CHRONICLE

20th Edition, March 2025

Banking, Financial Services & Insurance Board (BFSIB)

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA (ICMAI)
(Statutory Body under an Act of Parliament)

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Behind every successful business decision, there is always a *CMA*

Mission Statement

"The CMA professionals would ethically drive enterprise globally by creating value to stakeholders in the socio-economic context through competencies drawn from the integration of strategy, management and accounting."

Vision Statement

"The Institute of Cost Accountants of India would be the preferred source of resources and professionals for the financial leadership of enterprise globally."

About The Institute

The Institute of Cost Accountants of India is a statutory body set up under an Act of Parliament in the year 1959. The Institute as a part of its obligation, regulates the profession of Cost and Management Accountancy, enrolls students for its courses, provides coaching facilities to the students, organises professional development programmes for the members and undertakes research programmes in the field of Cost and Management Accountancy. The Institute pursues the vision of cost competitiveness, cost management, efficient use of resources and structured approach to cost accounting as the key drivers of the profession. In today's world, the profession of conventional accounting and auditing has taken a back seat and cost and management accountants are increasingly contributing toward the management of scarce resources and apply strategic decisions. This has opened up further scope and tremendous opportunities for cost accountants in India and abroad.

After an amendment passed by Parliament of India, the Institute is now renamed as ***"The Institute of Cost Accountants of India"*** from ***"The Institute of Cost and Works Accountants of India"***. This step is aimed towards synergising with the global management accounting bodies, sharing the best practices which will be useful to large number of transnational Indian companies operating from India and abroad to remain competitive. With the current emphasis on management of resources, the specialized knowledge of evaluating operating efficiency and strategic management the professionals are known as ***"Cost and Management Accountants (CMAs)"***. The Institute is the largest Cost & Management Accounting body in the world, having approximately 5,00,000 students and 1,00,000 members all over the globe. The Institution headquartered at Kolkata operates through four regional councils at Kolkata, Delhi, Mumbai and Chennai and 116 Chapters situated at important cities in the country as well as 11 Overseas Centres. It is under the administrative control of Ministry of Corporate Affairs, Government of India.

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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Chairman's Message

"We are what our thoughts have made us; so take care about what you think. Words are secondary. Thoughts live; they travel far."
– Swami Vivekananda

As we bid adieu to the financial year 2024-25, it is both a moment of reflection and an opportunity to chart our course for the journey ahead. This past year has been one of remarkable endeavors, notable achievements, and unwavering dedication in our quest to advance the Banking, Financial Services, and Insurance (BFSI) domain.

Among the many milestones we have traversed, one of the most illustrious was the National Seminar on Banking and Insurance, held on the 16th and 17th of January, 2025, in the vibrant city of Mumbai. Under the auspices of the BFSI Board, ICMAI, the seminar delved into the theme of "Enhancing Efficiency in Banking and Insurance by Leveraging Risk and Cost Management." The event was graced by esteemed dignitaries, including Ms. Sujata Saunik, IAS, Chief Secretary of the Government of Maharashtra, as the Chief Guest, alongside an assemblage of eminent figures in the banking and insurance sector. Seven insightful technical sessions illuminated the way forward, fostering dialogue and innovation.

For those who seek to revisit the wisdom imparted at this grand congregation, we have encapsulated the key takeaways in this 20th edition of the BFSI Chronicle. Additionally, the event recordings are accessible on the CMA YouTube channel for further enrichment.

This year also marked the triumphant launch of the Advanced Certificate Course on Fintech, a pioneering initiative by the BFSI Board, ICMAI. We take immense pride in announcing a 100% pass rate, a testament to the dedication of our candidates and the exceptional guidance provided by distinguished bankers entrenched in the Fintech ecosystem. A special note of appreciation is due to Shri NDSV Nageswara Rao, General Manager, State Bank of India, for his invaluable support in faculty facilitation and in shaping a robust publication on Fintech, an indispensable resource for aspiring professionals in this dynamic field.

In our continued engagement with regulatory authorities, we held fruitful discussions with the Hon'ble Governor of the Reserve Bank of India and senior officials from both Public and Private Sector Banks. These dialogues have strengthened our resolve, and we remain optimistic that our persistent efforts toward the inclusion of Cost and Management Accountants (CMAs) as Concurrent Auditors will soon bear fruit.

Furthermore, our commitment to continuous skill development was reinforced through the revision of course materials for three flagship certificate programs – Certificate Course on Concurrent Audit of Banks, Certificate

Course on Credit Management in Banks, and Certificate Course on Treasury and International Banking. Since their inception in 2020, these courses have evolved, with updated study materials aligned to contemporary industry needs. Additionally, we successfully conducted all levels of the Investment Management Course in collaboration with the NSE Academy.

Our calendar was replete with a series of webinars, thoughtfully curated to address pertinent issues in the BFSI sector. These knowledge-sharing platforms have been instrumental in fostering continuous professional development, and we aspire to sustain this momentum in the years to come.

A highlight of our engagements was our presence at the prestigious Business Standard BFSI Summit 2024, where we set up an exclusive stall, creating a melting pot of ideas and collaborations with industry stalwarts in Mumbai last November.

On the advocacy front, BFSI relentlessly pursued the rectification of anomalies that excluded CMAs from various professional engagements. We are heartened to note that positive steps have been initiated by banks and other regulatory bodies to amend such expressions of interest, reinforcing the rightful place of CMAs in the financial landscape.

The BFSI Board has also been at the forefront of strategic partnerships, pioneering dialogues with the International Financial Services Centres Authority (IFSCA). The Memorandum of Understanding (MoU) we established has laid a foundation for collaborative growth, enabling the Institute to organize a spectrum of events at GIFT City and even beyond, extending to London.

Yet, as the saying goes, "The glass is always half empty." While we take immense pride in our accomplishments, there remain unfulfilled aspirations and unfinished endeavors. With renewed vigor, we stride into the new financial year, determined to complete our pending initiatives and launch an array of transformative activities. We firmly believe that with unwavering dedication and collective effort, no goal remains beyond reach.

We wholeheartedly welcome your suggestions at bfsi@icmai.in, as your insights are invaluable in shaping the future of the CMA profession. Rest assured, we remain steadfast in our commitment to leaving no stone unturned in our pursuit of excellence.

With Warm Regards,

CMA Chittaranjan Chattopadhyay

Chairman

Banking, Financial Services and Insurance Board

The Institute of Cost Accountants of India

From the Desk of the Department

It is March and as we slowly closing the financial year and comparing the performance of the year gone by the nation is now at a cross current faced by the new Government of United States of America. We are in the regime of reciprocal tariff and it will have a deleterious effect on our nation's GDP. It is estimated that as high as 0.6 percent of the country's GDP will be lost in the tariff war. We are sure that our trade our commerce especially the sectors such as automobiles, jewellery, pharmaceuticals, consumer goods etc. will be severely impacted. Our exports to USA is estimated to $ 77 billion will be affected.

The new tax regime w.e.f. of exemption of income tax of income upto Rs. 12 lakh will give a fillip to the consumption of the country as the citizens will have more to spend. The old tax regime will be slowly fade away and it will have a positive impact in the industry especially catering to the consumption story. However, the financial products like Life Insurance Policies, Small Savings Scheme, NPS products will be impacted as citizens will not procure them for tax savings purposes.

The GDP of the country upto February 2025 has seen a growth of 6.2 percent and it is believed it will grow by 6.5 percent for the financial year 2024-25. It is believed that overall investment and demand is positive and the future expectations index (FEI) remains optimistic and buoyant.

With the ceasefire of the war of Ukraine and Russia and with tepid tensions in the middle east and the geo political situation is felt to be better than previous calendar year and we hope such situation prevails for thewell-being of the world peace.

We have seen that overall trade volume of the world will be impacted with tariff tensions and it will have ripple effect in the GDP of all the countries.

The Reserve Bank of India in order to invigorate and provide succour to the economy notified a reduction of benchmark Repo rate by 0.25 percent to 6.25 percent. This is the first rate cut after 5 years and it is planned to cut further in the coming quarters. It is done with the objective of enhancing liquidity and enabling the growth momentum.

Book Review

D. Indu Sekhar
Former General Manager
State Bank of India

Title of the Book: ***"Advanced Certificate Course in FinTech"***

Published by: BFSI Board of The Institute of Cost Accountants of India, 12, Sudder Street, Kolkata-700 016.

"Advanced Certificate Course in FinTech" covers the following ***EIGHT*** Chapters (All aspects are Interconnected with "Advancements in Contemporary Technological Innovations" in the World):

1. ***Introduction to FinTech.***
2. ***Technology Innovation & FinTech Evolution.***
3. ***Blockchain.***
4. ***FinTech and Banking.***
5. ***FinTech and Asset Management.***
6. ***FinTech and Insurance.***
7. ***FinTech and Payments.***
8. ***FinTech and Cryptocurrencies.***

The Term "Fintech" represents a Synthesis of the Words "Financial" and "Technology." It Pronounces the ***"Application of Technology"*** in the provision of "Financial Services and Products to Consumers". This may include various Fields such as **B**anking, **I**nsurance, and **I**nvestment, essentially any Sector that pertains to ***Finance***.

The various Technologies employed within ***"FinTech Models"*** in the Financial Sector Globally covered in this Book are:

Blockchain	Digital **B**anking	Big **D**ata	Artificial **I**ntelligence	Cloud **C**omputing
Cyber **S**ecurity	Crypto **C**urrency	Data **A**nalytics	**I**nternet of **T**hings (IOT)	**O**pen **B**anking
Regulatory **T**echnology	**R**obotics	Embedded **F**inance	**A**utomation	**B**iometrics
Chatbots	**V**irtual **P**ayments	Artificial **I**ntelligence in **F**inance	**K**larna / **e**-commerce	**P**redictive **M**odelling
Quantum **C**omputing	Artificial Intelligence and Machine Learning	**B**lockchain Disrupt **F**inancial Protocols	Artificial **I**ntelligence **A**utomate and **S**ecure	**Etc. Etc.**

FinTech, or Financial Technology, is transforming India's Financial Services Sector by making services more accessible, efficient, and Secure. Fintech is growing rapidly in India and is one of the Fastest Growing in the World.

Fintech Innovations in India:

- Digital Banking: Online and Mobile Banking Solutions are more Convenient and user-friendly than Traditional Banking.

- Digital Lending: FinTechs. are bridging the gap between Consumers with Low Credit Scores and New-to-credit Customers.

- Secure Payment Gateways: FinTechs are offering secure payment gateways and mobile wallets.

- Lending: FinTechs are offering Paperless Lending Solutions.

- Blockchain and Cryptocurrency: FinTechs are offering New Opportunities for Decentralized and Transparent Financial Ecosystems.

Following the read-through of this FinTech Book, the resultant implications for the readers are:

- Delve into Fintech's impact on Markets, Global Ecosystem, and Business Models.

- Uncover How Tech Innovation is Propelling Fintech's Evolution.

- Grasp Blockchain's Fundamentals, from Origins to Web 3.0 Revolution.

- Explore Fintech's Disruption of Banking, from New Lending to Open Banking.

- Embrace Digital Asset Management, from Robo-advisors to Goal-based Investing.

- Explore Fintech's Insurance Revolution, from Usage-based to Smart Contracts.

- Master Fintech Payment Trends, from Global Ecosystems to Programmable Payments.

- Gain a Deep Fintech and Crypto understanding, from ICOs to NFTs and Trading Strategies.

This comprehensive, hands-on book is the go-to source for everything you need to confidently navigate the ever-changing scene of this booming industry. This FinTech Publication will shed light on this rapidly changing landscape making it an invaluable source of information for anybody working in or interested in this space particularly Financial Sector (including Banking / NBFCs).

For further information on availability of Book etc. Please Contact:

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- CMA (Dr.) Aditi Dasgupta, Joint Director at bfsi@icmai.in.

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A Reflective Overview of Banking & Insurance - Contemporary Developments and Way Forward

(Excerpts from Dr. Paritosh Basu's keynote speech delivered on January 17, 2025, at the National Seminar on Banking and Insurance organised by the Banking, Financial Services, and Insurance Board of the ICMAI)

CMA (Dr.) Paritosh Basu
Senior Director (Services)
Stragility Consulting Pvt. Ltd.

The BFSI business ecosystem in India is slowly progressing towards the direction technology titan Mr. Bill Gates envisaged in his often-quoted statementin 1994: ***"Banking is necessary, bank is not."*** This dictum is equally applicable to insurance and other financial services rendering businesses. The COVID-19 Pandemic has validated that statement and reinforced that trust, services, and relationships are necessary. Physical meetings and branches are not.

On the other hand, Mr. Shaktiknta Das, the erstwhile Governor of RBI, said in a Summit on July 19, 2024, that ***"Embracing technology and innovation while remaining focused on governance and risk management can ensure sustained capacity and resilience of the financial sector ..."*** But the next question that has started pondering researchers is whether branchless services are the end of the journey for BFSI entities with digital transformation (DT). Sustainability will also call for continued efforts to maximise revenue generation and minimise value destruction with applications of technologies. Otherwise, the entire effort will remain restricted to digitalisation, and the DT of businesses will not be achieved.Again, DT is a journey and not a destination.

The present authorand his two co-researchersconducted a study on the composition of revenue earnings of 70 selected banks across five continentsduring 2008-2013. In a published paper, they concluded that the selected Indian banksearned 87%from Interest and 13% from fee-based services, compared to 53% and 47%, 69% and 33%, of the selected banks of the USA and EU,respectively. The global average was 77% and 23%. The quoted composition of Indian Banks' earnings might not have changed significantly, tilting towards fee-based earnings.

Therefore, one can conclude that the Indian banking system continues to deliver predominantly the same three-hundred-year-old village-bankers' lending servicesthrough digitalised banking systems. Hence, overdependence on interest earnings has not reduced. On the other hand, RBI has not yet permitted commercial banks to engage in commodity trading, which the banks in the USA and Europe can do to reduce their dependency on interest earnings. It is also a matter of research to conclude whether potential scopesfor generating additional earnings through new business models with innovative applications of digital technologies have been fully explored to de-risk the topline earnings.

But Neo-insurance operators, emerging from startups to unicorn status like Policybazar, Digit, Acko, etc., have introduced several innovations with InsureTech to generate revenues while optimising policy and claim management expenses. They have also integrated their smartphone Apps with other business operators like Ola and Uber to provide embedded travel insurance services. NeoInserersalso innovatively use robotic process automation (RPA)to manage proposals from insurance policy issuance to claim management seamlessly. The application of advanced cognitive tools for data analytics has helped them achieve customer delight simultaneously with the frugal management of expenses.

It is unclearwhy the Neobanks of India are not permitted to operate with full-stack banking licenses despite providing excellent services to traditional bankers for customer acquisition and payments. Those neobanks are also providing additional Procure2Pay and Order2Cash management services to MSMEs through digital platforms to diversify business and revenue models.The

emergence of such Neo-banks has substantially curtailed the payment services of traditional banks.

Two significant risks from Indian banks' digitalisation exercises are cybercriminals' invasions of their digital transaction and data storage systems and mule bank accounts. Cybersecurity, IT-related risks, digital frauds, and mule bank accounts are also significant concerns that must be addressed to reduce the number of instances before further steps are taken to generate new business and revenue models with innovative applications of digital technologies.

Meanwhile, the Indian corporate bond market and private credit, i.e., the P2P lending market, are gradually proliferating with adoption and digital technology-based transactional platformssecured by guardrails powered by AI for cybersecurity. The growth of these two markets under the regulations and watchful eyes of RBI may soon cause shrinkage in the lending business of traditional banks.

The mismatch will occur if P2P lending and corporate bond management are done using blockchain, but RBI does not fully operationalise retail and wholesale CBDC using blockchain platforms. Error- and risk-free interoperability of these platforms is also to be established for seamless operation, shedding the need for the ultimate financial settlements to be done beyond the blockchain platforms using fiat currencies with the intervention of traditional commercial banks.

While the insurance sector is slowly and steadily moving ahead with digital transformation, the time is here and now for traditional Indian banks and RBI to once more go back to the drawing board and work for de-risking the topline of banks by diversification of business and revenue models with fee-based services delivered riding on digital technologies. These will encourage and bring NBFCs along the road to becoming a significant partner in the journey of digital transformation in the Indian BFSI sector.

NOTE: The views expressed in this paper are exclusively those of the author.

Future Financial Ecosystem: 'Finternet'

Abstract:

The Finternet phenomenon integrates Technological Advancements with Financial Systems, thereby facilitating users in the Management and Exchange of a Variety of Assets in a Secure manner.

The paramount objective of Finternet is to enhance Individual Autonomy by providing users with Comprehensive Control over their Assets within a meticulously regulated and secure framework. Through the utilization of Tokenisation, Finternet empowers users to convert an extensive array of Assets, encompassing Real Estate, Bonds, Non-Fungible Tokens (NFTs), and Artworks, into Digital Formats. Subsequently, these Digitised Assets can be Traded or Administered via a Consolidated Platform, thereby offering unparalleled Accessibility and Adaptability.

Mr. Nandan Nilekani, Co-founder of Infosys, recently Articulated the Transformative implications of Finternet during his presentation at the Global Fintech Fest (GFF) held in Mumbai. He elucidated how Finternet is poised to Fundamentally Alter Financial Services on a Global Scale, particularly in Domains such as Payments, Lending, and International Transactions.

Mr. Nilekani emphasized that Finternet would enable Individuals to engage comprehensively in the Economic Environment by exercising control over a Diverse Spectrum of Assets. This Spectrum includes user-governed and regulated assets, as well as registered land and tokenised tangible assets. He further stressed that the forthcoming major innovation within India's Fintech Ecosystem would center around Asset Tokenisation, with mainstream Banking Institutions facilitating Smart Contracts under Governmental Regulation.

Shri Nagarjun K
Deputy Manager
State Bank of India, Regional Office

Finternet constitutes a multitude of interconnected Financial Ecosystems, analogous to the Internet. It aims to diminish barriers among diverse Financial Services and Systems, significantly alleviating the intricate Clearing and Messaging processes, alongside other impediments that currently afflict the Financial System. The Architecture of the Finternet will be predicated on Consolidated Ledgers, thereby integrating various Financial Markets, including Tokenized Assets, Equities, Bonds, and Real Estate, onto a singular programmable platform. This infrastructure possesses the potential to empower Individuals and Enterprises to transfer any desired Financial Asset, in any Quantity, at any moment, utilizing any device, to any recipient, globally. Financial Transactions are projected to be Cost-effective, Secure, and Virtually Instantaneous.

Necessity of Finternet:

Financial Asset Transactions, such as those involving Real Estate and Bonds, often require several days to settle. The lack of interoperability among isolated proprietary databases frequently hinders the velocity of transactions, particularly in the context of Cross-border Payments. Legitimate Transactions are adversely affected by the propagation of compliance measures aimed at preventing Illicit Activities, including those associated with Anti-money Laundering and Terrorist Financing.

The duration for Government Transfers to Banks frequently exceeds expectations for Individuals, compelling them to resort to Short-term Loans, often incurring elevated interest rates. Additional Costs associated with external verification systems, auditing mechanisms, and back-office operations further exacerbate the financial system's expenses. Furthermore, the costs related to Cross-border remittances remain prohibitively high.

The Credit Period itself imposes substantial costs on companies engaged in International Transactions. Occasionally, significant hidden costs are incurred during potentially lucrative transactions and products that ultimately do not materialize.

A Multitude of Deficiencies and their repercussions, alongside specific drivers, are heralding a transformative evolution within the ecosystem of financial systems.

Drivers:

a) The sphere of economic activity is burgeoning at an extraordinary rate, pushed by Digital Innovations. These advancements are engendering multiple layers of innovation, which are proliferating to unlock markets globally.

b) The proactive engagement of regulatory activities in fostering Open Finance, Open Banking, and Tokenization reflects a promising intent to leverage the potential inherent in financial innovations.

c) The explosion of internet accessibility across all demographics, coupled with the universal adoption of smartphones, has paved the way for every Digital Application. Progressions in cryptographic technology, declining computational costs, and advancements in Artificial Intelligence are poised to instigate a revolution within Financial Systems.

Finternet's Concept:

The Three 'U's: According to Mr. Nilekani, the Finternet is characterized by Three Essential Attributes:

- ✓ User-centric.
- ✓ Unified.
- ✓ Universal.

This framework implies that the Finternet prioritizes the user within the Financial Ecosystem, harmonizing various Asset Classes, and ensuring the System's Universal Applicability. By amalgamating the finest elements of the regulated Financial Environment with State-of-the-art Tokenization Technology, the Finternet aspires to establish a financial infrastructure that is both secure and inclusive.

This Digital-first paradigm is anticipated to markedly accelerate the Velocity, Security, and Cost-efficiency of Financial Transactions, thereby facilitating a transformative enhancement relative to the existing Financial Framework. The focus on interoperability guarantees that diverse Financial Ecosystems can engage and communicate cohesively, while the principle of modularity enables the system to progress and adapt over time, assimilating novel technologies and services without compromising the integrity of the prevailing infrastructures.

Benefits of Finternet:

The advantages associated with the Finternet are extensive, positioning it as a transformative entity within the Global Financial Framework. Several fundamental benefits include:

- ✓ ***Empowerment of Users:*** Finternet grants Individuals' direct authority over their Assets, thereby diminishing dependence on Conventional Financial Intermediaries.
- ✓ ***Universal Interoperability:*** By Integrating diverse Asset Classes onto a Singular Platform, Finternet facilitates seamless interaction and Management of Assets.
- ✓ ***Enhanced Security:*** The Implementation of Sophisticated Cryptography and Smart Contracts Guarantees that all transactions are Secure, Transparent, and Immutable.
- ✓ ***Increased Accessibility:*** Finternet democratizes access to an array of Asset Types, enabling a broader Demographic to engage in the Global Economy.
- ✓ ***Tokenisation and Smart Contracts (The Fundamental Components of Finternet):*** The principle of Tokenisation is integral to the Finternet. It entails the conversion of Tangible Assets into Digital Tokens that can be Traded or Managed on a Blockchain. This Methodology not only enhances the efficiency of Asset Management but also shows novel pathways for Investment and Wealth Generation. Conversely, Smart Contracts are self-executing agreements, with the stipulations of the contract encoded directly into software.

These Contracts ensure that Transactions are Secure, Transparent, and Automatically Enforced, thereby mitigating the necessity for Intermediaries.

✓ ***Unifying Financial Services with Advanced Technology:*** Mr. Nilekani has Articulated a Visionary framework for the Finternet that aspires to Unify Financial Services through the application of Advanced Cryptography and Tokenisation. This framework is formulated to encompass all Asset Types, including user-controlled assets, user-generated content, NFTs, and regulated financial products. The objective is to establish a Universal Infrastructure that not only safeguards users from the adverse aspects of Financial Transactions but also optimizes their engagement in the economy.

The Road Ahead:

The Finternet embodies an Ambitious Vision for the Future of Global Finance, possessing the capacity to fundamentally alter the manner in which Financial Services are accessed and employed. By establishing a Unified, User-centric Financial Ecosystem, the Finternet endeavours to enhance Financial Inclusion, Lower Costs, and stimulate Innovation within Financial Services.

Nonetheless, actualizing this ambition will necessitate a Unified endeavour from both the Public and Private Sectors, accompanied by meticulous deliberation of the associated Challenges and Risks.

If effectively executed, the Finternet has the potential to emerge as a fundamental pillar of the Digital Economy, providing a Financial System that is more efficient, Inclusive, and Innovative for Future Generations. As we find ourselves on the threshold of this Significant Transformation, it is evident that the moment for the Finternet is Opportune.

The Intersection of Technological Innovations, Regulatory Endorsement, and escalating economic ambitions presents a distinct opportunity to establish a Financial System that genuinely caters to individuals across all geographies. This Aspirational Vision Possesses the capacity to fundamentally alter the Financial Landscape for Future Generations.

Mr. Nandan Nilekani, Co-founder of Infosys, has characterized the ‘Finternet’ as a remedy for laborious Banking Procedures such as Securing Loans, acquiring Real Estate, Transferring Assets, and Bonds, among Other Tasks.

"The Finternet represents a Novel Paradigm in Global Finance, characterized by the Three 'U's' – it is User-centric, Unified, and Universal – emphasizing the necessity of placing the user at the core while ensuring universality across diverse Asset Classes. The Finternet amalgamates the strengths of the regulated financial ecosystem with the advantages afforded by Tokenization Technology. It employs the fundamental construct of tokens to facilitate universal interoperability and composability," Mr. Nilekani elucidated.

Such financial operations may require extensive Timeframes to accomplish, depending on labour-intensive clearing processes and substantial documentation, rendering the existing financial infrastructure inadequate to meet user demands.

- ***Tokenization of Everything:*** Tokenization refers to the methodology of converting rights associated with an Asset into a Digital Token utilizing Blockchain Technology or Analogous Systems. "Every asset, ranging from your savings account to your art collection, can be tokenized. This methodology streamlines ownership, transfer, and trading through a cohesive global ledger," Mr. Nilekani Articulated.

  For example, consider the ownership of a Real Estate Asset, such as an Apartment. Currently, the process of Selling this Apartment, or a fraction thereof, necessitates a difficult and intricate procedure, including identifying potential buyers, managing paperwork, and complying with regional regulations. Through tokenized fractional ownership, the apartment could be segmented into, for instance, 1000 tokens, each signifying a 0.1 percent stake in the property. These tokens could subsequently be marketed on a digital platform, facilitating fractional ownership. If an individual aspires to invest in real estate but cannot afford to purchase an entire property, they can merely acquire several tokens. This process is seamless and devoid of fractional complications.

- ***User-Centric Financial Systems:*** The Finternet emphasizes a user-centric approach; this financial service positions users at its core, granting them comprehensive control over their financial assets, whether they pertain to deposits, real estate, or non-fungible tokens.

  "It is user-centric, placing the user at the nucleus of the challenges we aim to address, as users desire increased autonomy over their financial endeavours. It must be unified, signifying that it should encompass all asset classes. This could include shares, bonds, deposits, artworks, or even horses; the specific asset class is immaterial," Mr. Nilekani asserted.

- ***Global Interoperability:*** Nilekani advocates for an extensive architectural framework for the internet that facilitates the buying and selling of tokens across various ledgers, thereby enabling mobile transactions. Consider a scenario wherein one possesses digital tokens recorded on a blockchain in India and intends to utilize them for acquiring goods from a firm operating on a disparate blockchain in Germany. Global Interoperability would facilitate communication and transaction processing between these two distinct blockchains without necessitating token conversion or the involvement of multiple intermediaries.

  "It is imperative that we harness the capabilities of Cryptography and the Principles of Tokenization in all relevant domains. In other words, can we conceptualize a methodology that fully leverages the optimal advantages offered by Tokenization Technology, and that is precisely the function of the Big Internet. This system employs fundamental constructs of tokens and subsequently enables universal interoperability," elucidated Mr. Nilekani.

Right Moment for the Emergence of the Finternet:

The Financial Services Sector is on the brink of a significant transformation, shaped by a multitude of converging trends. These developments are poised to redefine the manner in which over 8 billion Individuals and 300 million Enterprises engage with and navigate Financial Ecosystems. Such trends present a duality of opportunities and challenges, necessitating sophisticated, forward-looking policy and technological frameworks to fully exploit their potential. Historically, the convergence of Foundational Technologies and Trends, exemplified by the industrial revolution's amalgamation of mechanisation, steam power, and mass production, or the Digital Era's Integration of the Internet, GPS, and Smartphones, has engendered Novel Realms of Innovation. This phenomenon has resulted in profound shifts within human society and economic structures. The brink of a comparable opportunity within the Financial Services domain, driven by:

Escalating Economic Aspirations and Involvement of Individuals and Enterprises: The advent of the digital age has magnified the economic ambitions and capabilities of individuals and entities. Moreover, it has intensified expectations for financial services that are more Accessible, Tailored, Affordable, and Efficient. The increase in the formalisation of informal activities, entrepreneurial initiatives, and market engagement illustrates the diverse array of financial needs and applications. This burgeoning landscape of economic activity demands a financial system sufficiently robust to accommodate the dynamic and varied needs of an interconnected, digitally empowered public.

Evident Intention from Regulatory Bodies: There exists a discernible regulatory intent to harness the potential of financial innovations in a secure and controlled manner. This is manifested in initiatives such as Open Finance, Open Banking, the Tokenisation of Central Bank Currency, Digital Asset Regulation, and the introduction of Rapid Payment Systems, among others across various jurisdictions. Although many of these initiatives commence with an expansive vision, they frequently become compartmentalised during the implementation phase. Consequently, there is a pressing need for an architecture that endorses a Cohesive Approach. Such an Architecture can ensure that the Initial Expansive vision is preserved and effectively realised.

Universal Accessibility: The widespread adoption of smartphones and the enhancement of internet accessibility are crucial in facilitating equitable access to financial services, empowering digital applications, and enabling user-centric experiences for a broader demographic. While smartphones and internet connectivity will drive the uptake of digital-first solutions, applications within the Finternet will also be accessible through diverse means, including feature phones and assisted modes, thereby ensuring that no individual is excluded.

Progress in Cryptographic Technology: Recent advancements in cryptographic techniques and technologies have markedly improved the capabilities of financial systems, providing attributes such as Programmability, Immutability, Composability, Interoperability, and Verifiability. When effectively leveraged, these Technological Advancements facilitate more Secure, Efficient, and Seamless Interactions across various Financial Platforms and Systems.

Advancements in Computational Technologies and Artificial Intelligence (AI): The implementation of AI is poised to fundamentally transform the financial services sector, thereby augmenting processes related to identity verification, fraud management, underwriting, and advisory services. Progress in cloud computing and associated computational technologies has facilitated the creation of advanced AI Tools. Such innovations, encompassing voice-activated interfaces and multilingual capabilities, are dismantling conventional barriers, thereby rendering financial services more accessible to a broader demographic, including individuals with disabilities and those who are non-native language speakers, thus promoting inclusivity within the financial ecosystem. The advent of large language models in conjunction with other generative AI methodologies represents a noteworthy technological progression, with cloud infrastructure being instrumental in the processing and analysis of extensive data sets. This advancement in AI has the potential to revolutionize financial systems, particularly in the domain of fraud detection, where AI algorithms can promptly recognize and react to anomalous activities, thereby enhancing security measures. Furthermore, generative AI can optimize numerous back-office operations, resulting in cost reductions and decreased processing durations in tasks such as document scanning, transcription, data entry, customer request vetting, and text summarization. Additionally, the capacity of AI to identify novel data patterns enables financial institutions to gain deeper insights into customer preferences and creditworthiness. It also streamlines compliance mechanisms, including know-your-customer regulations, thereby reducing expenses and enhancing efficiency and accuracy.

