainty in the global financial markets and geopolitical tensions. The fall of the petrodollar system could trigger a loss of confidence in the US dollar and cause its value to decline sharply. This could create instability and chaos in the global financial system, which relies heavily on the dollar as a reserve currency and a medium of exchange. India could suffer from higher capital costs, inflation, and currency depreciation as a result.

Furthermore, the fall of the petrodollar system could also escalate geopolitical conflicts and rivalries among major powers, such as the US, China, Russia, and Saudi Arabia. India could find itself caught in the middle of these conflicts and face pressure to align with one side or another. This could compromise India's strategic autonomy and national interests.

CONCLUSION

The petrodollar agreement gave the u.s. political and military influence in the middle east and ensured a steady demand for the dollar. The agreement has faced several challenges in recent years. The future after the fall of the petrodollar agreement is uncertain and complex. it will depend on how the actors involved adapt to the changing circumstances and shape their interests and strategies. it will also require a collective vision and cooperation among the international community to address the common challenges and opportunities that arise from this transition until a new order is established.





INFLATION IN ARGENTINA-HIGHEST IN THE WORLD

UNDERSTANDING ARGENTINA'S UNPRECEDENTED INFLATION CRISIS:



**BY-
KESHAV
AGRAWAL
ECO(H)**

Argentina has led itself to an unstable economic situation due to inflation that they have been dealing with for many years. The country's recent history is marked by high inflation rates which are highest across the globe, currency devaluations, and periods of economic instability. The article will throw light on various aspects of Argentina's inflation.

Inflation has hit 100% for the first time since 1991, a severe drought is preventing grain exports, and due to the government's rigorous currency controls, the black market dollar is now worth twice as much as the official rate, putting Argentina's economy in danger of imploding.

The expenditure that the government is doing even being in financial deficit is one of the key factors leading to inflation in Argentina. Government expenditure has exceeded its revenue, which has increased the money supply and has increased pricing pressure. Argentina's history of currency printing has also led to inflation as it increased the money supply in the economy.

The average inflation rate was 206.2% per year from the year 1980 to 2022. The price increase was 902.38 billion percent overall. An item that cost 100 pesos in 1980 cost 902.38 billion pesos at the beginning of 2023. For February 2023, the year-over-year inflation rate was 102.5%. The rate is higher than expected by the Consumer Price Index that is a 6.6% monthly rise and a 13.1% year-to-day increase.

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- DROUGHT AND EXPORTS HIT
- SOLUTIONS FOR STABILITY
- CHARTING ARGENTINA'S FUTURE

The Peso(currency of Argentina) lost half of its value as compared to the dollar leading to a currency crisis in 2018. The government headed by then President Mauricio Macri received a \$57 billion loan from the IMF that was record-breaking but the agreement failed in order to stabilize the economy. Following Fernandez's victory in 2019, there was a significant selloff of government bonds, which led to a default by his administration. Fernandez manufactured money during the epidemic to pay cash handouts and wage programs since he was unable to obtain credit after the default, which paved the way for inflation to soar further. Fernandez also enacted a maze of price freezes and currency restrictions, resulting in an alphabet soup of several exchange rates. The policies did not work to reduce inflation or currency losses, but they did complicate the economic climate.

Argentina majorly depends on the export of raw materials like soybeans and meat which is one of the factors that has led to inflation. The country's export revenue rose during periods of high commodity prices, resulting in a huge inflow of foreign currency. Therefore, the cost of imports lowers because inflation is boosted due to the increase in the value of the currency. Also, when commodity prices fall, the export revenue of the country faces a decline and thus causing currency depreciation.

The severe drought has hit Argentina hard. Climate change has affected the country's grain export system, leaving the farmers across the Pampas high and dry. The loss amounts to \$14 billion and 50 million tonnes less of grain output across soy, corn, and wheat. Exports are projected to fall 28% in 2023 compared to last year.

There are multiple effects of high inflation on Argentina's economy and society. One of the most important effects is the loss of consumers' purchasing power. It became difficult for people to afford even the basic necessities of life like food due to the increase in the price and the increase in the cost of goods and services. Living standards gradually drop as a result, particularly for people with low income.

Inflation makes long-term planning and investment a lot more difficult, thus affecting a lot of businesses in Argentina. Rapid fluctuating prices make it difficult to estimate spending, prices, and profits, which can discourage investment and hinder economic growth.

To tackle inflation in Argentina, several solutions have been proposed, that includes fiscal discipline, that is budget deficit reduction must be the government's top priority if it is to ease pressure on prices and the money supply. it can be done through and can be necessary by

reducing government expenditure, raising taxes, or implementing both at once.

Monetary policy is one way, which is to manage the money supply and inflation. This causes increasing interest rates, restricting the expansion of credit, and controlling the money supply. Framing structural reforms, that is to increase productivity, competitiveness, and economic diversification in Argentina. This could enhance training and skills, cutting down red tape and corruption, and encouraging innovation and entrepreneurship.



CREDITS: SARAH PABST

The change in exchange rate policy is important in order to give the economy a strong foundation. The policy should change as it was one of the main sources of instability in the past. This shall entail implementing a flexible exchange rate system, which can counter sudden and uncertain shocks and bring ease in pricing pressure.

Argentina's inflation is a complex issue that needs a varied approach to fixing. The government must implement the mentioned solutions and must address the root causes of inflation. A stable exchange rate policy can also aid in lowering economic volatility and improving the environment for both consumers and enterprises. Despite the difficult situations, Argentina still can beat the inflation and deal with the crisis, henceforth creating a secure and prosperous future for its citizens.



CREDITS: ALEXANDER SCHIMMECK

US DEBT CRISIS

UNDERSTANDING THE COMPLEXITIES
NAVIGATING THE FISCAL LIMITS



BY-
JIYAA
BBE

INTRODUCTION

If you get cash, you need to take care of it. It's just straightforward. However, on the off chance that your pay isn't developing quickly enough, you'll be in a spot of trouble. You'll have to juggle your daily expenses along with repaying the principal and interest on your loans. Furthermore, some of the time, the main way out is to acquire more cash just to reimburse the old credits. It is somehow an endless loop. This can happen to nations as well. That is the reason the US has a standard set up to hold this kind of obligation gorge within proper limits.

The US is in the throes of such a crisis. US DEBT CRISIS is a long-standing crisis that has been there in the US, since 1978, when they changed the debt ceiling basically like clockwork, i.e. every nine months! By what other means do you think the cutoff took off from \$1 billion when it was first acquainted in 1917 to an incredible \$31.4 trillion now? Each time the US government was in danger of hitting this self-imposed debt ceiling, they simply modified it

As a result of these challenges, Sri Lanka faced a problem of critically low foreign exchange reserves which had fallen about 70% in the two years to just \$2 billion at the end of February 2022, which was barely enough to cover just 2 months of its import requirement. Ultimately, the country had to declare a default on its entire foreign debt, totaling about \$51 billion, as a last resort.

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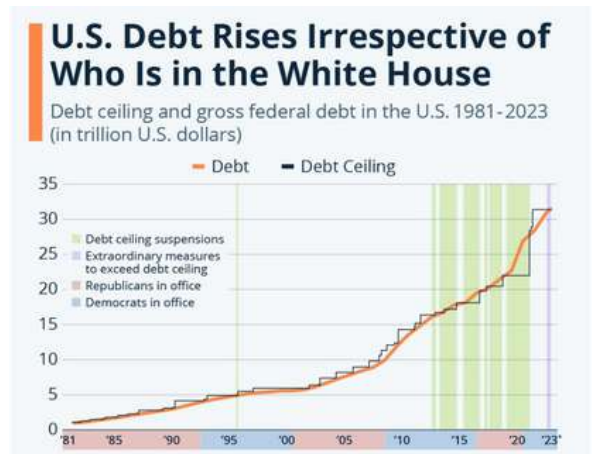
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WHAT IS THE DEBT CEILING?

Built by Congress in 1917, the debt limit, or debt ceiling, sets the most extreme measure of exceptional federal debt the U.S. government can bring about. It's a limit on borrowing more cash only to meet a portion of its current commitments — such as government salaries, pensions and also the interest on existing debt. In January 2023, the total national debt, as well as the debt ceiling both, stood at \$31.4 trillion. The U.S. government has run a shortage of an average of around \$1 trillion consistently beginning around 2001, which means it spends significantly more cash than it receives in taxes and other income. To compensate for any shortfall, it had to borrow to continue to finance payments that Congress has already authorized. Congressional action to raise the debt ceiling doesn't expand the country's monetary responsibilities, as decisions to spend cash are administered independently. Any change to the debt ceiling requires more fantastic part endorsement by both chambers of Congress.

When the government needs to get cash to pay its debt, raising or suspending the debt ceiling becomes important. For a centennial, raising the debt ceiling has generally been a routine system for Congress. At the point where the Treasury Department could no longer handle the government's bills, Congress has acted rapidly and in some cases consistently to increase the cutoff on what it could get. Since 1960, Congress has increased the ceiling multiple times, generally as of late 2021. 49 of these increases were carried out under Republican presidents, and 29 were under Democratic presidents. Congress also has the authority to likewise decide to suspend the debt ceiling, or briefly permit the Treasury to supplant as far as possible, rather than raising it by a particular sum. While this move was interesting during the initial ninety years of the ceiling's presence, Congress has suspended it as far as possible multiple times since 2013. Another part of the debate over the debt ceiling started in 2011 while brawling over

spending between President Barack Obama and congressional Republicans brought about a protracted deadlock. Congress in the end arrived at an arrangement to raise the ceiling only two days before the date that the Treasury assessed it would reach a dead end financially. Nonetheless, the brinkmanship set off the most unstable week for U.S. stocks since the 2008 financial emergency, and the FICO assessment organization S&P Worldwide Ratings minimized the US's creditworthiness for the first and only time. The Government Accountability Office, which fills in as the federal auditor, surveyed that the delay in reaching an arrangement increased U.S. borrowing costs by \$1.3 billion that year alone.



With U.S. political polarization deepening over the past 10 years, votes to raise the debt ceiling have remained petulant, with congressional budget peddles increasingly demanding spending cuts as a trade-off for their help.

At the point when the debt ceiling was set to lapse in 2013, the debate over the cutoff constrained the government into a shutdown, and in 2021, the issue again boiled right down to the last second. As policymakers once more conscious over the ceiling in 2023, President Biden has said he will make do with nothing under a no-strings-attached increase. In the meantime, Republicans led by House Majority Pioneer Kevin McCarthy have involved their majority in the House of Representatives to negotiate a debt ceiling increase on a decrease in federal spending. McCarthy wrote on Twitter that, "If you gave your child a credit card and they kept hitting the limit, you wouldn't just keep increasing it. You would sit down with them to identify where they are overspending and where they can change their behaviour. It's the ideal opportunity for the federal government to do the same thing." In April 2023, the Republicans passed a bill that would suspend the debt ceiling in return for cutting federal spending by very nearly 14% over the following ten years. Examiners say that the bill gets no opportunity of passing the Democrat-led Senate, and Joe Biden has taken steps to reject the action.

CONSEQUENCES OF PENETRATING DEBT CEILING

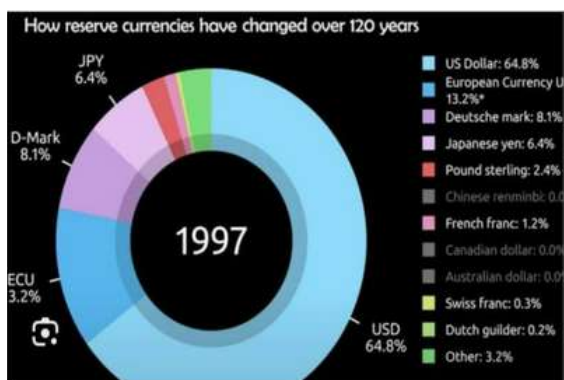
The debate over the debt ceiling has caused economists, such as CFR's Roger Ferguson to think about the once inconceivable prospect of a U.S. default — that is, Washington announcing that it can never again pay its debts. A few specialists say that this would proclaim mayhem for the U.S. and global economies. Indeed, even short of default, raising a ruckus around the town ceiling would hamstring the government's capacity to finance its operations, including accommodating the national defence or funding entitlements like Medicare or Social Security.

Potential repercussions of arriving at the ceiling incorporate a minimization by credit rating agencies, expanded borrowing costs for organizations and mortgage holders the same, and a dropoff in shopper certainty that could stun the U.S. financial market and tip the economy into a downturn. Goldman Sachs economists have assessed that a break of the debt ceiling would promptly end around one-tenth of U.S. economic activity. According to the centre-left figure tank Third Way, a break that prompts default could cause the deficiency of 3,000,000 positions, add \$130,000 to the expense of a typical thirty-year mortgage, and raise interest rates to the point of expanding the national debt by \$850 billion. Moreover, higher interest rates could redirect future taxpayer cash from much-required federal investments in areas such as infrastructure, education, and health care.

"Failure to meet the government's obligations would cause irreparable harm to the U.S. economy, the livelihoods of all Americans and global financial stability," Treasury Secretary and former Federal Reserve Chair Janet Yellen wrote to Congress in January 2023.

IMPACT OF CEILING ON THE MARKET

Specialists say a U.S. default could unleash destruction on global financial markets. The creditworthiness of U.S. treasury securities has long reinforced interest for U.S. dollars, adding to their worth and status as the world's safe money. Any hit to trust in the U.S. economy, whether from default or the vulnerability encompassing it, could make investors sell U.S. treasury bonds and accordingly weaken the dollar. Over half of the world's foreign currency is held in U.S. dollars, so an unexpected reduction in the cash's worth could echo through the market for treasuries as the worth of these reserves drops. As heavily indebted low-income countries struggle to make interest payments on their sovereign debts, a weaker dollar could make debts denominated in other currencies relatively more expensive and threaten to tip some emerging economies into debt crises.



CREDIT: VISUAL CAPITALIST

Numerous U.S. exporters could profit from dollar depreciation since it would increment unfamiliar interest for their goods by really making them cheaper. However, similar firms would likewise bear higher borrowing costs from rising interest rates. Dollar instability can also advantage aspiring great-strength competitors including China. However, Beijing has long sought to position its renminbi (the currency of China) as a global reserve, its currency accounts for under 3% of the world's allocated foreign reserves.

Does the government have any other option if the ceiling is not raised?

If congressional negotiations over the debt ceiling aren't resolved earlier than the ceiling is reached, the Treasury can stave off a default for a very long time with a series of transitory actions it calls "unprecedented measures." These include suspending payments to some government employee savings programs, underinvesting in specific government funds, and postponing auctions of securities.

While the Treasury has used those measures while preceding negotiations stalled — inclusive of in 2011 and 2013 — Congress has never neglected to raise the ceiling before the measures have been exhausted. If Congress does not act to raise as far as possible despite such crisis measures, federal spending would need to plummet or taxes would need to rise significantly (or a combination of the two). In 2023, the debt ceiling was reached without an association on January 19; Treasury Secretary Yellen has advised that unusual measures may be exhausted with the aid of using June 1. Experts have seen both reducing federal spending and increasing expense revenue enough to cover the required payments as processes that could assume control north of 10 years.

As that date approached without an arrangement to raise or suspend the cutoff, some experts proposed alternatives that would not require a congressional endorsement. These include conjuring the Fourteenth Amendment of the U.S. Constitution, which states that

"the legitimacy of the public debt of the United States... shall not be questioned," to issue more debt; others include selling U.S. gold and printing a platinum coin worth \$1 trillion. Biden has publicly called these measures untenable. The Treasury Division could also concede payments on military salaries or to Social Security and Government medical care recipients. It has the choice of focusing on debt payments, although, in Walk 2023, Yellen dismissed that thought as "default by another name."

Despite the cushion of unprecedented measures, long impasses over the debt ceiling can be enough to shake investor certainty.

In May 2023, interest rates on four-week U.S. Treasury bills, long considered the safest asset in the financial system, arrived at a record high.

Is there a similar policy in any other country?

Scarcely any nations hold up with debt ceilings, and no area else do the boundaries frequently threaten serious economic disruption.

- Denmark has one, but it is so much higher than the country's spending that it has not posed an issue. In 2021, Denmark's central government debt was about 14% of its ceiling.
- Australia introduced a debt limit in 2007 intending to legislatively command fiscal responsibility amid huge budget deficits. The ceiling was raised several times before being revoked in 2013.

Poland's constitution caps spending at 60% of gross domestic product (Gross domestic product), but it does not restrict borrowing.

Thus, should the ceiling be revoked?

According to a few analysts, they contend that requiring legislative consent, as far as possible manages the cost of Congress a few oversight authorities and causes fiscal accountability. The first 1917 legislation was intended to give the Treasury some independence over acquiring by permitting it to give debt up to the ceiling without a congressional endorsement for every issuance; preceding 1917, Congress approved the Treasury to get in more modest additions. In any case, as of late, opposition parties have frequently involved debt limit talks as an influence to impact policies not connected with the actual ceiling.

"It is time for the United States to leave behind this antiquated mechanism that brings the country to the precipice of default every few years."

A few financial specialists say that the debt ceiling fills a helpful need by making a valid obligation to restrict spending. They bring up that past debates over the debt ceiling prompted concessions that reduced spending. In 2023, numerous congressional Republicans have noticed, binding debt ceiling exchanges to their interests that developing budget shortfalls compromise the U.S. economy.

In any case, numerous different business analysts and policymakers fight that the federal debt ceiling is utter horror to sound fiscal policy, calling it imprudent to repress the government's capacity to meet previously enacted financial obligations. In 2013, 97% of U.S. financial specialists met by the College of Chicago concurred that the U.S. component for raising the debt ceiling can prompt more regrettable fiscal results. Yellen falls into that camp, contending that the debt ceiling is innately destructive to the U.S. economy since it works to limit acquiring that fund's past responsibilities. CFR's Ferguson agrees "Congress should eliminate the debt ceiling, or at least tie it to spending such that the debt limit increases automatically whenever a spending bill passes," he writes.

Conclusion

Thus, there are 3 methods for settling the US Debt Ceiling Crisis:

- First, by increasing the debt limit as far as possible.
- Second, by issuing premium bonds.
- And third, by minting a platinum coin worth \$1 trillion coin.



FROM RAGS TO RICHES: MONACO'S JOURNEY TO ECONOMIC SUCCESS

DIVE DEEP INTO MONACO'S RAGS TO RICHES TALE



BY-
ADITYA SHARMA
ECO(H)

INTRODUCTION

Monaco, a small but elegant principality tucked away in the middle of the French Riviera, is well known for its abundant way of life and dazzling casinos. However, did you realise that this tiny city-state has advanced significantly from its early days? Monaco's transformation from a struggling fishing village to one of the richest countries in the world has been truly amazing. We'll go into Monaco's fascinating past in this blog article and examine how it developed into an economic powerhouse with strong figures to support it. A thrilling journey through Monaco's past, present, and future awaits you, so hold on tight!

MONACO'S HUMBLE BEGINNINGS

Monaco, a tiny independent city-state on the French Riviera, is known for its enormous wealth and opulent lifestyle. Monaco's situation has sometimes been better, though. In the early years of its existence, Monaco was just a lonely rocky outcrop devoid of any notable natural resources or businesses. In substandard conditions, the local inhabitants subsisted on fishing and farming.

Prince Charles III assumed control of Monaco during the 19th century and set out to make it a desirable vacation spot for affluent travellers. In the future, tourism will be the main driver of economic growth in his small principality. He built opulent hotels and casinos that drew wealthy travellers from around Europe to accomplish this purpose. Beginning with this, Monaco began to emerge from obscurity and become a glamorous refuge for high rollers.

Monaco has survived despite several obstacles throughout its history, such as political unrest and economic downturns, by depending on

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- THE PRINCIPALITY'S TRANSFORMATION
- MONACO'S ECONOMIC SUCCESS STORY
- THE BENEFITS OF LIVING IN MONACO
- CONCLUSION

creativity and reinvention. Thanks to its dedication to modernisation while conserving its legacy, it is now one of the richest countries in the world per capita.

THE PRINCIPALITY'S TRANSFORMATION

It is quite amazing how Monaco developed from a tiny, impoverished fishing village to the thriving principality it is today. Monaco experienced serious economic problems in the 19th century as a result of its reliance on agriculture and fishing. Prince Charles III started making investments in Monaco's infrastructure after realising the potential for tourism there.

Monaco developed opulent hotels and casinos under his direction, drawing affluent visitors from throughout Europe. Millions of francs were brought in annually by the Monte Carlo Casino alone. The prince made significant investments in cultural institutions like museums, opera houses, and theatres to further draw in affluent visitors. Throughout the 20th century, more money was invested in real estate development, infrastructure for transportation, sporting events (like the Grand Prix), and upscale shopping malls (like Les Galeries Lafayette), among other things, to continue the transition.

As one of the richest countries in Europe today, Monaco has a strong economy supported by several sectors, including financial services, which contribute almost 17% of GDP, real estate (15%), and building (12%), among others. In addition to having stunning architecture, it has gained international recognition as a tax haven, drawing many millionaires who now live there permanently or occasionally.

MONACO'S ECONOMIC SUCCESS STORY

The narrative of Monaco's economic development is nothing short of amazing. Monaco, which started as a modest fishing community, has grown into a global powerhouse with one of the highest GDPs per capita in the world. The French Riviera's strategic position and the principality's advantageous tax laws are just two of the reasons for its success. Monaco has long been renowned for its welcoming business environment, which draws businesspeople and investors from all over the world.

To promote tourism and international investment, the government has also made large expenditures on infrastructure projects such as new hotels, apartments, and convention centres. Their position as a desirable location for companies looking for international expansion prospects is strengthened by their focus on expanding important sectors of their economy.

Beyond simply monetary advantages, Monaco's success also translates into greater living conditions for its citizens who have access to first-rate facilities including

healthcare, education, and cultural activities. These elements work together to make Monaco both a prosperous and enticing location to live in. The economic prosperity of Monaco serves as an example for other nations seeking to grow their economy through effective policies that emphasized entrepreneurship and luring foreign capital while upholding high standards of life for their residents.

THE BENEFITS OF LIVING IN MONACO

There are several advantages to living in Monaco, which attracts visitors from throughout the world. One of these advantages is that Monaco boasts among the world's lowest tax rates, making it a well-liked destination for businesspeople and high-net-worth individuals. Living in Monaco also has lovely weather, with consistently warm temperatures and lots of sunshine. Due to this, it is ideal for outdoor pursuits like sailing, swimming, and tanning on one of its many beaches.

Living in Monaco will be wonderful for those who prefer good dining, as many Michelin-starred eateries are serving up delectable cuisine from all over the world. Residents can also take pleasure in going to special events like Formula 1 races and yacht shows and shopping at upscale establishments. Monaco provides excellent international schools and a secure atmosphere for raising children for those who have families. Due to the principality's compact size, everything is easily reachable on foot or by public transport.

The beauty of the surrounding landscape, which includes mountains and sea views, only adds to the allure of residing in this thriving Mediterranean city-state. These elements work together to make life in Monaco incredibly opulent and distinctive.

CONCLUSION

Monaco's rise from poverty to affluence is proof of the effectiveness of tenacity, creativity, and foresight. The principality has seen an astonishing metamorphosis from a struggling port city to one of the richest cities on the planet. Today, Monaco is a global economic hub that draws some of the most successful businesspeople and entrepreneurs. It offers possibilities for businesses to prosper while giving inhabitants unrivalled quality-of-life benefits thanks to its favourable tax laws, business-friendly climate, and premium lifestyle options.

Monaco's proactive commitment to growth and development is the key to its success. The government has made significant investments in infrastructure initiatives including Port Hercules and Fontvieille Marina that have increased commercial development as well as tourism.

Monaco's proactive commitment to growth and development is the key to its success. The government has made significant investments in infrastructure initiatives including Port Hercules and Fontvieille

Marina that have increased commercial development as well as tourism.

Moreover, Monaco has developed a diverse economy that can survive market shocks better than many other countries by concentrating on major areas like finance, real estate, hospitality, and tourism.

Monaco is among the most sought-after locations in the world to reside or conduct business as a result of all these features. There are few places better suited than this little but mighty European nation-state for those looking for high-end opulent living standards or entrepreneurs looking for investment opportunities. Although Monaco began as a poor city-state with little more than rocky terrain and few resources, it now boasts impressive economic statistics thanks in large part to its ability to adapt over time through wise policy decisions combined with relentless efforts aimed at attracting new investments into its borders; offering something truly unique among global destinations whether targeting personal wealth accumulation or professional expansion. Monaco's rise to economic prosperity has been genuinely amazing. Monaco has gone a long way from its beginnings as a little fishing village to being one of the richest nations in the world. The vision and tenacity of the principality's leaders over the years helped to reshape the country.

Monaco's economy today is outstanding, with high GDP per capita numbers and low unemployment rates. It is a desirable site for enterprises and investors from around the world due to its advantageous tax laws and strategic position.

Life in Monaco has numerous advantages as well, including a high standard of life, first-rate medical care, outstanding educational opportunities, and a thriving cultural environment. It seems sense that so many individuals would aspire to live in this stunning principality.

Monaco is a little country, yet despite its size, it has a booming economy. Its success story motivates other countries that aim to attain comparable levels of wealth via diligence, creativity, and capable leadership.



THE *REVOLUTIONISING* ERA

A full-page background image showing three humanoid robots in a bustling outdoor market. The robots are silver and black, with a boxy, retro-futuristic design. They are standing in the foreground, looking towards the left. In the background, there are many people, mostly men, sitting on benches or standing under orange awnings. The scene is brightly lit, suggesting a sunny day.

WHAT'S INSIDE

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GENERATIVE ARTIFICIAL INTELLIGENCE

UNLEASHING CREATIVITY AND
REVOLUTIONIZING FINANCE



**BY-
AADITYA SINGH
BCOM (H)**

CREDITS: NATURE COMMUNICATION

INTRODUCTION

In recent years, the advancements in Artificial Intelligence (AI) have been nothing short of remarkable. Among the groundbreaking technologies, Generative AI has emerged as a game-changer.

This technology focuses on creating and generating new content, such as text, images, and music, with a remarkable resemblance to human creations. The implications of Generative AI stretch across various industries, including finance. In this article, we will explore the concept of Generative AI, delve into its prominent use cases, and examine its profound impact on the financial services sector, supported by compelling data and statistics.

Understanding Generative AI Generative AI utilizes complex algorithms and models to generate new data that closely resembles existing patterns or examples. Unlike traditional AI techniques, which primarily focus on classification and prediction, Generative AI takes a significant step forward by creating original content. This is achieved through the implementation of techniques such as deep learning, neural networks, and reinforcement learning algorithms.

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- PROMINENT USE CASES OF GENERATIVE AI
- IMPACT ON FINANCIAL SERVICE
- CONCLUSION

PROMINENT USE CASES OF GENARATIVE ARTIFICIAL INTELIGENCE

Content Generation:

Generative AI has revolutionized content creation in various industries. In marketing, it has been found that Generative AI-driven tools have led to improved content quality and engagement, as reported by 77% of marketers. The entertainment industry has also witnessed the transformative impact of Generative AI, with 63% of professionals in the field stating that it enhances their ability to generate compelling scripts and storylines.

Image and Video Synthesis:

The application of Generative AI in computer graphics and virtual reality has been transformative. Studies have shown that the use of Generative Adversarial Networks (GANs), a subset of Generative AI, has resulted in a 40% reduction in time and cost for generating lifelike visualizations and virtual environments.

Speech and Music Synthesis:

Generative AI has made a significant impact on voice assistants and the music industry. User feedback suggests that voice assistants powered by Generative AI have a more natural and human-like conversational ability, as reported by 85% of respondents. In the music industry, leveraging AI for composing original music has resulted in increased inspiration and creativity for 60% of musicians.

IMPACT ON FINANCIAL SERVICES

Generative AI has brought transformative changes to the financial services sector, as supported by compelling data and statistics:

Fraud Detection:

The implementation of Generative AI-powered fraud detection systems has led to a significant reduction in financial losses due to fraud. Through data analysis, it has been determined that these systems achieve an average fraud detection accuracy of 95%, resulting in a 50% decrease in fraudulent transactions.

Risk Assessment and Portfolio Management:

Financial institutions have witnessed substantial improvements in risk assessment and portfolio management through the utilization of Generative AI techniques. The data-driven simulations enabled by Generative AI have resulted in a 30% increase in

portfolio optimization accuracy, leading to an average 15% higher return on investment (ROI) for clients.

Algorithmic Trading:

Generative AI has revolutionized algorithmic trading strategies. Backtesting data reveals that AI-powered trading algorithms have outperformed traditional strategies, delivering an average annual return of 25%, compared to 12% with conventional approaches. Additionally, these algorithms have reduced transaction costs by 40% due to their increased efficiency.

Customer Service and Personalization:

The integration of Generative AI-driven chatbots and virtual assistants in financial customer service has yielded significant benefits. Studies indicate that 72% of customers reported a satisfactory experience when interacting with AI-powered chatbots, leading to a 20% increase in customer retention rates for financial institutions.

Fraudulent Document Detection:

Generative AI algorithms have proven effective in detecting fraudulent documents. Research findings demonstrate that these algorithms achieve an accuracy rate of 92% in identifying forged or tampered documents, significantly enhancing security and trust in financial transactions.



Credit Risk Assessment:

Generative AI has revolutionized credit risk assessment in the finance industry. By analyzing extensive datasets and generating synthetic scenarios, Generative AI algorithms can accurately assess an individual's creditworthiness. This helps financial institutions make informed decisions when approving loans or extending credit lines, reducing the risk of defaults and improving overall portfolio performance.

Personalized Financial Advice:

Generative AI has enabled financial institutions to provide personalized financial advice to their clients. By analyzing customer data, financial goals, and market trends, Generative AI algorithms can generate tailored investment strategies and recommendations. This level of personalization enhances customer satisfaction, increases engagement, and strengthens the client-advisor relationship.

Regulatory Compliance:

The finance industry is subject to a myriad of regulatory requirements. Generative AI has played a crucial role in streamlining compliance processes. By analyzing vast amounts of regulatory documents, legal frameworks, and historical cases, Generative AI algorithms can generate compliance reports, identify potential risks, and ensure adherence to regulatory guidelines. This reduces manual effort, improves accuracy, and enhances overall compliance efficiency.

Predictive Analytics:

Generative AI has enhanced predictive analytics capabilities within the finance industry. By leveraging historical data, market trends, and macroeconomic indicators, Generative AI algorithms can generate predictive models that assist in forecasting market movements, identifying investment opportunities, and managing risk. This empowers financial institutions to make data-driven decisions, optimize their strategies, and stay ahead of the competition.



Fraudulent Insurance Claims Detection:

Insurance companies face significant challenges in detecting fraudulent claims. Generative AI has emerged as a powerful tool in combating insurance fraud. By analyzing patterns, historical data, and claim information, Generative AI algorithms can identify suspicious activities, detect fraudulent claims, and minimize losses for insurance providers. This not only protects insurers but also ensures fair treatment and lower premiums for honest policyholders.

CONCLUSION

Generative AI has emerged as a powerful catalyst for innovation, efficiency, and personalized services within the finance industry. Its impact on fraud detection, risk assessment, algorithmic trading, customer service, regulatory compliance, and predictive analytics has been substantial. The use of Generative AI has led to significant reductions in financial losses due to fraud, improved portfolio management accuracy, and enhanced customer satisfaction.

As financial institutions continue to embrace Generative AI, it is essential to address ethical considerations and ensure responsible and transparent use. Striking the right balance between AI capabilities and human expertise will be crucial to maximize the benefits while maintaining trust and accountability. Furthermore, ongoing research and development will continue to expand the potential of Generative AI, unlocking new opportunities and transforming the way we interact with financial services.

In conclusion, Generative AI has ushered in a new era in finance, empowering financial institutions with enhanced capabilities to deliver personalized services, mitigate risks, and optimize decision-making. With the continued advancements in Generative AI, the finance industry is poised for further transformation, driving innovation, efficiency, and customer-centric solutions.





CREDITS: SHUTTERSTOCK

AUGMENTED REALITY AND THE INTERNET OF THINGS

REVOLUTIONIZING THE WAY WE INTERACT WITH THE DIGITAL WORLD



**BY-
SAANCHI MEHRA
PSY (H)**

INTRODUCTION

The convergence of Augmented Reality (AR) and the Internet of Things (IoT) has paved the way for a new era of interactive and immersive experiences. AR overlays the physical world with digital content to enhance our perception and interaction with reality. IoT, on the other hand, connects everyday objects to the internet, enabling data collection and sharing. Combining these two technologies opens up a wealth of possibilities that will change the way we live, work and play.

Augmented Reality

Bridging the gap between the Physical and Digital Realities, AR technology bridges the gap between the physical and digital worlds by overlaying virtual elements onto the real-world environment. From smartphone apps to headsets to smart glasses, AR is becoming more accessible to users. AR leverages computer vision and sensor technology to detect and track objects, map the environment, and provide users with real-time contextual information. AR uses are wide-ranging and diverse. In industry, AR is revolutionizing manufacturing, maintenance, and training processes. Workers can access instructions in real time, visualize equipment layouts, and transfer digital information to physical machines, increasing productivity and reducing errors. In retail, AR is changing the way consumers shop.

A virtual try-on experience allows customers to visualize items such as clothing and furniture in their own space before purchasing. This immersive interaction improves the decision-making process and increases customer satisfaction.

Internet Of Things

Connecting the Physical World The Internet of Things refers to a network of interconnected physical devices with sensors, software and connectivity. These devices can communicate with each other and with the Internet, enabling seamless data exchange and building intelligent systems. IoT is pervasive in many areas, from smart homes and cities to healthcare and transportation. The integration of IoT and AR will make the physical world more responsive and intelligent.

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IoT devices generate a wealth of data such as temperature, humidity, location, and usage patterns. AR can use this data to provide real-time contextual information and overlay relevant content onto physical objects. For example, smart homes can integrate his IoT-enabled devices such as thermostats, lighting, and security systems into AR applications. Users can control and monitor their home environment through an AR interface, adjusting temperature, lighting and security settings with simple gestures and voice commands.



CREDITS: KARA PERRICONE

Synergy

Augmented reality and the Internet of Things merge. As AR and IoT grow together, they create a powerful symbiosis, enhancing each other's capabilities and expanding opportunities for innovation. Here are some areas where the synergy between AR and IoT is having a big impact:

- **Improved user experience:**

AR augments her IoT data with visual overlays, allowing users to interact with their surroundings in new and intuitive ways. For example, wearing AR glasses, users can see real-time information about objects they encounter, including product details, ratings, and maintenance procedures.

- **Remote Support and Training:**

By combining AR with her IoT-connected devices, remote experts can provide real-time guidance and support to technicians and trainees in the field. AR interfaces allow experts to superimpose digital annotations, instructions, and visual cues on the real objects technicians and trainees are working with, increasing efficiency and reducing errors.

- **Smart City:**

AR and IoT can work together to build an intelligent urban environment. For example, an AR navigation system can guide pedestrians and drivers through a city by highlighting points of interest, real-time traffic information, and public transportation options. Additionally, IoT sensors embedded in urban infrastructure collect data on air quality, noise levels, and energy consumption, which can be visualized and

displayed via an AR interface to help raise awareness and make informed decisions.

- **Healthcare:**

The integration of AR and IoT could revolutionize healthcare. During surgery, surgeons can display patient data such as medical images and vital signs in the field of view to improve accuracy and reduce risk. AR can also help with remote patient monitoring, allowing medical professionals to monitor and analyze patient data in real time, facilitating personalized care and early intervention.

CONCLUSION

The convergence of augmented reality and the Internet of Things is changing the way we interact with the digital world. Combining AR's ability to overlay virtual content onto the physical world with the connectivity and data capabilities of IoT opens up endless possibilities across industries. From improving user experience, to enabling remote assistance in smart cities, to revolutionizing healthcare, the synergy between AR and IoT has enormous potential to transform many aspects of our lives. As these technologies continue to advance, we can expect further innovations and exciting new applications that redefine the way we perceive and interact with our environment.



GREEN FINANCE

BUILDING A SUSTAINABLE FUTURE FOR THE PROSPERITY OF THE PLANET



CREDITS: CLIMATECHANGE-THE NEW ECONOMY.COM



**BY-
JANVI ARORA
BBE**

MEANING

The word Green Finance is a mixture of two terms: "green," i.e., green activities," which are activities that are environmentally friendly, and "finance," i.e., "funds and investment. The word simply means investment in environmentally friendly activities. Green finance refers to the financing of making the world greener. It is the investment and funding made by public, private, or non-profit organizations or individuals to promote and contribute to sustainable development. It can be defined as investment in sustainable development and environment-oriented fields for the creation of a better environment. Investments can be made in various environmental-related fields. It may be for the fauna and flora, or it can be for pollution and global warming, or it can be for the fresh air and water crises. It is a combination of both economic and environmental aspects. The investor has to utilize resources in such a way that maximum social, environmental, and economic benefits can be generated. The investment can be made for the improvisation of the environmental crisis or for the implementation of environmental protection and sustainable development policies. The investment would return you profits, but the environment should not bear the loss because of it.

IMPORTANCE

The environmental impairment given by living beings to this world is not hidden from anyone. In this era of environmental crisis, rising temperatures, increasing carbon footprints, water scarcity, and a never-ending list of environmental problems, it is very important to adopt methods to save the environment. Each one should aim to promote and contribute to green finance.

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- MEANING
- IMPORTANCE
- CHALLENGES AND RISK INVOLVED
- BENEFITS OF BUSINESS FIRMS
- BANKING SECTOR AND GREEN FINANCE
- PRODUCTS OF GREEN FINANCING
- GREEN FINANCE IN G20 COUNTRIES
- GLOBAL GREEN BOND MARKET
- GREEN FINANCE IN INDIA
- CONCLUSION

- **Environment Protection:** With the help of green finance, nations aim to reduce the adverse impacts on the environment. Contributing even a small amount of funds for green activities would be a big contribution to environmental protection.
- **Meeting Sustainable Goals:** Goals It would help various entities and the country as a whole to meet sustainable development goals, i.e., the 17 objectives constituted by the UN (United Nations) to meet environmental and economic development. These goals ensure a balance between economic development and environmental protection. Today's generation would be able to give the future generation a developed nation and a healthy environment to live in.
- **DISEASE-FREE PEOPLE:** Due to increased global warming and ozone depletion, the planet attracts a huge number of diseases. Contributing to the prevention of ozone layer depletion is a great job that investors would do. The time and money invested in the improvement of environmental conditions would return to a disease-free nation and thus produce healthy human resources who can effectively and efficiently work for economic development.
- **INFRASTRUCTURAL DEVELOPMENT:** Investment in energy-related projects would result in the development of infrastructure. Advanced technology would be used, and this would ensure that environmental conditions would improve. It will also lead to better use of energy and thus likely terminate the energy crisis.
- **REDUCED CARBON EMISSIONS** –The increasing level of carbon emissions is a threat to lives. An unforgettable gift of green finance would be a reduction in the level of carbon emissions which would help in reducing global warming also.
- **FUNDS TO CATER VARIOUS PROBLEMS**–It would help generate environmental-centric funds. The fund accumulated would be fully utilized for the betterment of the environment. The ability of institutions to grant loans for environment-related activities like afforestation, solar energy production, water conservation, and a lot more would increase.
- **A PERFECT COMBO** –It is a perfect combo for the one who wants to contribute both in social and economic ways to the growth of their nation. It is the best way out to earn maximum return both economically and environmentally.



CREDITS: NEWS.NUS.EDU.SG

CHALLENGES AND RISK INVOLVED

Risks and challenges are unavoidable aspects of any sort of economic activity. Management of the risks to this finance is very important as the smallest of the smallest ignorance can lead to a big loss to the environment and the firm and can also harm living beings.

- **A NEW PRACTICE** - As this concept is unconventional, it is one of the biggest risks. No past records or reports can assist in this area and thus there is a lack of guidance. The one to invest in green activities may hesitate to do so because of this reason.
- **LACK OF AWARENESS** - Lack of awareness is another concern. To attract a large number of investors and people in green finance spreading awareness about it is very important.
- **HOODWINKING** -Awareness is also required during the early stage of investments and funding. An investor may promise to invest but can deceive at a later moment. Therefore one should be alert and aware at each step of the transaction to prevent any fraud.
- **LACK OF REGULAR MONITORING AND GUIDELINES** - Regular monitoring is crucial for making green finance a huge success. A set of guidelines and instructions must be formed by regulatory bodies and authorities to ensure transparency in this area. It would also ensure the safety of funds and thus safeguard the interest of investors.
- **PROBLEM IN IMPLEMENTATION** - One more problem that is prominent is the implementation of these types of transactions. Due to improper flow of information and lack of expert guidance implementation of green transactions may be a chaotic task. The working of systems and chances of loopholes add up to the list of risks and problems.

- **IMPROPER FLOW OF INFORMATION** – The asymmetric flow of information may be a hurdle in the transaction. One must be fully informed about each and every aspect of the project and investment to make a good decision.
- **MISUSE OF FUNDS** – The flow of funds doesn't guarantee that they would be used for the purpose said. The misuse of funds collected for green financing is an important issue to be taken care of. A proper green financial system is required to monitor the correct and regular flow of funds.

BENEFITS TO BUSINESS FIRMS

Every coin has two sides, so green finance does. Agreed that it carries many risks and challenges but it cannot be ignored that this is a wonderful opportunity for the business firms and can benefit them in many ways.

- **PREVENT GOVERNMENT INTERVENTION** – Being involved in green activities would make them more aware of environment-related rules and regulations. They could now operate in an environmentally friendly way and thus can follow all the regulatory norms and avoid Government intervention and penalties.
- **CSR** – Undertaking development activities without adding burden on the environment would add up to their CSR i.e. Corporate Social Responsibility. It would impact the company, its share prices, and its reputation positively.
- **ATTRACT CUSTOMERS** – In today's modern era, consumers are getting aware and thus understand the importance and need for environmental conservation, and thus green financing would act as a magnet to attract customers to the firm. It would build up the reputation and goodwill of the firm.



CREDITS: STANDARD CHARTERED

- **COST EFFECTIVE** – Following the sustainable way of production would lead businesses to save their costs and thus would lead to the generation of profits.

- **REDUCED SCARCITY OF RESOURCES**– The funds would be utilized for environmental development and conservation. It would lead to the reduction of the scarcity of resources by making natural resources available as the funds would lead to the reduction of wastage of resources and improve extraction of resources.

CHALLENGES AND RISK INVOLVED

Bank is one of the most frequent words that come into mind when one thinks about finance. The banking sector plays an important role in green finance. Growing awareness and relevance of green finance reflects the role of banks in green finance, be it any type of bank. Now they are focusing on the advancement of loans, saving activities, and capital formation in environment-related activities or green activities. Taking environmental conditions and factors into consideration during any decision-making or guidelines formation reflects the importance and role of green finance in the banking sector.

Multilateral Development banks play an important role in this sector. They play an important role in deploying the international financial contribution for climate change. They are also supporting and promoting environment-friendly projects and investments by providing better debt strategies.

Another contribution of the banking sector to Green Finance is TCFD.

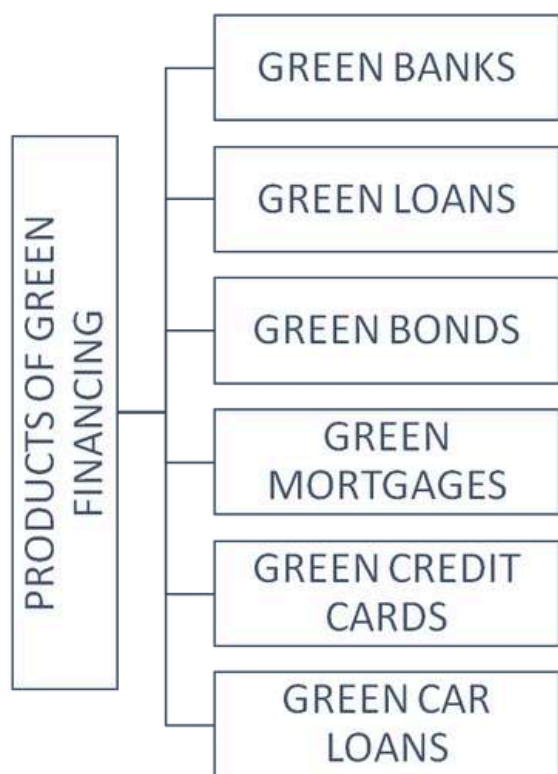
TCFD stands for Task Force on Climate-related Financial Disclosure. It is an institution constituted by the Financial Stability Board (FSB), a regulatory body for monitoring the global financial system, in 2015, to increase access to financial information related to the environment.

TCFD IS BENEFICIAL FOR COMPANIES IN THE FOLLOWING WAYS:-

- The timely flow of information helps the firm to make a rough estimate of the risks related to the environment which can have an adverse impact on the company.
- The entities are now capable of making a well-informed decision after a proper risk analysis.
- Knowing the risks involved helps them to plan their activities and goals accordingly.

PRODUCTS OF GREEN FINANCING

There are different types of products in green financing. There exists a variety of products and instruments in the green financial market. Let's have a look at some of them.



GREEN BANKS

In simple words, the Green Banks are the banks that promote green activities. They are financial institutions with a mission to eradicate adverse environmental conditions and boost energy production through the means of strategic financing. They aim to increase and encourage environment-related investments and prioritize lending to environment-friendly projects.

GREEN BANKS IN INDIA:-

- The Indian Renewable Energy Development Agency (IREDA) – Public sector
- Tata Cleantech Capital Limited (TCCL)- Private Sector

GREEN LOANS

Green Loans refer to the debt given to various individuals or institutions for environment-friendly activities. The amount borrowed is invested in green activities. The purpose for which the loan is taken must add some benefit to the environment. The loans given for a project related to the environment, may it be for energy saving or for water conservation, would be considered a green loan.

Green loans are often provided after complete verification. It is done to ensure the flow of funds for sustainable activities and thus avoid hoodwinking in this matter.

EXAMPLES OF GREEN LOANS:-

- Loan to an individual/firm for planting a solar panel on the roof of a home/office
- Loan to buy an electric car
- Loan to fund an energy-saving project
- Loan for installing water purifying plant.

GREEN BONDS

Green Bonds are highly secured debt instruments issued to fund any project which benefits the climate, the environment, and the atmosphere. Some of the areas for which green bonds are issued:-

- Efficient energy use
- Pollution reduction
- Clean water
- Protection of aquatic ecosystems
- Sustainable Agriculture

The list doesn't end here. There are many other crucial areas within the environment for which these bonds are issued.

GREEN MORTGAGE

The mortgage is a type of loan agreement, used in case of borrowing for a property, under which the lender has the right to take away the property of the borrower in case the borrower fails to repay the loan taken. Under Green Mortgage, the loan is granted to the people who would try to make their property energy efficient or improvise their property so that it doesn't harm the environment anyway. The property has to meet some environmental standards to be qualified as a green building i.e. an environment-friendly building. To increase investment in Green Buildings special benefits are provided in this type of loan, like less interest to a huge amount.



CREDITS:PRESS TRUST OF INDIA

GREEN CREDIT CARDS

Green credit cards act as a tool to have constant monitoring of carbon footprints. It helps consumers manage and change their consumption patterns to a sustainable consumption pattern. Consumption of sustainable and environment-friendly products makes consumers earn special benefits in the form of discounts and cashback. By providing specific schemes and benefits they attract consumers towards spending their money in an environment-friendly manner and thus be a part of green finance.

GREEN CAR LOANS

These are the debt instruments i.e. the loans provided for the purchase of green cars or green vehicles i.e. environment-friendly cars and vehicles. These types of cars do not harm the environment by pollution and do not increase carbon emissions. Electric cars are an example of green cars. These loans carry lower and discounted interest rates to attract customers to buy vehicles with low carbon emissions

GREEN FINANCE IN G20 COUNTRIES



CREDITS: G20.ORG

G20

G20 means Group of 20 is an intergovernmental forum that consists of 19 countries. The economies work together to focus on and discuss various global economic issues such as climate change, the international financial system, and other important areas

DEVELOPMENT OF GREEN FINANCE IN G20 COUNTRIES

According to UNEP (2017) United Nations Environment Progress (2017) report, the development of green finance in G20 countries is measured based on three parameters:-

- Support for the development of local green bond markets
- Promoting international collaboration for cross-border investment in green bonds
- Improving the measurement of green finance activities and their impacts.

Table showing the development of green finance in G20 countries:-

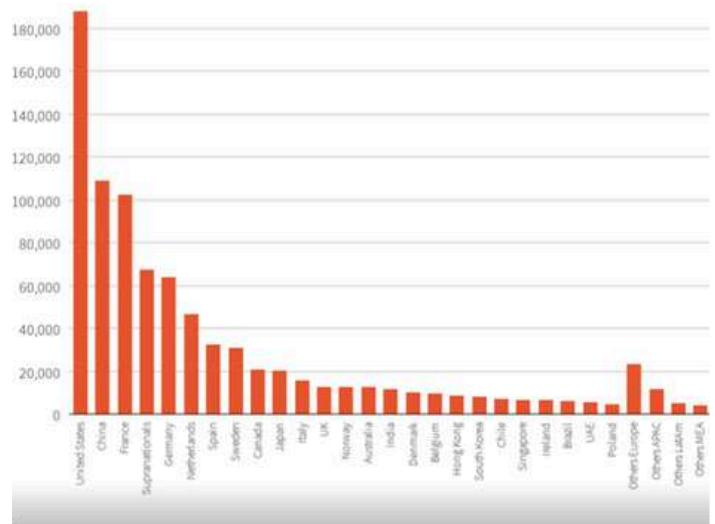
G20 Member Countries	Support for the development of local green bond markets	Promoting international collaboration for cross-border investment in green bonds	Improving the measurement of green finance activities and their impact
Argentina	*		
Australia	*		
Brazil	*	*	
Canada	*	*	
China	*	*	*
France	*	*	
Germany	*		
India	*	*	
Indonesia	*		
Italy	*		
Japan	*		
Mexico	*	*	*
Russia	*		
Saudi Arabia			
South Africa	*	*	
South Korea	*		
Turkey	*		*
UK	*	*	*
US	*		
EU	(N/A)	*	
International	*		*

Source: UNEP (2017) United Nations Environment Progress (2017) report, p.14

As per the report, the three countries to meet all the three parameters are –

- China
- Mexico
- United Kingdom

GLOBAL GREEN BOND MARKET



CREDITS: UBS, CLIMATE BONDS INITIATIVE

As per the graph, the top three countries to issue Green Bonds are:-

- U.S
- China
- France

GREEN FINANCE IN INDIA

SOME GREEN FINANCE INITIATIVES IN INDIA

- 100% of FDI under the Renewable energy sector under automatic method.
- Perform Achieve Trade (PAT) System – It acts as a regulatory instrument to reduce energy consumption in industries and economic areas with high energy consumption patterns.
- Funding various projects and programs for boosting Renewable Energy Sector.
- India's Nationally Determined Contribution (INDC)- Under an agreement with Paris, India signed NDC with specific environmentally friendly goals:-

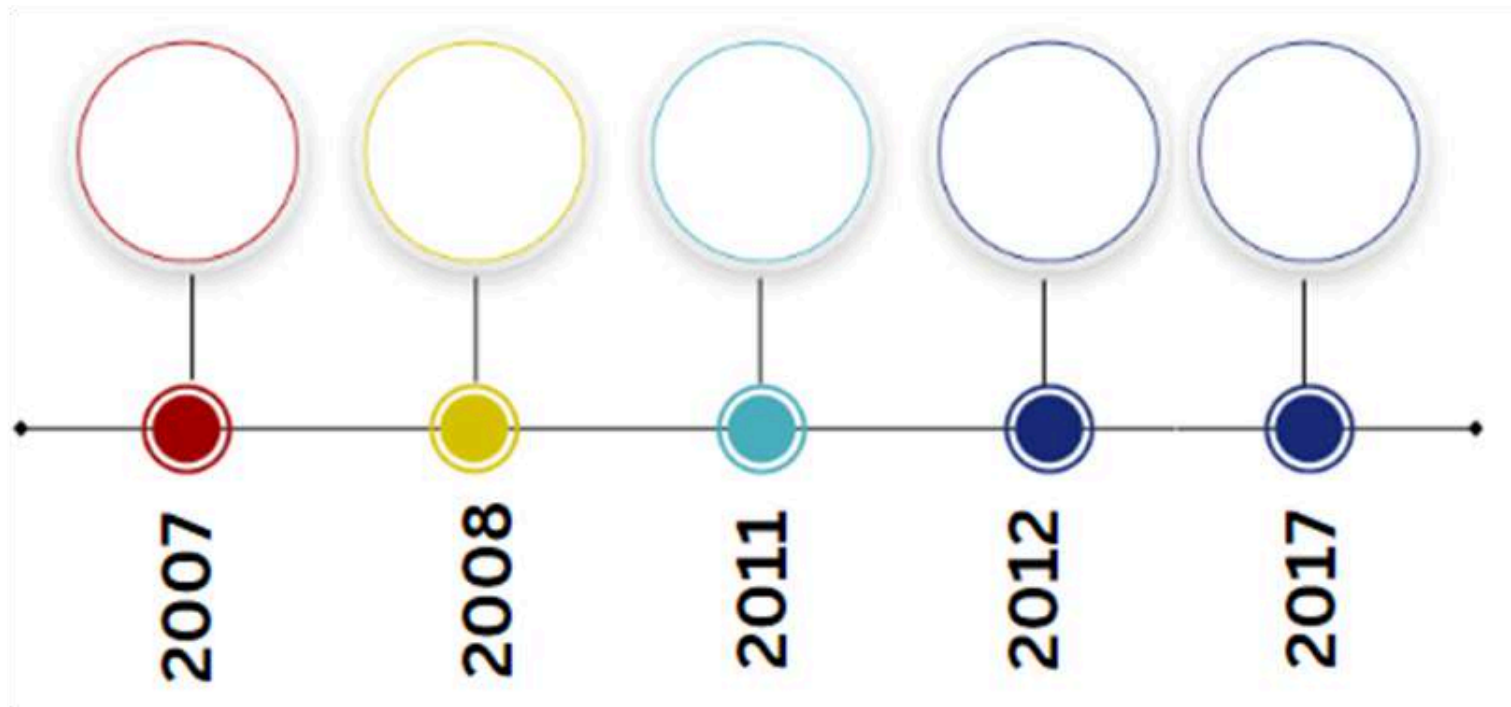
- Lowering down GDP Emissions i.e. the intensity of carbon emissions in the GDP (Gross Domestic Product) development.
- To increase usage of non-fossil fuels energy sources
- Provide extra carbon sink so that negative impact carbon emissions can be reduced.

INDIA'S PUBLIC POLICY ON GREEN FINANCE.

India started stressing on green finance from 2007. Let's have a small look on a brief timeline about India's public policy on green finance.

2007

In December 2007 RBI published a notification titled- 'Corporate Social Responsibility, Sustainable Development and Nonfinancial Reporting – Role of Banks'. It was done with an aim to highlight some environmental aspects in economic and financial system.



It reflected the essence and relevance of climate change, increasing temperature, global warming and carbon footprints on the goal of sustainable development of the economy.

2008

In June 2008, NAPCC-National Action Plan on Climate Change was released by the Prime Minister. It was formulated to stress on the strategies to make Indian economy develop sustainably. It emphasized that Economy should grow so that living standards of people rise but it should not have adverse impacts on the climate also. It aimed to achieve economic success with environmental success. It focusses on analyzing the impact of climate change on economy and other related aspects.

2011

In 2011, under the Ministry of Finance, CCFU was formed. CCFU stands for Climate Change Finance Unit. It emphasizes on the climate change financial matters. It looks into the procedure of green finance and act as a coordinator between different green financiers. It fund the projects to lower down the carbon emissions.

2012

In 2012, Sustainability disclosure requirements were implemented. Under this, the firms are supposed to disclose detailed information to the customers about how their product meets sustainability criteria and standards. It would help to improve the transparency of the company in their role to promote and follow sustainable development.

2017

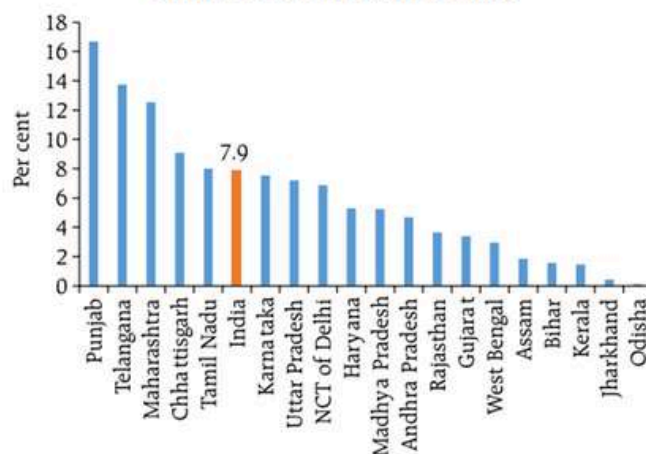
SEBI made it compulsory for the top 100 companies listed at BSE and NSE to publish their Corporate Social Responsibility reports since 2012.

Ministry of Affairs made it mandatory for companies to show the progress in their Corporate Social Responsibility.

INITIATIVE FOR RENEWABLE ENRGY SECTOR

Reserve Bank of India included renewable energy sector in Priority Sector Lending. It helped in dedicating funds for renewable energy sector and thus helped in its improvement.

Chart 3: Share of Non-conventional Energy Finance: As on March 2020



Note: This chart shows the share (in per cent) of non-conventional energy into the outstanding bank credit to the electricity generation. Excludes Regional Rural Banks and Small Finance Banks.

Source: Basic Statistical Returns, Reserve Bank of India and Authors' calculations.

INDIA'S SOVEREIGN GREEN BONDS

These are the Green Bonds issued by the Government of India. These bonds would focus on funding the projects in areas such as waste management, pollution control, renewable energy, water conservation, and climate change.

**Table 3: Green Bonds Issuance Since January 1, 2018
(Corporate and Government: All Maturities)**

Country	Amount issued (\$Mn)	Number of bond issued	Amount issued as per cent of all bond issuance (per cent)	Number of bonds issued as per cent of all bond issuance (per cent)
Euro Area ¹	1,96,854	594	1.7	0.4
China	63,023	183	0.3	0.2
USA	35,421	71	0.2	0.2
Japan	11,815	88	0.1	1.1
South Korea	11,781	44	1.0	0.4
Central and Southern America ³	8,869	53	0.5	1.0
India	7,992	22	0.7	0.3
South-east Asia ²	7,208	86	0.6	1.4
Australia and New Zealand	5,878	15	1.1	0.8
UK	5,311	17	0.4	0.5
Hong Kong	4,781	19	0.5	1.0
Singapore	496	9	0.05	1.2

Source: Authors' calculations, Bloomberg.

According to the table above India has issued green bonds worth US\$8 approximately. It accounts 0.7% of all bonds issued in Indian Financial Market. Some of the Green Bond Issuers:-

- Yes Bank Ltd.
- Indian Renewable Energy Development Agency Ltd
- Indian Railway Finance Corporation Ltd.
- Adani Renewable Energy Ltd
- Rural Electrification Corporation Limited or REC Ltd.
- Power Finance Corporation Ltd.

CONCLUSION

The unconventional concept of green Finance is an interesting and must to know concept for everyone. This is a perfect mixture for the one who aspire to grow economically but also have a soft corner for environment of the planet. There is a need to increase awareness about this concept in order to make it prominent and successful globally. The powerful positive impact it would have on the planet would overpower the risks and problems involved in this financing and make it a huge success. The day when people would be interested in it as they are in stock market would not be far if it's growth is properly executed.

Being specific to its progress in India, The value of green bonds issued clearly reflects the contribution of public

sector in green Finance. There is a need to increase the role of private sector in this sector to improve investments and earning. Also a proper regulatory system needs to be developed so that a safe and transparent green financial market can run smoothly. It must be ensured that there is no problem of asymmetric information i.e. incomplete flow of information as it would keep investors (firms and individuals) deprived from taking an informed decision and thus making an investment which would return higher profits to them and the environment.



WORLD'S TRANSITION AWAY FROM CARBON

CHARTING THE SHIFT TOWARDS A
SUSTAINABLE FUTURE



BY-
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CREDITS: ВЛАДИМИР ХУРАВЛЁВ

INTRODUCTION

"Carbon is the building block of life, the element that weaves through the fabric of our existence. It is a reminder that we are all connected, sharing the same fundamental atoms, and bearing the responsibility to protect and preserve the delicate balance of our planet."

In addition to being a chemical element that can be found in all plants and animals, coal, and petroleum, carbon also occurs in its pure form as diamond or graphite.

CARBON'S ABUNDANCE IN THE ENVIRONMENT

All living species, whether humans or animals or plants have some concentration of carbon in them. Carbon is a key ingredient in fossil fuels like coal, oil, and natural gas. Carbon is a component of organic matter, which includes decomposing plants, animals, and other organic things in the soil. This organic carbon is essential for soil fertility and nutrient cycling. The various types of carbon are widely dispersed throughout the planet.

CARBON EMISSION

When greenhouse gases like carbon dioxide (CO₂) and others are released into the atmosphere as a result of human activity, this is referred to as carbon emissions. In addition to deforestation, industrial operations, and agricultural practices, the burning of fossil fuels (coal, oil, and natural gas) is the main source of these emissions. Global warming and climate change are caused by the buildup of greenhouse gases in the atmosphere, which is facilitated by carbon emissions.