To Conclude:

Finternet signifies a profound Transformation in Conceptualization of Finance and the Digital Landscape. By amalgamating these two realms, Finternet possesses the potential to democratize access to Financial Services, Empower Individuals, and foster a more inclusive Global Economy. As Tokenization and Smart Contract Technologies Advance, Finternet could indeed emerge as a Pivotal Innovation in the Financial Technology Sector, particularly within the context of a Rapidly Expanding Economy such as India.

The path of finance may very well be determined by Finternet, a platform that integrates user-centric principles, universal applicability, and cutting-edge technology to fundamentally transform the management and interaction with Assets.

References:

BIS Working Papers: The Financial System for the Future-Finternet.

Detect Fraudulent Activities Through 'Digital Footprint Analysis'

Abstract:

Fraud represents a considerable threat to the financial stability of Companies, necessitating the implementation of robust detection and prevention methodologies. In the current business environment, the continuous transformation of Financial Markets coupled with advancements in technology has introduced unparalleled challenges, with fraud emerging as a significant hazard to the stability and integrity of organizations globally. As financial transactions grow increasingly involved and the digital domain expands, fraud offenders exhibit a remarkable adaptability in their tactics, reflecting a high degree of sophistication.

Digital Forensics assumes a crucial function in contemporary investigations by tracing the electronic traces left by individuals. Employing Methodologies such as data acquisition, keyword analysis, and link analysis, investigators are capable of extracting significant information and revealing the accuracy of situations. Nonetheless, problems including encryption and the extensive volume of digital data present challenges that necessitate resolution. Notwithstanding, with the continuous advancement of Tools and Technologies, the domain of Digital Forensics remains dynamic, ensuring that no digital trace remains overlooked in the search for justice.

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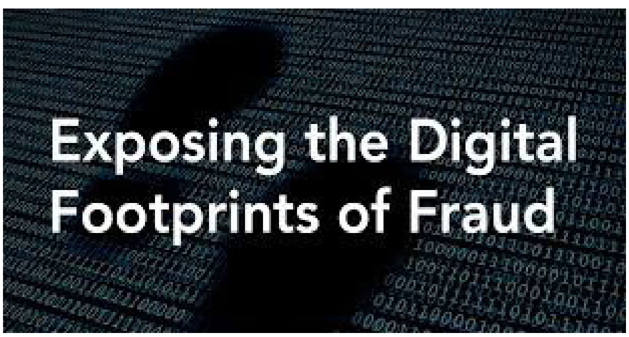
Each action taken online, whether it be a click, swipe, or interaction, generates a Digital Footprint, which constitutes a residual data trail. These footprints encompass a broad spectrum of activities, including visits to websites, engagements on social media platforms, electronic correspondence, file downloads, and beyond. Each action contributes distinctly to an individualized digital signature, thereby creating a complex variety of information.

Digital Footprints:

A Digital Footprint, often referred to as a "Digital Shadow," represents the distinctive trail of data generated by an individual or organization during their engagement with the internet. Almost every online interaction results in the generation of a trace. Certain traces are obvious, such as a publicly accessible post on social media. Other traces may be more nuanced, demonstrated by the cookies utilized by websites to monitor visitor activity. The cumulative effect of all traces left by an Individual or Entity constitutes their Digital Footprint. While both individual internet users and organizations possess Digital Footprints, they exhibit significant differences.

An Individual's Footprint is comprised of the personal information they share, both directly and indirectly. It encompasses online account interactions, browsing history, and the information that data brokers accumulate in the background. Conversely, an Organization's footprint is inherently more intricate. It encompasses the sum of the Company's Online presence, which includes all Public and Private internet-facing assets, content, and activities. Official websites, internet-connected devices, and confidential databases all contribute to a Company's Digital Footprint.



Actions undertaken by Employees, such as sending Emails from Corporate Accounts, further augment an Organization's Digital Footprint.

Categories of Digital Footprints:

Digital Footprints evident in various classifications, ranging from persistent to temporary. Persistent footprints comprise data retained on Servers or within archival systems, such as browsing history or social media contributions. Temporary Footprints comprise brief data, including cookies or temporary internet files. Both Categories possess considerable Forensic relevance, yielding unique insights into an Individual's Digital Behaviours.

a) Forensic Relevance:

Within the investigative domain, these Footprints function as essential clues. Forensic Analysts diligently trace these pathways, applying their expertise to reconstruct incidents and extract crucial evidence. For example, in contexts involving Digital Forensics, understanding these Footprints is critical for explaining the sequence of occurrences and formulating a detailed Chronological Account.

b) Mobile Device Forensics:

Given the omnipresence of Smartphones, the field of Mobile Device Forensics has assumed significant importance. Such Devices harbour extensive Digital Footprints, encompassing call Logs, Text Messages, GPS Co-ordinates, and Application Usage Data. The process of understanding and extracting information from these devices necessitates specialized expertise from a Digital Forensic Analyst expert in navigating the details of Mobile Systems.

Digital Footprint Analysis:

- ✓ **Social Media Engagement:** Contributions, Interactions, and Endorsements.

- ✓ **Online Transactions:** Records of Purchases and Payment Information.

✓ **Browsing Behaviour:** Websites accessed and Search queries entered.

✓ **Device Specifics**: Internet Protocol Addresses and Device Identifiers.

✓ **Communication Data**: Electronic Correspondence, Messages, and Chat Exchanges.

Digital Footprint Analysis Identifies Fraudulent Activities:

✓ Fraud Detection necessitates the examination of patterns and variances within the data. For instance, a sudden increase in expenditure, different login locations, or discrepancies within a user's profile may signify fraudulent conduct. Sophisticated Tools and Algorithms are employed to discern these irregularities.

a) Is Digital Footprint Analysis Legally Authorized:

✓ Indeed, it is acceptable; however, it must be executed in strict adherence to Data Protection statutes and privacy regulations. It is essential to guarantee that data collection and Analytical Methodologies are respectful of user privacy and conform to established legal frameworks.

b) Reconstructing Incidents and Identifying Evidence:

✓ The proficiency in analysing Digital Footprints is beached in the Capacity to reconstruct incidents. Forensic analysts methodically amalgamate fragmented data points to construct a comprehensive narrative of the sequence of actions. Through this Analytical Process, essential evidence is revealed, whether in the context of legal proceedings, Corporate Investigations, or instances of Data Breaches.

Application of Digital Footprint Analysis for Fraud Detection:

a) **Monitoring Behavioural Anomalies**-Vigilance for a typical Online Behaviour, such as:

- **Abrupt Increases in Expenditure:** If a patron who typically engages in modest purchases suddenly acquires expensive items, such behaviour may warrant scrutiny.

- **Inconsistent Online Engagements:** Sudden Alterations in an Individual's Interactions with Social Media or Websites may indicate fraudulent activity.

b) **Verification of Digital Identities-**Ensure the consistency of Digital Identities. For instance:

- **Discrepancy Between Digital and Physical Information:** If an Individual's online persona does not align with their established details, this inconsistency could signify fraud.

c) **Utilization of Social Media Analytics**-Examine Social Media Behaviour to reveal:

- **Connections and Affiliations: Investigate whether the Individual is linked to known fraudsters or maintains dubious associations.**

- **Content and Conduct**: Assess the Nature of their Posts and the manner in which they engage online.

Other Applications of Digital Footprint Analysis:

- **Employ Predictive Analytics:** Implement Predictive Models to foresee potentially fraudulent activities. These models analyse Historical Data to project future behaviours and identify high-risk individuals prior to the emergence of issues.

- **Integrate with Anti-Money Laundering Systems:** Fuse Digital Footprint Analysis with existing Anti-money Laundering Systems. This integration fosters a Holistic Approach to fraud detection, thereby enhancing the effectiveness of monitoring efforts.

Challenges of Digital Footprint Analysis:

Digital Footprint Analysis Challenges and Considerations. While the Analysis of Digital Footprints possesses significant potential, it is accompanied by various challenges:

- **Data Privacy and Compliance:** It is imperative to adhere to regulatory frameworks such as the General Data Protection Regulation (GDPR) and other pertinent legislation. Ensuring the protection of customer privacy is essential while simultaneously monitoring and preventing fraudulent activities.

- **Data Accuracy:** The integrity of the data collected is of paramount importance. Inaccurate data may result in false positives (Misidentifying inoffensive behaviour as suspicious) or false negatives (overlooking genuine fraudulent activity).

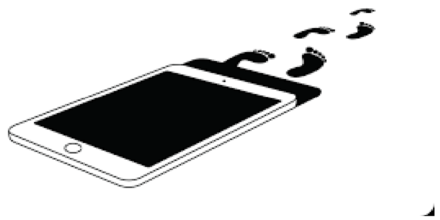
- **Ethical Concerns:** It is vital to remain knowing of ethical implications. Upholding customer privacy and refraining from disturbing practices is crucial. Achieving a balance between effective fraud detection and privacy considerations is fundamental to preserving Trust.

- **Technical Integration:** The Amalgamation of Digital Footprint Analysis Tools with pre-existing systems may present complexities. It is essential to ensure that the Tools employed are compatible with current operational processes and Technological Infrastructure.

Trends and Tools in Digital Footprint Analysis:

The Domain of Digital Footprint Analysis is rapidly evolving, necessitating Vigilance toward Significant Trends. Emerging Technologies, such as Artificial Intelligence (AI) and Blockchain, are revolutionizing Data Analysis Methodologies and Fraud Detection Mechanisms. AI facilitates the Identification of irregular patterns and behaviours, while Blockchain enhances the Security and Precision of Transactions.

Concurrently, Fraudulent Tactics are continuously adapting. To maintain a competitive edge, it is essential to routinely refine analytical techniques and Tools to Address New indicators of fraud. This necessitates the ongoing updating of Systems and Knowledge.



Regularly refreshing Analytical Tools, providing comprehensive Training for Personnel, and Optimizing Strategies will aid in mitigating contemporary Threats and Curtailing Fraud.

Digital Footprint Tracking and Protection:

Digital Footprint tracking enables Organizations to observe and analyse user behaviour, thereby enhancing the understanding of online activities and Security Vulnerabilities. Conducting an Internet Footprint assessment can unveil concealed Data regarding one's Online presence, yielding insights into the Personal Information being circulated.

The composition of a Digital Footprint encompasses both the Data that is deliberately shared and the residual traces left by passive online activities, such as Web Browsing and Geolocation Data. Digital Foot Printing empowers Businesses to Chart and Evaluate the online interactions of their Clientele, delivering invaluable Data for Marketing endeavours and Cybersecurity Initiatives.

An Online Footprint assessment ensures that the Personal and Professional information disseminated across the Internet is congruent with established Privacy and Security Objectives. A Digital Footprint email may encompass Critical Metadata, disclosing information regarding sender Behaviour, Geographical Location, and Device Utilization for further scrutiny. The Analysis of One's Email Digital Footprint can reveal discernible patterns, facilitating enhanced protection against Phishing Threats and Highlighting unintended exposure of sensitive information.

Conclusion:

Digital Footprint Analysis constitutes a Pivotal Instrument for Financial Institutions striving to augment their Anti-money Laundering (AML) and Fraud Prevention Strategies. By understanding and Capitalizing on Digital Footprints, Organizations can more effectively Identify Suspicious activities, Authenticate Identities, and Evaluate Risks. The essential element is the integration of these insights into existing Operational Frameworks, maintaining awareness of Novel Developments, and continuously enhancing Methodologies.

While executing Digital Footprint Analysis, it is imperative to acknowledge that this domain is characterized by its dynamic nature. The necessity for adaptation and continuous Vigilance is paramount in sustaining effective strategies for Fraud Prevention. By Employing appropriate Tools and Methodologies, we can enhance the Institution's defences and provide Robust Protection against Fraudulent activities.

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Are Banks Hungry for Deposits?

Abstract:

Banks are currently meeting considerable challenges in preserving Depositors' Savings within Current Accounts and Savings Accounts (CASAs), which are pivotal for maintaining Balance-Sheet integrity and serve as Low-cost funding Sources. Depositors exhibit a limited incentive to retain their savings in these accounts over prolonged durations, primarily motivated by aspirations for heightened returns amidst an environment marked by escalating Inflation. Consequently, the customers are increasingly diverting their financial assets towards Riskier Investment avenues, anticipating Superior Returns, facilitated by Contemporary FinTech Innovations and an array of Technology-enabled Financial Service Platforms actively participating in Capital Market Transactions.

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Financial Institutions are witnessing a surge in Transaction Volumes, as Customers can now seamlessly Transfer or Withdraw their funds Instantaneously. These Transactions return to Banks as Wholesale Deposits, which display a Greater Degree of Volatility in contrast to Retail Deposits. This Dynamic necessitates that Banks engage in innovation by providing more sophisticated Financial Products, such as Term Deposit Sweeps, which enable the Transfer of Excess Funds from Savings Accounts into Term Deposit Accounts. As a result, Banks are formulating strategies to introduce a broader spectrum of Innovative Solutions aimed at strengthening long-term retail contract liabilities while Diminishing Cash Outflows.

Decline in Deposits:

Bank Deposits exhibited a Growth Rate of less than 11 percent in June 2024, while Loans experienced a Growth Rate of 14 percent. By August 9, 2024, the Annual Growth Rate of Bank Deposits had Risen to 11.7 percent, in contrast to a Loan Growth Rate of 18.4 percent. Several factors contribute to this phenomenon.

Following the Pandemic, the Nation's Capital Markets underwent a substantial surge in Retail activity, facilitated by both Direct Trading and Indirect means such as Mutual Funds. Indian Households have increasingly shifted their focus from Traditional Bank Deposits to Capital Markets, motivated by the allure of enhanced returns and the improved engagement facilitated by advancements in digitization.

The Economic Survey 2023-24 indicates that the Quantity of Demat Accounts with the National Securities Depository Ltd (NSDL) and Central Depository Services Ltd (CDSL) escalated to INR 15.14 Crore in FY24, Compared to 11.45 Crore in the preceding Financial Year. Additionally, the escalating Cost of Living, Rising Tax Burdens, and a precarious employment landscape have adversely affected the Average Indian Household, prompting many Individuals to Deplete their Savings.

Deposit Mobilization:

The Indian Financial Sector is Currently grappling with a formidable set of challenges. In addition to the persistent issues surrounding Non-Performing Assets (NPA) and mounting debt, the Sector is now confronted with a troubling Decline in the Rate of Deposits, compared against a robust acceleration in Credit Growth. This expanding Asset-liability Gap raises significant concerns not only for the Banking Institutions within India but also for alternative investment vehicles such as Mutual Funds and Pension Schemes, which are increasingly diverting funds away from Traditional Banking. At this critical juncture, Banking Institutions must reevaluate their conventional strategies concerning Customer Acquisition and Retention.

a) **Interest Rates:** In this context of elevated interest rates, wherein the 'Repo Rate' has attained its peak and inflation remains at a substantial level, it is entirely rational for customers to demonstrate a reduced propensity to allocate their savings in CASAs (which furnish banks with low-cost funding) as they seek superior rates typically associated with Term Deposits, which have historically functioned as the repository for their long-term savings.

b) **Customers' Investment Preferences:** Since the commencement of the Pandemic, there has been a pronounced evolution in Customer Preferences concerning the allocation of household savings towards alternative financial assets, including Stocks and Mutual Funds, which have consistently yielded superior returns compared to Traditional Term Deposits, which have only managed to exceed inflation by approximately 1% to 2%. All State-owned Banking Institutions, which collectively represent around 60% of Total System Deposits, have instituted Special Deposit Programs to attract and retain deposits while offering Competitive Interest Rates ranging from 7.15% to 7.30% for tenures of less than Two Years. Investors no longer perceive it as advantageous to retain their funds within CASAs, which provide banks with Low-cost Funding and Strengthen their Balance Sheets (with CASAs constituting 40.5% of funds in FY-2024 compared to 43% in FY-2023 and 45% in FY-2022).

c) **Technology Banking Solutions:** The advent of contemporary Mobile Applications and Technology-driven Banking Solutions has markedly simplified the process for Customers to execute instantaneous fund Transfers and withdrawals from their accounts, thereby casting uncertainty on the extent of Customer Retention within the Banking Sector (Source: RBI Governor's Statement, 5 April 2024).Consequently, Financial Institutions are diligently formulating and implementing strategies to unveil a broader array of Innovative Solutions designed to sustain Robust Long-term Retail ContractLiabilities while concurrently mitigating Cash Outflows. In a concerted effort to maintain relevance, these Institutions are striving to effectively Cross-sell Retail Asset and Liability Products to their existing depositor base, thereby amplifying transactional volumes.

Digital Advancements Vs. Customer Retention:

Financial Institutions are committing significant resources to enhance their Information Technology Infrastructure to provide an extensive variety of Digital Offerings and to refine the personalization

of the customer experience through Mobile Applications. This Strategic initiative has demonstrated efficacy in attracting New Clientele through Digital Platforms, Partnerships with Financial Technology Enterprises, and the Cross-promotion of diverse Lending Products and Credit Facilities, thereby establishing New Avenues to fulfil the burgeoning Demand for Credit.

Liquidity Coverage Ratio-Elevates Stable Deposits:

The Reserve Bank of India (RBI) has recently proposed at Strengthening Banks' Liquidity Prerequisites (Currently, a Liquidity Coverage Ratio of 100% is mandated) for Stable Deposits acquired through Mobile and Online Banking Channels, instituting an elevated run-off factor (the unforeseen withdrawal of deposits) of 10%, an increase from the previous 5%, and 15% for less Stable Deposits due to their heightened ease of withdrawal. This regulatory alteration will necessitate that Banks sustain an adequate Portfolio of Government Securities to withstand 30 Days of Stressed Deposit outflows, thereby constraining their Lending Forecasts. The Newly proposed "Liquidity Coverage Ratio" framework will compel Banks to adopt prudent strategies to attract and retain a larger volume of High-quality Stable Deposits.

Strategies to Navigate Challenges:

a) **Opening of New Branches:**Notwithstanding the increasing prevalence of digital accounts, Banking Institutions are reverting to the historically efficacious strategy of multiplying their physical branch networks; this initiative is anticipated to partially mitigate the challenges associated with deposit mobilization by addressing a broader demographic of depositors. While state-owned banks already maintain a greater number of branches, it is predominantly the private sector banks that have accelerated their deposit growth, and the addition of further branches is projected to enhance deposit mobilization endeavours. Although the digital transformation has yielded substantial benefits, Branch Banking remains integral for engaging with Semi-urban and Rural Populations. For instance, HDFC Bank has articulated plans to inaugurate 1,000 New Branches in the Fiscal Year 2025, compared to 1,481 in Fiscal Year 2024. Similarly, Kotak Bank intends to Establish 175-200 Branches, an increase from 150 in Fiscal Year 2024, with other institutions such as RBL Bank and Karur Vysya Bank also expressing intentions to expand their Branch Networks.

b) **Innovative Solutions:**Introduction of Appealing Term Deposit Schemes: Financial Institutions have launched specialized schemes that provide elevated Interest Rates on Shorter-term Deposits to rectify their Asset-liability Mismatches, thereby attracting Deposits with Rates that exceed the Standard Rate by 40-50 Basis Points. This Strategy is predicated on the expectation that, as the Interest Rate

Cycle evolves, they will not face challenges in servicing Higher-Cost Deposits over Prolonged Periods.

The enactment of a Term Deposit sweep-in mechanism facilitates the Automatic reallocation of funds from Savings Accounts to Fixed Deposits whenever account Balances dip below a designated threshold, thereby lessening the reliance on Costly Borrowing Options and mitigating dependence on Wholesale Funding Channels. This System empowers Financial Institutions to synchronize short-term liabilities with long-term assets, thereby fulfilling regulatory requirements by enhancing liquidity while concurrently creating avenues for the Cross-promotion of Ancillary Banking Products and Services to Clientele.

To Conclude:

As the Monetary Policy Cycle experiences a Transition and the Monetary Policy Committee (MPC) initiates reductions to the Policy Repo Rate, Indian Banking Institutions are projected to face significant obstacles in maintaining their Current Profit Margins.

A considerable portion of Loans in India is indexed to the External Benchmark Lending Rate (EBLR), which is susceptible to more Immediate Repricing in comparison to Deposits. This scenario engenders a conundrum, especially as a Sizable Segment of Deposits is locked in at Elevated Interest Rates and will experience Repricing only Incrementally. Consequently, Banks may confront a contraction, as their Interest Income from Loans may dwindle at a more rapid pace than the Interest Costs associated with Deposits.

In addition to the internal strategies and initiatives of Banks aimed at delivering innovative Financial Products and Leveraging their Extensive Branch Infrastructures to attract Stable Retail Deposits from Household Savings, it is becoming increasingly evident that the Capacity to Fund via Organic Deposits is under considerable pressure. Financial Institutions have commenced the procurement of a larger share of Non-retail Deposits to fulfil the surging Demand for Credit. They must sustain High Deposit Rates over an extended period, adhere to the New Liquidity Coverage Ratio (LCR) Regulations concerning Volatile and Digital Deposits, manage their Lending Dynamics, and Navigate Liquidity Challenges without endangering their Profit Margins.

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Business Rule Engine (BRE) in Banking
(A 'Novel Framework' for Understanding by 'Concurrent Auditors' in Banks)

***Abstract**:*

The Risk and Credit decision-making team within a lending Banking Institution contends with a multitude of Credit-related determinations Daily, including queries such as 'Should this Loan Application receive Approval?', 'What Interest Rate should be Applied?', or 'Should a Loan Application be earmarked for Additional Manual Evaluation?' The potential responses to these inquiries can be as varied as the number of personnel within the Banking Sector, which underscores the necessity for Lending Policies to regulate routine decision-making processes. These policies are condensed and articulated through Business Rules. However, what precisely constitutes these Rules, and what form do they take?

Business Rules consist of a Collection of predetermined criteria that facilitate the Derivation of Conclusions to reach Decisions. For instance, 'if CIBIL Score > 600, then Maximum Loan Amount = ₹ 3,00,000', or 'If the Applicant is Classified within a Medium-Risk Category, then the Interest Rate must not surpass 14%'. As illustrated, a Rule establishes conditions that dictate subsequent actions.

[Rule = condition (if) + action (then)]

A succession of such actions constitutes a Lending Procedure or Workflow. However, who or what is executing all these Rule-based Actions? Human Agents? Automated Systems?

In light of the fact that the Digital Age is currently in effect, an Ideal Loan Application Process should require Three Minutes to Complete, One Minute for Approval, and necessitate Zero Human Involvement. Nonetheless, this scenario can only materialize if decision-making systems are subject to Automation. Such Automated Frameworks are Collectively referred to as Business Rules Engines (BRE).

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In the Complex domain of Banking, where Accuracy and Uniformity hold critical importance, the implementation of Rule Engines has emerged as an essential Technological Foundation. Rule Engines, fundamentally, are Software Systems developed to facilitate the Automation of decision-making processes through the Application of a predetermined set of Rules and Logical Conditions. These Rules serve as the fundamental guidelines that empower Banks / Financial Institutions to plotter through the complexities of financial transactions, thereby ensuring adherence to regulations, enhancing Operational Efficiency, and Bolstering Reliability.

From mitigating the Risks of Fraud to optimizing Customer Engagement, Rule Engines have emerged as the unpredicted architects of numerous dimensions of Contemporary Banking, Fostering Precision and Uniformity in a Continuously evolving Financial Environment.

BRE Types:

In the multifaceted sphere of Banking, where an overabundance of operations and decisions are executed every minute, distinct categories of Rule Engines are employed for Specific Applications. These Rule Engines, tailored to address various facets of Banking, play a significant role in enhancing the Sector's Operational Efficiency and Regulatory Compliance. The Principal Types of Rule Engines frequently utilized in the Banking Industry include:

a) ***BRE-For Credit Scoring:*** Within the realm of Banking, one of the most widespread applications of Rule Engines pertains to Credit Scoring. These Engines evaluate the Creditworthiness of Individuals and Business Enterprises by scrutinizing a variety of factors, including Credit History, Income, Debt Levels, and others. Rule-based Credit Scoring Engines empower Banks to make judicious lending decisions, whether pertaining to Loan Approvals, Interest Rate settings, or Credit Limit determinations. They ensure Uniformity and Impartiality in the assessment of Credit Applications.

b) ***BRE-For Anti-Money Laundering (AML):*** AML Rule Engines serve as indispensable instruments for Banks in their efforts to Combat Financial Crimes, encompassing Money Laundering and Terrorist Financing. These Engines utilize predefined rules and algorithms to scrutinize transactions and customer information. Upon the detection of suspicious activities or patterns, alerts are generated for further examination. AML Rule Engines are essential for maintaining Regulatory Compliance and preserving the integrity of the financial system.

c) ***BRE-For Fraud Detection:*** Financial Institutions are perpetually confronted with Threats from Fraudsters intent on exploiting weaknesses. Fraud Detection Rule Engines assume a crucial role in the Identification of Potentially fraudulent activities. They monitor transactions in Real-time, applying Rules to discern atypical patterns or behaviours. When a Transaction Triggers a predefined Rule, it may be flagged for scrutiny or rejected, thereby preventing unauthorized access to funds and safeguarding customers.

d) ***BRE-For Customer Interaction:*** Furthermore, Rule Engines significantly enhance customer interactions within the Banking Sector. These Engines employ predefined Rules to Tailor Customer Experiences. For instance, when a customer accesses their Online Banking Portal, the Rule Engine is capable of presenting customized content based on their prior interactions and preferences. This personalization cultivates stronger customer relationships and encourages cross-selling opportunities.

e) ***BRE-For Compliances:*** Regulatory Adherence represents a paramount concern for Financial Institutions. Compliance Rule Engines facilitate the alignment of banking operations with Industry Regulations and Governmental Directives. These

Systems engage in continuous surveillance of Transactions, Policies, and Procedures, identifying any discrepancies from established compliance norms. This proactive approach aids Banks in evading Penalties, Legal Complications, and Detriment to their Reputations.

f) ***BRE-For Accounting:*** Accounting Rules Engines are integral to the assurance of precise financial reporting and adherence to Accounting Principles. They automate various Accounting Operations, oversee Journal Entries, and assist in the Compilation of Financial Statements. These Engines are instrumental in enabling Banks to uphold Financial Transparency and Integrity.

g) ***BRE-For Loan Origination:*** In instances where customers seek loans, be it for Mortgages, Personal Loans, or Business Financing Loan Origination Rule Engines optimize the application and approval workflow. They assess applicant information against Pre-established Lending Benchmarks, thereby Automating the Decision-making Continuum. Loan Origination Rule Engines significantly augment the efficiency and precision of Loan Approvals while Ensuring Uniformity in Lending Protocols.

h) ***BRE-For Risk Management:*** The management of Risk is a foundational element within the Banking Sector. Risk Management Rule Engines evaluate diverse Categories of Risk, including Credit, Market, and Operational Risk. By employing predefined Risk Models and Guidelines, these Engines assist Banks in making Judicious decisions regarding Investments, Asset Distribution, and Lending Strategies.

Each of these Business Rule Engines (BREs) fulfils a specific function within the banking sector, catering to particular requirements and challenges. The capacity to automate decision-making processes grounded in predefined rules not only enhances operational efficacy but also guarantees that banks remain compliant, secure, and oriented towards customer satisfaction. Collectively, these Rule

Engines strengthen the resilience of the Banking Ecosystem, promoting prudent Financial Practices and reliable Customer Service.

Use of BRE in Banking Sector:

To gain a deeper insight into the pragmatic utilization of Business Rule Engines within the Banking Sector, a concrete instance of how a Rule Engine can be employed to optimize operations and enrich Customer Experiences.

Loan Approval and Underwriting Process-An Example:

In the ever-evolving domain of the Banking Sector, where Customers frequently seek financial support for diverse objectives, a critical consideration is the effective processing of Loan Applications. Whether pertaining to Personal Loans, Mortgages, or Business Financing, Banks Encounter the challenge of Appraising numerous applications while adhering

to stringent Standards for Risk Evaluation and Regulatory Compliance.

To address these exigencies, Banks implement Advanced Technological Solutions that streamline the Loan Approval and Underwriting Protocols. A Central Element of this Modernization is the Integration of Rule Engines. These Rule Engines constitute Software Systems that utilize Predefined Rules and Decision-making Logic to Automate the Assessment of Loan Applications.

The Scenario focuses on the elaborate procedure of Loan Approval and Underwriting within a Banking Establishment. This Complex Process is essential to a Bank's Operations, ensuring responsible lending practices while mitigating financial risks. Below is an overview of the steps involved in this vital process, enlightening how Rule Engines strengthen Efficiency and Enhance Decision-making.

Step 1: Submission of Customer Application- The initiation of the Loan Approval and underwriting procedure occurs when an Individual / Business Enterprises articulates a requirement for Financial Support, which may include Personal Loans, Mortgages, or Commercial Loans. Applicants have the facility to submit their Loan requests via the Banks / Financial Institution's Digital Interfaces, encompassing its official website or mobile application.

Step 2: Collection of Data-Following the submission of the Loan Application, the Financial Institution Embarks upon an Extensive Data Collection Protocol. This phase entails the accumulation of a Diverse Array of information from the Applicant. The Gathered Data may encompass:

- ✓ **Personal Information:** Name, Residential Address, Contact Details, Aadhaar Verification, etc.
- ✓ **Financial Background:** Credit History, Prior Loans, and Repayment Patterns.
- ✓ **Employment Documentation:** Details pertaining to Current and Past Employment.
- ✓ **Income Verification:** Evidence of Income Sources, including Pay Packages, Tax Returns Submission, or Business Financial Statements etc.
- ✓ **Loan Purpose:** Detailed Information regarding the intended use of the Loan, such as Property Acquisition or Business Expansion.