IN THIS ARTICLE

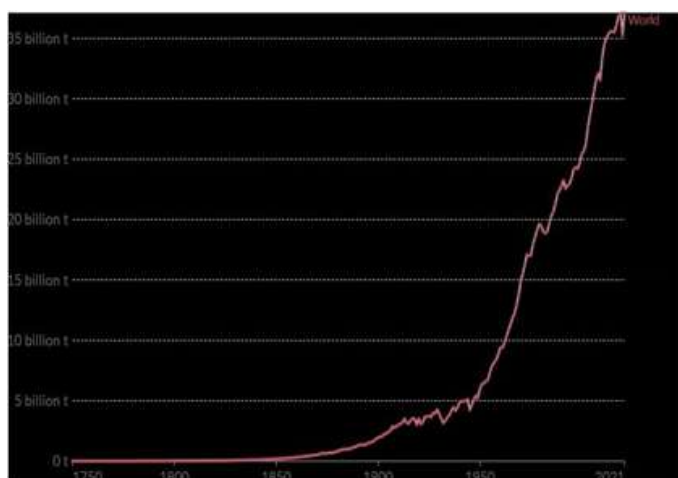
- INTRODUCTION
- CARBON'S ABUNDANCE IN THE ENVIRONMENT
- CARBON EMISSION
- EFFECTS OF CARBON EMISSION
- HOW CAN THE PROBLEM OF CARBON BE SOLVED
- ZERO CARBON VEHICLES
- KEEPING THE FORESTS INTACT
- CONCLUSION

A significant source of carbon emissions is the combustion of fossil fuels for transportation, heating, and power production. Carbon that has been buried for millions of years and has been stored as CO₂ gets released into the atmosphere when fossil fuels are burned. Deforestation, especially in tropical areas, increases carbon emissions because the declining number of trees is unable to absorb this extent of emission. The world spends an astounding US\$423 billion annually to subsidize fossil fuels for consumers – oil, electricity that is generated by the burning of other fossil fuels, gas, and coal.

EFFECTS OF CARBON EMISSION

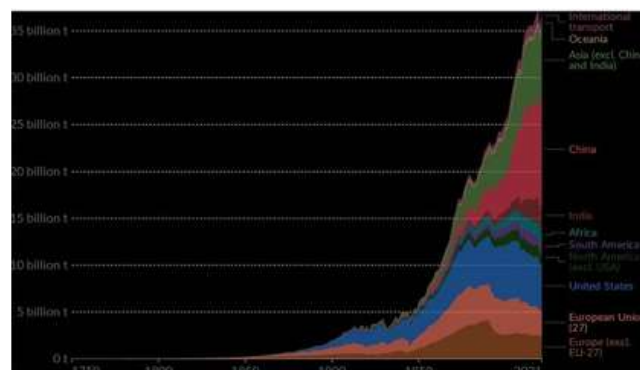
Increased frequency and intensity of extreme weather events caused by climate change can have profound impacts on human health. Heatwaves, droughts, and floods can lead to physical injury, displacement, and the spread of disease. Air pollution caused by the burning of fossil fuels can also have adverse effects on respiratory and cardiovascular health.

A 2017 study found that in China, 1.23 million air pollution-related deaths in 2010 represented up to 13.2% of the country's GDP. In the same year, air pollution caused over 23 000 deaths in the UK, representing up to 7.1% of the GDP. Another report projects that annual premature deaths due to outdoor air pollution will increase to up to 9 million people in 2060 from 3 million in 2010, as well as an increase in annual global hospital admissions: 11 million people in 2060 from 3.6 million people in 2010. Carbon dioxide emissions are costing the Indian economy up to \$210 billion every year, according to a global study that found that India is likely to suffer the highest economic damage from climate change after the US.



CREDITS: WORLD IN DATA BASED ON THE GLOBAL CARBON PROJECT

Annual CO₂ emissions are displayed by area and nation in a treemap visualization. With 53% of all emissions coming from one region, it is Asia. With over 10 billion tonnes of emissions annually, China is the world's top emitter. With 18% of global emissions, North America is the second-largest regional emitter, closely followed by Europe with 17%. With 3-4% of the world's emissions apiece, South America and Africa are both very minor emitters. Due to debate about how emissions that cross international boundaries should be apportioned, neither shipping nor aviation is included in national or regional emissions calculations.



CREDITS: WORLD IN DATA BASED ON THE GLOBAL CARBON PROJECT

HOW CAN THE PROBLEM OF CARBON BE SOLVED

Despite the fact that the world appears to come to an end if carbon were to disappear due to the need that humanity has placed on it. Addressing the environmental catastrophe requires both reducing carbon emissions and finding alternatives to carbon-intensive industries. Switching from fossil fuels to renewable energy sources, such as solar, wind, hydroelectric, and geothermal power, is one of the most efficient ways to reduce carbon emissions. By making this change, less carbon-intensive energy is produced.

Prime Minister, Narendra Modi, as a part of the national statement delivered at the 26th Conference of the Parties (COP 26) in Glasgow in November 2021, announced five bold and ambitious targets to be achieved to enable further reduction in emissions. The landmark net-zero commitment by 2070 was among the five new climate change targets announced by the Prime Minister. Net zero means removing as many emissions of carbon dioxide from the atmosphere as produced. India's four other commitments – all by 2030 are:

- Increasing non-fossil energy capacity to 500 Gigawatts (GWs),
- Fulfilling 50 percent of energy requirements from renewable sources,
- Reducing the carbon intensity of the economy by 45 percent, and
- Reducing total projected carbon emissions by One billion tonnes.

Improving the efficiency of Buildings, transportation, and industrial processes can significantly reduce carbon emissions. This can be achieved through better insulation, energy-efficient appliances, fuel-efficient vehicles, and optimized industrial processes. The outlay of Rs. 19,700 crores for the Green Hydrogen Mission is to facilitate the transition of the economy to low carbon intensity, reduce dependence on fossil fuel imports, and make the country assume technology and market leadership in this sunrise sector. The target is to reach an annual production of 5 MMT by 2030.

ZERO CARBON VEHICLES

Traditional internal combustion engine vehicles, which produce carbon emissions, can be replaced by electric automobiles. Electric vehicles (EVs) have no exhaust emissions and run primarily on electricity. Important efforts towards decarbonizing transportation include encouraging EV uptake and creating a charging infrastructure.

The Ministry of Power has developed a scheme on viability gap funding for the creation of battery energy storage systems with a capacity of 4,000 MWh, in accordance with the announcement made in the Union Budget 2023–24. According to the budget, the subsidy granted under the Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME) for FY23 is expected to be at Rs. 2908 crores or triple the allocation of Rs. 800 crores for the last financial year

As per the data on the Vahan portal, India registered 311,000 battery-operated vehicles (BOVs) in FY21, compared to 119,000 in the previous year.

The FAME Scheme, approved in Phase II of 2019 with an outlay of INR 10,000 Crore, aims to generate demand by supporting 7,090 e-buses, five lakh e-Three wheelers, 55,000 e-Four-wheeler passenger cars (including strong hybrid), and 10 lakh e-Two wheelers. As of February 11, 2022, there are 966,363 electric vehicles on the road across the country. GST on electric vehicles has also been reduced from 12% to 5% and GST on chargers/charging stations for electric vehicles has been reduced from 18% to 5%. India is boosting its green energy production capacity through wind, solar and hydro projects, as well as setting a target of becoming a Net Zero Carbon Emitter by 2030.

KEEPING THE FORESTS INTACT

India's total forest cover has increased by 2261 Sq. km in the last two years, reflecting its focus on environmental conservation. The India State of Forest Report 2020–21xiv revealed that India's total forest cover was 7,13,789 sq. km in 2021, reflecting an increase of 3.14% over 2011.

This improvement can be attributed to better conservation measures, protection, afforestation activities, tree plantation drives, and agroforestry. Sustainable agricultural practices, such as organic farming, agroforestry, and precision agriculture, can also reduce carbon emissions from the agriculture sector.

CONCLUSION

While we hear from thousands of activists and environmentalists talking endlessly about the problems caused by the most important element, Carbon but we as individuals should start taking small steps to overcome this problem which could lead to even worse in the coming era when it would become so challenging for us to live a healthy and quality lifestyle. The rapid changes we see in this dynamic world are essential in this everyday changing world where these renewable sources would take over the charge and the evolution of the EV in the recent past concludes the world is moving away from the era of carbon. Companies not only from foreign states but also indigenous companies and startups are contributing to the rapid advancement in technology and changing the perspective of people which was earlier filled with the historic dependence on nonrenewable resources. The nationwide policies along with the state policies are contributing well to the improvement in the current scenario and inviting new and dependable ways to cater to the needs in the future. We read about the international bodies attempting to scale their environmental policies with the approach of keeping the environment healthy. However, strict rules should be implied for this so that the world keeps in mind the importance of environmental protection and is not solely devoted to profits.

The world will witness something different in the coming decade just like the changes during industrialization and the discovery of the internet.





AUTOMOBILE SAFETY IN INDIA

REVVING UP SAFETY: NAVIGATING INDIA'S ROAD TO SAFER AUTOMOBILES



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CREDITS: KP TV

"Three killed in car accident...", "Delhi man dies in road accident...", "4 Dead, many critically injured...", "25 killed as bus catches fire...." There goes no day without headlines like these flooding our newspapers and broadcasts.

Looking at the data for the year 2021, a total number of 4,12,432 road accidents had been reported in India, with the death toll reaching 1,53,972 and 3,84,448 persons being injured. It is imperative to note that 67 percent of the total deaths that took place due to road accidents involved people lying in the age bracket of 18-45 years.

What do you look for in a car whenever you decide to buy one? Or what comes to your mind when you see a crumbled vehicle lying on the roadside?

If the answer isn't safety, congratulations, you are different from the rest of us. Speaking on the behalf of a majority of the population, safety is one of the paramount features one considers while making a buying decision. Although it may not always have been the case.

Let's delve a bit into the past, somewhere around the 1890's. The modern day automobile had just been founded. There were only a handful of them on the roads. This changed when a man named Henry Ford founded the Ford Motor Company, a decade later, and revolutionised the transportation industry by bringing in the concept of assembly lines, and making cars available to the masses.

As the number of vehicles on the road began to shoot up, the concern for safety and regulations came into picture.

IN THIS ARTICLE

- ACCIDENTS IN INDIA
- WHAT IS SAFETY
- SAFETY STANDARDS ABROAD
- NCAP AND SAFE CARS FOR INDIA
- BHARAT NCAP
- CONSUMER AWARENESS AND GOVERNMENT REGULATIONS

A significant source of carbon emissions is the combustion of fossil fuels for transportation, heating, and power production. Carbon that has been buried for millions of years and has been stored as CO₂ gets released into the atmosphere when fossil fuels are burned. Deforestation, especially in tropical areas, increases carbon emissions because the declining number of trees is unable to absorb this extent of emission. The world spends an astounding US\$423 billion annually to subsidize fossil fuels for consumers – oil, electricity that is generated by the burning of other fossil fuels, gas, and coal.

Safety is not just about how well a car is built or the chances of survival of the occupants in case of an accident. Safety is also about comfort, not feeling fatigued or lethargic after a long drive and many such constituents that we tend to disregard. Safety is also about the people outside the vehicles, i.e., pedestrian safety. Safety is also about efficient traffic management and road safety regulations.

USA was one of the first countries that formally introduced safety standards and regulations for automobiles. On September 9, 1966, the National Traffic and Motor Vehicle Safety Act became a law in the United States, which was the first set of mandatory federal safety standards for motor vehicles. Elsewhere followed. A revolutionary milestone in the recent past was the formation of New Car Assessment Programmes, abbreviated as NCAP. Numerous countries and regions in the world have their own NCAPs, such as the US NCAP, Japan NCAP, Euro NCAP, ASEAN NCAP, Australasian NCAP and Korean NCAP. In 2011, Global NCAP, an independent charity, was formed in the UK, with the aim to promote crash testing and reporting in emerging markets.

In 2013, Global NCAP, under its project Safer Cars for India, conducted crash tests on five of the most sold compact cars in the Indian market at that time, three of them were from a Japanese-Indian manufacturer, one from a Korean and one from an Indian OEM. All five cars scored a shocking 0 stars out of 5 for adult occupancy, bringing the topic of car safety to limelight in India.



CREDITS: GLOBAL NCAP

Everybody started talking about safety, the media, the content creators, but most importantly, the Indian consumer.

Fuel efficiency, features, space; this was what was on the top of the checklist of Indian buyers. The buyers were so focused on parameters such as fuel efficiency, which we can't blame them for, given the drastically high and ever rising fuel prices, and gimmicky and not-so-utilitarian features like a sunroof, which was impractical, given the Indian weather conditions. All this pushed safety much lower in the buyers' checklist. Neither were there strict government regulations surrounding the same. All this resulted in manufacturers silently getting off offering safety features in Indian mass-market cars. India being a very price sensitive market added to this problem.

Soon after the Global NCAP crash test results, consumers started taking safety seriously. The government also started putting out reforms and the manufacturers had no other option than to cater to the rising concern. In few months of time, we saw cars such as the Tata Nexon and Mahindra XUV300 performing incredibly in the NCAP crash tests. Airbags were made a mandate in cars. Manufacturers started focusing on structural integrity. An initiative by an outside body, the Global NCAP, brought a huge change in the Indian market. Although the Global NCAP's rating system has some controversies around it, it nonetheless serves as an important parameter for the crash safety of a car.

While we do take Global NCAP ratings as a benchmark for safety nowadays, the Indian markets have been very different from the markets abroad, not only in the automotive sector, but in many others ranging from food to electronics. While the top causes for accidents in countries like the USA, UK and Germany are speeding and distracted driving, the majority of accidents in India are due to poor road conditions, speeding and lack of discipline. Just like McDonald's had to introduce the pocket-friendly Mc Aloo Tikki to thrive in the Indian markets, India needs its cost-effective tailor-made safety tests, procedures and standards in order to evaluate cars as per Indian conditions.

Talking about tailor-made standards and regulations, India is coming up with Bharat NCAP, its own crash testing programme, which aims to enhance road safety and vehicle safety. Bharat NCAP will significantly cut down the costs that a manufacturer has to incur to send its cars for crash tests, encouraging OEMs to send in more cars for testing and certification. The Bharat NCAP standards will be in line with the Global NCAP standards. Although it would still be voluntary for manufacturers to send in their cars for crash testing, the Ministry of Road Transport and Highways would have the authority to

recommend certain cars based on market feedback, clocking a certain sales threshold or in general public safety interest.

Bharat NCAP is expected to play a crucial role in increasing safety in cars sold in the Indian market, boosting awareness about safety amongst consumers and focusing on road safety in general. While relying on NCAP ratings can come very handy while making a buying decision for a car, we should be aware of the fact that NCAP ratings do not solely constitute what we refer to as 'safety' in a car or a car market. They are not the full and final measure of a car's safety. Consumer awareness is indispensable and it should be the responsibility of all the stakeholders involved, i.e., the government, the manufacturers and the consumer itself, in increasing consumer awareness and making more and more people aware about their right to safety, safe cars and safe roads. Keeping that in mind, strict government regulations are required to keep the manufacturers in check and reprimand them in case they are in the wrong. Lastly, safety at large can't be insured unless the manufacturers themselves take the initiative to build safer cars for India. Manufacturers need to have the integrity to ensure that they are giving their customers safe and solid products in exchange for their hard earned money, especially when the consumers trust the manufacturers so much. A car sold by a manufacturer might just be another unit going out of its warehouse or showroom, but for an average Indian consumer, it might be the only car or one of a few cars that he/she might be purchasing in his or her lifetime for himself/herself and for his or her family.



THE FUTURE OF INSURANCE

HOW TECHNOLOGY AND DATA ANALYTICS ARE TRANSFORMING THE INSURANCE INDUSTRY



BY-
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BBE

INTRODUCTION

The insurance industry has undergone significant transformations in recent years, driven by advancements in technology and the increasing availability of data. These changes have paved the way for a future where insurers can better understand customer needs, adapt in real-time, and offer personalized products and services. In this article, we will explore how technology and data analytics are shaping the future of insurance, with a focus on telematics, embedded insurance, and imagery and geospatial intelligence.

TELEMATICS: REVOLUTIONIZING AUTO INSURANCE

Telematics, the use of technology to monitor and transmit data from objects or places, has emerged as a game-changer in the auto insurance industry. By leveraging smart devices embedded in vehicles, such as smartphones, IoT sensors, and in-vehicle navigation systems, insurers can gather valuable data on driving behavior, including speed, braking patterns, and habits. This data provides insurers with a more accurate understanding of the risk posed by individual drivers, allowing them to identify high-risk drivers and offer specialized coverage options.

Moreover, telematics enables insurers to predict and mitigate risk more effectively. By accurately assessing risk, insurers can offer competitive pricing and encourage safer driving behaviors through incentives and rewards. This use of data and telematics creates a structure where insurers can provide more competitive rates, enhance the customer experience, and ultimately improve profitability.

IN THIS ARTICLE

- INTRODUCTION
- TELEMATICS
- EMBEDDED INSURANCE
- THE ROAD AHEAD
- IMAGERY AND GEOSPATIAL INTELLIGENCE
- CONCLUSION

EMBEDDED INSURANCE: CONVENIENCE AND PERSONALIZATION

Gone are the days when customers had to engage with specialized insurance agents or spend hours on the phone to obtain policy information. The rise of digital transformation has empowered consumers to interact with insurers through various channels, including websites, smartphone apps, chatbots, and voice assistants. This shift has given rise to embedded insurance, where insurance coverage is seamlessly integrated into everyday experiences.

For instance, when booking a flight, customers may be offered the option to purchase travel insurance coverage. Similarly, customers can add coverage for electronic devices at the point of purchase in a store. This embedded insurance approach provides convenience and personalization, allowing customers to choose coverage options that align with their specific needs.



CREDITS: INUBE

Data gathered from these digital channels enables insurers to gain insights into customers' purchasing behaviors and preferences. By understanding what policies are frequently purchased and when they are purchased, insurers can tailor their offerings and improve the overall customer experience. This data-driven approach enhances customer satisfaction and loyalty, driving growth and profitability for insurers.

IMAGERY AND GEOSPATIAL INTELLIGENCE: ENHANCING RISK ASSESSMENT

Traditionally, insurers relied on on-site surveys and risk management assessments to evaluate potential risks associated with a policyholder's property. However, the emergence of imagery and geospatial intelligence technologies, such as satellites, drones, sensors, and cameras, has revolutionized risk assessment in the property and casualty insurance sector.

With imagery data, insurers can assess the likelihood of natural disasters, such as floods, wildfires, and hurricanes. This information allows insurers to accurately price policies and provide targeted coverage based on the specific risks faced by a policyholder. Geospatial data complements imagery data by providing insights into location-specific risks, such as traffic patterns and environmental hazards. By leveraging both imagery and geospatial intelligence, insurers can make better-informed underwriting decisions, offer more accurate pricing, and provide proactive coverage and protection.

Furthermore, imagery and geospatial intelligence enable insurers to be proactive in identifying potential risks and taking preventive measures. For example, updated geospatial images can reveal issues like overhanging trees or cracks in driveways, prompting insurers to adjust coverage plans accordingly. Real-time updates and effective communication with customers enhance transparency and trust, leading to improved customer satisfaction and long-term loyalty.

THE ROAD AHEAD: UNLEASHING THE POWER OF DATA

As policyholders increasingly seek digital solutions for their insurance needs, insurers have a unique opportunity to leverage data and develop innovative ways to serve their customers. By focusing on transparency, collaboration, and open platforms, insurers can harness the power of data to create value-added business services and products.

Artificial intelligence (AI) and machine learning (ML) technologies also play a significant role in the future of insurance. AI-powered chatbots, for example, can enhance customer service by providing personalized assistance and answering policy-related queries. However, it is crucial to ensure ethical and unbiased implementation of these technologies, promoting fairness and transparency in decision-making processes.



CREDITS: BROADRIDGEADVISOR.COM

With access to real-time data through telematics, insights into purchasing behavior, and the use of imagery and geospatial intelligence, insurers are better equipped than ever to understand customer needs, tailor their offerings, and mitigate risks. By embracing technology and data analytics, insurers can transform the insurance industry and deliver enhanced customer experiences in the years to come.

CONCLUSION

The future of insurance lies in the seamless integration of technology and data analytics. Telematics enables insurers to gather valuable insights into driving behavior, leading to personalized coverage options and improved risk assessment. Embedded insurance provides convenience and personalization by integrating coverage options into everyday experiences. Meanwhile, imagery and geospatial intelligence revolutionize risk assessment, allowing insurers to offer targeted coverage and proactive protection. By leveraging the power of data, insurers can enhance the customer experience, drive profitability, and shape the future of the insurance industry.



LITHIUM: THE WHITE GOLD

THE RUSH DRIVING TOMORROW'S POWER REVOLUTION



**BY-
RISHI
BCOM (H)**

CREDITS: RHJ/GETTY IMAGES//STOCKPHOTO

INTRODUCTION

In the 21st century, when everyone is focused on technological advancement, one of the natural resources will influence the geopolitics of the world and the country having a valuable share in the supply chain will have an advantage over others. Today's modern era revolution is powered in large part by soft, silvery-white, alkali metal known as lithium. Just as oil was called the black gold of last century, lithium is called the white gold of our times.

WHY IS LITHIUM SO IMPORTANT

One of the reasons for which lithium has gained so much importance is due to its various uses in different industries such as medicines, catalysts, air treatment, glass, aircraft, motorsport and ceramics. Also by using its tensile strength and lightweight (low-density) qualities, the lightest known metal is integrated into alloys to improve their strength-to-weight ratio. But the main reason for increase in importance of lithium is due to its usage in secondary (rechargeable) lithium-ion batteries as well as primary (non-rechargeable) lithium-metal batteries due to the fact that the future of energy lies in electric vehicles and renewable sources, and according to the data, the use of lithium in batteries has increased significantly, from 23% in 2010 to 73% in 2021. Amazingly, a single electric car's lithium-ion battery pack normally comprises roughly 8 kilograms (kg) of lithium and cherry on the cake McKinsey camp; Company predicts that by 2030.95% of the demand for lithium will come from batteries.

IN THIS ARTICLE

- INTRODUCTION
- WHY IS LITHIUM SO IMPORTANT
- DISTRIBUTION AND MINING OF LITHIUM
- PROCESS OF CONVERTING LITHIUM INTO LITHIUM BATTERY
- CHINA'S MONOPOLY IN INDUSTRY
- INDIA'S DISCOVERY OF LITHIUM
- OTHER COUNTRIES CONDITION IN THE INDUSTRY
- CONCLUSION

Now even though there are other battery options available in markets, lithium happens to be a better option than others because of reasons which are explained below in detail.

High energy density: The extraordinary energy density of lithium-ion battery technology is one of its main advantages. This is especially important for electrical gadgets like smartphones, which need to operate for longer periods of time while using more power. Lithium-ion batteries, as opposed to Nickel Metal Hydride (Nimh) batteries, can offer the required charge capacity while adhering to the restrictions of compact size. Furthermore, lithium-ion batteries are perfect for electric vehicles and power equipment because of their high power density, which is necessary in these applications.

Self-discharge: When compared to other rechargeable cell types like Nickel Cadmium Battery (Ni-Cad) and Nickel Metal Hydride (Nimh) battery, lithium-ion cells exhibit a substantially lower self-discharge rate. Lithium-ion batteries typically self-discharge at a rate of about 5% in the first 4 hours after charging, and thereafter decline to about 1 or 2% every month. This characteristic ensures extended shelf life and minimizes the loss of stored energy over time.

Cell voltage: Each lithium-ion battery produces about 3.6 volts, which is higher than the 1.5 volts that ordinary nickel cadmium, nickel metal hydride, and alkaline batteries normally produce as well as lead acid cells' 2 volts. In many battery applications, this increased voltage enables the use of fewer cells. Smartphones, for instance, simplify power management and lower complexity by using only a single lithium-ion cell.

Load characteristics: Lithium-ion cells or batteries have load characteristics that are generally consistent, maintaining a constant voltage of 3.6 volts per cell until the last of the charge has been used up. The consistent and predictable performance in a variety of applications is ensured by this stable voltage delivery.

No priming necessary: Lithium-ion batteries are ready to use right out of the package, unlike certain rechargeable cells that need priming during their initial charge. They are supplied completely functional, which streamlines setup and makes them easier to use right away.

Variety of types available: The choice of the most appropriate technology for particular applications is made possible by the availability of many types of lithium-ion cells. While certain variations may give much greater current levels to meet the power needs of tools and electric cars, others can deliver significantly higher current levels, making them perfect for consumer mobile electronic devices.

This adaptability offers customized solutions based on requirements particular to each application.

DISTRIBUTION AND MINING OF LITHIUM

After learning so much about the importance and usage of lithium, let's focus on its distribution and mining process. According to resources, 9.2 million tonnes of lithium are present in Chile. With 5.7 million tonnes, Australia has the second-largest lithium deposits in the world. Argentina's lithium deposits total 2,200,000 million tonnes. Lithium deposits in China total close to 1,500,000 million tonnes. Zimbabwe has lithium reserves of about a million tonnes. Brazilian lithium deposits total million tonnes. The amount of lithium in the United States is close to eight million tonnes. India has also found a large amount of lithium in Jammu and Kashmir. We will explore this in detail afterward.

Coming to the mining part lithium is mined in two different ways, let's learn about each one of them in detail.

1. **Lithium from the Salt Lakes:** Significant producers of lithium Bolivia, Argentina, and Chile use this process. In this ; Saline brine is initially obtained by pumping it through underground sources into massive basins, where it evaporates for up to two years in the heat of the sun. The concentrated brine is thoroughly filtered before chemical extraction is performed to produce lithium carbonate, an essential component in the production of batteries. According to a study done by the Swedish Environmental study institute, this extraction technology boasts relatively low carbon dioxide emissions, with estimates roughly 50 to 100 kg of CO₂ for an average car battery (50 kWh). However, ecological systems and water resources in the area may be affected by this technique. Additionally, certain regions may experience water scarcity issues for agricultural purposes.

2. **Lithium from Solid Rock:** Australia is currently at the forefront in mining lithium from pegmatites, that are solid rock formations. To access reserves of lithium-rich ore, the mining process uses drilling and blasting procedures. The recovered ore follows processing in crushing plants, and precious lithium gets separated from the inert material using chemical and metallurgical procedures. The majority of lithium is extracted globally by solid rock mining.



CREDITS: SALON.COM

PROCESS OF CONVERTING LITHIUM INTO LITHIUM BATTERY

Firstly ore is extracted and the OpenBSD; goes through ; and refining procedure for greater purity then the specialized battery components are made and after that integration is done into battery pack with all electronics and sensors after this battery pack into EV, then there is also a reverse supply chain where lithium battery and reused.

CHINA'S MONOPOLY IN INDUSTRY

Today China's position in the lithium business stands out. Despite the fact that it only had 7.9% of the world's lithium deposits by the end of 2020, according to estimates the nation has 60% of the world's processing and refinery capacity for lithium. This becomes more important as the global market for electric vehicles (EVs) is expanding quickly. According to figures, global EV sales increased by an astounding 60% in 2022, reaching 10.4 million units, or 13% of the 80 million vehicles sold worldwide. Notably, China, which accounted for 60% (6.2 million) of the total EV sales, which increased by 2 times from the prior year, played a decisive part in this expansion. In comparison, sales of EVs in North America increased by 50% to 1.1 million, while sales of EVs in Europe increased by 11% to 2.6 million in 2022. Even two of the biggest businesses in the lithium mining industry, Ginseng and Tianjin, are of Chinese descent. As of March 2023 out of 200 lithium-ion mega factories, 148 were located in China. Out of top 10 lithium battery manufacturers, 6 were located in China. Ginseng is a large supplier of batteries to Tesla, while Tianjin owns a 28% share in SQM, a significant Chilean materials and chemical firm.

Notably, Bolivia, which is home to the greatest undeveloped lithium reserves in the world, also benefits from China's economic cooperation. Pimientos de Litio (LB), the state-owned lithium firm of Bolivia, launched joint ventures with the Xinjiang TEA Group of China in 2019. The latter paid \$2.3 billion for a 49% stake in LB. In addition, Chinese businesses have made large investments in lithium projects all around the world. For instance, lithium projects in Zimbabwe were recently purchased by Zhejiang Bayou Cobalt, Signorine Resource Group, and Changing Lithium Group for a total of \$679 million. Processing plants are already being developed in the nation by Bayou Cobalt and Chengxin Lithium. Similar to this, in order to obtain the rights to three lithium mines in 2021, Fiji Mining Group and Contemporary Ampere Technology Ltd invested a sizable sum of money totaling \$1 billion in Argentina. Between 2018 and 2020, China invested almost \$16 billion in mining ventures in the lithium triangle.

China also lent a cumulative \$17.1 billion to Argentina and \$3.4 billion to Bolivia between 2005-2020. China has a substantial presence and influence in the global lithium market, as evidenced by its dominance in lithium manufacture, strategic investments in mining projects around the world, and partnerships with important companies in nations with abundant lithium resources.

INDIA'S DISCOVERY OF LITHIUM

An important discovery of a sizable lithium deposit in Jammy camp; Kashmir was recently announced by India's Geological Survey of India (GSI). The GSI calculates that the area has about 5.9 million tonnes of lithium. Currently, the United Nations Framework Classification (NFC), a thorough approach that takes into account geological, feasibility, and economic elements, is used by the GSI to evaluate the mining concession. The lithium finding in this instance belongs to the G3 classification. However, more investigation is required to determine a more accurate estimate, which would fall under the G1 stage. This investigation includes comprehensive mapping involving geochemical and geophysical studies as well as drilling. The identified lithium resources are located in Jammy and Kashmir's Reais district, in the region.

The blessing for India in the form of white gold comes with some challenges such as this area is well-known for its seismic activity and, according to the Indian seismic zone map, is located in seismic zone IV, which denotes a high-risk area susceptible to major damage. Several low-magnitude earthquakes have recently occurred in the area in the months of August and September. The region is also a part of the well-known Kashmir seismic gap, where experts believe a "great" earthquake with a magnitude greater than 8 will occur. The discovery of such a substantial lithium deposit in Jammy camp; Kashmir has significant implications for India's domestic lithium reserves and the country's efforts to secure a strategic position in the global lithium market. Further exploration and evaluation will play a crucial role in determining the full potential and economic viability of this discovery.

Apart from finding lithium India companies are also investing in the industry, the following list includes some investments made in India's lithium industry.

1. Exide Industries started constructing a lithium-ion cell manufacturing facility with a capacity of multiple gigawatt hours at Harald, Bengaluru, through its subsidiary Exile energy solution limited. With VOLT energy Technology China, Exile Industries signed a long-term technological collaboration agreement.

2. Tata Chemicals has a 126-acre industrial location in Chhota, Gujarat, where it can produce lithium-ion cells and ; up to 10 GW annually in addition to recycling operations.

3. In Haryana, Ampere Technology Limited plans to establish a Lithium-ion Polymer battery manufacturing facility.

4. A Gig plant is also being built close to Chennai by Lucas TVS and 24 M Technology, lithium-ion battery technology company .

5. Through the Gig plant in Telangana, Mara Raja Batteries Limited expects to create lithium cells and battery packs with ultimate capacities of up to 16 GWh and 5 GWh, respectively.

6. With a total investment of 799 crores, MONTH INDUSTRIES LIMITED (MIL) is establishing India's first lithium-ion cell manufacturing facility. Battery manufacturer TIANJIN LISTEN BATTERY JOINT STOCK CO LTD and MIL have a technology agreement. Phase 1 of the project will have an initial installed capacity of about 250 MW.

OTHER COUNTRIES CONDITION IN THE INDUSTRY

As the world prioritizes reaching net-zero carbon emissions, the Africa Finance Corporation forecasts a large increase in the global battery and electric industry, forecasting its value to reach \$8.8 trillion by 2025 and \$46 trillion by 2050. Africa, in particular, is expected to experience a rapid increase in lithium production during this decade. The continent is anticipated to generate 497,000 tonnes of lithium in 2030, with Zimbabwe being a significant contributor, according to predictions made by commodities trader Prefigure. The largest lithium reserves in Africa are found in Zimbabwe. Some lithium mining projects in the nation are currently in the exploration stage and are scheduled to start production. One of the biggest lithium mines in Zimbabwe, Nikita Lithium, has a reserve of 10.8 million tonnes of lithium ore, which contains roughly 150,000 tonnes of lithium. Once all of its lithium deposits have been utilized, Zimbabwe hopes to supply 20% of the world's lithium consumption.

Despite having a lot of important raw material sources, including lithium deposits in Argentina, Chile, and the Multinational State of Bolivia, combined called the lithium triangle does not yet have the ability to produce lithium batteries. There are signs, though, that the area might support the creation of a future value chain for the manufacture of batteries.

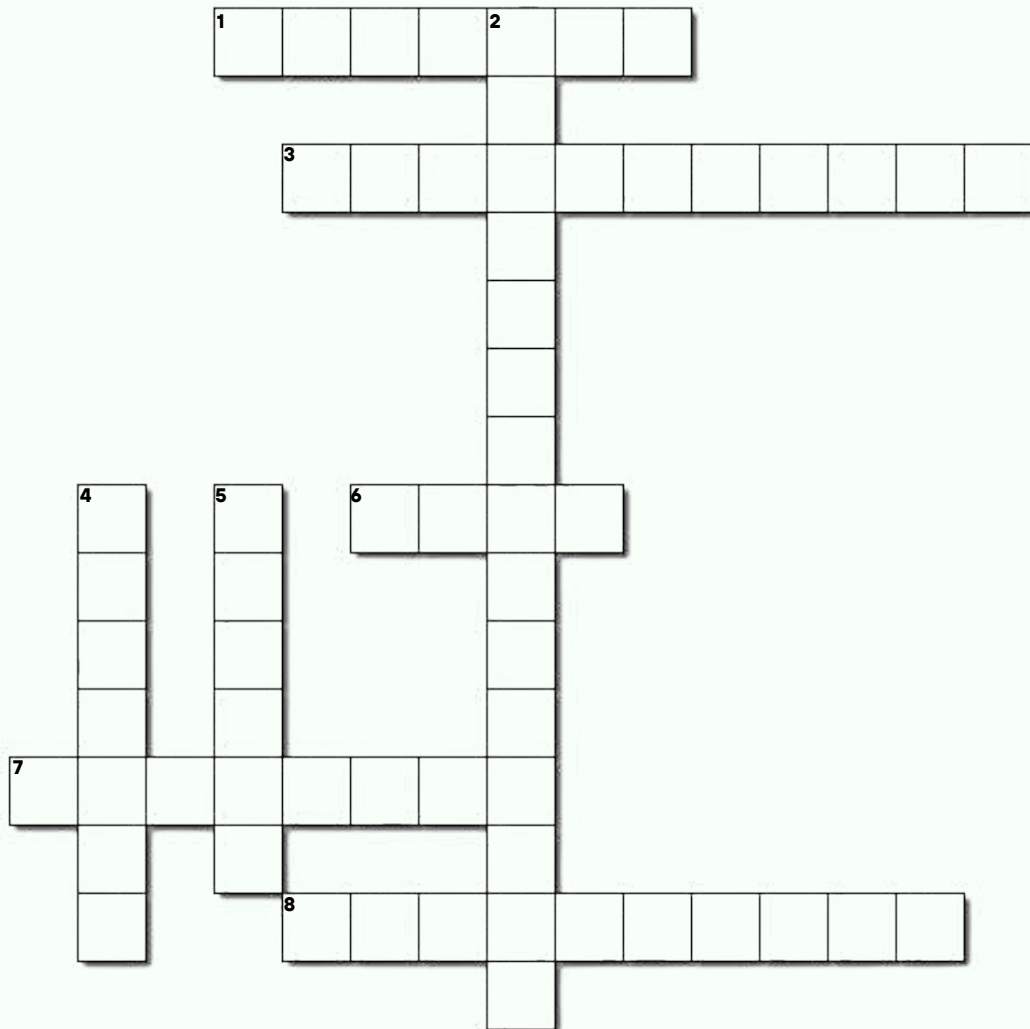
Having lithium deposits in a country might also help in getting foreign investments. As foreign direct investment (FDI) inflows to Chile increased significantly in 2021, reaching US\$15.252 billion, a 65.7% increase over 2020. Notably, all FDI components showed improvement, with the majority of investments going to services and natural resources (63% and 30%, respectively). The sector with the largest rise (89%) was natural resources.

According to the 2022 World Investment Report published by UNCLAD, Argentina's FDI inflows returned to pre-pandemic levels in 2021, as they increased from USD 4 billion in 2020 to USD 6.5 billion, largely driven by mining projects. Brazil on the other hand is also trying to establish itself in the lithium ; as they are actively participating in lithium-ion battery research and development projects headed by both public and private organizations and Brazil also has a well-established lead-acid battery manufacturing industry. Including Brazil's top lead-acid battery producer, Material Mourn, have begun constructing lithium batteries in the region using imported cells from China thanks to agreements with CATL. In a similar vein, WEG, one of the biggest producers of electrical equipment in the world, is importing lithium cells to put together battery packs with a concentration on the bus, truck, and energy storage industries. Although there are encouraging signals that Latin America can become a player in the lithium-ion battery value chain, there are still big obstacles to overcome. Among them is the requirement to strengthen competitive business capacities and quicken the uptake of electric vehicles through a combination of stringent rules and strong incentives.

CONCLUSION

One of the most significant industries from a geopolitical standpoint is lithium. As the globe tries to be more environmentally friendly, the demand for electric vehicles is increasing, which will eventually cause the need for lithium to increase. Lithium is being used by nations to accomplish their objectives. China is making significant investments in the lithium industries of other nations in an effort to maintain its monopoly. The largest reserves are in African and South American countries, but they are unable to use them effectively because of a lack of funds, infrastructure, and technology. Some nations are making attempts to encourage domestic manufacturing. If India's recent lithium discovery proves to be economically advantageous, and they are able to overcome obstacles, they may be able to lessen their reliance on other nations.

CROSSWORD



ACROSS

3. A class of software applications for managing regulatory compliances
4. A government plan, with a digital aim, Bringing MSMEs into the online game - name the project
7. No vaults, no doors, just lines of codes - a type of bank
8. India's first, a financial delight - a fixed-return financial platform

DOWN

1. When non-financial companies, like an online stores or a ride-sharing apps, offer financial services such as payments, lending,
3. In a land carbon negative and new, UPI's first step outside India it flew
4. In bytes and bits, it equally dwells, tracking digital steps from start to end
5. In the south-east, a peninsula of gold - this country is one of the first countries to make ESG reporting mandatory for all payments, lending, or insurance

RESEARCH PAPERS

WHAT'S INSIDE



The Analytical benefits and setbacks of Mergers and Acquisitions
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Financing Decisions and their Impact on Stock Prices
Navigating the Future: The Role of AI in Revolutionizing Financial Services.

THE ANALYTICAL BENEFITS AND SETBACKS OF MERGERS AND ACQUISITIONS



by **Yashvardhan,
BBE**



by **Garv Chugh,
ECO. (H)**



by **Aditya Sharma,
ECO. (H)**

CREDITS: STOCK.ADOBE.COM

Abstract

The main objective of any business is growth, and decisions are made with this goal in mind. Strategies for achieving growth can be categorized into four forums: Organic, Inorganic, Internal, and Mergers, Partnerships & Acquisitions.

This article focuses on Mergers and Acquisitions (M&A) as a widely used strategy for business growth, profitability, and competitiveness. It delves into the benefits, setbacks, and analyzes a real-life case to assess the effectiveness of M&A. The research explores the multifaceted dynamics and implications of M&A, covering strategic motivations, financial aspects, post-merger integration challenges, and the impact on firm performance, shareholder value, industry structure, and economic growth. By critically analyzing existing literature and empirical evidence, this research provides valuable insights into the opportunities, risks, and key success factors associated with M&A activities, contributing to the advancement of M&A theory and practice.

The primary objective for a company or any business in this world is to grow. All the decisions thus far made by the company are made by keeping in mind that these decisions would contribute to the overall company's growth and success. There are various strategies which can be adopted for the same. We can label the strategies into four different forums, that is Organic, Inorganic, Internal and Mergers, Partnership & Acquisition. In brief, Organic growth is achieved by using the company's own internal resources, while inorganic deals with the external resources for long term growth and the Internal strategy emphasises on optimising company's own existing internal processes.

This article delves deeper into Mergers and Acquisitions. It discusses its setbacks, the benefits and analyse a real life case which will prove whether the technique is truly fruitful for a company. It is the most widely used strategy used by mostly every firm to grow, strive, earn profits and be competent in the ever-changing business environment.

This research aims to explore the multifaceted dynamics and implications of mergers and acquisitions (M&A) from a comprehensive perspective. M&A transactions are complex corporate activities with far-reaching consequences, and understanding their underlying drivers, strategies, and outcomes is crucial for both practitioners and scholars. The research examines the strategic motivations behind M&A, including market expansion, synergy creation, and competitive advantage. It delves into the financial and operational aspects, such as valuation methods, deal structuring, and post-merger integration challenges. Additionally, the study investigates the impact of M&A on firm performance, shareholder value, industry structure, and economic

growth. By critically analyzing existing literature and empirical evidence, this research provides valuable insights into the opportunities, risks, and key success factors associated with M&A activities, contributing to the advancement of M&A theory and practice

It is important to note that however we can treat M&As as a subtopic of inorganic way of growth but it exceeds itself far beyond the inorganic boundaries. Before going into the further analysis, let us first know what do the two words mean individually.



CREDITS: INTERNATIONAL ATOMIC ENERGY AGENCY

MERGERS

Mergers are business deals wherein two or more firms which are already operating combine or merge together to form a new and individual entity. Usually mergers are seen among firms who operate on a similar size, similar product lines and scope. The reason for this is usually bringing down the competitor approach and operating together, ultimately aiding in increasing scalability, revenue and the company's growth in the future. It does not always hold true that the firms are merging on mutual terms. It could be a scenario where one firm is forcing the other to merge, intending an hostile merger. There are numerous advantages and disadvantages to mergers.



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The following are some potential benefits:

- **Economies of scale:** Companies that are merged can frequently achieve economies of scale by combining their operations, which can result in lower costs and higher profits.
- **Expanded piece of the pie:** Mergers can also increase a company's market share, putting it in a stronger position to compete.
- **New market access:** Consolidations can likewise give organisations admittance to new business sectors, which can assist them with developing their business.

However, mergers are not always beneficial, there are various setbacks associated to it:

- **Job cuts:** Since the two original firms combined, mergers frequently result in job cuts.
- **Culture conflict:** Culture clashes can also occur during mergers because the two original firms may have distinct cultures and methods of operation. Conflict and issues within the merged firm may result from this.
- **Financial Risk:** Mergers can also be risky financially because they might not work out and cost a lot of money.

Hence, by comparing the setbacks and benefits, a firm takes steps towards a merger. Some of the most well known mergers are AOL with Time Warner, Disney and Marvel and many more.

ACQUISITION

Acquisition is another type of business deal where a company acquires a major portion of another company and takes over the control over the company. The deal is usually done in the form of purchase of the stocks, shares or the assets of the company. The target company has a total of 100% shares before acquisition and when the acquirer comes in for acquisition, it is only completed if it purchases more than 50% of the shares of the target.

The process however is not as straightforward as it seems. There are various risks associated with it. The target company has to give up its controlling rights, the acquirer can make decisions without the consensus of the shareholders. However, there is a special clause, called the No-Shop clause signed between the two companies if the acquirer has got the affirmation from the target company.



CREDITS: PRECHECK.COM

Let us now have a look at the setbacks a firm can achieve by an acquisition:

- **Difficulties with integration:** Coordinating two companies' tasks can be a complex and tedious cycle. This can result in product development delays, issues with customer service, and financial losses.
- **Overpaying the target company:** On the off chance that the acquirer overpays for the target company, it can jeopardise its own monetary wellbeing.
- **Regulatory difficulties:** Acquisitions can be dependent upon administrative investigation, which can defer or try and keep the arrangement from going through.

A firm can also derive benefits out of the process of acquisition:

- **New services and products:** By gaining access to the target company's technology, intellectual property, and customer base, acquisitions can assist companies in expanding their product and service offerings.
- **Cost reductions:** Acquisitions can assist companies with minimising expenses by wiping out copy works and combining tasks.
- **Increased value for shareholders:** Acquisitions can increase shareholder value by creating a larger, more diversified company with greater potential for growth.

Vodafone and Mannesmann is considered as the largest acquisition in history, in the year of 1999 wherein Vodafone acquired Mannesmann for \$203 billion, a huge amount at that point of time and can be considered in the current era too.

Difference between Merger and Acquisition

Merger	Acquisition
<ul style="list-style-type: none"> • Two companies combine to form a new company. • The new company has a new name, new leadership, and a new board of directors. • The goal is to create a stronger, more competitive company. • Mergers are typically friendly transactions. 	<ul style="list-style-type: none"> • One company buys another company. • The target company keeps its name and its employees, but it is now under the control of the acquiring company. • The goal is to gain access to new markets, customers, products, technology, or resources. • Acquisitions can be friendly or hostile transactions.

Can Merger and Acquisition take place together?

Merger and acquisition can occur simultaneously. As a matter of fact, they are majorly undertaken in an inter-related manner to accomplish a particular objective. In order to gain access to new markets or customers, a company might, for instance, merge with another company and then acquire a third company to acquire new technology or resources. Let us see how both can exist together:

- **Merger and acquisition to expand product offerings:** In order to reach new markets or customers, a company might join forces with another one. In order to create a larger, more diversified company that is able to sell its products in a wider variety of markets, for instance, two businesses that sell products that are comparable to one another but in distinct geographical regions might merge.
- **Product diversification through mergers and acquisitions:** In order to increase the number of products or services it offers, a company may decide to merge with another one. To create a one-stop shop for businesses that require both software and hardware, a company that sells software and hardware might, for instance, merge.
- **Merger and acquisition to decrease costs:** In order to reduce costs and streamline operations, a company may combine with another one. For instance, two companies that have covering tasks could converge to lessen the quantity of workers and offices that they need.

Acquisitions and mergers to gain access to new technology: In order to gain access to new technology that can assist it in enhancing its products or services, a company may decide to merge with another company. In order to develop electric vehicles, for instance, a car manufacturer might join forces with a battery manufacturer.

Merger and Acquisition: A Real Life Case

The Walt Disney Company is a well-known, multi-national entertainment company with a long history and a well-established brand. It is renowned for designing enduring icons like Mickey Mouse, making adored animation and live-action films, running theme parks and resorts across the world, and owning well-liked television networks including ABC, ESPN, and Disney Channel. Disney has established itself as a dominant power in the entertainment sector thanks to its dedication to storytelling, innovation, and providing amazing experiences. Popular franchises like Star Wars, Marvel, and Pixar are included in the company's varied portfolio of assets, which also has a strong brand image. However, Disney is up against fierce competition from

rival media behemoths like Netflix and Amazon, who are upending the status quo of media with cutting-edge business strategies.

Previously known as News Corporation, 21st Century Fox was a multi-national media conglomerate with a range of media holdings. It covered a wide range of industries, including satellite broadcasting, cable channels, and film companies like 20th Century Fox and Fox Broadcasting Company. The Simpsons and the X-Men are just two of the well-known brands that 21st Century Fox developed and distributed. However, Fox is facing difficulties due to dwindling viewership and shifting customer tastes, which have reduced income and profitability.

The Walt Disney Company's acquisition of 21st Century Fox is a momentous development in the rapidly expanding and ever-evolving entertainment and media sector. The necessity to adapt to changing consumer demand for high-quality digital content and to restructure the media market was the driving force for this deal. It is clear from a thorough examination of both businesses—including their financial performance and valuation—that the acquisition is anticipated to boost Disney's competitiveness and raise shareholder value.

Benefits of the acquisition:

- **Increased Market Share:** The acquisition would provide Disney the chance to grow its content collection and distribution options, which would improve its standing in the media sector.
- **Economies of Scale:** The combined business would operate on a bigger scale, which might result in cost reductions in areas like production, marketing, and distribution.
- **Synergies:** The combined business would benefit from a larger content library and distribution network, which might open up new revenue channels and cross-selling possibilities.
- **Diversification:** By expanding into similar industries or entering new markets, the acquisition would enable Disney to diversify its business activities and lower its risk.
- **Talent acquisition:** Disney's human capital would be strengthened by access to talented workers and top executives from 21st Century Fox as a result of the acquisition.

Drawbacks of the acquisition:

- **Exorbitant Transaction Costs:** The purchase entails high transaction costs, such as legal fees, due diligence charges, and investment banking fees, which may have an effect on the merged entity's financial performance.

- **Cultural Disparities:** There may be variations in the corporate cultures, management approaches, and staff morale between the two businesses, which could make integration difficult and possibly cause conflicts.
- **Integration Issues:** Merging the operations, systems, and procedures of two businesses can be difficult and time-consuming, and it often requires a significant financial commitment.
- **Regulatory Obstacles:** The acquisition may be subject to regulatory review and approval procedures, which could cause delays or possibly the deal's collapse.
- **Financial Risks:** Disney may face greater financial risk as a result of the acquisition's substantial debt financing requirements.

Conclusion

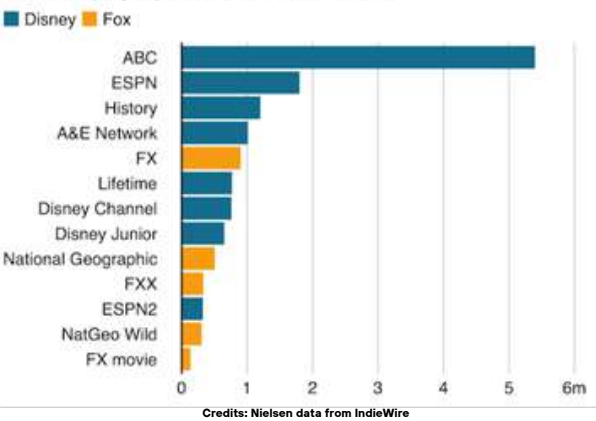
- **Strategic Synergies:** The merger made it clear how crucial it is to spot and take advantage of strategic synergies between combining organisations. The assets of 21st Century Fox were acquired by Disney, opening up new markets and creating the possibility of cross-promotional and cross-selling opportunities.
- **Content Consolidation:** The merger made combining content portfolios more important. Disney increased the number of well-known franchises and recognisable trademarks in its intellectual property inventory by acquiring 21st Century Fox. Disney's competitive position was boosted by this consolidation, and it was better able to provide a wide range of engaging material to a global audience.
- **Entry into New Markets:** The acquisition illustrated the benefits of expanding into new markets and diversifying one's revenue sources. Disney extended its footprint in important markets and acquired access to global assets through the acquisition of 21st Century Fox. Disney was able to do this by utilising the purchased company's distribution networks and existing infrastructure to reach new audiences and spur growth.
- **Challenges with integration:** The merger highlighted how important it is to manage the integration process carefully. Integrating various cultures, systems, and operational structures is necessary when two major organisations are merged. To streamline operations, reduce interruptions, and realise synergistic benefits, effective integration planning, communication, and change management are crucial.
- **Strategic Vision and Future-Proofing:** The merger emphasised the necessity of a strategic vision and strategies that can withstand the future. Due to the rapid growth of technology and shifting

consumer preferences, the media and entertainment sector is undergoing tremendous change. To stay competitive, businesses must continuously innovate and adapt. Disney was able to increase its capabilities as a result of the merger, positioning the company for success in the rapidly changing digital market.

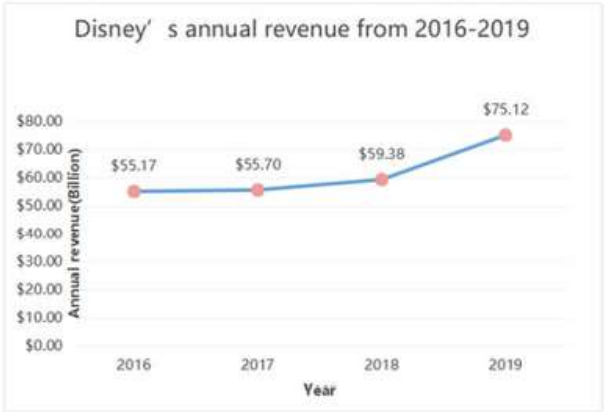
The acquisition of 21st Century Fox's assets has allowed Disney to expand its content library and strengthen its position in the industry. The acquisition resulted in the separation of its assets, with certain properties being retained by the newly formed Fox Corporation.

Disney now dominating US TV networks

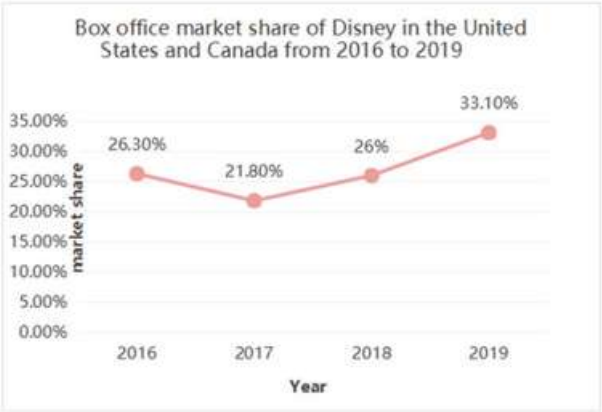
Viewership by top US TV networks in 2018



After the completion of acquisition in 2019 the subscriber base and revenue increased substantially.



Disney's annual revenue from 2016-2019



Box office market share of Disney in the United States and Canada from 2016 to 2019



A HISTORY OF FINANCIAL INSTRUMENT TRADING



by Saanvi Bansal,
BMS



by Kshitij Gumber,
BBE



by Kshitiz Aggarwal,
BCOM (H)

Abstract

Financial instrument trading has been a fundamental aspect of economic activity throughout history. This article explores the evolution of financial instrument trading, starting from the barter system to the establishment of formal exchanges and the impact of trading on economies. It highlights the challenges faced by the barter system, such as the lack of a common measure of value, difficulty in finding a double coincidence of wants, lack of divisibility, storage and preservation issues, and the inefficiency of indirect trades. The transition to monetary systems, marked by the introduction of a common medium of exchange, addressed these challenges and paved the way for the development of financial instrument exchanges.

The article presents a timeline of key milestones in the history of financial instrument trading, including the establishment of the Amsterdam Stock Exchange, the New York Stock Exchange, and the Chicago Board of Trade. It also discusses significant events such as the end of the Bretton Woods system, the emergence of high-frequency trading, and the impact of the COVID-19 pandemic on global financial markets.

Furthermore, the article emphasizes the benefits of the exchange system, including increased liquidity, transparency in pricing, efficiency in trading, and risk management capabilities. It compares the exchange system to historical examples such as the Thales of Miletus' speculation, the Code of Hammurabi's regulations, and the limitations of the barter system.

Lastly, the article explores the impact of financial market crises, such as the stock market crash of 1929, Japan's financial crisis of the 1990s, and the 2008 global financial crisis. These crises demonstrate the significant influence financial markets can have on economies, including bank failures, long-lasting consequences, economic recessions, unemployment, and the need for effective economic policies and governance.

In toto, this research article provides a comprehensive overview of the qualitative bedrock of valuation in financial instrument trading, highlighting its historical significance, the challenges faced by previous systems, the benefits of the exchange system, and the impact of financial market crises on economies. Understanding the evolution and impact of financial instrument trading is crucial for policymakers, investors, and individuals seeking to navigate the complex world of finance.

INTRODUCTION

Financial instrument trading involves buying and selling securities, such as stocks, bonds, and options, on an exchange or other trading platform. When a trader buys a security, they are hoping that the price will increase, so that they can sell it later at a profit. When they sell a security, they are hoping that the price will decrease, so that they can buy it back later at a lower price. The goal of trading is to make a profit by buying and selling securities at the right time and at the right price.

Trading can be done through a variety of platforms, including exchanges, brokerages, and online trading platforms. Investors can trade securities directly on an exchange, such as the New York Stock Exchange or Nasdaq, or through a brokerage that provides access to multiple exchanges. Online trading platforms, such as Robinhood or E-Trade, provide investors with an easy and accessible way to trade securities from their computer or mobile device.

Trading involves a certain level of risk, as the price of securities can be volatile and unpredictable. It's important for investors to do their research and understand the fundamentals of the securities they are trading, as well as to have a clear strategy for buying and selling. Successful traders often use technical analysis, fundamental analysis, and risk management techniques to help them make informed trading decisions and manage their risk.



CREDIT: PIROSKHA VAN DE WOUW/REUTERS

HISTORY

The history of financial instrument trading goes back to the 6th century BCE. Thales of Miletus was a Greek philosopher and mathematician who is credited with making one of the earliest recorded attempts at financial instrument trading. According to some legend, Thales predicted that the olive harvest would be exceptionally bountiful one year, so he purchased the rights to use all the olive presses in the region in advance. When the harvest was indeed bountiful, Thales was able to rent out the olive presses at a premium to other farmers who needed to process their crops. This allowed him to make a significant profit and is considered one of the earliest examples of futures trading. Thales' success in this venture is said to have inspired other Greeks to engage in similar financial speculation, and his legacy helped to establish the importance of foresight and risk management in financial instrument trading.

Around 1754 BCE, King Hammurabi of Babylon is known for creating one of the earliest legal codes in history, the Code of Hammurabi. The Code included provisions that regulated financial transactions and set penalties for fraud and other financial crimes. Hammurabi's Code is considered to be one of the earliest examples of a legal framework for financial instrument trading, and it helped to establish the importance of fair and transparent financial practices in commerce and trade. However, it was heavily biased towards the wealthy and powerful and did not provide equal protection under the law for all citizens. While Hammurabi's Code did not specifically address financial instruments such as bonds or futures, it laid the foundation for the development of legal frameworks that would regulate financial transactions in the centuries and millennia that followed.

The barter system of financial instruments is believed to have originated in prehistoric times when human societies felt the need to exchange goods and services without using money. Let's delve into the details of where the barter system began and the major problems faced:

Origins of the Barter System:

The exact origins of the barter system are difficult to trace, as it emerged in various parts of the world independently. As early humans transitioned from a nomadic lifestyle to settled communities, they started engaging in activities such as hunting, farming, and crafting. With specialisation, individuals produced surplus goods beyond their immediate needs, leading to the emergence of trade and exchange.

Early Barter in Mesopotamia:

One of the earliest recorded instances of the barter system can be found in ancient Mesopotamia, the region between the Tigris and Euphrates rivers (modern-day Iraq). Mesopotamia was home to city-states like Sumer, Akkad, and Babylon, which flourished around 6000 BCE. In Mesopotamia, trade networks developed, and the barter system was used extensively for exchanging goods. Various items were traded, including textiles, pottery, grains, metals, and livestock. The city-states acted as trading hubs, facilitating the exchange of goods between different regions.

Barter in Ancient Egypt and China:

Similar to Mesopotamia, ancient Egypt and China also relied on the barter system. In ancient Egypt, dating back to around 3000 BCE, a complex economic system emerged. Farmers traded surplus crops, artisans exchanged goods such as pottery, jewellery, and textiles, and merchants facilitated long-distance trade routes.

In ancient China, barter played a crucial role in economic transactions during the Zhou dynasty (1046-256 BCE) and subsequent periods. The Chinese barter system involved commodities such as silk, porcelain, tea, and spices being traded within and outside the country.



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Problems Faced by the Barter System:

1. **Lack of a Common Measure of Value:** One of the major challenges of the barter system was the absence of a standardised unit of value. The value of goods was subjective and could vary significantly between trading partners. This made it difficult to establish fair exchanges and led to disagreements and disputes.
2. **Difficulty in Finding a Double Coincidence of Wants:** Barter required a mutual coincidence of wants, meaning two parties had to desire what the other had to offer. Finding individuals with complementary needs and wants was not always easy, especially when dealing with diverse goods and services.
3. **Lack of Divisibility:** Some goods, such as livestock or land, were not easily divisible. This posed a problem when trying to trade these items for smaller or different goods, as finding an equivalent exchange became complicated.
4. **Storage and Preservation:** Certain goods, like perishable agricultural produce or livestock, were difficult to store or preserve for an extended period. This limited the flexibility and feasibility of barter transactions, as goods needed to be exchanged promptly to avoid spoilage or loss of value.
5. **Inefficiency and Indirect Trades:** Barter transactions often required a series of indirect trades, as individuals had to exchange their goods for intermediate goods before acquiring what they actually desired. This added complexity, time, and effort to the trading process.

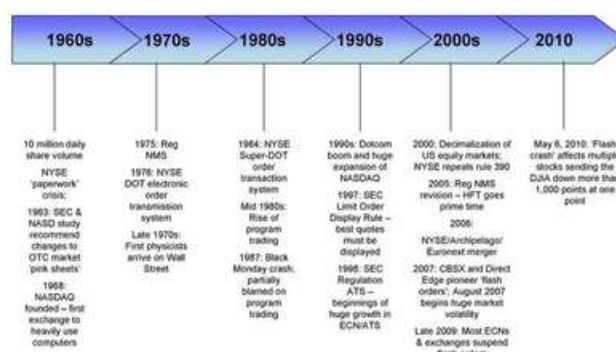
Transition to Monetary Systems:

Due to the inherent challenges of the barter system, various societies gradually transitioned to monetary systems, where a common medium of exchange, such as coins or paper money, facilitated trade. The introduction of money as a standardised unit of value addressed many of the problems faced by barter, providing a more efficient means of exchange and contributing to economic development. The development of stocks, bonds and futures contracts made it possible for people to invest their money and manage risk.

While the barter system played a crucial role in the early stages of human economic interaction, its limitations eventually led to the adoption of monetary systems that continue to shape modern economies. Today, financial instrument exchanges are an important part of the global economy, allowing people to buy and sell financial instruments from all over the world.