Step 3: Verification of Data-The information collected is subjected to stringent verification Protocols. Bank Officials Authenticate the legitimacy of the submitted documents, Validate the Identity of the Applicant, and Cross-check the provided information against Pre-existing records.

Step 4: Evaluation of Credit Score-An essential component of the underwriting process involves the assessment of the Applicant's Creditworthiness. This evaluation frequently depends on the applicant's Credit Score, which offers insights into their Historical Credit Conduct and repayment dependability.

Step 5: Analysis of Income and Financial Status-The Applicant's Income and Overall Financial Condition are meticulously analysed to ascertain their ability to Repay the Loan. This analysis encompasses:

- ✓ Examination of income sources and their stability.
- ✓ Evaluation of debt commitments and existing financial obligations.
- ✓ Review of financial assets and reserves.

Step 6: Assessment of Collateral (If applicable)-In the case of Secured Loans, such as Mortgages, the Bank evaluates the Valuation and Condition of the Collateral Presented by the Applicant. This Collateral Functions as Security for the Loan and reduces the Financial Institution's exposure to Risk.

Step 7: Compliance with Regulatory Standards-Banks / Financial Institutions are obligated to maintain rigorous adherence to Financial Regulations and Lending Statutes. This Phase involves navigating a Complex Landscape of Regulations at the Regulatory, Central, State, and Local Tiers. Compliance ensures that the Lending Practices of the Bank conform to Legal Mandates.

Step 8: Evaluation of Risk-A pivotal function of underwriting is the assessment of the risk associated with the loan. This encompasses:

- ✓ Evaluation of the Applicant's Credit Risk based on their Credit Score and History.
- ✓ Analysis of Market Conditions that may impact the Performance of the Loan.
- ✓ Assessment of the Loan's purpose and its Conformity with the Bank's Lending Standards.

Step 9: Decision-Making Process-Upon the Completion of these thorough Evaluations, a Decision must be rendered regarding the Loan Application. Decisions may be Categorized into Several Classifications, including:

- ✓ Approval: The Loan is Sanctioned, and the Applicant Progresses to Subsequent Steps.
- ✓ Rejection: The Application is denied based on Risk Analysis or other Considerations.
- ✓ Further Examination: In certain Instances, Additional Information or Clarification may be necessary Prior to reaching a Decision.

Step 10: Notification of Customer-Timely Communication with the Applicant is of utmost importance. Regardless of the outcome, the Applicant must be informed in a Transparent and Professional manner, Elucidating the result and any requisite Subsequent actions.

Step 11: Documentation and Disbursement-Upon the sanctioning of Loans, the Financial Institution undertakes the generation of requisite Loan Documentation. This Documentation defines the stipulations and provisions of the Loan, about Interest Rates, Repayment Timelines, and particulars pertaining to Collateral. Subsequent to the Applicant's Endorsement of the Agreement, Financial resources are allocated in accordance with the Designated purpose of the Loan.

Step 12: Post-Approval Monitoring-The interaction between the Financial Institution and the borrower extends beyond the initial approval phase. The financial institution persistently oversees the Loan Portfolio, ensuring that Borrowers fulfil their Repayment Responsibilities. Preliminary Indicators of delinquency are managed through established Collections Methodologies.

In this systematic loan approval and underwriting procedure, financial institutions depend on Rule Engines to facilitate Automated Decision-making, Enhance Operational Efficiency, and maintain uniformity in the evaluation of Loan Applications. Rule Engines assume a Pivotal Role in Risk Management and adherence to Regulatory Standards, thereby enabling Financial Institutions to extend loans with assurance while concurrently protecting their Fiscal Interests.

In the realm of Banking, the Application of Rule Engines frequently surpasses the confines of Singular Applications. Numerous Financial Institutions connect the capabilities of Multiple Rule Engines or converge them into a Comprehensive Ecosystem of Software and Services. The Strategic Interlinking of Rule Engines within the Banking Sector promotes an unhampered flow of data, ensures decision consistency, and enhances Operational Efficacy. The Methodology by which Rule Engines are interconnected within the Banking Domain Covers:

- Data Integration and Exchange.
- Workflow Automation.
- Decision Consistency.
- Real-time Processing.
- Regulatory Compliance.

Reporting and Analytics.

- Customer Experience.
- Scalability.
- Risk Management.

In Conclusion, the interconnection of Rule Engines within the Banking Sector promotes Operational Efficiency, ensures Data Consistency, and Boosts Decision-making across Diverse Functions. It Equips Banks / Financial Institutions with the adaptability required to meet evolving Regulatory Demands, enrich Customer Experiences, and Proficiently Manage Risks. The Strategic Amalgamation of Rule Engines constitutes a Critical Asset in Modern Banking Operations, thereby augmenting Competitiveness and Compliance.

A Variety of Rule Engine Types, including both Open-source and Proprietary Solutions, present distinct Features and Advantages. From the perspective of the Indian Banking Landscape, Rule Engines assume a Crucial Role in fulfilling the specific requirements of the Banking Sector, ensuring alignment with Regulatory frameworks and facilitating streamlined operations.

As the Banking Sector undergoes continuous Evolution, the Prominence of Rule Engines will Inevitably Increase, providing support to Banks in their pursuit of Operational Excellence and enhanced Customer Satisfaction.

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How Digital Lending Mechanisms of Banks Operate?

Abstract:

This methodology incorporates digital instruments to assist lenders in expediting the decision-making process regarding loan approvals based on a streamlined application procedure. It facilitates a more rapid and accessible borrowing experience, thereby transforming the lending sector. Furthermore, it seeks to extend financial opportunities to individuals who may encounter difficulties in securing loans from conventional financial establishments.

In essence, digital lending refers to the acquisition of financial resources via online platforms, as opposed to traditional banking institutions. It is characterized by its speed, convenience, and round-the-clock availability. Digital or fintech lending platforms leverage sophisticated technologies such as artificial intelligence and big data analytics to enhance the borrowing and lending experience for all stakeholders. This innovative paradigm has experienced significant growth, fundamentally altering the dynamics of monetary transactions. Consequently, the fintech lending market is anticipated to escalate to over $400 billion by the year 2028. This projected growth rate of 18% is expected to occur at a pace threefold that of traditional banking, which expands at a rate of 6%.

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The Digital Lending Ecosystem in India is currently experiencing a significant metamorphosis. Driven by Advancements in Technology, Amendments in Regulatory frameworks, and evolving consumer inclinations, Digital Lending is fundamentally altering the manner in which Individuals and Enterprises procure credit. Transitioning from Traditional Paper-based Loan Applications to AI-enhanced Credit Evaluations, the lending mechanism is evolving to become more expedient, user-friendly, and progressively inclusive.

For borrowers, the advent of digital lending has markedly streamlined the loan application procedure for both commercial entities and individuals. In lieu of grappling with cumbersome documentation and physical bank visits, applicants are now afforded the convenience of applying for loans online, thereby submitting their financial data electronically from the comfort of their residences. A notable advantage lies in the ability of computer algorithms to rapidly evaluate the probability of repayment by borrowers, thereby hastening the approval timeline. Upon receiving approval, funds are expeditiously disbursed, thereby furnishing borrowers with timely financial support. The repayment process is equally uncomplicated and is conducted through online platforms.

For lenders or debt investors, the digital lending platforms available for investors present a myriad of investment opportunities, enabling them to customize their portfolios in accordance with individual preferences and risk appetites. Following the establishment of a profile, the lender has the capability to peruse available loans and engage in research prior to arriving at investment decisions. Investors can securely transfer capital through the platform and subsequently receive interest payments as compensation. Although associated fees are present, tools are accessible to mitigate lending-related risks. In summary, digital lending optimizes the processes of borrowing and investing, yielding advantages for all stakeholders involved.

Tools for Digital Lending Platforms:

a) ***Artificial Intelligence & Machine Learning:*** Artificial Intelligence and Machine Learning are being employed to automate and optimize numerous facets of the lending process, encompassing customer onboarding, risk assessment, loan disbursement, and repayment monitoring. By harnessing extensive datasets and sophisticated algorithms, lenders are enabled to execute swifter and more precise credit determinations while simultaneously lowering operational costs and enhancing the customer experience.

b) ***Blockchain & Smart Contracts:*** Blockchain Technology functions as a decentralized, immutable ledger that meticulously documents transactions across a network of computing devices. Its high level of security is predicated on the fact that data cannot be modified once it has been inscribed. Smart Contracts represent self-executing contractual agreements with stipulations explicitly embedded within the Code. Established upon Blockchain Technology, Smart Contracts inherit the Security, Immutability, and Decentralization Intrinsic to the Foundational Technology. With the advent of Blockchain Technology and Smart Contracts, the forthcoming trajectory of Lending Appears to be more Secure, Transparent, and Efficient than it has ever been.

c) ***Open Banking & Data Sharing:*** Open Banking facilitates the secure exchange of financial data between Banking Institutions and Third-party Service Providers. The capabilities afforded by Open Banking have empowered lenders to arrive at more accurate Credit Assessments, Tailor Loan Offerings, and Expedite the Loan Processing Timeline. Data Sharing is intrinsically linked to Open Banking, allowing lenders to access an extensive array of alternative data sources to augment Credit Evaluations. By Scrutinizing a Borrower's Transaction History, Social Media Interactions, and Psychometric Metrics, Lenders can effectively assess First-time Borrowers who may lack a formal Credit History.

d) ***Real Time Credit Decisions:*** The influence of financial technology has rendered instant gratification a feasible reality within the lending domain. With the capability for Real-time Loan disbursements, individuals can now obtain funds precisely when they are required, devoid of any delays or complications.

e) ***Digital Identity & Biometrics:*** By leveraging Aadhaar-based electronic Know Your Customer (e-KYC) Protocols, Digital Lenders are now able to authenticate a Borrower's Identity Within Seconds. This Paperless, consent-driven procedure not only enhances the onboarding experience but also markedly diminishes the potential for Fraudulent Activities. By Incorporating Biometric Verification into their onboarding frameworks, Lenders can effectively Eradicate the Risk of Identity Theft. This Approach not only Safeguards the Interests of Lenders but also Shields legitimate Borrowers from becoming victims of Fraudulent Schemes.

f) ***Alternative Data & Credit Scoring:*** Alternative Data Encompasses Non-traditional indicators that extend beyond the Standard Credit Bureau Information utilized to assess a Borrower's Creditworthiness. This includes utility payment records, mobile usage patterns, e-commerce transactions, and social media engagement. By capitalizing on these alternative data metrics, lenders are afforded a more comprehensive understanding of a borrower's financial behaviour and repayment capability. Credit Scoring Methodologies employ Machine Learning Algorithms and Artificial Intelligence to analyse vast datasets and discern patterns indicative of Creditworthiness. The Advantages of this Approach include enhanced accuracy, Expedited Processing Times, and Minimized Bias.

g) ***Regulatory Technology (RegTech):*** RegTech denotes the application of Advanced Technologies to augment Regulatory Procedures and Guarantee adherence within the Financial Services Sector, encompassing Digital Lending Practices. Through the implementation of Automated Know Your Customer (KYC) verifications, continuous oversight, and the promotion of responsible lending, RegTech Methodologies empower Digital Lenders to adeptly navigate the intricate regulatory environment, diminish compliance-related threats, and uphold equitable and Transparent Lending Methodologies.

Characteristics: Traditional Lending (TL) Vs Digital Lending (DL)

Traditional lending practices are typically characterized by extensive paperwork. In contrast, digital lending enhances efficiency by utilizing data from various channels to swiftly evaluate the creditworthiness of borrowers. The improvement in customer service within digital lending, facilitated by advanced

technologies, surpasses traditional methods that often necessitate in-person visits or telephonic communications. Digital lenders are capable of addressing a more extensive customer demographic, emphasizing expedited financing, with loan approvals occurring within hours rather than weeks.

a) Process and Application:

- **TL:** The procedure for application necessitates the completion of physical forms, in-person meetings, and manual operations. Borrowers typically visit banking establishments or financial institutions to solicit loans, submit documentation, and undergo credit evaluations.

- **DL:** The entirety of the application procedure transpires in an online environment, predominantly via websites or applications. Applicants are not required to appear in person; they merely complete forms and upload documentation. The lending platform facilitates expedited decision-making.

b) Accessibility:

- TL: The accessibility to traditional lending services may be constrained by the geographical positioning and operational hours of physical branches. Borrowers may be compelled to travel to a bank or lender's premises during designated business hours.

- DL: Digital lending platforms significantly augment accessibility, empowering borrowers to apply for loans from any location with internet connectivity, available 24 hours a day, seven days a week.

c) Speed and Efficiency:

- TL: The approval and disbursement of loans through conventional channels may extend from several days to weeks due to manual processing and bureaucratic documentation.

- **DL:** Digital lending platforms utilize automation and algorithmic processes to refine the lending procedure, resulting in accelerated approvals and disbursements, occasionally within mere minutes or hours.

d) Verification Process:

- **TL:** Conventional lending necessitates documentation and in-person meetings to authenticate information, which can be time-consuming.
- **DL:** Online applications, the submission of digital documents, and automated verification mechanisms minimize paperwork and hasten the process.

e) Credit Assessment:

- **TL:** Banks and traditional financial institutions typically evaluate applicants' creditworthiness, assets, and financial parameters to ascertain their eligibility for loans, frequently resulting in a protracted process.
- **DL:** Digital lending platforms employ sophisticated algorithms to assess creditworthiness, integrating traditional metrics alongside alternative data, such as digital footprints and social media interactions. This automated mechanism expedites the process in comparison to traditional lending.

f) Customer Experience:

- TL: Traditional lending necessitates face-to-face engagements with banking representatives or loan officers, which may exhibit variability in quality and degree of personalization.
- DL: Digital lending provides a streamlined and convenient user experience, offering self-service functionalities, customized loan proposals, and continuous access to customer support.

g) Risk Management:

- TL: Traditional lending depends on established risk assessment frameworks and may exhibit a more conservative approach in its lending practices, rendering it challenging for certain applicants to obtain a loan.
- DL: Digital lending platforms frequently present more lenient loan approval processes with less stringent criteria.

Benefits:

- For borrowers, digital lending provides a level of convenience through online applications and document submissions, which are accessible around the clock from any geographical location. Rapid approvals and the disbursement of funds, frequently within mere minutes, are enabled by automated systems and sophisticated credit assessment algorithms. These algorithms leverage alternative data sources, thereby diminishing the need for paperwork and enhancing the overall borrowing experience. Furthermore, user-friendly interfaces present tailored loan offerings. Additionally, digital lenders may impose less rigorous eligibility standards, thereby broadening access to loans for a more diverse array of borrowers.
- For lenders and investors, crowdfunding investments, particularly within the realm of digital lending, afford opportunities for diversification, income generation, and the potential for superior returns compared to traditional fixed-income investments. Digital lending additionally facilitates control over risk exposure, access to varied markets, and the capacity to enhance the overall yield of investment portfolios. Loans may function as a hedge against inflation, providing a safeguard against the erosion of purchasing power. Engaging in loan investments through crowdfunding can be particularly appealing for investors seeking income, diversification of their portfolios, and the prospect of higher returns, contingent upon thorough due diligence and effective risk management.

Models:

Digital lending and fintech lending platforms utilize a variety of business models. The five predominant models include Peer-to-Peer lending, Resale Marketplace Lending, Balance Sheet Lending, Digital Banks and Neobanks, as well as Invoice Financing and Supply Chain Finance.

Peer-to-Peer Lending: Peer-to-peer lending establishes direct connections between individuals seeking to borrow capital and those willing to lend, effectively circumventing conventional banking institutions. A digital platform serves as an intermediary, facilitating the loan process. Investors are afforded the opportunity to select which loans to finance based on associated risk and anticipated returns.

Resale Marketplace Lending: Analogous to peer-to-peer lending, these platforms also present loans as investment opportunities but infrequently provide direct borrowing options on their sites. Such platforms resell loans that have already been procured by borrowers from loan originators. The loan originators leverage technology to determine loan eligibility and the respective interest rates at which these loans are offered to investors.

Balance Sheet Lending: Certain lending organizations utilize their own capital to extend loans, sourced either from substantial investors or the proprietors' funds. They assume the risk associated with borrower default but are positioned to achieve elevated profit margins. These organizations employ technology to enhance loan decision-making and effectively manage associated risks.

Digital Banks and Neobanks: These entities operate exclusively in a digital environment, either online or via mobile applications. They capitalize on technological advancements to provide expedited loan services, reduced fees, and a more efficient customer experience compared to traditional banking institutions.

Invoice Financing and Supply Chain Finance: These types of financing represent specialized loan products tailored for businesses. Invoice financing enables companies to obtain capital by leveraging outstanding invoices as collateral. Conversely, supply chain finance assists businesses in managing payment processes throughout their supply chain by utilizing technological platforms.

Conclusion:

The emerging generation seeks autonomy over their personal or business data to foster a more transparent lending experience. Having matured in an environment dominated by the internet, smartphones, and social media, young Millennials and Generation Z borrowers exhibit a notable proficiency in utilizing their digital footprints for personal or business advantage. They actively adopt technology to optimize daily activities and aspire to make well-informed decisions regarding financial transactions. As their presence in the professional realm expands, they are positioned to be the generations that will shape the future landscape of lending.

Digital Lending denotes a remote and automated mechanism that facilitates individuals in applying for loans and additional credit services through online digital platforms and channels. This process incorporates mobile applications and websites to optimize the lending experience. By employing these methodologies, loans can be disbursed in under ten minutes without the necessity for collateral. The expansion of digital lending within India has been remarkable. The digital lending market in India exhibited a Compound Annual Growth Rate (CAGR) of 132% from 2017 to 2022. Moreover, it is anticipated that India's digital lending market will potentially escalate to USD 515 billion by the year 2030.

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Funds Transfer Pricing Mechanism In The Banks

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Funds transfer pricing is an internal allocation and measurement mechanism for determining the pricing of incremental loans/investments/deposits and for determining the profit contribution of various lending and borrowing units of a bank. It is critical component of the profitability measurement process, as it allocates the major component of profitability in a bank, net interest margin. It's a management decision tool and is useful means to identify the areas of strength and weaknesses within the bank.

Funds Transfer Pricing Mechanism

Under FTP, the central funding unit determines the transfer price curve for various maturities from time to time based on the policy approved by the asset liability committee.

The bid curve (i.e. the transfer pricing curve used for liabilities of the bank) is to be based on the marginal cost of borrowing and servicing cost for different maturities. While arriving at this, liabilities such as current account/savings account with non-determinate maturity may be categorised based on statistical behavior model.

Offer curve (i.e. the transfer pricing curve used for assets of the bank) is calculated as bid rate adjusted for the following:

1) ***Cash reserve ratio (CRR) and statutory liquidity ratio (SLR) negative carry liabilities:*** Benefit of CRR is to be given for inter-bank liabilities.

2) ***Liquidity charge for maintenance of liquid assets:***The extent of liquidity cushion to be maintained by the bank may be determined through the use of statistical behavioral model, stress-testing and scenario analysis. The cost of maintaining such liquidity buffer would be added to arrive at the offer rate. Also, business activities creating the need for the bank to carry additional liquidity such as undrawn facility may be charged based on their expected usage of contingent liquidity.

3) ***Term premia*** depending upon slope of deposit rate curve and other market rates.

Every liability raised by the business unit is to be "transfer priced" using the prevailing bid rate for the matching maturity. Similarly, every asset at the time of origination is to be "transfer priced" using the prevailing offer rate for the relevant maturity.

For amortising assets, each cashflow is to be treated as an individual bullet loan for that maturity and priced accordingly to arrive at a composite rate for that asset. The difference between the rate charged to the customer and the transfer price on that asset is the net interest margin on that transaction attributable to the business unit.

Components of Funds Transfer Pricing

The main components of Funds Transfer Pricing are the asset spread, liability spread, and residual spread.

- ***The asset spread*** (credit spread) is the net interest margin earned by funds users, generated by assets such as loans, investments, and fixed assets that receive an FTP charge.

- ***The liability spread*** (deposit spread) is the net interest margin earned by funds providers on products that provide funding for the institution such as savings, certificate of deposits, and institution borrowings that receive an FTP credit.

- ***The residual spread*** is the margin that Treasury/Funds Management group earns by ensuring adequate liquidity and managing interest rate risk exposure and other risks.

Methods For Funds Transfer Pricing

There are different approaches for FTP which is prevalent like:

1) Pooled/Average Cost Method

Based on average cost of all outstanding liabilities a single transfer price rate is arrived at and used for all

assets and liabilities.

The average cost method is easy to implement but does not take into account the current costs and the term structure of interest rates.

2) Net Transfer Of Funds Method

Based on net transfer of funds (difference between assets and liabilities) between business units and funding unit.

The net transfer of funds method (amount of total assets and liabilities are netted out, without considering the respective maturities) minimises the complexity in the use of transfer pricing, but under this the cost of interest rate and liquidity risk would continue to impact the profits of the branch.

Another reason why using this method is not appropriate is that the potential for assets and liabilities may not be uniform for all business units and therefore, the practice to net off would not be fair and consistent for all the business units/branches.

3) Market Benchmark Linked Method

Based on prevailing market benchmark rates for different maturities such as MIBOR, T-bill rate, G-sec rate, transfer pricing curve is determined.

The market benchmark linked method provides an objective basis to set the rates but would work if the markets are liquid and competitive. In the absence of borrowings of banks being linked to the same benchmarks, the movement in the market rates and cost of borrowings of the bank may not be synchronised.

4) Matched Maturity Marginal Method

Based on incremental cost of raising funds for different maturities. Under this approach,the rates charged for the use of funds and rates credited for providing funds are based on matching the maturity of the asset and liability instruments to the FTP rate that corresponds to that maturity and thus there is segregation of the interest rate risk and liquidity risk from the business unit profitability.

This method is more advantageous than other three methods as it incentivises the bank to eliminate costliest marginal funds so that threshold for lending rate reduce and establishes threshold for each decision to be profitable on an incremental basis.

Conclusion

It is important for every bank to have a robust and well laid out Funds Transfer Pricing framework which is conducive to the complexity and the nature of business of that bank. The FTP methodology employed in the banks should be consistent and transparent.There must be a mechanism for the branches and all business units to know on a periodic basis how they are faring, on the basis of the defined FTP framework vis-à-vis the budgeted targets.

Establishing a Gold Bank Would Stabilise the Indian Rupee

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Establishing a Gold Bank in India has been a topic of discussion among policymakers, economists, and industry experts to mobilize the country's vast gold reserves for economic development. The necessity of such a bank depends on several factors, including gold market dynamics, the role of gold in the Indian economy, and the potential benefits and challenges associated with creating such an institution.

India is one of the world's largest holders of gold, with an estimated 25,000 to 30,000 tons owned by households, temples, and institutions. Much of this gold is in the form of jewelry and is not actively utilized for economic purposes. A Gold Bank could help mobilize this idle gold by encouraging individuals and institutions to deposit their gold in exchange for interest or other financial benefits. India heavily relies on gold imports, contributing to its current account deficit (CAD). A Gold Bank that utilizes domestic gold reserves could reduce the need for imports and ease pressure on the CAD.

A Gold Bank could offer financial products like gold-backed loans, savings accounts, and bonds. These products would allow individuals to use their gold holdings for liquidity without the need to sell them. This could be especially advantageous for rural households, where gold is a primary form of savings.

A Gold Bank could help stabilize gold prices by regulating supply and demand in the domestic market. It could also act as a market maker, ensuring transparency and reducing the influence of informal markets. The jewelry industry, a significant contributor to India's economy, could benefit from a consistent supply of gold at reasonable prices, thereby ensuring smoother operations and growth.

Significant amounts of gold are often underutilized in Indian temples. A Gold Bank could partner with these temples to

monetize this gold for productive purposes, such as infrastructure development or social welfare programs.

The success of a Gold Bank would depend on building trust with the public. Ensuring transparency in operations, pricing, and gold valuation is essential. Gold symbolizes wealth and security and holds deep cultural and emotional significance in India; convincing individuals to part with their gold may be challenging, even temporarily.

Establishing and managing a Gold Bank would necessitate substantial infrastructure, including secure storage facilities, reliable technology systems, and skilled personnel. A clear regulatory framework would also be crucial to govern the bank's operations, addressing issues related to gold valuation, interest rates, and taxation. The informal gold market, made up of unorganized lenders and pawnbrokers, plays a significant role in India's gold economy. A Gold Bank could disrupt this sector, potentially leading to opposition from stakeholders. The Gold Bank would need to address risks associated with fluctuations in global gold prices, which could impact its financial stability.

India has monetized gold through initiatives like the Gold Monetization Scheme (GMS) and the Sovereign Gold Bond (SGB) scheme. However, these efforts have encountered limited success due to low participation and a lack of awareness. A Gold Bank could address some shortcomings of these schemes by offering more attractive terms and enhanced outreach, as outlined below:

Mobilizing Dormant Gold: A gold bank can tap into the value of dormant gold reserves, estimated to exceed $1 trillion, by encouraging individuals to deposit their gold and earn interest.

Reducing Dependence on Imports: India can lessen its reliance on gold imports by utilizing domestic gold reserves, which may help stabilize the currency and decrease the trade deficit.

A gold bank can offer liquidity, enabling access to funds without needing to sell gold.

Standardizing Gold Quality: A gold bank can standardize gold quality, ensuring that deposited gold adheres to specific purity standards.

Generating Employment: A gold bank can generate new job opportunities in the gold sector, encompassing assaying, refining, and vault management.

Enhancing Financial Inclusion: A gold bank can extend financial services to rural areas and underbanked populations, promoting financial inclusion.

Supporting the Jewelry Industry: A gold bank can provide financing options to the jewelry industry, helping small and medium-sized enterprises.

Challenges and Considerations

Trust and Confidence: Building trust among gold holders to deposit their gold with the bank is essential.

Security and Storage: Ensuring the secure storage and transportation of gold is essential.

Regulatory Framework: A clear regulatory framework is needed to govern the gold bank's operations.

Interest Rates and Fees: Competitive interest rates and fees must be offered to attract depositors.

India can derive the following fiscal advantages by opening ***a Gold Bank***:

1. Reducing Trade Deficits

India is the second-largest consumer of gold, importing approximately 800 to 900 tons each year. This creates a significant trade deficit. A Gold Bank could help monetize domestic gold holdings, thereby reducing reliance on imports.

2. Strengthening the Rupee & Reserves

A gold bank could enable India to establish gold-backed reserves, lessen reliance on foreign exchange, and bolster the rupee in global trade.

3. Promoting Gold-Backed Financial Products

The bank could introduce gold savings accounts, gold-backed bonds, and digital gold transactions, allowing clients to earn interest on their holdings while ensuring liquidity.,

4. Boosting Government Revenue

A Gold Bank could improve tax compliance in the gold trade, deter smuggling, and generate revenue through transaction fees, deposits, and investment instruments.

5. Strengthening Economic Stability

A Gold Bank would strengthen financial stability by decreasing external dependence on gold and ensuring that India's substantial gold reserves are formally integrated into the economy.

India's obsession with gold is a double-edged sword. When managed properly through a Gold Bank, it can transform from an economic burden into a financial asset that boosts growth, strengthens the rupee, and promotes a more resilient financial system. Such an institution could mobilize dormant gold reserves, reduce gold imports, and provide financial products that leverage gold holdings.

A Gold Bank can effectively address cultural, operational, and regulatory challenges while fostering trust among the public. Given India's significant gold holdings and potential economic advantages, establishing a Gold Bank warrants consideration as a component of a broader strategy to leverage the country's gold resources for development.

The government must develop robust policy measures, increase public awareness campaigns, and engage in stakeholder consultations to transform our weakness regarding gold into our strength. More gold with the government would reduce imports and stabilize the Indian Rupee.

Status of Home Buyers in Resolution Process of Real estate companies under Insolvency and Bankruptcy Code 2016.

[The article attempts to delve into the issues and challenges facing the home buyers in legally protecting their interest in the resolution proceedings of the real estate companies under the Code and related legal activism therearound]

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Introduction

Promulgation of the Insolvency and Bankruptcy Code (IBC) in 2016 is indeed an epoch-making reform in India's judicial landscape. Prior to enactment of IBC, there existed a fragmented insolvency resolution legal regime rendering insolvency resolution processes complex, protracted, and inefficient. It involved application of plethora of laws , rules and regulations, to different aspects of insolvency and bankruptcy applicable to various kinds of stakeholders in the realm of various facets of insolvency and liquidation . There persisted a regime of legal complexity in the absence of a comprehensive insolvency law.

State should ensure that there would be freedom for any commercial entity to begin a business, freedom to continue doing business in provided level playing field, and the freedom to discontinue/exit the business. While the first two freedoms were well recognized in the Indian regulatory regime , enactment of IBC afforded greater freedom to business entities to exit the business best preserving their respective interest. IBC envisages an orderly process for resolution of businesses insolvency adhering to a legally stipulated time frame eschewing the tardy and lethargic legacy system. The Code overhauled the legacy legal regime for corporate distress resolution in India putting in place a predictable, market-determined, incentive-driven and time-bound mechanism therefor. The Code is a law for insolvency resolution.

The salient features of IBC include integrated resolution process adhering to a statutorily prescribed time lime, setting up of adjudicating authorities(viz., the National Company Law Tribunal (NCLT) and the National Company Law Appellate Tribunal (NCLAT) . Insolvency and Bankruptcy Board of India (IBBI) has also been created to evolve an Institutional mechanism to oversee, regulate, exercising definitive jurisdiction, among other over insolvency proceedings and professionals. The IBC envisages facilitation of corporate insolvency resolution through constitution of Committee of Creditors (CoC) and a structured liquidation process if resolution is found to be infeasible within the given time frame.

Housing and Construction activities have significant bearing on economic activities of other sectors of the economy which in turn play significant role in employment generation and job creation in the country .These have multiplier effects on GDP of the country. The real estate business in India has grown manifold over the past decades. The sector however had to steer through sever unprecedented hardships and stiff challenges in the aftermath of COVID- 19 outbreak. As per Indian Banks' Association (IBA) estimate the sector is saddled with about 4.12 lakh stressed dwelling units involving Rs 4.08 lakh crores struck in stalled real estate projects (3). Of these about 2.40 lakh stressed dwelling units are in NCR. As per the report of the Expert Committee on Rehabilitation of Legacy Stalled Real Estate Projects appointed by the Ministry of Housing and Urban Affairs (MoHUA) if 75% of these stressed units are resolved, it will add about three lakh dwelling units to the housing sector. The resolution of these stressed units will help a segment of middle and lower middle class people in good stead by providing them dwelling houses for which a substantial amount stood already paid by the home buyers.

Recognition of home buyers under the code

Initially, under the IBC framework homebuyers of the real estate project did not have any recognition as financial creditors or operational creditors, to be legally competent and eligible to launch Corporate Insolvency proceedings against defaulting real estate companies. But thanks to the jurisprudence and legal system of the country. Over the years through evolution of IBC ,a new enactment , while being tested in the judicial turf, the rights of the home buyers got legal recognition in insolvency resolution process as financial creditors through required amendments of the law and related regulations.

The first impetus came in 2017, when the corporate insolvency proceedings of the real estate company Jaypee Infratech Limited was started under IBC by NCLT. Jaypee Infratech Limited then had several incomplete housing projects. The aggregate amount of money paid to the company by the home buyers by way of advance pending handing over of possession of completed flats exceeded the recognised financial creditors' (bank) dues. However, the home buyers were not given any right of representation in the creditors' committee for want of their legal recognition as financial/operational under IBC . Thus they were incapacitated from safeguarding their interest in the insolvency proceedings launched against the defaulting company although they in aggregate were having larger dues form the company compared to that of all the recognised financial/ operational creditors taken together. Originally IBC did not accord the home buyers of real estate projects having advanced money pending delivery of duly complete homes ,the status of financial creditors or operational creditors who are conferred right to launch Corporate Insolvency Resolution proceedings against a defaulting/distressed real estate company. In this backdrop the distressed homebuyers of Jaypee Infratech Limited appealed to the Supreme Court (Chitra Sharma vs Union of India) for remedial and mitigating directions so as to safeguard the interest of homebuyers considering the fact that the debts owed to the homebuyers by the corporate debtor was more compared to what was due to the banks. As per then existing legal position, the banks only were recognised as financial creditor placing them in more advantageous position vis a vis the homebuyers.

The Supreme Court in the case ibid afforded relief to the homebuyers of all real estate projects floated by Jaypee Infratech Limited by issuance an interim directions for recognising the homebuyers as financial creditors and induction of appointed authorized representatives of the home buyers in Committee of Creditors ("COC") under Section 21 of IBC to advocate the case for the homebuyers and to protect their interests.

In the wake of the above direction issued by the Supreme Court the government with a view to providing rightful position to homebuyers in relevant insolvency proceedings under IBC promulgated an ordinance viz, Insolvency and Bankruptcy (Amendment) Ordinance, 2018 with effect from 06.06.2018. In terms of this ordinance, the homebuyers have been accorded the status of financial creditors under the Code. Subsequently Insolvency and Bankruptcy Code (Second Amendment) Act, 2018 was passed conferring the allottees the stature of financial creditors under IBC incorporating in the definition of 'financial debt' (vide., Section 5(8)(f) of the Code) that any amount received from a house buyer of real estate project shall be considered as amount having the commercial effect of a borrowing. Thus, the amount received by way of advance from the allottees in the real estate projects pending delivery of the duly completed dwelling units , received statutory recognition as 'financial debt' and the allottees were accorded legal status of 'financial creditors'. The Supreme Court subsequently upheld the constitutional validity of the 2018 Amendment and, emphasised ,among others , the need and importance of safeguarding the interest of homebuyers in corporate insolvency proceedings clarifying that advance amounts are collected by real estate agencies from the homebuyers with a profit-making motive and therefore the same have commercial effect of a borrowing.

Home Buyers not treated individually under IBC

To safeguard the interests of viable real estate company against possible threat of initiation of unwarranted insolvency proceedings under IBC even by a single home buyer ,IBC (Amendment) Act, 2020 was promulgated amending Section 7 of the Code to prescribing a minimum required threshold to file an application under Section 7 of IBC. In pursuance of this Amendment, the corporate insolvency resolution proceedings need be launched jointly, by at least 100 of homebuyers or not less than 10% of the total number of homebuyers under the same real estate project, whichever is less. For example: In a real estate project "XYZ Builders" having 1200 homebuyers , then minimum of 100 are required to jointly file an insolvency petition against XYZ Builders. In another case, in a real estate project "AXY Constructions Ltd" having 70 homebuyers , then minimum of 7 of them are required to jointly file an insolvency petition against AXY Constructions Ltd.

Homebuyers' involvement in insolvency proceedings would not be on an individual basis but as a class. Homebuyers need elect a representative to advocate their interest in the COC. Homebuyers' decision-making process would be based upon decisions emerging out of a democratic process of deliberation of all individual homebuyers in separate class meetings be convened by their representative. The representative as also the minority homebuyers cannot renege the decision made by the majority homebuyers vide amendment to section 21 (6A) and provisions of new section 25 A inserted by the IBC (Second Amendment) act, 2018. The Supreme Court upheld the constitutional validity of these amendments.

Status of decree holder homebuyers under the Code

A definition of the term creditor has been provided in Section 3(11) of IBC . A creditor is define therein to be "any person to whom a debt is owed and includes a financial creditor, an operational creditor, a secured creditor, an unsecured creditor and a decree-holder." However, IBC does not explicitly define the term, 'decree-holder.' Therefore it would be rational to fall back upon to Section 2(3) of Code of Civil Procedure, 1908 wherein a decree-holder has been defined to mean "any person in whose favour a decree has been passed or an order capable of execution has been made". The issue whether decree holder home buyers are distinct from the other home buyers or not came up for judicial scrutiny. Finally, the issue has been settled with finality by the supreme court. The honourable court gave recognition to decree holder home buyers as financial creditors in the absence of any further classification in a class of creditor. (vide. Case Vishal Chelani & others vs Debashis Nanda.) . The supreme court observed that it would be iniquitous to treat a specific segment of a class of financial creditors differently from others on the pretext that some of them have decree for recovery of dues in their favour. The Supreme Court has thus ensured that home buyers, irrespective of their choice of remedy under the RERA, are treated uniformly under the IBC.

Status of homebuyers in case of liquidation of the real estate agency

In the eventuality of failure of insolvency resolution process and the company goes into liquidation, homebuyers will receive amounts in accordance with the waterfall mechanism as delineated under Section 53 of IBC. As of now, the homebuyers are treated as unsecured financial creditors and therefore, they are placed under Section 53 (d) of IBC. Homebuyers are placed in the fourth position under the waterfall mechanism after insolvency process costs, dues of the secured creditor, dues of workmen and employees. Thus, the claims of the Homebuyers under liquidation shall be admitted in their respective ratio after dues of above-mentioned categories are satisfied first. Therefore, liquidation would be highly disadvantageous for the home buyers. Homebuyers' representative in the committee of creditors should therefore make all-out effort for resolution of the company avoiding liquidation option.

Conclusion

From the forgoing it is apparent that insolvency resolution process of a real estate company would be a bit different from that of corporate debtors engaged in other sectors. It is , however, gratifying that the Hon'ble Supreme Court has granted the homebuyers including those who are the decree-holders the status of 'financial creditors' under Code. The IBC ,2016 is dynamic law smartly evolving in response to the specific needs of the stake holders and other players in the related ecosystem.

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Federated Learning in the Financial Sector: A Revolution in Privacy Preserving AI

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Introduction

The financial sector is undergoing a technological transformation with the integration of artificial intelligence (AI) and machine learning (ML). One of the latest advancements in this space is Federated Learning (FL), a decentralized approach to ML that enables organizations to train models collaboratively without sharing sensitive data. This innovation is particularly beneficial in financial services, where privacy, security, and compliance with stringent regulations are paramount.

Understanding Federated Learning

Federated Learning is a machine learning technique that allows multiple entities to train a shared model without exposing their raw data. Instead of transferring data to a central server, FL enables model training to occur locally on distributed devices or servers, sending only model updates rather than actual data.

How Federated Learning Works

Initialization – A global model is created and distributed to all participating clients (banks, financial institutions, or other entities).

Local Training – Each client trains the model on its own dataset.

Model Updates – Instead of sharing raw data, clients send encrypted model updates to a central server.

Aggregation – The server aggregates updates using techniques such as Federated Averaging (FedAvg) to refine the global model.

Iteration – This process repeats until the model achieves desired accuracy and robustness.

Applications of Federated Learning in the Financial Sector

Federated Learning is revolutionizing financial services by enabling

AI driven insights while maintaining privacy and regulatory compliance. Here are some key applications:

Fraud Detection and Prevention

- Traditional fraud detection relies on centralized data processing, which can expose sensitive customer information to security risks.
- FL enables financial institutions to collaboratively train fraud detection models across different datasets while preserving customer privacy.
- It allows banks to detect cross institutional fraud patterns, improving accuracy and reducing false positives.

Credit Scoring and Risk Assessment

- Credit risk models require vast amounts of consumer data, often siloed across multiple institutions.
- FL enables better credit scoring by allowing multiple institutions to share insights without exposing individual consumer data.

Personalized Financial Services

- Financial institutions can develop personalized recommendations for clients without compromising their privacy.
- By leveraging federated models, banks can analyse transaction patterns to suggest tailored investment products or spending strategies.

Anti-Money Laundering (AML) Compliance

- FL enables collaborative analysis of suspicious transactions across multiple banks and jurisdictions.
- Banks can train ML models to identify illegal activities while maintaining regulatory compliance.

Algorithmic Trading

- Trading firms can enhance predictive models by combining insights from multiple market participants without sharing proprietary data.
- Federated Learning allows firms to develop more robust trading strategies while maintaining a competitive edge.

Women's Contributions to Federated Learning and Financial AI

Women have played a crucial role in the advancement of Federated Learning and AI in financial technology. Some notable contributions include:

1 Sanghamitra Bandyopadhyay:

A leading AI researcher, Sanghamitra has made significant contributions to machine learning, optimization, and computational biology. Her work has been recognized with prestigious awards such as the IEEE Fellow Award and the ACM Grace Hopper Award . She has also served as the director of the Indian Statistical Institute, furthering AI research in India.

2. Arpita Patra:

Known for her work in secure multi party computation, Arpita has developed cryptographic protocols that ensure privacy and security in AI systems. Her research addresses critical issues in data privacy, a growing concern in the AI driven world.

3. Dr. Cynthia Dwork – Differential Privacy

Dr. Cynthia Dwork, a computer scientist, has made significant contributions to privacy preserving technologies, including differential privacy, which is a key component of Federated Learning. Her work has influenced the way financial institutions handle sensitive data while maintaining security and compliance.

4. Dr. Shafi Goldwasser – Cryptographic Foundations

Dr. Shafi Goldwasser, a Turing Award winning cryptographer, has contributed to secure multiparty computation, a technique used in Federated Learning to ensure data privacy. Her research is instrumental in securing AI models in financial applications.

5. Dr. Fei Fei Li – AI Ethics and ML Advancements
Dr. Fei Fei Li, an AI researcher, has contributed significantly to machine learning applications, emphasizing the ethical use of AI in financial decision making. Her advocacy for responsible AI ensures that Federated Learning aligns with ethical standards in the financial sector.

6. Dr. Dawn Song – Secure AI and Federated Learning
Dr. Dawn Song is a leading researcher in AI security and Federated Learning, working on privacy preserving AI solutions for various industries, including finance. Her contributions help financial institutions implement Federated Learning with robust security measures.

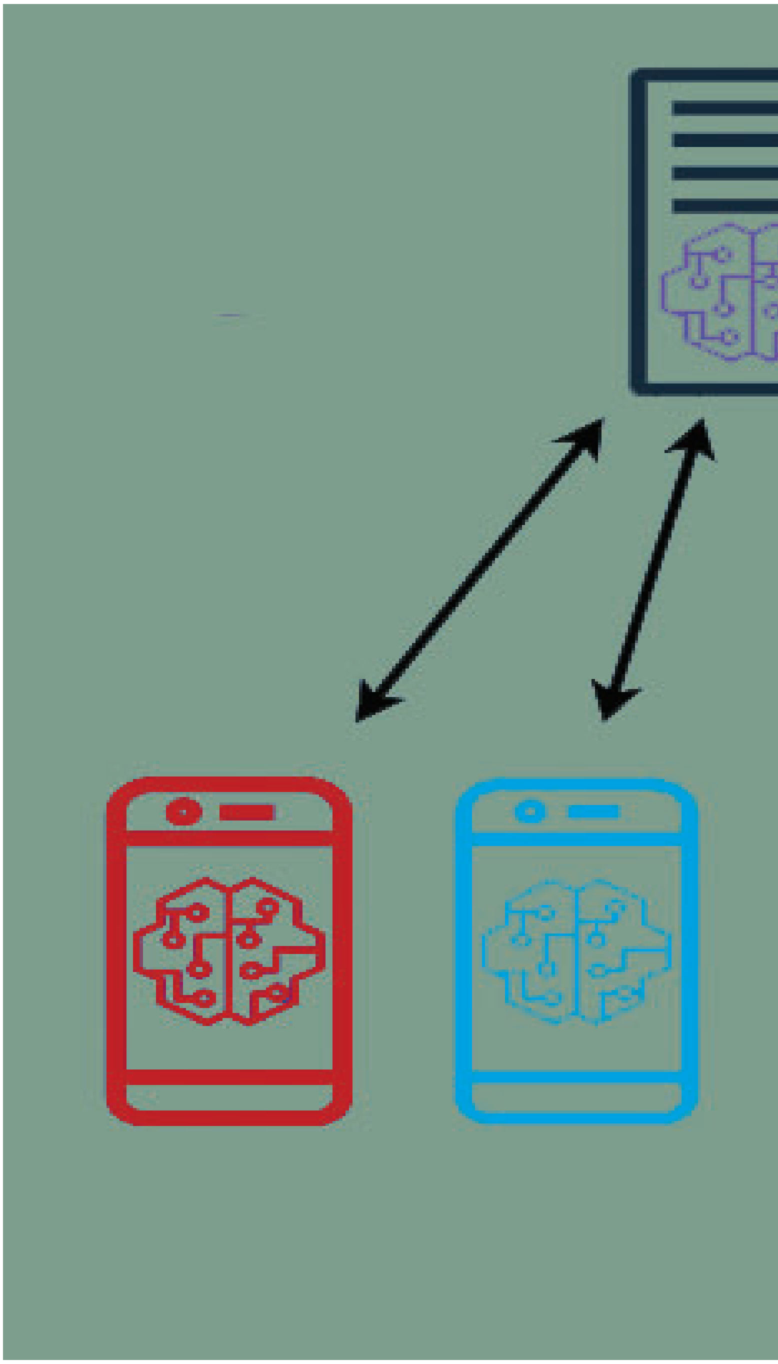
Women in FinTech Leadership

Women leaders in fintech, such as Anne Boden (Founder of Starling Bank) and Hélène Barnekow (former CEO of Microsoft Sweden), advocate for privacy focused AI adoption in financial services. Their work in driving digital transformation within banks and fintech firms has encouraged the integration of privacy preserving AI technologies like Federated Learning.

Advantages of Federated Learning in Finance

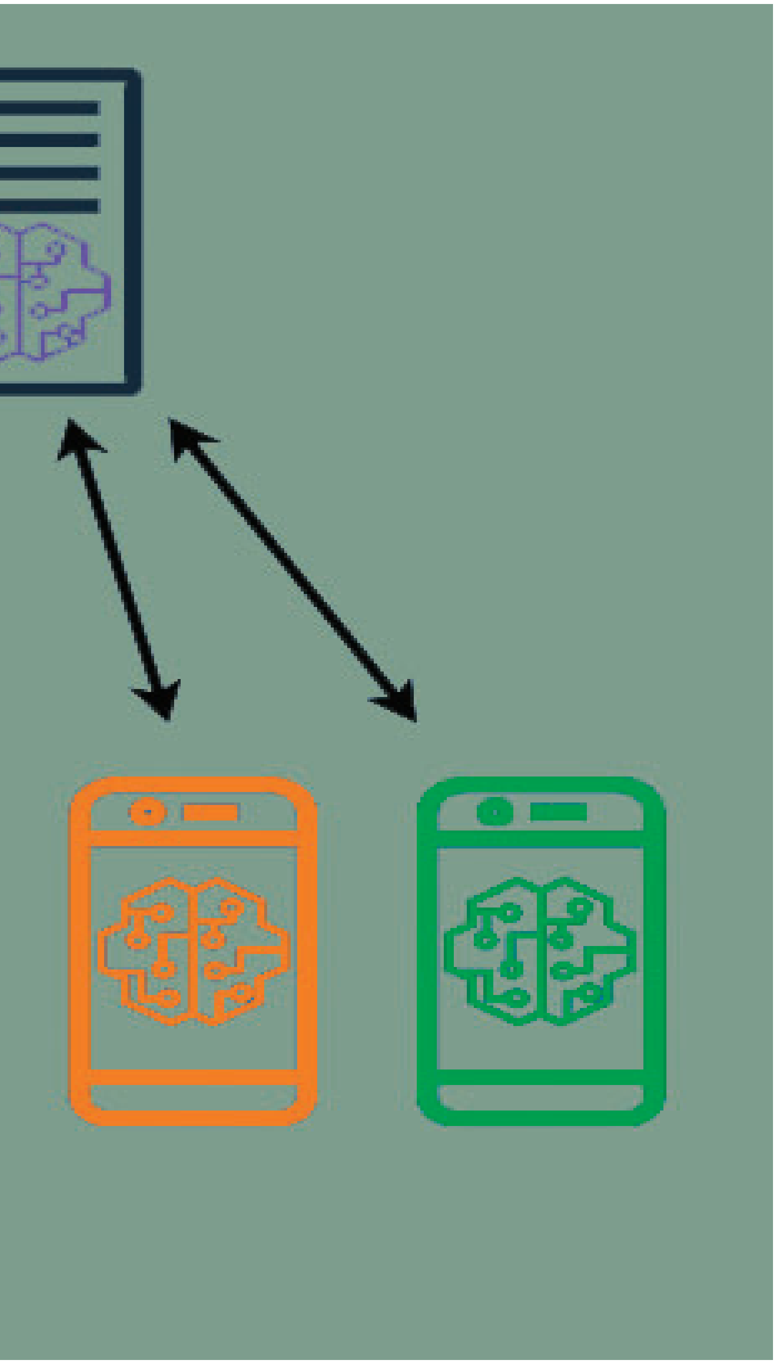
1. Data Privacy and Security
Raw data remains within local environments, reducing the risk of breaches and compliance violations. FL ensures that customer sensitive data, such as financial transactions, remains protected.

2. Regulatory Compliance
Compliance with financial data protection laws (e.g., GDPR, CCPA, and PSD2) is more manageable as FL minimizes data exposure. Reduces risks associated with cross border data transfers.



3. Reduced Data Transfer Costs
Instead of moving large datasets to a central server, FL transmits only model updates, reducing bandwidth and storage costs.

4. Improved Model Accuracy and Generalization
By leveraging diverse datasets from multiple institutions, federated models are more representative



and generalizable.

5. Enhanced Collaboration Across Institutions

Banks, insurers, and fintech companies can collaborate on ML models without exposing proprietary customer data. Facilitates knowledge sharing while maintaining competitive advantages.

Future of Federated Learning in the Financial Sector

The adoption of Federated Learning in financial services is expected to grow rapidly as institutions seek to balance AI innovation with privacy and compliance. Some future developments include:

Integration with Blockchain Technology

Blockchain can enhance FL by providing a decentralized ledger for model updates, ensuring transparency and security.

Advancements in Secure Computation Techniques

Privacy preserving technologies like homomorphic encryption and differential privacy will make FL more resilient to attacks.

Expansion to Cross Sector Collaborations

Financial institutions may collaborate with healthcare, retail, and telecom sectors to develop more comprehensive consumer insights.

Regulatory Support and Standardization

Governments and regulatory bodies may introduce frameworks to standardize FL practices in financial services.

Conclusion

Federated Learning represents a ground breaking shift in how financial institutions leverage AI while maintaining data privacy and regulatory compliance. Women researchers and leaders have played a significant role in shaping the technology, ensuring its ethical and secure adoption. As FL adoption continues to grow, financial institutions will benefit from more secure, privacy conscious, and efficient AI driven decision making.

Agentic AI – The Future of Automation

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Agentic AI: The Future of Autonomous Decision-Making

Agentic AI is an emerging technology that is set to transform industries by combining advanced artificial intelligence (AI) with enterprise automation. This innovative approach creates autonomous AI agents capable of analyzing data, setting goals, and taking actions with minimal human supervision. These agents are designed to make decisions, solve dynamic problems, and continuously learn and improve through interactions.

What is Agentic AI?

Agentic AI refers to AI systems that possess sophisticated reasoning and iterative planning capabilities, enabling them to autonomously solve complex, multi-step problems. Unlike traditional AI, which often relies on predefined rules, Agentic AI uses patterns and likelihoods to make decisions and take actions. This probabilistic technology is highly adaptable to changing environments and events, making it possible to automate workflows and business processes that deterministic systems cannot address.

By analyzing patterns and likelihoods, Agentic AI can handle uncertainties and dynamic conditions more effectively. This capability opens up a wide range of applications, from advanced robotics and autonomous vehicles to sophisticated financial modeling and personalized healthcare.

How Does Agentic AI Work?

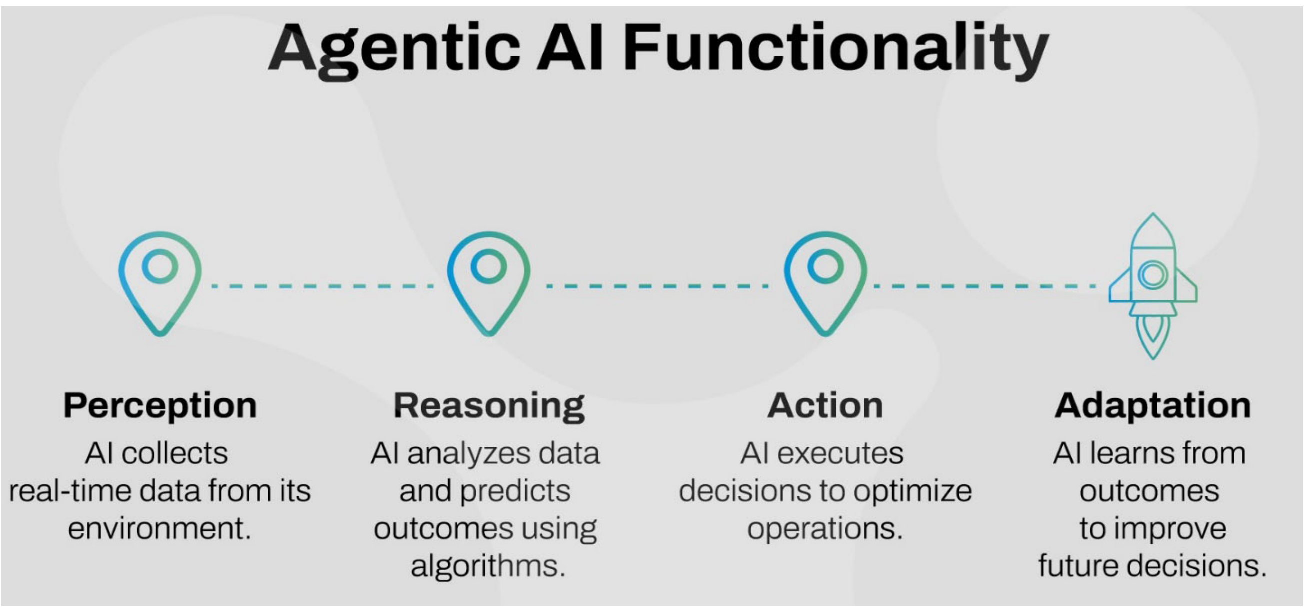
Agentic AI operates through a four-step process:

1. Perceive: AI agents gather and process data from various sources, such as sensors, databases, and digital interfaces. This involves extracting meaningful features, recognizing objects, or identifying relevant entities in the environment.

2. *Reason:* A large language model acts as the orchestrator, understanding tasks, generating solutions, and coordinating specialized models for specific functions like content creation, visual processing, or recommendation systems.

3. Act: By integrating with external tools and software via application programming interfaces (APIs), Agentic AI can quickly execute tasks based on the plans it has formulated.

4. Learn: Agentic AI continuously improves through a feedback loop, refining its strategies and actions based on outcomes and new data.



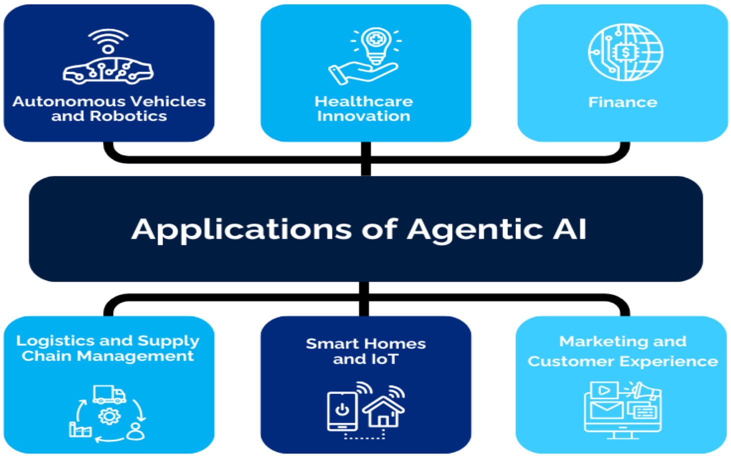
Applications of Agentic AI

The potential applications of Agentic AI are vast and varied. Here are a few examples:

✿ ***Customer Service:*** AI agents can provide personalized customer support, handle complex inquiries, and recommend solutions based on real-time data.

✿ ***Healthcare:*** Virtual caregivers powered by Agentic AI can assist the elderly, monitor patient health, and provide timely interventions.

✿ ***Supply Chain Management:*** AI-powered supply-chain specialists can optimize inventories and respond to fluctuations in real-time demand.



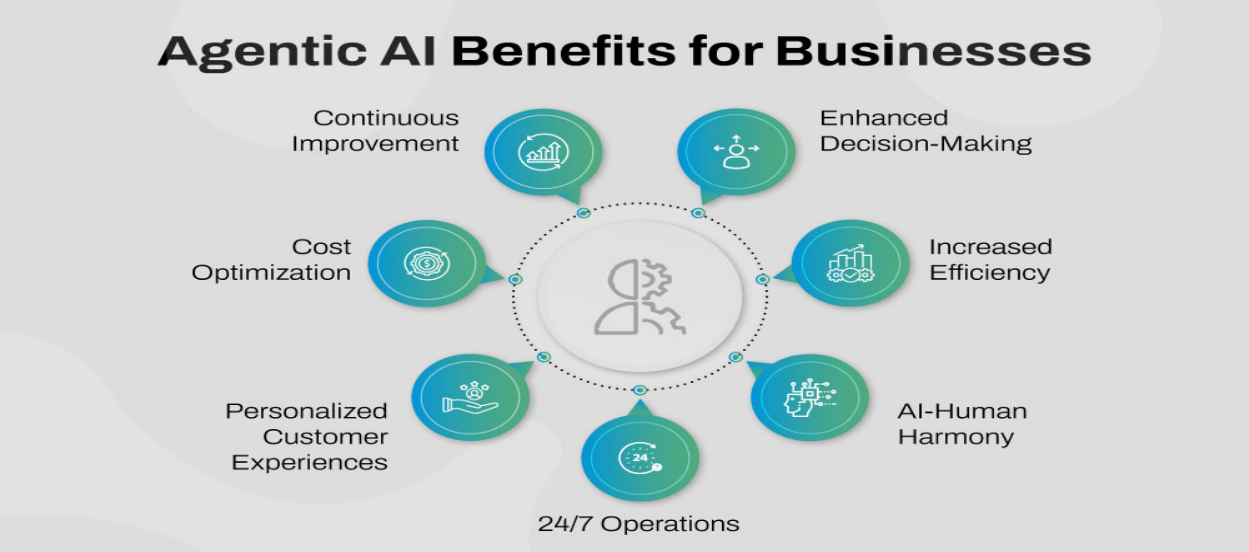
Agentic AI vs. Traditional AI

Traditional AI systems, such as Robotic Process Automation (RPA), follow fixed rules and predefined outcomes. In contrast, Agentic AI systems are dynamic and context-aware, capable of handling complex, decision-making processes that can adapt in real-time. This shift from rules-based automation to a more flexible approach marks a significant advancement in AI technology.

Benefits of Agentic AI

By powering next-generation AI agents to perform a wider array of tasks, Agentic AI offers several important benefits:

- ***Increased Efficiency and Productivity***: AI agents can take on complex, decision-intensive tasks, allowing people to focus on strategic initiatives and creative problem-solving.
- ***Enhanced Customer Experiences:*** AI agents provide personalized and responsive experiences at scale, improving customer satisfaction.
- ***Strategic Human-AI Collaboration:*** Agentic AI systems enhance human performance and productivity by seamlessly integrating with existing systems and processes.



Challenges and Ethical Considerations

While Agentic AI offers significant benefits, it also presents challenges, such as the potential for bias, mistakes, and inappropriate use. Ensuring responsible and ethical use of Agentic AI is crucial. Researchers and developers are actively working on frameworks and guidelines to ensure transparency, fairness, and accountability in AI-driven actions.

The Future of Agentic AI

As Agentic AI continues to evolve, it promises to bring significant benefits, including increased productivity, innovation, and insights for the human workforce. However, it is essential to harness the power of Agentic AI responsibly and ethically to ensure its development is safe and fair.

In conclusion, Agentic AI represents a significant leap forward in the field of artificial intelligence. By enabling machines to think, plan, and act autonomously, it has the potential to transform industries and improve our daily lives. As we navigate this new era, it is essential to harness the power of Agentic AI responsibly and ethically.

"From Exclusion to Inclusion: Transforming Access to Financial Services"

- A case study

Abstract

This case study explores the role of and customized financial products in promoting financial inclusion among underserved populations. It examines how tailored solutions, such as bill discounting facilities have successfully addressed barriers to access and usage of financial services. By analyzing specific case, the study highlights the strategies employed by financial institutions to engage low-income individuals and communities. Key findings reveal that innovative products not only enhance accessibility but also foster financial independence and empower users to manage their finances effectively. The case study concludes with a result that encourages financial service providers to further leverage innovation in driving inclusive economic growth and improving the financial well-being of marginalized groups.