Here's a brief timeline of the history of financial instrument trading:

- 1602: Amsterdam Stock Exchange Established - The Amsterdam Stock Exchange is considered the first stock exchange in the world. It was founded by the Dutch East India Company and was primarily focused on trading shares of the company.
- 1792: New York Stock Exchange Founded - The New York Stock Exchange (NYSE) was established in New York City, becoming the primary stock exchange in the United States. Initially, it started as a meeting place for traders, but it eventually evolved into a formal exchange.
- 1867: Formation of the Chicago Board of Trade - The Chicago Board of Trade (CBOT) was founded as a commodity futures and options exchange. It played a significant role in trading agricultural commodities such as grains.
- 1914: Creation of the Federal Reserve System - The Federal Reserve System was established in the United States as the central banking system. It has since played a crucial role in regulating monetary policy and maintaining stability in the financial markets.
- 1971: End of the Bretton Woods System - The Bretton Woods system, which fixed exchange rates to the U.S. dollar, collapsed, leading to the era of floating exchange rates. This event had a profound impact on global financial markets and the way currencies were traded.
- 1973: Chicago Board Options Exchange Founded - The Chicago Board Options Exchange (CBOE) was created as the first exchange specialising in trading standardised options contracts. It introduced a new dimension to financial instrument trading.
- 1983: Financial Instruments Trading Begins Electronically - The introduction of electronic trading systems, such as NASDAQ (National Association of Securities Dealers Automated Quotations), allowed for faster and more efficient trading. It became a model for other exchanges worldwide.
- 1986: London International Financial Futures Exchange Established - The London International Financial Futures Exchange (LIFFE) was founded, specialising in trading futures and options contracts on various financial instruments.
- 1990s: Rise of Online Trading - With the advent of the internet, online trading platforms emerged, enabling individual investors to participate directly in financial markets. This marked a significant shift in accessibility and democratisation of trading.
- 1997: Asian Financial Crisis - The Asian financial crisis originated in Thailand and quickly spread across several Asian countries, causing severe economic disruptions and impacting global financial markets. It highlighted the interconnectedness of global financial systems.
- 2007-2008: Global Financial Crisis - The collapse of the subprime mortgage market in the United States triggered a global financial crisis. It resulted in a severe recession, widespread bank failures, and a decline in financial instrument valuations.
- 2009: Bitcoin and the Emergence of Cryptocurrencies - Bitcoin, the first decentralised cryptocurrency, was introduced. It paved the way for the development of numerous cryptocurrencies and blockchain technology, which have since influenced the financial instrument landscape.
- 2010: Introduction of High-Frequency Trading - High-frequency trading (HFT) gained popularity, utilising powerful computers and algorithms to execute trades at incredibly high speeds. HFT has had a significant impact on market liquidity and trading strategies.
- 2020: COVID-19 Pandemic - The COVID-19 pandemic caused widespread disruptions in global financial markets, leading to sharp declines and extreme volatility. Governments and central banks implemented various measures to stabilise economies and support financial markets.
- Present Day: Continued Evolution and Innovation - Financial instrument trading continues to evolve rapidly, with advancements in technology, algorithmic trading, artificial intelligence, and the increasing adoption of cryptocurrencies and decentralised finance platforms.



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Need for Exchange

The first financial instrument exchange was the Amsterdam Stock Exchange, which was founded in 1602 by the Dutch East India Company. The exchange was created to trade shares of the company, which was one of the largest and most powerful corporations in the world at that time. The Amsterdam Stock Exchange was the first exchange to use a formal system of trading, with brokers and dealers meeting in a designated location to buy and sell shares. The exchange was also the first to use a system of tradable securities to represent ownership in a company, which allowed for greater liquidity and ease of trading. The Amsterdam Stock Exchange was an important development in the history of finance and helped to establish the modern system of financial markets that we have today.

The exchange system has several benefits over The Thales of Miletus, The Code of Hammurabi and The Barter System of financial instruments. First, the exchange system provides a formal platform for buying and selling financial instruments, which makes it easier for buyers and sellers to find each other and agree on a price. This helps to increase liquidity in the market and makes it easier for investors to buy and sell securities. Second, the exchange system provides transparency in pricing, which helps to establish fair market values for financial instruments. This helps to prevent price manipulation and provides investors with confidence that they are receiving a fair price for their investments. Third, the exchange system provides greater efficiency in trading, as buyers and sellers can quickly and easily execute trades. This helps to reduce transaction costs and increases the speed of trading. Fourth, the exchange system provides a mechanism for risk management, as investors can use financial instruments to hedge against risks in the market. Overall, the exchange system provides a more efficient, transparent, and fair way to trade financial instruments. While the Code of Hammurabi was an important step in the development of legal systems, it did not have the same benefits as the financial instrument exchange.



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Impact

Throughout history, financial markets have had significant effects on countries and their economies. Here are some examples:

A) The stock market crash of USA's Financial Crisis of the 1990s

- The stock market crash of 1929 had a huge impact on the United States and the rest of the world.
- It caused a global economic crisis that lasted for years and resulted in mass unemployment, poverty and conflict.
- The accident caused significant damage to the American economy by causing many banks and financial institutions to go bankrupt.
- This highlights the importance of managing financial markets and preventing excessive speculation that can cause economic damage.
- Bank failures: The crash led to a wave of bank failures across the United States. Almost 5,000 banks failed across the world. Many countries struggled to recover from the depression that followed the crash, with some countries not seeing economic growth again until after World War II.
- Long-lasting consequences: The stock market crash of 1929 had long-lasting consequences, shaping the course of history for decades to come. It played a key role in the rise of fascism in Europe, with economic hardship and unemployment providing fertile ground for extremist groups to gain power. It also led to a fundamental shift in how people thought about investing, with a greater emphasis placed on diversification and risk management

B) Japan's Financial Crisis of the 1990s

- The bursting of the housing and stock market bubble in the early 1990s led to a long period of economic recession in Japan known as the "burst decade."
- It had a huge impact on the Japanese economy and slowed the world down. The crisis demonstrated the importance of good economic policy, transparency and accountability in the financial sector, and the need for good governance to prevent similar situations in the future.
- Inflation is currently low, but deflation has become a serious problem.
- Unemployment is high and many Japanese businesses are closing.
- The Japanese government lost a Decade trying to revive the economy.
- The Japanese government has implemented many economic policies to improve the economy, such as monetary expansion and financial support, but these have not been fully effective.
- Despite efforts to resolve the economic crisis, Japan's economy did not fully recover until the early 2000s, and some analysts believe the country still

faces problems with growth and demographic change.

C) The 2008 Global Financial Crisis

The 2008 global financial crisis was one of the worst economic crises in modern history.

- It stemmed from the subprime mortgage crisis in the US and caused a global recession.
- This crisis greatly affected the economies of many countries, including the USA, Europe and Asia.
- As a result, financial markets have had a great impact on the economy of many countries throughout history. It stimulated economic growth, employment and innovation, but it also led to serious economic problems and conflicts.
- The housing market was severely affected by the crisis, with many homeowners losing their homes to foreclosure.
- The financial crisis prompted the crisis that resulted in the bankruptcy and collapse of several major financial institutions like Lehman Brothers, creating panic and widespread fear in the industry.
- In response to the crisis, the US government passed the Emergency Economic Stabilization Act, which created a \$700 billion bailout fund to help rescue struggling financial institutions.
- The 2008 global financial crisis left a lasting impact on the world's economy, leading to long-term changes in regulations, financial reform, and consumer attitudes towards banking and investments.

D) Iceland Financial Crisis

In October 2008, the Icelandic government effectively nationalised the country's banking system, taking control of all three major banks.

- The Icelandic government was unable to bail out the banking system. The three banks were too big and their debts were too great for the Icelandic government to provide financial support.
- In October 2008, the Icelandic government effectively nationalised the country's banking system, taking control of all three major banks.
- The crisis had a significant impact on Iceland's economy, with a sharp decline to handle on its own. This led to the collapse of the banking system and ultimately the entire economy.
- The Icelandic krona lost almost 50% of its value during the crisis. This meant that imports became more expensive and inflation increased, making life more difficult for ordinary Icelanders.
- The government ended up nationalising the three main banks and selling off their assets in order to pay back debt. This led to layoffs and decreased investment in the country.

- One positive outcome of the crisis was that Iceland was forced to address its unsustainable economic policies and implement financial reforms. The country also saw a surge in tourism, which helped to boost the economy.
- The crisis in Iceland served as a warning to other countries about the importance of regulating financial institutions and avoiding excessive risk-taking. It also highlighted the interconnectedness of the global economy and the potential for a financial crisis to quickly spread beyond national borders.

Conclusion

The history of financial instrument trading is a long and complex one, marked by numerous innovations, crises, and changes in regulation. From the early days of the Amsterdam Stock Exchange to the rise of electronic trading and the introduction of new financial instruments, the world of finance has been constantly evolving. While financial instrument trading can be a lucrative way to invest and make money, it is important to remember that it also carries risks and requires careful research and analysis. By understanding the history of financial instrument trading and staying informed about current trends and developments, investors can make more informed decisions and navigate the complex world of finance with greater confidence.

A need was felt to abandon the barter system and to create the Exchange. Exchanges play a critical role in the functioning of financial markets. By providing a platform for buyers and sellers to come together and trade financial instruments, exchanges facilitate price discovery, increase liquidity, and promote transparency. Exchanges also help to reduce transaction costs and provide a mechanism for regulating trading activities. Additionally, exchanges can help to promote economic growth by providing companies with access to capital and enabling investors to participate in the growth of the economy. In short, exchanges are a vital component of modern financial markets, and their continued success is essential for the growth and stability of the global economy.

Financial Markets have had a wide impact on various economies throughout history. Major economies which were affected include US, Japan, Europe and Iceland.

THE QUALITATIVE BEDROCK OF VALUATION



CREDITS: MEDIUM.COM



by **Siddharth Sinha**



by **Shivam Singhal**

Abstract

This article explores the qualitative bedrock of valuation, shedding light on the crucial role that qualitative factors play in the valuation process. Traditionally, valuation has primarily focused on quantitative metrics, such as financial statements, market data, and discounted cash flow analysis. While these quantitative methods provide important insights, they often overlook the qualitative aspects that can significantly impact the value of an asset or investment.

The findings of this article underline the importance of a holistic approach to valuation that incorporates both quantitative and qualitative factors. Valuation practitioners, investors, and decision-makers need to recognize and evaluate the qualitative bedrock to make more informed and accurate valuation assessments. Neglecting qualitative aspects can lead to misjudgments, undervaluation, or overvaluation of assets, resulting in suboptimal investment decisions and potential financial risks.

INTRODUCTION

In today's complex business environment, assessing the value of a company goes beyond financial metrics alone. Qualitative valuation focuses on non-financial factors that contribute to a company's overall worth and future prospects. This report delves into the factors and characteristics involved in qualitative valuation, shedding light on the key elements that drive a company's value and potential.

QUALITATIVE VALUATION: AN OVERVIEW

Qualitative valuation involves the assessment of non-financial aspects that impact a company's valuation. These factors provide insights into a company's strengths, weaknesses, competitive advantage, and growth potential. While financial metrics like revenue, profitability, and cash flows remain essential, qualitative factors add depth and context to the valuation process.

FACTORS AFFECTING QUALITATIVE VALUATION:

This section explores various factors that influence qualitative valuation, including brand reputation, customer loyalty, corporate culture, intellectual property, management expertise, competitive advantage, industry positioning, sustainability, social responsibility, and market trends.

- **Brand Reputation:**

A strong and positive brand reputation contributes to customer trust, loyalty, and market positioning. Factors such as brand recognition, perceived quality, and customer satisfaction play a vital role in determining a company's value.

- **Customer Loyalty:**

A loyal customer base is a valuable asset for any company. Factors such as customer retention rates, repeat purchases, and customer satisfaction surveys help assess the strength of customer loyalty and its impact on long-term financial performance.

- **Corporate Culture:**

The values, norms, and behaviors embedded within a company's culture significantly influence its success. A positive corporate culture fosters innovation, employee engagement, and overall organizational performance, making it a critical factor in qualitative valuation.

- **Intellectual Property:**

Intellectual property, including patents, trademarks, copyrights, and trade secrets, can provide a significant competitive advantage and protect a company's innovations. Assessing the strength and value of intellectual property assets is crucial in qualitative valuation.

- **Management Expertise:**

Strong leadership and management expertise are vital for a company's success. Evaluating the skills, experience, and track record of the management team helps gauge their ability to navigate challenges, drive growth, and create value.

- **Competitive Advantage:**

Understanding a company's competitive advantage, whether through cost leadership, differentiation, or a unique business model, provides insights into its sustainable position within the market. Assessing competitive advantage aids in qualitative valuation by considering market share, barriers to entry, and industry dynamics.

- **Industry Positioning:**

The company's positioning within its industry and its ability to adapt to industry trends and disruptions significantly impact its long-term viability. Analyzing market share, growth potential, and industry-specific challenges helps assess qualitative valuation.

- **Sustainability and Social Responsibility:**

Increasingly, companies' environmental, social, and governance (ESG) practices influence their valuation. Assessing a company's commitment to sustainability, ethical practices, and social responsibility contributes to a comprehensive qualitative valuation.

- **Market Trends and Potential:**

Evaluating market trends, growth potential, and future opportunities helps determine a company's ability to capture market share, expand into new markets, or innovate. These factors contribute to the qualitative assessment of a company's value.

ASSESSING QUALITATIVE FACTORS:

This section explores approaches and methodologies for assessing qualitative factors, including data collection and analysis, evaluating intangible assets, conducting due diligence and research, and making industry comparisons.

- **Data Collection and Analysis:**

Collecting relevant data on qualitative factors often involves surveys, interviews, industry reports, and market research. Analyzing and interpreting this data aids in understanding a company's intangible value drivers.

- **Evaluating Intangible Assets:**

Qualitative valuation requires assessing intangible assets such as brand equity, customer relationships, patents, and intellectual property. Various valuation methods, including market-based approaches, income-based approaches, and cost-based approaches, help evaluate intangible assets' value.

- **Due Diligence and Research:**

Thorough due diligence and research are crucial to understanding a company's qualitative aspects. This includes studying historical performance, reviewing management's strategies, analyzing industry dynamics, and identifying potential risks and opportunities.

- **Industry Comparisons:**

Benchmarking a company against its industry peers helps identify strengths and weaknesses, assess relative positioning, and gain insights into qualitative factors affecting valuation. Industry-specific metrics and benchmarks provide valuable context for qualitative assessments.

CHALLENGES IN QUALITATIVE VALUATION:

This section discusses the challenges associated with qualitative valuation, including subjectivity and bias, lack of standardization, limited data availability, and identifying key drivers.

- **Lack of Standardization:**

Unlike financial metrics, qualitative factors lack standardization, making their assessment more challenging. Developing frameworks and industry-specific standards can help mitigate this issue and provide consistency in qualitative valuation.

- **Limited Data Availability:**

Obtaining reliable and comprehensive data on qualitative factors can be difficult. Companies may not disclose certain information or provide limited access to data, requiring analysts to rely on alternative sources and estimation methods.

- **Identifying Key Drivers:**

Determining the most critical qualitative factors relevant to a specific industry or company is essential. Identifying key drivers and prioritizing their impact on valuation requires expertise, industry knowledge, and thorough analysis.

CONCLUSION:

Qualitative valuation plays a vital role in understanding a company's worth beyond financial metrics. Factors such as brand reputation, customer loyalty, corporate culture, intellectual property, and management expertise contribute to the overall qualitative valuation. Although challenges exist, a comprehensive assessment of these qualitative factors provides valuable insights for investors and stakeholders.



AN EMPIRICAL ASSESSMENT OF FEMALE LABOUR FORCE PARTICIPATION IN INDIA



CREDITS: THEWIRE



by **Aanya Babuta,**
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by **Sarika Mahto,**
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Abstract

This study aims to assess the factors influencing the female labor force participation rate (FLFPR) in India, a topic of paramount importance for gender equality and economic development. The research examines the various determinants that impact FLFPR, including socio-cultural norms, educational attainment, household characteristics, labor market conditions, and government policies. By employing quantitative methods and analyzing large-scale datasets, the study provides empirical evidence on the relationship between these factors and FLFPR in India. Additionally, it investigates the variations in FLFPR across different regions, sectors, and demographic groups, shedding light on the intersectionality of gender with other dimensions of inequality. The findings of this research not only contribute to the existing literature on female labor force participation but also offer insights to policymakers, organizations, and stakeholders to design and implement effective strategies for promoting women's economic empowerment and fostering inclusive growth in India.

A review of the existing empirical literature reveals that factors such as social constraints, lower caste mobility and household burden have been identified as some of the major factors contributing to low female labour force participation in India. According to NSSO data ie. 50th Round (1993-1994), 61st Round (2004-2005), 68th Round (2011-2012) of

Employment and Unemployment Survey (PLFS) (2017-18) data, the analysis (according to the authors)) showed a U-shaped relationship between FLFPR and education, but it shifts downward over time. The relationship between FLFPR and MPCE deciles is not U-shaped but negative.

Women with higher incomes are more likely to obtain a degree, which increases their probability of employment. Even then, the lower labour force participation of women in the top deciles indicates that the income effect dominates over education. Importantly, the FLFPR decreases over time regardless of income and education. This suggests that there are factors other than supply that explain the problem of falling FLFPR. Special attention should be paid to demanding problems and socio-institutional factors that prevent women from entering the working life.

The Puzzling Decline in Female Labor Force Participation in India

Between 2005 and 2011, India experienced strong growth, falling birth rates and rising education levels. This economic and demographic change was difficult to reconcile with the low and declining participation of women in the labour force, especially in rural areas, observed during the same period. This thesis assesses the determinants of the decline in female labour force participation in India between 2005 and 2011 using state-level inequality data.

It aims to answer two questions: what are the factors driving the decline and whether existing policy measures are sufficient to bring about change in the near future. Using regression analysis and Shapley decomposition, this thesis concludes that several factors contribute to the decline.

However, two main trends emerge from the results. There is clear evidence that the relative importance of economic variables as a determinant of female labour force participation increased over the period, with a greater relative effect in rural areas. Of these economic variables, the relatively greatest explanatory power was the increase in female unemployment, as measured by local labour market conditions and education.

At the same time, the importance of cultural factors as determinants of women's labour force participation has decreased. Although cultural and other economic factors continue to determine female labour force participation, education and local labour market conditions, as measured by female unemployment, play a larger role in explaining the decline. A rural employment program implemented during the same period, the Mahatma Gandhi National Rural Employment Guarantee Scheme, offers a unique opportunity to test the impact of current employment policies on women's labour force participation.

The conclusion of this thesis is that MGNREGS with its pro-women mandate is a step in the right direction but is by no means a panacea. A multifaceted intervention targeting both economic and cultural factors is needed.

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Trends in Women's Employment

According to Lewis (1954), the transition of women's work from domestic work to commercial work is one of the most important features of economic development. However, this is one aspect where India's record has been dramatically dismal. Indeed, low female labour force participation is a factor that keeps India's overall labour force participation rate low. As noted in the ILO Global Employment Trends Report 2013, India ranks 11th in terms of female labour force participation among 131 countries with available data (ILO, 2013). Since the 1980s, the female labour force participation rate (WPR) (also known as the employment-to-population ratio) has declined almost continuously.

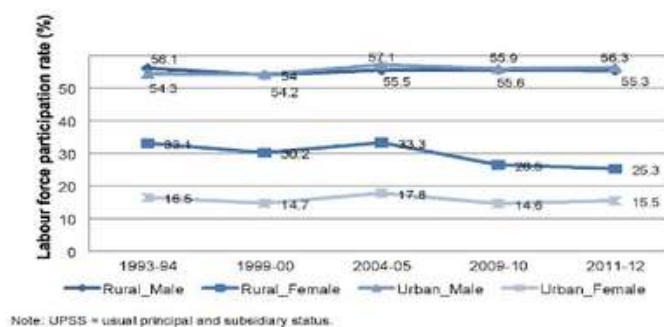
Despite this trend, the release of NSS Round 66 (2009-2010) of the Employment and Unemployment Survey (EUS) generated considerable surprise and discussion about trends in the data. In particular, these figures showed slow employment growth and sharp declines in the share of women in the labour force between 2004-2005 and 2009-2010. The recently published results of the 68th round of the ELS (2011-2012) show a return to stronger employment growth, but a continued decline in the number of women working in rural areas.

Overall, the unemployment rate remained relatively stable. However, the change in the labour market is progressing, as the share of agricultural workers is decreasing and the share of permanent/salaried workers is increasing. In this regard, it is very important to understand the gender dimension of employment development in India. Despite strong growth in the 21st century, women's labour force participation in India remains low, although there are large differences between urban and rural areas. In addition, there are still large gender differences in the participation rate (see Annex Maps 1 and 2).

Long-term trends indicate that women's share of the labour force has declined from approximately 40 percent in the 1990s to 29.4 percent in 2004-2005. Evidence from Round 68 shows no overall turnaround in female labour force participation, estimated at 22.5 percent (all ages), still below the 23.3 percent reported in 2009-2010. However, there is a clear difference in urban areas. In this regard, the share of women in the labour force is continuously decreasing in rural areas, while it is increasing in cities (Figure 6).

In India, the participation rate of rural women fell from 26.5% in 2009-2010 to 25.3% in 2011-2012 (a common definition of status), while the share of urban women increased from 14.6% to 15.5% during the same period. This trend is partly explained by the fact that the number of hard-working women in secondary schools is increasing and that.

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Female Labour Force Participation: A Comparative Analysis between High and Less Developed Districts of Himachal Pradesh

Since Mincer's pioneering work in 1962, the economic analysis of Female Labor Force Participation has received significant attention. For the purpose of formulating policies for developing economies, the role that women play in economic activities has emerged as the most hotly debated topic among a plethora of researchers and analysts. Due to its impressive performance over the years, the Indian state of Himachal Pradesh has established itself in the development discourse as a distinct entity. Himachal Pradesh has made significant progress over time in eradicating extreme poverty within a generation while simultaneously sharing the successes of prosperity with historically excluded groups, such as women. It has established itself as one of the states with the best human development outcomes in India and remarkable growth, particularly over the past two decades. The primary goal of this paper is to compare the labour force participation rates of women in highly developed and less developed districts of Himachal Pradesh.

First, we'll go over the history of Himachal Pradesh's labour force participation from 1983 to 2011, and then we'll try to compare the labour force participation of women in highly developed and less developed districts of Himachal Pradesh. We used the F-test and the T-test to empirically examine the data in order to evaluate the female labour force participation of highly developed and less developed districts. According to the study's findings, there was a statistically significant mean difference between cultivators in rural and urban areas of highly developed districts, but there were no statistically significant mean differences between rural and urban areas of high per capita income for total female workers, agricultural labourers, household industry workers, and other workers.

Despite the fact that women in wealthier households typically have lower participation rates, there were significant mean differences between rural and urban areas with less per capita income in terms of total female workers, cultivators, agricultural labourers, household industry and other workers.household incomes. Measurement issues and a general decline in employment opportunities for women are additional potential causes.

Why is India's Participation Rate so Low?

Various economic and social factors that interact in a complicated way at both the home and macrolevel influence whether and how women choose to join in the workforce. According to studies from around the world, some of the most significant causes are urbanisation, economic growth/cyclical effects, fertility rates, and the age of marriage. In addition to these problems, outcomes are still influenced by social norms governing women's roles in public life.

Since more and more women of working age are enrolling in secondary schools, India has achieved significant strides in improving access to education for girls. However, the nature of the nation's economic expansion has meant that few employment, particularly in rural areas, were established in fields that could easily accommodate women.

Despite the insufficient job creation, household incomes did increase, which may have had a negative impact on women's engagement, particularly in ancillary activities (the "income effect") due to preferences changing. Last but not least, although though the majority of women in India work and make economic contributions in one way or another, a large portion of their labour is not recorded or taken into account in official statistics, which causes women's labour to be underreported.

Domestic work was performed by 35.3% of Indian females in rural areas and 46.1% of Indian females in urban areas in 2011–12, compared to 29.3% and 42%, respectively, in 1993–94. Therefore, inaccurate measurement could impact the participation rate's trend as well as its level.

Domestic work was performed by 35.3% of Indian females in rural areas and 46.1% of Indian females in urban areas in 2011–12, compared to 29.3% and 42%, respectively, in 1993–94. Therefore, inaccurate measurement could impact the participation rate's trend as well as its level.

one's noteworthy to note that a sizable percentage of women who typically perform domestic responsibilities reported being open to taking a job if one was offered at their home. 34 percent of rural women and roughly 28 percent of urban women who typically perform domestic responsibilities expressed their willingness to accept work, and both groups indicated that tailoring was their favourite line of work.

Growth in Female LFPR(Labour Force Participation Rate)

According to the most recent Annual PLFS Reports, the country's expected Labour Force Participation Rate (LFPR) for women with typical status who are 15 years of age or older was 30.0%, 32.5%, and 32.8% during 2019–20, 2020–21, and 2021–22, respectively. This data illustrates an upward trend.

In 2019–20 india saw 5 poits increase in LFPR of women. This time span encompasses the early stages of the Covid-19 epidemic, when India was placed under a strict lockdown to slow the spread of the new virus. Research shows that even in areas where women's labour force participation is low, it frequently rises during economic downturns, demonstrating its counter cyclical nature.

Steps Taken by the Government to Improve Women's Participation in the Labour Force

The World Bank claims that expanding educational opportunities for women and girls can significantly improve FLFPR. Increasing women's levels of education may result in increased FLFPR and economic growth, according to a study by the Indian Council for Research on International Economic Relations (ICRIER).

The government has made a number of efforts to increase women's work opportunities and labour force participation. The labour rules now include a number of safeguards to ensure that female employees have equal access to opportunities and a comfortable working environment. The Code on Social Security, 2020, has provisions that increase paid maternity leave from 12 weeks to 26 weeks, require crèches in businesses with 50 or more employees, let women to work night shifts with proper safety precaution.

Domestic work was performed by 35.3% of Indian females in rural areas and 46.1% of Indian females in urban areas in 2011–12, compared to 29.3% and 42%, respectively, in 1993–94.

According to the 2019 Code on wages, no employee must be subject to gender discrimination in an establishment or any unit thereof when discussing salaries paid by the same employer for the same or similar types of labour performed by any employee. Furthermore, unless the employment of women in such work is prohibited or restricted by or under any law currently in effect, no employer shall make any discrimination on the basis of sex when recruiting any employee for the same work or work of similar nature in the conditions of employment.

The government is offering training to female workers to improve their employability. Furthermore, the government's top aim is creating jobs while also raising employability. As a result, the Indian government has undertaken a number of initiatives to promote employment throughout the nation.



INTEGRATING CONSULTING, STRATEGY, PSYCHOLOGY, AND PHILOSOPHY: ENHANCING ETHICAL DECISION-MAKING IN ORGANIZATIONS

by **Mohamad Faizan Raza**
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CREDITS: CDD20, PIXABAY

Abstract

The integration of consulting, strategy, psychology, and philosophy in ethical decision-making within organizations unveils a complex landscape that demands comprehensive understanding and thoughtful navigation. This research paper explores these disciplines' synergistic interplay and implications for ethical decision-making. Drawing upon a wide range of theoretical frameworks, case studies, and empirical research, this study investigates the alignment of organizational strategy with ethical values, the delicate balance of stakeholder interests, the psychological factors influencing ethical judgments, and the philosophical foundations that underpin ethical frameworks. This paper provides a comprehensive overview of integrated approaches to ethical decision-making by examining real-life case studies and synthesizing insights from diverse perspectives. The findings underscore the intricate nature of organizations' ethical challenges and highlight the significance of incorporating multiple lenses in decision-making. The implications of this research shed light on the importance of proactive ethical consulting strategies, the integration of psychological insights into decision-making processes, and the value of philosophical perspectives in fostering a culture of ethical excellence. This research contributes to the body of knowledge on ethical decision-making. It provides practical recommendations for organizations striving to navigate the complex ethical landscape with integrity and purpose.

Introduction

Overview of Ethical Decision-Making in Organizations

Ethical decision-making calls upon the collective consciousness of individuals, interweaving intricate threads of consulting prowess, strategic acumen, psychological insights, and philosophical wisdom. When figuring out what is right, several disciplines work together in a way that sounds good.

The strategy is a powerful ally in making ethical decisions, like a compass in rough waters. Organizations must think about the long-term effects of ethical decisions and balance the needs of stakeholders, the expectations of society, and long-term sustainability. A strategic architect finds a way through the rough terrain by ensuring that organizational goals and ethical imperatives align.

As you learn more, the mysterious role of psychology reveals its fascinating nuances. It sheds light on the psychological reasons behind making ethical decisions. Cognitive biases, like shadows hiding in the corners of the mind, cast their spell, distorting perceptions and making it hard to decide right and wrong. With their knowledge of psychology, ethical leaders can untangle the complicated web of motivations, biases, and emotional forces in human behaviour.

Philosophy, the ancient oracle, gives us deep wisdom that helps us make ethical decisions. Ethical theories point the way, shedding light on the moral landscape and giving a framework for analyzing ethics. From utilitarianism's utilitarian calculus to deontology's categorical imperatives, philosophical views add to ethical discussion and make us think about morality.

Integrating consulting, strategy, psychology, and philosophy is a straightforward way to help organizations make more ethical decisions. As organizations try to find their way through the confusing maze of ethical choices, this holistic approach opens up new perspectives, improving decision-making and building a culture of ethical excellence.

Research Objective and Problem Statement

This research paper explores the integration of consulting, strategy, psychology, and philosophy in ethical decision-making within organizations. We wish to explore the problem statement: "The need for more understanding regarding how these disciplines converge and influence ethical choices, leading to dilemmas and moral ambiguity". This study aims to fill this knowledge gap, providing insights and a holistic framework for organizations to make informed and ethically sound decisions.

The Role of Consulting in Ethical Decision-Making: Navigating the Moral Maze

A. Importance of Ethical Consulting Services in Organizations: Unveiling Ethical Odyssey

Ethical consulting services are instrumental, providing organizations with a moral compass to steer through the tempestuous waters of ethical challenges. Their expertise transcends mere compliance with regulations; it encompasses a deeper understanding of ethical frameworks, values, and principles that underpin responsible business conduct. By engaging ethical consultants, organizations embrace a proactive approach, acknowledging that ethical considerations are not an afterthought but an integral aspect of sustainable and responsible practices.

B. Consulting Approaches to Ethical Dilemmas and Decision-Making: Unraveling the Ethical Enigma

Ethical dilemmas, those ethereal enigmas that test the mettle of organizations, require a nuanced and multifaceted approach. As a discipline, ethical consulting embraces diverse approaches to untangle these moral

conundrums and illuminate a path toward ethical clarity.

One such approach is the utilization of ethical frameworks, which provide a structured lens through which ethical dilemmas can be analyzed. Consultants adeptly navigate these frameworks, evaluating the moral implications of various courses of action and guiding organizations toward ethically sound decisions.

Consultants also employ stakeholder analysis, recognizing the intricate web of interests, perspectives, and values that shape ethical decision-making. Ethical consultants can identify potential conflicts, mitigate risks, and balance competing interests by comprehending the diverse stakeholder landscape.

Furthermore, ethical consulting draws upon ethical leadership principles to guide decision-making. Consultants collaborate with organizational leaders to foster a culture of ethical responsibility, aligning values and cultivating ethical decision-making capabilities across all levels of the organization.

C. Case Studies: Consulting Interventions for Ethical Challenges: Illuminating Ethical Triumphs

The true essence of ethical consulting lies in its tangible impact on organizations grappling with ethical challenges. Through the lens of compelling case studies, we witness the transformative power of consulting interventions in navigating ethical complexities.

Case Study: "Ethics Consultation in Healthcare"

Problem: The healthcare team faced a complex ethical dilemma regarding end-of-life care for a patient with conflicting wishes expressed by family members and healthcare providers.

Action: An ethics consultant was engaged to provide guidance and support. The consultant conducted an ethical analysis, facilitated stakeholder discussions, and helped the team navigate the decision-making process.

Result: The ethics consultation enabled the healthcare team to reach a consensus on the patient's care, respecting the patient's autonomy and balancing the interests of all stakeholders' interests. It enhanced communication, improved understanding, and ultimately led to a more ethically informed and patient-centred approach.

Case Study: "Ethical Consulting for Corporate Social Responsibility"

Problem: A company recognized the need to develop and implement a comprehensive corporate social responsibility (CSR) strategy but needed to gain the expertise and knowledge to do so effectively.

Action: The company engaged an ethical consulting firm specializing in CSR. The consulting firm assessed the company's operations, identified areas for improvement, and developed a tailored CSR strategy.

Result: Through the consulting intervention, the company successfully implemented ethical and sustainable practices across its operations. It enhanced its reputation, built stronger stakeholder relationships, and achieved positive social and environmental impacts. The CSR strategy improved corporate governance, employee engagement, and long-term business sustainability.

These case studies highlight the value of ethical consulting in addressing complex ethical challenges, facilitating informed decision-making, and driving positive outcomes in healthcare and corporate contexts.

Strategic Considerations in Ethical Decision-Making: Unleashing the Power of Ethical Strategies

A. Aligning Organizational Strategy with Ethical Values: A Delicate Balancing Act

In the ever-evolving business landscape, organizations face the daunting task of aligning their strategic objectives with ethical values. This process demands a delicate balancing act, where the pursuit of profitability must harmonize with a commitment to ethical conduct. The perplexing challenge lies in crafting strategies that drive organizational success and uphold the highest ethical standards.

To navigate this intricate terrain, organizations must first define their ethical values and incorporate them into their strategic decision-making. Bursting with creativity and foresight, they must envision a future where ethical considerations are not mere add-ons but integral components of their strategic vision. It requires a shift from traditional approaches, in which ethics are an afterthought, to a paradigm in which ethics are deeply woven into every strategic choice.

B. Balancing Stakeholder Interests in Ethical Strategies: The Symphony of Diverse Perspectives

Ethical decision-making extends beyond satisfying shareholders' interests; it necessitates a harmonious symphony of diverse stakeholder perspectives. Bursting through the constraints of traditional stakeholder management, organizations must embrace a more holistic and inclusive approach to strategic decision-making.

This multifaceted challenge demands recognizing and including various stakeholder interests: employees, customers, suppliers, communities, and the environment. Organizations must burst the confines of self-interest and consider the broader implications of their actions. They must embark on a journey of stakeholder engagement, actively seeking diverse voices and perspectives to inform their ethical strategies.

Psychological Factors in Ethical Decision-Making: Unraveling the Complexities of Moral Development and Cognitive Biases

A. Moral Development Theories and their Relevance in Organizations: Unraveling the Tapestry of Ethical Growth

An intricate tapestry of moral development theories influences human behaviour and ethical decision-making. These theories shed light on individuals' progressive stages of their ethical journey. In the organizational context, understanding these theories becomes paramount, as it allows leaders to foster ethical growth and create an environment that nurtures ethical decision-making.

Leaders must embrace the complexity of moral development theories, recognizing that individuals within their organizations may be at different stages. By offering tailored support, mentorship, and ethical guidance, organizations can empower individuals to progress along the moral development continuum, cultivating a culture that promotes ethical behaviour.

B. Cognitive Biases and Ethical Judgment: The Shadows Lurking within Decision-Making

Cognitive biases cast their shadow on ethical decision-making, distorting judgment and influencing behaviour. Bursting the bubble of objectivity, organizations must confront these biases head-on, unravelling their intricate mechanisms and mitigating their impact.

Recognizing the pervasive nature of cognitive biases, organizations can implement robust decision-making frameworks that challenge prevailing assumptions and encourage critical thinking. By fostering a culture that values dissenting opinions, organizations can burst the shackles of confirmation bias and promote more robust ethical judgments.

In the dynamic landscape of strategic considerations and psychological factors in ethical decision-making, organizations must navigate the perplexing terrain with strategic finesse and burst forth with creative solutions. They can chart a path towards sustainable success by aligning organizational strategy with ethical values and balancing stakeholder interests. Simultaneously, by unravelling the complexities of moral development theories and cognitive biases, organizations can foster a culture of ethical awareness and judgment.

Philosophical Perspectives on Ethical Decision-Making: Unveiling the Tapestry of Ethical Theories

A. Ethical Theories and their Application in Organizational Ethics: A Kaleidoscope of Moral Perspectives

When delving into ethical decision-making, one encounters a kaleidoscope of ethical theories, each offering a unique lens through which to view and navigate complex ethical dilemmas. These theories provide frameworks for understanding the nature of right and wrong and guide individuals and organizations in pursuing ethical conduct.

From consequentialism, which focuses on the outcomes and consequences of actions, to deontology, which emphasizes adherence to moral duties and principles, and virtue ethics, which emphasizes the cultivation of virtuous character, each ethical theory presents a distinct perspective on ethical decision-making. Organizations must engage with these theories, exploring their applicability and discerning which ethical framework aligns most closely with their values and organizational culture.

B. Philosophy as a Foundation for Ethical Values and Principles: Building the Pillars of Ethical Consciousness

Philosophy is the foundation of ethical values and principles with profound insights and timeless wisdom. Organizations can construct an ethical framework that guides their decision-making processes by drawing upon philosophical traditions such as utilitarianism, Kantian ethics, and ethical relativism. Philosophy invites contemplation and reflection, challenging individuals to explore fundamental questions about the nature of ethics and the moral obligations that bind them. It encourages critical thinking, engaging individuals in robust ethical discourse and fostering a deeper understanding of the complexities inherent in ethical decision-making.

Embracing philosophy as a foundation for ethical values and principles empowers organizations to transcend narrow self-interest and consider the broader implications of their actions. Philosophy offers a broader perspective, encouraging organizations to make decisions grounded in a deep understanding of the moral fabric underpinning their existence.

Philosophical perspectives on making ethical decisions involve a mix of confusion and excitement as organizations try to understand the complexities of ethical theories and the deep insights that philosophy can offer. Organizations begin a journey of ethical exploration and growth by applying ethical theories to organizational ethics and using philosophy as a foundation for ethical values and principles. They figure out how to make ethical decisions in a complicated world by weaving together philosophical ideas to make a path of honesty, responsibility, and moral accountability.

Integrating Consulting, Strategy, Psychology, and Philosophy: Forging the Ethical Pathway

A. Creating Ethical Consulting Strategies and Frameworks: Unleashing the Power of Strategic Consciousness

Consulting strategies and frameworks provide a compass to navigate the complex terrain of ethical quandaries when it comes to ethical decision-making. Brimming with innovative approaches, ethical consulting strategies unlock the potential to integrate various disciplines, such as strategy, psychology, and philosophy, into a cohesive framework that guides organizations towards ethical excellence.

B. Incorporating Psychological Insights into Ethical Decision-Making Processes: Unraveling the Complexities of Human Behavior

Human behaviour lies at the heart of ethical decision-making, and psychology offers profound insights into the intricacies of our minds. Psychological perspectives shed light on the cognitive biases, moral development, and ethical judgment that shape our choices.

Integrating psychology into ethical decision-making processes empowers organizations to understand the complexities of human behaviour, challenging conventional assumptions and promoting a deeper appreciation for the diverse range of ethical perspectives. Bursting with psychological awareness, organizations can adopt interventions and frameworks that mitigate biases, promote moral growth, and foster ethical leadership. By incorporating psychological insights, organizations transform ethical decision-making into a process that encompasses the multifaceted nature of human cognition and behaviour.

Results and Discussions

Case Studies: Ethical Decision-Making in Organizations

Case Study 1: Ethical Challenges in Global Supply Chains

Problem: The case study explores ethical challenges in global supply chains, including labour exploitation and environmental sustainability issues.

Action: Ethical consulting strategies were developed and implemented to address these challenges. The action plan involved:

- Conducting audits of supply chain practices
- Establishing ethical guidelines and standards
- Collaborating with suppliers to ensure compliance.

Result: The following was the result of implementing ethical consulting strategies:

- Improved labourers' working conditions,
- Reduced environmental impacts
- Enhanced organization reputation

It also led to more robust relationships with suppliers based on ethical principles, ultimately contributing to sustainable and responsible supply chain practices.

Case Study 2: Ethical Dilemmas in Organizational Leadership

Problem: The case study delves into ethical dilemmas organizational leaders face in decision-making, particularly concerning conflicts of interest and ethical misconduct.

Action: Psychological insights were integrated into the ethical decision-making processes of the organization. This involved:

- Implementing training programs on ethical leadership
- Establishing Mechanisms for ethical dilemma resolution
- Promoting a culture of transparency and accountability

Result: By incorporating psychological insights:

- Organizations witnessed a positive shift in ethical decision-making
- Leaders became more aware of cognitive biases and moral considerations, enabling them to make sound ethical judgments
- An increased ethical awareness throughout the organization strengthened ethical leadership and improved ethical conduct.

These case studies demonstrate the practical impact of integrating multiple disciplines in ethical decision-making processes, providing valuable insights into how organizations can navigate complex ethical challenges and foster a culture of ethical excellence.

Conclusion: Embracing the Complex Tapestry of Ethical Decision-Making

A. Summary of Findings: Unveiling the Intricacies

Embarking on this intellectual odyssey exploring the synergistic interplay of consulting, strategy, psychology, and philosophy in ethical decision-making, we have unearthed a treasure trove of fascinating insights. The amalgamation of these diverse disciplines unfurls a kaleidoscope of intricate hues illuminating the convoluted nature of ethical quandaries within organizations. Our expedition has unravelled the intricacies of aligning organizational strategy with ethical values, deftly balancing the multifarious interests of stakeholders, delving into the nuances of moral development theories, and unmasking the veiled influence of cognitive biases that shape the ethical fabric of decision-making.

The philosophical bedrock of ethics has provided a vantage point to comprehend the theoretical scaffolding that guides organizational conduct.

B. Implications for Ethical Decision-Making in Organizations: Navigating the Uncharted Terrain

The things we learned from our multifaceted investigation have much to do with how organizations make ethical decisions. The integrated approaches presented here can help organizations figure out how to deal with ethical problems. By understanding how consulting, strategy, psychology, and philosophy all work together, organizations can find a way to follow ethical principles while still reaching their strategic goals. This combination makes it easier to understand all stakeholders' different interests. It creates a culture of morality and accountability.

C. Recommendations for Integrated Approaches to Ethical Decision-Making: Forging the Path Ahead

Several recommendations emerge from the insightful revelations and the complicated nature of ethical decision-making for organizations seeking to forge a path of ethical excellence. Organizations should develop proactive ethical consulting strategies and frameworks considering the multidimensional nature of ethical challenges. To ensure that ethical practises pervade all levels of the organization, these frameworks should include meticulous analysis, ethical audits, and continuous monitoring.

Second, it is critical to prioritize incorporating psychological insights into ethical decision-making processes. Leaders and decision-makers should understand cognitive biases and moral development theories. This increased self-awareness will allow them to navigate ethical quandaries with more excellent acuity and fairness.

Finally, organizations must acknowledge philosophical perspectives' profound influence on ethical decision-making. Embracing ethical theories and frameworks and fostering philosophical discourse within the organizational fabric will lay a solid foundation for the flourishing of ethical values and principles.

In this turbulent landscape of ethical decision-making, the combination of consulting, strategy, psychology, and philosophy offers a tapestry of options. Organizations can chart a course to ethical excellence, stakeholder satisfaction, and long-term success by embracing the paradoxes, complexities, and uncertainties that underpin ethical quandaries.

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INDIA'S COMPETITIVE POSITION AND IMPLICATIONS ON GLOBAL TRADE

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Abstract

History has been a witness of the prosperity that Indian subcontinent has earned through centuries. From the golden age until colonization, Indian civilization was being boasted as one of the most advanced economies in the world. Indian economic history traces back to the famous Indus valley civilization. It has been considered as advanced for its time, by historians. Existing from 3300BCE to 1300BCE, Indus valley civilization was an epitome of thriving economies and first urban civilization in the world sustaining on manufacturing, agriculture, and trade. Over centuries, the affluence of India increased. However, the fortunes began to decline, around late 17th- early 18th century with the inclination of east India company, in the country's rich heritage. Economy got stagnant, patterns of trade were manipulated to suit the crown, and an overall reliance on newly industrialized Britain increased. Though the balance of trade was favorable, it concealed a low level of industrialization in the country, with complete ignorance to the domestic producers. With the stroke of midnight hour, when India emerged as a free nation after 200 years of continuous struggle, a long and arduous road waiting ahead for the country to stand on its feet again. The balance of trade with the volume and composition of exports and imports were revamped completely. This article aims at creating a time lapse of India's position through the history. Highlighting the struggles that underwent to put India in global map, where it is today and how it is continuously on the road to betterment.

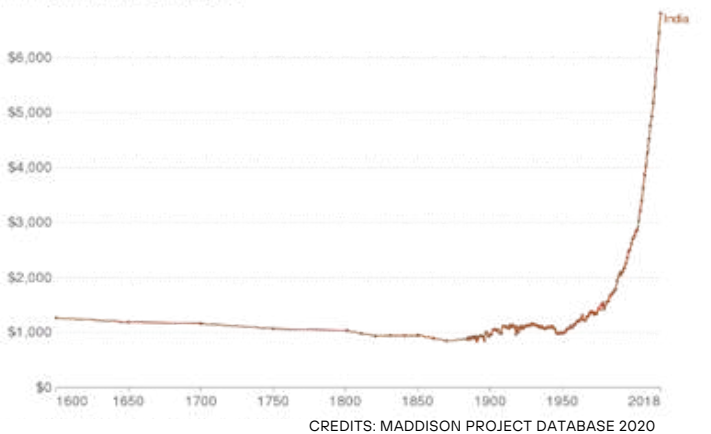
Introduction

India has held the flag of being one of the most advanced economies in the world for around, two and half millennia starting near the end of 1st millennium BC till the rise of British rule. The first minting of punch-marked silver coins by Mahajanpadas, 500BC, it embarked a strong trade and intensive commerce in and around the country. Around 300BC, Mauryan empire united the whole of Indian subcontinent, including the state of Tamilakam which was ruled by The Crowned Kings. The political unity in this ONE empire resulted in common economic system with an enhanced trade and commerce network. This led to an increased agriculture production in the subcontinent. This was not an end to the dynasties which brought prosperity to the country. Many classical and early medieval kingdom of Cholas, Pandyas, Cheras, Guptas, etc. continuously added to this golden age. Until 1000AD the country was driven by subsistence economy. There were no signs GDP growth between 1 to 1000AD.

It was only in the high medieval era that the GDP per capita began rising up in the graph. By 17th century when the country was once again united by the Mughal empire, India became the largest economy and a manufacturing power in the world, producing a quarter of the global GDP. The majestic subcontinent saw its downfall with the fragmentations and being conquered the very next century. It was India's economic prosperity and a thirst for oriental goods that Europeans came to India.

GDP per capita, 1600 to 2018

GDP per capita adjusted for price changes over time (inflation) and price differences between countries – it is measured in international-\$ in 2011 prices.



India's competitive position in global trade has been on the rise in recent decades. With its large and growing population of over 1.3 billion, India has a significant market for both domestic and international goods. Overall competitive position in global trade is likely to continue to strengthen in the coming years, as the country's economy continues to grow and the government maintains its focus on developing infrastructure and technology. As such, India is likely to remain a key player in the global market for years to come.

Colonial Economic History

One major change that occurred in Indian foreign trade from pre-colonial to Britisher's time was alterations in its commodity pattern. Although India continued to have an export surplus, the pattern of foreign trade turned upside down. For instance, from the exporter of cotton textiles India was converted into an importer of machine-made cotton textiles from Europe, thereby ruining India's rich traditional handicrafts.

India's economy and foreign trade position during colonial rule was vastly different from its current position. India accounted for around 20% of the world's GDP in the 18th century, but this figure fell to around 4% by the end of the colonial era in 1947. During the colonial era, India was primarily an exporter of raw materials, such as cotton, jute, and tea, and an importer of finished goods from Britain. This trade relationship was heavily skewed in favor of the British, who used India as a captive market for their goods and as a source of cheap raw materials.

The impact of colonialism on India's economy was profound. British policies and practices, such as high taxes and land revenue, forced many Indian farmers and workers into poverty, which further weakened the country's economy. Additionally, the British imposed

restrictions on Indian industries in order to protect their own manufacturing interests, which further stifled economic growth.

Despite, India's economy did experience some growth during the colonial era, particularly in the areas of agriculture and textiles. However, this growth was largely driven by the demands of the British market, rather than by development of India's own industries. By the end of the colonial era, India's per capita income was less than half of what it was in 1757.

Since gaining independence in 1947, India has made significant strides in developing its economy and becoming a competitive player in the global market. Today, India is the world's sixth-largest economy, with a GDP of over \$2.7 trillion. While the impact of colonialism on India's economy was significant and long-lasting, India has made impressive progress in recent decades and is poised to continue to grow and thrive in the global market.

Post Independence History

After gaining independence in 1947, India faced a number of economic struggles. The country was left with a weak and underdeveloped economy, which had been heavily impacted by the policies and practices of the British colonial administration. India's new government faced the daunting task of rebuilding the country's economy and creating a sustainable path for growth and development.

A major challenge facing India after independence was the issue of industrialization. The country had a small and underdeveloped industrial sector, and the government faced the challenge of creating the infrastructure and incentives necessary to attract investment and spur growth. In response, the government launched a series of economic reforms, which included the nationalization of key industries and the creation of public sector enterprises. These reforms helped to spur growth in the industrial sector, but they also led to a large and inefficient public sector, which continued to be a drag on the economy for many years.

Another of the biggest challenges facing India after independence was the issue of food security. India had been heavily reliant on imports of food grains during the colonial era, and the new government faced the challenge of ensuring that the country had enough food to feed its growing population. In response, the government launched the Green Revolution in the 1960s, which saw the introduction of high-yielding varieties of crops and significant investments in irrigation and other agricultural infrastructure. This helped to

increase food production and improve food security in the country.

India also faced significant challenges in the area of foreign trade. The country had been heavily reliant on exports of raw materials during the colonial era, and the new government faced the challenge of developing new markets and expanding its export base.

In response, the government launched a series of economic reforms, which included the liberalization of trade and investment policies and the creation of special economic zones. These reforms helped to attract foreign investment and expand India's export base, but they also led to increased competition and a widening income gap between the rich and the poor.

India's trade policies and practices have evolved significantly since gaining independence in 1947. In the early years after independence, India pursued a policy of import substitution, which aimed to reduce the country's dependence on foreign goods and promote domestic industries. Under this policy, the government imposed high tariffs on imported goods and provided subsidies to domestic industries.

While this policy helped to promote the growth of domestic industries, it also led to a lack of competition and inefficiencies in the economy. In the 1990s, the Indian government began to shift towards a more liberalized trade policy, with a focus on increasing exports and attracting foreign investment.

Current Scenario

India's position in global trade has been growing stronger in recent years. The country has emerged as a major player in international trade, with exports totaling to \$330 billion in 2020. Key exports include petroleum products, gems and jewelry, pharmaceuticals, and textiles. India has also signed quite many free trade agreements (FTAs) with other countries and economic blocs, including ASEAN, Japan, and South Korea, which have helped to increase trade between India and its partners.

One of the factors contributing to India's growth in global trade is its highly skilled workforce. The country is known for its strong talent pool in areas such as information technology, engineering, and pharmaceuticals. India's software and services industry, in particular, has become a major source of exports and foreign exchange earnings. The industry is expected to continue to grow in the coming years, driven by factors such as the increasing demand for digital services and the government's focus on promoting innovation and

entrepreneurship.

India's Global Trade Position

India's trade has been growing steadily over the last 5 years, with the country emerging as a major player in the global market. In 2016, India's total trade was valued at \$643 billion, with exports accounting for \$261 billion and imports accounting for \$382 billion. By 2020, India's total trade had increased to \$794 billion, with exports totaling \$330 billion and imports totaling \$464 billion.

India's position in global trade has also been strengthened by its strategic location, which provides a gateway to the markets of Southeast Asia and the Middle East. India's location has made it an attractive destination for foreign investment, with many multinational companies setting up operations in the country to take advantage of its growing consumer market and skilled workforce.

India has also been actively working to promote regional economic integration and cooperation. As a member of the South Asian Association for Regional Cooperation (SAARC), India has been working with its neighbors to promote greater trade and economic cooperation in the region. Additionally, India has been working to strengthen economic ties with other countries in the region, such as Japan and South Korea, through initiatives such as the India-Japan Comprehensive Economic Partnership Agreement.

India's trade with US has been boasted in the recent times. The pharma exports to the US shot up 25% to \$4.8bn during Apr-Dec on 2019. This was followed by gems and jewelry trade from US to India which fell 11% to 7.1bn in the same year. The trade surplus of India with US increased from 11.8bn to 12.6bn in the years 2018-19.

Overall, India's position in global trade is likely to continue to strengthen in the coming years, as the country continues to grow and develop its economy and trade sector. With a highly skilled workforce, a diverse range of industries, and a strategic location, India is well-positioned to remain a major player in the global market and to continue to grow and thrive in the years to come.

Conclusion

Looking down the memory lane, India was not always in such a steady pedestal in global trade. From pre-colonization to the struggles for independence and after finally being independent, there were thousands of hurdles, country and its leaders had to overcome. The challenges were numerous, the shortages were too many to count but the determination, will and a sense of

confidence from a free nation, made our economist, leaders and advocates turn tides to make a change. Despite the challenges, India has made significant progress in developing its economy and becoming a major player in the global market. Today, India is the world's sixth-largest economy, and the country has emerged as a major player in international trade. While there is still much work to be done to address the country's ongoing economic and social challenges, India's progress in recent years is a testament to the resilience and determination of its people and its leaders.



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ENERGY DEMAND FUNCTION ANALYSIS OF HIGH-FREQUENCY TRADING (HFT) INDUSTRY

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Introduction

High-Frequency Trading (HFT) is a type of algorithmic trading in which computer programs analyze market data and execute trades at high speeds and volumes.

HFT is important in finance because it provides liquidity to the market, reduces bid-ask spreads, and improves price discovery. It also enables traders to profit from small price differences between different financial instruments by executing trades in fractions of a second.

HFT has become increasingly popular in the past few decades, with estimates suggesting that HFT accounts for a significant portion of the trading volume in some financial markets.

However, there are concerns about the potential risks and instability that HFT may introduce to the financial system, such as flash crashes and market manipulation. Additionally, there is growing concern about the energy consumption of HFT and its impact on the environment, which has prompted research into the energy demand function of the HFT industry

Abstract

This paper investigates the energy demand function of the High-Frequency Trading (HFT) industry in the context of the finance domain. The growing concern over the energy consumption of HFT has prompted the need for a comprehensive analysis of the factors influencing energy consumption in this sector. Through a literature review and data analysis, this study focuses on trade volume, message traffic, and order book depth as potential determinants of energy consumption. The findings suggest a positive relationship between trade volume and energy consumption, highlighting the significance of HFT activities in the overall energy landscape. The results shed light on the need for energy-efficient strategies and future energy demand predictions in the HFT industry. The implications of this study provide valuable insights for policymakers and industry stakeholders seeking to address energy consumption challenges in the context of financial markets.

1.1 The growing concern about the energy consumption of HFT

The growing concern about the energy consumption of HFT stems from the fact that HFT operations require massive computing power, which in turn requires a significant amount of energy. This energy consumption has increased as HFT has become more prevalent in financial markets.

The energy consumption of HFT is not only costly but also has potential negative environmental impacts, as the majority of the world's energy is still produced from fossil fuels, which contribute to climate change.

Moreover, the energy consumption of HFT can also have an impact on the stability and efficiency of financial markets. HFT algorithms require real-time access to market data and extremely fast processing speeds, and any disruptions to the power supply or cooling systems could lead to system failures, which can cause significant losses for traders and investors.

Furthermore, the large energy consumption of HFT can also strain local power grids and raise concerns about energy security. In some cases, the high energy demand of HFT may also contribute to the need for more fossil fuel-based energy production, which may have additional environmental impacts.

Overall, the growing concern about the energy consumption of HFT highlights the need for a better understanding of the energy demand function of the HFT industry and potential strategies to reduce energy consumption and promote sustainable financial markets.

1.2 Objectives of the study

The objectives of this study on the energy demand function of the HFT industry could include the following:

1. To identify the main drivers of energy consumption in the HFT industry, such as the size of the market, the number of trades executed, etc.
2. To establish a relationship between the energy consumption of HFT with the identified drivers of energy consumption, statistically.
3. To evaluate the potential environmental impacts of the energy consumption of HFT and highlight areas

where energy efficiency measures could be implemented.

4. To provide policy recommendations to reduce the energy consumption of the HFT industry, promote sustainable financial markets, and mitigate potential risks to the stability of the financial system. Overall, the objectives of this study aim to provide a better understanding of the energy demand function of the HFT industry and its potential impacts, as well as to inform policy decisions that promote sustainable and efficient financial markets.

1.3 An outline of this study

This study on the energy demand function of the HFT industry will follow a structured outline that begins with an introduction to the background and context of HFT. The literature review section will define and explore the history of HFT and summarize previous studies on the energy consumption of HFT, as well as other related literature on energy efficiency in the financial industry. The methodology section will describe how the data sources, statistical analysis, and codes written will be used for the analysis. The data sets utilized section will provide a description of the data sets used in the study and the data cleaning and preprocessing methods. The results section will present the energy consumption estimates for the HFT industry, an analysis of the main drivers of energy consumption, and a comparison of energy consumption between HFT and the drivers of energy consumption. The recommendations section will provide policy recommendations for reducing energy consumption in HFT, promoting sustainable financial markets, and suggestions for future research.

2 Literature Review

Through the literature that I have reviewed, I have noted down some three factors which seem to influence the energy demand function of high frequency trading according to various resources. The factors are as follows:

1. Trade volume
2. Message traffic
3. Order book depth

A significant portion of the arguments presented in this report extensively references the scholarly work titled "QUANTIFYING THE HIGH-FREQUENCY TRADING 'ARMS RACE'" authored by Matteo Aquilina, Eric Budish,

and Peter O'Neill. This paper delves into the technical and quantitative aspects of high-frequency trading, shedding light on the factors that impact energy consumption within this domain. Furthermore, it elucidates the recent advancements witnessed in the world of trading since the 1990s. Initially dominated by human traders operating on trading floors, pits, and desks, the financial market gradually transitioned towards electronic platforms encompassing major asset classes such as equities, futures, treasuries, currencies, and options. The paper highlights this transformation and emphasizes the increased potential for transactional efficiency.

This paradigm shift has sparked numerous discussions on the significance of speed in modern electronic markets. A prominent concept that emerges in this context is "latency arbitrage," which exploits disparities in information transfer speeds. The paper provides an illustrative example by citing the existence of 16 different exchanges in the United States, along with over 50 alternative trading venues, creating ample opportunities to capitalize on latency arbitrage.

This dynamic environment has sparked intense competition among market participants, giving rise to what is commonly referred to as an "arms race." The objective is to establish an optimal infrastructure that enables executing superior trades compared to competitors. In the past, this race was measured in milliseconds; however, it has now progressed to the realm of microseconds and even nanoseconds.

The escalating tempo of this competition vividly portrays its fiercely competitive nature. Additional sources, such as the article titled "One Day, the Stock Market Could Eat the Power Grid," reinforce the notion that there appears to be no end in sight for this race. The absence of natural constraints exacerbates the situation. There are no theoretical limits on the number of participants in the stock market, the number of trades they can generate per second, or the notional amount of money that can be shuffled among market participants, thanks to derivatives.

In summary, this unbounded competition highlights the increasingly intense nature of the arms race within the market, where participants continually strive to enhance their trading capabilities and outperform their rivals.

This gives us a good setup for the report to present the factors mentioned in the literature. Given below is a brief description of each of these factors and the literature that mentions the dependence of each of these:

1. Trade volume: The individual value of each trade may seem relatively small, often equivalent to just a fraction of a price tick. However, due to the sheer magnitude of trading volumes involved, the cumulative stakes become significant. This clearly underscores the significance of our initial key factor that contributes to the energy demand function in the realm of high-frequency trading (HFT). Trade volume refers to the total number of shares or contracts exchanged within a specific timeframe. In the context of HFT, greater trade volumes indicate heightened market activity and trading frequency. The volume of trades plays a critical role in determining energy consumption since it directly impacts order processing, data management, and infrastructure usage. A larger trade volume typically necessitates increased computational resources and data transmission, which in turn can result in heightened energy consumption.

2. Message traffic: In the world of high-frequency trading, there are intense competitions taking place worldwide. These competitions involve various technologies such as microwave links connecting different market centers, fiber-optic cables spanning across oceans, trading algorithms implemented on specialized hardware, exclusive access to data feeds from exchanges, strategic locations near exchanges (even on rooftops), and, importantly, highly skilled professionals. These elements highlight the crucial role of message transfer in high-frequency trading. Therefore, in this paper, we analyze data from stock exchange messages to measure a significant

aspect of high-frequency trading known as "latency arbitrage."

Our findings reveal that these latency-arbitrage races occur frequently and happen at incredibly high speeds, often lasting between 5 and 10 millionths of a second. These races contribute to a significant portion of overall trading volume, accounting for approximately 20%. Message traffic refers to the flow of trade-related messages exchanged between market participants. These messages include buy and sell orders, order cancellations, and trade confirmations. In high-frequency trading, where fast information exchange and real-time decision-making are vital, the volume of message traffic plays a crucial role in determining energy consumption. Higher message traffic requires more network bandwidth and data processing, leading to increased energy usage within the trading infrastructure.

3. Order book depth

The distinction between message data and the more commonly known limit order book data lies in their content. Unlike limit order book data, message data captures both successful and failed attempts to trade or cancel orders. This unique characteristic allows researchers to observe both winners and losers in a trading race, which is not possible with limit order book data since it only shows successful trades.

However, message data does not include the state of the limit order book, which includes information about prices and quantities at the best bid and offer. Including this information in the messages would make them larger and slower. Therefore, it becomes necessary to pay attention to the order book itself, which brings us to the third important factor discussed in this paper: order book depth.

Order book depth refers to the availability of buy and sell orders at various price levels in the market. A deeper order book indicates a higher level of liquidity and trading activity. It plays a crucial role in the efficiency and speed of trade execution.

Deeper order books may require more computational processing, data transmission, and storage, which can lead to increased energy consumption by the trading infrastructure. It is essential to consider order book depth in the analysis of energy demand in high-frequency trading.