Key word : *Micro finance, Agri lending , Financial inclusion , Banking , Formal credit*

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Beginning of Sagar's Journey :

Sagar joined the bank as a Directly Recruited Officer (DRO) after completing his BBA. In his first week at the bank, he was handpicked to run a "Mobile Banking Activation" campaign as part of the bank's digitalization initiative. Sagar outperformed management's expectations, and the zone ranked first in the campaign across India. Soon, he won the trust of his superiors and was assigned the task of leading all major campaigns in the zone. The zone achieved the targets for all campaigns led by Sagar. Upon completing five years of service, he was promoted to the rank of Senior Manager.

Upon promotion, he was transferred to the Bhingri Branch as Branch Head. The branch's business was constantly declining, with all business parameters showing negative results. There were pending irregularities in advance accounts and frequent customer complaints regarding unresolved issues.

The Zonal Head was confident that Sagar would be the perfect

Branch Head to turn around the branch.

Bhingri Branch

The branch is located in the Krishnagiri District of Tamil Nadu and is categorized as a "semi-urban" branch.

Table 1 : Key Business Figures as of 31.03.2023 (Rs in Crores)

Particulars	Amount (A)	Target as of 31.03.2024 (B)	Gap (B-A)
Deposits	65.00	90.00	25.00
Advances	85.00	125.00	40.00
NPA	6.30	Nil	5.13
Profit/(Loss)	(0.30)	3.70	4.00

Staff Details:

- ***Sub Staff:*** Mohan – Aged 58 years
- ***Clerical Staff:*** Dipak – Head Cashier, Jaya – Works in the Credit Department, Ritika – Works in the Savings Department
- ***Officers:*** Mukesh joined the bank in 2019 and was in charge of the Operations Department. Uday joined the bank in 2020 and was in charge of the Advances Department.

The following work was pending in the branch:

1. Pending action to be taken (ATR) on 35 critical observations made by the internal auditor last year.
2. Review of all education loan and home loan accounts pending.
3. Internal credit ratings were not carried out in 33 accounts.
4. Periodic inspections pending in all MSME accounts.
5. Seven fresh MSME loan applications pending for processing.
6. Security documents not vetted in 36 accounts.
7. Letters of Acknowledgement of Debt not obtained in 56 accounts.
8. Insurance of securities had expired in all major accounts.
9. Financial statements and audited balance sheets were pending in MSME accounts.
10. Delay in submission of stock statements by borrowers.
11. No reviews were available for accounts that were marked as reviewed.
12. Priority sector business was negative by 138% as another bank took over one major account.

Sagar became overwhelmed as he unearthed the branch's pending issues. He remained optimistic that his senior colleagues and the management would provide the necessary support to turn around the branch.

Within a week of taking charge as Branch Head, the bank launched a priority sector loan campaign for a month .The target assigned to his branch was Rs. 30.00 crores. Sagar felt that the campaign was a launchpad for him to grab management's attention and earn recognition. He decided to focus on achieving the campaign's target.

Brief about the Campaign Score Sheet:

- One New to Bank (NTB) customer sanction: 3 points
- One NTB customer sanction and disbursement within the campaign period: 5 points
- One review with increased sanction: 2 points
- One review with increased sanction and disbursement: 3 points

- One takeover sanction: 4 points
- Takeover sanction and disbursement: 8 points
- On achievement of target: Bonus points 100

The branch that scores the highest and achieves the target will qualify for dinner with the Head of the Priority Sector vertical of the Bank.

Sagar held a meeting with the branch officers to express his concerns about the branch's "bad shape." He encouraged them to engage wholeheartedly in the campaign and assured them that he would handle the extra workload, including all follow-up calls from the Regional and Zonal offices. Uday and Mukesh agreed to support the campaign's targets. Sagar advised them to gather information on leading agri-based processing units in the area, knowing that meeting the target would depend on securing a significant lead from these units.

Uday reached out to Mr. Shankar, a chartered accountant and loan arranger, requesting priority sector agri-loan leads for the branch. Mr. Shankar, a well-known figure in town, had previously assisted the branch in securing large-ticket leads. He assured Sagar that he would support their goal of achieving ₹ 30 crores within a month.

One fine morning, Shankar visited the branch with Mr. Gopal Krishna, the promoter of Fruit Delight Agro Private Limited, a company that manufactures edible fruit juice under the brand name "Juicy" and exports mango pulp to various countries. The company had a solid financial standing. They requested assistance in providing liquidity to mango farmers (their creditors) by facilitating the immediate realization of crop receivables, as it typically took the company an average of six months to pay the farmers. Sagar reviewed the bank's product catalogue but found no such facilities offered in the priority sector segment. Nevertheless, he was determined to convert the lead into business, so he reached out to Mr. Desai, the priority sector head of the zone, to discuss the opportunity.

Mr. Desai had always regarded Sagar as the "cream of the crop" among all the branch heads. He was cordial, supportive, and listened patiently to Sagar's concerns. At the end of the meeting, he advised Sagar to prepare and design a new customized product scheme for the business lead, which the zonal office would then recommend for approval to higher authorities.

Sagar found himself in a dilemma; he had never designed a product before. Additionally, the pending compliance issues in the branch weighed heavily on his mind. It was essential for him to be firm, resolute, and committed to navigating this challenging situation.

Questions to consider after reviewing the case study :

1. What product can the bank offer to effectively convert the business lead?
2. Outline the features of the product that can support financial inclusion and cater to the microfinance segment, specifically targeting a large number of farmers. What will be the Terms & Conditions for the sanction ?
3. As Branch Head, what role must Sagar play in turning around the branch while ensuring that all pending compliance issues are addressed?

What happened next ?

Sagar left the Zonal office and headed to the branch to design an "effective product" that could meet the needs of loan applicants, particularly farmers, as well as those of the bank. He browsed the websites of leading public sector banks, the Reserve Bank of India, and agri-based NBFCs to gather ideas for suitable products. After spending half the day collecting data, he focused on a "bill discounting product" that could fulfil the requirements of all stakeholders while remaining cost-effective for both customers and the bank.

However, he recognized that "Fruit Delight Agro Private Limited" was a reputable company in the area, attracting interest from many banks eager to secure quality business from them. Sagar understood that only by offering cost-effective, customer-friendly, and timely loan approvals could he convert this opportunity into business. The pressure of racing against time, coupled with the challenges of product design and approval, was mounting on him.

Fruit Delight Agro Private Limited (FDAPL)

Fruit Delight Agro Private Limited (FDAPL), the flagship company of the Delight Group, operates in the fast-moving consumer goods and agri-related sectors. Established in 1999 as a franchisee of Delight Agro Pvt. Ltd. (DAPL), the company manufactures and markets DAPL's beverage brands (Juicy, Appy, Grappy, Mango Mania) and snack brand (Chippo) in Southern India from its factory in Krishnagiri, Tamil Nadu.

Building on its extensive experience in agri-business, the company expanded into the export of food items. This division exports products such as mango pulp, guava pulp, sesame seeds, and bakery ingredients to customers worldwide.

FDAPL exports a variety of mango pulps, particularly the Alphonso and Totapuri species, adhering to the highest quality standards. The manufacturing process complies with Good Manufacturing Practices and aligns with the General Principles of Food Hygiene. Additionally, the products meet EU and FDA regulations regarding pesticide residue and microbiological standards. In a short time, FDAPL has become India's leading exporter of mango pulp, supplying companies in the Middle East, Southeast Asia, and Europe.

FDAPL has acquired processing rights for mango pulp at plants located in Tamil Nadu. The company has partnered with SGS, a globally recognized firm in food quality, to certify the quality of its products at these plants.

Table 2 :Brief Financials of the Company : ***(Amt Rs in Crores)***

Particulars	Audited 2020	Audited 2021	Audited 2022	Audited 2023	Estimated 2024
Sales	314.08	304.60	318.27	423.00	524.77
Out of which Export Sales	85.66	82.03	105.72	156.60	274.83
PAT	4.33	1.13	2.04	1.61	17.22
Tangible Net Worth	70.27	71.27	80.31	107.53	124.97
Current Ratio	1.00	1.00	1.08	1.10	1.24
Current Ratio without TL Installments	1.07	1.06	1.18	1.27	1.37
DE Ratio (TTL/TNW)	1.02	1.07	1.12	0.87	0.87
DE Ratio (TOL/TNW)	3.50	2.97	3.36	1.98	1.98

Sagar called Mr. Desai to share his idea for developing a schematic bill discounting product, assuring him that he would send an approval note to the zone within three working days for recommendation to the Corporate office. Meanwhile, he received calls from the compliance and audit departments regarding pending issues, and some customers expressed frustration over delayed services and unresolved matters. He updated the branch officers on the progress of the lead and encouraged them to manage the day-to-day operations of the branch while he focused on this project. He assured them of his support, emphasizing that teamwork is essential for effective leadership.

Sagar reached out to Mr. Gopal Krishna, the promoter, to gather further details about the number of farmers they worked with, their operating cycles, average bill payment periods, and logistical data. Mr. Gopal Krishna was pleased to see Sagar's proactive approach.

The product program note was sent to the Zonal office for recommendation and subsequent submission to the Corporate office for approval. However, ten working days passed without any news about the scheme's approval, and Sagar anxiously awaited updates.

After a week, the Zonal office received approval for the scheme from the Corporate office, and the Zonal Head was delighted with Sagar's efforts. However, challenges remained. The Corporate office requested the zone to submit a complete appraisal note for the sanction, stating that funds would only be disbursed once all the farmers had executed the necessary documents. The zone had just ten working days to complete this task within the campaign period. The Zonal Head called Sagar to the branch, praised his efforts, and informed him of the deadlines. With a total of 100 farmers involved, completing the process was indeed a Herculean task.

Sagar began working late into the night to meet the deadlines, and within three days, the appraisal was forwarded to the Corporate office. On the sixth day, the sanction was granted, leaving the branch with four days to complete the documentation and disburse the funds.

Since the proposal was a specially designed schematic loan, the documentation differed from that of other loans. The branch prepared draft documents and had them vetted by the legal department. On the penultimate day of the campaign, the documents were executed with the assistance of the Zonal office staff, and the funds were disbursed. The focused efforts of Sagar, along with support from the Zonal and Corporate offices, proved fruitful.

It was encouraging to see a significant number of farmers brought under the umbrella of formal credit. The bank's innovative approach played a crucial role in achieving the priority sector targets.

Sagar won the campaign and qualified for a "Dinner with the Head of the Priority Sector vertical." The zone achieved record success in the campaign. During the felicitation ceremony, he was awarded the winner's trophy, and his chest swelled with pride.

The Zonal Head, Mr. Shah, felt he had made the right decision in entrusting the branch to Sagar, pleased that Sagar effectively leveraged Shankar's skills.

Compliance:

The branch successfully completed the pending compliance issues, with all staff members actively contributing to the branch's improvement. The rating of the branch improved from B (average) to A (good) in the subsequent annual audit.

Teaching notes :

Learning Objectives: The aim is to raise awareness among branch heads and credit officers about the importance of generating business leads and enhancing the bank's business development efforts. Special focus will be given to the challenges of lending to economically disadvantaged groups, which often arise from limited financial data, unstable cash flows, and information asymmetry.

Case Administration Methodology:

1. Divide participants into groups of 3-4 individuals.

2. Each group will elect a Group Leader.

3. Groups will discuss and list their opinions on the introductory questions provided.

4. Group Leaders will then present the insights gathered from their discussions.

5. The Case Administrator will compile all points shared by the Group Leaders to identify potential solutions.

Suggestive answers:

The product that the Bank can offer to the farmers is Bill discounting, it is a financial service offered by banks or financial institutions that allows businesses to receive immediate cash by selling their bills of exchange or promissory notes at a discount before their maturity date. The farmers raise the bill in favour of the company, which can be discounted at reasonable charges. FADPL, a renowned company with a strong financial position, ensures the bill is realised on time. Therefore, bill discounting would be a suitable product for the farmers.

Here's how it works:

- ***Issuance of a Bill:*** A seller (farmers) issues a bill of exchange to a buyer (FADPL), indicating that the buyer will pay a specific amount on a specified date.
- ***Discounting the Bill:*** Instead of waiting for the payment to arrive on the due date, the seller (Farmers) approaches a bank or financial institution to discount the bill. The bank will pay the seller(FADPL) the face value of the bill minus a discount fee (which is the interest for the remaining period until maturity).
- ***Maturity Payment:*** When the bill matures, the bank collects the full amount from the buyer (FADPL)
- ***Handling number of borrowers:*** Given the large number of farmers, the formation of Joint Lending Groups (JLGs) can be proposed, allowing facilities to be granted to each individual JLG.

Benefit of Bill discounting facility :

For the Bank:

- ***Fee Inc***ome: The bank earns fee on the discounted bills, generating a steady stream of income.
- Risk Mitigation: By dealing with verified clients and businesses, the bank can reduce the risk associated with lending.
- Enhanced Customer Relationships: Offering bill discounting can strengthen relationships with clients, leading to increased loyalty and potential for cross-selling other banking products.
- Portfolio Diversification: It allows the bank to diversify its lending portfolio by including trade finance products.
- Reduced Default Risk: Bills of exchange are generally backed by the buyer's creditworthiness, lowering the chances of default.

For the Buyer:

- ***Extended Credit Period:*** Buyers can manage their cash flow better by extending the time to pay suppliers while still maintaining good relationships.
- ***Improved Purchasing Power:*** Access to discounted bills allows buyers to acquire products without immediate cash outflow.
- ***Facilitated Trade:*** This facility enables smoother transactions between buyers and sellers, fostering a more efficient supply chain.
- ***Financial Flexibility:*** Buyers can utilize their working capital more effectively, allocating funds to other business needs.

For the Seller:

- ***Immediate Liquidity:*** Sellers receive cash quickly by discounting their bills, improving their cash flow and reducing waiting time for payments.
- ***Reduced Credit Risk:*** Selling to a buyer with a bill discounting arrangement reduces the risk of non-payment, as the bank assumes some risk.
- ***Business Growth:*** With immediate cash, sellers can reinvest in their business, purchase more inventory, or expand operations.
- ***Improved Cash Management:*** Faster access to funds helps sellers manage their operational

expenses more efficiently.

Overall, a bill discounting facility provides significant advantages to banks, buyers, and sellers, enhancing liquidity and facilitating smoother trade transactions.

Answer 2:

Objective of the scheme :

To provide liquidity to the mango farmers by immediate realisation of crop receivables under tie up arrangement with M/s Fruit Delight Agro Private Limited (FDAPL).

[Company is making payment to the farmers after six to nine months. As a result farmers face liquidity crunch]

1. Eligibility:

1) Mango farmers supplying mango to M/s Fruit Delight Agro Private Limited (FDAPL) through Joint Lending groups (JLG).

2) Group (JLG) of mango cultivators who supply Totapuri and Alphanso mangoes to M/s Fruit Delight Agro Private Limited (FDAPL), a company engaged in manufacturing of edible fruit juice under brand name of 'Juicy"

3) Each group will consist of up to 10 farmers from same / nearby villages normally engaged in similar agriculture / orchard related activities.

4) In each group, all members would jointly execute one Inter-se agreement (making each one jointly & severally liable for repayment of all loans taken by the group). The members should also offer a joint mandate (notarized) to the bank to enable them to avail credit facilities. The mandate is to be signed by all members and to be supported by resolution of the Group.

5) Groups / Farmers will be initially introduced by FDAPL based on satisfactory dealings for 2/3 years with FDAPL & our Bhingri branch should undertake due diligence. FDAPL will identify the group members with the help of their field staff.

6) The defaulters to any Financial Institution/ Bank are not eligible for credit facilities under the subject Scheme; suitable undertaking is to be obtained as per extant guideline.

7) Under the scheme, due date of receivables shall be six to nine months from the date of supply of Mango/receipted challan and Bill of Exchange is to be drawn accordingly. There should be adequate consideration for the farmers to accept credit terms. Farmers should be economically benefited by better price or other financial pay off, so that they have incentive to accept delayed payment by six to nine months from FDAPL over immediate selling in the open market against cash.

2. Loan Amount:

The loan amount will be to the extent of value supplied by the farmers or Rs 30.00lacswhichever is less and maximum loan amount per Joint Liability Group (Max. of 10 farmers) is aggregate of loan amount of its members or maximum Rs30.00 Crs whichever is less. The total exposure under the scheme shall not exceed Rs 30/- Crore at any point of time.

3. Nature of Facility:

Bill Discounting facility maximum up to Rs 300.00 lacs to individual JLGs and Rs 30.00 lacs each JLG members, maximum up to 10 members in each JLG

(The facility is not for growing of mango plant but a post-sale comfort provided to the farmers selling Mango to FDAPL. As such cost of cultivation and fixing of working capital required for growing of mango has not been considered under this scheme.)

4. Margin:

NIL ; If value of mango supplied by the individual farmer of the JLG, is in excess of Rs 30.00 lacs, then amount exceeding this to be borne by the farmer.

5. Rate of Interest & other Charges:

(a) ***ROI:*** BR+1.00% p.a. to be recovered upfront under discounting module. (Subject to change as per Bank's guidelines)

(b) ***Unified Processing Charges -*** Not applicable, since this is a bill discounting facility.

(c) ***Bills handling charges –*** Bills handling charges as applicable as per service charges with cap of Rs 10000/- per JLG only.

(d) ***Management Fee*** - Rs 100,000/- from the FDAPL.

6. Security:

- Bill of exchange drawn by respective JLGs on M/s Fruit Delight Agro Private Limited , duly accepted by Fruit Delight Agro Private Limited with maximum tenor of 9 months.
- Letter of B.P. /B.D. Undertaking in respect of bills purchased for Mango supplied by respective JLGs to M/s Fruit Delight Agro Private Limited .
- Joint and several liabilities of group members in case of group lending (within group).
- Inter-se agreement by group members making each one jointly & severally liable for repayment of all loans taken by the group.
- Original copy of Challan / Invoice in evidence against physical delivery to FDAPL
- Corporate guarantee of M/s Fruit Delight Agro Private Limited
- Personal guarantee of promoter directors of FDAPL viz. Shri Gopal Krishna

7. Disbursement:

1. Initially FDAPL will introduce farmers forming a JLG from whom Totapuri and Alphanso mango will be procured. FDAPL will verify quality and negotiate price.
2. FDAPL will facilitate/assist undertaking due diligence, obtaining copies of required papers/documents and verification by the Branch and ensure KYC of the borrowers/groups.
3. FDAPL will assist the group for opening of an operative account with the Bhingri branch.
4. After finalisation of deal and after delivery of produce by the JLG members to FDAPL, the groups will approach the Bhingri branch for finance against original copies of accepted Bills by FDAPL.
5. The financing branch shall disburse the full receivables amount less the interest amount and other charges directly to account of groups opened in the name of the JLG. The amount shall be remitted to the Bank A/c maintained with the Bhingri Branch.
6. FDAPL will undertake to make payment of the bill directly to the Bank on the due date.

8. Security Documents to be obtained:

- KYC Document from farmers:
  - ✓ All applicable documents for individual KYC of farmer shall be obtained along with relevant documents in case of Joint Lending Group.
- Common Document for all credit facilities:
  - ✓ Appropriate resolutions form M/s Fruit Delight Agro Private Limited .
  - ✓ Letter of recommendation for financing farmers/groups
  - ✓ Separate Guarantee Deeds signed by FDAPL and promoter directors
  - ✓ Undertaking by Fruit Delight Agro Private Limited . to pay amount of bill on due date

directly to Bhingri branch.

- All other documents relevant far such type of advance

- Tripartite agreement among farmers/groups, FDAPL & the Bank, authorizing the bank to extend loan to group of farmers against supply of mango to Fruit Delight Agro Private Limited

- Agency agreement between FDAPL and the bank, whereby the FDAPL confirm and agrees that they will act as an agent of the bank to ensure that genuine farmers will receive the credit and they will be obliged to perform their roles as agreed. Roles and responsibilities shall be clearly defined in the agreement. Agreement shall also include following terms:

  - ✓ Fruit Delight Agro Private Limited . shall directly deposit the payment in respect of receivable to the farmers / groups to the financing Branch on demand /due date of the bills by the financing branch.

  - ✓Fruit Delight Agro Private Limited . shall be responsible for and bear any statutory or other liability / obligation / penalty arising due to delayed payment to the farmer / groups.

  - ✓Fruit Delight Agro Private Limited . shall understand and agree that only on their sole representation, the Bank has agreed to discount the supply bill drawn by the farmers/groups on FDAPL and FDAPL are solely responsible for payment of bill amount on due date.

- Copies of the entire KYC document of the farmers/groups are to be collected by the financing branch from the branch where the groups opened their operative accounts.

9. Other Service Charges:

All other charges to be recovered as applicable.

10. Due Diligence / KYC:

- The Bhingri Branch will have to carry out requisite KYC formalities for the groups.

- Due diligence of borrowers/guarantors shall be carried out by the Bhingri Branch

11. Role of Fruit Delight Agro Private Limited :

- FDAPL shall collect application for credit facilities and SB Account Opening form from the JLGs for the participating farmers / groups along with required documents for compliance of KYC.

- FDAPL shall send the applications for credit facilities to Bhingri Branch along with recommendation letter and a statement indicating member/group wise amount of loan recommended by them for sanction along with value of mango supplied by JLG.

- The Branch will discount the bills as per eligibility after processing at their end and provide the bill discounted details to M/s Fruit Delight Agro Private Limited who will act as guarantor.

- On due date of the bills, M/s Fruit Delight Agro Private Limited shall directly make payments to the bank.

Table 3: Terms & Condition of Sanctions

A	**Nature of Facility**	**Bill discounting facility to Joint Liability Group(JLG) formed by mango Cultivators supplying mango (Totapuri & Alphanso) to Fruits Delight Agro Private Limited**
	Eligibility	Joint Liability Group to be introduced by FDAPL with Maximum farmers of 10 in each JLG (No individual Borrower is to be entertained)

	Purpose	To meet the financial need of the farmers/JLGs who supply mango to FDAPL only
	Extent of loan	Extent of value of receivable supplied by Farmers or Rs.30.00 lacs per farmer, whichever is lower. Loan amount of the group is the aggregate of loan amount of its member, maximum up to Rs.300.00 lacs per JLG Total exposure under the scheme shall not exceed Rs.30.00cr at any point in time
	Tenure of loan	Maximum 9 months
	Margin	Nil,if value of mango supplied by the individual farmer of the JLG,is in excess of Rs.30.00 lacs ,then amount exceeding this is to be borne by the farmer
	Rate of Interest	Base Rate +1.00% P.A (Subject to change as per Bank;s guidelines)
	Prime Security	**1.**D P Note 2.Bill of exchange drawn by respective JLGs on M/s Fruit Delight Agro Private Limited ,duly accepted by Fruit Delight Agro Private Limited with Maximum tenor of 9 months **3.**Letter of B P /BD undertaking in respect of bills purchased for mango supplied by respective JLGs to M/s Fruit Delight Agro Private Limited
	Collateral Security	a. Joint & several Liabilities of group members b. Corporate guarantee by M/s Fruit Delight Agro Private Limited c. Personal Gaurantee of Mr.Gopal Krishna
	Service charges	1.Bills handling charges as applicable as per service charges with cap of Rs.10000/- per JLG 2.Management fee of Rs.100000/- to be shared by discounting Bank.
	Disbursement	• The operative account and the loan account will be opened in the name JLG to be operated by group leader (Notarized joint mandate) based on inter se agreement supported by resolution of JLG • Farmers/JLG will be introduced by and identification of group members will be done by FDAPL • Farmers shall supply mangoes to FDAPL and raise bills against the same which if found in order will be accepted byFDAPL • The accepted receivable bills shall be submitted to Bhingri Branch by JLG for discounting • Branch after compliance of laid down norms will discount the bills and disburse the amount net of interest and commission to credit of the operative account of JLG

	Other Documents	• Original copy of challan/Invoice in evidence against physical delivery to FDAPL • Original Copy of the Transport receipt of the goods from the farmer to the processing unit of FDAPL • Appropriate resolution from Fruit Delight Agro Private Limited for recommendation for financing the group and extension of their corporate Guarantee • Copy of procurement agreement entered by FDAPL with the group • KYC documents of Farmers & JLG duly verified by local branch • Tripartite agreement among JLG, FDAPL & Bank, authorizing the Bank to extend loan to JLG against supply of goods to FDAPL & FDAPL will be liable to repay the loan to bank on due date. Agreement shall also include the following term that FDAPL shall be responsible for and bear any statutory or other liability/obligation/penalty arising due to delayed payment to Bank on due date. • Undertaking by Fruit Delight Agro Private Limited to pay amount of bill on due date directly to the Bank. • Declaration cum undertaking cum Authority by JLG. • Undertaking from JLGs that they have not availed /received finance from any Bank / FIs and that they are not defaulters of any Bank /FIs. • Joint and several liabilities of group members in case of group lending (within group) • Inter Se agreement by group members must make each one jointly and severally liable for repayment of all loans taken by the group. • Agency agreement between FDAPL and the Bank ,whereby the FDAPL confirm and agrees that they will act as an agent of the bank to ensure that genuine farmers will receive the credit .Roles and responsibilities shall be clearly defined in the agreement .Agreement shall include the following terms : ➢ Fruit Delight Agro Private Limited shall directly deposit the payment in respect of receivable to the farmers/groups to the financing Branch on demand /due date of the bills by the financing Branch. ➢ Fruit Delight Agro Private Limited shall be responsible for and bear any statutory or other liability /obligation/penalty arising due to delayed payment to the farmer /groups ➢ Fruit Delight Agro Private Limited shall understand and agree that only on their sole representation, the Bank has agreed to discount the supply bill drawn by the farmers/groups on FDAPL and FDAPL are solely responsible for payment of bill amount on due date.

Answer 3 :

Vision and strategies adopted by Sagar to turnaround the branch

Vision

Sagar decided to have the following vision for the branch

- Transform the branch into a top performer while ensuring compliance and driving business growth.
- Achieve the branch's targets during campaign periods to enhance its brand image.

Strategy

To improve the branch immediately, Sagar decided to create a roadmap for transformation and development, taking necessary measures based on various change indicators. After implementing the roadmap, he established a continuous refinement and monitoring process. To achieve this vision, he chose to adopt the following strategies:

a) To connect with staff and bring pride in them

b) To connect with people who could generate quality business

c) Stay focused, negotiate effectively, and work diligently toward achieving the goal.

Execution

He acted swiftly on opportunities with determination and killer instinct, all the stakeholder aligned to the agile culture and worked towards the common goal as a team. Sagar's confidence and positive outlook was instrumental in conversion of the lead , the tailor made solution provided by the Bank strengthened the relationship with reputed client like FDAPL , the extra mile effort of Sagar was worth enough to turnaround the branch. He adopted following methods to execute the strategies:

- ***Communication:*** Sagar clearly articulated goals, expectations, and feedback. He maintained open lines of communication with both his subordinates and top management.
- ***Decision-Making:*** He made informed and timely decisions that benefited the branch.
- ***Motivation:*** He inspired and encouraged team members to perform at their best.
- ***Strategic Thinking:*** He developed and implemented long-term strategies for growth by focusing on quality and high-value business leads.
- ***Adaptability:*** He responded to changing circumstances and challenges with flexibility and a positive approach.
- ***Coaching and Mentoring:*** He provided guidance and support to team members for their development, assuring them that he would always be available to help.
- ***Empathy:*** He understood and considered the needs and perspectives of the team.
- ***Accountability:*** He took responsibility and ownership for the branch's performance and outcomes.
- ***Visionary Thinking:*** He created a clear and compelling vision for the branch's future, aimed at achieving targets and completing pending compliance.

Steps Taken for Increasing Team Synergy:

1. Sagar conducted a staff meeting in which he conveyed his objectives to the team.
2. He had one-on-one interactions with his staff to understand their mindsets, asking about their personal lives and whether they were facing any problems, both personally and professionally.
3. He made it clear to everyone that there should be no senior-junior divisions; we would work as a team.
4. To acknowledge small achievements and excellent customer service, he would recognize employees, thereby boosting their confidence.
5. To increase team synergy, he organized meetings and small gatherings for staff along with their family members.
6. He instructed the staff to address any pending tasks first, and he personally monitored their progress to ensure nothing was left unresolved, which helped reduce customer complaints.

Steps Taken for business development:

- He focused on customer retention by organizing regular customer meetings to understand their problems and taking the opportunity to promote our various products.

- He increased the branch's visibility through hoardings and posters displayed outside the premises.
- He nominated his staff for various training programs to enhance their product knowledge.
- As improvements in branch performance became evident, the Regional Office assigned an officer to support the branch in completing pending reviews.
- The satisfaction and comfort experienced by customers enabled the branch to effectively cross-sell products, helping to achieve its targets. FDAPL played a key role in generating additional business for the branch. Mr. Gopal Krishna's trust and confidence in the branch were crucial in establishing it as the primary bank for FDAPL. As a result, all cash collections, deposits, and employee salary accounts were transferred to Bhingri Branch from other banks.

Epilogue

In the wake of Sagar's successful initiative to develop a tailored bill discounting product, Fruit Delight Agro Private Limited (FDAPL) emerged as a key beneficiary, significantly enhancing its operational efficiency and financial stability. The timely disbursement of funds not only empowered the farmers involved but also solidified the bank's position as a trusted partner in the agricultural sector.

Sagar's journey exemplified the power of proactive leadership and collaboration. His ability to navigate complex challenges while fostering teamwork within the branch was pivotal in achieving the ambitious campaign targets. The branch's improved compliance rating and the recognition Sagar received were testaments to the collective effort of all involved.

As the bank continued to expand its portfolio of innovative financial products, it reinforced its commitment to financial inclusion, ensuring that even the most underserved segments of society had access to the capital they needed to thrive. The successful implementation of the bill discounting facility paved the way for future initiatives aimed at supporting agricultural and microfinance sectors.