In this study, while acknowledging the significance of factors such as message traffic and order book depth in influencing energy consumption in high-frequency trading (HFT), the analysis has been focused specifically on trade volume as a primary determinant. This approach aims to provide a comprehensive understanding of one of the major factors contributing to energy consumption in HFT. By examining the relationship between trade volume and energy consumption, this analysis aims to shed light on the substantial impact of trade volume on energy demand within the HFT industry. Nevertheless, it is essential to acknowledge the potential influence of other factors, such as message traffic and order book depth, which warrant further investigation in future studies.

3 Methodology

Based on the research proposition outlined in the report, this study aims to investigate the relationship between three independent factors - trade volume, message traffic, and order book depth - and the dependent variable, 'energy demand'. Given below is the equation that would depict this dependence.

$$\text{HFT Energy Consumption} = \alpha + \beta_1 \cdot (\text{traded volume}) + \beta_2 \cdot (\text{message traffic}) + \beta_3 \cdot (\text{order book depth}) + \epsilon \quad (1)$$

Here, ' α ' is the intercept. ' β_1 ', ' β_2 ' and ' β_3 ' are the constants that show the dependence of the HFT energy consumption with trade volume, message traffic, and order book respectively. ' ϵ ' is the error term.

To maintain the report's conciseness, the focus of the analysis is specifically on the dependence of high-frequency trading (HFT) energy consumption on trade volume.

The study utilizes two primary datasets for analysis. Firstly, the equity segment market summary data obtained from BSE India provides the monthly number of trades as a measure of trade volume.

Secondly, the monthly electricity statistics of the world are used to gather data on global final electricity consumption, which serves as an estimate of HFT energy consumption. This assumption is based on the understanding that equity markets represent a significant portion of the overall markets engaged in high-frequency trading and that HFT energy consumption correlates positively with other factors, particularly total electrical energy consumption.

To visually depict the relationship between energy consumption and the number of trades, a scatter plot is generated, accompanied by a regression line. The scatter plot presents the data points as individual dots, while the regression line illustrates the observed relationship. A positive slope on the regression line indicates a positive relationship between energy consumption and the number of trades, while a negative slope suggests a negative relationship.

4.1 Equity Segment - Market Summary For the Time: April 2021- February 2023:

*1

File name: '2021-2023 Market Summary.csv'

Description: As the name suggests, the dataset is a collation of 2 datasets posted on BSE India's website namely - 'Equity Segment - Market Summary For the Year:2021-2022' and 'Equity Segment - Market Summary For the Year:2022-2023'.

We have extracted the time period April 2021 - February 2023 for matching the data timeline with the monthly electricity statistics. The data contains the 'Year' and 'Total No. of Trades' columns which are important for our study.

4.2 Monthly Electricity Statistics (till February 2023):

*2

File name: 'MES 0223 usable.csv' Description: This dataset, updated monthly, provides electricity production and trade data for OECD Member Countries and electricity production data for a selection of other economies. We have extracted the time period April 2021 - February 2023 for matching the data timeline with the equity segment

market summary data. The data contains the 'Time', 'Balance' (Having Final Consumption data), 'Value', and the 'Unit'(uniformly GWh) columns which are important for our study.

5 Results

*3

Extracting data from the Monthly Electricity Statistics Data:

```
import pandas as pd
import numpy as np
```

```
# Read the CSV file into a pandas DataFrame
df = pd.read_csv('MES 0223 usable.csv')
```

```
# Filter the DataFrame to include only rows with
Balance='Final Consumption (Calculated)'
filtered_df = df[df['Balance'] == 'Final Consumption
(Calculated)']
```

```
# Convert the 'Value' column to numeric
filtered_df['Value'] = pd.to_numeric(filtered_df['Value'])
```

```
# Group the DataFrame by month, year, and sum the
'Value' column
```

```
filtered_df['sum values'] = filtered_df.groupby(['Time'])
['Value'].transform('sum')
```

```
# Remove NaN values from the 'sum values' column
filtered_df = filtered_df.dropna(subset=['sum values'])
```

```
# Divide the 'sum values' column by 106
filtered_df['sum values'] = filtered_df['sum values'] / 10**6
```

```
# Remove the 'Country' column
filtered_df = filtered_df[['Time', 'sum values']]
```

```
# Remove repeating rows based on the 'Time' column
filtered_df = filtered_df.drop_duplicates(subset=['Time'])
```

```
# Keep the first 23 rows in a new DataFrame
new_df = filtered_df.head(23)
```

```
# Display the new DataFrame
new_df
```

Saving the MES data from the new dataframe to a csv file:

```
# Save the new DataFrame to a CSV file
new_df.to_csv('new_df hft.csv', index=False)
```

Extracting the required data from Equity Segment - Market Summary data:

The data for 2021-2022 and 2022-2023 time periods are combined to get data for the time period Apr-21 to Feb-23. The 'Year' and 'No. of Trades' columns are important to us. This data is put into the file named '2021-2023 Market Summary.csv'. Forming a new csv file with data extracted from both the datasets:

-

The 'No. of Trades' column from '2021-2023 Market Summary.csv' is added to the 'Time' and 'sum values' columns from the 'new_df hft.csv' file according to the months and years mentioned in 'Time' (in 'new_df hft.csv') and 'Year' (in '2021-2023 Market Summary.csv') columns in their respective files.

The name of the 'sum values' column is changed to 'Final Electricity Consumption(Calculated)(106GWh)' in the new file 'new_df hft volume.csv' which has the columns - 'Time', 'Final Electricity

Consumption(Calculated)(106 GWh)' and 'Number of trades'. The 'new_df hft volume.csv' is then uploaded to carry out a regression analysis on it.

Visually depicting the relationship between energy consumption and No. of trades:

```
import matplotlib.pyplot as plt
import seaborn as sns

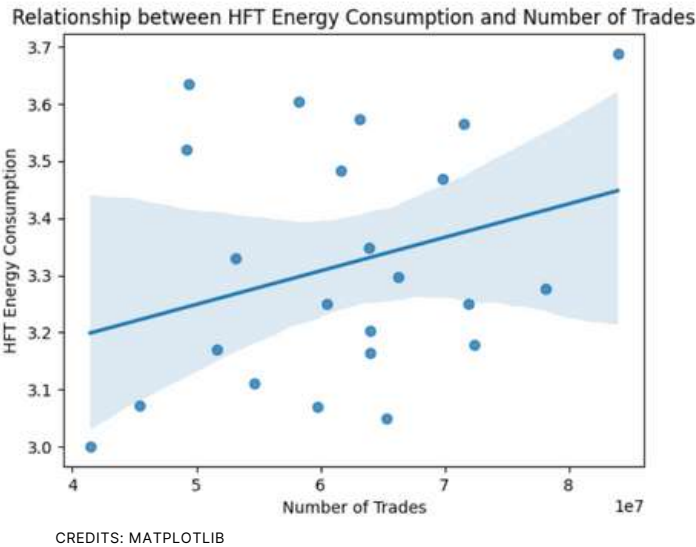
# Read the data into a pandas DataFrame data
data = pd.read_csv('new df hft volume.csv')

# Create a scatter plot with regression line
sns.regplot(x='Number of trades', y='Final Electricity Consumption(Calculated)(106 GWh)', data=data)

# Set plot labels and title
plt.xlabel('Number of Trades')
plt.ylabel('HFT Energy Consumption')
plt.title('Relationship between HFT Energy Consumption and Number of Trades')

# Display the plot
plt.show()
```

Output:



(It is visible that the HFT energy consumption is positively correlated with the number of trades. (The assumptions should not be forgotten but this data is the most accurate representation that could be carried out using the two datasets).

6 Recommendations

Based on the findings from various research papers, articles, and references, it is evident that the energy consumption of the high-frequency trading (HFT) industry, in terms of overall energy consumption by financial institutions or other energy-consuming

industries is relatively insignificant. Reports indicate that data centers, which encompass HFT operations, account for approximately 1-2 percent of global electricity usage, and HFTs themselves likely represent only a fraction of that percentage. However, it is important to recognize that there are currently no specific restrictions in place to curb the potential energy consumption of the HFT industry. Considering these observations, a key recommendation arising from this report is to focus on predicting the future energy demands of the HFT industry. This entails developing methodologies to anticipate the energy requirements associated with the growth and evolution of HFT activities. By doing so, it would be possible to establish appropriate measures, including the potential implementation of limits or caps, on the factors discussed in this report—namely, trade volume, message traffic, and order book depth. Such proactive measures would help ensure that the energy consumption of the HFT industry remains aligned with sustainable energy goals and minimizes any potential impact on the overall energy landscape.

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SECURITIZATION AND DERIVATIVES IN THE AIRLINE INDUSTRY - COMMERCIAL FLIGHT TICKETS

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Abstract

The following study attempts to analyze the possibilities and future prospects of flight ticket securities and derivatives. The purpose and the market creation of the same are discussed. The study then details the bundling of such securities, the complex nature of the valuation of such securities and their derivatives. The study concludes by providing a holistic perspective on securitization and derivatives and imploring sustainable growth and maintenance of these markets.

Exordium - State of the Asset-Backed Securities and the Derivatives Market

As of the end of the financial year 2021-22, the ABS market stood at roughly \$700 billion, rising gradually from \$600 billion at the end of 2013 to roughly \$750 billion at the end of 2019, before falling slightly and then recovering as the pandemic abated. While auto ABS have seen a steady rise, credit card and student loan ABS have seen a gradual decline, which has been captured by an ever-increasing share of non-traditional ABS even as the ABS market did not grow significantly, indicating an appetite for new investment avenues and higher risk appetites, even for fixed income portfolio holders.

Derivatives have been one of the most important financial market developments and they are widely used as a tool for risk management and speculation all over the world. The notional value of outstanding OTC derivatives rose from \$598 trillion at 2021 end to \$632 trillion in June 2022. The gross market value of outstanding OTC derivatives rose from \$12.4 trillion to \$18.3 trillion in the same period. Some estimates even approximate the derivatives market size (in terms of notional value) to be a quadrillion dollars, ten times the global GDP.

While the global equity market capitalization declined about 20% in 2022, representing a wipe out of more than \$25 trillion, the amount of derivatives traded on exchanges increased by a sharp 34.4% to \$84.76 billion. It is noteworthy that this increase was driven by a 63.8% increase in options, which account for 65% of all derivative contracts traded, while futures only grew 0.7%.

Single stock options, commodity futures and ETF futures were the only derivatives where volumes declined year on year.

Such a sharp increase in appetite for derivatives indicates a more financially inclined global population with hedging and speculation needs who wish to earn a return above the benchmark rates through such instruments and have a higher risk appetite. Such a rise has also been fueled by the fluctuations in asset prices since the pandemic and increased market integration along with lower transaction costs with more market players and the sheer ease of trading. Trading applications and improvements in communication networks make such markets accessible to a majority of the population.

Innovations in derivative markets and development of more sophisticated risk management tools and the growing demand and supply of risk management professionals has led to a wider selection and application of risk management strategies, derivatives being the primary among them.

Along with hedging, in order to benefit from the growing market trends and capitalize on the increasing risk appetite of traders globally, the possibility of a new line of securities and derivatives in the airline industry is created.

An overview of existing airline industry related indices, securities, and derivatives

While fuel costs have been hedged by the airline industry for a very long time through various contracts and derivatives, it is only recently that Airbus came up with Skytra, the world's only airfare benchmark administrator facilitating financial risk transfer for the air travel industry. The Skytra Price Indices (SPIs) are designed to underpin risk transfer solutions such as air traffic insurance products, index-based lease rates or derivatives. There are seven SPIs measuring the cost of air travel and are designed for hedging purposes to protect against ticket price volatility. SPIs can be used as a reliable reference price for airline revenue hedging, travel budget hedging and performance benchmarking. Skytra's long-term goal is to support futures and options based on these benchmarks allowing the trillion-dollar global airline industry to access such risk management tools for the first time. With such efforts being undertaken on a large scale, the writers believe that there is much scope for securitizations and derivatives for commercial flight tickets.

Introduction

The revenue of commercial airlines worldwide came close to \$800 billion in 2022, lagging behind revenues of pre-pandemic levels but showing a strong recovery for the industry. With a growing appetite for non-traditional asset backed securities and derivatives (especially options), as detailed above, the researchers propose an implementation of commercial flight ticket securities and derivatives. The underlying asset would actually be the inventory of the airlines, that is the flight ticket, entitling the holder to flight service, and the revenue or cash flows arising from their sale being what backs the security itself.

A stable ABS market for commercial flight tickets would result in revenue assurance for commercial airlines, and that to a considerable period before the actual provision of service. The airline would have a fiduciary responsibility towards the holders of the securities for the execution of flights and such obligation to ensure that all flights do take place or refund the amount would rest solely on the airline or the airline may even insure itself against an occurrence where the flight itself does not take place. The investors in the flight ticket ABS would only be subject to the risk of ticket price fluctuations and tickets remaining unsold (which the airlines would try to minimize on a best-effort basis).

It is of great importance that the pricing of flight tickets be done independent of any financial instrument relating activity. Prices must be unbiased and not be representative of any special interests held by the airline. The airline would become an agent of the investors in ticket securities and would have to hold no conflict of interest to ensure fairness. Regulation and supervision would be necessary for the same. Pricing should purely be as if the securities and derivatives did not exist in the first place. As long as pricing remains free of irrational and frequent fluctuations and is unbiased, there is a huge scope for growth in this market.

A commercial flight ticket financial market would also do the job of soaking up excess liquidity in the market. Excess liquidity in any market is disastrous, especially in the ABS and derivatives market as was seen when the housing bubble burst in 2008, leading to the global financial crisis. A very high derivative to underlying security ratio is another reason why the 2008 crisis shook the foundation of global financial stability. It becomes necessary to soak up excess liquidity and propensities to risk in a sustainable manner.

Mispricing and inefficient information are the two killers of stability in financial markets and for the purpose of our proposal for commercial flight ticket securitization and derivatives, these must be non-existent. A good tool such as this shall remain virtuous if people and the system choose not to abuse it. This paper advocates for sustainable and holistic growth and innovation in the financial markets at its core, more than anything.

Market Creation

The Sell-side would be made up of all commercial airlines or the financial institutions they lease from, which may choose to have these securities underwritten to ensure more buyers for these securities. The buy-side would be made up of fixed-income portfolio investors and speculators who wish to bet on macroeconomic trends, the volume of people traveling by air being a proxy in which they could invest. They may wish to bet on a particular period, an airline, specific locations, fuel prices or any other factor which affects ticket prices.

The sell-side would hedge their risk while the buy-side would earn an almost assured return as the closer the date of a flight comes, the higher its tickets are priced. The bundle of tickets would be sold at a slight discount a certain time period before the flight, the bundle having been placed in a special purpose vehicle while remaining in the books for accounting purposes should the need arise.

Such securities would provide a relatively safe investment for buyers of such securities because of the fact that much of the revenue on the part of the airlines is assured through travel and tourism agencies and even airlines themselves are conservative in terms of the number of flights they carry out with respect to the demand.

While derivatives would be easily made upon an existing security, it is called into question how such numerous amounts of tickets would be securitized efficiently to maintain a manageable amount of instruments in the market and provide sufficient liquidity to them. The answer to this lies in the securitization and bundling of commercial flight tickets

Securitisation and Bundling of Commercial flight tickets

The extent to which airline tickets are affected by various factors are all things that one would consider when bundling tickets together. These would also be the factors a trader or investor would take a bet on when exposing themselves to any speculation or hedge. The various factors affecting flight ticket prices are -

- **Supply and Demand** - The most basic of factors that influence the price of anything. An anticipated rise or fall in either of these would be a significant driver in the prices of securitized tickets, as well as their derivatives.
- **Competition** - The airline industry has been an Oligopoly and will continue to be so due to the high barriers of entry and huge capital expenditures required. Oligopolies are the markets that are most susceptible to price wars and competition among the handful of big players, even though cooperation and cartels can exist in Oligopolies. Nevertheless, it makes the industry susceptible to even the actions of a single member.
- **Seasonality** - This would be a major speculating point for many investors. In festive seasons, prices are inclined to go up drastically. Apart from that, the seasonality of tourism is something that affects ticket prices and the airline industry significantly.
- **Fuel Prices** - One of the most volatile parts of the airline industry's costs, fuel prices would directly contribute to a movement in ticket prices and these securities can also be used as a proxy for betting on fuel prices in combination with some of the other factors.
- **Length of the route covered and the route taken** - While a longer route would obviously imply a higher cost, sometimes this is not the case in connecting flights.
- **The Departure and Arrival locations** - These would be key while indulging in speculations. While large cities and metropolitan areas could be priced high because of demand, they would also have the scalability advantage that smaller towns do not. These are some of the factors that could be at play when investors would attempt to value and speculate on prices.

Time of booking - This would be a major factor upon which investors could speculate and which would drive significant demand. This is because of the fact that as the date of the flight comes closer, the ticket price increases. Data also tells us that 85% of global ticket sales take place 90 days or fewer before take-off.

So the time of booking tickets is an essential factor in determining how much revenue the airlines, or after securitization - how much cash flow the investors can generate for themselves.

- **Ancillary fees** - Airlines often charge for excess baggage, in-flight services like meals and seat selection. It is up to the airlines' discretion whether they choose to model the revenue generated from these services into their securities pricing model, entitling investors to cash flow from such ancillary services as well.
- **Business/Executive and Economy Class** - The proportion and amount of revenue coming from different seating classes is also something investors may wish to speculate upon and something which would be a factor in the pricing of tickets and securities.
- **The Airline** - The airline itself would be a key factor that one might bet upon while investing in such securities. It might be a proxy for its shares. Even private airline companies may have the option to have their securitized tickets listed on exchanges.
- The kind of aircraft used for the flight
- The free inflight services provided by the airline

In different contexts, an airline may expect a different proportion of their seats to get filled. Sometimes, the airlines may sell more tickets than there are seats available on the flight itself, to cover up their no-show rate as well. In some other cases, there may be a significant portion of the flight unbooked. While bundling and pricing tickets, the airlines must take into account all past and present data to estimate to a reasonable degree of accuracy what the bookings of this flight might turn out to be. Adding a commission for their listing and exchange-related costs and discounting their expected revenue from the securitized tickets, an airline can sell Commercial flight ticket-backed securities. Investors may even pressurize airlines to streamline and make their operations more efficient to avoid volatility in the percentage of seats booked. This would eventually increase the profitability of airlines.

For bundling purposes, let us assume the simplest of cases - A Los Angeles to New York flight run by a hypothetical ABC Airlines Inc., no stoppages or routing through another airport, at 8 pm on 23 December 2023. Let this flight be purely economy class and we shall ignore any ancillary fees. The airline would have priced the tickets, and hence the securities based on fuel prices, the distance covered, the timing of the flight and considering any relevant seasonality, which in this case would be the Christmas Season.

Despite several competitors running similar flights as well, ABC Airlines is confident that it'll have a fully booked flight running, but just in case, accounts for a small no-show rate of 1-2% and overbooks tickets by that amount, or simply may just choose to confiscate the ticket price paid by the no shows and refuse a refund. Either way, the airline anticipates all 520 tickets to get booked on their Airbus A380. Taking an average price of \$200 per ticket sold based on their analysis of pricing and their anticipation of future probable events taking place on or before the 23rd, the airline values its tickets at \$104000 on 23rd September 2023 when securitizing these tickets. The airline would discount these tickets at an appropriate rate, say 8%, leading to a 2% discount rate. The airline anticipates \$200 by way of listing charges and chooses to incorporate those as well, leading to a final cost of \$102120 for the bundle of tickets, which would roughly generate a return of 1.84% for the investors over 3 months, should the expected revenue target be met. Any investor valuing the ticket bundle at or over its cost of \$102120 would invest in it, in parts or in whole. While those who value the security below its price would choose some other deal more lucrative for them. This was a purely homogenous ticket bundle and its value was relatively easy to perceive.

When ticket bundles get more and more heterogeneous, valuing and pricing them may get more complicated for investors, who'd want to analyze the covariance and correlation of different kinds of tickets and the different factors affecting them as well. The lesser the amount of bundles existing in the market, the more liquidity and derivatives could be provided to them.

Unlike the major kinds of ABS, securitized flight tickets are a short-term security and would only require a single accrual of cash flows at maturity or the day of take off, or the day of or the day after landing in case of ancillary fees being accrued to the investors as well. Airlines would be able to invest the cash flows occurring from ticket sales into short-term investments to garner an extra gain as well, at the investors' and their discretion.

Investing in securitized flight tickets may be a more lucrative option for investors in comparison to the existing SPLs due to the fact that securitized flight tickets offer specificity and different combinations of these securities may be invested in for those seeking a customized and tailored portfolio. While securitization may be restricted by the fact that two separate airlines may not merge their securities into one bundle, this can be done if the same financial institution is leasing aircrafts to multiple airlines.

Securitization would greatly stabilize the short-term fluctuations in airlines' revenue and transfer much of the risk to investors who are not averse to such risk, absorbing the excess liquidity in the financial markets and giving a chance for both parties to benefit from such transactions. Increased stability in their profitability would also make airlines a more stable industry in general and perhaps even more lucrative to investors, even though securitization would stabilize the revenue of airlines and not increase them.

Where there is securitization, there may also be scope for tranches. Senior tranches may be allowed to draw out the proceedings from the sale of flight tickets first while the junior tranches would be more exposed to the risk of tickets remaining unsold, but also would gain an excess return to compensate them for this risk should the tickets sold later be sold at a higher price, which is often the case with bookings done close to the flight date.

Derivatives of Securitised flight tickets

Given below is a brief description of how major kinds of derivatives would work for securitized commercial flight tickets -

Futures and Forwards - Anticipated movements in the price of securitized and bundle tickets could be traded upon in standardized and unstandardized forms in the forms of futures and forwards which could work on physical or cash delivery.

Options and Swaps - Calls and Puts would be relevant in the industry for buyers and sellers wanting to bet on macroeconomic trends, price movements and travelers' behavior. Premiums would be traded and cash delivery would take place at expiry. Meanwhile Swaps, especially in OTC, would be easily implemented and both of these instruments would serve greatly in hedging airlines' risk as well as become a tool for macroeconomic and region-wise speculation, among other things.

Disclosure, Regulation and Supervision

A lot of information by the way of ticket sales and underlying data would need to be released to the investors and the general public to help them make more informed decisions since trading in such securities would require market knowledge and significant skill.

While that would greatly improve the transparency and eventually the efficiency of the airline industry, it would initially lead to the costs of making information publicly available. Airline companies, especially private ones, would not be inclined to be subject to more disclosure requirements and legal considerations. They would also incur costs in hiring the necessary professionals for the various accompanying caveats with the securitization of their tickets. While some costs may be saved by restricting market participants to players in the airline industry and institutional investors who would have the know-how to manage all associated risks, ideally everyone should be able to benefit from this innovation in the financial industry and if such scalability is achieved by the airline industry and financial markets, the monetized airline industry would face largely reduced volatility and increased liquidity.

Similar to how the Skytra Price Indices are regulated by the Financial Conduct Authority, the flight ticket securities and derivatives would also become subject to scrutiny, regulation and supervision, domestic as well as international in some cases.

Disclosure, Regulation and Supervision of these securities and their derivatives is absolutely key. Trying to pump out more instruments to absorb all liquidity to earn more commissions and revenue is something that has drastic consequences as has been seen in the financial crisis of 2007-08. It is of extreme importance that these instruments be regulated and all adequate disclosures be made in an accurate and timely manner. In eras of excess liquidity and financial optimism, it can be so easy to chase growth and value that doesn't exist and inflate the investors' perception of prices. With the volume of derivatives growing increasingly larger than the securities underlying them, a financial crisis like the one seen in 2008 has the potential to wipe out unthinkable amounts of wealth.

So while there are costs to such restraints and controls, they serve the greater good and prevent investors and speculators, which are humans after all, to get caught up in their own fallacies and behavioral tendencies.

Conclusion

This paper chooses not to deal with any data or facts and figures because of the fact that companies like Skytra are much more well-equipped with industry knowledge and years of data through their collaboration with companies in the airline industry. They are much more suited than the writers to undertake a task this mammoth of a scale. Despite not having analyzed data, the writers hold faith in the concept and scope of securitized tickets and their derivatives.

Though a few alternatives like fuel price hedging and speculation, associations between or among airlines, insurance, features like locking in price and booking later and flexibility in the types of ticket products offered exist and do soak up some of the demand that is there for the instruments proposed in this paper, not all purposes that the writers seek to achieve can be fulfilled by these alone. There lies tremendous scope in monetizing the volatile airline industry and it serves to soak up excess liquidity and demand in the Asset-Backed Securities and Derivatives market. Another scope of this paper lies in that it just doesn't explore securitizing flight tickets, it explores securitizing inventories which may break out and become its own fully-fledged market. There is a uniqueness to the kind of speculation and risks that investing in airline tickets and their derivatives offers investors and hedgers. As technology develops, air travel may become increasingly commonplace, making the industry and hence such securities and derivatives grow even larger in the amount of impact they may have.

Warren Buffet once called Derivatives 'Financial weapons of mass destruction'. It is a big task to prove such a great man wrong, but we collectively must do so. We must be better. We must come out of the cycle of greed and the chase for constant growth, looking for value that doesn't exist, that is a mirage. As this paper concludes, the writers hope that the global financial markets see a brighter, more sustainable future derived from true value, driven by good values.

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THE ROLE OF WEB 3.0 MARKETING IN ENHANCING CUSTOMER EXPERIENCE

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Abstract

Web 3.0, the next phase of the internet, is poised to revolutionize marketing and customer experience. This article delves into the impact of Web 3.0 on businesses, focusing on its key pillars: the semantic web, artificial intelligence, and natural language processing. The semantic web structures data for machine interpretation, enabling customers to establish vocabularies and data repositories. Artificial intelligence empowers computers to perform human-like tasks, while natural language processing enhances comprehension of spoken and written language.

In the realm of marketing, Web 3.0 presents both challenges and opportunities. The removal of third-party cookies disrupts targeted advertising, necessitating a shift towards highly customized user experiences. Businesses must leverage the decentralization of the web to tailor offerings to individual customers. Web 3.0 also empowers users to control their data, prompting organizations to engage in community marketing and prioritize data privacy.

To thrive in this new landscape, marketers must adapt their strategies. Without third-party cookies, they need to leverage various user data sources to effectively target consumers and deliver personalized content. Updated marketing approaches aligned with the opportunities and constraints of Web 3.0 are vital.

Introduction

Overview of Ethical Decision-Making in Organizations

Many organisations today view technology as a crucial resource for enhancing earnings and minimising expenses. With well over one trillion Uniform Resource Locators, the World Wide Web (hereafter referred to as the Web) is recognised as the fastest expanding publication medium of all time (URLs). Utilisation of the internet has grown at an estimated pace of 566% over the course of the past twelve years, making it the fundamental means of communication among individuals across the globe. The technology behind the Internet's management structure is developing at an even faster rate thanks to ever-increasing growth rates. Before developing into the more dynamic Web 2.0, the early Web, also referred to as Web 1.0, had static informational capabilities. The next version of the web, known as Web 3.0, brings with it both new potential and challenges. Web 3.0 was expected to alter how users interact with gadgets and networks, as well as how businesses utilise information to promote, sell, and manage their operations.

Diving into Web 3.0, it provides an extensively personalised user experience that has the potential to drastically change the landscape of digital marketing. Hence, companies must begin preparing for web 3.0 marketing in order to effectively plan and benefit from these new advancements.

How will Web 3.0 impact businesses?

The next phase of the internet, known as Web 3.0, strives to interact with individuals and equipment while still offering an accessible and open network. Blockchain technology, decentralisation, privacy, and security are some of the important components of web 3.0.

It has three key pillars:-

A. "Semantic web":

Structures internet data so that computers can interpret it the same as human beings can. This will provide the opportunity for customers to establish vocabularies, establish data handling rules, and create data repositories on the Web.

B. "Artificial intelligence":

Enabling computers to comprehend jobs that are normally performed or developed by humans.

C. "Processing of natural language":

Harnesses computing ability to comprehend spoken and written language.

Its impact on marketing and customer experience :

In the past, organisations employed a combination of public relations, advertising, and direct marketing to spread awareness about their products and offerings. But so far, with the introduction of Web 3.0, the digital environment has undergone a significant transition.

For instance, the removal of third-party cookies from popular online browsers may eventually make it more challenging for online marketers to target certain demographics. This action is necessary since these cookies are used to gather information about user's online activities. Targeted advertising and other marketing initiatives are expected to make efficient use of the information acquired.

A. Customised user experience :

Web 3.0's primary objective will be to provide customers with a tailored experience. Digital marketers will need to devise strategies to benefit from the internet's decentralisation and provide a tailored experience for their customers.

B. Data Capturing and Privacy :

Users will be able to manage their data using Web 3.0 while advertisers rely on it for targeted advertising. Organisations will need to engage upon community marketing to establish credibility and collect marketing data.

Updated marketing strategies will be required :

Digital marketers will need to adapt their approach in accordance to Web 3.0's influence in order to take advantage of new opportunities and constraints.

As third-party cookies will no longer be available, marketers will need to make use of a variety of user data sources to efficiently target consumers. This will facilitate the creation of more specific and targeted content.

What Next ?

The next phase in marketing has just begun with Web 3.0. In addition to harnessing new data sources, tracking marketing efforts across the digital-first buyer experience, and preserving user privacy, this new internet era will present a slew of new opportunities for software marketers.

Various applications are expected to allow individuals to get rewards for utilising the network and uploading content online, which is undoubtedly a make-shift phenomena given the current state of social media. Limited edition material may be turned into NFTs by Web 3.0 digital marketing companies to offer people ownership of it. By developing protocols that would enable users to vote and make decisions on system updates, it may also continue communicating with its users and including them in decision-making.

Together with the internet as a whole, the digital marketing sphere will undergo a revolution and transformation, moving from static Digital advertising to the creation of digital artworks or NFTs that showcase various businesses' most recent products. Capturing the future market and your ideal target market will depend on how businesses approach adapting to the evolving internet to create new services, personalised experiences, or perhaps digital environments. Marketing will also continue to become increasingly omnichannel, meaning that marketers will need to examine the whole customer journey and the multiple channels and touchpoints that our consumers use to connect with us, throughout the various stages of their customer life cycle.

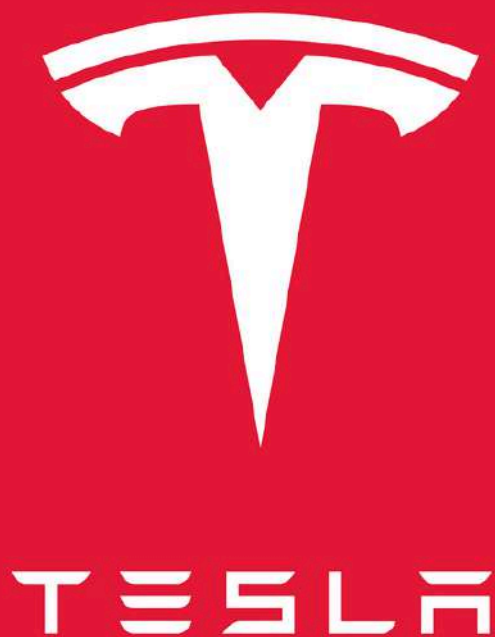
If used correctly and effectively, Web 3.0 may, in my judgement, be a very successful instrument to enhance customer experiences as it returns control of customer information to the consumer himself. Transparency plays a massive role in improving digital trust and loyalty while enhancing data protection and giving customers a favourable, immersive experience across all of a brand's channels.

To sum up, web 3.0 will have a big impact on marketing in the years to come, and marketers need to lead the way in this new revolution. So, it will be crucial for marketers and business owners alike to master web 3.0 marketing in order to achieve heights in enhancing customer experiences . Web 3.0 also creates new chances for digital marketing experts from several sectors to assist businesses in connecting with their clients in the emerging internet era.



UNDERSTANDING RELATION BETWEEN TESLA INC. STOCK PRICE AND SENTIMENTS

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CREDITS: TESLA

Abstract

There are more than 60 major stock exchanges including the New York stock exchange, Bombay stock exchange and the tiny ones. Of the 60 stock exchanges, top 16 form 87% of total market capitalization. The largest stock exchange is in the United States. A stock market is a place for buying and selling shares, bonds and securities of a company. The performance of a stock market of a company is a key economic indicator of the performance of the company. Stock market performance is also an indicator of world economic strength. The total market capitalization of publicly traded securities rose to US\$93.7 trillion at the end of 2020. The participants in the stock market include retail investors, institutional investors, mutual funds, index funds, investor groups, etc.

Consider the case when a company announces that it has won a bid for car manufacturing, this sends positive news to the market that the company has been successfully generating revenues. This kind of news usually leads to an increase in stock prices. Similarly, negative news regarding a company like increasing debt, overstating revenue, number of users can send a negative signal to the investors and reduce their confidence in the company. This type of news can lead to a decrease in stock price.

Chapter 1 Introduction

Objective:

This project aims to understand the relationship between the Tesla Inc. stock price and the sentiments shown on social media or newspapers. Messages in social media or news will be extracted from Twitter using Python. An exploratory data analysis will be performed on the data. The sentiment score for these processed messages will be calculated and a graph between sentiment score and Tesla Inc. stock price will help us understand if there is any direct relation between both the variables.

Methodology:

The project begins with a brief overview of stock markets and sentiment analysis. It is followed by the survey of literature to understand current work performed and their limitations. Inferring the limitations of the review, the probable variables affecting stock prices were determined. A graph and regression equation have been prepared to understand the effect of those variables.

Major Findings:

The sentiments are related to the stock prices and it does impact the stock prices. Any increase in sentiment score leads to a marginal increase in the stock price. Other factors like day high, day low, volume also affect the close price of the stock.

The multiple linear regression equation developed will help in determining stock price and the impact of adding sentiment score is that it reduces the Mean square error for the regression equation.

There are multiple factors that need to be considered while interpreting the performance of a stock price. The stock price can be impacted by following factors:

- Financial performance of the company
- Market Growth potential
- Competitors Performance
- Company Future Growth Plans
- Perception of the investors and normal people
- Inflation
- Political Stability

However, it is tough to quantify all these factors and the impact that they might have on the stock price of a Company. Most of the above stated points are continuous points of discussion on social media, news, meetings, etc. So, understanding what people say on the internet can help understand the variability in stock prices. It is also very important to distinguish irrelevant news from relevant news.

People also give biased comments on a company without complete evidence. This type of news holds no significance in understanding the stock price movement and it should be removed before analysis of the text.

Chapter 2

Literature Review

An accurate model will reduce the risk of an investor and improve the decision making of an investor. The paper aims to develop a model to predict the stock price movement using the financial time series as the input variable. It uses deep learning models which is very useful in forecasting market behavior. The model was based on LSTM and a blend of CNN_LSTM. The model was used to predict closing prices of Tesla Inc. and Apple. CNN LSTM was able to predict more accurately and R squared value was much higher, around 98-99%. [1] The drawback of the study was that it did not incorporate the sentiment information of financial markets.

The paper looks into the sentiment on Twitter regarding electric vehicles by extracting tweets from Twitter using Twitter API and finds the most common words spelled on twitter. 45000 tweets were extracted using Twitter API. The work is deployed as a fully functional web-app. The most common hashtag while sharing tweets related to electric vehicles is Tesla whereas Elon Musk is the most common bi-gram in tweets. 47% of the tweets had a positive sentiment score. The author uses Valence Aware Dictionary and Entiment Reasoner to find the

polarity of the tweets. Author uses word-cloud to find the most commonly used words. The future scope of work is to add new features in web application, add many NLP classifiers to interpret accuracy of sentiment predicted along-with VADER. [2]

The goal of the research is to use different machine learning models to predict stock prices using historical stock price data as one of the independent variables. Two models are used to predict stock price of Tesla, the two models are Linear regression and Long Short-term model. It was found that the LSTM model gives higher accuracy than linear regression. The accuracy using linear regression model was 92% on test data and root mean square error for the model was around 151 whereas the root mean square error for LSTM is around 32. [3]

It is extremely challenging to beat the markets. The paper used historical stock price data for 10 years from 2011 to 2021. Two methods were used for prediction which are Kalman filter and Long short-term memory model. For volatile stock, Tesla was used and for non-volatile stock, Microsoft was used. On comparison of both models, it was observed that volatility affects the stock price prediction model's accuracy. For less volatile stock, Kalman is better than LSTM whereas for high volatility stock, LSTM predicts stock price with reasonable accuracy. The results could be used to develop a stock portfolio generator, etc. [4]

Due to dynamism, stock markets are unpredictable. Large amount of information flows in the market, which makes it tough for investors to make the correct decision for wealth maximization. The paper tries to understand the effect of sentiment analysis on stock price and use it as a factor for stock price prediction. It tries to find the combination of textual analysis to predict stock price movement. The paper shows that different models predict with different accuracy and it can be concluded that stock prices fall or rise with changing public sentiments. The future scope of work is towards using machine learning models to achieve high accuracy and improve interpretation and use of text. [5]

The research explores different ways to predict stock closing price for a listed company. It includes 6 new independent variables and takes historical data for multiple companies. The study includes using six deep learning models to predict the closing stock price for a day. [6]

Chapter 3

3.1 The design of the Study

3.1.1 Problem Statement

Stock prices are highly volatile and the price changes in stock depend on supply and demand, political factors, natural calamity, inflation, business performance, market performance and many other factors. Understanding the relationship between stock price and market sentiment is an active area of research and analysis and it can mitigate the risk involved in trading on stocks. Many researches have shown that social media can be a valuable resource to find patterns and trends in the stock market.

3.2. Methodology of the Study

3.2.1 Sources of Data

The data for the research was collected from Twitter using Python programming language. There are multiple ways to collect data like Twitter API, 'snsrcape' module. 'Snsrcape' module was used to get Twitter data. Twitter tweets were collected for each day from 1 November 2022 to 28 February 2023 and 5000 unique tweets were collected on each day for the above stated time period. To get relevant information regarding Tesla stock price,tweets with "#TSLA" in the tweet were only extracted because they were more relevant to stock price compared to other hashtags, user ID tweets like '#TESLA', 'Elon Musk' user ID.TSLA is the code of Tesla in NASDAQ stock exchange. The python code to extract tweets is given is appendix.

Multiple fields were collected from Twitter like 'url', 'date', 'rawContent', 'renderedContent', 'id', 'user', 'replyCount', 'retweetCount', 'likeCount', 'quoteCount', 'conversationId', 'lang', 'source', 'sourceUrl', 'sourceLabel', 'links', 'media', 'retweetedTweet', 'quotedTweet', 'inReplyToTweetId', 'inReplyToUser', 'mentionedUsers', 'coordinates', 'place', 'hashtags', 'cashtags', 'card', 'viewCount', etc.

url	date	rawContent	renderedContent	id	user	likeCount	lang	retweetedTweet
https://twitter.com/PlugInFUD/status/160870094...	2023-01-01 23:58:46+00:00	some PhD sociology student will one day write ...	some PhD sociology student will one day write ...	1.609701e+18	{'username': 'PlugInFUD', 'id': 1019865488626...	13	en	NaN
https://twitter.com/OTC_Bitcoin/status/1608700...	2023-01-01 23:58:20+00:00	URGENT SIGNAL:win3h from row, Stock Market ill...	URGENT SIGNAL:win3h from row, Stock Market ill...	1.609701e+18	{'username': 'OTC_Bitcoin', 'id': 18873891, 'd...	45	en	NaN
https://twitter.com/Keanu0004/status/160870082...	2023-01-01 23:58:17+00:00	Alerts V!Update inWatchlist inDiscord inWhtype...	Alerts V!Update inWatchlist inDiscord inWhtype...	1.609701e+18	{'username': 'Keanu0004', 'id': 14753919593558...	0	in	NaN
https://twitter.com/Kernycorp/status/160870068...	2023-01-01 23:58:38+00:00	Happy #NewYear, goodbye 2022 and introducing 2...	Happy #NewYear, goodbye 2022 and introducing 2...	1.609701e+18	{'username': 'Kernycorp', 'id': 10905182043418...	4	en	NaN

FIGURE 3.1: EXCERPT OF TWEETS

3.2.2 SENTIMENT ANALYSIS

Sentiment analysis involves using machine learning, natural language processing to find emotions behind the text. The sentiment analysis gives the polarity of text as positive, neutral and negative or rates the polarity from -1 to 1. In the research, Valence Aware Dictionary for Sentiment Reasoning (VADER) from NLTK module is used to find the polarity of each tweet. It gives the sentiment score of each tweet from -1(extremely negative) to 1(extremely positive). A neutral sentiment score stays close to zero.

QuickTrade Idea 252 :TSLA https://t.co/Wie7K1...	QuickTrade Idea 252 :TSLA divx.bSgF2BY via...	1.609701e+18	{'username': 'AlertTrade', 'id': 121158213, 'd...	0	en	NaN	NaN	NaN	0.0000
@Mindubw @NotABubble See those Mercedes SUV EV...	@Mindubw @NotABubble See those Mercedes SUV EV...	1.609701e+18	{'username': '7wtd', 'id': 292286168, 'display_...	1	en	NaN	NaN	[EOS]	-0.0772
Some market predictions for 2023:n- #Gold con...	Some market predictions for 2023:n- #Gold con...	1.609701e+18	{'username': 'jadelitzy', 'id': 1564847539696...	0	en	NaN	NaN	['Gold', 'DXY', 'Crypto', 'Silver']	-0.2960

FIGURE 3.2: SENTIMENT SCORE ON RIGHTMOST COLUMN FOR EACH TWEET

3.2.3 Historical Data

Historical stock price for Tesla Inc. was collected from NASDAQ for the time period of 1 November 2022 to 28 February 2023. The market capitalization on 7 April 2023 was 579.88B USD and stock price has risen by 71.19% to \$185 year to date. It is a volatile stock. CEO of the firm is Elon Musk and revenue for the company has increased by 51% year on year to 81.46B USD. Data regarding day high, day low, day close price and volume for each day was collected.

After data collection, graphs of sentiment score vs high, low, close stock price and volume will be made to understand the relation between both the factors. Pearson correlation coefficient will be calculated to understand the impact of any change in sentiment score on the stock price. A multiple linear regression will be made to understand the impact of adding the sentiment score to the regression equation.

CHAPTER 4

4. Data Analysis and Interpretation

Thorough analysis of different literatures was performed to understand data analysis, twitter data extraction, sentiment score models. Twitter data was collected from 1st November 2022 to 28th February 2023. Twitter data consisted of tweets made by the user, date of tweet, user id. The tweets were extracted for '#TSLA' to get the news related to the Tesla stock prices and Tesla company. 'Snsrcape' module was used to scrape data from Twitter using Python. The code for extracting data using the module is given below. 5000 tweets for each date were extracted using 'snsrcape' in Python. VADER sentiment module was used to calculate sentiment

score for each day on those 5000 tweets. A chart for stock price v/s sentiment score on each day from 1st November 2022 to 28th February 2023.

4.1 Comparing Pearson Correlation Coefficient of Variables

It can be observed that any increase/decrease in sentiment score leads to an increase/decrease in closing price. The Pearson correlation coefficient between close price and sentiment score for the same day is 0.4881.

Pearson Correlation Coefficient						
	sentiment score	Volume	Open	High	Low	Close/Last
sentiment score	1	-0.34259	0.414788	0.434939	0.463	0.488163716
Volume	-0.342589868	1	-0.38977	-0.34506	-0.39248	-0.346470832
Open	0.414787943	-0.38977	1	0.992939	0.992491	0.979684383
High	0.434939266	-0.34506	0.992939	1	0.994069	0.991419942
Low	0.462999939	-0.39248	0.992491	0.994069	1	0.99288643
Close/Last	0.488163716	-0.34647	0.979684	0.99142	0.992886	1

FIGURE 4.1: PEARSON CORRELATION COEFFICIENT

It can be seen in the correlation coefficient of close with other variables that correlation is very high with Open, high, low and moderate with sentiment score. The correlation of close is negative with volume. Thus, the variables can be a good way to measure the close value. The sentiment score correlation with other variables lies below 0.5, thus the sentiment score is an independent variable whose impact on the regression equation can be duplicated with other variables of the regression equation. However, it is visible that the correlation coefficient of open with high, low and close is very high, the values are greater than 0.90. So, there can be a case where we can remove one of these variables and still get better results because open can be explained by other three variables like high, low and close.

4.2 Comparison of Sentiment Score with other variables

The close variable and sentiment score are positively correlated with each other. However, it was observed that the volume and sentiment score were negatively correlated to each other with correlation coefficient of -0.34259.



FIGURE 4.2: CLOSE V/S SENTIMENT SCORE

Similarly, in the case of high price of the day, the Pearson correlation coefficient is 0.43493. Thus, any increase/decrease in sentiment score leads to an increase/decrease in the highest value of the day's stock price.



FIGURE 4.3: LOW V/S SENTIMENT SCORE



FIGURE 4.4: HIGH V/S SENTIMENT SCORE

However, it was observed that the volume and sentiment score were negatively correlated to each other with correlation coefficient of -0.34259.

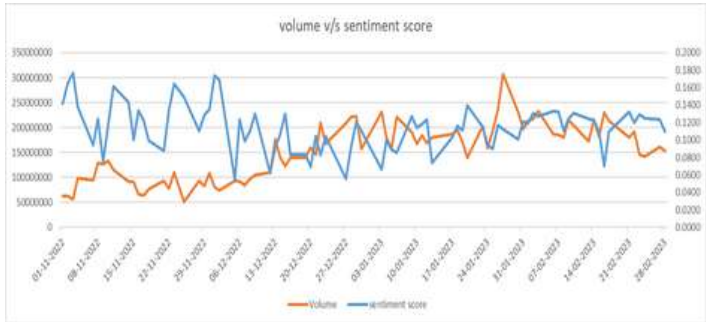


FIGURE 4.5: VOLUME V/S SENTIMENT SCORE

4.3 Regression Equation and Joint Explanatory Power

Two multiple linear regression equations were created with stock closing price as the dependent variable and open, high, low, volume as the independent variable in one regression equation and an additional sentiment score variable was added as independent variable in the second regression equation. The excerpt of summary output for both equations is given on the next page.

Regression Statistics								
Multiple R	0.99664785							
R Square	0.993306937							
Adjusted R Square	0.99295467							
Standard Error	2.76309444							
Observations	81							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	4	86111.98034	21528	2819.76	9.16159E-82			
Residual	76	580.2365071	7.63469					
Total	80	86692.21685						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	pper 95.0%
Intercept	0.001308595	2.31344474	0.00057	0.99955	-4.606315929	4.608933118	-4.606315929	4.60893
Volume	8.80529E-09	7.05013E-09	1.24895	0.21552	-5.23627E-09	2.28469E-08	-5.23627E-09	2.3E-08
Open	-0.660459376	0.089468171	-7.3821	1.7E-10	-0.838650681	-0.482268071	-0.838650681	-0.4823
High	0.660448591	0.111711607	5.91209	9E-08	0.437955642	0.882941539	0.437955642	0.88294
Low	1.003165949	0.103746741	9.66937	7E-15	0.796536407	1.209795491	0.796536407	1.2098

FIGURE 4.6: REGRESSION EQUATION 1 WITHOUT SENTIMENT SCORE

Regression Statistics								
Multiple R	0.99690949							
R Square	0.99382852							
Adjusted R Square	0.99341709							
Standard Error	2.67087732							
Observations	81							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	5	86157.19792	17231.4	2415.54	2.4798E-81			
Residual	75	535.0189259	7.13359					
Total	80	86692.21685						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-3.01167004	2.536317882	-1.1874	0.23881	-8.06427435	2.04093428	-8.06427435	2.04093428
sentiment score	36.3225101	14.42700326	2.51768	0.01395	7.58244581	65.0625744	7.58244581	65.0625744
Volume	1.2397E-08	6.96257E-09	1.78053	0.07904	-1.4731E-09	2.6267E-08	-1.4731E-09	2.6267E-08
Open	-0.570852	0.093519592	-6.1041	4.2E-08	-0.75715258	-0.3845514	-0.75715258	-0.38455142
High	0.65094735	0.108049203	6.02455	5.9E-08	0.4357023	0.8661924	0.4357023	0.8661924
Low	0.91048082	0.106827814	8.52288	1.2E-12	0.69766891	1.12329274	0.69766891	1.12329274

FIGURE 4.7: REGRESSION EQUATION 2 WITH SENTIMENT SCORE

In regression equation 2, the P-value of all coefficients except intercept is very low, thus they have a significant impact on predicting stock prices. It is visible from regression equation 2 that 0.1-unit increase can lead to increase in predicted price by 3.6 units. The coefficient of 'Open', intercept is negative and that of other variables is positive. The total observations were 81 and the total sum of squared was 86692.21 for the regression equation 2.

The accuracy on whether the difference between actual closing and opening price increased or decreased was 83.95%.

The joint explanatory power for adding a sentiment score variable is calculated using F-stat (1,75). The RSS for regression equation 1 is 580 and that for regression equation 2 is 535, the cost is 1 degree of freedom. On calculation, The F-stat (1,75) is 6.3386. The F-critical value for 5% significance level is around 3.97. Hence, F-stat is greater than F-critical. Thus, we can say that at a 5% significance level the addition of 'sentiment score' variable has significant impact on the regression equation and it improves the accuracy of the regression equation.

CHAPTER 5

5.1. Finding and Conclusion

We can draw following conclusions based on the research performed:

- At a 5% significance level the addition of the 'sentiment score' variable has a significant impact on the regression equation and it improves the accuracy of the regression equation.
- Volume and sentiment score were negatively correlated to each other with correlation coefficient of -0.34259.
- Pearson correlation coefficient between close price and sentiment score for the same day is 0.4881. Any increase/decrease in sentiment score leads to an increase/decrease in closing price.
- Twitter tweets can be a useful way to find the sentiments of the market and integrate them to the stock price prediction model.

5.2. Way Forward

The study helped us understand the impact social media has on stock prices. Further research can be performed in the below stated areas to continue study and improve knowledge on the topic:

- Use of other regression models like deep learning, Random Forest, etc to improve accuracy and reduce mean square error
- Removing irrelevant news from the relevant news and integrating only relevant news to the stock price prediction model to reduce the error occurring due to irrelevant news
- Capture data from other social media websites, newspapers, stock market experts and use the information to improve prediction of stock price
- Integrating financial performance, political stability, natural calamity as variables and understand if they improve the prediction of stock prices

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ECONOMICS OF THE SPORTSWEAR INDUSTRY

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Shaheed Sukhdev CBS

INTRODUCTION

The sportswear industry in India has been growing steadily over the years. The industry has experienced a surge in demand, thanks to the increased interest in fitness and sports activities. The industry includes manufacturers and retailers of various types of sports apparel, footwear, and accessories. The introduction of international sports brands into the Indian market has been a major driver of the growth of the sportswear industry in India. Brands like Nike, Adidas, Puma, and Reebok, among others, have established a strong presence in the Indian market and have contributed significantly to the development of the industry. In addition to the international brands, several domestic sportswear brands have also emerged in India. These brands cater to the unique needs and preferences of Indian consumers, offering a range of products that are both affordable and of high quality.

MARKET STRUCTURE

The sportswear industry is an example of an oligopoly market structure due to the following reasons:

1) Small number of dominant firms:

- In 2023, the sportswear industry continues to be characterized by a concentrated market structure, with only a few large firms, such as Nike, Adidas, and Puma, holding significant market shares.
- These established brands have a long history in the industry and have successfully built strong customer bases and brand recognition. As a result, they enjoy a competitive advantage in terms of market presence, consumer trust, and resources.

2) Barriers to entry:

- The sportswear industry presents substantial barriers to entry for new firms looking to compete with established brands. One significant barrier is the high investment costs required to enter the market.
- New companies need to invest heavily in research and development to create innovative and appealing products that can attract customers. This involves extensive design and testing processes to ensure quality, performance, and style.
- Additionally, substantial investments in marketing and branding are necessary to establish brand awareness and differentiation from competitors. Finally, building a robust distribution network is crucial for reaching consumers effectively, requiring significant investments in logistics, partnerships with retailers, and e-commerce capabilities.



CREDITS: NIKE

Abstract

The sportswear industry in India has experienced significant growth due to the rising interest in fitness and sports activities. This paper examines the economics of the sportswear industry, focusing on the market structure, market players, market power of Nike, and strategies for tapping into new markets. The industry is characterized as an oligopoly, with a small number of dominant firms, high barriers to entry, product differentiation, interdependence among firms, and extensive advertising and marketing. Nike, Adidas, and Puma are identified as the top market players in India, with Nike holding significant market power due to its strong brand name and focus on innovation. To tap into new markets, Nike can consider offering competitive prices, localizing products, and emphasizing social and environmental responsibility. The price elasticity of demand and supply in the industry varies across different brands and products. The outlook for the sportswear industry is positive, driven by factors such as health awareness, innovation, e-commerce, sustainability, and emerging markets. Overall, sportswear brands that can innovate and adapt to changing consumer needs will be well-positioned for success in the future.

3) Product differentiation:

- Product differentiation is a key strategy employed by firms in the sportswear industry to gain a competitive edge. Established brands like Nike and Adidas continuously introduce new and innovative products to capture consumer attention and maintain their market position.
- They invest in research and development to develop advanced materials, technologies, and designs, leading to products with unique features, performance benefits, and aesthetic appeal. By offering a wide range of differentiated products, these brands cater to diverse consumer preferences and create a sense of exclusivity and desirability.

4) Interdependence:

- The firms in the sportswear industry are interdependent, meaning that the actions taken by one firm can significantly impact the actions and strategies of others.
- For instance, if one dominant firm decides to lower its prices, it may force competitors to respond in kind to remain competitive. This can trigger a price war, resulting in decreased profits for all firms involved.
- Similarly, strategic decisions made by one company, such as entering a new market segment or collaborating with influential athletes or celebrities, can prompt others to follow suit or develop counter-strategies to maintain their market position.

5) Advertising and marketing:

- Advertising and marketing play a vital role in the sportswear industry as firms heavily invest in promotional activities to establish and maintain their brands.
- Established brands allocate significant financial resources to marketing campaigns across various channels, including television, print media, online platforms, and social media. They sponsor sports events, teams, and athletes, further enhancing their brand visibility and association with excellence and performance.
- These extensive advertising and marketing efforts create a strong brand image and consumer awareness, making it challenging for new firms to compete. Start-ups and smaller companies often lack the financial resources and brand recognition to execute large-scale marketing campaigns, limiting their ability to reach and influence consumers effectively.

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MARKET PLAYERS

The top 3 market players in the sportswear industry in India are:

1) Nike:



CREDITS:NIKE

- Nike, headquartered in the United States, is a global powerhouse in the sportswear industry and is also a prominent player in the Indian market. Nike's success can be attributed to its continuous focus on innovation, performance, and cutting-edge design.
- The company is known for its iconic "swoosh" logo and its ability to capture the essence of sports and athleticism in its product offerings. Nike's extensive range includes footwear, apparel, accessories, and equipment for various sports and athletic activities.
- In India, Nike has established a significant market share by leveraging its brand recognition, sponsoring high-profile athletes and teams, and engaging in impactful marketing campaigns.
- The brand's commitment to social and environmental sustainability, as well as its partnerships with local athletes and organizations, further strengthens its presence in the Indian sportswear market.

2) Adidas:



CREDITS:ADIDAS

- As a German multinational corporation, Adidas has established itself as one of the world's leading sportswear brands and a formidable competitor to Nike in the Indian market.

- Known for its distinctive three-stripe logo, Adidas emphasizes a fusion of sport, fashion, and culture in its product offerings. The brand caters to a wide range of sports, including running, football, basketball, and more, offering footwear, apparel, and accessories.

- Adidas's products are renowned for their performance-enhancing technologies, durability, and stylish designs. In India, Adidas has built a strong market presence by collaborating with local athletes and teams, sponsoring sporting events, and investing in brand campaigns that resonate with the country's youth.

3) Puma:



CREDITS:PUMA

- Headquartered in Germany, Puma is another influential player in the Indian sportswear industry. Puma has established a reputation for its combination of performance, style, and functionality. The brand offers a wide array of sportswear and lifestyle products, including footwear, apparel, and accessories.

- Puma's products are known for their sleek designs, comfort, and technological innovations that enhance athletic performance. In India, Puma has gained popularity through collaborations with renowned athletes, celebrities, and designers, leading to successful product launches and impactful marketing campaigns.

- Puma's emphasis on sustainability, reflected in its use of recycled materials and eco-friendly initiatives, resonates with environmentally conscious consumers in the Indian market. Puma competes fiercely with Nike and Adidas, leveraging its brand image, strategic partnerships, and a strong retail presence to capture a significant market share in India's sportswear industry.

MARKET POWER

I'll take the example of "**Nike**"

1) Nike has significant market power in India due to its strong brand name and innovative product offerings. Nike is known for its **high-quality** sportswear products, which are perceived as being superior in terms of design, quality, and performance by consumers.

2) One of the **unique selling propositions (USPs)** of Nike in India is its focus on innovation and technology. The company invests heavily in research and development to create new and innovative products that meet the changing needs of consumers. This focus on innovation and technology is a key factor that sets Nike apart from its competitors and helps to retain its market position in India.

3) The product offerings of Nike in India are relatively **heterogeneous**, as the company offers a wide range of sportswear products, including shoes, apparel, and accessories, targeted at **different consumer segments**. Nike also collaborates with local Indian designers and celebrities to create products that cater to the local tastes and preferences of Indian consumers.

4) Nike is likely to retain its position in the Indian sportswear market in the next few years, as the company has a strong brand name, a focus on **innovation and technology**, and a wide range of product offerings. However, Nike will need to continue to invest in research and development and marketing to stay ahead of its competitors and meet the evolving needs of consumers in India.

HOW CAN NIKE TAP INTO NEW MARKET

1) Offering competitive prices:

- To enter new markets, Nike can strategically price its products to be competitive with local and global competitors. Conducting market research to understand price sensitivity and consumer purchasing power in each market will enable Nike to set prices that are attractive to price-conscious consumers.

- By positioning itself as a more affordable option without compromising quality, Nike can gain a foothold in new markets and establish a brand presence. Additionally, offering periodic discounts, promotions, or bundle deals can further incentivize consumers to choose Nike over its competitors.

2) Localizing products:

- Understanding the unique needs and preferences of consumers in different markets is crucial for Nike's success. By localizing its products, Nike can adapt to local trends, styles, and cultural nuances.

- This involves designing products specifically for the local market, considering factors such as climate, sports preferences, and fashion preferences.

- For example, in colder regions, Nike may introduce winter-specific sportswear, while in markets with a strong interest in a particular sport, Nike can develop specialized product lines for that sport.

- By catering to the specific needs and preferences of consumers in each market, Nike can resonate more effectively with local consumers and build brand loyalty.

3) Social and environmental responsibility:

- Growing consumer awareness and concern for social and environmental issues present an opportunity for Nike to differentiate itself.

- By prioritizing social and environmental responsibility, Nike can attract socially conscious consumers in new markets. This can include initiatives such as reducing carbon emissions, using sustainable materials, implementing fair labour practices, and supporting social causes.

- Communicating these efforts transparently and authentically through marketing campaigns and brand messaging can help build trust and a positive reputation among consumers.

- For instance, Nike's "Move to Zero" campaign, which focuses on sustainability and reducing waste, has resonated with consumers who prioritize eco-friendly brands and practices.

PRICE ELASTICITIES OF DEMAND AND SUPPLY

1) Price Elasticity of Demand:

- The sportswear industry in India exhibits varying degrees of price elasticity of demand. This indicates that consumers' response to price changes differs across different sportswear brands and products.

- For example, the demand for more affordable sportswear brands like Decathlon may be more price elastic, meaning consumers are highly sensitive to price changes. As a result, a decrease in prices could lead to a relatively larger increase in demand.

- On the other hand, premium brands like Lululemon or high-end designer sportswear may experience relatively inelastic demand, as consumers are less price sensitive and more focused on factors like brand prestige and quality.

2) Price Elasticity of Supply:

- The price elasticity of supply in the sportswear industry in India can vary based on factors such as production capacity, availability of raw materials, and manufacturing capabilities.

- Some sportswear brands may have a more elastic supply, meaning they can quickly adjust their production levels in response to changes in price and demand. This flexibility allows them to efficiently meet shifts in consumer preferences and market demands.

- Conversely, smaller or specialized sportswear brands may face limitations in expanding production, leading to a relatively inelastic supply. This can result in challenges in keeping up with sudden surges in demand or adapting to price fluctuations.

CONCLUSION

The outlook of the sportswear industry is positive, and the industry is expected to continue to grow in the coming years. Here are some of the key trends and factors that will shape the future of the sportswear industry:

- **Growing health and fitness awareness**
- **Innovation and technology**
- **E-commerce and digitalization**
- **Sustainability and social responsibility**
- **Emerging markets**

Overall, the sportswear industry is expected to continue to grow in the coming years, driven by a combination of these and other factors. The industry is highly competitive, and sportswear brands that are able to innovate, adapt to changing consumer needs, and build strong brand identities will be well-positioned for success in the future.



MARKETING: THEN, NOW, AND IN THE FUTURE



CREDITS: TIPPAPATT/GETTY IMAGES/ISTOCKPHOTO



by **Sanket Bagade,**
IIM Kashipur

Marketing is the art and science of creating, communicating, delivering, and exchanging offerings that value customers, clients, partners, and society. It is a crucial aspect of every business, whether large or small and has undergone significant changes over the years. In this article, we will explore the evolution of marketing concepts through the years, the progressive renovation of the marketing mix components, and traditional marketing vs. digital marketing.

Abstract

Marketing has undergone significant changes over the years, evolving from a production-oriented approach to a customer-centric focus. This article explores the evolution of marketing concepts, the progressive renovation of the marketing mix components, and the comparison between traditional and digital marketing. It highlights the shift from product orientation to market orientation, the emergence of relationship marketing and integrated marketing communication, and the recent emphasis on customer experience. The article also discusses the renovation of the marketing mix components, including product, price, place, and promotion, to align with changing consumer needs and preferences. It further delves into the advantages and challenges of traditional marketing versus digital marketing, emphasizing the importance of targeting specific audiences and measuring campaign effectiveness. Looking ahead, the article discusses the future of marketing, including personalized marketing, emerging technologies, and the rising significance of sustainability and ethics. It concludes by emphasizing the need for businesses to adapt to new trends and technologies, focusing on customer needs, and building strong relationships to achieve long-term success.



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Evolution of Marketing Concepts through the Years

The concept of marketing has evolved significantly over the years. In the early days, marketing was mainly about producing goods and distributing them to customers. However, in the 1950s and 60s, there was a shift towards a customer-centric approach, where companies began to focus on satisfying the needs and wants of their customers.

The marketing concept evolved further in the 1970s and 80s when the focus shifted from product orientation to market orientation. This approach emphasized the importance of understanding customer needs and desires and developing products and services that met those needs. Companies began conducting market research to gain insights into customers' preferences and behaviors.

In the 1990s, the concept of relationship marketing emerged, which emphasized the importance of building long-term relationships with customers. Companies began to focus on retaining existing customers, rather than just acquiring new ones. This approach involved providing excellent customer service, developing loyalty programs, and creating personalized experiences for customers.

In the 2000s, the concept of integrated marketing communication (IMC) gained popularity. IMC involves integrating all aspects of marketing communication to deliver a consistent message to customers across all channels. This approach recognizes that customers receive information from multiple sources and seeks to ensure that the messaging is consistent and coherent. In recent years, the concept of customer experience (CX) has emerged, emphasizing the importance of creating positive customer experiences at every touchpoint. This approach recognizes that customers are not just buying products and services but also their associated experiences. Companies focus on delivering customers a seamless and enjoyable experience, from the initial research phase to post-purchase support.

Progressive Renovation of the Components of the Marketing Mix

The marketing mix is a set of tactical tools that a company uses to promote its products or services. The traditional marketing mix consists of four components: product, price, place, and promotion. However, the marketing mix has undergone progressive renovation in recent years to incorporate new elements that reflect the changing marketing landscape.

Product: In the early stages of marketing, the focus was on producing goods efficiently. In modern times, the focus is on designing products that meet consumer needs and desires.

Price: In the past, businesses set prices based on production costs. Today, prices are set based on consumer demand, competition, and perceived value.

Place: In the past, businesses focused on getting their products into as many stores as possible. Today, businesses use various channels to distribute their products, including online marketplaces and social media platforms.

Promotion: In the past, businesses used aggressive advertising and sales tactics to promote their products. Today, businesses focus on creating meaningful and authentic connections with their target audience through content marketing, influencer marketing, and social media marketing.

A progressive renovation of the marketing mix involves continuously reviewing and updating the elements of the marketing mix to ensure that they are aligned with the evolving needs and preferences of the target market. This requires a customer-centric approach and a willingness to innovate and adapt to changing market conditions.

Traditional Marketing vs Digital Marketing

Traditional marketing refers to the use of traditional advertising channels such as TV, radio, print, and outdoor advertising. Digital marketing, on the other hand, refers to the use of digital channels such as search engines, social media, email, and mobile apps. Traditional marketing has its advantages, such as reaching a broad audience, building brand awareness, and establishing a personal connection with consumers. However, it is limited in its ability to measure the effectiveness of campaigns and target specific audiences.

Digital marketing, on the other hand, allows businesses to reach a targeted audience, measure the effectiveness of campaigns, and engage in real-time conversations with consumers. However, it is also subject to constant changes and updates in digital technology, which can be a challenge for businesses to keep up with.

The Future of Marketing

The future of marketing is exciting and filled with endless possibilities. It will undoubtedly continue to evolve and adapt to the changing needs and wants of consumers. The rise of new technologies such as artificial intelligence, virtual and augmented reality, and voice search will create new opportunities for businesses to connect with consumers.

The concept of personalized marketing will become even more critical, as businesses will leverage consumer data to create tailored experiences that meet their needs and wants. The use of chatbots and conversational marketing will also continue to rise, providing consumers with instant and personalized assistance.

Marketing Automation: The Way Forward

Marketing automation is a powerful tool that enables businesses to automate their marketing campaigns, streamline their workflows, and increase revenue. It uses technology to automate repetitive tasks and provide businesses with valuable data insights that can be used to optimize their marketing strategies anything from lead nurturing to email marketing, social media advertising, and customer segmentation.

Marketing Automation involves a combination of software and processes that help businesses streamline their marketing efforts and optimize their campaigns. In this article, we will explore the benefits of marketing automation, how it works, and best practices for implementing it in your business.

Marketing automation platforms are designed to integrate with other marketing tools, such as customer relationship management (CRM) systems, to provide a comprehensive view of the customer journey. By automating tasks, businesses can save time and money while improving the effectiveness of their marketing campaigns.

Marketing automation platforms typically include a range of features designed to automate different aspects of the marketing process. These can include:

Lead Management: Marketing automation platforms can capture and manage leads by integrating with CRM systems and automating lead nurturing processes.

Email Marketing: Marketing automation platforms enable businesses to create and send targeted email campaigns based on customer behavior, preferences, and interests.



Social Media Advertising: Marketing automation platforms can automate social media advertising campaigns, including targeting, scheduling, and optimization.

Analytics and Reporting: Marketing automation platforms provide valuable data insights that can be used to optimize marketing strategies and improve campaign performance.



Best Practices for Marketing Automation

Define Your Goals: Before implementing marketing automation, it's important to define your goals and objectives. This will help you determine which features and processes are most relevant to your business and ensure that your efforts are aligned with your overall marketing strategy.

Segment Your Audience: Marketing automation is most effective when it is used to target specific segments of your audience. By segmenting your audience based on behavior, preferences, and interests, you can tailor your marketing messages and improve engagement.

Create Valuable Content: Marketing automation is only effective if your content is valuable and relevant to your audience. This means creating high-quality content that is tailored to the needs and interests of your target audience.

Use Data to Inform Your Strategies: Marketing automation platforms provide valuable data insights that can be used to optimize your marketing strategies. By analyzing data on customer behavior, preferences, and interests, you can identify trends and patterns that can inform your marketing efforts.

Test and Iterate: Marketing automation is an ongoing process that requires testing and iteration to optimize campaign performance. By regularly reviewing and analyzing your campaigns, you can identify areas for improvement and make data-driven decisions to optimize your strategies.

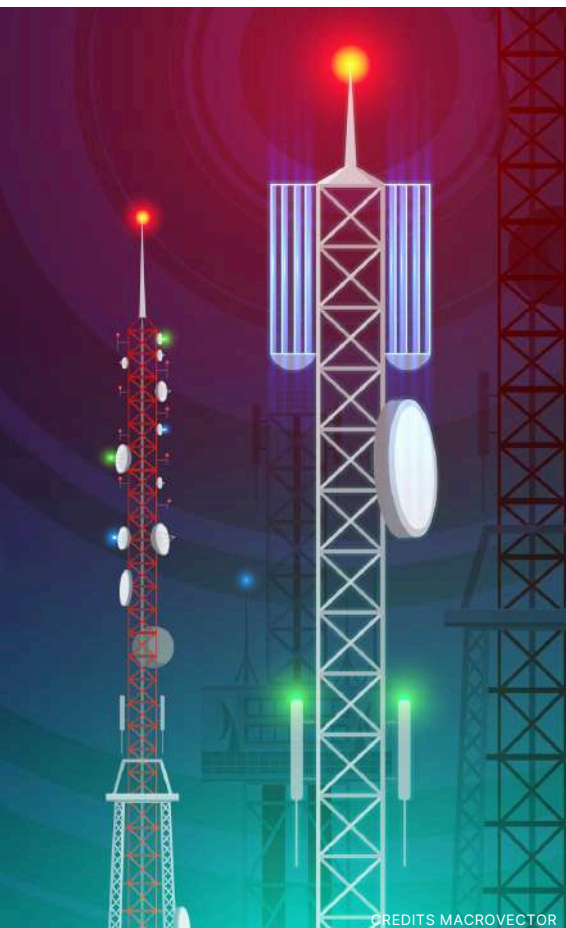
Conclusion

Marketing has come a long way from its traditional roots to the modern-day digital marketing landscape. From print ads to billboards, and TV commercials, marketing has evolved to include social media, influencer marketing, and personalized marketing. The rise of technology has created a more interconnected world where businesses can reach their audience on a more personal level.

As we look to the future, marketing will continue to evolve with the advancements in technology. The use of artificial intelligence, virtual reality, and augmented reality will further transform the way businesses engage with their customers. Additionally, sustainability and ethical practices will become more important for businesses, and marketing will need to reflect this shift.

In conclusion, marketing is an ever-evolving field that requires businesses to adapt to new trends and technologies. By staying ahead of the curve and focusing on the needs of their customers, businesses can continue to build strong relationships with their audience and achieve long-term success.





FINANCING DECISIONS AND THEIR IMPACT ON STOCK PRICES – A STUDY OF THE INDIAN LISTED TELECOM FIRMS

by **Sandeepan Das**

Abstract

The management of a business takes a lot of decisions throughout its lifetime. Some of the most important decisions are the financing decisions. Financing decisions involve determining the sources of funds for the capital structure of a company and choosing the right mix of debt and equity capital to maximise their profitability. A company may choose to acquire high debt and low equity with the motive of increasing the return on equity of the firm or acquire more equity than debt. These decisions further affect their stock prices as the former decision may make the firm less attractive to investors as the high interest obligations on debt make it vulnerable to unforeseen losses and the latter makes the firm earn relatively lower profits but safe from losses. This is especially true for the telecom firms in India as they are known for using high levels of debt financing. This is a study analyzing the financing decisions of the two listed telecom firms in India, Bharti Airtel Limited and Vodafone Idea Limited, and the subsequent impact of these on the stock prices of the firms. Data is retrieved from the financial statements of the firms and historical stock prices for five years and accordingly the relationship between the changes in capital structure and its impact on its stock prices are analyzed. Using linear regression analysis, it was determined that the capital structure changes do not have a significant linear relationship with the changes in the stock prices of the firms.

The financial decisions made by a firm's management are crucial in maximizing the firm's value and shareholder wealth while minimizing financial risks. These decisions involve determining the optimal capital structure, which involves selecting the right mix of debt and equity financing. The capital structure decision should consider factors such as maximizing the firm's value, adaptability with minimal expenses, maximizing owner wealth, balancing risk and rewards, and meeting financial commitments. Various theories, including agency theory, information asymmetry theory, signaling theory, trade-off theory, pecking order theory, and market timing theory, highlight the relationship between capital structure decisions and company performance.

For example, the pecking order theory suggests prioritizing internal financing from retained earnings, followed by debt financing and equity issuance. The trade-off theory suggests balancing tax advantages and bankruptcy costs when taking on debt. The agency theory highlights the importance of debt financing to align management's interests with maximizing profitability and shareholder value. Other theories focus on information signaling and market timing. Financial leverage, while effective in increasing profitability and shareholder wealth, carries the risk of vulnerability to unforeseen events and negative impacts on cash flow and profitability. Studies have shown that increased leverage leads to higher risk and stock price volatility. The current study aims to examine the impact of financial leverage on stock price patterns in listed Indian telecom companies, considering the importance of pricing fluctuations and capital structure.

Literature Review

The choice between debt and equity capital is a crucial financial decision that a corporation must make (Glen and Pinto, 1994, referenced in Joshua Abor, 2007). The choice is significant because it affects an organization's capacity to respond to its competitive environment and because it must optimise returns to multiple organisational constituents (Abor and Biekpe, 2005). A company can generally select from a wide range of alternative capital arrangements, including lease financing, the usage of warrants, the issuance of convertible bonds, the signing of forward contracts, and more. Businesses do approach the problem of optimising capital structure needs differently to design a capital structure that optimises total market value (Joshua Abor, 2007).

Managers select the ideal blend of various financing sources to increase the value of the firm. To grow debt, one of the most crucial sources of funding for businesses must be done. Firms that employ debt to finance a portion of their financial resources are anticipated to have better value than companies whose whole capital is supported by shareholders due to the cheap cost of debt (Ozdagli, 2012).

Modigliani and Miller (1958) were the first to emphasise the relevance of capital structure theory to firm performance, arguing that the choice of a company's capital structure has no bearing on the firm's value in the absence of taxes, asymmetric information, bankruptcy costs, transaction costs, and in efficient markets with homogeneous expectations. According to these rigorous hypotheses, the choice of funding has no impact on the firm's worth. Since the real-world markets don't operate under these presumptions, fresh research has been done to see if capital structure theories and company performance are related.

Theorem 2 by Stiglitz (1974) provides the broadest arbitrage argument that Assumptions 1–5 entail that a firm's financing decisions have no impact on the market value of the company. Imagine there is a capital structure that is ideal for the company, but the company doesn't select it. By purchasing equal shares of the company's securities and then issuing the ideal proportions on personal account, any investor may provide the market the best capital structure. If the market value of the company was lower than the value suggested by the optimal capital structure, the investor may profit from an arbitrage by offering the market the ideal capital structure. Since there is no cost associated with taking advantage of them, every investor has an incentive to do

so, which makes their presence incompatible with market equilibrium. Miller demonstrates that just because there is no correlation between a firm's market value and its financing choices, it does not automatically mean that the financing choices have no impact on the holders of the firm's securities. The company may be able to leverage its financing choices to transfer wealth from its bondholders to its stockholders or vice versa if it is able to issue hazardous debt. Even though it could be less economically effective than maximising the wealth of both stockholders and bondholders, Stiglitz (1974) contends that businesses are likely to prioritise shareholder wealth.

Research Gap

The significance of this research lies in its focus on the unexplored relationship between capital structure decisions and stock prices in the Indian telecom sector. With intense competition and financial challenges in the industry, proper capital structure decisions are crucial for firms to ensure profitability and maximize shareholder wealth. Given the potential for bankruptcy filings and the industry's overall performance, the study's importance is further emphasized.

Objective of the research

The objective of the study is to study the impact of the financing decisions taken by Bharti Airtel Limited and Vodafone Idea Limited on their stock prices over a period of 5 years, 2017-18 to 2021-22, and how the choice of financing impacts the same. The financing decisions have been judged by the changes in the Debt-Equity ratios of the two firms over the period of 5 years as it depicts the choice of financing the management of the firms have opted for.

Data and Methodology

The research relies on secondary sources for data, primarily obtained from the annual reports of Bharti Airtel Limited and Vodafone Idea Limited, as well as historical stock price data from Yahoo Finance. The study covers a period of five financial years, starting from March 31st, 2018, and ending on March 31st, 2022. The variables considered include the debt-equity ratio, representing the firms' financing decisions, as the independent variable. The stock prices of the firms at the end of each financial year are the dependent variable. Additionally, control variables, such as political issues and natural disasters, are included to account for factors other than capital structure that may affect stock prices. Linear regression analysis is employed to examine the relationship between the firms' financing decisions, measured by changes in the debt-equity ratios, and the corresponding changes in stock prices.

Results and Analysis

Table 1: Sample Data of DE ratio and year ending stock prices of Bharti Airtel Limited and Vodafone Idea Limited

Financial Year	Bharti Airtel Limited		Vodafone Idea Limited	
	Debt Equity Ratio	Stock price at year ending	Debt Equity Ratio	Stock price at year ending
2017-18	0.61	368.49	2.09	46.25
2018-19	0.85	304.78	1.82	18.25
2019-20	0.81	443	16.11	3.1
2020-21	1.22	519.75	-4.12	9.3
2021-22	1.31	757.15	-3.08	9.65

Table 1 shows the values of Debt-Equity ratios and the year ending stock prices of Bharti Airtel Limited and Vodafone Idea Limited over the period of 5 years, starting 31st March 2018 to 31st March 2022.

Table 2: Descriptive statistics of the variables related to Bharti Airtel Limited

Bharti Airtel Limited			
Debt Equity Ratio		Stock price at year ending	
Mean	1.0475	Mean	478.634
Standard Error	0.127172783	Standard Error	78.38634566
Median	1.035	Median	443
Mode	#N/A	Mode	#N/A
Standard Deviation	0.254345565	Standard Deviation	175.2771974
Sample Variance	0.064691667	Sample Variance	30722.09593
Kurtosis	-5.266922108	Kurtosis	1.379825042
Skewness	0.085921155	Skewness	1.163601739
Range	0.5	Range	452.37
Minimum	0.81	Minimum	304.78
Maximum	1.31	Maximum	757.15
Sum	4.19	Sum	2393.17
Count	4	Count	5
Largest(1)	1.31	Largest(1)	757.15
Smallest(1)	0.81	Smallest(1)	304.78
Confidence Level(95.0%)	0.404720553	Confidence Level(95.0%)	217.6353857

Table 3: Descriptive statistics of the variables related to Vodafone Idea Limited

Vodafone Idea Limited			
Debt Equity Ratio		Stock price at year ending	
Mean	2.564	Mean	17.31
Standard Error	3.611114232	Standard Error	7.626162207
Median	1.82	Median	9.65
Mode	#N/A	Mode	#N/A
Standard Deviation	8.074696898	Standard Deviation	17.0526171
Sample Variance	65.20073	Sample Variance	290.79175
Kurtosis	2.785679043	Kurtosis	3.083559751
Skewness	1.588146874	Skewness	1.714645991
Range	20.23	Range	43.15
Minimum	-4.12	Minimum	3.1
Maximum	16.11	Maximum	46.25
Sum	12.82	Sum	86.55
Count	5	Count	5
Largest(1)	16.11	Largest(1)	46.25
Smallest(1)	-4.12	Smallest(1)	3.1
Confidence Level(95.0%)	10.02606044	Confidence Level(95.0%)	21.17362073

Tables 2 and 3 provide a descriptive analysis of the 5-year data of debt-equity ratio and year ending stock prices of Bharti Airtel Limited and Vodafone Idea Limited. Stark differences in the data of both the firms can be observed, especially in the values of mean, standard error, median, range, sample variance, standard deviation, and the minimum and maximum values of the year ending stock prices. When it comes to the values related to the debt-equity ratio of the two firms, not many differences can be observed, apart from the values of standard error and range.

Taking into consideration the purpose of the research, the hypotheses for both the firms are formulated as follows.

H0: There is no linear relationship between the changes in DE ratio and the changes in stock prices.

H1: There is linear relationship between the changes in DE ratio and the changes in stock prices.

Using linear regression analysis, we get the following results:

Bharti Airtel Limited: Summary Output

Table 4: Regression Statistics

Regression Statistics	
Multiple R	0.82876924
R Square	0.68685845
Adjusted R Square	0.58247794
Standard Error	113.257020
Observations	5

Table 5: ANOVA Results

	d f	SS	MS	F	Significance F
Regression	1	84406.92562	84406.92562	6.580332175	0.082837106
Residual	3	38481.4581	12827.1527		
Total	4	122888.3837			

Table 6: Linear Regression Model Output

	Intercept	Debt Equity Ratio
Coefficients	5.297041475	493.0593318
Standard Error	191.3466512	192.2096882
t Stat	0.027682959	2.565215815
P-value	0.979653578	0.082837106
Lower 95%	-603.6534017	-118.6376802
Upper 95%	614.2474847	1104.75634
Lower 95.0%	-603.6534017	-118.6376802
Upper 95.0%	614.2474847	1104.756344

Based on the results of the linear regression analysis of the debt-equity ratio and year ending stock prices of Bharti Airtel Limited as summarised in Tables 4, 5, and 6, various insights are obtained. It can be observed that the correlation coefficient (multiple R) is 0.83, signifying a strong positive correlation between the changes in debt-equity ratios and year ending stock prices. The coefficient of determination (R square) is 0.69, which means that roughly 69% of the variability in the year ending stock prices can be explained by that of the debt-equity ratio and thus fit the linear regression model. The standard error is 113.26, meaning that our linear regression model may not be that precise in predicting the changes in year ending stock prices based on the changes in the debt-equity ratio, as there is large amount of variability in the data. Most importantly, the value of significance F is higher than 0.05. Therefore, we fail to reject the null hypothesis.

Thus, as per the results of the linear regression analysis, there is no linear relationship between the changes in debt-equity ratio and the changes in year ending stock prices of Bharti Airtel Limited.

Vodafone Idea Limited: Summary Output

Table 7: Regression Statistics

Regression Statistics	
Multiple R	0.199959927
R Square	0.039983972
Adjusted R Square	-0.28002137
Standard Error	19.29299495
Observations	5

Table 8: ANOVA Results

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	46.50803709	46.50803709	0.124947827	0.74711007
Residual	3	1116.658963	372.2196543		
Total	4	1163.167			

Table 9: Linear Regression Model Output

	Intercept	Debt Equity Ratio
Coefficients	18.39274404	-0.422287066
Standard Error	9.155682618	1.194657533
t Stat	2.008888338	-0.3534796
P-value	0.138131945	0.74711007
Lower 95%	-10.74472428	-4.224220519
Upper 95%	47.53021236	3.379646386
Lower 95.0%	-10.74472428	-4.224220519
Upper 95.0%	47.53021236	3.379646386

Based on the results of the linear regression analysis of the debt-equity ratio and year ending stock prices of Vodafone Idea Limited as summarised in Tables 7, 8, and 9, various insights are obtained. It can be observed that the correlation coefficient (multiple R) is 0.2, signifying a fair positive correlation between the changes in debt-equity ratios and year ending stock prices. The coefficient of determination (R square) is 0.04, which means that roughly 4% of the variability in the year ending stock prices can be explained by that of the debt-equity ratio. The standard error is 19.29, meaning that our linear regression model may be relatively precise in predicting the changes in year ending stock prices based on the changes in the debt-equity ratio, as there is relatively lower amount of variability in the data. Most importantly, the value of significance F is much higher than 0.05. Therefore, we fail to reject the null hypothesis. Thus, as per the results of the linear regression analysis, there is no linear relationship between the changes in debt-equity ratio and the changes in year ending stock prices of Vodafone Idea Limited.

Conclusions

The primary aim of this study was to examine how a firm's financing decisions impact its stock prices. Two Indian telecom companies were chosen for analysis over a five-year period, focusing on changes in their debt-equity ratios as indicators of financing choices. Despite finding no significant relationship between the selected firms' financing decisions and stock price fluctuations, it is crucial to note that the absence of rejection for the null hypothesis does not dismiss the potential impact. Existing literature supports the link between a firm's capital structure decisions and stock prices, influenced by factors like information asymmetry, signaling, market timing, and pecking order.

The study's small sample size may have limited its ability to detect significant effects. Nevertheless, the findings provide valuable insights for future research, highlighting areas for exploration and emphasizing the significance of financial decision-making and stock price factors. In conclusion, while the study's sample did not reveal a significant relationship, financial decisions remain vital in understanding stock market behavior, presenting avenues for further study and practical implications in finance.

Research Limitations

Like any journey towards a goal, the current research study faces constraints that hinder progress. These constraints include:

1. The study's limited scope due to the exclusion of two out of four active telecom firms in India. Data was solely obtained from two listed companies, which may limit the generalizability of the findings to the entire industry. Caution must be exercised when applying the study's results to the broader telecom sector.
2. The data sample was confined to a five-year period due to the limited operational history of Vodafone Idea Limited. A longer sample would have required including other firms, altering the research focus. Nonetheless, the findings shed light on financial decision-making in the Indian telecom industry.
3. Predicting future actions based on past performance may not always be reliable, given the unpredictable and changing nature of the Indian telecom industry. Factors such as the Draft Telecom Bill of 2022 introduce uncertainty, emphasizing the need for caution when interpreting the study's results in the context of industry dynamics.

Suggestions

Although the null hypothesis was not rejected in this study, it does not imply that a firm's financial decisions have no significant impact on its stock prices. Instead, the study's findings can be valuable for future research and practical applications, identifying areas for further investigation and emphasizing important factors to consider in studying financial decision-making and its effects on stock prices. Suggestions for future research include expanding the sample size to establish a significant relationship between capital structure changes and stock prices, examining the impact of non-financial factors on stock prices, conducting comparative analyses across industries, and exploring the relationship between financial performance and stock prices. These avenues can enhance the understanding of financial decision-making's impact on stock prices and provide insights for decision-makers, investors, and policymakers.



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Navigating the Future: The Role of AI in Revolutionizing Financial Services.

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Abstract

This research paper aims to analyse the evolving role of Artificial Intelligence (AI) in the field of finance. With technological advancements progressing at an unprecedented rate, AI is emerging as a powerful tool that has the potential to revolutionize various aspects of finance, including management, risk assessment, marketing strategies, customer awareness, and fraud detection. This research paper explores AI's current and future applications in finance, while also discussing the advantages, challenges, and ethical considerations associated with its implementation. By examining the existing literature and real-world examples, this paper summarizes how AI is reshaping the financial landscape and provides insights into its impact on the financial discipline as perceived by industry experts and stakeholders.

Recently, artificial intelligence (AI) has received critical attention, has entered many interesting industries, and has undergone significant changes. Financial education is no exception, as AI will continue to replace everyday tasks and revolutionize finance teaching and learning. From computational management, machine learning and big data analytics, AI-driven decision-making, probability management tables, site responses, data visualization, and more. Opportunities, new exchanges, customer benefits, etc. This perspective focuses on key areas where AI significantly impacts finance-related businesses.

Risk assessment is another key area where artificial intelligence is changing the traditional rules. Introducing capital can use machine learning to create timing models for the analysis of financial events, identify situations and eliminate them. These models can analyse a variety of information, including credit history, interpretation of results, and release patterns, to make timely assessments and aid selection. Management with artificial intelligence is more efficient, accurate, and sensitive to changing advertisements.

AI frameworks can analyse customer searches, preferences, and behaviour for better experiences using conversational and search terms. Financial advisers may use this information to promote their offerings, connect with customers, and provide products and services. In addition, AI-powered chatbots and virtual assistants play an important role in supporting customers by providing timely and personalized recommendations, answering questions, and solving problems quickly.

However, issues related to artificial intelligence and ethics must be addressed as we move forward. It must carefully consider information security, algorithmic style, plausibility, and accountability to ensure the appropriate and ethical use of advice in financial practices.

AI-Powered Transformations in the Finance Industry: A Multitude of Applications.

1. Algorithm trading.

Algorithmic trading has become a common practice in the financial industry with many advantages such as optimization, improved liquidity, and lower transaction costs. This method involves using complex algorithms to execute trades according to specified rules and market conditions. Artificial intelligence (AI) plays an important role in creating and developing business strategies in algorithmic trading.

AI-powered algorithms analyse lots of historical data and trading time to identify patterns, trends, and flaws that human traders may not notice. Using machine learning techniques, these algorithms can learn from past market performance and predict future prices. It can quickly and accurately analyse and process large volumes of data, providing superior intelligence in developing effective business strategies.

High-Frequency Trading (HFT) is part of algorithmic trading that involves making large numbers of trades in fractions of a second. High-frequency trading relies on various smart algorithms to make secondary trading decisions based on market data and signals. While a large market can offer quality products and develop the market, it also brings with it concerns about market regulation, unfair advantage, and market pressure. Regulators and business participants actively monitor and control business practices to ensure fair competition and reduce risks.

Risk management is an important aspect of algorithmic trading. While AI algorithms can improve business strategies, they also introduce new risks. These risks include model errors, malfunctions, connectivity issues, and business interruption. Financial institutions need effective risk management processes to identify and mitigate these risks. Implement risk management measures such as pre-trade risk analysis, position limits, and electronic controls to ensure the stability and integrity of the financial trader.

As a result, algorithmic trading powered by AI has revolutionized financial markets by improving efficiency, liquidity and reducing costs. Artificial intelligence algorithms can analyse large volumes of business data and create effective business strategies.

However, the rise of high-frequency trading has raised concerns about market integrity and safety. Risk management is crucial for dealing with the risks associated with algorithmic trading. Financial institutions and regulators must constantly monitor and update changes to ensure transparency, fairness, and stability in the financial market.

2. Fraud Detection and Prevention:

In finance, fraud detection and prevention are an important part of maintaining financial integrity and protecting companies and customers from bankruptcy. With the rapid development of technology, artificial intelligence (AI) has become a powerful tool to detect and combat fraud. Artificial intelligence-based fraud detection systems use machine learning models, behavioural analysis, and flaw detection techniques to improve the accuracy and efficiency of fraud detection systems.

One of the main benefits of using artificial intelligence in fraud detection is the ability to analyse large amounts of data and identify patterns or anomalies that could indicate fraudulent behaviour. Machine learning models such as neural networks, decision trees, and support vector machines can train historical data to learn patterns associated with fraud. These models can be used to identify new changes and identify suspicious activities based on learning models. This enables financial institutions to detect fraud in real-time and take immediate action.

Behavioural analytics is another important artificial intelligence technology used in fraud detection. AI systems can create customer base models by analysing customer behaviour and business models. Any deviation from this design could be considered fraudulent. Behavioural analytics can improve the accuracy of fraud detection by capturing changes in customer behaviour over time and adapting to new fraud patterns.

In addition, artificial intelligence-based anomaly detection algorithms play an important role in preventing fraud. These algorithms are designed to identify outliers or unusual patterns in data that could indicate fraud. By continuously analysing transactions and comparing them to historical data, AI systems can identify unexpected patterns, such as unusual purchase prices, unusual locations, or the difference between changes. Real-time fraud prevention can trigger alerts or block suspicious transactions to prevent fraud from occurring.

Using artificial intelligence in fraud detection and prevention not only increases the accuracy and speed of detection but also helps reduce negative impact. Traditional legal systems often lead to many false positives, leading to unnecessary investigations and inconvenience to legitimate consumers. On the other hand, AI machines can learn from historical data and adjust detection methods, making fraud more accurate while reducing false positives.

As a result, AI technology has revolutionized the financial industry in fraud detection and prevention. By leveraging machine learning models, behavioural analytics, and anomaly detection algorithms, financial companies can help increase their ability to detect and prevent fraud in real-time.

The use of artificial intelligence can analyse large volumes of data, identify patterns and detect anomalies that may indicate fraud. As technology continues to evolve, AI-based fraud detection will become smarter, more affordable, and stronger against fraud.

3. Risk Assessment and Management.

The integration of artificial intelligence (AI) technology has revolutionized risk assessment and management in the financial industry. AI-driven risk assessment models have become powerful tools for credit assessment, detection of potential risks, and minimization of losses. This model uses advanced algorithms and machine learning techniques to analyse large amounts of data, including credit history, financial statements, and transactions. AI algorithms can process this data, providing accurate forecasts and risk assessments, and enabling financial institutions to make informed decisions. In addition, predictive analytics powered by artificial intelligence identify patterns and trends in data, enabling risk management and enabling organizations to predict and mitigate risk.

AI is also used in credit ratings and mortgage lending, making the process easier and more efficient. In addition, AI-enhanced stress testing and scenario analysis allow organizations to simulate various business scenarios and assess their risk exposure. AI has revolutionized risk assessment and management in the financial industry, enabling more informed decision-making and improved risk mitigation strategies.

4. Customer Service and Personalization.

Artificial intelligence (AI) has made great strides in customer service and personalization. Chatbots and virtual assistants have become essential tools for providing customer support. These AI-powered machines can interact with customers, answer questions and resolve issues quickly, eliminating customer conflicts. In addition, AI analyses customers, financial history, and preferences, enabling personalized recommendations and financial planning. This enables financial institutions to offer solutions that fit the client's needs and goals.

Natural language processing encourages communication and collaboration by enabling AI machines to understand and respond to customer interactions in conversations. Additionally, sentiment analysis and customer analysis have enabled financial institutions to better understand customer satisfaction and responsiveness, enabling them to improve service and meet customer needs. Overall, AI in customer service and personalization is changing the way financial markets interact with customers, creating personalized experiences and increasing overall customer satisfaction.

5. Portfolio Management.

With the integration of artificial intelligence (AI) into the financial sector, customer service, and personalization have increased drastically. Chatbots and virtual assistants have become important tools in customer support, providing instant support and customer service. This AI-powered system can process questions, provide information, and even work to improve the overall customer experience. Leveraging natural language processing technology, chatbots, and virtual assistants can simulate human-like interactions, understanding and answering customer questions during a conversation. AI also supports personal advice and financial planning.

AI algorithms can analyse large amounts of data to generate recommendations based on a person's financial goals, risk appetite, and historical data. These personalized recommendations allow consumers to make informed decisions and optimize their financial strategies. In addition, AI-based financial planning tools provide information about investments, retirement planning, and budgeting, allowing consumers to take control of their finances.

Natural Language Processing (NLP) plays an important role in customer interaction. NLP algorithms can extract valuable information and thoughts by analysing users' messages, emails, and social media. This analysis enables financial institutions to gain insight into customer preferences, expectations, and pain points. By better understanding their customers, financial institutions can improve their products and services, customize their marketing strategies, and effectively resolve customer problems.

Overall, AI has revolutionized customer service in the financial industry. Chatbots and virtual assistants provide instant support, personalized recommendations to improve decision-making, NLP, and analytical sentiments to provide an efficient and effective customer experience, and insight into customer satisfaction. These AI-powered solutions improve customer engagement, increase productivity and increase customer loyalty. As technology continues to evolve, the integration of AI into customer service and personalization will continue to evolve, providing finance users with a more informed and convenient experience.

6. Market Analysis and Prediction.

With the advent of artificial intelligence (AI), the field of business analysis and forecasting has changed dramatically. AI-powered techniques are now used to extract useful insights from a wide variety of data, including social and news media. Sentiment analysis is one of the most important applications and includes analysis of these resources to evaluate market sentiment. Financial analysts can better understand market expectations and investor sentiment by understanding the collective behaviour of individuals and the media.

In addition to sentiment analysis, AI is also used to predict stock prices and markets.

AI systems can process historical market data, identify patterns and make predictions about future prices using machine learning algorithms. These forecasts can help investors and traders make decisions about buying, selling, or holding securities.

Another area where AI is effective is automated news aggregation and event-based marketing. AI algorithms can scan and collect text messages and other relevant information over time. AI systems can quickly analyse and collect this large amount of data, identifying key events and their impact on financial markets.

This allows traders to take advantage of the market and make timely decisions. Web analytics is another important aspect of business analytics that has proven useful. By analysing the interactions between business participants, AI algorithms can uncover hidden patterns and relationships that drive business success. This network analysis helps identify key players, business owners, and information flows in the financial ecosystem. These insights can provide more insight into business behaviour and help make more informed decisions.

As a result, integrating artificial intelligence into market analysis and forecasting has changed how financial professionals interpret and predict market movements. Through sentiment analysis, AI can monitor the business sentiment and emotions of business people. Estimating the value of products and business models will help you make better investment decisions. Automated news aggregation and event-based marketing make responding quickly to new news and events easy.

With the continuous development of technology intelligence, business analysis, and forecasting ability should be improved, providing financial professionals with accurate and relevant information time to deal with a difficult and volatile financial market.

Conclusion.

The use of artificial intelligence (AI) in the financial industry has many benefits and has the potential to change traditional practices. AI can transform customer interactions, reduce errors, and save costs by automating tasks, improving fraud detection, and providing personalized recommendations. Front and middle offices will benefit greatly from AI applications, with potential savings estimated at \$416 billion by the end of 2023.

Young consumers' preference for digital banking, combined with the increased use of online and mobile banking due to the COVID-19 pandemic, has led to the use of Intelligence as essential for financial institutions to be competitive and successful in the burgeoning business world.

In addition, the potential for cost savings and operational efficiency is very high thanks to the use of artificial intelligence. North American banks alone could save an estimated \$70 billion from head office operations by 2025. Total cost savings from AI applications for banks are estimated to reach \$447 billion by 2023, demonstrating the enormous value and ROI that AI can bring to the financial industry.

Ultimately, the integration of AI into finance offers financial institutions significant opportunities to improve the customer experience, increase efficiency and stay ahead in a fast-paced environment.

The benefits of AI in business automation, fraud detection, and personalized recommendations are undeniable. As the financial industry continues to embrace AI, organizations must prioritize investments in AI technology, data management, and skill development to support AI's transformative potential.

Key takeaways.

- AI is changing all aspects of finance, including marketing, fraud detection, risk management, customer service, transaction management, business analytics, governance, and ethical decision-making.
- AI supports the development of advanced systems and machine learning models that improve decision-making and increase efficiency.
- The use of big data analytics enables financial institutions to use big data to gain insights, identify patterns and act correctly.
- AI-driven technologies such as chatbots, virtual assistants, and robot advisors improve the customer experience and enable personalized financial services.
- Ethical considerations of objectivity, transparency, confidentiality, and governance are important when using AI in finance.





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Did you know that less than 1% of India's population invests in the stock markets which is a huge source of secondary income all across the globe? Why do you think that is the case?

Over 99% of people who open demat accounts for trading in the stock markets end up losing all their capital and bear heavy losses. This is because of their lack of knowledge about trading and their inability to identify the right time to buy or sell a particular stock. Not to mention that there is an even larger segment of people who are afraid of entering into the stock market for this exact reason because they don't have the necessary capital to invest or the risk of losing is too high for them.

So let's get this right, you as an individual might be facing two problems, one that you don't have enough capital to invest and two you lack the knowledge to invest.

That would mean that you spend around 30 to 40000 rupees learning the abc's of trading and then spend another 30 to 40000 rupees as your initial capital hoping that you get it right the first time.

Now this is where TIC comes into picture. We, at TIC, aim to bridge the gap between you and the stock markets by providing you with everything you need to start your trading journey.

We, at TIC, aim to deliver not just knowledge and learning but also the capital you will need to kick start trading without the inherent risk of losing your money.

Sounds Unbelievable right? Let us try to understand this with the help of a common man's situation.

Just like you, Akash has always dreamt of investing in stock markets. However, he had zero knowledge about trading and no capital at his disposal. After rigorous ordeals, he saved up just about 10,000 rupees to finally get in the game.

This left him with two choices...

Let's see what those two choices were:

Option A: With no knowledge, novice Akash could use this money to start investing in the market. You can guess what happened next. Bingo! He blew up all his money and his dream of becoming a trader shattered before turning into reality.

Now let's look at **Option B:** Aakash spent his savings on gaining knowledge through several courses that could not even satisfy his quest to gain substantial proficiency in trading. As a result, he lost all his savings. These courses left him with no choice but to opt for paper trading which meant there was no return on his investment.

But, lucky for Akash and you, TIC comes in with Option 'LIT'

Akash found us, The Investor Co., which promised to provide a platform for live trading without any capital and no inherent risk of losing money to losses and yet, he got to take his profits home. He got all this along with a comprehensive course on trading **just for 7000/-**

He got the necessary training and experience without worrying about arranging more capital for trading. The young boy with a dream decided to take the leap and invest in himself. The course immersed him in a world of trading strategies, fundamental and technical analysis. He learned how to study and interpret market trends, charts, prices and finally appeared for the test.

Can you guess what happened next?

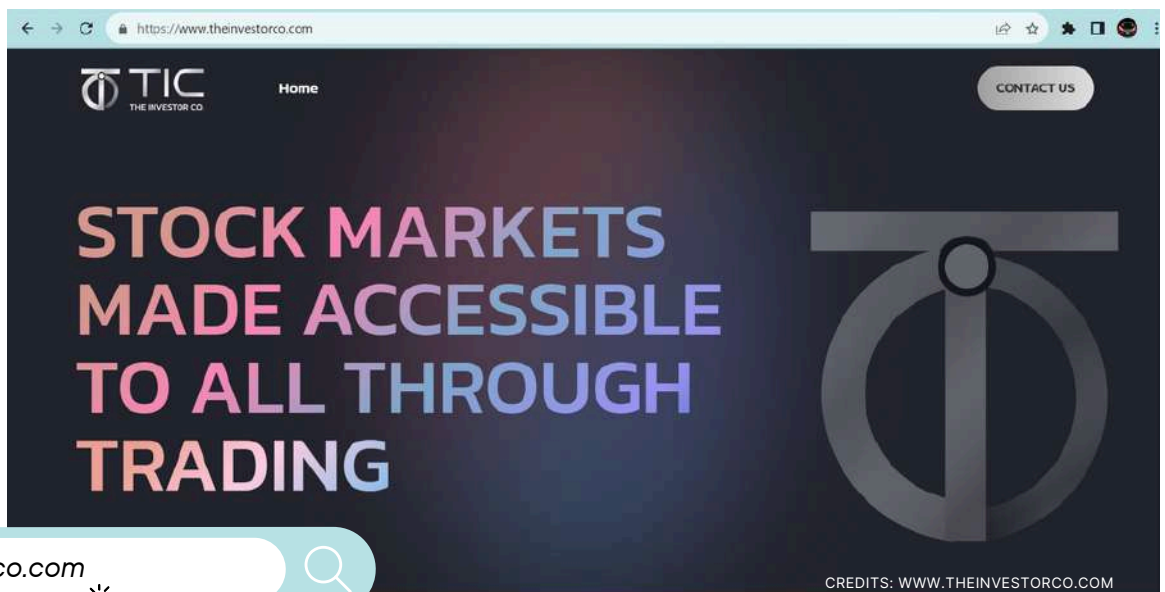
His patience and hard work paid off! This platform provided Aakash with over trades worth 50,000 every week. He could withdraw 100% of his profits and encash them at his convenience. He did all this just after completing his course to improve his skills and confidence. And guess what? He earned profits too!

The ability to invest freely and make real monetary gains without any capital, risk or loss bearing helped Aakash fulfill his dreams.

And we can help you and millions of others achieve this dream too.

We can get you LIT!

LIT (Learn Invest Trade) is a one of a kind platform which facilitates and enhances your trading experience. Utilise this platform for 6 months and get hands on experience in trading and earn real profits without losing any money.





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Introducing AexnGlobal Technology: Shaping the Future of Finance and Entertainment

In the dynamic and ever-evolving world of technology, AexnGlobal Technology emerges as a pioneering force that seamlessly bridges the domains of finance and entertainment. Our multifaceted ecosystem comprises a robust cryptocurrency exchange, an immersive gaming portal, poised to make its debut on October 26, 2023 and a groundbreaking DeFi (Decentralized Finance) wallet coming next. Let us embark on a journey through this digital realm, where innovation, empowerment, and financial evolution intertwine.

The Genesis of AexnGlobal: Where Vision Meets Reality

The story of AexnGlobal begins with a vision – a vision of harnessing the transformative power of technology to empower individuals across the globe. Our founders, a group of forward-thinking technologists, and financial experts, recognized the potential for a more inclusive, efficient, and entertaining digital future.

Chapter 1: The Crypto Exchange Revolution

Our journey takes flight with the cornerstone of AexnGlobal's ecosystem: the cryptocurrency exchange. In a world increasingly driven by digital assets, this exchange serves as a reliable platform for traders, investors, and enthusiasts alike.

Security and Trust

At AexnGlobal, security isn't just a feature; it's a commitment. We employ state-of-the-art encryption and authentication protocols to ensure the utmost security for your digital assets. Your peace of mind is our top priority, allowing you to explore the world of digital currencies with confidence.

A User-Friendly Interface

Cryptocurrencies may be revolutionary, but their complexity can be overwhelming. Our exchange platform boasts an intuitive and user-friendly interface designed to make trading accessible to everyone. Whether you're a seasoned trader or just beginning your journey, you'll find the tools and resources you need to succeed.

A Comprehensive Asset Portfolio

The digital asset landscape is vast and diverse, and AexnGlobal's exchange reflects this diversity. From the pioneering Bitcoin and Ethereum to a myriad of innovative altcoins, our platform offers access to a wide range of digital assets. Diversify your portfolio, explore new investment opportunities, and seize the possibilities of the digital frontier.

Chapter 2: The Gaming Portal

As we venture deeper into the AexnGlobal universe, a new chapter unfolds: the gaming portal. Here, entertainment and innovation converge to create an immersive gaming experience like no other.

A Universe of Possibilities

Enter a realm where the possibilities are boundless. Whether you're a strategist, a role-playing enthusiast, or a competitive gamer, our portal offers a diverse array of experiences to captivate your interests. Explore uncharted lands, engage in epic battles, or team up with friends to conquer virtual worlds.

Cutting-Edge Technology

Gaming should push boundaries and challenge norms. That's why our portal harnesses cutting-edge technology to deliver an unparalleled gaming experience. Expect seamless gameplay, stunning visuals, and interactive adventures that set new industry standards. With AexnGlobal, the future of gaming is now.

Community and Connection

Gaming isn't just about winning; it's about connecting with like-minded individuals. Our portal fosters a vibrant and inclusive community where gamers from all walks of life can collaborate, compete, and form lasting friendships. Join forces with fellow gamers to conquer challenges and share memorable experiences.

Chapter 3: The DeFi Wallet Saga

As we journey deeper into the heart of AexnGlobal, a monumental event looms on the horizon: the launch of our DeFi wallet, launching real soon. This is a moment you won't want to miss, so mark your calendars and get ready for a new era in DeFi that's just around the corner. Stay tuned for updates and be among the first to witness the future! This momentous occasion marks the culmination of our dedication to decentralization and financial empowerment.

Now, let us dive into a story that elucidates the essence of DeFi and the transformative power of our DeFi wallet:

The Tale of Digital Freedom: The DeFi Wallet

In a bustling city, there lived a curious individual named Sarah. Sarah was no stranger to the world of cryptocurrencies; she had watched from the sidelines as the landscape evolved. The centralized financial system had always felt stifling, with its gatekeepers and intermediaries dictating the rules.

One day, Sarah stumbled upon news of a groundbreaking technology known as DeFi, or Decentralized Finance. It promised to eliminate the need for middlemen, offering financial autonomy to anyone who dared to embrace it.

Intrigued, Sarah delved deeper into this world of DeFi. She learned that it was built on blockchain technology, a decentralized ledger that recorded transactions transparently and securely. But what truly captured her imagination was the concept of a DeFi wallet – a digital pocket of financial freedom.

Sarah decided to explore DeFi and acquired her very own DeFi wallet from AexnGlobal Technology. With this wallet in her digital arsenal, she could securely store her digital assets and engage in a plethora of financial activities without relying on traditional banks or financial institutions.

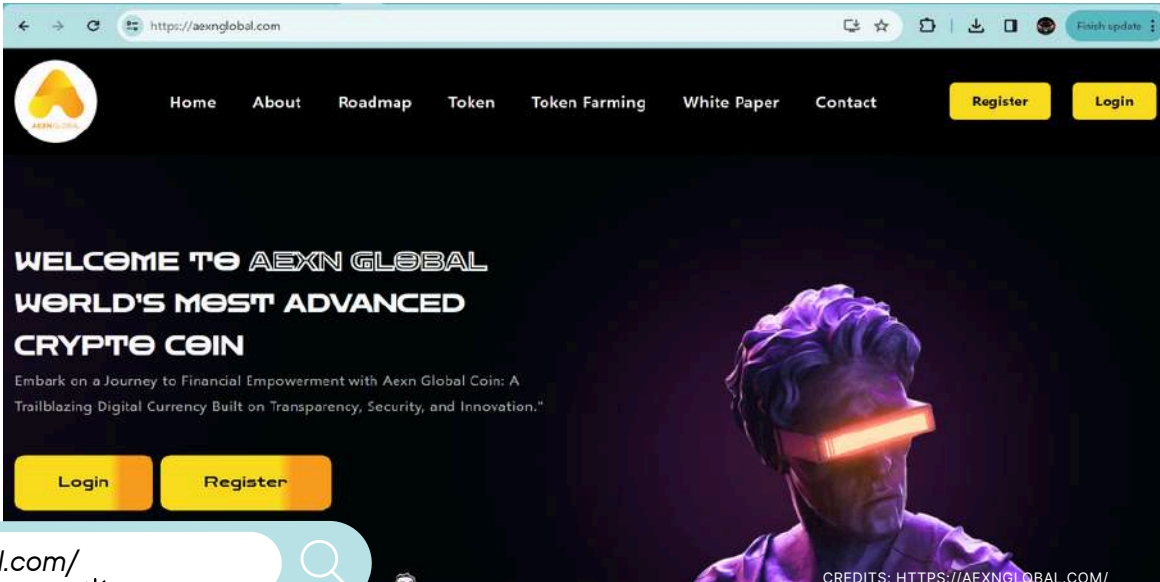
The Magic of DeFi

Sarah soon discovered the magic of DeFi within her wallet:

1. **Security Beyond Compare:** Her DeFi wallet utilized blockchain technology to ensure her assets were safe and tamper-proof. No longer did she have to place blind trust in centralized institutions; the power was now in her hands.
2. **Ease of Use:** Navigating the world of DeFi was surprisingly simple with her AexnGlobal DeFi wallet. The intuitive interface allowed her to seamlessly invest, stake, lend, and borrow digital assets, all while benefiting from the transparency and efficiency of blockchain technology.
3. **Financial Empowerment:** Sarah was no longer bound by the restrictions of the traditional financial system. With her DeFi wallet, she could participate in decentralized lending, earning interest on her assets, and even contribute to liquidity pools to help others while earning rewards.

Sarah's journey epitomizes the essence of DeFi and the transformative power of AexnGlobal's DeFi wallet. It's a story of financial freedom, autonomy, and the democratization of finance that empowers individuals like Sarah to take control of their financial destinies.

In conclusion, Welcome to AxenGlobal Technology – your gateway to the future of finance and entertainment. As we usher in the era of DeFi, we look forward to empowering you to seize the boundless opportunities of the digital age. Join us in shaping the future.



<https://aexnglobal.com/>

EXPERT INSIGHTS



WHAT'S INSIDE

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Car'ismatic Conversation with the Bossman

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Challenges and Opportunities in the Banking Industry in India





SUBHASH CHANDRA GARG



Former Finance Secretary, India

About the Expert

Mr. Garg graduated from Government College in Ajmer with a Bachelors in Commerce and an LLB from Rajasthan University. Garg holds a degree in cost and management accounting. Garg also holds a gold award from 1990 and is an accredited company secretary. Principal Secretary (Finance), Commissioner (Investment and NRIs), Secretary (Budget), and Secretary (Expenditure), are just a few of the important positions Garg has held in the Union and Rajasthan governments. He has also worked for the World Bank as an executive director.

DISCUSSING LIFE AND ECONOMY WITH MR. SUBHASH CHANDRA GARG

We had the honour of speaking with Subhash Chandra Garg, a renowned economist and former finance secretary of India, in an exclusive and fascinating discussion. Garg has worked in the Indian Administrative Service (IAS) for more than 36 years and has held influential positions in both the Union and Rajasthan governments.. Garg also discussed his most recent book, "The \$10 Trillion Dream," which presents a detailed plan for India's economic development. Garg's abundance of knowledge and experience offers a distinctive viewpoint on India's economic development and its prospects for the future.

Q1) According to the economic growth forecast, India is the fastest-growing economy for the year 2023. What steps can India take to retain its spot in the successive years, unlike China, which could not maintain its double-digit economic growth?

India did record a very good growth rate of 7.2% in the year 2022-23. This also happens to be one of the highest growth rates for the year among the major economies. However, India suffered a large contraction of 5.8% in 2020-21, the Covid year. Consequently, the four-year compounded annual growth rate (CAGR) since 2018-19 is still only 3.4%. This is quite a low rate of GDP growth for a developing and low per capita income country like India. The Chinese economy is more than 5 times the size of India's economy. If the Chinese economy grows at 4%, it adds an annual GDP accretion of \$640 billion since its GDP is roughly \$16 trillion. On the other hand, if India grows at 7%, it adds incremental GDP of only \$225 billion since its GDP is only about \$3.5 trillion. Let us not draw any comfort from slower annual growth in China. Even with slower growth, the Chinese people become three times incrementally richer every year. India would have to undertake hard and extensive reforms to put India on the sustained path of long high growth at 8-9% annually. You can read more about this growth agenda in my book 'The \$10 Trillion Dream.

Q2) You recently published a book titled 'The Ten Trillion Dream.' Could you provide us with a summary of the book?

It describes the state of the Indian economy in great detail and then lays out sectoral and thematic reform agendas. I believe that the economic, financial, and fiscal policies of the government make a tremendous difference in the growth outcome of the economy. I elevate policy to the status of the third major factor of production, following labor and capital. The book outlines an extensive policy reform agenda.

Q3) Demonetization happened on November 8, 2016. At that time, you were a World Bank executive director. When you received the news, did you consider it a rational decision by the Indian government to ban 500 and 1000 rupee denomination notes on such short notice?

Though I was working as an Executive Director at the World Bank in Washington DC, I happened to be in New Delhi on the day of the demonetization of Rs. 500 and Rs. 1000 notes, which amounted to 86% of the currency then in circulation. My initial reactions, which I did not express publicly for obvious reasons, were that this was a bold move but would cause enormous difficulties for the people. I was particularly concerned that it was not well-planned, and the sudden withdrawal of this much currency would have an adverse impact on people's daily lives. I also believed that, given the extent of black money in the country, a significant portion of the demonetized notes might not actually return. Overall, it did not appear to be a well-thought-out and well-designed decision.

Q4) This year, India will convene the G20 leaders' summit for the first time. What are your thoughts on this decision and how do you believe it will bring about change in the financial sector?

Unfortunately, the G20 has become largely dysfunctional due to the West's major concerns about China and the Russia-Ukraine war. You can see this in the case of the failure of some American regional banks, with the G20 playing no role in coordinating a global policy response, unlike the major role it played during the global financial crisis in 2008, which actually gave birth to the G-20. India will host numerous meetings of G-20 groups and the Summit Meeting. However, I don't expect it to make any difference whatsoever in global economic and financial affairs.

Q5) India and Guyana have agreed to cooperate in the oil and gas sector, including long-term crude purchases from the South American country and investments in its upstream sector. Is this contract advantageous? What are your opinions on it?

Guyana is hardly a player in the oil and gas sector, so it's not going to make much of a difference. India did well to take advantage of buying cheaper Russian oil. Gas is not as tradable as oil, so India remains constrained on the gas front.

Q6) What are your views on the government encouraging the use of digital methods for payments? Do you think the UPI commission charge on merchant-merchant transactions is necessary? Would you like to suggest changes to the commission scheme?

Digital payments are the order of the day. All over the world, payments are shifting from cash to digital, and we have also done well in this regard. UPI has been a great innovation that has made even small payments in the digital space extremely easy. The government has done well to promote digital payments. There should not be any charge on digital payments, as there are none on cash payments. However, fintech service providers need to receive remuneration for the services they provide. It is time for the RBI to build the digital payment system ecosystem in such a way that consumers do not incur any charges, but service providers receive reasonable compensation for their services. Banks, the RBI, or both need to bear this cost.

Q7) You served as the Economic Affairs Secretary and also the Finance Secretary of India. When you entered this service, what were your feelings towards the position and responsibilities?

Obviously, I had no idea about the position of Economic Affairs Secretary or the Finance Secretary when I got into the IAS in 1983. The structure and career progression in the service is such that in the initial 10-15 years IAS officers serve in the field holding positions of Sub-Divisional Officers, Collector, District Development Officers and other equivalent positions. The IAS officers are more concerned about the field positions and the responsibilities they would shoulder in the field. I off course had a finance and accounting background having studied in commerce and completed professional cost and works accounting course. Very soon I requested the Government of Rajasthan to post me in the Finance Department of the State, which the state government did not listen to. I got the opportunity to serve as a Director in the Department of Economic Affairs in the year 2000. I realised the responsibilities of Secretary, Economic Affairs and Finance Secretary at that stage.

Q8) How did you emerge as an efficient government servant, and how do you manage all the affairs peacefully? Have you never felt disappointed about the failures you encountered throughout your journey?

In the service, you interface with politicians and people all the time. India faces a variety of challenges in the economic, social, and political space. You are also not the only decision-maker. Sometimes, there is a conflict between political and public interests. You feel disappointed when you cannot serve the public interest and unfair political interests prevail. However, the service is not just about one or two decisions. You accept some failures along the way. Only when you feel that you might not be able to serve the public interest while remaining in government do you have the choice of leaving the service. One should not remain completely dependent on or tied to the IAS.

Q9) Sir, you were a member of the Indian Administrative Service (IAS) for over 36 years and have served in various key positions for both the Union government and the government of Rajasthan. You were also designated as the Finance Secretary in March 2019. What inspired you to write a book? And what are your predictions for the Indian economy by 2023?

Besides 'The \$10 Trillion Dream,' I have also recently published 'Subhash Chandra Garg's Explanation and Commentary on Budget 2023-24.' It is the most comprehensive and incisive account of India's budgets. I felt that I must share my understanding and thoughts on the economy and the budget with a wider audience. That persuaded me to write these two books, and I intend to bring out a few more books in the times to come.

Q10) Would you like to share your words of wisdom with students at the university who are considering becoming entrepreneurs after their graduation/post-graduation?

Study to understand the subject, not just to pass examinations. Don't make getting into one service or job your life's sole ambition. It is the knowledge and abilities that you acquire which will take you far in life, not just cracking some examination.



DEBAJYOTI RAY CHAUDHURI

MD & CEO, NeSL

About the Expert

Debajyoti Chaudhuri completed his graduation in mathematics from West Bengal and a Master of Business Administration in finance from the Faculty of Management Studies in Delhi. He spent almost 19 years working in the State Bank of India and is currently, the CEO and MD of NeSL. In this article, he speaks about his experience working at SBI and his views on the Indian G20 presidency.

BANKING INSIGHTS BY MR.DEBAJYOTI RAY CHAUDHURI

Mr. Debajyoti Ray Chaudhari, a renowned individual with a noteworthy career spanning numerous significant positions in India's financial sector, reveals his insightful ideas and experiences in this enlightening conversation. Mr Chaudhari offers invaluable insights on his notable accomplishments and the dynamics of his varied roles. He has a background that includes working as the Chief General Manager at the Insolvency and Bankruptcy Board of India (IBBI) and currently serving as the Managing Director and CEO at National e-Governance Services Limited (NeSL).

Q1) Sir, you have been a part of the corporate office at SBI, a Chief General Manager at IBBI and currently the MD and CEO at NeSL, what do you rate as your biggest achievements in all these years of working at such renowned institutions?

Every assignment had its own set of challenges, overcoming them always gives a sense of achievement. For example after 30 years of working as a commercial banker, when I took up the assignment as CGM of IBBI, there was always a bit a trepidation as to how I would fit into the role. However I ended up spending about 4 years in the youngest financial services regulator-IBBI and implementing some landmark legislation like the Companies (Registered valuer and Valuation) Rules, 2017

However, I believe the biggest achievement was, as the CEO of SBI in Dubai. Today we have so many Indians who are doing well in the global stage, but in those days it was not so common. Moreover, in Dubai with so many Indians, expectations were always very high from an institution and brand like SBI. I was happy that we are build up a highly profitable unit in Dubai by growing our business manifold.

Q2) All these years, sir, you have worked in a variety of institutions, what do you think is key to keep striving for success and not stop until you reach your goals?

For me everyday is different, i tell the people around me that one should try to learn something new everyday. As I said, in every assignment i have faced different sets of challenges. These situations made re-invent, innovate and rethink ways to come out on top. There have been good times and bad times. I believe that difficult times are not permanent, the darkest hour before dawn, is the one just before the dawn. Also savour the good times but be prepared for the cycle to change.

Q3) How can the G20 help to promote global economic growth?

G20 brings about cooperation and collaboration. It creates mutual understanding and fosters progress towards common goals like growth and development. It's not a political forum but an increase engagement with sovereign nations could prevent situations of conflict. Two World wars were fought in Europe but today we can move freely between most countries in Europe and there is hardly any border control. So cooperation, understanding and common self interest of development and growth should make countries come together.

Q4) With the recent partnership of NeSL with Federal Bank, how will the partnership be helpful for the beneficiaries in regard to e-Bank Guarantees?

Federal Bank is one of the thirteen banks who have issued bank guarantee through our portal. In today's era of instant messaging, there is no reason why a beneficiary of Bank Guarantee or BG should wait for the BG to be delivered through Courier or hand delivery, followed by a tedious process of verifying the authenticity of the same.

An e-BG issued through NeSL's e-BG platform, becomes instantly available and the beneficiary can access it on completion of a simple and one time registration process.

NeSL's e-BG platform is available 24/7 and as the movement gathers momentum, it will do wonders to reducing business cycles and facilitate ease of doing business in the country.

Q5) What do you think is the contribution of NeSL in safeguarding the matters related to information pertaining to any debt/claim?

NeSL is equitable to both the creditors and debtors. While both creditors and debtors can submit information, its generally the creditors who submit information as they are out of funds and need to protect their interests. For banks and other entities regulated by RBI, RBI has issued advisory to submit information to the IU. How its advantageous both to the creditors and debtor.

When an information is submitted to by a creditor to the IU, the IU presents it to the debtor. The debtor can agree to the same or dispute the same. If the debtor disputes the same, the creditor can take up with the debtor to resolve the same, after resolution, fresh information can be submitted which can be agreed upon by the debtor.

This ensures that issues are resolved when the relations are good between the debtor and creditor, when the debtor defaults on any loan he is unlikely to agree to such resolution. For the debtor also this is an opportunity to give his version of the data submitted by the creditor to the IU. In a recent case, even after a loan was supposed to have been closed by the creditor, the debtor continued to get messages form the IU to authenticate the information. This was alert to the debtor that there may still be some outstanding amount, which he may be called upon to pay later.

Q6) How do you see the growth or need of NeSL in the upcoming years?

To understand, how NeSL's DDE makes a difference to contracting, lets understand how a document gets executed. After the terms of the contents of the agreement/document have been decided between lender and borrower, human intervention is required to pay the stamp duty and procure the stamp paper, get all parties to affix their wet signatures on the document/agreement, and to store the executed document in a secure manner. Subsequent access to such a physically executed document is also a manual and cumbersome process.

NeSL's DDE platform digitalizes the document/agreement execution workflow from submission of document, to payment of stamp duty, to digital e-stamping to e-sign by the signatories to a completely secure digital storage/retrieval system.