Reflecting on this experience, Sagar recognized the importance of adaptability and foresight in the ever-evolving landscape of banking. The lessons learned from this endeavor would not only shape his future projects but also serve as a blueprint for colleagues across the organization. As he looked ahead, Sagar was motivated to continue driving positive change, ensuring that the bank remained a vital force in fostering economic growth and development within the community.

The story of this campaign became an inspiring case study within the bank, highlighting the impact of strategic innovation and the vital role of dedicated leadership in achieving success.

Suggested Readings:

Financial Inclusion

1. "Banking the Poor: Policies to Bring Low-Income Americans into the Financial Mainstream" by Robert D. Manning
2. "The End of Poverty: Economic Possibilities for Our Time" by Jeffrey D. Sachs
3. "Financial Inclusion: How to Make it Happen" by Atul K. Ghosh
4. "Inclusive Finance India Report" (annual publication by the ACCESS Development Services)
5. "The New Microfinance Handbook: A Financial Market System Perspective" by Joanna Ledgerwood

Microfinance

1. "Banker to the Poor: Micro-Lending and the Battle Against World Poverty" by Muhammad Yunus

2. "Microfinance Handbook: An Institutional and Financial Perspective" by Joanna Ledgerwood

3. "The Microfinance Revolution: Sustainable Finance for the Poor" by Marguerite S. Robinson

4. "Small Loans, Big Dreams: How Money is Changing the Lives of the Poor" by Lenddo

5. "Building a Better Microfinance System" by Mary Ellen Iskenderian

Bill Discounting

1. "Trade Finance: A Practical Guide to Risk Management" by Christopher M. McLain

2. "Principles of Financial Management" by Lawrence J. Gitman

3. "Financial Markets and Institutions" by Frederic S. Mishkin and Stanley G. Eakins

4. "International Trade and Finance" by Gerald A. Cohen

5. "Working Capital Management: Tools and Techniques" by David H. W.

The Phase of Fraud Detection and Cybersecurity in Banks

Before and After AI Integration

Dr. Jyotsna Haran
Presently visiting Professor in Mumbai

Primer

Central banks play a critical role in shaping the economic landscape of a country. They regulate monetary policy, control inflation, manage currency supply, and ensure financial stability. With advancements in technology, Artificial Intelligence (AI) is increasingly being integrated into central banking functions to enhance efficiency, decision-making, and fraud detection.

The ***Reserve Bank of India (RBI)*** has always played a crucial role in ensuring the security and stability of India's financial system. Before the advent of Artificial Intelligence (AI) and advanced digital tools, fraud detection and cybersecurity relied on manual checks, rule-based systems, and periodic audits. However, with the integration of AI, Machine Learning (ML), and advanced analytics, the RBI has significantly improved fraud detection, risk mitigation, and real-time threat monitoring.

Organizational Structure of Central Banks

The organizational setup of a central bank typically consists of several key components that facilitate smooth financial regulation and policy implementation such as-

1. Governing Body: The highest authority in a central bank is usually the board of governors or a monetary policy committee. This body makes crucial decisions on interest rates, inflation targets, and financial policies. For example, the ***Federal Reserve Board*** in the United States sets monetary policy and regulates the financial system.

2. Governor and Deputy Governors: The governor serves as the chief executive, overseeing the central bank's operations. They are often assisted by deputy governors responsible for specific functions such as monetary policy, banking supervision, or economic research. The ***Reserve Bank of India (RBI)***, for instance, has a Governor supported by several Deputy Governors managing different operational areas.

3. Departments and Divisions: Monetary Policy Department: Develops and implements monetary policies to control inflation and stabilize the economy. ***The European Central Bank (ECB)*** plays a significant role in setting monetary policy across the Eurozone.

- ***Financial Supervision Division:*** Ensures that banks and financial institutions comply with regulatory guidelines. ***The Bank of England's Prudential Regulation Authority (PRA)*** oversees the stability of financial firms.

- ***Currency Management Division:*** Oversees the issuance and circulation of currency to maintain financial stability. ***The People's Bank of China (PBOC)*** manages the issuance of the Chinese yuan.

- ***Research and Statistics Unit:*** Conducts economic research and provides data-driven insights for policy decisions. ***The Bank of Japan (BOJ)*** has a dedicated Research and Statistics Department that provides analysis for policy planning.

- ***Foreign Exchange and Reserves Management:*** Manages foreign currency reserves and exchange rate policies. ***The Swiss National Bank (SNB)*** is known for its significant role in foreign exchange interventions.

4. ***Regional Offices:*** Many central banks operate regional branches to implement policies at a local level and monitor banking activities nationwide. The ***Federal Reserve System*** has 12 regional banks across the U.S. to ensure localized financial stability.

Role of Artificial Intelligence in Central Banking

The emergence of AI has transformed various aspects of central banking, improving decision-making, financial oversight, and operational efficiency. The key applications of AI in central banks include:

- Monetary Policy Formulation: AI-driven analytics help in forecasting economic trends, inflation rates, and employment patterns, enabling data-driven monetary policy decisions. ***The Bank of Canada*** has been utilizing machine learning models to predict inflation trends more accurately.

- Fraud Detection and Financial Supervision: AI algorithms detect unusual transactions and fraudulent activities in the banking system, enhancing regulatory compliance and cybersecurity. ***The Monetary Authority of Singapore (MAS)*** employs AI-driven fraud detection systems to combat financial crimes.

- Risk Assessment and Management: AI models analyze market risks, credit risks, and systemic financial threats, assisting central banks in proactive risk mitigation. ***The European Central Bank (ECB)*** uses AI to conduct stress tests on major financial institutions.

- Predictive Analytics for Economic Trends: Machine learning algorithms analyze large datasets to predict economic downturns, helping policymakers take preventive actions. ***The Reserve Bank of Australia (RBA)*** leverages AI for economic forecasting.

- Automated Reporting and Compliance: AI streamlines financial reporting processes, ensuring accurate regulatory compliance with reduced human intervention. The Bank of England has implemented AI tools to improve regulatory reporting from financial institutions.

➢ Customer Service and Digital Assistants: Many central banks use AI-powered chatbots to handle queries from commercial banks and financial institutions, improving communication efficiency. The People's Bank of China (PBOC) has adopted AI-based digital assistants to provide real-time support for financial institutions.

➢ AI in the Reserve Bank of India (RBI): The RBI has been increasingly integrating AI into its operations. It uses AI-driven models to detect fraudulent transactions, assess credit risks, and predict economic indicators. Additionally, the RBI's AI-powered chatbot, Sachet, assists consumers in lodging complaints against unauthorized deposit schemes. The RBI has also explored AI applications in regulatory technology and supervisory technology to enhance compliance monitoring and financial oversight.

Challenges and Considerations

Despite the benefits of AI in central banking, certain challenges must be addressed:

- **Data Privacy and Security:** Ensuring that AI systems comply with strict data protection regulations.
- **Algorithm Bias:** Preventing biased AI models that may lead to unfair financial decisions.
- **Integration with Legacy Systems:** Updating traditional banking systems to seamlessly incorporate AI technologies.
- **Ethical and Transparency Concerns:** Maintaining transparency in AI-driven decision-making processes.

The organizational structure of central banks is designed to ensure economic stability, monetary control, and financial regulation. With the advent of AI, central banks are now leveraging technology to enhance efficiency, risk management, and predictive analytics. While AI presents numerous opportunities, it is crucial to address security, bias, and regulatory challenges to maximize its potential in central banking operations. As AI continues to evolve, its role in central banking is expected to expand, further modernizing financial systems and improving global economic stability.

Fraud Detection and Cybersecurity before AI Integration – RBI Status

1. Manual Fraud Detection and Audits

➢ Financial fraud detection was primarily manual and rule-based, relying on bank staff to review transaction patterns.

➢ Regular audits and inspections were conducted to identify fraudulent activities, which often led to delayed detection.

- Live Example: The Harshad Mehta Scam (1992) – Due to manual oversight and lack of real-time monitoring, stock market manipulation went undetected for years, causing significant financial losses.

2. Rule-Based Security Systems

- Banks and financial institutions followed preset rules to identify fraud patterns (e.g., flagging transactions above a certain amount or monitoring irregular account activities).
- Cybersecurity relied on firewalls and encryption, but lacked real-time monitoring and advanced threat prediction.
- Live Example: The Satyam Scam (2009) – Lack of an AI-driven fraud detection system allowed financial manipulation in corporate accounts to go unnoticed for years, leading to a corporate fraud of over ₹7,000 crore.

3. Delayed Fraud Reporting and Response

- Banks reported fraud cases to the RBI after discovery, often leading to long investigation periods.
- Fraud detection was primarily based on customer complaints, manual verification, and retrospective analysis.
- Live Example: The Punjab National Bank (PNB) Scam (2018) – Fraudulent LoUs (Letters of Undertaking) worth ₹11,400 crore issued by PNB went undetected for years due to a lack of real-time fraud monitoring systems.

4. Limited Consumer Protection

- Customers were often held responsible for fraudulent transactions if they failed to report them on time.
- Banks had less proactive fraud prevention, focusing more on post-fraud recovery rather than real-time prevention.

- Live Example: Many customers suffered financial losses in early phishing scams because banks lacked AI-driven real-time fraud alerts and behavior analysis.

Fraud Detection and Cybersecurity after AI Integration – RBI Status

1. AI-Powered Real-Time Fraud Detection

- AI-driven systems analyze large volumes of transactions in real time, identifying suspicious activities instantly.
- Machine Learning algorithms detect anomalous behavior based on historical fraud data and proactively flag high-risk transactions.
- Live Example: In 2021, the RBI mandated AI-powered fraud detection models for digital payment platforms such as UPI, RTGS, and NEFT, significantly reducing unauthorized transactions.

2. Predictive Analytics for Risk Assessment

- AI models predict fraud trends by analyzing historical fraud patterns and market behavior.
- Live Example: The RBI's Early Warning Signals (EWS) System flagged high-risk loans in Yes

Bank and DHFL, helping to detect financial stress before it turned into a crisis.

3. Automated Reporting and Instant Alerts

- AI enables real-time fraud reporting, reducing response times and improving regulatory oversight.
- Banks use chatbots and AI-based support systems to assist customers in reporting fraud instantly.
- Live Example: The Central Fraud Registry (CFR), implemented by RBI, has helped Indian banks track fraudulent borrowers in real time, preventing repeat fraud.

4. Enhanced Cybersecurity with AI

- AI-driven cybersecurity solutions detect phishing, malware, and cyberattacks before they impact banking systems.
- Banks deploy AI-based biometric authentication and advanced encryption to protect customer data.
- Live Example: In 2020, AI-based security algorithms helped State Bank of India (SBI) prevent a major cyber fraud attempt on digital banking services.

5. Improved Consumer Protection

- AI enables automated reimbursement processing for unauthorized transactions.
- AI-based fraud monitoring helps customers avoid financial losses through real-time alerts and fraud prevention measures.
- Live Example: RBI's AI-driven fraud detection tools helped detect fraudulent instant loan apps, leading to regulatory action against unauthorized FinTech platforms.

The integration of AI has revolutionized fraud detection and cybersecurity in the RBI. Earlier, fraud detection was slow, rule-based, and reactive, often allowing fraudsters to exploit system loopholes. With AI, fraud detection has become proactive, predictive, and real-time, ensuring stronger financial security. The RBI continues to evolve its AI-based cybersecurity framework, making India's banking ecosystem more resilient against fraud and cyber threats.

Impact of AI on Operations of RBI & PSB

Artificial Intelligence (AI) has significantly transformed the way financial institutions operate, including central banks like the ***Reserve Bank of India (RBI).*** The adoption of AI has enhanced efficiency in regulatory processes, financial monitoring, fraud detection, and economic forecasting. By integrating AI-driven tools, the ***RBI*** has strengthened its oversight mechanisms, improved decision-making, and streamlined operations.

Artificial Intelligence (AI) has become a crucial tool for enhancing efficiency, security, and decision-making in the financial sector. The ***Reserve Bank of India (RBI)*** and ***Public Sector Banks (PSBs)*** have both integrated AI into their operations, albeit with different objectives and implementations. While the ***RBI*** primarily focuses on regulatory oversight and financial stability, PSBs leverage AI to enhance customer service, risk management, and operational efficiency.

Key Areas Where AI Has Impacted RBI Operations

AI in the Reserve Bank of India (RBI)

1. Regulatory
2. Technology and Supervisory Technology

AI has enabled the RBI to automate regulatory and supervisory functions. With machine learning algorithms, the central bank can analyze vast amounts of financial data in real-time, ensuring compliance by financial institutions. These AI-driven solutions help detect irregularities, prevent financial fraud, and streamline reporting processes.

The RBI employs AI for policy formulation, financial monitoring, and fraud detection. Some key AI-driven initiatives by the RBI include:

2. Fraud Detection and Cybersecurity

The RBI uses AI-powered tools to identify fraudulent transactions and potential financial threats. By analyzing transaction patterns and detecting anomalies, AI assists in preventing money laundering, cyber-attacks, and financial fraud. This has strengthened the Reserve Bank's Financial Intelligence Unit and improved risk mitigation strategies.

1. ***Regulatory Technology and Supervisory Technology:*** The RBI uses AI-driven models for real-time monitoring of financial institutions, ensuring compliance with regulatory guidelines.

2. ***Fraud Detection and Risk Management:*** AI algorithms analyze transaction patterns to identify fraudulent activities and mitigate systemic risks.

3. ***Monetary Policy and Economic Forecasting:*** AI-driven analytics assist in predicting inflation trends, economic growth, and financial stability indicators.

4. ***Consumer Grievance Redressal:*** The RBI has introduced AI-powered chatbots like Sachet to assist consumers in lodging complaints against unauthorized financial schemes.

AI plays a crucial role in economic data analysis, enabling the RBI to predict inflation trends, GDP growth, and employment rates. By using AI-driven predictive models, the central bank can make data-driven monetary policy decisions, ensuring economic stability and effective inflation control.

AI in Public Sector Banks (PSBs)

4. Customer Grievance Redressal

To enhance consumer protection, the RBI has introduced AI-powered chatbots like Sachet, which assist customers in lodging complaints against fraudulent financial schemes. These automated solutions improve response times and provide real-time assistance to consumers, enhancing overall transparency in the financial sector.

PSBs integrate AI into their banking services to enhance customer experience and optimize operations. Some key applications of AI in PSBs include:

5. Foreign Exchange and Market Surveillance

AI-driven analytics allow the RBI to monitor currency fluctuations, foreign exchange reserves, and financial markets more effectively. With real-time data processing, AI helps in making informed decisions regarding exchange rate policies and foreign investments, ensuring market stability.

1. ***Chatbots and Virtual Assistants:*** Many PSBs, such as the State Bank of India (SBI) and Punjab National Bank (PNB), use AI-powered chatbots like SBI's YONO to provide real-time customer support and banking services.

2. ***Credit Risk Assessment:*** AI helps banks assess creditworthiness by analyzing financial history,

transaction patterns, and alternative data sources.

3. ***Fraud Prevention and Cybersecurity:*** AI-driven security systems detect and prevent fraudulent transactions by analyzing anomalies in real-time.

4. ***Process Automation:*** AI automates repetitive banking tasks such as loan approvals, document verification, and transaction processing, improving efficiency and reducing human error.

5. ***Personalized Banking Services:*** AI enables PSBs to offer tailored financial products based on customer behavior and preferences.

6. Automated Reporting and Compliance Monitoring

The RBI has integrated AI to automate financial reporting processes, reducing manual intervention and improving accuracy. AI algorithms analyze banking transactions, financial statements, and risk factors, ensuring that financial institutions comply with regulatory norms without delays.

Comparison Challenges and Considerations

Despite the benefits, the use of AI in RBI and PSBs

Aspect	RBI AI Applications	PSB AI Applications
Primary Objective	**Regulatory oversight, financial stability**	Customer service, banking operations
Fraud Detection	Identifies systemic risks in the financial sector	Detects individual transaction fraud
Decision-Making	Economic policy and risk assessment	Loan approvals, personalized banking
Consumer Interaction	Limited (e.g., Sachet chatbot)	**AI** chatbots, virtual assistants for banking services
Data Analysis	Macroeconomic trends, financial market stability	Customer spending patterns, credit scoring

AI has revolutionized the Reserve Bank of India's operations by improving regulatory oversight, fraud detection, monetary policy formulation, and consumer grievance redressal. As AI technology continues to evolve, the RBI is expected to further enhance its capabilities, ensuring a more efficient and secure financial ecosystem in India. However, addressing challenges such as data privacy, ethical AI usage, and system integration remains crucial for maximizing AI's potential in central banking.

While both the RBI and PSBs utilize AI, their objectives and applications differ significantly. The RBI employs AI for financial regulation, risk assessment, and monetary policy, whereas PSBs leverage AI to improve banking services, enhance security, and optimize customer experience. AI's role in both sectors continues to expand, ensuring a more efficient and secure financial ecosystem in India.

The New Phase of RBI after AI Integration

The Reserve Bank of India (RBI) has undergone a significant transformation with the integration of Artificial Intelligence (AI) into its operations. AI has enhanced fraud detection, regulatory oversight, financial monitoring, and cybersecurity, leading to a more efficient and data-driven banking ecosystem. This new phase marks a shift from traditional, manual processes to automated, real-time decision-making that ensures better risk management and financial stability.

1. AI-Driven Fraud Detection and Cybersecurity

With AI, the RBI has strengthened its fraud detection mechanisms, enabling real-time monitoring of financial transactions.

- AI algorithms now analyze large volumes of transactions, identifying irregularities and fraudulent activities.

- Example: The Central Fraud Registry (CFR) allows banks to report and track frauds, helping prevent repeat offenses.

- AI-based biometric authentication and behavior analysis enhance digital payment security, reducing instances of online fraud.

2. Enhanced Regulatory Oversight and Compliance

AI has improved the RBI's ability to oversee banking operations, ensuring better compliance with financial regulations.

- Automated Risk Assessment: AI evaluates financial institutions' stability by analyzing patterns in non-performing assets (NPAs), liquidity risks, and financial stress.

- Example: The RBI's Early Warning Signals (EWS) System flagged high-risk loans in Yes Bank and DHFL, helping regulators take preemptive actions.

- AI automates regulatory reporting, reducing manual errors and improving compliance efficiency.

3. AI in Monetary Policy and Economic Forecasting

The RBI has adopted AI-driven predictive analytics for monetary policy decisions and economic forecasting.

- AI models assess inflation trends, credit growth, and market conditions, helping in formulating data-driven policies.

- Example: AI-based simulations improve interest rate decision-making by analyzing large datasets on consumer spending and global economic trends.

- AI-driven sentiment analysis tracks market behavior, improving RBI's intervention strategies.

4. Real-Time Supervision and Risk Management

The RBI has strengthened its financial supervision with AI-powered tools that detect irregularities in banking operations.

- AI continuously monitors liquidity risks, capital adequacy ratios, and loan performance across banks.

- Example: AI flagged financial irregularities in shadow banking institutions, enabling early intervention and regulatory actions.

- The RBI's AI-powered chatbots and digital assistants assist financial institutions in regulatory compliance queries.

5. AI-Powered Digital Payments and Financial Inclusion

AI has played a key role in expanding financial inclusion and digital payment security.

- AI enhances UPI, RTGS, and NEFT fraud detection, reducing unauthorized transactions.

- AI-powered credit scoring models help banks assess loan eligibility for underserved populations.

- Example: The RBI's AI-based initiatives support digital lending platforms, ensuring responsible lending and risk mitigation.

Conclusion

The AI-driven transformation of the RBI has ushered in a new phase of efficiency, security, and data-driven governance. From fraud prevention and cybersecurity to monetary policy and financial inclusion, AI has significantly enhanced the central bank's ability to manage risks and ensure a robust financial system. As AI continues to evolve, the RBI is expected to further refine its capabilities, strengthening India's financial ecosystem in an increasingly digital world.

Forensic Audit:IBC, 2016

Abstract:

The Insolvency and Bankruptcy Code, 2016 (hereinafter referred to as "The Code") was formulated with the objective of facilitating the rehabilitation of a corporate debtor. The Code delineates a procedural framework that administers insolvency and liquidation proceedings in a timely manner. The underlying intention was to enhance the efficacy of the insolvency process and to optimize the valuation of their assets.

The Code has instituted a variety of features and procedural guidelines. One such aspect pertains to the nature and ramifications of specific transactions. Sections 43 through 56, followed by Section 66, encompass provisions that empower the Resolution Professional to repudiate such specific transactions.

The transactions executed by the corporate debtor with the intent to defraud the creditor are categorized as specific transactions. These transactions may include wrongful or fraudulent dealings, undervalued exchanges, and preferential transactions, among others. The ensuing article will examine the provisions within the Code that are relevant to the aforementioned categories of specific transactions.

Shri D. Indu Sekhar
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An Insolvency Professional, in the initial 30 days of the Corporate Insolvency Resolution Process (CIRP), specifically in the role of the Interim Resolution Professional (hereinafter referred to as 'IRP'), is required to exert considerable diligence and meticulousness, as this initial timeframe is critical for comprehending the underlying factors contributing to the Corporate Debtor's failure, namely, whether it constitutes a standard business failure or if the prevailing circumstances are attributable to avoidance, preferential, or fraudulent transactions. The transactions that may be subject to avoidance can be categorized into two distinct types: those aimed at recovering value ("recuperative transactions") and those that imply fraudulent conduct, breaches of legal obligations, alterations of financial records, etc. ("culpable transactions"). The Insolvency Professional may prioritize the examination of recuperative transactions. Culpable transactions, conversely, should be referred for further scrutiny by the appropriate regulatory authorities. The fundamental criteria for forming an evaluative opinion may encompass the following:

- ✓ Whether the transfer of assets was executed for the advantage of a creditor, surety, or guarantor, and whether such transfers positioned them more favourably than they would have been in the event of a standard distribution of the assets?

✓ Whether a transaction or transfer is conducted within the ordinary course of business of the Corporate Debtor? While transactions that fall outside the ordinary course of business are particularly susceptible to scrutiny, certain transactions may superficially appear to be ordinary course transactions, albeit lacking a legitimate business rationale. Typically, these transactions are executed involving related parties or where the outcome is to confer a benefit upon related parties.

✓ Whether the transfer was executed for a consideration that is markedly inferior to the consideration that would have otherwise been accrued by the Corporate Debtor?

✓ Whether the transactions necessitate the Corporate Debtor to incur exorbitant payments in relation to the credit extended and whether such transactions are deemed unconscionable under the prevailing conditions associated with the procurement of credit?

✓ Whether the transfer of assets influences the interests of the creditors and impacts the resolution process in terms of value?

✓ Whether funds have been procured to be remitted elsewhere, without any allocation towards the primary business operations of the company?

a) Preferential Transactions: As defined under Section 43 of the Insolvency and Bankruptcy Code (IBC), have profound implications for both the corporate debtor (CD) and the creditors engaged in distressed circumstances. These transactions manifest when a CD exhibits favouritism towards particular creditors, sureties, or guarantors by reallocating assets or benefits, thereby enhancing their standing relative to other parties. Such transactions are mandated to transpire within a specified 'relevant period' preceding the initiation of insolvency proceedings.

Examples of Preferential Transactions:

✓ Any transfer that establishes a security interest in property acquired by the corporate debtor, provided that a new value is generated or a new asset is created and a security interest is established within a timeframe of 30 days.

✓ It is stipulated that any transfer conducted in accordance with a court order shall not preclude such transfer from being classified as a preferential act by the corporate debtor.

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≈ Disbursement to unsecured family loans during the retrospective examination period, while the obligations of secured creditors remain unsettled.

✓ Disbursement to historical operational creditors (excluding standard business payments for the provision of goods or services), while obligations to secured creditors or unsecured financial creditors remain unpaid.

- ✓ Disbursement to an unsecured financial creditor may occur according to predetermined loan instalment schedules while the obligations to secured creditors remain unresolved.

- ✓ Disbursement to workers and employees conducted in the ordinary course of business shall not be regarded as a preferential transaction.

- ✓ Disbursement of any tax in contravention of an order from any authority shall not be regarded as a preferential transaction.

- ✓ Disbursement of routine taxes (whether direct or indirect) shall not be deemed a preferential transaction.

- ✓ Disbursement of secured debt for which the property of the directors is encumbered shall be construed as a preferential transaction.

- ✓ Disbursement to a secured creditor with precedence while the obligations to other secured creditors are outstanding.

- ✓ Disbursement to those creditors possessing security in the form of post-dated cheques endorsed by the directors shall be categorized as a preferential transaction.

- ✓ Disbursement of historical tax liabilities where there exists a potential for prosecution without any directive from a court or authority may also be classified as a preferential transaction.

- ✓ Adjustment of debit balances of debtors against credit balances of other parties shall be regarded as the assignment of debt to operational creditors, who possess a significantly lower priority under Section 53.

- ✓ Allocation of flats or plots by a real estate enterprise to suppliers of goods or services prior to the commencement of Corporate Insolvency Resolution Process (CIRP).

b) Undervalued Transactions: As articulated under Section 45 of the IBC, pertain to asset transfers executed at valuations that are markedly inferior to their actual market worth.

Examples of Undervalue Transactions:

- ✓ The divestiture of luxury and high-value automobiles owned by the Corporate Debtor to either affiliated parties or independent entities at a valuation significantly inferior to the prevailing market price of the vehicle.

- ✓ The disposition of luxurious office spaces or any other valuable assets belonging to the Corporate Debtor to either a related entity or an unrelated party at a price substantially below the market valuation.

- ✓ The provision of loans or advances to either related or unrelated parties devoid of any legitimate business rationale would also fall under the purview of Section 49.

- ✓ The conveyance of advantageous franchise agreements to another individual at a valuation markedly lower than its intrinsic worth.

- ✓ The transfer of equity shares in subsidiary enterprises where the business demonstrates profitability at a price that is less than the true value.

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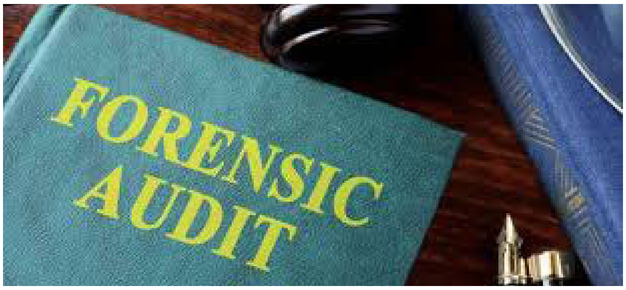
≈ The assignment of brand names, trademarks, or copyrights that are the property of the Corporate Debtor.

- ✓ The conveyance of intellectual property rights, software, patents, digital assets, and similar entities.
- ✓ The acquisition of any assets at an inflated price to sequester the funds of the Corporate Debtor from creditors.
- ✓ The resolution of outstanding obligations to associated entities or other parties at a valuation significantly lower than the owed amount would be regarded as the assignment of an asset at a price below its actual worth and would also be encompassed under Section 49.
- ✓ The write-off of sundry debtors or advances without adequate justification, rationale, or attempts to recoup may be interpreted as a gift under Section 45 and would also be captured under Section 49.
- ✓ The procurement of non-performing assets from family members or affiliated entities to safeguard the assets or funds of the Corporate Debtor from creditors would be classified as an Undervalued Transaction and would also be included under Section 49.
- ✓ The sale of unsold inventory by a real estate firm prior to the commencement of Corporate Insolvency Resolution Process (CIRP) at a price that is lower than the market rate.
- ✓ The sale of inventory at a valuation inferior to its actual worth.

*c) **Fraudulent Transactions:*** Within the context of insolvency proceedings, as stipulated in Section 66(1) of the IBC, encompass actions undertaken with the explicit intent to deceive creditors or for any fraudulent objective. This provision encompasses a broad spectrum of deceptive practices designed to undermine stakeholder interests, devoid of any specific retrospective examination period.

Examples of Fraudulent Transactions:

- ✓ Any financial transaction executed with the intention of insulating the assets or properties of the Corporate Debtor from the claims of creditors.
- ✓ Manipulation of accounting records or other documentation pertaining to the Corporate Debtor for the purpose of misleading creditors.
- ✓ Utilization of forged documentation and records to secure approval and disbursement of credit facilities, such as fraudulent exchange bills and fictitious sale bills for discounting, as well as export and import bills for discounting.
- ✓ Falsification of accounting records through the entry of fictitious sales and purchases to obtain enhanced credit facilities from financial institutions and banks.
- ✓ Falsification of accounting records by documenting fictitious expenditures to facilitate the diversion of the Corporate Debtor's funds for the personal benefit of management.
- ✓ Falsification of accounting records aimed at inflating the assets of the Corporate Debtor within the financial statements in order to present an optimistic outlook to financial institutions and banks for the procurement of supplementary credit facilities.



≈ Siphoning off inventory or stock of the Corporate Debtor by artificially inflating consumption figures through the falsification of accounting records.

- ✓ Submission of fraudulent financial statements to financial institutions and banks to secure additional credit facilities, including the use of a double balance sheet.
- ✓ Siphoning of funds from the Corporate Debtor through the execution of fictitious transactions that result in losses within the accounting records, benefiting the management personally.
- ✓ Fraudulent removal of assets belonging to the Corporate Debtor, resulting in detriment to creditors.
- ✓ Engagement in undervalued transactions with fraudulent intent, leading to detriment to the security interests of creditors, with undisclosed benefits accruing to the management.
- ✓ Deficiency in due diligence during business operations within the Twilight Zone, resulting in harm to the Corporate Debtor.
- ✓ Any asset or value retrieved through proceedings concerning avoidable transactions shall be incorporated into the Liquidation Estate.

d) Extortionate Transactions: As described in Section 50 of the IBC, are defined by circumstances wherein a CD acquires financial or operational debt under conditions that mandate exorbitant repayments. The pertinent period for the evaluation of extortionate transactions is confined to the two years prior to the commencement date of insolvency proceedings. This temporal framework enables a thorough retrospective analysis of transactions that may have exacerbated the financial distress of the CD through excessive interest payments or analogous financial burdens.

Examples of Extortionate Transactions:

- ✓ Acquiring unsecured loans from entities at prohibitively high interest rates and unfavourable terms.
- ✓ During the period of financial distress faced by the Corporate Debtor, suppliers impose monopolistic conditions for the provision of goods on credit.
- ✓ Securing loans from employees, directors, or affiliated entities at inflated interest rates constitutes an Extortionate Transaction.
- ✓ Obtaining a credit card loan with a high interest rate does not qualify as an Extortionate Transaction.
- ✓ Additionally, securing a loan from a Non-Banking Financial Company (NBFC) at an interest rate of 36% per annum is not classified as an Extortionate Transaction.