Further, the DDE platform enables an Application Programming Interface (API) based integration allowing bulk submission of documents/agreements to the execution workflow. NeSL DDE has done a lot in making the whole banking experience less tiresome for customers as well as paperless. In India, where a big

percentage of population still is untouched by banking facilities, will this help in bringing them in and its possible impacts on growth in economic terms?

Q7) One of DDE's many victories has been the fact that transactions can be processed during holidays too, with the maximum credit going upto 2800 cr. Considering the startup boom in India, how can such fast credit facilities help such players ?

DDE because of its anytime availability can benefit any one. One does not have to go multiple times to a bank, or to a stamp vendor who may not always be available, they may not have denomination of stamp paper required. The document can be executed at the comfort of one's home or office 24/7. If there are multiple signatories, the documents can move digitally between all signatories.

Q8) India has been rattled with big scale loan frauds in the past. Will going paperless make this practice even less frequent?

Going paperless can definitely prevent frauds as digital mode with a central repository makes it easy to verify. In NeSL's DDE every document is executed with digital signature and the document is signed, sealed and stored with access to authorised persons only

Q9) How can the private industry learn from such IT Infrastructure that has been made by NeSL?

NeSL is an e-infrastructure provider and its services are available are all sectors of the economy. It has all the attributes of an infrastructure provider like a risk management framework, policy of non discrimination of services and protection and indemnification of users.

Q10) Recently we have seen a huge increase in transnational cyber attacks. India will definitely feel the brunt of this issue as we Transition to such IT infrastructure. How are we prepared to deal with this, and how can the industry collaborate to prevent providing overall better cybersecurity services to the stakeholders?

Cyber attacks are one of the risks we have to manage. As businesses are becoming increasingly connected risks increase. As stated earlier, NeSL has appropriate risk mitigation measures over and above what is required under law. NeSL is regulated by IBBI, which is also a financial services regulator like RBI.

Q11) How does NeSL ensure that the benefits of e-governance reach all sections of society in India?

NeSL's DDE is available to everyone. As digital document execution requires digital signature NeSL has enabled Aadhaar OTP based signature. In places where mobile connectivity is poor, NeSL has provided a facility of biometric identification. So NeSL's DDE has been used for document execution for the smallest of loans like PM Svanidhi. To ensure that the loan is disbursed to the right person NeSL uses fuzzy logic to ensure matching of loan details with Aadhaar details.



GANESH NATARAJAN



Chairman, 5F World

About the Expert

The founder of 5F World, a platform for investing and mentoring start-ups, skills platforms, and social enterprises. Dr. Ganesh Natarajan is the co-founder of Global Talent Track and Kalzoom Advisors, as well as the chairman of Honeywell Automation India Ltd. and the Lighthouse Communities Foundation.

Interviewed by

*Saanvi Bansal, Associate Member
Gaurav Sharma, Associate Member
Aayushmaan Goel, Associate Member*

INSIGHTS ON GEOPOLITICS AND TECHNOLOGY

We had the honour of chatting in-depth with a well-known figure in the business and technology worlds, a former NASSCOM Chairman, and a pioneer in the development of the Indian IT industry. He offered his opinions on a variety of subjects, including the potential effects of the impending G20 conference on India's economy, the future of digital money, and the changing nature of technology's role in the workplace. His observations clarified the dynamic environment of the Indian IT industry and its crucial position in the world economy.

Q1) As you know that this year G20 summit is taking place in India. So what positive impact will that have on our economy?

Its gonna be a commendable impact. And this summit was definitely bigger than the one that was in Indonesia last year. And Mr. Khan said in many of his fields that in all areas, if you look at the geopolitical situation of the world, it's all moving towards what is called multilateralism. So there's no large trade bloc, multiple nations trading with each other. So in that context, India's invitation to be at least a participant in the G7 summit in Japan. And now, leading the G20 is really emerging as the voice of the global south. And the south Bloc countries, which is really, we all talk about this century being essentially to being very significant force in Asia, is cemented by the fact that we are now the G20. Leaders this year. So I think the opportunity to Project India, we're already the fastest growing economy in the world. And coupled with G20 advantage it gives us I think we will be in a very good position economically. And that will be very good for India.

Q2) Do you think it will have an impact on political relations with other countries?

No, there would be no impact you have to keep working on it, you know Prime Minister Modi is going to speak for the second time in Congress, the US Congress this month. And we are already seeing Mr. Modi himself did a great job of positioning India, Prime Minister is a well leader and from that point of view, I think politically if you recall this recently G7 summit, Mr. Modi had also gone to some of the Pacific Islands. So that's why the voices is out means that we should be offering solutions offering services to emerging markets in the world. Europe is already kind of slowing down the economy. The US and China become large. It's almost like a bipolar world between the two. So countries like India, I think politically as well as from an economic standing point of view, this is going to be a great opportunity. So it's probably one of the best opportunities for India to really take its capability and show it to the world.

Q3) We know that the RBI is currently in the trial phase on officially launching CBDC across India. So what are your views on CBDC for taking over UPI in the near future?

I don't see that happening, UPI today is almost 70% of payment transactions which is very much but the digital currency because I mean, as you know, two years back everybody was very hyped about cyber currency etc. And that was to monitor and measure. So to control and govern currencies, what CBDC will do is currently the banks are already beginning to trade in CBDC. And eventually if it is made more of a B2B or B2C, I think we'll all be because the time will come when you really don't need to carry any currency in your pocket. It will be a combination of Paytm or any other UPI format and trading. So I think that's going to be fantastic. And we are also seeing the beginnings of that happening across the world.

Q4) As the former chairman of NASSCOM what initiatives Did you undertake to promote the growth of the Indian IT industry?

Indian IT Industry is a significant success story because I remember when the software technology parts of India were started, what used to be called Department of Electronics, that it became a ministry of electronics and Information, so that is the time whole technology industry was probably less than 200 crores in size. The first secretary of electronics, he actually gave us a challenge saying, "Look, why don't you guys go faster." And as Tom was forced by the ministry, to create what is called the six software technology parks of India,

which was designated areas were all good companies. So at that time, we were hardly six or seven companies in less than 200 crores of revenue. But I think NASSCOM has been a stellar industry today. But if you look at NASCAR, we represent not only the large technology services companies, but also products deep take what is called Global Health Centers, all the multinationals. We work in India, engineering. So I think ever since it started in the late 80s, to when I was chairman in 2008. But we've seen the single voice of an industry builder to play there almost \$250 billion and as you know, India's objective is to be a \$5 trillion economy. And out of that 1 trillion will come from digital India and I think the industry itself will contribute half of that and the other half will come through platforms for not only technology is an industry or technology, enabler to multiple industries.

Q5) As you said it was a growing industry at the time. So what was the key challenges that you faced while building and scaling technologies?

The first challenge obviously to address the perception about India. I mean, Some of you are familiar with the imaginary western mind was all about saddles, and religion, etc. And if you remember snake charmers and the Indian, so that's really where we came from. So from that perception, just to give you an idea I remember, I was traveling in Alaska, with my wife which was about almost 20 years back and we arrived at the little island called Ketchikan where the ship was docked and the captain of the boat came to the back, when he looked at me and said ohh India 'computers'. So the perception that India was a technology economy to provide technology solutions started at the 2000- 2001 timeframe. And today's the big offering, it's technology that we have come from our handling possessions, handling the attractiveness of the industry. Those are the times when I graduated, everybody wanted me to go join maybe telco today, Tata Motors or Tata Steel, but it was not traditional economy. But today everybody wants to join Infosys or TCS or a sensor or whatever. And that's because of the perception in the student mind that this is a great Industry. I think the combination of supply side perception and demand side perception has really changed and that's really on what we have to work on from earlier But Devan Mehta was one of the founders of NASSCOM along with Harish Mehta, Saurabh Srivastva and people like that to make Angelico change happened working with government working with foreign customers, I think that has been the journey. And it's been a successful journey and it inspires many other industries from India including farmer, textile etc. To become a truly world class leaders.

Q6) As you have your bachelor's degree in physics. So what motivated you to the to pursue a career in the IT industry?

I have bachelor's degrees actually in mechanical engineering, and after that i went to a college in Bombay to do industrial Engineering. And then, when I joined manufacturing, my first job was at a company called Nasik in Maharashtra, where I'm actually working on production planning materials management and planning solutions, but to answer your question from the mid 80s and i started working then so, you went to manage switchgear factory Nasik see, you had to use computers to manage the material supply and the supply chain. So I was actually responsible for building the systems and because of that, I got very interested in that area then set up my own startup in 1985. Then ran a company called Aptic for 10 years and then Zensar Good from a company, to more often understanding the power of technology to enable industry.

So I come at it from an applications point of view. I think that was the motivation to migrate from a very hardcore engineering base, doing more of technology and technology support it

Q7) Was it difficult? And how did you blend in with the changes of the field?

That's a learning process, if you read a book called Homo deus by Yuval Noah Hrari, Mr. Harari also say that look every twelve years you're to be prepared to do complete from the start Because even in your own college, what you're being trained for basic principles of finance, economics don't change. But if you look at the opportunity that you might take, you might join a bank, you might then move into an NBFC, then move into a completely different area or maybe a private equity analyst. So opportunities to keep learning new tricks is very important and in my own case, I think that's what happened, because I moved in as an applications of IP kind of person. But today, I understand it. So whether it was virtual reality, or Metaverse, or AI Generator , I think we're all comfortable with this all new programs and we know how to apply that practice, practical experience and expertise is what probably drives all of us to keep the evolving.

Q8) As you mentioned the AIM , being a former CEO of an automation company, how do you think the emergence of platforms like Chat GPT ,google bar work to fix the job?

See, it's an ongoing process. That's what I said about Harari's book. Let's say somebody said to me in my life, I'll be a Java programmer, That was a big dream, 10 years back. Today Java programming will be completely taken over by GPT, or Google Bard. It's a repetitive process. Testing, for instance, for which we used to employ lakhs of people in India (which is now fully automated). So let's say writing, the book you are writing is purely based on research in Google and various already published chapters. Chatgett can do this work faster if you have to add experience or knowledge to that, then you will use chatbots to generate, to create the information base. On top of that, it will give a more contextual understanding of any subject. I was talking to the IT Secretary on Monday and even the government of India is saying that If you worry about AI, It can be autonomous, which means it can replace jobs if you just use it for some help, Augmentative AI can improve the quality of life, and the ability of businesses to be much more cognitive, actionable insights. And I think that is what I find exciting about generative AI, which will help.

Q9) Can you please explain the 5's approach that you've advocated in your career, and how it contributed to your success as a leader in the IT industry.

See, I'll just give you an example, when I first became a CEO I was 33 years old of a company called Aptic in 1991 and Aptic was a very small company and the market leader in it. We were up to do something significant. It was difficult, but we got this team together and said Let's create a vision for ourselves I remember we were seven training centers in 1991. And when we got together, we decided to create a vision for 2000. And the maximum we could reach was okay, maybe we can become 100 education centers and at least one center will be in Dubai. And I keep telling you this because I left Aptic in 2001. We had 1400 training centers in 42 countries and 24 other countries we were the market leader, including China. And when I look back I said what made this fantastic growth pattern. It was the 5's and when I say 5 ' 5s, I mean fast, focused or focused on achieving our goals, and Flexible, Because of various opportunities, we look at franchising rather than the same sort, or setting up our centers. And we weren't all very collaborative. So that was the last two EPs friendly and fun. And so then when I took over as the CEO of this company in Puna in Zensar. I brought the same 5's approach, the team went from 200 people to 8500 people by 2016. And then when I started my own company that exceeded everybody who acquired the company in the past, said, Whatever you do use the 5 F word. So, which is why the company I run is called 5F World, and it is more digital consulting and skills, social ventures , and investing . So , that's the genesis . And I

believe that something that works for everyone works, works for students like you. It works for new entrants to the corporate world.

Q10) Can you share some of your key strategies and initiatives that played a crucial role in driving the growth of the internet technologies of market value to 44% in the last 5 years?

Yes, our market value growth was compounding on an annual basis of 44%, during the 2016. We focused on Business model innovation. Now, just to give you the concept of innovation, we all know what product innovation like maybe a chat gpt or a platform like iPods and apple in early days that's productive. There's also this whole concept of process innovation. So the impact of the entire IT industry in India came about because of innovating and processes. A software engineering standard policy that made all the companies very reliable for the customer. But we chose innovation in the business model saying that our entire focus on changing the business. If you think about business model of a software company, typically in the old days it was programming and testing, we used to take a requirement, people would write programs, all the Java tested. And so we chose a business model where programming will be fully automated. Within that time, about 2002-2003 and we build tools to automate the programmes, so the essential idea was to create something called a blueprint foundry. And the blueprints would emerge from the foundry and get converted to programme like science fiction. But we made it happen. And that's what resulted in our great success. Similarly, when digital first happened, maybe 2008 or 2009, because we were the first one saying we can do complete digital transformation. For the model we built, which is the model of my one of my books which I wrote recently that I call achieving digital success, was not just about technology, it's about technology, it's about customer and employee journeys. It's about business process reengineering, it's about data analytics, and it's about leadership and culture. So by changing the model or changing the paradigm, or the perception of what a techno what a science is, whether it's software engineering or be always so I think that was fun. So we said let's be innovative and not just innovative products and services but the way we work what we sell to the customer and to my mind that's been the success of many of the companies that we're investing in today are following the same.

Q11) Sir, I want to ask you that how do you balance your responsibilities as a CEO and a leader while navigating various challenges and complexities within the business landscape?

Everybody wants to be the head of the company. So that is the chief executive director. Here we also call the managing director. But the way I look at it is to balance your balance your position your organisation or balance your contribution to your family and your society, and thirdly is to contribute to industry. So Industry Forum like NASSCOM you mentioned earlier, or CII is very active in the configuration industry or already, if you do all that you're not really contributing to your company, and building shareholder, you're also adding value to the industry in which you belong. In my case, it was a software industry then and eventually. And you're also making sure that you give enough time for work life balance and contributing. So if you do all that, you typically become much better. And today, it's been 40% of my time in the social sector. We have two large initiatives, one for humans, to my company called global talent. The other is livelihoods for urban city slums, young people growing up in the slums in cities like Delhi or Bombay or Pune.

How do we give them an aspiration, what we call agencies skills, and I think this must be as much satisfaction as investing or consulting etc. And that's why if you want to be a leader, you can't be what Americans call a one trick pony. You can't just be a great leader of an organization, you got to make sure that your impact is felt in all people.

Q12) So there was this one book 'Rising To The China Challenge', which you co-authored, which addresses the potential risks and vulnerabilities associated with economic dependence on China. Were there any other case studies that you analyzed?

No, not really, this whole book was happened because if some of you know in 2000 China actually broke into Dhoklam and pangong lake in Ladakh, encroached large parts of it, And they did a magnificent job pushing them back. So all that was done. But six of us got together. And that is two padma vibhushans, Dr. Vijay mashita, my friend, one of our former ambassadors to Pakistan, and China, which is Gautam Bambawale, and two economists. Dr. Ajit Rana And Dr. Ajay Shah, whose family founded the Center for monitoring in economy. So between the six of us, we actually started brainstorming, seeing that what should be our long term response to China. The military is one aspect, diplomatically, economically by the growth of our industries. Due to that time I'm talking about March 2020, there was \$2.9 trillion dollar economy, and China. a 15 trillion dollar economy, because maybe a few decades ago, we were almost equal. So we started to say that we need to make this happen. After that, talk to friends in industry and government. They said, "Well, I

mean, you've done an Indian pacing up to China was name of that book. But why don't you then write a specific book on India's pathway to success, which is what we do. And in fact there were 13 contributors to that book, I edited along with Ejaz Ghani who is a former principle economist in the world bank. And we got a lot of contributors to it. That's what runaway bestseller from the publishers, and that has really shown the purchasing aspect of traditional industries like manufacturing, agricultural services, or new areas, maybe organization, etc. How can india take the lead and that's, that's really what we do .And, really, the challenges, we've seen the political divisions, community division, so you're saying that while there also needs to be soft reforms in terms of full inclusion, collaboration etc, comprehensive example, looking at hard sectors, you look at things like urbanization, what should be done about that? You look at entrepreneurship, what we call trust deficits. That's the work we've been doing in the literary sector.

Q13) What motivated you to write a book about China's economic and geopolitical issues?

I told you that real motivation was China's uninvited entry into India and a lot of us very patriotic. But one thing is the reality is it's Pakistan or China or anybody else. I mean, unless you're strong, your enemy will walk all over you. That's why we define strong as not just military strength, but economic strength, political strain diplomatic strain. And today Prime Minister Modi is doing a fantastic job. Just positioning India as a true emerging, I wouldn't call them superpower, but truly emerging leader in the world.

Q14) I only have one last question for you. Would you like to convey a message to the entrepreneurs of a nation struggling in out of the globalised market?

My first message to all of you is you have such a plethora of opportunities around you , I remember when I was in school, and I was very passionate about English Language and English literature, i applied and got admission into Cambridge University in the UK, and my father was very clear that to succeed in this country. You can do one of three things, you can either do your C.A or you can be a doctor or an engineer at those times there were limited options. But today, when I look at young people went from being disc jockeys to, to maybe rap artists. I think that's the thing, but it's important to choose wisely. I mean, people who follow their passion know what they are doing to find success. People are obviously clear about what to do. So it's nice to see campaigns like startup India, doing startups, but the reality is nine out of 10 startups don't succeed .

So, to do to do a good startup as I keep saying, right, consumer entrepreneurship, your question, what is your product or service? And why is it different? Is there something unique about it and second is, like what is your running business model? Is the business model. The third of you know who your customers are? The fourth is, do you know where your funding is going to come from? Because there's no point in taking money from family, and then finding nobody else is going to fund it? And finally, what is your team? Because no individual entrepreneur, whether he is Steve Jobs, or Bill Gates, or Elon Musk can be a success . If you keep these things in mind, I think that is the future of entrepreneurship one of the critical students who wants to be a startup or an entrepreneur, if you keep getting it.

Q15) As AI and argumented reality like Chatgpt and metaverse are coming up, what is your take on them? There's a lot of hype that AI would eat up jobs; what's your view on this?

See, always, when computers first came in, people said, all jobs will be taken away, everything will be computerized, it actually created more jobs. So this is a real problem and I was discussing it with the CEO for the ministry on Monday in Delhi. And that question, all of us believe and so does Salke Sharma who was the secretary at IT for that matter and there were 4 CEOs were there in the room. And if you look at technology, you use technology for the value it can build like terms of increasing the pace, increasing the accuracy of the operations. But don't get scared. Inspired human beings, intelligent people who will are willing to constantly learn can never be overtaken. Now we may find the generative AI is completely taking over the world. But I've not seen that happen in the last 65 years of my life. And I don't expect that. So what to worry about at all because everybody likes me. Like everybody likes negative news rather than positive news . If I say AI is not a problem, people will say he doesnt know anything if I say January to AI will kill 1 billion jobs because everybody wants it to be so it's more sensationsism.



DR. TANU JAIN

CREDITS: TANU JAIN

Founder, Tathastuics

About the Expert

A BDS (Bachelor of Dental Surgery) graduate from Meerut's Subharthi Medical College, she was a dental surgeon, but she sensed something wasn't right. She subsequently made the decision to take the UPSC test. After only two months of study, Dr. Jain passed the UPSC prelims test in her first try and went on to become an IAS officer.

Interviewed by

*Preksha Aggarwal, Vice President
Mansi Khurana, Associate Member
Satvik Chhabra, Associate Member*

WORDS OF WISDOM BY IAS TANU JAIN

In this insightful interview, we have a direct discussion with a multifaceted civil servant who has worked in the medical profession, the civil service, and ultimately in education. The interview explores her motives, viewpoints on students' career choices, her experiences in different professions, and her opinions on addressing important societal concerns in India. This conversation provides a window into the complex journey and perceptive perspectives of a committed public servant.

Q1) What inspired you to join the civil services after pursuing a Bachelor's in the medical field? What is your take on changing fields in your career?

So, I am someone who has changed many careers. I started being a dentist, and after that, I chose civil services because it's a noble profession. In essence, the moment you choose to become a civil servant, you have to understand it is a big responsibility along with a lot of learning. This exam is considered to be a difficult exam because it takes you to a position where you have to handle a lot of responsibilities at the same time you get the authority to create an impact in society. Now I have switched my career to become a teacher.

UPSC is a very fulfilling job but the kind of impact a teacher can make on the young generation is great. Any developing nation should and must focus on the young generation more and to do that I made a shift from a government job to that of teaching. So if you are asking me about switching careers then I am the one who has switched careers twice. the moment you are moving into a larger vision you should make the next move.

Q2) That was quite insightful! Continuing it, according to you, what should we focus more on — what our passion is, or what we eventually are studying?

Both, in my opinion, Passion is important because it keeps you going even in difficult times but in the end, you can't compromise on content and Common sense because only passion doesn't help, If I have only passion with no content and quality as an aspirant or civil servant if you have only a passion but you don't write the content well or don't attempt the mcqs well or if your optional is not strong then passion is of no use. Passion means that you have to inculcate those qualities or traits that a civil servant must have so both require Hard Work, Content, and Guidance, and at the same time to pursue a passion.

So the passion for me is as an aspirant of a civil servant if you have to do the 5 AM morning study then you do that, if you have to Sacrifice the parties, marriages, and friends you do that and you do that happily not cribbing like "I have missed my life or I have missed my friends" etc.

So if you are passionate enough you will let go of certain things in life and it's okay as I am aiming for something big, aiming for something more valuable, so you sacrifice easily.

Q3) Ma'am, we've seen a lot of clippings of you conducting mock interviews for the UPSC. As we all know, your job as an IAS is highly secretive. How do you balance the two realities, one being so popular on social media and the other being limited in your professional work?

Both are very different domains. Generally, when I am sitting on a mock panel, teaching, or acting as a citizen, I do not discuss anything about my work. It's the general insight that I take care of, and as an officer, the work is secretive only to a certain level. There are only things that the government should be secretive about. Generally, the processes of government are meant to be transparent because a servant aims to serve their people, and power lies in the hands of the people. They should know what is happening, what policies are being run, and how they are run. So, there is definitely no secrecy, only transparency. If there is something related to the security of the country, it will be a very small area where information will be held secret. Apart from that, there will be no dilemma in handling the public and being a part of them.

Recently, I resigned from my government job and started my career as a teacher. I opened my institute as "Thatasthu Institute of Civil Services."

Q4) What an ambitious turn! So, ma'am, how do you envision the future of public administration and the evolving role of IAS officers in shaping it? Like you have recently opened an institute, how much has there been a change in the preparation nowadays compared to when you were an aspirant?

So, certain basic things don't change in UPSC. As such, they have always been there. UPSC demands aspirants to have an awareness of their surroundings. They must be individuals who can think, not just rote learners. Even if you read book after book, if you don't apply the knowledge, UPSC becomes a difficult task. The application of the mind, common sense, and logic is crucial in UPSC, and this requirement remains unchanged.

During our fathers' time when they were giving exams, they felt a kind of scarcity of material or guidance. You might have heard from your father or mother, "We had traveled hundreds of miles to get the books."

Scenarios have changed now. There is an abundance of material, and distractions are plentiful. If you open Telegram, you will find a countless number of materials, and this material is often focused and misdirected. The challenge for a student is to differentiate between non-important content and important content. The pattern has not changed, but confusion has increased due to the surge in material and random guidance.

Let me share an instance. When I opened my own institute, certain students came to me and said, "Ma'am, we would like to assist you in mentoring." I asked them if they had cleared the exam or at which stage they had reached. I was shocked to find out that only 1 out of 5 had cleared the Prelims exam. This reflects the quality of mentoring going on in UPSC. That is why I am staying with the trend. Guidance and content have changed, but the requirements of UPSC have not changed

Q5) Thank you, ma'am! I hope you bring a revolution in UPSC preparation, increasing the quality and reducing the misinformation, as mentioned earlier. Moving on to the following question, do you think social issues exist in India? As a public servant, how do you plan to overcome these issues and contribute to the growth of the country?

here are a number of social issues that are concerned with the current scenario of our existence as a country. Of course, gender issues are one, seeking poverty is itself a big malice, and employment and lack of basic amenities like education, and health is another problem. So definitely there are problems. But counting problems doesn't help. No nation will grow if we only count problems, we have to find solutions. And solutions to

several problems are very rarely found in the law, rarely there is any solution by any other means. It has to be a social solution. For example, We all know dowry is evil. We have a clear-cut concrete law over that, but still when you see the society, when you see the marriages, you will see that it is still happening. Now the term may be different, but the way it has been oriented is different, it still goes on. Similarly, if you talk about vulnerable sections, such as poverty. We have been given so many schemes by the government. The government is giving so much support, yet we hear of people dying from starvation, still, we hear of people lacking basic amenities. So the legal solution is very difficult in such situations, we have to find a social solution, and a social solution means not just the government, but each one of us is responsible. So the moment you see something wrong socially. It's your responsibility, it's my responsibility to act on it. If we do not act, we cannot just blame it on the government or the leaders. For example, corruption, we all know, we all have heard corruption is a social evil, If we want corruption to move out we all have to act.

Q6) What is your perspective on the use of technology and digital solutions in improving govt services and administration?

The government now has more data and facts on which to make decisions, thus there are many valid reasons for the government to undertake these steps and demonetization. Every government knows the consequences, but sometimes you have to take it to eliminate certain problems like that, and Regarding digitization, Digitization is the need of the hour, and it is an inescapable fact now, so you cannot escape digitization. Slowly and steadily the full financial system is going digital. Even small vendors are using UPI apps now. And definitely, it's more beneficial. It restricts the parallel economy and it brings more transparency into the system. And definitely, digitization should be promoted and adopted.

Q7) What is your perspective on the use of technology and digital solutions in improving govt services and administration?

Every step has its pros and cons, and there are various cons associated with it. So take the example of education, when a student is studying online, the student teacher's touch, the emotional connection is a little less. Students lag in taking classes, they feel like they can take the class maybe an hour later, not today, I'll take the class tomorrow. And slowly and steadily we don't know when the schedule is wrong and it slips away. I have seen students who could not keep discipline in their online classes and lag behind even

six months, so definitely that's a con, and there's also sometimes connectivity issues become major issues. And definitely, these cons can be slowly and steadily overcome. And the thing is even if we want or don't want, technology has arrived, and it's an irreversible thing. We have to make arrangements to accommodate technology. We cannot remove it, we cannot go back to the olden time and turn the wheel in reverse.

Q8) When the Uri event occurred, you had just begun your service as the Assistant Director of The Ministry of Defence; why was such a bold stance chosen by the government that typically avoids conflicts, and what was your take on it?

India has always been a peace-loving country, but not a cowardly country. We have always been a very strong country and, if anything will harm our sovereignty or any aspect of any security, we hold the right to retaliate in every manner, so this is what the government did, will do and in the past also has been done. It's nothing new that is happening, we always have been a strong country that holds every right to secure its sovereignty.

Q9) As we know, India holds the presidency of G20, what has been the impact of the same on the country and what's your role in the process?

My role? I was not invited to the G20 meet but definitely G20 is an international platform that provides us with a kind of exposure and place in the international community which is important. If we are holding it we definitely have a say over things discussed but again all of this must be looked at from both national and international perspective.

So changes definitely the decision taken in the meeting will be implemented and leaders coming to India and showcasing strength is definitely important, The economic decision and solidarity that develops during meetings are beneficial. so you know we just cannot say why not 2 things. It's a very rounded complex that will be implemented, you cannot just say that this change will be there. It has to be a long-term process in collaboration with all the countries so changes have to be made carefully.

Q10) You have mainly served mainly in the fields related to armed forces, and are currently working in DRDO as an assistant director. What future developments can we expect to strengthen the defence forces and systems of India?

So as it goes that each bureaucrat is a cog in the wheel which works with its own strength and every officer that posted it anywhere is crucial but the

significance is only of a cog, cog means a small piece of machinery so as my existence as a cog in the machinery of civil services, I try to bring maximum efficiency for developing defences of the country like every other bureaucrat of the ministry of defence. So my contribution is that I work with efficiency and full passion when I was placed and that's what is required in a civil servant.

Q11) What all steps do you think India needs to take in order to compete with the superpowers and ultimately become one?

There are a lot of things we need to do, we are a young country, and youth is our strength and if we can empower our youth, definitely we can become no. one because the moment we skill and empower our youth we will be number one, we have great minds, we have technological minds, the moment we work and become a leader of technology, the primary sector is taken care of, so I think we have to focus on two things growth and technology, if we find a balance between both of them we will be number one.

Q12) You said that India is a country of youth but nowadays we have the problem of underutilization, there are a lot of underprivileged students so what solution would you give for maximum utilisation of youth?

A lot of students are underprivileged and definitely talent and education should have no bars, when nature doesn't discriminate, Social systems under economic systems should not discriminate but the situation is that we have to create a buffer using government, technologies, and all other things. So the underprivileged section has to be taken care of that is where technology comes in handy, As you see more technological we are becoming the more phones we have, We have education in phones, so education is dropping slowly, and prices are dropping, if infrastructure cost decreases, education becomes cheaper again govt is taking all initiatives, govt is trying to bring better schooling for students, but it will take time, we need to work together to bring the change.

Q13) Govt has launched a scheme in India where they promote MSME development but how can we make it reach the villages so that self-employment growth opportunities are produced in these backward regions of the country as well?

Various schemes are there and definitely reach out all these schemes are reaching to the village, the effect can be seen so I don't know if you have watched the recent reality show, Shark Tank India, there you could

see that lot of people came from rural backgrounds also, it came from self-help groups kind of enterprises also so definitely the slowly and steadily these schemes are moving in these villages. The more awareness that we generate, the more people will become interested and more people will demand these changes.

Q8) Entrepreneurship is something that is new for developing countries like India but it has already stayed in developed countries like the US but for India, it is very new, even in some cities it is not served that well. So how is it possible for villages to do?

It is a myth that entrepreneurship is something new to India We have had entrepreneurs since ancient times, we have studied about the silk route, Commerce flourishing during the hadapa and Vedic periods, there was flourishing trade. We have trade relations with various companies so entrepreneurs is not new to us. The word entrepreneurship may be new but the concept is not new to us and we have heard about banyas, marvadis, etc All of them were doing entrepreneurship without knowing that this is entrepreneurship, we cannot say it's very new to India. With the change of technological supports, things are changing, new business models are coming such as the e-commerce model and soon new generation of entrepreneurs will stand out.

Q9) How did you cope up with personal problems during your college examinations and what advice would you like to give to students who are facing similar issues in their lives.

Each problem needs a different solution. Whatever problem that I faced I always remembered and it will pass, every problem has a solution that is why it is a problem. keeping your spirits high, talking to someone you are close to. Have a detachment with that issue and look at it from a very negligible point of view. Many times we start being very emotional about a situation and this creates a lot of problems. The moment we disassociate we see the reason and things improve. Reading philosophies would wound.

My father had a small accident while I was preparing for exams, but personal situations make an impact on your preparation level and emotional stability but definitely, Such things happen with everybody, not at one point in time but in the course of life they have to face it and we have to handle it maturely. When you are in a responsible position as an officer you have to understand that you have to keep your personal problems aside. This is where professionalism and student ethics come. And there is a quote from Geeta which says '*karm kar fal ki iccha mat kar*' which means you have to do your duty.

CAR'ISMATIC CONVERSATION WITH THE BOSSMAN



ADIL JAL DARUKHANAWALA

CREDITS: EVO-INDIA

Director, AdilsAutoZone

About the Expert

Adil has a background in mechanical engineering and has extensive experience in founding and contributing to several renowned automotive publications and portals, such as, Car and Bike International, OverDrive, Zigwheels and Fastbikes India. Adil Jal Darukhanawala has played a key role in shaping the country's automotive media landscape, and is known as 'The Bossman' in the industry.

Interviewed by

*Aryan Aggarwal, Design & Technical Head
Satvik Aggarwal, Public Relations Head*

Mr. Adil Darukhanawala is a prominent figure in Indian automotive & motoring journalism and a passionate automotive enthusiast. We delve into a wide range of topics in this conversation. Mr. Darukhanawala offers valuable insights and candid views on the complex challenges of maintaining objectivity in car review, the reasons why major car manufacturers have left the Indian market, the future of shared mobility and his unique insights into electric cars. Discover the world of automotive journalism with us as we look at it through the eyes of a true pioneer in the field.

INTERVIEWER: How do you as a journalist maintain objectivity and unbiasedness while reviewing a car, as you are an enthusiast too and you might have a liking for a particular car or a brand for a long time?

ADIL: So, there are two terms which you used-in to from your question - Journalist and enthusiast. I have been an enthusiast all my life so even though I don't remain a journalist, I have always remained an enthusiast even when I was doing journalism sort of work. I never learned journalism, I am a qualified mechanical engineer and for me, the key thing is, someone who makes a buying decision by being informed about my verdict or my assessment of A or B or C vehicle, it will impact him massively. So there could be someone who might buy just one car in his or her life, or one bike in his or her life and for someone to go wrong with my decision is really bad. So I will never let that happen. A company can go wrong, I don't care if the company loses 200 crore: but the man losing, or a woman losing 8-10 lakhs of rupees of his or her on their buying decision based on learning something from me, that I can not. So, I have always tended to side with the consumer who makes the choice, an informed choice based on my verdict and yes, I have my favourites. There is no question about that but those don't come into the picture at all. The question is, I also see whether a bike or car is fit for purpose for that person's use. So there's no point in having me trying to configure and write a road test about Maruti WagonR and try to say that it is a lousy car because it doesn't do Ferrari speeds.

INTERVIEWER: Doesn't make sense!

ADIL: It can never make sense! And you cannot say, oh it (Ferrari) has got only seats for two and I want to carry two kids, and my mother-in-law, and the help and the kitchen sink and it doesn't have space. So, it's incongruous both ways. But more importantly, you have to be truthful to yourself. So you look at a car or a bike from that perspective, and yeah, let me tell you one very important thing, in the industry which is there, and I literally started this thing going in 1977, there was no one who was writing, there was no one who was commenting on cars, bikes, motorsport, I'm a bike guy first and a car guy a close second. So, that is where; so, if you see, bikers are really much more deserving of the term being human, having that biker brotherhood; car guys are a little snooty, so I like to keep that snootiness behind the biker in me.

INTERVIEWER: Sir, first Indian MotoGP is just round the corner, so what mistakes that we made during the 2011-13 Formula 1 Grand Prix you think we should avoid so that it doesn't be a one time stint and the race comes to India every year?

ADIL: Wonderful question and honestly, I can feel the pain when I listen to such things because the sport is too ingrained, intrinsic to us, to me personally. My uncle's grandfather did the first motorcycle race in India in 1904. So, we know where we're coming from across over there. I think they are two different things; the Formula 1 thing failed because of a lot of political reasons and also, a private entity was bold enough to do Formula 1. But Formula 1 is no mug's game. No was was accepting; the formula 1 authorities themselves, the F1. And 90% of every revenue belongs to them. The circuit owner can only make revenue on ticket sales, and as you know, you can't command ticket sales like you would do abroad. Our standard of living et cetera, cannot, what you call, I think it did not work and the F1 guys thought that like how money-backed countries like the Gulf: the Middle East, the governments have bankrolled, even Singapore and Malaysia, governments have bankrolled the Grand Prix there. The F1 didn't get that sort of thing, and logically, I feel, for a country at that time, and plus, at that point in time, the event happened much before we thought that India was ready for it. So, I would have loved to see India doing Formula 1 long time ago, but it was not possible. Whereas MotoGP right now, I am fearful of only one thing; Delhi, northern-India is not the hub for motorcycle sport and never has been. And I have not seen anything done to get the sport going there. And curiously and interestingly enough, the organisers of Bharat MotoGP have been pretty silent about pushing the event in western and southern India, where the sport thrives.

So if you have consciously done that, it is bad, and if you have been ignorant about it, it is still worse. So on both counts, I am really scared about it; because one — MotoGP — it is a natural fit for India, it's also happy that the UP Government is using that as a flag waiver for all what is doing to get the state up industrially and everything. It is wonderful, so you have to tie in, but if the Grand Prix starts with an empty grandstand, I'll be hanging my head in shame!

INTERVIEWER: In the recent past, we have seen the exit of quite a few major automobile manufacturers from the Indian market, like Ford, Chevrolet, Fiat; despite India being the third largest passenger car market globally. What are the reasons that you think are responsible for this trend, both from manufacturers' perspective and the Indian authorities?

ADIL: Most important thing is, in spite of these three guys, whose attitude was suspect, India still is the third largest, okay! So there was something wrong with those 3 and their approach to India. So, honestly speaking, the Americans thought that they'd walk all over India and they'd demolished every existing player. They were made to smell the coffee and they had to exit India with their tail between their legs. It was an attitudinal problem more than anything else. General Motors thought if they can do it in USA, they can do it anywhere, and they thought Indians were living in the past, and they would, what do you call, succumb to the lure of whatever was coming from a white man's country. General Motors' problems were such that it did the same thing in Europe also and they failed in Europe as well. So it was natural that they were going to, what do you call, hit the bucket in India. It's just that they prolonged their slow death for a long time, and some poor ignorant of our countrymen suffered by buying their cars. Ford was a different story. Ford had good cars, really good cars! But their approach and sensibility was truly not in keep. I always found there were Ford guys, they were at a launch and they would come and say, Adil, "We have done a great job, what a wonderful job we have done." It used to grate on me because I never earned Honda or Maruti, or even any one of our home-grown manufacturers say, "We have done a great job in the launch of a car. They'd say, "We may have worked hard. We have worked hard for this." But these guys would pat themselves on the back and say, so one day I told them, "Why do you say this? Why don't you let the market tell you whether you've done a good job or a great job or not? So suddenly they said, "How dare could anyone say this to them!" I said "Yeah, that's your trouble." And Ford lost out in the mind. And FIAT, FIAT is Fix It Again Tony. They never gave quality. They thought they would historically, the ramification of what our grandfathers and fathers used to drive, so they thought they had built that. But they never ensured the quality.

INTERVIEWER: So we have to understand the consumer and the market.

ADIL: You have to! There is no question about it. And I see FIAT, or Stellantis right now, through Jeep and Citroen, making the same mistakes again.

INTERVIEWER: Okay, so, according to your point of view, what do you need to build a successful car brand in India then, other than this?

ADIL: You need to have affordable and usable technology, not technology for its own sake. There is no point having ADAS when our roads are not marked. Sacred cows dominate every proceedings and every speed corner. You need to have usable technology at affordable rates with decent performance. And yes, the goalposts have changed from a great thing where earlier, it was only fuel efficiency which dominated minds. Today, you need a modicum of pleasure, comfort, convenience, connectivity, all those things matter. And our Indian consumer is very discerning. He goes to make a buying decision for a car not alone, because the wife and the kids are party to what he or she needs across in the car. So if you do not, what do you call, have this overall approach to doing things, trust me, one of the key things, what is, you need a car, Hyundai is a good example of how it delivers whatever it does.

INTERVIEWER: What do you have to say about the controversial design language trend that is going on these days in the industry...

ADIL: With whom?

INTERVIEWER: It's a general trend but like if you, for instance, let's take the Mercedes S-Class. All the minimalism thing, I think it has lost its elegance that it stood for due to the minimalist design language that they have gone for. And it is a trend that we see in other companies as well. So, what is your opinion on that?

ADIL: You're right! You're right! You're right to an extent! I am not a fan of design now, but let's understand one more thing, a lot of it is dictated now by what couple of attributes that come in. Legislation is one very important aspect and in that thing, fuel efficiency and emission legislation. So they want to have a light-weight car, (which) is more emission-friendlier than a heavy car. So, the minimal thing comes in that thing. At the same time, keeping in ethos with Mercedes-Benz's stature, they want to, what do you call, also try to be as cutting-edge with minimalism as possible. So, there are too many variables involved. Yes, I have been brought up with a steady diet of really luxurious, what do you call, drawing halls on wheels, that sort of a thing with Mercedes-Benz

And suddenly today we see, it's like a lounge. So, it takes some time, but, some of my younger colleagues like it. Maybe it's a generational thing. I'm good to, I'm happy to see that you guys don't belong to this generation, with your question.

INTERVIEWER: We are also blessed! Those are some beautiful Mercedes models in your background. The CLK GTR, I personally love that design.

ADIL: Very good! Very good!

INTERVIEWER: Being the pioneer of Indian automotive journalism, what advice would you give to someone with a commerce or management background, such as ourselves, aiming to make it big in the automotive sector?

ADIL: Ah, you need to have passion. Whatever you do, in whatever walk of life, passion drives you. So, I've always told, always, whenever someone has asked me, that I have never worked a single day in my life, because my thing, the day this thing turns to work, I'll be an abject failure. So don't make this to be sounding like work. And passion can help you there. So you need to be passionate about whatever walk of life you want to excel in.

INTERVIEWER: Yeah, I think it's the only thing that can make it happen.

ADIL: That's the only thing, yaar. You need to be happy about it na. If you're not happy about it, what is the big point?

INTERVIEWER: Exactly, otherwise it will be normal lousy days, going to work.

ADIL: Yeah, absolutely! Then it's work! I have never worked a single day in my life.

INTERVIEWER: Sir, what are your thoughts on the lobbying done by the commercial vehicles operators and large companies with regards to, let's say, the scrap policy, like, which usually results in the confiscation of mostly private cars, which don't really contribute that significantly to pollution the levels as the commercial players?

ADIL: We, India, are a very impressionist society. It stems from our thing of being stupid followers of every illogical things. Our politicians are our servants put into parliament than other things. The public forgets that. The politicians suddenly become the end-all and be-all and there are edicts given by them. The day India starts questioning them, we are a very fragmented society in

that will. You have to, what you call; we have never questioned our politicians, never ever! And the politicians run roughshod. Yes, scrappage and what not is important, but it happens over, after you have given a timeline, which cannot be 6 months or one year, it has to be 10 to 15 years. You may have, whatever. Mr. Gadkari, may want to, what do you call, be, do whatever, the Prime Minister may want to do whatever, laudable thoughts are there, but they ought to give time, and they don't want to do that. That is my one big issue on this aspect. And one more thing is there, the automotive industry is the whipping boy of all the powers that be, because, all our OEMs don't get together to lobby jointly with the government. As such, they go separately to a minister to get curry favour for A manufacturer or B manufacturer. So the industry is fragmented, so much so that, when you're not a united body, the government whips you any which way and the manufacturer only wants to sell you a vehicle, and I think that's the end of the thing, which is very pathetic way to, what do you call, operate your business in the country.

INTERVIEWER: Okay, so what's your point of view on this mindset of India being like, 'Let's go, *dekh lenge jo hota hai?*' A huge chunk has this mindset.

ADIL: I don't want to live like that. I don't want to live like that. Yeah, there are many, because the fact is, it goes down to our scriptures and our epics because our way of life says every human being is a God. So, with 1.4 billion Gods, and even in the epics, the Gods fought with each-other. So, it's the same thing is in real life. So, everyone thinks, because he is God, "hum dekh lenge kya hoyega!" It's a lousy way to live.

INTERVIEWER: What do you have to say about the outrageous custom duties levied on CBUs and how much of an impact do they play in discouraging a large chunk of prospective buyers in procuring their dream cars nowadays?

ADIL: No,no! On CBUs - India is a manufacturing country. If you have CBUs open, we lose our manufacturing. Look at what has happened in so many companies in Europe, forget India. Britain has become a screwdriver company, France is just living on something, Italy, the bottom has fallen off, so many, Germany is reeling across all. So, if you care to think about it, how many countries are manufacturing countries? And CBUs, yes, India is a very rich country with very poor governments. So people don't mind. There is Lamborghini selling one and a half cars every blinking week in this country. That sort of a thing has not happened anywhere else.

INTERVIEWER: That's quite a lot!

ADIL: So, what I am saying is, at that end, there is no dearth of buyers. But if you get CBUs to be free for the Maruti, Tata, Mahindra sort of thing, you will wipe out our own manufacturing ability. You don't need that!

INTERVIEWER: Makes sense, yeah!

Do you think the current regulatory measures don't really add up in enhancing the build quality of automobiles?

ADIL: No, no, no! The build quality, you go have a look at the build quality of a Tata Motors car or a Mahindra car. They will rub the noses of many multinationals into the ground with their build quality, with every aspect across, they have done very well. So build quality is one thing, crash ability is another thing, and on both counts, the Indian manufacturers, the two home-grown Indian manufacturers are top notch. The others, you have to what you call, invest in that. So there is a Japanese way of doing minimalism in build without sacrificing structural integrity, as being in the long. Now India has got their own Bharat crash test.

INTERVIEWER: Bharat NCAP, yeah!

ADIL: So we have got, so we are moving there. Again, as I said, it's got to be evolutionary, it can never be revolutionary. Certain things which the government wants to do is revolutionary, no it cannot happen, it just cannot happen. And I don't want it to happen, to be honest with you.

INTERVIEWER: Sir, what do you think is the scope of shared mobility in the future of transportation? It is being talked about a lot these days.

ADIL: It's a good thing. It's a good concept. But, we as Indians are always aspirational. "I would like to be the king of the way." "I will, what do you call, even if I have to drive 40 kilometres alone, I will drive alone." So, there are, what I say is traditional mindsets which are there, they are hard to overcome. But yes, in certain aspects, where economic needs can be justified or fulfilled by shared mobility, so be it. But for it to really happen en masse, we still have got a long way to go.

INTERVIEWER: Print media is not dead yet, but if you talk about the people of our generation, they prefer to watch videos over reading magazines or even digital content for that matter.

ADIL: What a shame! What a shame! You need to read. You need to read! Without reading; that, that is the repository of knowledge. You have a book, so when are you going to keep on searching video, "Oh, I've read that," so when are you going to scroll down to search a video?

INTERVIEWER: That's a huge problem!

ADIL: Yeah, yeah, I know that! I knew your problem even before you mentioned about it. Sometimes the truth is right in front of your eyes, but you look through it.

INTERVIEWER: So, how was the '91-92 Honda Kinetic ride across the Sahara desert? We heard about it on a podcast; so you have been known for innovating and doing things that have never done before and that is what makes you stand apart!

ADIL: You need to be brave, and you need to be crazy, and you need to be having a little bit of stupidity. At that time, we were, 1991 was almost 32 or 33 years back, little bit more foolishness, today yaar, if you think like that! And we did it in the days when there was no cell phone, no Google maps, no proper paper maps and navigating by just sheer determination. Yes! So you need to be little hare-brained.

INTERVIEWER: That would have been adventurous, I guess!

ADIL: Obviously! That's what adventures are about, you know! So, anyone who does that thing, it's just that from a motoring magazine perspective, we were the first to drive into such areas, because we were enthusiasts, we were, all of us were enthusiasts when we started Car & Bike. And that is exactly what we kept on, that feeling and that prevalent theme running all through. I still have both the Kinetic Hondas that went across the desert, I still have them with me.

INTERVIEWER: Oh wow! Nice! Does it still run?

ADIL: Of course, yes! Of course, yes!

INTERVIEWER: There is a flood of information these days, unlike the time when you started F1 updates, which came a week late in the form of slides that you also talked about in a podcast. So how can we navigate across this ocean of information and misinformation, mostly that, and find credible material on auto stuff?

ADIL: Again, I come back to the same thing. When I took on the onerous task of setting-up ZigWheels for The Times of India, and ZigWheels was a cross-functional platform across print, across digital, across television and across event sort of thing. And doing when we went in the world wide web, we saw, and this I am talking about 2007, we saw that 90% of stuff posted on the web was utterly devoid of accuracy, latently false and it was peddling agenda. So one of the reasons why ZigWheels succeeded and that too rose to being number 3 in the amount of visitors and engagement and all after *timesofindia.com* and *et.com* in India. No one

else came close to us at all, even all the other big newspapers never even came close to us, zigwheels.com. Was information long-form, short-form, we never went to do things first. Today, I see so-called journalists, today, what determines a motoring journalist? A person who has got this instrument (mobile phone) in his hand, he's got his laptop, he sits down at the launch of a car, and he does a road test of a car without even touching the car or opening the door. That sort of journalism we never wanted to do and we never did. So that's why I said when we did that, but the bedrock for all of this is, you want to say credible information, you have to build that credibility up, even for a website or something. I don't see that credibility in any of the Indian websites. I don't see that, sorry to say, I don't see it. That's the reason why I said, when you want to do something, go back to the magazine, go back to books, It is easier said than done, but that is where knowledge resides.

INTERVIEWER: Exactly sir! I guess the effort is limited to minimal, it's almost zero nowadays.

ADIL: No, it's immediacy. Immediacy rules the roost.

INTERVIEWER: Immediacy, yeah!

ADIL: Immediacy rules the roost. Substance and context be damned. You want to be first in Google listing. Man, you want to be first in Google listing or you want to be giving the right information first?

INTERVIEWER: The deep analytical stuff is missing that was there in print media.

ADIL: Not only just that, even factual stuff is missing. So, it's a lousy way to live a life, yaar!

INTERVIEWER: Straight up, do you like electric cars? And do you like the design evolution that's being going on with them?

ADIL: I don't like electric cars at all. Honestly speaking, I don't like.

INTERVIEWER: Thank you so much! Thank you so much.

ADIL: I don't shy away from this. It's just that I don't say that the electrics don't work. Yes, they do work, they are comfortable, they've been proven to work well, the technology is demonstrated. No question about that. Does it do something for me? Here? No! The day it starts doing that, then I will look at it. The EQS from Mercedes came very close to making me marvel at an electric car, still does. But, 2 or 3 crores is not my cup of tea. Or, I don't have that much money to waste on a fad, and anyway, that's a different thing, it's a technology

demonstrator par excellence. It's good! But, I also like to drive my cars everywhere. I don't want to, what do you call, wait at a charging station for 3 hours when I can tank up my car with a 80-90 litre tank within 10-15 minutes and be on the way. Can we, what do you call, get that thing narrowed down? I don't think it's going to happen in the next 10-15-20 years. The government says we are electricity surplus. Yes, I believe them also, with a pinch, more than a pinch of salt. I believe them also. But, I don't believe them when the infrastructure to get that electricity going across everywhere to the car guys, I don't see that happening.

INTERVIEWER: That's a huge problem!

ADIL: It is!

INTERVIEWER: Sir, you probably have the biggest collection of scale models in India. We can see a sneak peak of that. So, any advice you would want to give to budding collectors?

ADIL: Enjoy the hobby! Don't let it bankrupt you. It can easily do that.

INTERVIEWER: (shows two car models) We had a couple of models ourselves.

ADIL: Oh, great! You have a Porsche and a Ferrari!

INTERVIEWER: Yeah, a 356 and a Laferrari!

ADIL: Yes, yes! So what I'm saying is, collect to a theme. That will, what do you call, make you focus properly. If you want to do Porsches, focus on Porsches, you want to do Ferraris, focus on Ferraris. That way, what'll happen, see, I started from 1972. So at that point in time, we collected indiscriminately. We were still in school, coming out of school, and slowly, slowly. So, lack of models, so whenever we saw some models come in shops, we just go out and buy them, given what. So, that was an indiscriminate phase of collecting in my life. From the mid-'90s, when Car & Bike International was well established, and we started talking to enthusiasts that automobilia could play a big role in every enthusiast's life. And, with a friend of mine we did something to get Maisto and Bburago to India. And I was instrumental in that. So that's where really it took off from. We wanted every Maisto and every Bburago built at that time. Because we never knew how long that thing would last, but then it mushroomed and all that. But after that, when you got so many things, then, you started to say, "Okay, let's adopt themes." So I have got 10,000 themes going on in my collection, so I am happy. But for someone to start new, have a theme and stick to that theme, for as long as possible.

INTERVIEWER: Yeah, that would be a rational choice, I guess!

ADIL: Yeah, absolutely! Yeah, I told you, you could go bankrupt so quickly you never knew what hit you.

INTERVIEWER: What is your approach while writing an article or reviewing a car? How do you go about it?

ADIL: First and foremost is you look at the car, before you drive it or anything, you just observe everything about the car, the build, the make up, how she sits on her four wheels, look at it from different perspectives, stand, crouch, et cetera. So, these are things you first do that thing. You get inside, look at the tactile points, see whether you are feeling comfortable. Just gripping the steering wheel is such an important thing! It's so very vital how you feel over there. So these are things which you do that thing and then, you don't start the music system before you go for a drive. You want to hear what the car tells you.

INTERVIEWER: What the engine tells you, yeah!

ADIL: Today's journalists across over there, they want to see whether Spotify is on, this thing is on, that thing is on, is there FM. First, let the car, you must listen to what the car is speaking to you, and not through its audio system. This is very important. Get to grips with that. Of course you need to know how comfortable you are once you get into the seat, strap up and get the driving position spot on for yourself. There's so much of adjustability now, that is critical. How you look out of the car, any blindspots of the A-pillar, the rear-view mirrors, etc. All those things matter. Because in India, you are under attack from everywhere, head-on, sideways, from top, below, everywhere. So, you need to be very conscious about where you are in there. And then you drive and you don't put your pedal to the metal at all. You drive through the gears. You have to understand how the car behaves. That is, try it slowly, do that, as soon as you start going through the gears through different speeds, different, how she turns, how she brakes, if you are trail braking sometime into a corner road. These are things you store in your information banks when you're doing that, and then, you can, what you call, take her to the limit or whatever. That is how you need to do that. And once you do that, because understand, what is, what class does that car belong to, and how you are, like I told you, gave you the example of Maruti versus Ferrari and vice versa. You've got to, what you call, understand who's going to be using that car, for what function. So that's how you assess and you prepare your report, you know. The thing is that you got to, you got to understand where the car resides, what class. And then, you put in your assessment, your review report, your verdict, et cetera.

INTERVIEWER: Thank you so much sir! Thank you so much for giving your time and...

ADIL: Not at all, I am very happy speaking with youngsters because youngsters have to be brought right. If they are brought up right, that's the future of our nation.

INTERVIEWER: Yeah, and thank you so much like, from our readers too, they would have a great time reading this.

I just wanted to show you this scrapbook that I made in my fourth standard. I'm not 100% sure, but I think this was from Overdrive, this picture right here.

ADIL: Yeah, it could have been, it could have been.

INTERVIEWER: Yeah, so this is what made me fall in love with the Veyron.

ADIL: And when I was your age, I had photos of the 300SL Gullwing Mercedes and I had photographs of the Ford GT40 winning Le Mans. You got the Bugatti, so nothing wrong in that!

INTERVIEWER: So I do have to thank you for that!

ADIL: Not at all! No, no, you don't need to! You need to be happy what you're doing, simple as that! What gives you pleasure, without inflicting harm unto others, that's what you should do.



ANANT LADHA



Founder, Invest Aaj For Kal

About the Expert

He's one of India's most-viewed financial educators, with 365 million views in 2022. His mission began with conducting over 200 physical sessions across India with the goal of educating 25,000 people. He has been recognized by the Government of Rajasthan for his efforts in the education sector.

Interviewed by

Sourabh, Associate Member

EMPOWERING FINANCIAL LITERACY: A CONVERSATION WITH MR. LADHA

YouTube and content creation are not real career paths! You might have heard your parents say this. Embark on the inspirational journey of Anant Ladha, a YouTube sensation with 500 million views on his channel, Invest Aaj for Kal. Read to know about his views on the significance of professional degrees, challenges in the profession, the impact of government policies, and the need for simplicity in financial planning.

Q1) Sir, coming from a commerce background what motivated you to start investment art or startup?

I used to conduct physical sessions about financial literacy and finance as a career, and some of them used to get so much strength. I have conducted around 200 plus sessions about financial literacy in overall India and my target was to financially literate 25000 people free of cost. once we reach 25,000 People even it got associated with the Rajasthan government and the Rajasthan government awarded us and recognise the efforts but the next question was here maybe if I continue to do this lifelong, I will not be able to go more than 25,000 people, but if we wanted to grow above this number and bring a bigger impact we need to change our path and then we started our youtube channel. The only motive was to spread more awareness about financial literacy like what I used to tell in my physical sessions. Why not spread it via digital media and increase our reach?

Q2) Around April of 2019, you started this startup. Was this your dream from the beginning?

So I have a physical business that is running very successfully and it has good growth as well staring a startup was not a dream it all started with spreading financial literacy or spreading education as a social motive or like let us help people out to ensure proper financial planning, property investments so that they can manage their finances properly, to encourage social objectivity through the digital route, I started my youtube channel and started posting videos about financial literacy, why finance is important, how to manage your finances etc . Then my goal beacons to

reach around 50 lakh people which I observe that I can only achieve through digital media or YouTube and that's how it all started.

It was never planned as such but now when I see it, it turns out that what motivated me was the desire to increase or even build social awareness about financial education.

Q3) Do you think right now investing as a business has raised its potential in the Indian market or this is just a start, which could be a major element in turning India into a developed nation?

So basically, I come from a financial background and very early on in my life I was involved in finances and studied financial markets. So from the start only I got involved in the stock market and for someone like me it acted like money games where you come and play and then money, so all these attributes attracted me towards finance. But when we shifted to Mumbai it started feeling like the real world to pay for some miscellaneous expenses. I started doing the stock market seriously and sometimes I even incurred losses but due to my interest and knowledge, I was still very curious to learn and gain more. So later on I was at a stage where I had to choose if I wanted to pursue my family business or take a job, I was allowed to choose if I wanted to take the risk or take the usual path and took the decision of pursuing my family business and expanding it which now turns out to be very good. It not only brings the best but also gives me a chance to learn more about what I want to do as an individual.

In the end, looks good I got lucky everything worked out but the journey is gonna change from time to time For example initially we took physical sessions in physical offices as we have around 18 offices for investment business but when COVID happened we took a random decision of taking all the offices to a central location like at that time it was a tough decision and then I think I just got lucky that things work out as there was no work no cargo vehicles and there were a lot of things at stake.

Q4) Since you have pursued CA, CFA and CSP, do you think that these professional degrees are liable for your knowledge and interest in investing?

100% Just for example, if you talk about CA it gives a sense of relief that even at the end if you don't have anything you can still earn and survive through this degree and it helps you to learn a lot of other stuff as well like discipline, hard work etc. Professional degrees like this help you to build your character and your inner self. If u talk about CFA it directly leads you to the knowledge of the stock market and other Financial aspects.

The CFA final level course is perfect for any stock market participants or those who are going to pursue their career around the stock market. Also, I will suggest to everyone key books of CFA Level Three, these books provide us with some key psychological pointers which I even focus on in some of my other videos because they are very important. For me education plays a very important role in building character and character only decides whether you are going to be successful in your life or not.

Q5) Do you think right now investing as a business has raised its potential in the Indian market or this is just a start, which could be a major element in turning India into a developed nation?

I feel every decade has a saturation point for every business out there. I'm not only talking about the investment business, for example, if you talk about the grocery business. It was predicted that it would be over in The 21st century but those who wanted to pursue it or be part of it will be there no matter how many upgrades there are or no matter how many technological changes there are. Those who want to be a part will always find their way to be part of that business. Maybe the method to adopt that business will change but the business always sustains itself no matter the time or space. Business is about people and it is never-ending. Businesses can change their form and some of them will always keep on changing. I feel if you are not upgrading or changing yourself every six months in any business. You will become outdated and there will be no growth or improvement.

Q6) Can you share some success stories or achievements of investing in Aaj for Kal?

Difficult one, as the government awarded us twice for spreading financial literacy. In 2022 we were the most viewed channel of the stock market in India on YouTube. In terms of number of views, we had somewhere around 365 million views on YouTube. If you talk about the finance category as a whole, personal finance, stock market, everything, we were the second most viewed channel in India in 2022. I think more than the number of people whom we can interact with if we talk about 365 million views I feel at least if not 365 million at least 10% was the genuine audience who benefited through the knowledge of financial literacy. So that is one thing. I have personally done around 100 Plus TV shows. So we can have some spread capacity here, 3 TEDex, etc.

I think it'd be so young to say that we have achieved so much, but I have to mention that we launched a book and it became a bestseller in the first 12 hours of pre-launch. So a proud moment for all of us.

Q7) As the government has announced the withdrawal of rupees 2000 notes from September, what impact does this news have on the stock market and investments?

No big impact as such because we already had a hint about their withdrawal since they were launched so, in general, it only affects large businesses or the ones who have bulk and loads of money. Coming back to your question it will have no impact on general public or stock market as most of the white money is invested in stock market which brings the safety and security in trading. There is no black money which can be invested in the Stock market. You can say that in the short term, there might be some impact on the property market. Because, as we all know, the property market was at times, a black money route which had the habit of impact. But I don't think it will have a major impact on our life as such.

Q8) My next question is – how do you stay updated with the latest market trends and changes in the investment landscape?

About personal finances I am very proud to say that my interaction lately with all the college students will have gone ahead. They are active on YouTube active on Instagram they are watching finance reads or maybe personal finance stuff and okay basics as compared to generation 20 years back. So we are in the right direction. I read news and articles, have some apps like ET money or maybe I'm active on Twitter where you get all the updates. Yes, I think the news is the only way by which you can stay updated and be ready to accept any new change that is coming. I feel it's human tendency to overreact to that change fairly and subsequently overreact cultivars and later we may underreact or so, I think the world is not the black and white world is great. So when COVID news article came out and there were multiple overreactions but later we accepted the fact and moved on.

Q9) How do you envision your mission of spreading awareness about finance and investing? And what are the steps you are taking in this direction and what steps according to you the government should take to increase the Teach?

If we talk about the government, no government has bigger issues to take care of. I see a lot of people saying that finance should be included in the curriculum. The government should spread financial literacy. I feel no government has bigger issues to head or to take care of. It is our responsibility as students of the free education board earlier. What I am doing is uploading regular free content on our channel, financial literacy basic to advanced level . There are different playlists for

everyone. Using a mutual fund, stock market, personal finance etc you can learn those stuff. I think if they don't make the jump we will blame others. As a parent, we should ensure that your marriage is near but we have to at least share some basic knowledge about personal finance so personal finance education should always start from home, that is the best place to start.

Q10) What are some common challenges you face in your profession? And how do you overcome them?

Yeah, the biggest challenge in our profession is to be ethical. I come from a business background and so I have this duty of being ethical and right because I have this legacy behind me whose name is stuck to it. Okay, then after a point in time, more than money your image is important. Why I'm saying this is because lately, I'm seeing a lot of good people also promoting something which is banned by the RBI. There are many apps which are banned by the RBI and are openly promoted by many big celebrities. I think influencers are suffering through hatred which is very heavy, but when I see a celebrity who has millions of followers I can't name that celebrity with more than 20-30 million followers of an app that is banned by RBI. So, till now we have ensured that we maintain integrity and stand corrected but it is always important to stay grounded in this matter. So being ethical is the most important thing and the toughest thing to be in our profession

Q11) India holds the presidency of G20. In your opinion, how does this promote international economic stability and growth?

Yeah, I feel representing Indians at any national forum or national platform is always good for Indian youth. Probably we are also excited about the Indians at the national and international levels. So it always motivates us. That's the biggest thing I think, motivation and having pride in our nation. I know we are doing better GDP-wise, inflation-wise, economy-wise etc but a representation of India like this only gives us more confidence and motivation. It gives us more confidence and confidence is the biggest asset which anyone can have.

Q12) According to you, what measures should the government seek to regulate and monitor the financial sector and ensure its stability and resilience?

See, too much regulation is always bad. I don't believe in too many regulations. But yeah, there should be clarity in what can be done and what cannot be done, especially something which is officially banned. If someone is doing it. We need to take some strict actions against them. That is it. I feel the government has an important role to play, but a more important role is ours ,

as citizens, that we should not promote any illegal product or activity. So we should know the difference between right and wrong. So the government should also take strict actions against them and we should also ensure that we do not click on fake celebrity hair on the edges. so we need to have that check in mind.

Q13) Can you share your perspective on sustainable investing and its potential impact on future?

Don't give Your basic mistakes too much credit , limit your loan amount, learn more about tomorrow's investment property etc term insurance. So at least our foundation is strong. So it's never a sustainable investment and if you're talking about ESG companies, I think India may be at the stage where ESG companies could further promote and conduct a US market which may have developed a concept to capture an ecologically supportive computer.

Q14) What are your plans or goals for investing aaj or Kal and are there any new initiatives or services that you plan to introduce?

I plan to impact one crore people by 2025 and by the impact I don't mean documented views. Still, many people get disturbed by views etc my sole purpose is to either provide direction and give them the knowledge so that they can take their financial decision properly, my purpose is to educate not to inform and that there is a lot of difference between informing and educating, So coming up the new things that we are trying to introduce at first we are trying to integrate AI with our daily projects or this. AI can take the finance education industry to next level second we are also trying to improve our video quality as there is suddenly shift from long format content to short format content. We are trying to adopt some new key points so that we make our long content fun and informative as usual.

Q15) I would like to ask what advice would you give to like to give individuals or businesses regarding financial planning and investment ?

So think simple. Don't complicate it. That's it.

I think a lot of people unnecessarily complicate finance in their business and personal life. There is no need to complicate it. That's it if you keep it simple. I always say that there is a principle known as the KISS principle, keep it simple and silly and it works well in life.



ABHINAV BANKA

CREDITS: LINKEDIN/ABHINAV BANKA

Assistant Director, IES, MoF

About the Expert

Abhinav Banka completed his Masters in Economics from the Indian Institute of Technology, Kharagpur. He is currently working as Assistant Director, Indian Economic Service, under the Indian Ministry of Finance.

THE CASE FOR INDIA'S CRITICAL MINERAL STRATEGY

The 6th assessment cycle of IPCC has reinstated the climate anxiety of global policymakers in scenarios where economies must measure each unit of their greenhouse gas emission with utmost precision. The quest to balance historical responsibilities with future predicted emissions to limit global emissions has thus given rise to the enigmatic term, "Net Zero". According to the IPCC, we only have 500 GtCO₂ carbon budget left (post-2020) if we want to limit global warming to 1.5 deg C, and 1150 GtCO₂ if we want to keep it to 2 deg C. This has already activated the panic alarm on climate mitigation and emission which various reports have quantified under diverse green pathways.

One of the most traversed green transition routes is the route led by the expansion of renewable energy. I doubt if anyone on this planet exists who has not heard of windmills and solar panels. But certainly, there may be many who are not well versed with emerging technologies like electric vehicles, energy storage batteries, hydrogen fuel, etc. Numerous studies have highlighted the due share of both former and latter in limiting the negative externalities of age-old fossil fuels, however, very few case studies present the limitations of newly developing climate mitigation and adaptation technologies.

We should note that the skepticism just mentioned is not concerning per unit cost or other energy efficiency parameters. After all present green energy technologies are giving tough competition to their veteran polluting fuels. The main issue surrounding upcoming technologies revolves around the most basic principle of economics, which is demand and supply. While the demand for cleaner fuels and clean energy technologies is surging at an exponential rate, the supply is a constraint that is tied to several factors, such as availability of critical minerals. Raw materials which drove industrial production (e.g. aluminium, copper and iron ore and steel) will continue to play their veteran role in green transition while other materials, such as rare earth minerals (notably neodymium and dysprosium), lithium, cobalt or nickel will drive the future demand. The global importance of critical minerals (including rare earth elements) is driven by their deployment in

electrical equipment ranging from Electric Vehicles (EVs), batteries, solar panels, automobiles, etc. as well as in strategic defense products like missiles, drones, fighter jets, and ships.

As the world transitions to a clean energy economy, global demand for these critical minerals is set to skyrocket by 400-600 percent over the next several decades. Global output of essential raw materials increased by 30% on average between 2012 and 2019 (22% if the period between 2012 and 2020 is considered). Chromium, arsenic, cobalt, titanium, selenium, and magnesium are among the crucial raw materials whose output increased faster than average globally (OECD).

While one may assume that with more demand there will be more mining and more trade of raw materials as happens with the majority of commodities, however, it is not the case in critical minerals. Instead, the two major factors that make their supply a major constraint is their global distribution and technologies associated with their mining and processing. The concentration of metals (like lithium in Chile, graphite in Turkey and China, etc.) sometimes gives rise to market powers that can be exploited for economic and non-economic reasons, e.g., through restrictions on output or trade, especially in the context of the upstream position of these products in international supply chains (OECD). With 37% of global deposits and a mammoth 58% share in global production (2020), China occupies a near monopoly position in critical elements. The 2009-10 rare earth elements blockade by China towards Japan and its increasing impetus to indigenously produce 70% of high-tech industries output under the 'Made in China 2025' policy further raises apprehensions on the uninterrupted global supply of elements. Given their rising importance for green energy transition and limitations on global supply, minerals can become the next big issue of geopolitical confrontation and are therefore considered a major global risk as per Global Risks Report,2023.

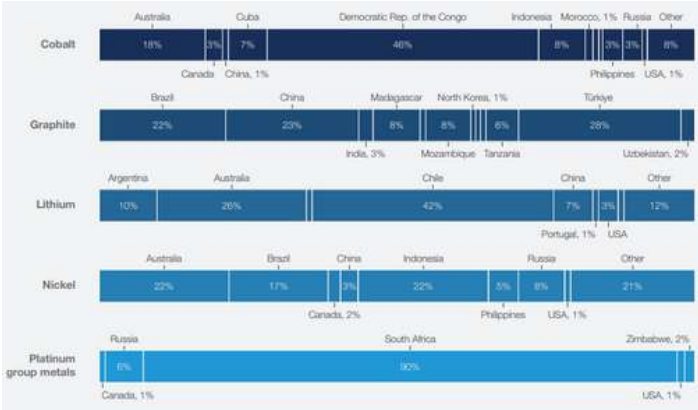


Figure: Reserves of critical metals and minerals

Taking cognizance of the worries posed by mineral concentration and the increased risk of delaying green energy transition deadlines, countries have already enacted domestic legislation as well as bilateral and multilateral partnerships. Legislations include dedicated capital support and tax credits by the US under the Inflation Reduction Act, EU's Critical Raw Material Act, while the US-led Mineral Strategic Partnership (MSP) is the most recent example of collaboration for critical mineral supply security.

The Case for India:

As per the updated Nationally Determined Contributions (NDC), India now stands committed to reducing the Emissions Intensity of its GDP by 45 per cent by 2030, from the 2005 level and achieving about 50 per cent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030. These cumulative targets would be achieved through Electric Vehicles and batteries, co-generation in power supply, sustainable housing, etc. The India Energy Outlook (IEA) 2021[1], estimates that India's power capacity from renewable sources is projected to increase to 69% in 2040 from the current level of 26% (2019). The driving force behind this change will be solar power, which will account for 68% of the renewable power capacity and 47% of the total power capacity. To achieve the ambitious NDC targets and in turn, travel closer to overarching Sustainable Development Goals (SDG), there is a massive requirement for critical minerals along with rare earth metals.

Mineral	Reserves (KT)	Total Reserves (KT)	Typical Share of Metal in Ore (%)	Mineral Needs (KT)	Ratio of Needs-to-Reserves (%)
Copper	2735	12158	100	3244	118.6
Nickel	0	189	1.5	145	No Reserves
Manganese	93475	495874	35	208	0.6
Cobalt	0	44910	0.5	7	No Reserves
Chromium	102210	344016	40	354	0.9
Molybdenum	0	19372	0.5	42	No Reserves
Zinc	10000	36363	100	1400	14
Rare Earths ⁴	0	25	100	19	No Resources
Silicon	17283	183963	100	2709	15.7

Table: Mineral Inventory and Select Mineral Needs for Clean Energy Manufacturing IN metric kilotonnes (KT)(2020-40)

[1] Some REEs are available in India – such as Lanthanum, Cerium, Neodymium, Praseodymium and Samarium, etc. Others such as Dysprosium, Terbium, and Europium, which are classified as HREEs, are not available in Indian deposits in extractable quantities [1] mines only selected minerals (e.g. IREL focuses on Thorium) [1]https://csep.org/wpcontent/uploads/2022/09/Critical-Minerals-for-Green-Technologies_26-Aug-22.pdf

[1] Some REEs are available in India — such as Lanthanum, Cerium, Neodymium, Praseodymium and Samarium, etc. Others such as Dysprosium, Terbium, and Europium, which are classified as HREEs, are not available in Indian deposits in extractable quantities

Bauxite	656422	3896864	20	14827	11.3
Lead	2482	13004	100	16	0.6
Titanium	14420	413626	6	3	0.3
Neodymium	None		N/A	N/A	No Resources
Silver	7	30	100	26	371.4
Indium	None		N/A	N/A	No Resources

Source: (Indian Bureau of Mines, 2015) and CSEP calculations

India’s electric vehicle market is expected to attain a CAGR of 23.8% by 2028 as per World Bank Study. The recent discovery of lithium in India has raised prospects of cost-effective EV battery manufacturing in India. This can surely be transformed into a success story. However, given the onus of major electricity generation on the renewable sector under India’s Amrit Kaal, India needs to secure supplies of other critical minerals as well.

Future Challenges:

The previous 10 years have seen a rise in the worldwide concentration of crucial raw material production among producing nations, which is typically more concentrated than their global imports and exports. This highlights the crucial role that global trade and supply systems play in processing and transporting these resources to users, but it also suggests that the top regions of these supply chains are susceptible to disruptions. The recent case of the Russia-Ukraine conflict has already pinpointed the crux of the energy problem. It has accentuated the fear of resource nationalism which could derail the individual and collective targets of the energy transition by 2050 if not later.

Overall, depending on the assumed pace of green transition, it is estimated that the demand for minerals (from energy as well as other sectors) will grow by on average four to six times between 2020 and 2030(IEA). The raw materials industry is heavily influenced by state action, notably through specific regulations (such as natural monopolies, and licenses), state ownership, investment limitations, strategic policies, and export restrictions. Additionally, there is growing evidence that states are intervening more in the management of these resources. One example of this is the increased use of limits on raw material exports.

India is notably on track to achieve its NDC targets. But that is not the end of the story. Be it the target of Net Zero by 2070 or 50% share of non-fossil fuel-based energy by 2030, the fulcrum of these targets is the assumption of “ceteris paribus”. Can we be sure that everything else will remain the same? John Meynard Keynes once said,” When the facts change, I change my mind. What do you do Sir?”

It is naïve to assume that green technologies are purely green. Assumptions of transparent supply chains, easy availability of materials, cost-effective scaling of domestic manufacturing, consumer behavior for energy, etc. are easy to model than to be replicated, as an element of uncertainty remains under the tag name of unknown. To put a cap on this unknown unknown and smoothen its path for green energy transition, it is high time for India to develop a robust Critical Mineral Strategy aligned with its domestic priorities yet linked to a global framework of critical mineral collaboration.

The views of the author are personal



CA HARSHITA SABHARWAL

CREDITS: HARSHITA SABHARWAL

Managing Director, Accenture

About the Expert

She completed her Bachelors in Commerce from SRCC and pursued both Chartered Accountancy and Cost Accountancy. As an MD at Accenture, she focuses on financial transformation, multi-functional projects, and sustainable initiatives.

Interviewed by

Piyush, Associate Member

Dev Chaudhary, Associate Member

FINANCIAL LITERACY, TECHNOLOGY, AND THE FUTURE OF FINANCIAL JOBS

CAs, the architects of the Indian Economy, delve into an insightful interview with CA Harshita Sabharwal, Managing Director at Accenture. Her journey from BCom to finance expertise, along with her views on financial literacy, technology, and the impact of AI in the industry, awaits your exploration.

Q1) We have learned that after completing BCom from SRCC one of the most prestigious colleges in India. With that you have successfully completed both, the chartered accountant and cost accounting course. So, mam, how did you manage to excel in both fields and reach new heights in your carrier.

I started doing my cost accounting when I was still doing my BCom. And I did complete a part of the course at that time. And continue with later with CA. So, benefit of doing both I would say is that one will help in managing and giving knowledge about second. Secondary I wanted to learn about cost accounting later these days. And that's the reason why I wanted to complete cost accounting too after my CA. So that's like If you are passionate about your subject and you continue to prioritise it well then probably it won't be going to have any problem.

Q2) How would you describe your experience during your tenure as an article trainee at PWC, additionally kindly share your 3 valuable lessons you have acquired during your tenure there?

It's a great question, so you know as when I did my CA back when I join PWC back in 1992, at that time we don't have option to go for CA foundation so graduation was mandatory and you can only CA articleship after your graduation. And the other thing is basically the way you stand out the time when I would say lucky enough to get through big 4, as it was one of the esteemed organisations at that time too for the articles. If you are working with Big 4 then your working hours are going to stretch. As you will have deadline timings and you know policy and client services and all. So mostly when you are doing CA with big firms for article while also studying so it can get challenging.

So that's one area where one needs to make sure to learn time management and whatever time I would get at that time like lunch break, weekends or day off I utilise everything to complete my course and study for exams in concern. So one learning from your question is that, 'If you would write articles with big firm, it's very important to get disciplined with time so that you can get to, when you need to and meet your objectives both from getting experience with a big firm and clearing your exam which is mandatory as well.'

My second learning if you ask would be you know as being a part of big firms, one need to learn project management system, it's not just about how to go with order and accessible knowledge. Go with writing articles and assignments and reports within proper time before they need to be handed. Sometimes you need to go backward so that you can finish everything in 24 days. Sometimes people write articles when they are in second or third year. So I would say, 'Project management is a great skill to have if you would like to succeed in a challenging and competitive environment.'

Third lesson would be, as being part of writing articles in a firm like PW, networking would be very beneficial, as you know you will be working with a variety of leaders, managers, partners so it is very important to build a network for you self by informally interacting with the leaders both to learn things on the job and even to learn technical expertise from their experience. So that's something I did and it kind of help me even to this day because I developed very good bonds with leaders and my peers over there.

And of course I got a part there during my carrier and over the years and secondly I learn and manage to do my work even better. So these would be my top 3 if you ask me from my learnings and lesson.

Q3) As our cell promote financial literacy, what's your perspective on the importance of financial literacy for teenagers and mam do you believe it should be made a mandatory part of a curriculum as only I think only commerce stream is made aware of that, science and arts stream are backed as they are not aware of many basics financial terms and that is one thing as in this part of century it is very important to be independent in that young age?

Piyush you are asking me a great question and something I am really passionate about as well so if I make sure this with you so in fact you know for woman day this year at Accenture, I have volunteered to take an initiative to increase the financial literacy of the people who are already working and what we realise was that so many of women who are in active job also didn't have the right level of knowledge about financial literacy both

in terms of where to invest their money, how to save, how to plan for retirement, how to invest in mutual funds and all of that. So the reason I am sharing this with you is that I feel very positively about the subject as well, and you are absolutely right Piyush that every one must learn about our basic subjects like social studies or science, English, mathematics with this financial literacy has also have to be mandatory as you know it's a life skill. Tomorrow you don't want to be stuck in that situation because you didn't learn or invest properly in earlier days of your carrier or retirement or you didn't make investment correctly. Even if you aren't a Finance professional it's so important to understand the basics term and what are the risk etc are when it comes to managing and investing your money. So I completely agree with you I think it should be a subject in class 10th as if not anything else we have economics as a subject in social studies one chapter could be devoted to financial literacy. Because I would say for class 10th it is basic economics where financial literacy can fall a very good start. And I would definitely like to be a part of this initiative even if you have to do it in college or etc with an issue of promoting financial literacy to students.

Q4) Can you provide that how you have contributed to improving the efficiency and effectiveness of financial processes within a corporate organisation?

So let me come on with few labels that we need to look at when we manage financial processes effectively and efficiently.

So, one of them is cost, because if you won't reduce the cost of managing the financial processes that it is cost of operations and it is not cost of operations.

The second is quality, so while we reduce cost we haven't to compromise the quality of product because it is so important in financial transactions if we make up this state for example if we make our prop prone we will not be able to access the kind of damage it can do.

The third is the technology intervention, so how much the technology intervention is currently there and what is the direction in which we are working forward.

And the fourth one is the people, so you know what kind what happens will, I don't know how much you guys have headed about financing the team that we could work in finance department in very traditional way like factory would have there own finance team there could be sales team, operations team. It will make the process very ease out. However there is a very change today, and the people also need to be taken cared and assured that they are upskilled to be able to manage in a most senserisied manner. And considering we have come a long way apart 20 years a lot of business sense ,

understanding of the people to be able to manage.

So these are the four labels:

Cost :- It is the first one, when we talk about the few things try to sensurise the way you do the work there will be definitely a reduction in the cost.

And this if ofcourse extended to offshore and onshore because we do end up doing a lot of outsourcing to India and then we further get leverage because of the lower cost of working from India because we end up ignore developed world like European market.

But you know the reason I mentioned that even centralisation builds up the cost is because even if it's an Indian operation the moment you centralise the people will do so that work. And centralisation also lead to larger ability to standardised your process.

The second aspect we have talked about is quality, and when you talk about good quality, what we mean is in contraction any kind of process we run in finance there is very sensitive one, because you can't impact the cash outflow, it can impact our ability to pay to a venture, all our credibility will come down, so the growth aspect which will impacted is the result of bad quality. So what we need to be that we need to bring it a lot of proactive imbedded the controls within our policies in order to make error in quality.

The third when I mention is technology intervention, it's obvious as everyday things are changing and as we speak up we are supposed to talk about generative AI as it will change in era of what and how we work.

Today we have look at ERP, automation, bringing in more and more intuitive ways of working, money machine learning all of that. So as we know that technology growth is their we will enable it to our future.

Fourth one I mention is people, people need to be more upskilled to be able to manage, one is the highly dynamic technology environment in everyday and the second is ways of working and when I say the ways of working what I mean is that we now working as a more in centralised environment. It simply means that we are now more in process touch and less in people touch. So these are the four labels by which we can manage finance effectively and efficiently.

Q5) What are the key responsibilities and area of focus in your role as a managing director at such a five hundred fortune company Accenture and mam can you discuss any specific innovative solutions or approaches that Accenture has implanted under your leadership.

So let me just explain my role a little bit role over here at Accenture Ltd. So I am part of finance practice team over here and it's a global team. So what we do is we support our existing client in terms of providing support or upselling and when I say upselling there will be so many changes and external world so how we can provide with solutions which will further enhance effectiveness of their business. So that's the one is I work on. So I am already supporting few big corporates in this space from there finance transformation during this.

The second one is that we are currently working on a project where we are looking at a multi auction project and when I say multi function we are looking at a business from finance and white chain sales, marketing, technology everything together complete the chain in the working forward in a more centralised way, in a more structured way and how is the organisation need to be ready to adapt the change. So that's the second thing I am currently doing. And we are experimenting with a few new areas as we speak on this.

Third one where I made up a personal contribution for new area is ESG in finance, this is something I am trying to develop a part of finance team in Accenture group currently because you have probably heard that sustainability is becoming the next big thing and our CEO is also supporting that sustainability in new digital. So like we had a digital revolution sustainability is working with the revolution area in future so every company needs that.

And the way we are progressing with the climate change we all need to focus on every realm of the life. So I am trying to make a contribution considering we are from finance background is because there are many standards comings up for ESG reporting, compliance, rift modelling, data gathering so building solutions around all of this for companies wherein we able to embedded putting in their finance properties and hence we able to provide more reliable reports for the right stakeholders. Be it a banker, investor, regulatory body so that's the space I'm working in globally and we already building some solutions now for 10-15 companies and we are working alone with them. So these are the space I have made personal contribution in addition to the other as I am very passionate about the subject as well.

Q6) How do you handle the budgeting and forecasting process in a corporate setting and what roles and techniques do you use?

If you ask me the true aspect here, what does the process expect in the technology world, I always go enroll with the importance to the process in government.

So if we talk about budgeting process and like for working process you also need to look at budget and whether we are going to make right profit or not. So we look at the forecast for the entire project. We need to understand how much money we going to spend, what were the other assumptions, are those assumptions going good today. And continue to go back to joint board and check and revalidate assumptions for the budget we had created. Because there is a change right during the time of project. So you need to look at zero based budgeting maybe every six months or every year and continue to validate against the only assumptions. So that's the one technique you only need.

Second I would put a very strong governance in play. As there are many factors and keys which impact cost of the project. So we have to keep a governance and control very tight from day one so that everyone understands that there is a very particular budget within which we need to deliver. If you do that right from the beginning it becomes surprise free, it becomes stress free.

Third aspect from a project perspective is to always keep a short-term plus long-term view. Short term view is that whether we perform correctly for a month. This was my budget, this is my actual. And if it's within the budget it's good, All green. However you also need to have a view of what is the forecast for rest of the year and whether I meet my objective of a particular budget or a year as well. We can't lose sight for the rest of the year. The reason I said that is because maybe I spent less in one month but what I did was is postponed my cost to month five. So when I come to the end of the year. I could have overshot my budget. And hence it is important to keep a overview of the short plus long term.

Fourth is lay down to alternate intensive cost. And now coming to the this is the process coming to the technology so we are quite a few different modules for budgeting we even knew ERP at that time. There are much more module and ethics as well. And then we have some in house systems for a control which we use. How much you need to forecast and what is trending it also gives us real dashboard. So those type of techniques are used it can be done on paper based or it can be done on system. So we use it based on which client we are working for.

Q7) Ma'am, you have mentioned the process aspect and a point strong governance, so can you explain any event where you have implemented it.

We use it everytime, like we are working on a project where we need to tightly manage the budget. In fact before this call I was on that budgeting review. I went down to look at each person who is on the project and how much the time a person wants to devote and the reason for that. And when we go back and use these functions. And that governance immediately triggers the right behaviour that's how much it's impactful. It was a simplistic one. There are many other that I will be sharing with governance perspective, every week you go back and have a review with the team and keeping the eye on the holistic number.

Q8) Since we have been talking a lot about technology and AI, with considering the increasing influence on AI in the industry. Many companies are laying off their employees. What's your thought on the initial threat on the financial job in the near future, and do we also see that Accenture is also laying off their human labour and man what's your thought?

You know with the technology coming yet I have been this from many years and answering these questions from five years. I have not seen jobs get lost due to technology, jobs only change so you need to get skilled with the technology so that you will be future ready. And when I say this to you or say this for myself the way I learn accounting in 1995 and stay to that I will not have job today. So we need to get re-skilling ourselves to stay relevant so AI may kind of take away jobs which are rule based, on the ground which can be automated but it cannot take away the human brain. So you need to be skilled for the job which are future ready.



GAURAV ARORA

CREDITS: LINKEDIN/GAURAV ARORA

Deputy Vice President, HDFC

About the Expert

A seasoned sales and marketing professional, Gaurav Arora specialises in sales planning, product management, revenue management and GTM planning. He is currently working as a Deputy Vice President at HDFC Bank.

Interviewed by

*Rahul Sood, Executive Member
Hitarth Arora, Executive Member*

BANKING, INVESTMENTS AND INNOVATION WITH GAURAV ARORA

In a candid interview, an HDFC Bank Deputy VP, Gaurav Arora, shares insights on banking strategies, fraud prevention, and the future of Indian finance. Discover how AI, competition, and sustainability are shaping the sector. Don't miss this expert perspective!

INTERVIEWER: Could you give us a first person perspective on how the HDFC and HDFC Bank merger changed the working environment or has any sort of optimization or change happened or how do you feel this decision has been the best for the bank?

GAURAV: So whatever views I'll give on this interview will be my personal views, it'll not be official views and anything related to HDFC per se. In depth specific confidential information will not be declared or disclosed here. I hope that's clear to you guys.

So as we see that the merger has just been commenced which is effective from 1st of July so it's just hardly fifteen days, so I think nothing has changed so far, the operations are the same it's just that the brand name of HDFC Ltd has moved as a HDFC Bank.

Now the whole idea behind having this merger what I feel is from a perspective of you know synergizing the energies and ensuring that the widespread geographical approach that HDFC Bank has already achieved over the past 25 years is also utilised to fund and reach the customers those who are looking for a home loan not only in main geographical area or in the main metros or main metro towns or urban areas but also to rural areas where bank has already got a huge presence so this will definitely bring across some synergies. When we say working environment I would say it's more about how we approach the customer would change its not about working environment. Working environment was excellent as always and continues to do so. The only thing that will change the reach the customer will be much more larger.

INTERVIEWER: Could you elaborate on what exactly strategies are changing that HDFC would be able to much better reach its customer base now?

GAURAV: When you say how will you be able to reach a much better customer base see It's completely a utilisation of the existing resources that we have . So HDFC Ltd will be able to utilise the Existing resources of HDFC bank which are much widespread being a banker you know we are widespread much more into rural geographies because that's how we are mandated by the government and specifically from RBI , So these are those guidelines we have widespread geographical presence which definitely become a touch point to those who did not have access or have very limited or far fetched access to the home loans piece . The branches were limited obviously because we were much more concentrated in urban areas and metros . So All the customers who are now reaching to bank will not only reach to bank for their banking related needs also for their home loan related needs .

INTERVIEWER: As we know fraud risk prevention strategies are one of your main responsibilities, so can you elaborate on that, sir?

GAURAV: As we know everything today has become digitalised. Nobody wants to have multiple forms signed up. This generation wants everything to be digitised. With the kind of high speed Internet access everybody has now and we are amongst the top most smartphone market in the world, we are number one Internet market in the world, it is very much important and makes more sense to capitalise on these type of capabilities that are build up by multiple organisations in India so to utilise that everything is getting digitalised as committed by the bank that we will be getting in 100% digitalization loan applications or any type of product applications. This will help the entire industry not only in banking but also in telecom so that everybody is able to get access to banking requirements, telecom requirements, all of the requirements they have in digitised mode. When you get digitalized the chances of having frauds become more as we can see frauds have increased by 20 times and this is not only in India but across the world. When these kind of fraud activities are happening it is very imperative for us to make sure that we have our strategies in place, we have our controls in place we have our control in place And specific to that we have our IT controls in place to ensure that frauds are not happening, money is not snatched away, banks are not duped. So that's as a prime responsibility, I take care of all the journeys

Multiple products of the bank. Where in my responsibility covers Ensures all the processes that are being built up With enough authentication with the customer so that frauds are minimised to the core and secondly, when the new things are coming up. And also sort of new innovations coming up that we are trying to

build up. For our customers, all those things are not 100% fraud-free because that is not possible but close to an extent.

INTERVIEWER: Can you also elaborate on your experience on product management and portfolio management And how it relates to your role in fraud prevention strategies?

GAURAV; Product management is a very broad term and product portfolio management also a very Broad term although it might look very simple in words But it is very broad when it comes to portfolio or product you have to manage everything whether your marketing P'sBecause you need to ensure that your product is placed to the right customer Who has the potential to buy it is it the right location so that the customer is reachable, then it is also about ensuring that it is packaged well. The product should be packaged well, it is available at all the locations and at the right time. It is a very broad term and when you say what all it includes, product management right from insuring what the competition is doing competitions benchmark is one part of it then product innovation is one part of it your product categorization is one part of it Your product strategy should be in such a way that it doesn't cannibalise your current product, ensuring that you have a star product in place not every product can be a star product, you have to ensure that every portfolio of yours have minimum one to 2 star product and then how the product is managed over a period of time how it is weighed, packed and placed, all that plays a role so you have to be very much into the market, Understand people's requirement which is ever changing and then accordingly define your products in a similar fashion and you have to be more productive in understanding the market. for a portfolio you obviously don't want Good for you Which means good for your portfolio they should not be NPA prone they should be quality customers. The loans and the product should go in the hands of the writing customer to reach this right set of audience and are consumed in a way that we are expecting it to be consumed. there should not be any kind of Fraudulent activity happening over there or any kind of malpractice happening there so those kinds of things also get involved in product management and portfolio.

INTERVIEWER: Definitely, sir. It is important how you package it and obviously marketing is always important. right now what we feel is there is some sort of race to become biggest creditors as India is converting into an economy where we have a lot of banks, we have NPFCs, we have Paytm, we even have Jio Financial Services coming in, all of them in a race to become biggest player to provide loans to the Indian population. What do you think is most important for any of these

organisations to become the biggest player in this market? What should they take care of? What do they need to beat the competition?

GAURAV: First of all we need to understand why are there so many players, if you see other international markets there are not so many players, why do we have so many players? so that's number one, number 2 How and what type of customer segment are you trying to approach so what's your target customer And accordingly you enter that market so first of all why is there so much requirement of so many players to be in the market because today as we talk we have reached much deeper into geographies, rural areas but still if you see banking is not available to every Indian as of now we are very far off from every Indian saying I have a bank account. We are way behind the target because we have to reach each and every household. International location when a child is born he is almost allotted an account number but in India that doesn't happen, the child is born with a birth certificate that is it. He doesn't have an account number, he doesn't have an aadhaar card, he has to apply for aadhaar card and later on his parents have to apply for multiple other things. But that's how it works in other international markets. The moment a kid is born he is allotted an account number, he is allotted with the Social Security number So that he is considered as an individual, he has an individual identity so that's why whenever that person wants to deposit anything he can do so but with us that's not the situation. so we are way behind that kind of approach so far but yes we are moving towards it but still very far off. So that is why it is important for us to go deep into interiors, there are many people who still don't want to keep their money in the banks because they are scared of whatever reasons, maybe because they have been cheated by some way or the other by small saukars at the village level. So they don't believe in such kind of banking system, They don't believe in such kind of organised financial sector because of their own age old belief but yes that is changing that's the reason there are a lot of investments. From marketing to education via multiple sources done by RBI, by banks, by NBFCs to ensure that the banking facilities and credit facilities are available to this level and that is when they can really think of that is the reason why so many players are coming into the market because there is a scope of catching up with the market this is scope of getting a piece of that pie and that's why you talk about all those financial companies that are coming in. Secondly because we are a consumer oriented market we have a huge potential of consumption, now We are the most populated country across the globe so we have a huge potential to consume so today we are a target for any and every organisation to come to India and market their products and ensure that they

capitalise on this consumption. So when you want to capitalise this consumption, how will that happen, it will only happen when enough credit is available to people, that's the reason why so many companies are coming in.

INTERVIEWER: Yes, sir. Despite having the largest population and basically the biggest customer base in the world, You lack infrastructure, basically strictness of rules, we are not able to get the population to trust the financial system of the country.

Could you elaborate on what exactly strategies are changing that HDFC would be able to much better reach its customer base now?

GAURAV: You use a mobile phone?

INTERVIEWER: Yes.

GAURAV: Some might be using an android, some might be using an iOS. You must be using whatsapp services. Your Whatsapp or SMS gets typed on their own?

INTERVIEWER: No sir.

GAURAV: So whatever level of innovation we have reached, it still requires human minds. It still requires that the human brain that humans touch to ensure that it is as per the emotional connect that we have machines will never have that. machines can only ensure that they do a particular task in a particular fashion very accurately that is the only thing a machine guarantees. Machines don't guarantee doing a similar job in a different fashion with a different set of things in a very emotional and attached way. It doesn't guarantee that with 100% accuracy. So definitely AI plays a big role. AI with an improvement in technology is Definitely helping everybody across The world whether it is the financial sector or any other sector for that matter, frauds are not only in the financial sector it is across the board. Whichever industry you pick up, frauds are there. So definitely AI is helping but technology will never become the owner of things, it can reduce manual efforts and improve efficiency. That is what is required and that is what we are implementing.

INTERVIEWER: Definitely, sir! I personally don't believe AI will replace jobs. What it will do its nature of jobs that changes after 20 or 30 years. it's just changing and hence all that it is happening.

But yeah we have to evolve because you know especially in the cyber security since you will need a AI on some level to protect against other AI threat ,

because you know as of security increases so does the threat level or maybe it's just the opposite.

GAURAV: Absolutely.

INTERVIEWER: How would you assist the current state of the banking sector in India? Are there any specific areas that need attention or improvement?

GAURAV: There are many areas you cannot say which all areas. There are many areas. There are numerous of them. As I said we know we don't have access to this kind of financial system, today we are living in a very, I would say very organised, developed, educated society. We come from that kind of background so we definitely feel that everything is matured to the level. But when you go deep interiors, you will understand the things are still in a very immature way from the customer end, so it still needs to get matured, it still needs to have to open up their arm towards the technology, towards the new way of things, so long way to go in multiple sector there is no such specific sector which requires a definite attention all the sectors where such attention because today consumption is not happening only in metros consumption is happening everywhere today you will find bikes and cars. Everywhere you'll find mobile phones everywhere you will find computers everywhere so it requires investment across the industry. Today farming is using drones to go ahead and sprinkle fertilisers, and you know all sorts of chemicals on their farms. So those kinds of technology have also come in so not everybody can afford a drone. Not everybody will believe a drone we have seen this kind of you know amazing efficiencies coming out by utilisation of these kind of machineries so that's why the investment happening. Electric cars, you know, are very nascent. There are multiple sectors. You know which requires investment.

INTERVIEWER: Correct, sir! There is always a scope of development and already sector do need investment, as you said.

How would you assist the current state of the banking sector in India? Are there any specific areas that need attention or improvement?

GAURAV: See I'm not sure, there are many things that can be done to support G20 there are multiple as we discussed now in the last question that there are many sectors that we can develop, there are many sectors we are investing in. In fact, Everybody in India is investing in, I don't see anything specific to say but definitely you know when we say that what are the pillars of the economy, Communication and transportation and banking system has a very important

role. So when you see today from specific to UPI, you guys would have understood where UPI has gone. Today we are the mother's or parent's of UPI, and now it is spread across the world. We've become number one in UPI so who could have ever thought that an economy which runs entirely on cash will suddenly become the biggest player in electronic transactions. So far we have gone ahead that RBI has actually introduced the digital currency. So anything can happen no specific sector, per se focused, we are commercial banks. I think that bank as an investment will do investments across and as and when the opportunities the right opportunities will coming will keep investing yeah following the guidelines of the RBI also

INTERVIEWER: Definitely, sir, something to be very proud of!

So, sir, we saw that you have some experience in the telecom industry as well as you worked in reliance and Airtel, so we felt like we needed to ask you something about that as well. So sir, reliance Jio and Airtel are basically the two biggest players in the market. So could you give us a first person perspective on, even though Jio disrupted the entire telecom industry with its inter marketing strategy on a very fundamental level. What is the difference between the two of them, who have some edge like work culture, technology, service. What sort of difference is there in the ground level?

GAURAV: So both are my ex-companies, so yeah see you are asking 2-3 questions in one question one is who has got edge, in technology, culture. So let's go one by one, so let's go back and see what was happening some years back okay when Jio started from some 7 or 8 years back so what was happening, so there were 12 players in the market okay so if you understand the market as a mandatory compliance thing from the TRAI of the government. We need to have two minimum government players in the market. Yeah so that's when you find Bsnl as one of the biggest players from the government end and the other was MTNL which was existing for quite some time and now it's almost serious to exist very soon, so that's how it is going to look that hope that they had their most efficient way of working then they would've survived more. Since government having a business in such core sectors like telecom, transport is very very important to exist, that's number one. After Jio came in, it disrupted the market because they changed the entire strategy. okay so if you see there are multiple calculations that could've actually gone into understanding the market because it again becomes a product management role. okay so that's how you actually look at the product. They looked at the same product in a different way yesterday when seven years back when you were using telecom, I'm not

sure that whether you are having mobile or not, but your parents definitely would be using mobiles right, so when your parents must be using mobiles, They would be using prepaid or postpaid for that matter. They can choose a plan for everything. You know what kind of user is gonna use it in the local segment or in the out-of-state segment and in international and all that stuff. so people were worried about everything, you know all these kind of checks but Jio thought that you know there is some analysis at their end and understood the market and they derived all the things ,here the pricing comes into the picture to understand that how much money does a person spend on a particular set of service okay so accordingly they would've arrived at certain set of amount and would have understood that you know how do we go out and leverage our unlimited data base because data is going to be the future that would be paid very well, which other organisations didn't but you can say could not understood it to the level that they've understood and accordingly you know ditching the entire market structure. They focus on data. because today we all want to be more on data rather than being on voice. We hardly talk nowadays. You know you want to wish you want to go on and give greetings to your loved one , friends you are more on the you know animated birthday wishes rather than going and wishing them in person or in person is very far fetched situations nowadays . So did they entirely vision the future and understood where we are moving okay and that's the similar situation but they saw in international markets also and they entirely focused on data being the biggest differentiator and they build up their network accordingly because that's what the approach was whereas other networks were built like 25 or 30 years back Whereas in Jio when they were investing newly, they took this kind of route where in they were heavily on their latest data market which give them a edge and they change their pricing structure and you know accordingly a very smart move towards the price towards the marketing piece and they credited well yeah. So it's all about innovation you know how they innovated their product.

INTERVIEWER: on, that sir 2-3 years back Elon musk's starlink has Tried to come into the Indian market but was denied permission by the government and basically I guess the reason was that they felt the competition in the industry would be disrupted by but You know considering that Jio and Airtel RTC are basically having some sort of monopoly in the market right now if we want a fast track innovation. We do need some sort of competition for some sort of advancement. technology. So what do you feel about that decision , like do you feel that if starlink today came into the market would the Indian telecom players be able to handle it?

GAURAV: See will they be able to handle it . Yes, why not because see what Jio has done is not everybody can do it that's number one because that requires a lot of investment , it requires lot of capital investment because you have to understand one thing telecom is not a economical business it's a very heavy capital intensive business okay , where a lot of capital is required because you have to buy aerowaves , then you have to buy all the technological equipments ,then you need a lot of manpower, then you need a lot of technology at the backend okay and a lot working capital to ensure that all these things are running in the right set of way that is planned.

So definitely telecom is a very expensive business and i'm sure starlink has got enough and much more you know money or capital to put into it.

See at the end of the day it has to be good for the consumer point number 1 the government job has to ensure that whatever is in favour of the consumer of the citizens of the country it should be done as far as it is possible from their own soil is done nothing like it if not it must always welcome the technology from outside also and see how we can use it and built the same or similar technology in-house.

So with their own set of innovation with their own set of things so I think I don't see any challenges in you know welcoming because there are hardly any two players only left third one is almost becoming dormant very soon.

So Airtel and Jio are very good so I don't think any challenge would be there. Airtel is also building up their own similar kind of infrastructure.

INTERVIEWER: Yes sir , we all know India is really good in competing with those things.

Sustainability and environmental responsibility have gained prominence in recent years, as we all know. How has HDFC bank incorporated sustainable practices into its operations and investment?

GAURAV: See I don't think I would be able to make much comment on that because that's not my area to be frank but I'm sure they have made good enough investment because they are few reports here and there which I keep reading the definitely would have made enough investments to ensure sustainability of the business is there but that's not my area of operations to comment

INTERVIEWER: A different way of basically saying sir what is your perspective on EFG per se because right now especially foreign investors they are taking EFG very seriously. What do you think India lacks as far as this goes and where does it have the potential to attract foreign investors through the use of EFG because right now basically the Indian economy on a certain level is dependent on foreign investors only.

GAURAV: See there are multiple sources of investment. Now you can say that we are dependent on foreign investments. Definitely it is there because that's where the money comes from because the multiplication factor is very high and for us to have that kind of money is very important but yes we have got very huge Indian entrepreneurs those were heavily investing in multiple sectors, including financial sector so I see that very soon that there are couple of reports which is reviewing that investments although they are there.

but then if you see couple of reports, suggest that there are investments from a foreign nationals are also on a decrease because of multiples reasons and when it comes from a specific organisations there are a lot of investments that are coming as I said we are a consumer market so definitely investments are there and they are bound to grow.

We are dependent on them and at the same time we are innovating at our own level. This is also where multiple innovations are happening and we must remember one thing that the heart and the core of these innovations have their roots coming from India . so definitely India's future is bright there is no second thought , with all sort of innovations that government is taking to ensure that you know that our own people our own sectors our own self dependency making India every sort of initiatives ensure that you know we become self reliant very soon , There are multiple other you must be listening to TATA taking up iphone production very soon you know that'll start.

So definitely there are lot of investments there are a lot of things are happening in own Indian soil also.

INTERVIEWER: Yes sir, resilience is something I believe that Indians basically specialises basically very famous for that globally despite all sorts of crises that have happened . India is one that has always have had the minimal impact and has been able to self sustain itself.

Now that GIFT city has been created in gujarat and is to set up to become the various international financial hubs in India . So what does that mean for domestic players and what sort of opportunity does it open to domestic banks, specifically HDFC Bank?

GAURAV: I would not comment on HDFC Bank but I would comment as what does it mean for an Indian consumers or an Indian investor because I'm not sure whether HDFC is investing there or not ,that's their personal call that they have to take, right? So see whether it is GIFT city or multiple other locations that have grown up so all these kind of things are not only for international investment but also for Indian investments are attracting very heavy investments for multiple reasons because now the disposable incomes have become high , the profits are becoming , see we were never the economy which can give you a very heavy EBITA margins by having low consumption we are we were and we will remain to be a consumer market and as we consume more right our services have to be more reasonable in nature okay which definitely generate huge profits and accordingly the investment will happens so that's what is the entire story and that's the entire cycle you can say that per say that is going to attract investment.

GIFT city saw one very huge success because that was one of its kind in the region of Gujrat I would say but there are multiple such stories to you know relate to across india.

India's future is bright is something all we can agree on and I think the financial sector being the biggest sector as far as I remember so it's growth is something that can never be compromised.

Till the time money is there, financial sector will never go out of fashion.

INTERVIEWER: Yes sir. And that's why it's very important for us to basically increase the trust of the population on the financial sector

GAURAV: Yeah, yeah, absolutely! Today, you're gonna buy anything you need financing right from the smallest of the things like a small phone or a laptop going up to your homes. not everything is financed even the road projects are financed right . You don't have funds to fund those kind of roads that government is trying to build so those are also financed so obviously you need that kind of support to ensure that development is happening.

It's like a chicken and egg story , like the chicken came first or egg came first weather, the financial will happen first or whether the asset will come first so it's like the same thing.

INTERVIEWER: Lastly would you like to convey a message to young entrepreneurs and investors of our nation, struggling in the globalised markets?

GAURAV: Only thing I can say, is that one thing which I fortunate enough to spend some time meeting and spending couple of meetings with our ex-MD of HDFC.

One thing he always said is never invest in something which you don't yourself believe in . If you are able to understand the concept , if you're able to see the future in that investment there it's very simple . So there are multiple industries, there multiple sectors Where HDFC never invested because our MD or our top leadership thought or never felt that these kind of things should be invested into.

Then never had that kind of confidence so there are couple of industries or sectors which I know so than ever invested because he always propagated that till the time you are ensuring that your funds are going into the right sector which you yourself are going to consume , which you yourself think is worth consumable whether it is the service whether it is a product ensure that you invest into that.

INTERVIEWER: That is great advice sir because at the end of the day The only reason money exists is because we trust that it has value if there is no trust, then basically the financial system would not exist.

Thank you for giving us your time! It was a very enlightening session. We loved talking to you, to have your insights and we are sure that readers will find every experience everything you have told us was very insightful as well; so we truly thank you sir, it was very lovely having you with us!

GAURAV: Thank you so much for having me here. It was nice interacting with such young minds and seeing how you guys are thinking so well to interact and all the best, do well , keep your focus, very LaserSharp . Whichever sector, whichever part you land up into . Just listen to your heart. That's more important and that's all I can say. Just be very focused, that's all.

The views presented in the interview are the personal thoughts of the speaker and do not echo the the views of HDFC bank



ANUJ BATRA

CREDITS: ANUJ BATRA

C Suite Professional

About the Expert

Anuj has more than 25 years of experience in leading and managing start-ups, turnarounds, and quickly growing companies & establishing brands in a variety of business verticals, including retail, e-commerce, hospitality, real estate, leisure & entertainment, wellness, education, FMCG, and consumer durables. Anuj has held board positions for both Indian and foreign brands and businesses.

UNLEASHING YOUR POTENTIAL: IT'S YOUR TIME TO CREATE A BRIGHT FUTURE

Dear Students,

It is with great pleasure that I address you today, for I firmly believe in the boundless potential that resides within each one of you. As a C-suite professional with 3 decades of experience and a passion for nurturing student-led startups, I understand the importance of embracing your unique skills and discovering your purpose in life. In the face of the challenges presented by the AI-driven world, I urge you to explore your talents, acquire relevant skills, make lifelong friends and embrace entrepreneurship to create a better future for yourselves.

Unveiling Your Skills and Passion:

Often, we find ourselves unaware of the talents and skills that lie within us until we embark on a journey of self-discovery. Waiting until after graduation to seek out these talents can be a missed opportunity. Instead, I encourage you to start exploring your interests, strengths, and passions while in college. Engage in extracurricular activities, participate in college events, and take on leadership roles that align with your inclinations. These experiences will help you gain practical knowledge, develop critical skills, and unlock your true potential.

Internships: A Gateway to Practical Knowledge

Internships are invaluable experiences that allow you to bridge the gap between theory and practice. Seek internships that align with your field of interest, even if they are unpaid or require extra effort. The experience and learning you gain during internships will pay dividends in your professional journey. It's crucial to strike a balance between academics, extracurricular activities, and internships. Effective time management is the key to maximizing your college experience. Plan your schedule wisely, allocate time for studying,

engaging in activities that fuel your passions, and pursuing internships. You'll discover what you are good at during these short stints. And these will highlight your capabilities when you will graduate and seek employment opportunities. You will no longer be the freshers.

Embracing Entrepreneurship and Taking Risks:

The AI era presents a wealth of opportunities and emerging fields that can shape the future. As aspiring entrepreneurs and future leaders, it is essential to stay informed about the latest trends and innovations. Be curious, explore new technologies, and immerse yourself in emerging domains such as artificial intelligence, data science, blockchain, and renewable energy. Develop a growth mindset that embraces lifelong learning, as the ability to adapt to new challenges will be key to your success. Always keep the door to Brain open.

Navigating the Challenges of the AI World:

While AI poses challenges in terms of job availability and skill requirements, it also presents a myriad of opportunities for those who are prepared.

Focus on acquiring skills that complement AI technologies, such as critical thinking, emotional intelligence, communication, and problem-solving. These uniquely human qualities will be in high demand and will enable you to collaborate effectively with AI systems.

Believe in Your Potential and Perseverance:

In the pursuit of success, it is essential to believe in your potential and cultivate a mindset of perseverance. Understand that failure is not a setback but a stepping stone towards growth and learning. Embrace challenges, learn from your mistakes, and continue to adapt and evolve. Remember the words of Henry Ford, who said, "Whether you think you can or you think you can't, you're right." Believe in your abilities, leverage your strengths, and have the courage to chase your dreams relentlessly.

Dear students, the future is yours to shape. Seize the opportunities that college life presents and embark on your quest to create a World full of hope.

With Best Wishes for your Bright Future!
Anuj Batra



SHASHANK RANDEV

CREDIT: LINKEDIN/SHASHANKRANDEV

Co-Founder, 100X.VC

About the Expert

100X.VC is India's first venture fund to invest in early-stage startups using India SAFE Notes. He is a seasoned entrepreneur and investor with over 15 years of cross-functional expertise and has a keen interest in technology-enabled startups, particularly in sectors like Fintech, Healthtech, SaaS, Deeptech and CleanTech.

Interviewed by

*Anant Aggarwal, EIC & Content Head
Aryan Aggarwal, Design & Technical Head*

THE JOURNEY OF 100X.VC: FROM STARTUP TO VENTURE CAPITAL FIRM

With over 20 years of experience, Shashank Randev discusses key trends in Indian startups, emphasizing the growth of fintech, healthtech, and software sectors. Providing valuable advice for entrepreneurs and sheds light on the importance of financial discipline and research. Discover the future of venture capital and technology in this informative interview.

Q1) How did your journey start, and 100X.VC came to be? How did you get into PEVC (Private Equity and Venture Capital) post MBA?

As a founding member of a start-up called VC circle in 2009, which was building SAS platform for the Private capital and equity capital industries. I had the opportunity to work with 300+ funds (private, equity, and venture capital), large consulting funds and Investment Banks and providing secondary research and building those start-ups from 2009 to 2016.

In 2015 we got acquired by News Corporation and got a bird's eye-view about what is happening in the ecosystem. After this, I stepped into direct investment through San Jose based funds and did that for 2 years and then got into angel investing and then eventually started 100X.VC with Sanjay, Ninad, Yagnesh, and Vatsal.

Sanjay has been the long-time mentor and friend of mine. All of them came with a vision of being a discovery fund and they used their individual vantage points from the ecosystem they had made since the last 10-15 years.

We realized there are opportunities in supporting early age companies as discovery funds and take those companies from 0 to 1. This is how 100X started.

Q2) You have 20 years plus of experience in Venture Capital and Entrepreneurship both in India and internationally and have made plenty of investments. What are some key trends that you are seeing in the Indian start-ups ecosystem right now and something excites you about the next phase of India's story?

So the current Indian generation is an interesting one. India has crossed the limit of world highest population and it has both advantages and disadvantage but I see that 85 percent i.e. a large set of population lies between 18 to 35 age group who have access to information through cheap internet and affordable devices which increases the ability to learn and absorb the information and knowledge and use it in a creative way, to build something new. This marks a unique vantage point that this generation has.

Emerging fintech and Indian tax solutions like UPI and growing of services in the Indian ecosystem has provided great chance and time to India to build out unique solutions for the Indian population. India is growing at a fast pace. The type of information, communication, services and products and collaborative opportunities marks an exponential growth as compared 15-20 years ago.

Next 10 to 15 years is an important time span for India where a lot of advancements would be seen. There would be changes and growth in the education sector, healthcare, and digitalisation of data. Some of the noticeable trends are the cross-sectors like fin-tech, health-tech, clean-tech, SAS software solutions and D2C brands. Different consumer patterns and business style is quite evident and thus we can see the beginning of the second phase of start-ups wherein Small start-ups are becoming large enterprises in itself. A new set of start-ups beyond Infosys and TCS can be seen. Crossing hurdles and growing exponentially is progressive. Seeing this growth, the strategy of 100X.VC is to invest in 100 companies a year because they believe fundamentally that India can continuously provide for the betterment of people.

Next 10-15 years is a Golden period for India. The companies and start-ups have enough market in India. Global products are also built out in India. India would continue to be at the nodal point of innovation at the global front and provide intelligent solutions all over the globe.

Q3) What are the key factors that you look at before investing in a company in India in the start-up ecosystem?

We follow 5 principles i.e. consider 5 factors before investing:

1. Founding Team - founding team and their complementary skills play a very important role.
2. Big Opportunities – they see how big the opportunity is. Look at the market size of opportunity.
3. Business Model
4. Product Moat and IP and the Ability of Execution.

5. Our ability to add value after we have invested - investment is easy but what to do with investment, hours devoted to the investment and helping them grow as a business is something critical.

Q4) How do you ensure the product market for the start-up you are investing in?

We deal with the companies which are in the phase where founders are discovering their product market and that's why we invest in them. The idea is to give them capital and experiment and help them develop their product market. The product market fit may be different for different categories of the product. A SAS software business may want that their solutions satisfy the needs of the corporate world and constant feedback is there. Whereas a D2C model focuses on getting the maximum number of buyers and users. We help the founders achieve this with their capital.

Product market fit is a continuous process and founders need to be flexible in terms of receiving feedback and pivoting the products because the product in itself wouldn't sell, you have to build a business around it and that's how larger businesses like Reliance are built.

Q5) What are some of the problems you face while investing in a start-up?

Founders think that they will start anything and get the funds. One of the challenges faced is starting a start-up by the founder without realizing the need of the product. If the product has no customers, no buyers i.e. the product has no market, it's quite challenging sometimes. The market size is to be considered.

A message for future founders is that it's not cool to start a start-up, it requires effort and sweat and blood to start a start-up. It must have capability to develop into a large enterprise. It requires more strength and effort than required to do a 9 to 5 job. From low to high, all is to be considered. They have to be prepared for all this and they are supposed to be flexible. It's what founders don't understand and hence it turns out to be a problem for them.

We are seeing emergence and growth of mature founders. We see young students building great business and yet building out great products. The style of working of young minds helps them achieve all. It's a give and take, challenges may be there but one needs to be consistent, enthusiastic, persistent. Will power matters. With advent and access to Venture Capital, the support system is provided to the founders.

Q6) According to you, what are the most promising sectors in India and fields where you have seen the

most creative product in the past 2-3 years?

Growth is evident in SAAS products in India. We see amazing solutions build out in healthcare, health-tech and deep-tech. There is enough and more innovation happening in deep-tech companies and we always like to keep back in these companies. A great consumer pattern and development is also happening in D2C brands in FMCG sectors, eatable products sectors.

In my opinion, no one sector is trending, every sector is up for grabs. With the advent of chatGPT and creative AIs, enhancement can be expected and seen in all the sectors. All sectors are becoming interesting. Farmers of India are very technology enabled and adoptive to new technology for output increase.

In my opinion every sector is important unless we see that there is a high growth company with a great team and a continuous building and scaling up capability and his(investor's) ability to add more value to the company.

Q7) What advice do you give to young people who are interested in private equity and venture capitalism as a career?

Career in private equity or venture capital is very interesting as it gives you a sense about how businesses are built at various levels and what are the challenges faced. If one looks at the pyramid structure, private equity lies on the top, in the middle lies growth stage capital and at the bottom comes micro Venture Capitalist and early stage investors.

The problem at each level of the pyramid is different. At the bottom level it may be about if the product will work or not. At the growth stage, how much growth is happening in business is the key area of concern whereas at the top level what matters is how large the entity is.

To prepare such a value system mind-set, we have run an internship programme for the last 4 years, where young minds get a 6 months full time internship offer at the Bombay office. Founders work with the experts, ex-partners, source team. They get to understand how an investment decision is made. They get to research what's next.

We have had 40+ interns over the last 4 years and all of them have joined growth stage VC or private equity funds or investment banks etc. Getting an internship with a large/mid-size/small start-up is critical as it gives a front-seat view of what all challenges a company is going through?

Q8) If you have a corpus of say 5 lakhs how will you invest the same today? What would be the approach about different investment options you have?

5 lakhs is a very small amount, one can't do anything with that. So let's up this amount to 50 Lakhs. I would prefer parking 10 lakhs in 5 companies or 5 lakhs in 10-20 companies. I will try to diversify my investment. It's the same as not to place all the eggs in one basket. Strategy that works while investing in the early stage is to distribute.

Q9) Any tips for entrepreneurs who are looking to raise capital through Venture Capital?

Ideas come and go. Execution is the key. To start with, you need to move that idea into a viable product. To get that idea to this stage, continuous efforts and how to do that is the barrier for the founders. Raising money before the product is a bad idea, it's the wrong attitude of the founder. One needs to think about how to convert an idea into a product. The advice is that move beyond ideas, build something tangible. Your vision also becomes sharp.

Q10) How to maintain basic financial hygiene?

Just to teach the basics to the aspiring founders, we have launched a Non profitable initiative called 100X Gurukul. It gives inputs to founders and provides live/recorded master classes on various topics like product development, product road map, and financial projections.

It is difficult to achieve financial discipline in India as we have grown in that middle class way since childhood. But I think more than financial discipline in the ability to do market research and complete market analysis is more important as if you have finances to invest but you realize that the total addressable market is less, it's of no use. One needs to do a complete analysis about where he/she stands and how big is the opportunity.

Q11) What iSAFE is?

It's an open source website. It's an instrument to help first time founders who start not to value their company but essentially raise the money, to raise money quickly and help them get money in their accounts sooner than later. Its India's Simple Agreement for Future in Equity i.e. one would raise money today for equity which could be converted in future time.

Q12) LLM AND AI has been on top since chatGPT was launched. What are your views on the generative AI space?

LLM and AI is filling the gap by streamlining cross pollination of data in the industry and thus are bringing efficiency in industry. It would lead to development of products and solutions in various sectors. They are building the niche of each and every sector.



VIPIN AGARWAL



Ex-President, Raymond

About the Expert

Vipin Agarwal is a former president of Raymond Limited. He is a business advisor, an insolvency professional, a registered valuer, and a business process re-engineer.

Interviewed by

*Avantika Yadav, Associate Member
Khushi Dudy, Associate Member*

CHALLENGES AND OPPORTUNITIES IN THE BANKING INDUSTRY IN INDIA

Experience Vipin Agarwal's (a visionary banker and former President of Raymond Limited) insights on Banking Challenges, AI Security, and the Cashless Revolution! Discover how traditional Indian banks are adapting to fintech competition. Delve into advanced tech like AI, biometrics, and facial recognition for secure banking and uncovering the benefits of a cashless society.

Q1) What do you think will be the biggest challenges that the banking industry will face in the next decade?

The first I think is we are going to create a kind of mini monopolies which would not be enough for you to give the kind of demand for finance which is there and which should be there for businesses to grow. That would mean two things, number one is going to be something which is called unauthorized parallel banking, which is not a very healthy scenario. Number two is that there is going to be possibly more business taken away by the private sector banks from the public sector banks, which means there is going to be possibly a brighter future for private sector banks compared to public sector banks.

Q2) As a knowledgeable expert, what steps are banks taking to ensure cybersecurity and data protection as they increasingly adopt digital technology?

So, you know, this is something which is again divided between private sector and public sector. So, there are a couple of banks in the private sector, who are actually paying far more attention to this digital transformation and bringing sophisticated technology. And they are also public sector banks, for example, State Bank of India I would say, is possibly much much ahead compared to the rest of the peers in the public sector. Having said this, the people who are actually doing cyber fraud and cyber security breach, they are even further smarter. So, they are actually trying to outsmart any of the moves, which the banking industry is trying to bring as a security measure. It is a constant battle, it is a continuing battle, there is no finishing line to this.

Q3) What challenges or opportunities do you anticipate for traditional banks in phase two of increasing competition from FinTech startups in India?

See, traditional banking is something which is going to face a hell lot of challenges. Okay, now, traditional banking is actually thriving in two parts. Part number one is they actually have got a legacy of low cost deposits. If you see the balance sheet of some large public sector banks, then you will find that they have got large chunks of savings account deposits. Savings account deposit is actually virtually free of cost money. They've also got some large amounts of fixed deposits of long term maturity. Now, if you take the balance sheet of say State Bank of India or Punjab National Bank, you will find their average maturity of fixed deposit to be three to five years. And their average cost is something like 30% lower than a private sector bank. Plus their savings account deposit base is few times larger than a private sector bank. That means their competitive strength comes from the legacy of illiteracy of the consumer. What is illiteracy of the consumer? That a guy who is actually living in a small town, he will not be financially savvy to think about transferring his money from savings account to fixed deposit account, by saying that he's not utilizing the full amount lying in the savings account. People actually feel very happy psychologically, if they have a large amount of money lying in their savings. Assume there is a teacher in a government school and he's making a salary of 50,000 rupees. And his monthly expenditure is say 25,000 rupees. On an annualized basis, he would have about three lakh rupees lying in surplus in his bank account, but three lakh rupees lying in a bank account in savings as underutilized money gives him a lot of psychological safety. He will not go and take the pain of converting a portion of that deposit. That means that you are actually thriving on inefficiency.

Now with the onset of internet education, online activity, this competitive advantage is going to go now. What has happened is there are people like Bajaj finance and all, they have actually come and started this business only because they have found that public sector banks are having huge amount of inefficiency and the market size of India in particular is 140 crores. So, from 140 crore people, even if 10 crore people become your customer in the modern day of banking, then for them it would be some point decimal market share, but for you it will be a business size which is of several 1000 crores and you see the, you see the success story of Bajaj finance. If Bajaj finance can sanction a loan for buying kitchen equipment in five minutes off the shelf at the storeroom, the public central bank would not be able to do it. So, what they're doing they're actually trusting loans to the pocket of educated customers by engineering and reengineering and doing

some creative thinking. So, what it means is that the future of traditional banking is extremely challenged. And the second thing is if the competitive advantage of keeping the low cost deposits shifts even by 10%, you're going to see a lot more sickness in the banking industry in the public sector. All it requires is a 10% shift and the low cost deposit base of public sectors. And you know what happens? There is a saying which goes like, "change happens gradually and then it happens suddenly". For something you know which was not appearing to be moving, suddenly you know it crash lands, because it was appearing stationary, but then suddenly it crashed lands. So, the change is there, but the change is not visible. And then suddenly you find that the cumulative effect of ten years is now visible in one year, which is why businesses come and businesses vanish.