Conclusion:

In conclusion, the understanding and application of forensic audit methodologies in accordance with the Insolvency and Bankruptcy Code of 2016 are crucial for upholding the integrity of insolvency proceedings. Forensic audits serve as a rigorous instrument for identifying and mitigating fraudulent or improper transactions, thereby ensuring a just and effective framework for insolvency resolution.

References:

Regulations of IBBI on Transactional / Forensic Audit.

Preferential, Undervalue, Fraudulent, Extortionate Transactions Under IBC Code, 2016

Forensic Audit (IBC, 2016)

Abstract:

The notion of avoidance transactions is pivotal in optimizing the assets of the Corporate Debtor, thereby aiding in the safeguarding of the investors' interests. Furthermore, it cultivates a sense of trust and assurance among investors when engaging in investments within jurisdictions that uphold such a principle. This, in turn, contributes to the attraction of global investment.

The legal framework governing avoidance transactions, encompassing preferential, undervalued, fraudulent, and extortionate credit transactions, has been profoundly influenced by seminal rulings issued by various courts across the nation. Insolvency Professionals participating in insolvency procedures are required to possess a comprehensive understanding of the complexities associated with these transactions and the relevant legal regulations.

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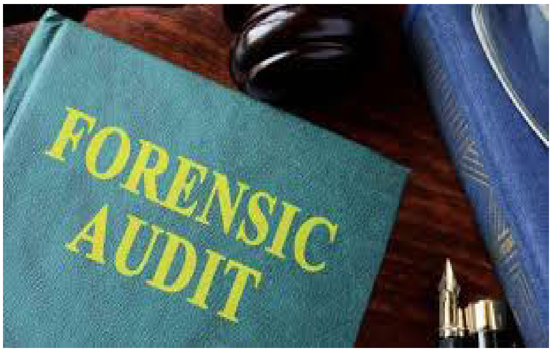
The Insolvency and Bankruptcy Code of 2016 ('IBC') signifiesa transformative alteration in India's insolvency paradigm, emphasizing the rights of creditors while eliminating the previous leniency extended to debtors. This examination investigates transactions classified as Preferential, Undervalued, Fraudulent, and Extortionate ('PUFE') that transpire during the critical 'look-back period' preceding insolvency. It scrutinizes the pertinent provisions of the IBC that empower resolution professionals to detect and annul these transactions in order to protect creditor interests.

The IBC, recognized as a landmark legislative enactment, represents a substantial departure from earlier insolvency frameworks by abolishing the notion of a defaulter's sanctuary and reinstating the primacy of creditors within the economic landscape. Nevertheless, challenges have arisen from precarious transactions undertaken by corporate debtors ('CDs') during the pre-insolvency interlude, commonly referred to as the 'look-back period.' These transactions are characterized as stipulations within insolvency law that authorize the annulment or rendering ineffective of asset transfers or obligations incurred prior to insolvency proceedings, enabling the recovery of any transferred assets or their value in the collective interest of creditors, which are categorized into four types:



PUFE Transactions:

- ✓ Preferential Transactions (Section 43 of the Code).
- ✓ Undervalued Transactions (Section 45 of the Code).
- ✓ Fraudulent Transactions (Section 66 of the Code).
- ✓ Extortionate Credit Transactions (Section 50 of the Code).

PUFE transactions, encompassed within the provisions of Sections 43 to 51, and Section 66 of the IBC. The resolution professional ('RP') or liquidator is obliged to identify such transactions and submit an application to the National Company Law Tribunal ('NCLT') to facilitate the realization of creditor claims. The IBC stipulates that the RP must formulate an opinion regarding such transactions within 75 days, render a decision by 115 days, and file the application within 135 days.

Related Party Transactions:

The IBC delineates a comprehensive enumeration of individuals and entities classified as 'related parties.' This includes individuals such as directors or key managerial personnel of the CD, as well as other entities like associate companies, subsidiaries, or corporate holdings. (Judicial Pronouncement: Phoenix Arc v. Spade Financial Services Limited).

a) Preferential Transactions:

Preferential transactions, as articulated under Section 43 of the IBC, possess substantial ramifications for both the CD and the creditors engaged in distressed circumstances. These transactions arise when a CD exhibits favouritism towards particular creditors, sureties, or guarantors by transferring assets or benefits, thereby enhancing their standing relative to others. Such transactions must occur within a designated 'relevant period' prior to the initiation of insolvency proceedings. The relevant period is delineated under Section 43(4) of the IBC in two distinct terms:

- ➤ Preference is conferred upon a related party (excluding circumstances solely due to employment) during the two-year interval preceding the insolvency commencement date; or
- ➤ Preference is allocated to an individual other than a related party within the one-year timeframe preceding the insolvency commencement date.

Importantly, Section 44 authorizes the NCLT to nullify such transactions and compel the recovery of benefits accrued from them.

Important Provisions: The criteria utilized for evaluating preferential transactions necessitate the determination of whether the transfer enhances the recipient's position relative to what they would have obtained through the conventional asset distribution mechanism delineated in Section 53 of the Insolvency and Bankruptcy Code (IBC). Exceptions are established for transfers executed in the ordinary course of business or those that establish security interests in assets procured by the Corporate Debtor (CD).

Judicial Pronouncements: A multitude of judicial precedents provide valuable insights into the application and interpretation of preferential transaction provisions within the framework of the IBC:

- ✓ Venus Recruiters (P) Ltd. v. Union of India.
- ✓ S.V. Ramkumar v. Orchid Pharma Ltd.
- ✓ Chitra Sharma v. Union of India.
- ✓ Mrs. Dipti Mehta v. Shivani Amit Dahanukar.
- ✓ Ram Ratan Kanoongo v. Sunil Kathuria.

b) Undervalued Transactions:

Undervalued transactions, as articulated in Section 45 of the IBC, pertain to asset transfers executed at valuations that are considerably lower than their intrinsic worth.

Important Provisions: A transaction is deemed undervalued pursuant to Section 45(2) of the IBC if it entails a CD gifting or transferring assets in exchange for consideration that is substantially less than the value of the consideration that the CD would have otherwise rendered (i.e., the acquisition cost of such assets), contingent upon the stipulation that such transactions do not occur in the ordinary course of business. The applicable timeframe for contesting such transactions varies depending on whether the parties involved are related or unrelated to the CD.

Judicial Pronouncements: Numerous judicial precedents elucidate the ramifications of undervalued transactions within insolvency proceedings:

- ✓ M/s. Cethar Limited
- ✓ Adriatic Sea Foods (P.) Ltd. v. Suresh Kumar Jain

c) Fraudulent Transactions:

Fraudulent transactions within the context of insolvency proceedings, as delineated in Section 66(1) of the IBC, encompass actions conducted with the intent to defraud creditors or for any illicit purpose. This provision encompasses a broad spectrum of deceptive practices aimed at undermining stakeholder interests without specifying a defined look-back period. Nevertheless, Section 66(2) of the IBC affords reasonable grounds for defense, underscoring the necessity of due diligence and rational evaluation of transactions.

Distinction Between Section 49 and Section 66 of the Code:

Section 49 is designated as "Transactions Defrauding Creditors." It pertains to circumstances wherein a corporate debtor engages in a transaction undervalued intentionally, with the explicit aim of shielding assets from individuals entitled to assert claims against the Corporate Debtor or to detrimentally influence the interests of such individuals.

Section 66 pertains to instances where it is ascertained during the insolvency process that any operations of the corporate debtor have been conducted with the intention of defrauding creditors or for any fraudulent objectives. This section also encompasses scenarios where a director or partner of the corporate debtor has exhibited negligence and failed to exercise appropriate diligence in mitigating potential losses.

The parallelism between Section 49 and Section 66 is that both provisions encompass actions undertaken with the objective of defrauding creditors. However, whereas Section 49 necessitates a deliberate intention to deceive creditors through the execution of such transactions, Sub-section 2 of Section 66 additionally imposes penalties for negligent actions that adversely affect the interests of the creditors. Furthermore, Section 49 specifically addresses the corporate debtor itself engaging in fraudulent transactions, while Section 66 imposes personal liability on any responsible individual (Sub-section 1) or Director/

Partner (Sub-section 2).

Moreover, Section 49 and Section 66 do not stipulate any look-back period, in contrast to other provisions regarding avoidance applications; therefore, any transaction may be scrutinized during insolvency proceedings.

Important Provisions: Section 66 of the IBC addresses fraudulent and wrongful trading, stipulating that if a petition is submitted by the Resolution Professional (RP) during the Corporate Insolvency Resolution Process (CIRP) or liquidation phase to initiate action against individuals who knowingly engaged in business with the intent to defraud creditors or for any fraudulent objective, it empowers the National Company Law Tribunal (NCLT) to impose liabilities, including rendering such individuals personally liable without limitation, necessitating their contribution to the assets of the CD, or restraining them from managing the affairs of the CD.

It is noteworthy that in instances where undervalued transactions are executed with the objective of defrauding creditors, Section 49 of the Insolvency and Bankruptcy Code (IBC) becomes applicable. Section 49 of the IBC specifically addresses transactions that are designed to defraud creditors and is invoked once the corporate debtor (CD) has engaged in a preferential and/or undervalued transaction 'intentionally' under the guise of:

a) Safeguarding the assets of the CD from the reach of any individual entitled to assert a claim against the CD, or

b) To detrimentally influence the interests of such individuals with respect to the claim.

A salient feature of this provision is the absence of a look-back period, as fraudulent acts are deemed null and void. Moreover, Section 69 of the IBC imposes severe penalties, which may include imprisonment and fines, upon officers found culpable of fraudulent behaviour, thereby emphasizing the seriousness of such infractions.

Judicial Pronouncements: Numerous judicial precedents elucidate the ramifications of fraudulent transactions within the context of insolvency proceedings:

- ✓ Shiv Kant v. Union of India.
- ✓ Rakesh Kumar Jain v. Jagdish Singh Nain.
- ✓ Jayesh Shanghrajka v. Divine Investments.
- ✓ Edelweiss Asset Reconstruction Company Ltd. v. Net 4 India Ltd.
- ✓ Axis Bank Ltd. v. Anuj Jain.

d) Extortionate Transactions:

Extortionate transactions, as delineated in Section 50 of the IBC, are exemplified by situations in which a CD acquires financial or operational debt under terms that necessitate exorbitant payments. The pertinent timeframe for evaluating extortionate transactions is confined to the two years preceding the initiation of insolvency proceedings. This temporal parameter enables a retrospective analysis of transactions that may have exacerbated the financial distress of the CD through excessive interest payments or analogous financial burdens.

Judicial Pronouncements:

In the seminal case of:

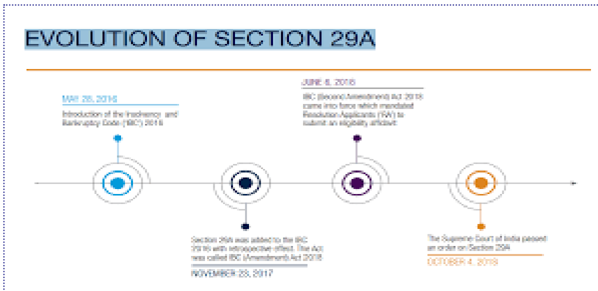
- ✓ M/s Embassy Property Developments v. State of Karnataka & Ors.

✓ In Shinhan Bank v. Sungil India (P.) Ltd.

Examination of Section 29A in the IBC, 2016:

The Insolvency and Bankruptcy Code, 2016 (IBC) is designed to rejuvenate distressed corporations by encouraging Corporate Bidders to engage in investment activities aimed at facilitating their recovery from insolvency.

- ✓ Initially, the legislation permitted any entity, encompassing the corporate debtor's promoters, affiliated parties, or individuals implicated in misconduct or fraudulent conduct that precipitated the default of the Corporate Debtor, to submit a resolution proposal without imposing rigorous criteria.
- ✓ This methodology attracted criticism due to potential vulnerabilities that might enable indirect control by promoters. Subsequent legislative amendments, particularly the incorporation of Section 29A through the IBC (Amendment) Ordinance, 2017, and the IBC (Amendment) Act, 2018, were instituted to mitigate these apprehensions. Section 29A delineates eligibility parameters for resolution applicants to obstruct defaulting promoters and related parties from re-establishing control over distressed enterprises, thereby safeguarding the integrity and impartiality of the resolution mechanism.
- ✓ The complex ramifications of Section 29A within the IBC paradigm include disqualifications predicated on both direct and indirect affiliations with the corporate debtor. This provision aspires to uphold transparency and avert conflicts of interest by prohibiting ineligible individuals or entities from proposing resolution plans.



✓ In the process of assessing the equilibrium between constraining errant promoters and ensuring avenues for authentic resolution applicants.

Conclusion:

The fundamental objective of transaction avoidance under the IBC is to recuperate the assets for the CD, thereby rendering them accessible to creditors who have consented to accept less than the total amount owed. Timely recovery is imperative for optimizing returns for creditors and mitigating losses. Nevertheless, there exists a considerable backlog of claims, amounting to approximately ₹ 2.8 Lakh Crores across diverse categories, including Preferential, Undervalued, and Fraudulent Enterprises (PUFE) transactions and their combinations, awaiting resolution at National Company Law Tribunals (NCLTs) nationwide. In spite of judicial determinations concerning claims approximating ₹ 42,000 crores, only claims totalling around ₹ 5,200 crores have been successfully recovered. This backlog engenders delays within the Corporate Insolvency Resolution Process (CIRP) and amplifies the burdens associated with litigation.

References:

IBC, 2016 Code.

Judicial Pronouncements-NCLT, NCLAT, Supreme Court.

IBBI Regulations.

IBBI Quarterly Newsletter, January-March 2023, Vol. 26.

New Health Insurance Guidelines

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IRDAI, recognized as the autonomous and statutory entity charged with the oversight and regulation of the insurance and reinsurance sectors within India. In the current year, the Insurance Regulatory and Development Authority of India (IRDAI) enacted a series of pivotal guidelines that profoundly transformed the health insurance landscape in India. These newly instituted regulations aim to enhance accessibility, affordability, and efficacy of health insurance across diverse demographic strata. Prioritizing inclusivity, these directives tackle numerous pressing issues, ranging from the extension of coverage to senior citizens without age limitations to the minimization of waiting periods for pre-existing medical conditions. Significant regulatory alterations aimed at enhancing the empowerment of policyholders within the Health Insurance Sector, encompassing the reduction of cancellation fees, the delineation of protocols for the no-claim bonus, and the augmentation of transparency in claim-settlement processes.

Guidelines instituted by IRDAI:

a) Simplification of Policy Particulars:

Insurers are now required to furnish a Customer Information Sheet (CIS) that concisely encapsulates the essential terms and conditions of the policy in accessible language. This initiative seeks to facilitate a clearer understanding of insurance coverage for policyholders.

b) Health Insurance Plans for All:

Abolition of Age Limits: The recent IRDAI regulations pertaining to health insurance mandate that insurers provide at least one product devoid of any upper age restrictions. Historically, the majority of policies-imposed limitations on individuals up to the age of 65. This modification guarantees that an expanded array of options is accessible to senior citizens and those exceeding traditional age thresholds. This modification primarily advantages senior citizens, enabling them to procure comprehensive health insurance at any point in time. To cultivate a just health insurance environment where age does not influence an individual's capacity to secure insurance coverage. Insurers are now compelled to develop insurance products that are inclusive of all demographics, encompassing individuals across all age brackets, those with diverse pre-existing medical conditions, and persons with disabilities. Furthermore, these policies must extend coverage to outpatient department (OPD) services, daycare treatments, and home care services. Additionally, coverage for all advanced surgical procedures is mandated. Nevertheless, a challenge emerges as policies that encompass such a broad spectrum of individuals and treatments are generally associated with elevated costs. Addressing this pricing dilemma would enhance the benefits of these recent reforms for policyholders.

c) Pre-existing Disease:

From Four Years to Three: The waiting duration for the coverage of pre-existing ailments such as diabetes or hypertension has been curtailed, facilitating earlier claims. This alleviation permits expedited financial relief for the treatment of enduring health complications. The stipulated waiting period for pre-existing diseases is now adjusted to three years of continuous coverage. Nonetheless, policyholders are obligated to fully disclose any pre-existing conditions during the application process, as failure to do so may result in claim denials, even post the waiting period. Insurers are precluded from rejecting claims for these conditions after three years, provided there has been no misrepresentation.

d) Specific Disease:

Standardisation to Three Years: Certain specific ailments or procedures, including joint replacement surgeries, are now subject to a reduced waiting period in accordance with the newly established IRDAI guidelines on health insurance. Patients are now able to access essential surgeries more promptly with financial backing from their insurers.

e) Severe Medical Conditions:

Non-Discrimination Policy: The newly instituted IRDA guidelines explicitly prohibit insurers from denying coverage to individuals afflicted with severe medical conditions such as heart disease, cancer, renal failure, and AIDS, contingent upon the final terms and conditions delineated by underwriters and specific policy stipulations. Coverage may, however, still be subject to individual underwriting criteria and applicable waiting periods. This ensures that high-risk individuals are afforded the requisite health insurance protection.

f) AYUSH Treatment:

Comprehensive Coverage: Patients are now entitled to claim the total cost of treatments under AYUSH (Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homeopathy) up to their insured sum. This supports the incorporation of traditional and alternative medicinal practices into the framework of mainstream health insurance.

g) Customised Plans:

Tailored Products: Insurers are urged to develop health insurance products specifically designed to accommodate the needs of children, seniors, students, and maternity cases. This initiative addresses the diverse health insurance needs pertinent to different life stages and conditions.

h) Cashless Claim Settlement:

Insurers are required to maintain an exhaustive registry of hospitals and healthcare providers for cashless claim settlements, accompanied by explicit guidelines regarding reimbursement claims for services rendered outside this designated network.

i) Moratorium Period:

Shortened to Five Years: The duration of the moratorium within which insurers are permitted to contest claims pertaining to nondisclosure of information has been abbreviated to five years, thereby augmenting trust between policyholders and insurers. Following the five-year period, insurers are prohibited from disputing claims except in instances of substantiated fraud, thus providing enhanced security to policyholders.

j) Vulnerable Groups:

Insurers are mandated to provide designated coverage options for marginalized populations, encompassing individuals with disabilities, those living with HIV/AIDS, and persons experiencing mental health challenges. These offerings must conform to applicable legislative requirements and ensure equitable access to healthcare services. By addressing the specific needs of these demographics, insurers can foster inclusivity and deliver critical protections for individuals who may encounter discrimination within conventional insurance markets. This initiative epitomizes a dedication to social responsibility and health equity.

k) Allowance for Multiple Claims:

Flexibility in Claims: Policyholders possessing benefit-based policies are afforded the opportunity to submit claims to multiple insurers. Individuals can optimize their benefits and obtain sufficient support during medical emergencies.

l) Streamlined Renewal Procedure:

Insurers are now expressly prohibited from declining the renewal of a policy solely based on the prior submission of a claim. Furthermore, insurers are not permitted to engage in fresh underwriting, which entails the evaluation of an individual's health and the determination of policy conditions, unless a request for an enhancement in coverage is initiated by the policyholder. These modifications are intended to facilitate the renewal process for policyholders.

m) Penalties for Non-compliance with Ombudsman Directives:

Insurance providers are mandated to execute the directives issued by the insurance ombudsman within a 30-day timeframe. Non-compliance will incur penal interest. Moreover, insurers will be obligated to compensate the policyholder ₹ 5,000 for each day of delay if the ombudsman's awards are not acted upon within the designated timeline. Such provisions are designed to ensure prompt compliance by insurers with the resolutions rendered by the ombudsman.

n) Accelerated cashless claims processing:

Commencing on July 1, 2024, health insurance providers will be obligated to make determinations regarding cashless treatment requests within a one-hour timeframe. Presently, each insurance entity adheres to its own policies concerning the duration for processing cashless requests and claims, resulting in discrepancies in the efficiency of these processes.

o) Expedited claim settlement upon discharge:

Insurance companies have been directed to authorize the final cashless settlement at the point of discharge within a three-hour window following the receipt of the relevant bills. Should there be any delay surpassing this three-hour limit, the insurer will bear the responsibility for any additional charges imposed by the hospital.

p) Reduction in cancellation charges:

Policyholders are now afforded the opportunity to annul their health insurance policy by issuing a 7-day notice to their insurer. The insurer is obligated to refund a portion of the premium corresponding to the remaining duration of the policy, contingent upon no claims having been filed. Previously, the charges associated with cancellation were markedly higher, rendering the early termination of a policy financially burdensome.

q) Rewards for claim-free years:

In the domain of motor insurance, policyholders who refrain from making a claim will observe a decrement in their premium for the subsequent year. Conventionally, in health insurance, the bonus accrued from unclaimed amounts is appended to one's coverage or sum insured. However, the IRDAI is instituting reforms that will provide policyholders with the option to either receive augmented coverage or benefit from a diminished premium upon renewal. This innovative alternative is particularly advantageous for individuals confronted with elevated premiums, especially in the wake of the COVID-19 pandemic.

r) Enhanced transparency in the claim rejection process:

The adjudication of claim rejections is now mandated to be conducted by a triad of members from the product management committee, as opposed to being determined by a singular individual. This modification is intended to enhance transparency and mitigate the occurrence of arbitrary claim rejections that customers frequently experience.

s) Protection against rejection after 5 years:

Following a period of 60 consecutive months of coverage, insurers are barred from rejecting claims on arbitrary grounds. Claims may only be denied if it can be substantiated that the policyholder has engaged in fraudulent activities. This stipulation is designed to afford policyholders greater security and assurance regarding the legitimacy of their claims.

To Conclude:

The recent IRDA guidelines for health insurance in 2024 are strategically formulated to cultivate a more inclusive, adaptable, and supportive health insurance framework in India. They aim to dismantle enduring obstacles and facilitate improved coverage and access to medical care for all citizens. These reforms encompass expedited cashless claim processing, diminished cancellation fees, enhanced transparency in the processes surrounding claim rejections, and a concentrated effort on the simplification of policy information. Moreover, the prioritization of providing insurance coverage for all individuals, irrespective of age or pre-existing conditions, along with the inclusion of coverage for advanced surgical procedures, underscores a dedication to rendering insurance more inclusive and accessible. While obstacles such as the pricing of comprehensive coverage persist, these reforms represent a favourable progression towards realizing the objective of "Insurance for All" by the year 2047.

References:

IRDAI Guidelines.

Women in AI, Finance, Machine Learning, and Generative AI: Pioneering a Data-Driven Future:

Ms. Rashda Khanam
Deputy Manager(Data Scientist)
Analytics Dept.
State Bank of India

Introduction:

The convergence of ***Artificial Intelligence (AI), Machine Learning (ML), Finance, and Generative AI (GenAI)*** is transforming the financial landscape. From ***algorithmic trading*** and ***risk assessment*** to ***fraud detection*** and ***personalized banking***, AI-driven innovations are reshaping financial services. However, despite the growing demand for AI expertise, ***women remain underrepresented in AI, ML, and finance***, especially in leadership and technical roles.

This article explores the role of ***women in AI-powered finance***, their ***contributions***, the ***challenges they fac***e, and the ***future of inclusive innovation in financial AI.***

AI, ML, and Generative AI in Finance:

AI and ML have already become essential in financial services, providing ***data-driven insights, predictive analytics***, and ***automated decision-making***. The recent advancements in ***Generative AI*** are further enhancing the industry by creating ***personalized financial reports, synthetic data for risk modelling, and AI-powered financial assistants.***

Type Of Built in Algorithm:

Key AI & ML Applications in Finance:

1. ***Algorithmic Trading*** – AI-powered models analyze real-time market data, executing trades at high speed.

2. ***Fraud Detection & Prevention*** – ML models identify suspicious patterns and prevent cybercrimes.

3. ***Credit Scoring & Risk Assessment*** – AI evaluates borrowers' creditworthiness beyond traditional scoring.

4. ***Personalized Financial Services*** – AI-driven virtual assistants provide customer support and tailored investment advice.

5. ***Regulatory Compliance & Anti-Money Laundering (AML)*** – AI helps financial institutions stay compliant with evolving regulations.

6. ***Generative AI in Finance*** – AI models like ChatGPT and BloombergGPT generate financial reports, summarize earnings calls, and assist in predictive modeling.

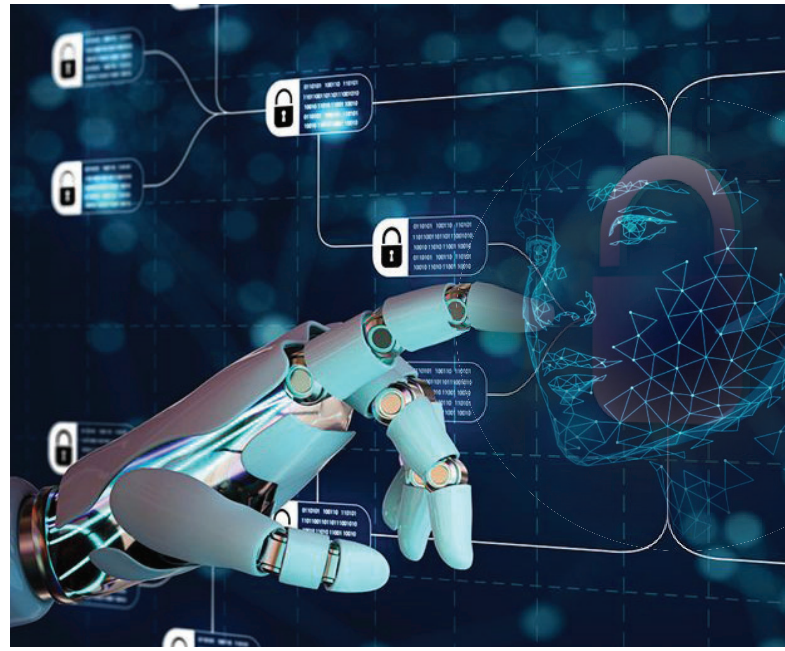
Women Leading AI and Finance Innovation:

Despite barriers, many women are making groundbreaking contributions in AI, ML, and finance. Some notable leaders include:

- ***Dr. Manuela Veloso*** – Head of AI Research at JPMorgan Chase, leading AI-driven financial innovations.
- ***Daniela Rus*** – Director of MIT's Computer Science and AI Lab, working on financial automation.
- ***Joy Buolamwini*** – Founder of the Algorithmic Justice League, addressing bias in AI, including finance-related models.
- ***Fei-Fei Li*** – Co-director of the Stanford Human-Centered AI Institute, advocating for ethical AI development.
- ***Ivana Bartoletti*** – AI ethics expert, ensuring responsible AI use in financial institutions.

Why Women's Representation Matters in AI and Finance:

- Reduces AI Bias – More diversity leads to fairer financial AI models.



- Improves Financial Inclusion – Women-driven AI solutions address gender-based financial disparities.
- Enhances Ethical AI Development – A balanced workforce ensures responsible AI implementation.
- Encourages More Women in STEM – Representation fosters role models for the next generation.

Challenges Women Face in AI, ML, and Finance:

Despite progress, women encounter several barriers in these fields:

1. Underrepresentation in Leadership
Women hold only 26% of AI-related jobs globally and an even lower percentage in finance and FinTech leadership roles.

2. AI and Financial Bias
Many AI models are trained on historical financial data that reflects gender disparities in credit approval, investment access, and financial decision-making.

3. Limited Access to Funding

Women-led FinTech startups receive significantly less venture capital than male-led counterparts, limiting innovation potential.

Workplace Bias & Gender Gaps in AI Research

Many financial AI firms still struggle with ***gender diversity*** in technical teams and ***equal pay issues***.

Solutions: Bridging the Gender Gap in AI & Finance:

To increase women's participation and leadership in AI-driven finance, various strategies can be implemented:

1. Encouraging STEM Education & AI Training for Women

- Scholarships & AI bootcamps tailored for women in FinTech.
- AI mentorship programs connecting female students with industry leaders.

2. Promoting Gender-Inclusive AI Models

- Developing bias-free training datasets for financial AI models.
- Ensuring AI-driven credit scoring systems are fair and inclusive.

3. Supporting Women-Led FinTech & AI Startups

- Increasing funding and investment in women-led AI and financial tech companies.
- Encouraging government policies that promote gender equality in AI funding.

4. Increasing Women's Leadership in AI & Finance

- Hiring more women in AI leadership roles and financial AI research teams.
- Building a network of female professionals in AI, ML, and finance to collaborate and mentor young women in the field.

The Future of Women in AI, ML, Finance, and Generative AI:

As AI continues to transform finance, women's contributions will be crucial in shaping its ethical, innovative, and inclusive future. With stronger representation, increased funding, and equitable opportunities, women can drive the next wave of AI-powered financial advancements.

A future where women thrive in AI and finance is not just beneficial for gender equality—it's essential for innovation, economic growth, and ethical AI development.

Conclusion:

Women are making significant strides in AI, ML, finance, and generative AI despite facing challenges. By closing the gender gap, promoting diversity, and ensuring AI's ethical use, the financial industry can unlock its full potential.

The next era of AI-driven finance must be built with women at the forefront—because inclusive innovation leads to a better, more equitable financial future for all.

When will INR touch Rs. 100 per USD?

CMA Nijay Gupta
Forex Expert

Are we going close to INR touching Rs. 100 per USD. What could be the reason for such a fall towards Rs. 87 per Dollar recently or is it the sentiment towards USD is bigger than INR fall. Infact, I started my banking career in 1978 in Forex Deptt with USD/INR at Rs.7.50 per USD. When I started getting older, I thought USD/INR at 100 should be fine to say "Bid adieu" ("to say goodbye" or "to take leave of") but looks I am still attached to the USD sentiments like that of 85% of the world using USD for settlement of international trade, Investments and Travel. The efforts of BRICS etc likeminded countries (mainly under sanctions or facing Forex issues) for De-Dollarization with alternative currency will not take shape with US President (Trump 2.0 jitters) threat of 100% Tariff on countries trying to ignore USD. Not only Russia, Iran etc even 19 Indian Companies/Individuals are underUS sanctions for using USD.