So the public banks are actually sitting on a competitive advantage which is purely a function of the illiteracy of customers. If customers become more educated or somebody goes and makes them educated, they will transfer their money. If you are having an account with a public sector bank, somebody comes and tells you that it is advantageous for you to open a bank account with them. So you still maintain half account with public sector banks and half account with the private sector banks, and then later you find that you're getting good service and good money growth from the public sector. So what you'll do is, you will actually close your account with the public sector, and then shift your entire thing to the private sector, that is the fintech. And then eventually what would happen is you will do it and then your friend will do it and then friend's friend will do it, there's going to be a chain reaction. It'll actually mean a dent in the deposit base of public sector banks, as in when there is going to be a dent, their safety net is going to go down and if their safety net goes down, they are again going to be in financial sickness.

Q4) AI is becoming more popular these days. Will AI and machine learning play an important role in future banking?

So, from an analytics point of view, AI and machine learning would play a very significant part. What is happening is AI and machine learning, these are tools. These are tools developed by human intelligence to serve humanity. What is happening is the tools are being wrongly used. So, how are these tools being wrongly used? Because what is the difference between artificial intelligence and natural intelligence, artificial intelligence is devoid of emotion. Natural intelligence is full of emotion. What it means is that any service which is related to customer interface, right, if you try to replace it with artificial intelligence, then there is going to be emotion versus more emotion and there is going

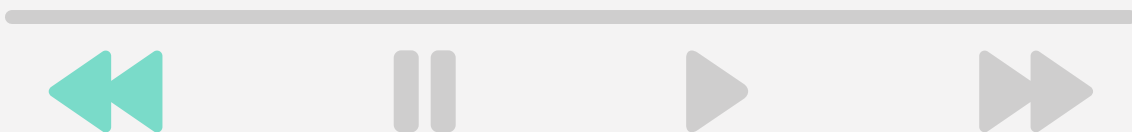
to be huge amount of customer dissatisfaction. For artificial intelligence, usage of that in customer facing roles is not desirable. However, if you have to do back office, large database analysis for research purposes, when artificial intelligence is going to give you a lot more insightful data points by which you can actually increase your business returns.

Q5) What are your views on the potential risks and benefits of a cashless society for the banking industry?

Cashless society is something where the greatest advantage is that everything is accounted for. There is no unaccounted money. And if you have totally accounted money, then what would happen? You know your economy is going to possibly prosper to the world's highest level because there is no economy in the world which I can think of, of this size, which is totally cashless. That means that your total economic activities are recorded in an identifiable fashion. That is a dream, that is a dream. So this is something if you are able to achieve even 50% plus would actually give you a lot of breakthroughs which has already started happening. If you see, the tax collections are going up right now. It is only a function of your cashless society. Yes Digitization has grown by some 5%, 10% and the implication is like this. Do you know that in the last 70 years of independence and if you see also the pre-independence, so you take data of 100 years. For the first time in our country last year, we had a situation where our actual revenue collection was higher than the budgeted estimates. It has never happened before. People are not talking about it. But this is one of the path breaking turning points in the economic scenario of the country.

REWIND!

FINANCE & INVESTMENT CELL, 2022-23



YEAR-IN-REVIEW



February, 2023
FIC Premier League



FINOM3NA

FINANCIAL MARKETS

27-28 March, 2023
Finomena 3.0

May, 2023-Ongoing
Project Samarth



10 June, 2023
Investors' Showdown S1

INVESTORS'
SHOWDOWN

A HIGH EQUITY
TRADING
COMPETITION

04 July, 2023
You Grow Girl with
Navya Naveli Nadna



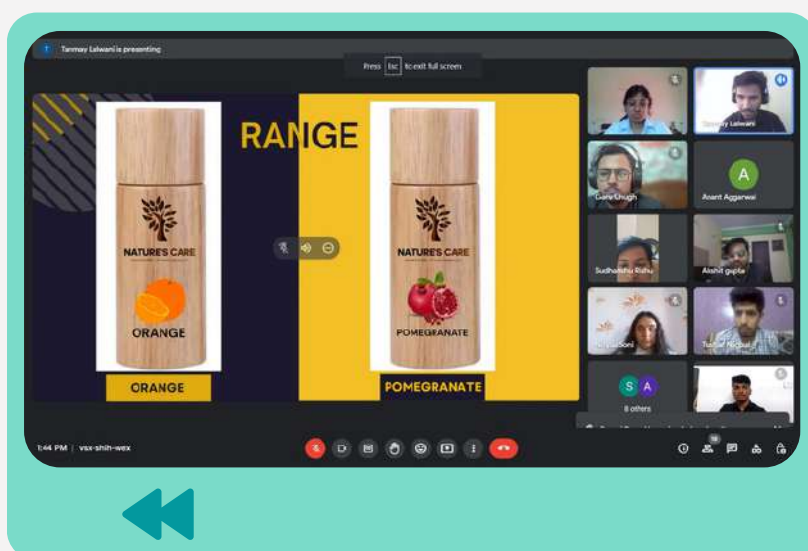
DR. ADARSH BHATTAR
EUPHONY
THE SIXTH SEQUEL

4-6 October, 2023
Euphony : The Sixth Sequel (TBH)

It's Rewind time.



FEBRUARY 10, 2022 - FEBRUARY 15, 2022



FPL or the Finance Premier League (February) was an intra-cell competition of the Finance and Investment Cell of Aryabhata College. 7 teams with 6 members each competed with each other in this competition, which aimed to provide a realistic experience of some of the finance related activities and develop analytical, practical and teamwork skills.

The second and the final event was MOCK STOCK. It was a portfolio management and a trading event. The teams were to trade among themselves and buy and sell the equities of one another. The orders were placed and executed using a systemized and organized google form system. Both the events witnessed a huge and active participation. The enthusiasm of team members was an important factor of the success of the competition.

The competition was divided into 2 events, i.e. 2 rounds - SHARK TANK and MOCKSTOCK. Both the rounds were held in an online mode. The first event was SHARK TANK. In this preliminary round ,the teams were to create a hypothetical company and present it to the panel. The teams were to brainstorm on all the aspects that are considered while formation of a real company. The aspects like company name, logo, tagline, business model, expected revenue, fundraising methods, seed capital required and the marketing strategies were taken into consideration.



FINOM3NA

AMPLIFYING VOICES, INSPIRING MINDS



MARCH 27, 2023 - MARCH 28, 2023



The third edition of our annual flagship financial conclave - Finomena 3.0 was organized on 27th and 28th of March, 2023. Prominent figures from diverse fields including finance, business, journalism, economics, and politics added their esteemed presence to the prestigious two-day pan-India event. The theme of the event was "Financial Wellness: Achieving personal and social prosperity".

The event was kickstarted on an inspiring note by Mr. Abhishek Singh, an IAS officer and honorary advisor to BRICS CCI, as one of the key speakers. The first day witnessed engaging and thought-provoking discussions featuring esteemed personalities. This was followed by an enlightening session featuring Mr. Anil Swarup, a former Secretary of the Indian government. Additionally, the day's penultimate session featured a live conversation with Mr. Meghnad Desai, a distinguished British Indian economist who has also served as a Labour politician.

In addition to that, an enchanting showcase of arts and skills unfolded during the event. An afternoon of poetic delight called "Kavya Samelan" was meticulously organized, featuring renowned poets such as Krishna Gopal Solanki, Upendra Fatehpuri, and several other talented individuals.

The day culminated with an engaging competition called Finopoly, offering participants a fulfilling adventure where they could enhance their financial

skills, strategize effectively, and push their limits. Importantly, the competition provided an opportunity for participants to forge connection and network.

The second day of the event commenced with a renewed sense of enthusiasm, captivating not only the participants but the entire team as well. It began with an interactive speaker session featuring Ms. Mitali Nikore, the Founder and Chief Economist consultant, whose engaging presentation kept everyone fully engrossed. As the day progressed, it witnessed insightful discussions and fruitful deliberations involving esteemed personalities such as Mr. Narendra Nath Mishra, Mr. Ankit Dev Arpan, Dr. Navneet Anand, Dr. Gurusharan Dhanjal, and Dr. Anshul Dhingra. The presence of CA Parag Gupta, a highly respected educator and the founder of The RKG Institute, added further prestige to the event. CA Parag Gupta, known for inspiring countless students, interacted with the attendees, leaving a lasting impact on their minds.

The event concluded with a formal closing ceremony, highlighted by the vibrant celebration of "Bollywood Day" arranged by the FIC Team. The event culminated with captivating performances, officially marking the end.

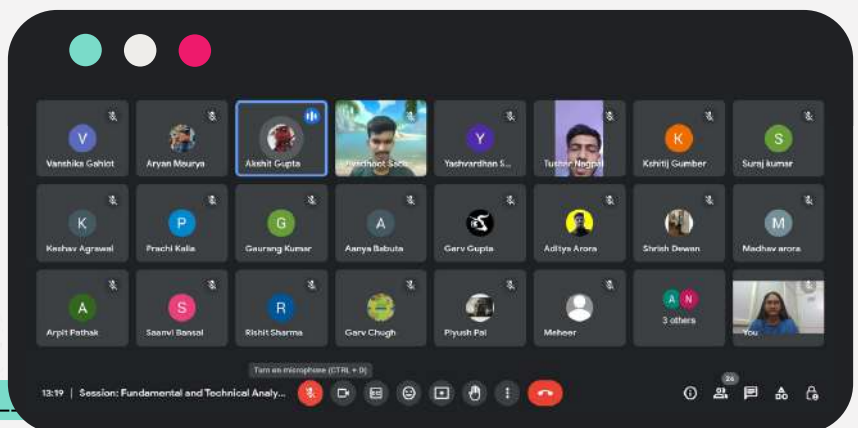




SEASON ONE | JUNE 10, 2023



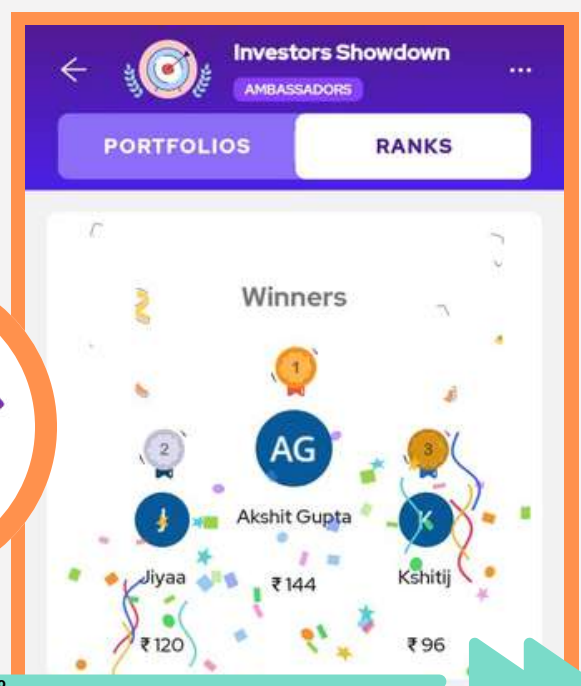
CA Omkar Bhutada
StockGro Expert



FIC Aryabhata introduced an exciting new quarterly mock trading event called "Investors' Showdown" in collaboration with the StockGro App. This initiative provides FIC members with a platform to apply the financial skills they've honed during their journey with FIC and gain hands-on experience in real stock market trading, all while using virtual currency.

The inaugural edition, "Investors' Showdown Season 1," unfolded as a real-time equity trading competition, commencing on June 12th and concluding on June 15th. Hosted on the StockGro App, the event began with a preparatory session conducted by StockGro on June 10th.

This session was instrumental in educating students about stocks and the workings of the stock market, equipping them with essential knowledge. The primary objective of this virtual trading event was to generate the highest profits, and it was a thrilling experience for all participants. The winners of this three-day trading extravaganza were Akshit Gupta, Kshitij Gumber, and Jiyaa. The winners were later honored and celebrated by the Finance and Investment Cell for their exceptional achievements.



Credits: StockGro



04 JULY, 2023



Navya Nanda
at Yuva's roadshow

Credits: yuvaa.co.in

In an initiative sponsored by L'Oréal India and orchestrated by Yuva, the "You Grow Girl" campaign hosted a thought-provoking workshop dedicated to shedding light on the pressing issue of street harassment. This enlightening event unfolded on July 4th within the Activity room of Aryabhatta College, University of Delhi, and was organized by the Finance and Investment Cell.

Ms. Navya Naveli Nanda, a prominent advocate for women's rights, graced the occasion with her presence, sharing her valuable insights and personal experiences. Her presence served as an inspiration, instilling a sense of unity and resilience among the audience. Nanda delivered a captivating and contemplative discourse, offering a unique perspective on the vital importance of taking a stand against street harassment. The event provided a platform for attendees to openly share their own stories and engage in meaningful discussions.

The "You Grow Girl" workshop represents a significant stride toward the creation of a safer and more just society, one that confronts the issue of street harassment head-on. It is our fervent wish that the knowledge and inspiration gleaned from this event will leave an enduring and positive imprint on the lives and communities of all those who participated.





OCTOBER 04, 2023 - OCTOBER 06, 2023

Euphony, the annual fest hosted by the Finance and Investment Cell at Aryabhata College, is a captivating extravaganza that showcases a diverse array of dynamic financial events. This event serves as a national stage for students to enhance their financial knowledge and analytical prowess while delving into the intricate nuances of finance through the practical resolution of real-world problems. Euphony also strives to ignite a spirit of healthy competition among young minds. Over the course of three action-packed days, this event consistently garners success, drawing participation from more than 13,000 students from across the nation.

The fest boasts a multitude of engaging events meticulously organized to provide an enjoyable and hands-on learning experience for all participants, fostering skill development in a fun and inclusive manner. The entire team at FIC exerts immense effort to ensure that each event during Euphony is not just an occasion, but a memorable experience filled with excitement.

Euphony embarked on its journey in 2018 and has since witnessed five successful seasons of this multifaceted event. In 2022, Euphony was held from October 11th to 13th, featuring an impressive lineup of creative and real-world competitions, including case study challenges, trading competitions, auctions, treasure hunts, and merger and acquisition simulations, among others. It received accolades, securing the 10th position in Unstop's ranking of the best college fests.

Anticipation is building for the upcoming 2023 edition, the sixth installment of this grand spectacle. With more than seven competitive events on the agenda, Euphony is slated to take place from October 4th to 6th, 2023. Mark your calendars for what promises to be yet another unforgettable celebration of financial acumen and competitive spirit!





FINANCIAL YEAR-IN-REVIEW 2023





Credit : Denis Balibouse/REUTERS

JANUARY

An additional \$100 million in funding for Pakistan's recovery and reconstruction has been announced by the United States.

State Department spokesman Ned Price said at a news conference here Monday that the funding would also include humanitarian assistance to support flood relief and reconstruction efforts in refugee-hosting areas.

"Today, I am pleased to announce that the United States has announced an additional \$100 million in recovery and reconstruction funding, bringing our total contribution to over \$200 million," he said. Price said the new \$100 million will be used for flood prevention and control,

disease monitoring, economic growth and clean energy, climate-smart agriculture, food security and infrastructure rebuilding.

U.S. flood assistance complements broader efforts to form a green alliance between the U.S. and Pakistan to address a range of climate and resilience issues central to Pakistan's recovery, the spokesman said.

"Pakistan's recovery and reconstruction is an ongoing process over the coming months and years, and we will continue to support Pakistan's efforts to build a climate-resilient future for its people," said Price. Also on Monday, the opening session of an international



Credit : AKHTAR SOOMRO

US announces USD100 million recovery, reconstruction funding for Pakistan

conference on climate-resilient Pakistan in Geneva was addressed by Pakistani Prime Minister Shebaz, the e-mail said at least \$16.3 billion needs to be spent by Pakistan for the next three years.

FEBRUARY



THE ADANI NOSEDIVE

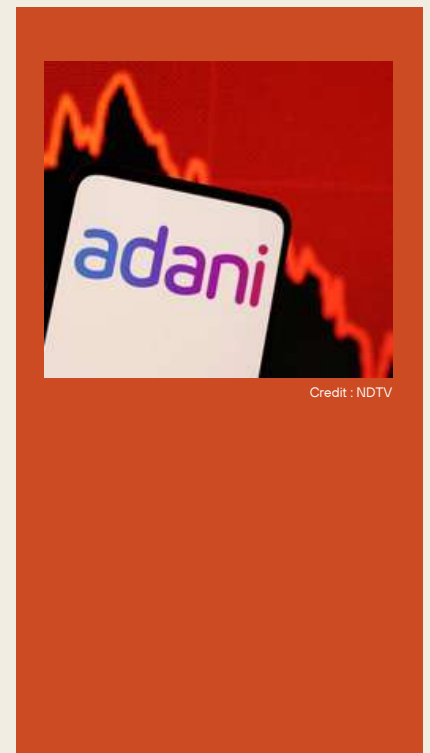
Due to the state of the market, India's Adani Enterprises cancelled its \$2.5 billion share offering. Investors were shocked since the Adani Enterprises FPO was completely subscribed.

The decision came after a 28.5% decline in share price, which brought the company to trade 31.6% below the lower limit of the FPO price range of 3,112-3,276 per share. On Tuesday, January 31, the last day of the campaign, the FPO had received all of its subscriptions. The issuance, which was the largest FPO in India, was subscribed 1.12 times. However, because the issue price was higher than the stock price of Adani Enterprises, domestic institutions such as mutual funds and

the majority of individual investors avoided the FPO. Retail investors bid for 12% of the shares allocated to them, whereas it was 54% for the employees' quota.

Abu Dhabi-headquartered International Holding Company (IHC) announced an investment commitment of \$400 million, or roughly ₹3,200 crore, in the FPO through its subsidiary Green Transmission Investment Holding RSC.

A day after release of Hindenburg's report, the company raised ₹5,985 crore from anchor investors ahead of the FPO by allotting 18.3 million shares at 3,276 each to 33 institutional investors.



MARCH



TPG capital Looking to exit SAI life sciences with a \$500m cheque

Three people with knowledge of the situation are said to have been informed by the private equity investor TPG Capital as well as its five-year-old investment. If successful, the sale could net the PE firm up to \$500 million for its minority stake in the company. TPG owns a 43.4% interest in Sai Life

Sciences after investing over \$135 million (about 900 crore) in the company in 2018. The company was founded in 1999 and started offering contract manufacturing services in 2005. TPG declined to comment. Emails and text messages sent to Sai Life Sciences' managing director Krishna Kanumuri, and the company's chief financial officer, Siva Chittor, remained unanswered till as of press time.

TPG's likely stake sale is seen attracting global PE funds which have already struck several deals in India's pharma and healthcare sector. TPG will complete the transaction by purchasing additional shares from current investor Tata Capital,

which will be followed by a primary investment into the two-decade-old business. The international investor is anticipated to purchase approximately 35% of Tata for about \$100 million, or Rs 650 crore. Sai Life, a company established in 1999, also manufactures essential active pharmaceutical ingredients (APIs) utilised in formulations, pills, and syrups.

The need for generic medications is increasing due to the quick development of novel technologies, and this is causing the worldwide API market to expand at a double-digit rate.



APRIL



Credit : Corporate Finance Institute

FPIs in Indian Equities: A Good Start

In April 2023, the beginning of Financial Year 2024, i.e., 2023-24, the Foreign Portfolio Investment (FPI) was started on a bright spot. Approximately Rs. 8767 crores were invested in the Indian equities by Foreign investors. The Indian economy received such a huge amount in a short period of time. The major portion of FPIs was attracted by the Banking, Financial Services, and

Insurance (BFSI) sector. Both Banks and Non-Banking Financial Corporations interested the Foreign Investors.

Other sectors, such as the automobile sector, capital goods (the tangible assets for the production of consumer goods), Metals and Mining, and Fast-moving consumer goods (FMGCs), fascinated investors and thus formed a crucial part of the investment.

The FMGCs had the least portion of investment out of the total FPI amount. The announcement and decision of maintaining the normality of the RBI rates by the Monetary Policy Committee (MPC) of RBI was one of the major factors of attraction for FPIs.

The MPC kept the repo rate unchanged at 6.50%. Another important factor was the satisfying and non-disappointing results of various companies in the economies as a whole. The non-declining profits attracted the Foreign investors to invest in Indian equities.



Credit : Forbes

In the field of economics, inflation refers to an increase in the overall cost of goods and services in a country.

THE INFLATION HYPE SETTLES

In May 2023, India's Inflation Rate Drops to a 2-Year Low. According to the most recent statistics from the Ministry of Statistics and Programme Implementation, consumer pricing index (CPI)-based retail inflation in India fell to a more than two-year low of 4.25% in May 2023. The CPI dropped from 4.70% in April, 5.66% in March, 6.44% in February, and 6.52% in January to 4.25% in May 2023.

This sustained drop in inflation portends for consumers a more regulated and stable price environment. The Reserve Bank of India (RBI) views this as a

positive development since it shows that inflation has decreased for three months in a row and is now below its 6% upper tolerance range. Wholesale Inflation decreased from 1.34% in March 2023 to -0.92%. The cost of producing and distributing goods may decline as a result of this negative inflation rate, which would be advantageous for both firms and consumers.

MAY

RBI'S VARIABLE REVERSE REPO AUCTION



The interest rate at which commercial banks park their excess funds in RBI is known as the reverse repo rate.

Controlling inflation by removing excess liquidity from the monetary system is done through a method called Variable Reverse Repo Auction.

Inflation may be brought into the economy due to the presence of excess surplus liquidity. After pumping 2.4 trillion rupees into the banking liquidity surplus, RBI offered to withdraw Rs. 2 trillion through a 14-day Variable Reverse Repo Auction. An announcement was made for another Variable Reverse Repo Auction for Rs. 1 trillion, but it did not receive full subscription. The interest rate remains unchanged, and the normality of the interest rate is maintained. The amount of trading surplus, interest on withdrawals, and the confidence of banks to park their excess funds with RBI

are affected by volatility.

This 14-day auction provides banks with an opportunity to invest and assures them of liquidity. However, some private banks still believe that the Variable Reverse Repo Auction is of interest to them, but the RBI may not be successful in offering

this auction. Additionally, some banks choose to withdraw from opting for the Marginal Standing Facility provided by the RBI, which allows scheduled commercial banks to increase their liquidity if they choose to do so.

JUNE



Credit: Nathaniel B. Gerhart

Project Samarth

विद्या ददाति विनयम्

Cognizant of the fact that the destination of financial security can only be reached through the path of financial literacy, Project Samarth was started with the aim of assisting future leaders in developing a keen interest in and understanding finance.

With a head for finance and a heart for the world, our mission is to empower each and every person to achieve more. Project Samarth aims to spread financial literacy to the different sections of society and teach the torchbearers of tomorrow something that books and schools never taught them. We aim to start a revolution that will inspire the youth to become financially independent.

Under the project, members of the Finance and Investment Cell of Aryabhatta College visit different organizations (including blind schools and children NGOs) around Delhi to conduct financial literacy sessions for children, in order to complete a specific

curriculum of **FINANCIAL LITERACY**. The aim of the visits is to impart knowledge about the importance and management of money and to assess the current level of financial knowledge among the children.

EMPOWERING EACH AND EVERY ONE TO ACHIEVE MORE!

The team consists of enthusiastic cell members who had prepared a well-structured layout for the workshop, incorporating various activities and engaging teaching methods to convey financial concepts to the children effectively.

The sessions include **interactions and discussions** focussed towards introducing key concepts of **savings and expenses**. **Topics such as personal finances, fundamentals of budgeting, banking functions and its importance** are explicitly discussed as a part of these sessions.

It is essential that theoretical knowledge complements practical exposure. The sessions, hence include interactive games, fun activities and practical demonstrations to enhance the children's understanding. Use of comprehensive storytelling and integration of theory with real life scenarios is a key aspect of these sessions.



ASSESSMENT OF CURRENT FINANCIAL KNOWLEDGE:

During the workshop, the students conducted **group activities to assess the children's understanding of financial concepts**. These activities included simple scenarios where the children had to make choices regarding saving, spending, and prioritizing needs. The students closely observed the children's decision-making processes and took notes to evaluate their financial literacy levels.

Continuous Evaluation: Regularly assessment of the impact and effectiveness of financial literacy initiatives through pre-and post-assessments to measure the progress of children's financial knowledge and skills.

The interactive nature of the workshop enabled the volunteers to identify the areas that require further attention and improvement. The experience highlighted the importance of adaptability in teaching financial literacy to children and provided valuable insights for the cell's future initiatives.



FUTURE DIRECTION FOR THE PROJECT

Curriculum Development: Collaborate with education experts to design a comprehensive, age-appropriate financial literacy curriculum tailored to children's understanding and learning capabilities.

Interactive Teaching Methods: Incorporate more interactive activities, games, and visual aids to engage children actively and enhance their understanding of financial concepts.

Community Engagement: Extend the reach of financial literacy programs beyond the NGO by partnering with schools, community centers, and other NGOs working with children to conduct regular workshops and awareness campaigns.





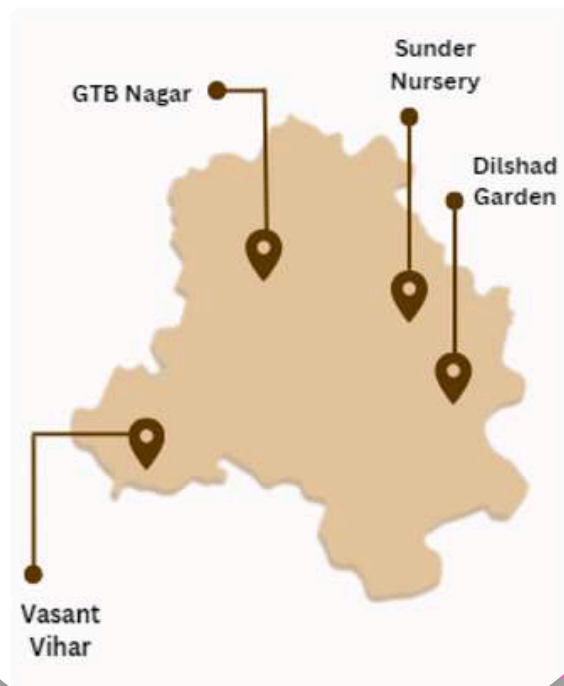
In a world where financial literacy is a cornerstone of empowerment and economic advancement, Project Samarth aims at bringing financial literacy to different sections of society. This section delves into transmitting the impact of the project in fostering economic independence and breaking the cycle of financial vulnerability.

OUR IMPACT

EMPOWERMENT THROUGH KNOWLEDGE :

The project's curriculum covered a range of topics, from basic budgeting and saving techniques to more complex concepts like banking sector and personal finances. The focus was on practical knowledge that individuals could immediately apply to their lives. Real-life scenarios and case studies were integrated to make the concepts tangible and relatable. As a result, the practical exposure that the students received because of comprehensive curriculum proves to be a key tool in the empowerment of the community through our diligent and assiduous efforts.

AREAS COVERED



In this scorching heat of Delhi, with one aim, to spread financial literacy among different sections of society and teach the torchbearers of tomorrow something that books and schools never taught them, we conducted our sessions in different regions of Delhi. This initiative spanned from the busy streets of Guru Tegh Bahadur Nagar to the beautiful landscapes of Sunder Nursery, from the greenery of Vasant Vihar to the residential areas of Dilshad Garden. These sessions were conducted in collaboration with NGOs, blind schools and community centres assisting us in reaching a large section deprived of financial concepts and imparting our journey of financial upliftment of the sections of society generally ignored by masses.





TRANSFORMING LIVES

The impact of the project was felt not just in numbers but in the stories of changed lives. The individual transformation that students had in gaining confidence, fostering team spirit and social interactions enlightens the young minds on an abstract scale.

Students expressing their ideas freely, interacting with dignity and grasping concepts with sincerity communicates about the success Project Samarth has transformed into. These individual transformations collectively contribute to the economic empowerment of the entire community.

A BEACON OF HOPE

The story of Project Samarth serves as a beacon of hope, illustrating that change is possible even in the most challenging circumstances.

Through Project Samarth, we demonstrated that empowerment through knowledge can transform lives, break barriers, and pave the way for brighter futures. Project Samarth serves as a reminder that when knowledge meets dedication and community collaboration, the result is an ongoing journey towards prosperity and self-reliance.

Project Samarth gives me the opportunity to be both fulfilling and inspiring. I am driven by the passion to bring positive change through education and empower individuals with the gift of literacy. Being able to contribute to someone's growth, witness their achievements, and see the joy in their eyes is what fuels my love for this project. It's an incredible privilege to be part of something that has the power to uplift lives and create lasting impact.

- Ansh Kapoor, Project Head

Volunteer experiences :

Project Samarth gave me the opportunity to volunteer and be a part of their visits, which fulfilled my long-standing desire to visit an NGO and help the kids there. The kind of satisfaction I get seeing their cheerful faces and eyes sparkling with big dreams is so heartfelt. Overall it has been an incredible experience and I wish to be a part of many more such visits and try to shape a better future for them with my teammates.

-Khushi Dudy

I always wanted to do a social deed, maybe for an orphanage or an NGO. So, I volunteered for Project Samarth in my college. It was indeed a wonderful experience to step into their lives, for a day, and contribute something to their struggling lives. The experience was not only limited to teaching, but the learning part was inclusive. A basic understanding of finance is something very crucial nowadays, and I am glad Team FIC of Aryabhata College is serving the need of the hour.

-Bhoomika

I could say that Project Samarth helped me give an insight about the section of people generally ignored by the masses. It helped me reflect upon the various challenges and hardships to which ones are usually not privy to. Therefore, I could proudly say that it was a learning experience for both the students and me. I would like to thank Pehchaan-NGO for providing us the opportunity to educate and empower the underprivileged section and for being a part of the revolution, which Project Samarth aims for.

-Shrish Dewan

Core Team Message

60 of 72m



Resume



▶ Play

Reflecting on my evolution from a probationary member to the position of President within the Finance and Investment Cell, I'm reminded of the vibrant book of memories and growth that has defined this journey. Each moment, from late-night brainstorming sessions to heated debates, has woven into the fabric of lasting bonds. The Finance and Investment Cell has played an instrumental role in shaping my college life. It's more than just a student organization; it's a platform where passion, curiosity, and creativity converge. The nurtured environment here has not only enhanced our understanding of finance but has also forged lifelong connections. As I navigate my path beyond college, I will carry forward the cherished memories, the invaluable friendships, and the profound lessons that the Finance and Investment Cell has bestowed upon me.

2022-23 Season1





PREKSHA

Vice President

2022-23 Season1

▶ **Play**

College life is a unique chapter, a time of self-discovery and exploration. It's about late-night discussions, passionate debates, and forging bonds that endure beyond these hallowed halls. The pursuit of knowledge here extends beyond textbooks, into the realm of life skills, resilience, and adaptability. Amidst this vibrant journey, my involvement with the Finance and Investment Cell has been a defining aspect. Through workshops, events, and interactions, I've honed skills that extend far beyond the academic realm. It's been a platform where learning meets application, and where friendships are forged amid shared interests and goals. As I reflect on this transformative period, I'm filled with gratitude for FIC. They've not only equipped me with knowledge but have also nurtured personal growth. With sincere appreciation, I step into the future, carrying these cherished memories and valuable lessons.



AKSHIT

Strategic Director

2022-23 Season1

▶ **Play**

I began my academic journey as a science student, fascinated by the world of equations and experiments. However, little did I know that the captivating realm of stocks and investments would soon sway my path towards the field of finance. It was during the initial weeks of my college life when I first stumbled upon the Finance and Investment Cell (FIC), a beacon of knowledge and opportunity. In that transformative moment, I made a resolute decision: "I am definitely going to join this club"... It ignited a hundred dreams and prompted a thousand actions. Every step I took, from attending meetings to organizing orientations, strengthened my belief that joining FIC was the best choice I made. The passion and dedication of the hard-working team behind FIC inspired me, and I hope my journey within the field of finance will be equally fulfilling. I am grateful for the corner that FIC provided me, where I could take shelter from this complicated world.



N

**▶ Play**

FIC has played an integral role in making my 1.5 years of college life not only bearable but truly remarkable. It has shaped me into the person I am today. The bonds I have formed within FIC are invaluable. Being a part of FIC has allowed me to grow and develop as an individual. Taking on the responsibility of leading our esteemed Project Samarth stands as one of my proudest personal achievements. Through this endeavor, I have worked on my leadership skills, work ethic, and embraced the values of honesty and dedication. As I reflect on my journey thus far, I am overwhelmed with a deep sense of commitment. FIC has given me so much, and I am determined to give back in return. I vow to continue contributing to the society with unwavering honesty and dedication, putting forth my best efforts to ensure its continued success. FIC will always hold a special place in my heart. I am forever grateful to FIC for shaping my college experience into something extraordinary, and I eagerly look forward to the future endeavors we will embark upon together.

2022-23 Season1**▶ Play**

The beginning of my academic year cultivated in me a drive for excellence which also draped the veil of reservation and nervousness on my personality. Little did I know that my profound love for economics and finance would give a headstart to my academic life and an opportunity to explore the diverse and enchanting realm of money and all that it brings to the table along with it. I stumbled upon the Finance And Investment Cell, after meandering around grappling with choices and opportunities that other societies and organisations had to offer. Even before factoring in my passion and interests, the thing that grabbed my attention most was the freedom of exploration and expedition that it had to offer. I have always said that FIC is the silk route and all of us are its Marco Polos. The raw passion of not just my superiors but my counterparts and subordinates has motivated me to grow even further and I am absolutely grateful to FIC for having provided me with the right environment and liberty to foster those feelings.

2022-23 Season1



▶ Play

From initially having no concept of college life, to embracing it wholeheartedly, being a member of the Finance and Investment Cell has enriched my life beyond expectations. This journey has been nothing short of a thrilling roller coaster, brimming with enjoyable and enlightening moments. The Cell provided me with opportunities that exceeded my wildest imagination. It's astonishing to reflect on how far I've come, transitioning from a novice to fully immersing myself in college life. The countless experiences, laughter, and lessons learned have left an indelible mark. My time with the Finance and Investment Cell has been an education beyond textbooks, cultivating skills and friendships that will endure. Grateful for this journey, I eagerly anticipate the adventures yet to come.

2022-23 Season1



▶ Play

I am immensely grateful to the Finance and Investment Cell (FIC) for being a guiding light during my college life. When I had first attended FIC's orientation, I knew I had found my place, and I made a steadfast decision to join this remarkable club. It became the catalyst for countless dreams and motivated me to take numerous actions. Throughout my time with FIC, from an associate to an event head to becoming the Editor-in-Chief, my conviction in choosing FIC grew stronger. I am deeply appreciative of the opportunities, mentorship, and the friendships that FIC has provided me. These experiences have not only enriched my academic life but have also prepared me for the challenges and opportunities that lie ahead. FIC provided me with a safe haven, a place to seek refuge and gain profound insights into the intricate world of finance. I am forever grateful to FIC, for being an integral part of my college experience and for the lasting impact it had on my life.

2022-23 Season1



N

[▶ Play](#)

It's seldom easy when you are told to fit your thoughts into a piece with a defined word limit. Anyways, I'll give it a try. I ought to tell you that the titles on these pages are mere fancy words that we use, to give ourselves a bit of self-validation. In fact, all of us, over this seemingly short span of time – which was actually close to a good one and a half years – did a bit of everything. I would be lying if I told you that I didn't spend most of my time in college with these people, and I did enjoy every (read most) of it, despite me telling them otherwise. I would forever be grateful to FIC for giving me plenty of opportunities, making me learn a ton of new things, and how can I not mention the people that I met through the course, after all, it's the people that have made FIC what it is. Coming to this magazine, it has been a platform for the cell's members to contribute to in their own personalised way, and the careful selection & placement of each and every element in these pages is a testament to our belief in the power of storytelling. When we... oops, hit the word limit! The copy is yours to cherish...

2022-23 Season1

[▶ Play](#)

As we flutter through these pages, a wave of contentment settles in. The annual magazine stands as a testimony to the marriage of creativity and purpose that defines our design journey. Every stroke of the digital brush, every choice of color and font, was an effort to enrich the storytelling experience. Design breathes life into words, evoking emotions and guiding readers on a visual adventure. This year's magazine is a canvas of collaboration. The dedication of our team, the fusion of ideas, and the tireless pursuit of perfection have culminated in a tapestry of inspiration. My heartfelt gratitude goes to the team for their unwavering commitment. It's their passion that brought vibrancy to these pages, making the magazine more than just ink and paper. As we close this chapter, let's look forward to more design horizons waiting to be explored.

2022-23 Season1






STUTI

PR Head

▶ Play

It's hard to believe it's been two years since I joined FIC. However, at this juncture, FIC isn't just an organization; it's become a family to me. A family that has been by my side since the very beginning of my college journey. I can hardly fathom what my life would be like without the presence of FIC now. My passion and dedication for this cell surpass anything I've ever worked on. What's more, the friendships I've forged have predominantly stemmed from my time at FIC. To them, and especially to FIC, I am eternally grateful for being the bridge that connected us. If I were to compile a list of the top ten pivotal moments in my life, FIC would undoubtedly hold a place among them. Leading the team hasn't always been a smooth ride, but every challenge I've encountered has bestowed upon me wisdom and strength. While each individual journeys alone, the allure of destinations like FIC makes the entire journey profoundly beautiful. Here's to FIC, an extraordinary chapter that continues to enrich my life.

2022-23 Season1




SATVIK

PR Head

▶ Play

In today's world, we find ourselves at the crossroads of remarkable progress and unprecedented challenges. In this rapidly changing landscape, it is more important than ever for us to foster empathy, understanding, and collaboration to address these challenges and build a sustainable future for all. We have a vision to achieve the goal of personal development along with the the concept of societal development as well. Our team of this year is another example of this vision. The team has worked tirelessly day and night to provide the third edition of our magazine, "The Absolute Advanatge" which aims at voicing and showcasing various pieces belonging to numerous classes such as finance, economy, sustainable development, etc. This note is dedicated to the perfect team that a million organisations in the world wish for along with any other mind out there in the world who searches for a way to make the world a better place for everyone.

2022-23 Season1

YEARBOOK



N JOURNEY
★★★★★

2022-23

The Finance and Investment Cell
S3E1 "Aryabhata College"

 Most Liked

 Play

MORE INFO 



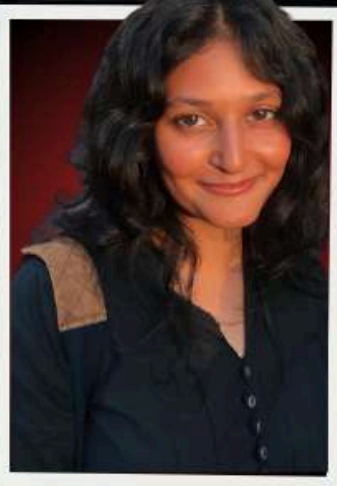
Memories





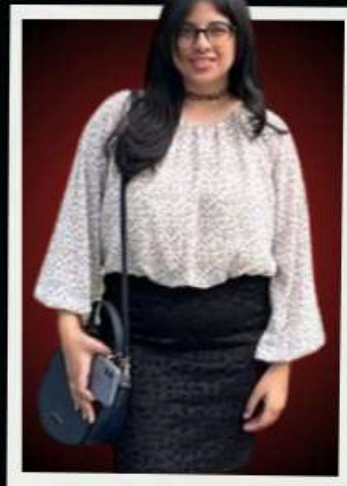
Aaditya Singh

Life is too important to be taken seriously.



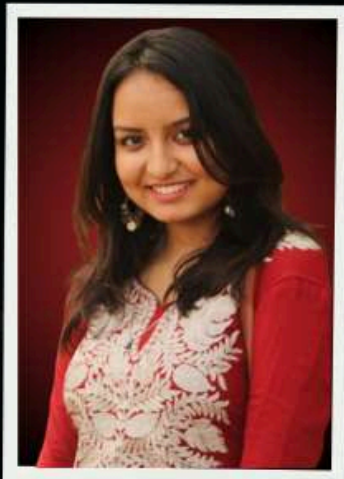
Aakriti

the less i know the better



Aanya Babuta

Always a learner



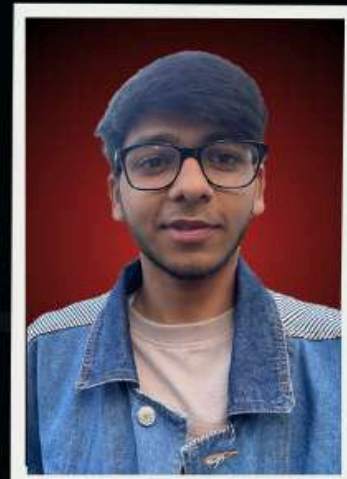
Aastha Pandita

just me being the best...



Aayushi

Don't wait for opportunities, create them.



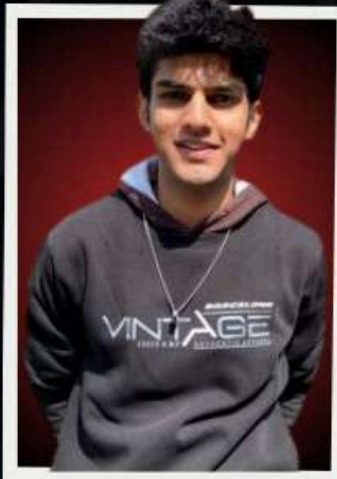
Aayushman Goel

Life is a journey, enjoy the ride.



Abhinav Jain

I am a driven individual who is not afraid to face a challenge



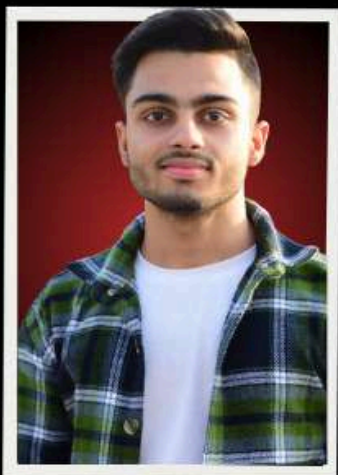
Abir Singal

Don't let yesterday take up too much of today.



Adi Jain

Life is either a daring adventure or nothing at all.



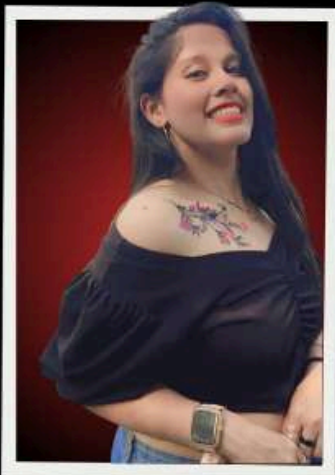
Aditya Arora

Life is a beautiful
struggle.



Aditya Sharma

One chance, BANG



Akansha Sharma

A people's person.
Love Exploring
between the chaos.



Akshat Kocher

Always looking for an
opportunity to do better
and achieve greatness



Akshita Chawla

In the middle of
every difficulty,
lies opportunity



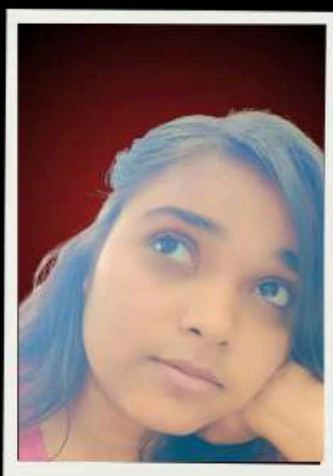
Akshit Gupta

Why so serious?



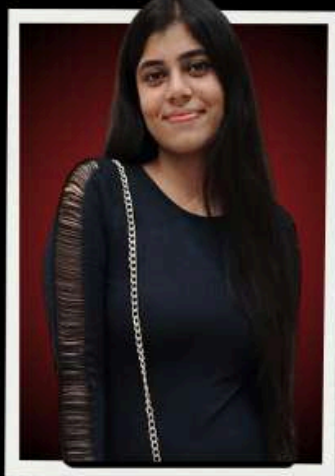
Alok Yadav

A balance of
holding on and
letting go.



Anamika Upadhya

A smile is the best
accessory you can
wear in your living.



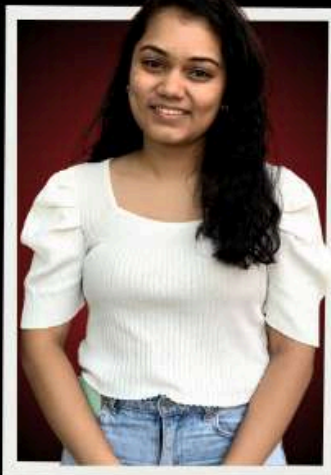
Ananya Khurana

An optimistic
individual with an
ardour to learn.



Anika Tandon

When I am myself, I
am happy and have a
good result.



Anisha Saxena

Dramatic enough



Anmol Gupta

Believe you can
and you're
halfway there.



Ansh Chopra

Keep hustling



Ansh Kapoor

Just connecting
the dots.



Anant Aggarwal

God made men, Colt made
them equals, Kalashnikov
civilised them.
Bíró will liberate them.



Anupriya

Life is a song, sing
it.



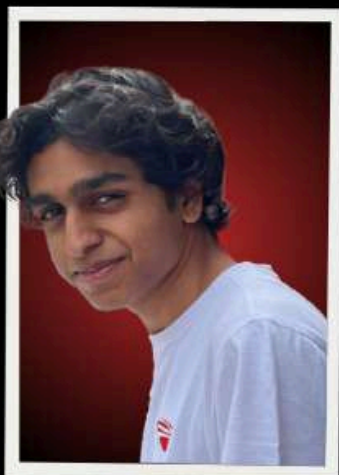
Arpit Pathak

I am a very
hardworking and
self-motivated
person



Aryaan Manchanda

I am a self driven
individual with a knack
of extra curricular
activities



Aryan Aggarwal

You expected some
witty shit here?



Aryan Maurya

Be the change you
wish to see in the
world.



Aryan Gupta

Let's do that



Asad Ahmad

If you want to win a
marathon, you gotta
train for a triathlon



Avadhoot

Why be the King when
you can be the GOD !



Avantika

She trusts her own
abilities and knows
that she has value.



Ayush Kataria

I want you to deal
with your problems
by becoming rich



Bhoomika

Falling seven times,
Standing up eight
times :)



Devanshu Dalmia

The best way to
predict the future
is to create it.



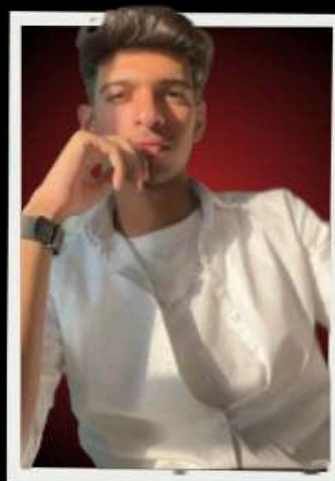
Dev Garg

Believe in yourself



Devansh Gupta

All it takes is a
walk and a gallery



Devansh Sharma

In the midst of
chaos, there is also
opportunity.



Divyansh Bansal

Make your own
rules



Diya

I pride myself on
being a reliable
person.



Garv Chugh

I believe in
~~Hardwork~~
Smartwork



Garv Gupta

I'm PROUD of what I
embody, but that
doesn't mean I won't
fight for better



Garv Mittal

Learn, Love, Laugh,
Live...



Gaurang Kumar

I am a self motivated
hardworking being
and keen to learn
new skills



Gaurav Sharma
Hyperactive Child



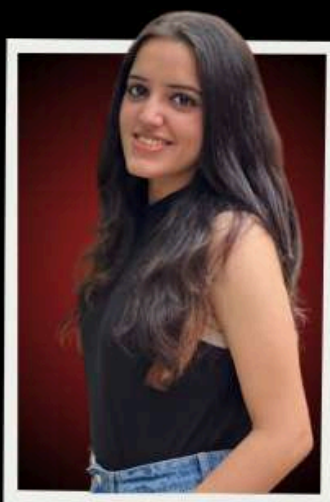
Gaurav Singhal
I am a student by day, but a problem solver by night.



Gracy Agrawal
Be imperfectly real, it's perfectly rare



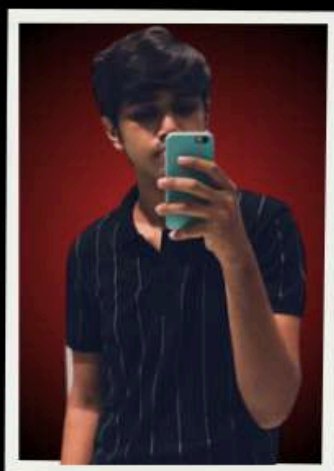
Hitarth Arora
I will be fighting for justice and claiming my place



Hridya Bharara
My name is always mispronounced



Isha
I am ambitious, curious and driven



Ishaan
Life is not a problem to be solved but a reality to be experienced



Janvi Arora
Believe in being honest with myself



Jagrit
The only limit to our realization of tomorrow will be our doubts of today.



Jiya

A versatile human
who loves to cherish
every bit of what she
does.



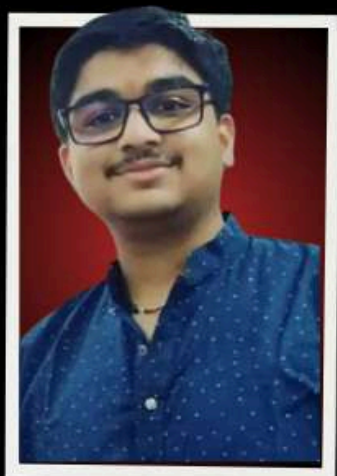
Jigyasa Khanna

curious if I'll ever
give an actual
one-liner



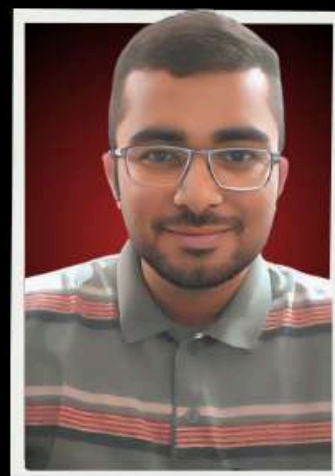
Kalyani

A creative person
eager to learn new
things



Keshav Agrawal

Not made to fit in
but here to stand
out



Keshav Kapoor

Transforming
ordinary into
extraordinary, one
moment at a time



Khushi Dudy

Bringing glory into
whatever I do



Khyati Mukhija

The future belongs
to those who believe
in the beauty of
their dreams.



Krish Soni

Do the best you can
until you know better.
Then when you know
better, do better



Kshitij Gumber

Born to learn, Live
to slay



Lakshya Agarwal

workaholic , Right
now building
dream's



Madhav

Fake it,until you
make it !



Madhav Gulati

looking for the
perfect distraction



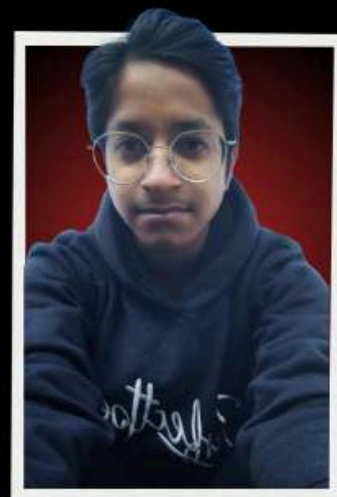
Mansi

Life is 10% what
happens to us and 90%
how we react to it.



Meheer Besoya

Finding happiness
in little things



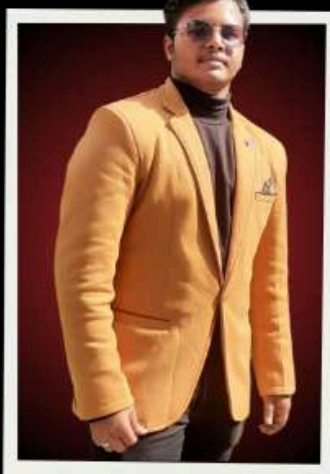
Nabh Goel

Finding my Ikigai



Neha Yadav

Ahh shit ! Here we
go again.



Nimit Jain

I put myself in the
way of things
happening, and
they happened



Nimish Mehra

Find happiness in
the chaos



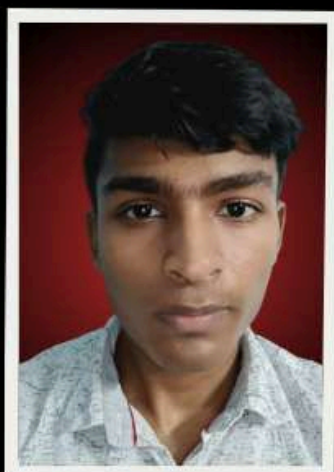
Nityaa Soni
veni,vidi,vici



Panshul Jetwani
I need a doctor



Parth Mahindru
Let me hover in
my reverie !



Piyush Pal
just trying to be
myself .



Piyush Yadav
either full of
energy or zooned
out



Prachi Kalia
Passing through
constricted paths
of life



Priyam Jain
I live in blacks
and whites of life



Priyanshu Mallick
Wandering through
the meadows of life;
aiming for the sky.



Preksha Agarwal
I'm working on me.
For me; to be a
better me



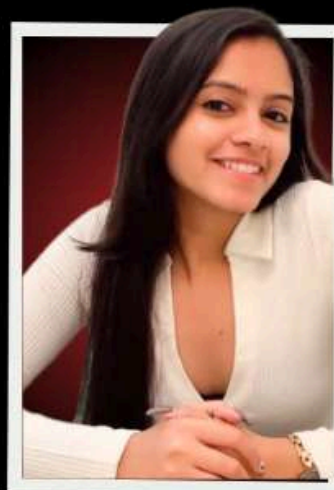
Rahul Sood

No such thing as a
life that's better
than yours



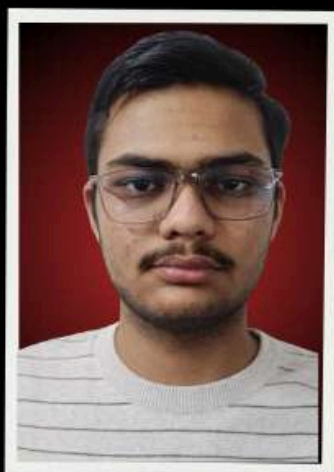
Rhytham Seth

I am being forced
to describe myself
in one line.



Ridima Srivastava

You don't have to
be great to start,
but you have to
start to be great.



Rishi Agarwal

I hope for best but
always prepared for
worst .



Rishika Khera

Don't stress about
the dumb shit.



Rishit Sharma

A lifelong learner
with a passion for
personal growth



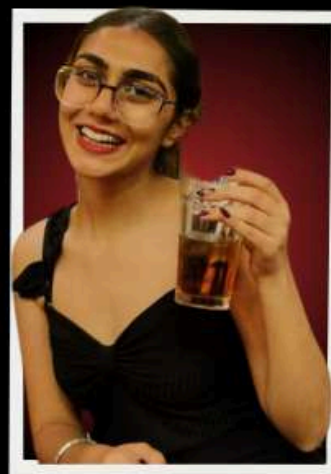
Rohit Ramani

Rome wasn't built
in a day, but it
burned in one



Rounaik Kumar

I m just a regular
person with few
tricks



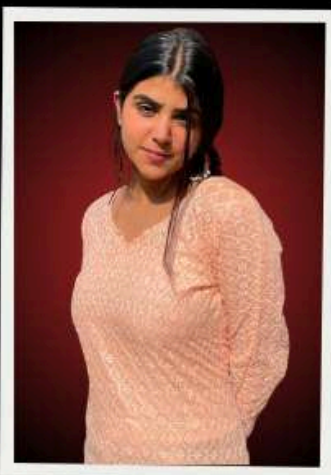
Rupin Kaur

Real



Ryanshi

You were born to
stand out, stop
trying to fit in



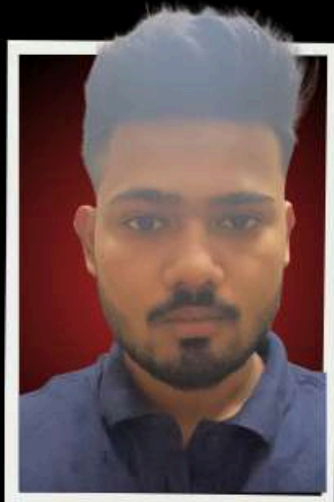
Saanchi Mehra

If I die, turn my
tweets into a book



Saanvi Bansal

Rise to success,
don't expect it to
lower its standards.



Samarth Jain

Once the
subconscious mind
accepts an idea it
begins to execute it



Saksham

The best time to
plant a tree was 20
years ago. The
second best time is
now.



Sarika

Life is too short to hold
onto anger & resentment
- choose love &
forgiveness instead.



Sarthak Singh

Just trying to find
the Equilibrium.



Satvik Chhabra

Too complicated
to be described in
a few words.

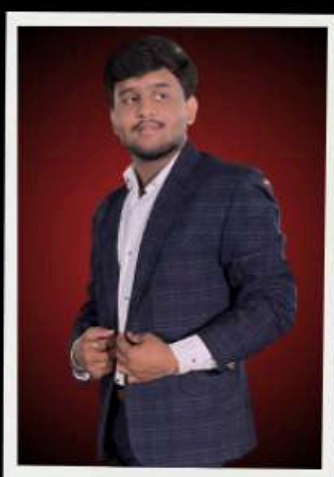


Satvik Aggarwal

Don't be sorry, be
better



Shakshi
hardworking



Shivam Singhal
Sky is the limit



Shivam Sharma
I am an Optimistic
and hardworking
person with learner
mindset



Shrish Dewan
Seeker mentality
with Decisive
personality



Shubhangini Singh
The only limit is
your mind.



Shubh Chopra
Looking for the
pain that serves
the purpose



Siddharth Sinha
They got blood on
the money and I
am still counting



Stuti Kesharwani
They got blood on
the money and I
am still counting



Sparsh Garg
I am a driven
individual who likes
to try new things and
be good at them.



Sudhanshu Kumar

Trying to learn
from every
moment



Suhaan Malhotra

Don't compromise
yourself - you're
all you have



Sahej Verma

"Pal do Pal ka
Shayar"



Sourabh

Enthusiastic for
new things.



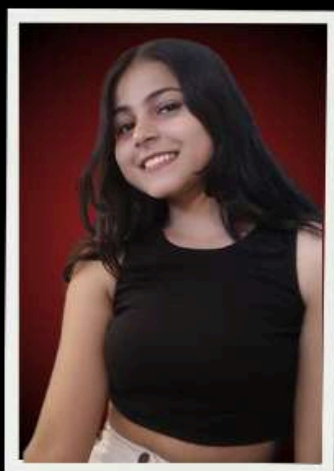
Tanmay Lalwani

Accept, Adapt,
Attack



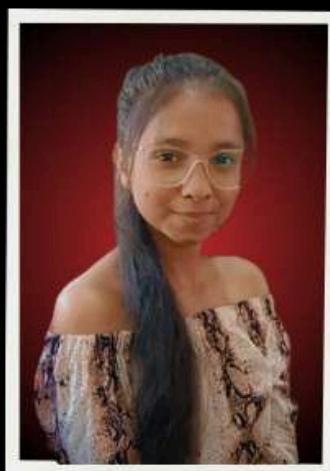
Tanisha Saxena

The only person you
should try to be better
than is the person you
were yesterday.



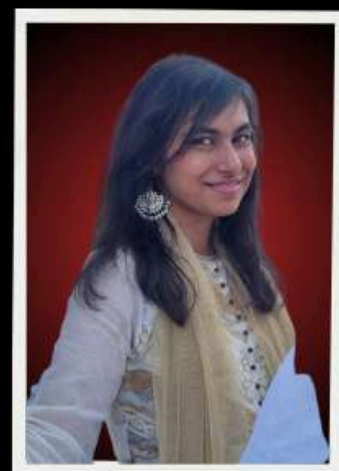
Tanisha

To shine your
brightest light is to
be who you truly
are



Tisha Jain

Let yourself be drawn
by the stronger pull
of that which you
truly love



Triguna Jain

It's all about the
illusion



Tushar Nagpal

Just an enthusiast who tries to create an impact everytime



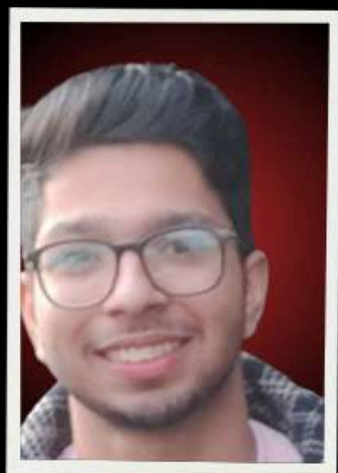
Ujjwal Khemka

The harder you work for something, the greater you'll feel when you achieve it.



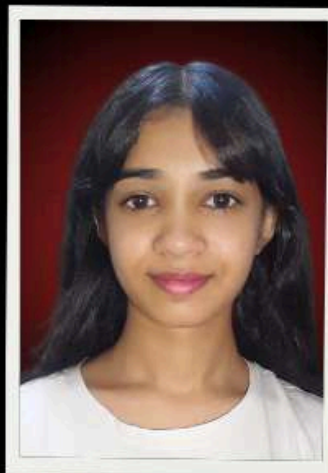
Vansh Aggarwal

The greatest risk is not taking any risks.



Vansh Sarin

Up and away



Vanshika Gahlot

Stay low-key, work on yourself and then pop out. Have them be like, "Since whennnn"



Vishal Rana

Follow your inner moonlight; don't hide the madness



Varun Pandey

A creative problem-solver who thrives in fast-paced, dynamic environments.



Yashvardhan

A confident and curious learner with sharp observations who enjoys being in thick of action.



Aditi Goyal

Life goes on...

An FIC Aryabhatta Publication

The Finance and Investment Cell

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Benito Juarez Marg, South Campus, Anand Niketan, New Delhi



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