Is that INR fall can be related to last 9 months' Trade Deficit touching USD 220BN for FY 2025 followed by FII's withdrawing about USD 20BN in last 3 months forcing RBI to supply USD from Forex Reserves (coming down to USD 625BN). Spot Selling of USD by RBI have double whammy for RBI, as every sale of USD by RBI sucks the INR from market resulting in tight money market & higher call money rates (above RBI's Repo rate of 6.50%)/higher yields on G-sec. So, RBI's new Governor Mr. Sanjay Malhotra took time to settle and understand the impact of INR volatility. The impact of INR Depreciation on Inflation, Money Supply and FII's selling of stocks in equity market and controlling all the same through OMO in G-sec or doing Sell/Buy or Buy/Sell swaps in Forward markets to avoid dwindling Forex Reserves thru Spot intervention. Strong Dollar Index above 108 also added to the woes of falling INR.

Though FII's impact on capital market was off-set by domestic Mutual Fund buying for almost equal amount and even FII's subscribing in Primary Capital Market IPOs or thru OFS, QIP issueshave reduced the pressure on outflow of USD by FII's from India.

So, mainly the outflow of USD in India, is due to import of Gold, Electronic & Oil Importers, people using remitting upto USD 250,000 under LRS (despite 20% TCS), aggressive marketing by Travel/Airlines for Visa free

destinations/countries, repayment of ECB loans/Interest.

Infact, Govt's reducing custom duty on gold import from 15 to 6% (similar to VAT of Dubai) made huge amount of gold import during last 3 months of Indian festivals followed by liberal electronic and automobile parts imports into India from china, which is not in good terms currently (India trade deficit with China will touch USD 100 Bn this year). No action against Corporates for import of goods and Mis-use of PLI scheme.

India despite violating US sanctions against Russia, were importing Oil from Russia and settling the oil trade thru UAE, China and INR thru Special Vostro Account with reduced or even increased oil price by mocking the world for using INR for settlement of international trade. Russia has Reserves in INR for about USD 50BN with INDIA in INR thru Special Vostro Account with various AD banks in India. If Russia is able to negotiate with US for peace with Ukraine, this USD 50 Bn equivalent with India may go out of India back to Russia.

The impact of INR depreciation on INR will be known more, when RBI shall not be able to reduce the Repo rate of 6.50% in its next month's MPC meet, despite major banks reducing interest rates. May be RBI will continue providing liquidity thru Repo, VRR, OMO or doing USD Buy/Sell or Sell/Buy swaps or reducing CRR from present 4% to 3% till June 2025.

Suggestions for Exporters, Importers, ECB Borrowers& RBI:

Exporters make use of PCFC or EEFC a/c for managing USD/INR conversion and for import payments thru natural hedge mechanism;

Importers/ECB Borrowers to book forward till June 2025. This may cost addition 3% forward premium on Spot USD/INR over 3% already lost via depreciation of INR;

Ensure Complying Risk Management Policy of the Company and following RBI's regulation for compliance unless you have natural hedge.

Make use of PCFC for import payments, if there is option for the same.

RBI can offer higher interest rates to NRI's to attract more money into India;

The recent changes by RBI on FEMA for opening Foreign Currency with Indian bank is like EEFC account only and also RBI allowing to open NRI accounts with Indian banks branches overseas will not attract much money, as Indian bank's branches/Rep office overseas are already offering such services to NRI's thru their branches in India.

RBI can consider offering higher Tax-Free Interest to NRI's thru FCNR-B or NRE accounts

Journey of a village girl ~ Football to Finance

Abstract :

Financial inclusion strives to remove the barriers that exclude people from participating in the financial sector and using financial products and services to improve their lives.

Financial inclusion is crucial for economic growth, poverty reduction, and social equity. It empowers marginalised communities, especially women, supports entrepreneurship, and promotes digital and social inclusion, contributing to a more inclusive, resilient society.

Here goes a true story of a tribal girl on how efforts of various organisations are driving India to be a financially inclusive country.

CMA Angshuman Bhattacharya
Financial Consultant

Jungle Mahal in West Bengal is home to a number of different tribal communities including Santhals, Kurmis, Kherias and Sabars, the tribal ethos enriches the mystic charm and natural beauty.

Jharna Tudu (name changed), a girl from Jungle Mahal was somewhat different than other girls of the same village. Like other girls she went to school but in her past time she was to be seen busy playing football with the local boys while other girls were helping their parents in household chores.

As she grew up, she improved her natural skill of art of football but at the same time continued her studies when many of her girlfriends had left studies.

Her football skill meanwhile drew attention of school teachers and other local authorities. She represented her school in Subrata Cup Tournament, an all-India School Football Tournament, representing state of West Bengal.

As she involved in football more and more her fame spread wing on a larger canvas. She was nominated to be a part of West Bengal Women Football team to represent West Bengal in National Women Football Championship.

After two years, she got married and shifted to a village in

Photo of Financial Education program in progress ….

Birbhum district to stay with her husband.

Meanwhile, she attended a Financial Education program of National Centre for Financial Education conducted by the author at her present village where she landed into the world of personal finance. She came to know about financial planning, how to increase value of his investment without compromising risk, importance of insurance and also first-time realised necessity of retirement planning.

Within a month she was seen running around bank, talking to local insurance agent and made her husband busy to ponder over their future.

Finally, she opened their first fixed deposit account in bank and issued cheque towards premium of life insurance. Next month she and her husband again went to their bank for opening account for Atal Pension Yojana.

In between she completed her graduation in Physical Education. She is now an enlisted football referee supervising the league matches in different districts in West Bengal.

As I met her again after a gap of two years in another program she came forward and thanked me and National Centre for Financial Education for educating her in personal finance front.

I was delighted to know that she had convinced her other family members to open Pension accounts. Incidentally, she brought her mother-in-law in the program of National Centre for Financial Education conducted at a nearby village.

It gives us an exciting feeling to know, yes, we could reach last mile.

Mitigation of Climate change Risk and Role of Sustainable Finance.

The previous year ,2024 was the warmest year on Earth since 1850, according to one estimate (As per global Temperature Report for 2024 by Berkeley Earth ,a California -based research organisation).As per the said report,the global annual average temperature for 2024 is estimated at 1.62 +/- 0.06 degrees Celsius above the average during the period 1850 to 1900(a period often used as a pre- industrial baseline for global temperature targets).This is above the key threshold of 1.5 degrees Celsius as agreed to under the Paris agreement of 2015.Eachincrement of additional warming is likely to have a compounding impact, in the absence of adequate and timely mitigation steps to reduce man-made green house gas emissions .The main culprits have been the excessive emissions of CO2 and methane in the name industrial development , deforestation ,live stock production and fertilizers use.The recent warming spike in 2023-24 is significantly higher than the previous linear trend .The recent devastating fires in Los Angeles , hurricanes , flash floods, cyclones and other tragic incidents ,across the globe are indicative of the lingering threat to human society at large and the economy due to adverse climate changeconditions.

Here we delve into the aspects relating to mitigation of climate change risk and how the Financial System needs to equip itself for a sustainable future.

Shri C. M. Khurana
Former CGM-CFO Oriental Bank of Commerce
Former CGM (credit) IIFCL

Broad Features of Climate change Risks

A large volume of discussion papers and literature has emerged in the recent past on the various aspects of climate change risks . This includes the reports and research papers from multilateral financial agencies, central banks of various countries and organisations like BCBS, besides specialised agencies working on different issues relating to climate change.

Reserve Bank of India as the central bank of the country has taken proactive steps in the direction of tackling climate change with early regulatory response.It conducted a survey on climate risk and sustainable finance in July 2022 , followed by a Discussion Paper on climate risk and sustainable finance

.

Subsequently the 'Framework For Acceptance of Green Deposits' was announced by RBI in April 2023 and a Draft Disclose Framework on climate Related Financial Risks, was brought out in February 2024.In addition, the report on Currency and Finance 2023 by RBI- Towards a Greener Cleaner India , covered the issues relating to climate change in a comprehensive manner.

There are primarily two types of risks arising from climate change that we need to understand.

1) Physical Risks - These emanate from both gradual and sudden impacts such as natural disasters affecting real assets and financial instruments. These risks can affect trade, fiscal policy, monetary policy and financial stability thereby assuming a great importance.In the absence of availability of reliable and adequate data estimating the loan losses from physical risks is a challenging task.

2) Transition risks arise from efforts to mitigate climate change.It arises from the need for transition ,as we make our efforts to achieve our net zero targets, which can be disruptive.It could be result of adaption to low carbon technologies as well as change in consumer behaviour and investor preferences about specific sectors.It creates uncertainties for firms and investors,which may further lead to financial risks which in turn can impact financial stability. The immediate impact of adverse climate events underline the need for adaptation to the changing circumstances.The inter linkages between physical and risk and transition risks further amplify the overall risks involved

Need for Effective Efforts

Climate change directly impacts the macro financial strength of the economy and the range of policy options available to mitigate climate risks requires dedicated research for evolving a robust comprehensive strategy to deal with the challenges involved.India is among the most affected countries in terms of exposure and vulnerability to climate risk events due to its geographic location .However with concerted efforts, we have emerged as the leading country among G20 nations in its climate protection performance. Progress has been made on all the four parameters including, green house gas (GHG) emissions, renewable energy, energy use and climate policy.

Transition to renewable energy, energy efficiency, electrification of transportation and sustainable land use are essential steps for mitigation,besides building climate resilient infrastructure and carbon capture and storage.

Handling the transition risk

The looming Climate Change Risk has forced global level action by each country .Achievement of Net Zero emissions target by 2070 is a challenging task for our country which calls for balancing its growth and environmental objectives.

A well thought out holistic strategy will be required to reduce greenhouse gas emissions and replace the generation of energy through non fossil fuels. There is a need to evolve and use innovative technologies to successfully achieve this transition .The reduction in use of coal in power generation and other carbon emitting sectors will need to be undertaken in a gradual phased manner since an immediate reduction is not in the interest of the economy.

The renewable energy sector will have to play a leading role in improving productivity in a cost effective manner with the help of use of innovative technologies backed by inhouse research and development.Large scale battery storage to supplement the renewable energy sector, and new technologies like green hydrogen will require due focus to replace the thermal Power plants in stages.

The concept of circular economy will need to be adopted by industries with effective re - use of waste materials in each sector to minimise carbon footprint.

On going up gradation of skills and capacity building with a collaborative approach will also go a long way towards our journey for achieving the net zero goal.

India's strategies include spurring investments in environmental friendly alternative sources of energy and climate science and technology.

Instruments of climate policy

Most economies have adopted fiscal policy as the primary instrument to achieve climate change commitments and targets.The commonly used fiscal policy instruments include a) price based instruments - carbon taxes, feed in tariffs , renewable subsidies ; and b) quantity based instruments - emissions trading system and renewable quotas .India needs to adopt a balanced approach using a combination of these instruments.Over the period of time, the role of the central banks of the counties and financial sector as a whole has also emerged in tackling the climate change risks.A calibrated and careful approach is required for climate change and energy transition.

Sustainable Finance:Issues and challenges

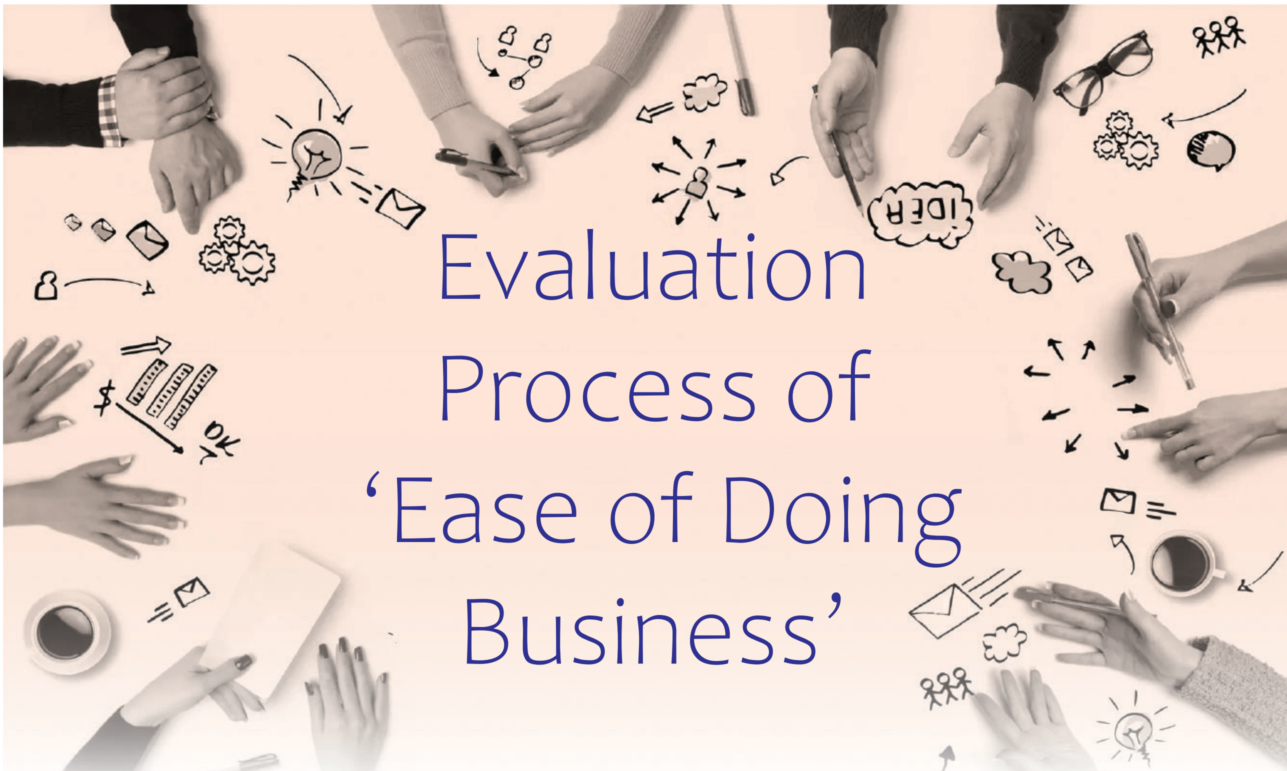
At the heart of the effective mitigation of climate change risks is the issue pertaining to adequate and timely availability of finance . India and the world as a whole require a considerable amount of funding to achieve its net zero targets. Conference of Parties (COP 29) at Baku Azerbaijan produced mixed outcomes in this respect .The focus was to establish the New Collective Quantified Goal (NCQG) on climate finance.The new agreement proposes to triple the climate finance for Emerging Market and Developing Economies from the previous goal of USD 100 billion to USD 300 billion annually by 2035.This however fell short of the overall expectations of EMDEs indicating that their priorities are not yet fully aligned with the developed nations.

It is estimated that the funding requirement to fund our goals of Nationally Determined Contributions(NCDs - Panchamrit goals) is in the range of about USD 160 billion per year.In India we need funding,both for mitigation and adaptation.The climate risk mitigation necessitates funding of green and sustainable projects based on newer technologies .This will entail higher credit risk initially, as assessment of financial and techno- economic viability of these projects is likely to be challenging.As regards adaptation, several issues in the form of data, knowledge and capacity gaps , technical and institutional constraints limit the proper identification and development of adaptation projects.A new set of assessment parameters and benchmarks may have to be evolved to examine and finance sustainable projects without subjecting the financial system to spill Over risks.

The compliance of the draft Disclosure Framework Guidelines by the Regulated Entities, after the same are finalized by RBI, is required to prepare the regulated entities to identify and build competencies to mitigate climate risks and not to restrict lending to any particular sector or industry .RBI also proposes to address the issues relating to gaps in climate data availability with creation of data repository namely RBI - climate Risk Information System (RBI - CRIS) as announced in October 2024.

Conclusion

Climate Change Risks are the challenges being faced by the entire world and an urgent action is required,taking into account the mid term as well as long term perspective of the issues involved ,in a holistic manner.On the financial sector front ,a proactive and collective effort is required to tackle the challenges in a pragmatic and step by step approach with in-depth analysis at each stage.All stakeholders need to work in a collaborative manner to provide a definitive roadmap for sustainable growth and environment for the future generations.



Evaluation Process of 'Ease of Doing Business'

Abstract:

Economic Systems are evaluated based on their facilitation of Commercial Activities, Ranked on a Scale from 1 to 190. A favourable Ranking in 'Ease of Doing Business' Signifies that the Regulatory Framework is more supportive of the Establishment and Functioning of Domestic Enterprises. The Rankings are Established by Organizing the Cumulative Scores Across Ten Distinct Themes, each Comprising Multiple Indicators, with each theme receiving Equal Consideration. The Valuation of All Economies is Standardized as of May 2019.

Dr. P. Sai Sudha
Financial Expert

The World Bank Group has resolved to cease the dissemination of its 'Doing Business' Rankings concerning National Business Environments as articulated in its 'Doing Business' Report, following the discovery of data inconsistencies and ethical dilemmas in the Reports for the years 2018 and 2020.

Introduction to Ease of Doing Business Report (EoDBR):
The EoDBR is disseminated by the World Bank. The Primary features of the 'Ease of Doing Business' Report are delineated below:

- ✓ Historically, the World Bank has produced this report on an Annual Basis. The Index was established to assess the implications of Economic Policies and Reforms instituted by Governments in the respective Nations with the Aim of facilitating and enhancing the Business Environment.

- ✓ This Report is released subsequent to the Assessment of Countries' performances based on the following Eleven Parameters (for the 2020 Rankings, the Labour Market Parameter was omitted, hence the 2020 Rankings were derived from Ten Parameters).

- ✓ Comprehensive Practical Research involving Government Officials, Legal Practitioners, Business Consultants, Accountants, and other Professionals is conducted to collect data reflecting the performance of these Nations.

'Ease of Doing Business' parameters considered for Ranking Countries:

1. ***Starting a Business:*** The simplicity of the procedures involved in initiating a New Enterprise, along with the associated Time, Costs, and Minimum Capital requirements, are also evaluated.
2. ***Dealing with Construction Permits:*** The accessibility of securing approval for the Construction of a Business Premises etc. is assessed.
3. ***Getting Electricity:*** The straightforwardness of acquiring a permanent Electricity connection for a Newly established Business Premises is examined.
4. ***Registering Property:*** The ease and straightforwardness of the process for Registering Commercial Real Estate are evaluated.
5. ***Getting Credit:*** The depth of the Credit Information Index and the robustness of the Legal Rights Index are scrutinized.
6. ***Protecting Investors:*** Various Indices pertaining to the extent of disclosure and the facilitation of Shareholder Litigation are taken into account.
7. ***Paying Taxes:*** This parameter investigates the Quantity of Taxes imposed, the Hours expended Annually on Filing Tax Returns, and the Total Tax Liability as a percentage of Gross Profit.
8. ***Trading Across Borders:*** This encompasses the procedures involved in the Export and Import of Goods within the Country.
9. ***Enforcing Contracts:*** This involves analysing the Time, Cost, and effort necessitated to enforce a Debt Contract.
10. ***Resolving Insolvency:*** This checks the Time, Cost, and Percentage Recovery Rate in the context of Bankruptcy Proceedings.

- The Greater the Score attained by a Nation; the Superior its Ranking will be.
- The Inaugural Report was released in 2003 (Initially termed the 'Doing Business' Report, with Country Rankings commencing in 2006). Since its Inception, over 3,500 Reforms have been enacted across various Nations. In the Fiscal Year of 2017-18 alone, a record 314 Reforms were implemented across 128 Economies. During this reference period, the Indian Government enacted 37 Reforms.

Benefits of 'Ease of Doing Business' Rank:

The position a Nation attains in the 'Ease of Doing Business Rank (EoDBR)', as published by the World Bank, confers Numerous Advantages. These Advantages are:

- The Reputation of the Nation within the Global Marketplace is enhanced. The Government of India (GoI) has instituted a Total of 37 Reforms during the specified Timeframe and seeks to assess the Efficacy of these Reforms.

- The Government is undertaking measures to Liberalize the Business Environment, and the aforementioned Reforms are Yielding Positive Outcomes.

- This Transformation positively alters the perception of the Country among Global Market Participants, portraying it as an Advantageous Location for Business

Operations.

- The Rankings are anticipated to serve as a reference framework for Investors in making informed decisions. Therefore, a Superior Ranking in the Report correlates with increased favourability.

- The Performance of the GoI regarding the implementation of the Goods and Services Tax (GST) will elucidate the degree to which this reform is conducive to Business (Notably, GST was excluded from the previous Year's Ranking.

- The Growth path of Industries has Averaged approximately 7% during the 1990s, subsequently escalating to 7.4% in the preceding decade. Ultimately, the manufacturing and Export Sectors encountered challenges owing to the Global Financial Crisis. The Government aims to attract both Domestic and Foreign Investments into the manufacturing sector by fostering a more favourable regulatory environment.

India & Ease of Doing Business:

India has demonstrated commendable progress in light of the advancements it has achieved regarding its 'Ease of Doing Business' performance. The salient points are:

- According to the most recent report, namely the EoDB Report 2020, India has ascended 14 positions to attain the 63rd Rank (Compared to the previous year's 77th Rank), achieving a score of 71.00 (Up from Last Year's Score of 67.23).

- India retains its position as the frontrunner among South Asian Nations.

- India's upward trajectory in the Rankings is notable, having advanced from a Rank of 130th in EoDB 2015 to 63rd in EoDB 2020 (Out of 190 Countries).

- India has excelled in Various Parameters, including the acquisition of construction permits and trading across borders, while also achieving modest improvements in the domains of Business Initiation and Credit Accessibility.

  - ✓ India has streamlined the Process of Starting a Business by completely Integrating Multiple Application forms into a Singular Incorporation form.

  - ✓ Through a Unified Electronic Platform that enhances Electronic Submission Methods for documentation and upgrades to Port Infrastructure, the processes of Importation and Exportation have become markedly more Efficient.

  - ✓ The Recovery Rate associated with resolving Insolvency has witnessed a substantial increase from 26.5% to 71.6%. Furthermore, the duration required for Resolving Insolvency has Significantly Decreased from 4.3 years to 1.6 years.

- The World Bank will now Expand its Assessment to include Kolkata and Bengaluru, in addition to Delhi and Mumbai, in the preparation of the Ease of Doing Business Report, thereby offering a comprehensive overview of the Nation's Business Environment.

EoDBR - India Needs to Improve:

Despite India's commendable performance regarding its standing in the 'Ease of Doing Business (EoDB)' domain, there remains significant Scope for Enhancements. Below are several critical aspects necessitating improvement:

- Although India has ascended 19 positions to attain the 137th rank, it still necessitates 17 Days to Commence a Business, in Contrast to just 12 days in OECD Nations.

- The Insolvency and Bankruptcy Code (IBC) is undoubtedly an essential reform; however, it is currently undergoing further evolution. Presently, it has encountered various issues pertaining to its Operational Efficiency.

- ✓ The duration required for the Resolution Process has exceeded the stipulated time frame outlined within the code.
- ✓ There exists a Deficiency in Supporting Infrastructure.
- ✓ Dissenting Financial and Operational Creditors have increasingly sought recourse through the National Company Law Tribunal (NCLT) and National Company Law Appellate Tribunal (NCLAT), thereby hindering progress.
- ✓ The Judiciary has been engaged in Elucidating Numerous Provisions of the Law.
- ✓ The Recovery Rates pertaining to Debt remain Disappointingly Low:

- The stabilization of the Goods and Services Tax (GST) has been problematic, as the time required to file tax returns has escalated from 214 hours to 275.4 hours, indicating an imperative need for reduction.
- Despite the Government's enactment of legislation pertaining to Commercial Courts, Reports indicate that the Judicial Process is exceedingly sluggish, requiring more than Four Years to enforce Contractual Agreements.
- To address the Challenges associated with contract Enforcement, the Government has amended the Commercial Court Act and has facilitated the establishment of Commercial Courts across 250 Districts. This initiative may potentially enhance the Rankings in the Forthcoming Year.
- The acquisition of Land has emerged as one of the most tough challenges facing Companies in India, Primarily due to the absence of a Unified Land Acquisition Framework.
- India must enhance its Logistics Infrastructure to promote Cost-effective and Efficient Logistics, which will be instrumental in advancing the 'Make in India' initiative.
- The Global Manufacturing Index, as reported by the World Economic Forum, has positioned India at the 30th Rank, highlighting Human Capital and Sustainable Energy as Two Significant Challenges confronting the Nation. In this context, India's Ranking is considerably Inferior compared to its Competitors such as China and Thailand.

Are the Rankings Effective?

The following Issues, Criticisms, and concerns have been articulated:

- The Rankings exclusively Capture the Experiences of Small and Mid-sized Enterprises, omitting Proprietary and Partnership Firms from Consideration.
- The Ranking merely reflects a Comparative Analysis among Nations, and a Country's standing may not accurately represent the reforms it has Instituted.

- ✓ The Reforms enacted by other Nations may prove to be Comparatively Superior.
- ✓ Enhanced Performance does not invariably Correlate with an Improved Ranking. In the EoDB report of 2019, while India's Performance Score across all Ten Parameters has shown Improvement, its Ranking has only advanced in Six Parameters.
- ✓ The Reforms are not Incorporated within the Ten Evaluated Parameters.
- ✓ Reforms are accounted for beyond the Designated Cut-off Date.

- The Index takes into consideration only Two Cities in India-New Delhi and Mumbai, which do not adequately represent the Ground Realities.

- The Methodology Employed for the Computation is subject to Ongoing Modifications. Consequently, conducting comparisons of these Rankings Over Time may Yield limited Significance, as Methodological alterations have been Integrated into the 2019 Report.

- An Increase in the 'Ease of Doing Business (EoDB)' suggests a reduction in Regulatory Constraints. Does this imply that we are inadvertently fostering a Competitive decline in Standards?

- Investors Evaluate a multitude of Additional Factors prior to committing Capital to any Market, such as the Potential for Global Trade Expansion, Governmental Stability, and unforeseen Catastrophic events. The World Bank has explicitly indicated that "While Doing Business is a Powerful Tool for Catalysing Reforms in Business Regulation, the Indicators are not utilized by Policymakers as the Sole reference in devising Reform Initiatives."

  ✓ For the Inaugural Time, China has received a Ranking Below 50, specifically occupying the 46th Position, yet it remains one of the Countries that consistently Secures substantial Foreign Direct Investment (FDI). In this context, China serves merely as a Singular Instance, as there appears to be scarcely any Correlation between the Ranking and the Influx of Investments.

- The Ranking System does not demonstrate any Discernible Association with the Economic Growth of the respective Countries. This divergence generates a dichotomy-should Investments be directed towards enhancing the Ranking, or should they Aim for enduring reforms that Foster Growth while concurrently improving the Ranking in the Long Run?

- Experts advocate that the Government should prioritize Sustainable Reforms over those designed to enhance Rankings; these Improvements should be viewed as a By-product rather than the Primary Objective of Public Policy. The World Bank's Report indicates that Nations which have excelled in the Rankings are not those that Initially Aimed to Elevate their standings, but rather those that have pursued Extensive Reforms and Prioritized Economic Competitiveness.

- The Rankings fail to adequately account for the Actual Costs of Conducting Business in Nations characterized by substantial Unorganized Sectors, such as India, where Production Costs differ significantly from those of Larger Formal Enterprises.

- Instead of relying on the Rankings within the Index, a more effective gauge of a Country's Performance is the Scores attained in the "Distance to Frontier" metric.

- The Index is deficient in accurately assessing the Challenges Businesses encounter regarding Liquidity Acquisition, Restrictions on Internal Trade, and issues related to Skilling and Employability.

To Conclude, the World Bank Group is responsible for the Annual Publication of the 'Ease of Doing Business Report', which has been disseminated Since 2003 to evaluate the regulatory costs imposed on firms across 190 countries. The benefits associated with the 'Ease of Doing Business Rank' are Enhancement of Image in the Global Marketplace, Deregulation of Commercial Activities, Promotes the Establishment of Enterprises in Nations with Superior Rankings, Facilitates Strategic Planning for Future Development Initiatives, Expansion of Industries within Nations occupying Elevated Positions.

Mutual Funds Investing in Falling Markets

Shri Sudhakar Kulkarni
Certified financial Planner

The Indian equity market is currently in a bear phase and experts believe that ongoing correction is far from over. This has culminated significant downturn, resultantly many indices showing remarkable double-digit declines. More particularly the mid cap & small cap stocks are feeling heat of market crash.

As of March 6, 2025, the BSE Sensex, BSE Mid Cap Index, and BSE Small Cap Index have corrected by -13.4%, -19.4%, and -21.6%, respectively from their all time high. Although mid-caps and small-caps have high growth potential, however due to the current valuations, mutual fund investor in general and those who have reasonably good exposure to small & mid cap funds in particular are seriously panicked.

However mutual fund investor needs to handle this situation calmly and not to act in panic. Let us see what needs to be done in such situation.

Investor first needs to understand what is mutual fund and how it works.

Simply to put mutual fund is an investment option where you can invest in multiple assets such as equity, debt and commodities. In addition, hybrid fund which offers combination of debt and equity. So, as an investor, when you invest in mutual funds, you have the option of investing in equity funds that can offer growth potential, Debt Funds that can provide downside protection, and even Hybrid Funds that can offer both. As such mutual funds provides you an opportunity for portfolio diversification. However, it doesn't mean the investments in mutual funds are risk free. Investment risk depends up on type of mutual fund you have invested. Equity mutual fund carries market risk and which is comparatively more in small cap and mid cap and less in large cap. It means that when you are investing in mutual funds, you must consider things like your own risk appetite, your return expectations, and also the time period for which you want to stay invested. In current situation Mid cap and small cap mutual funds are worst affected where you saw the better potential while investing. In such situation it is better to embrace the volatility and try to hold on for the long term.

What needs to be done with your mutual fund investments during falling market/volatile market.

1. Don't get panicked

Volatility is part and parcel of capital market, one needs to understand it, and don't get excited when market goes up and don't get panicked when it comes down. This volatility offers you entry and exit at appropriate time. Stay calm and quite during falling market and be optimistic.

2. SIP investments

Don't stop your current SIPs and switch to safer investments like Bank or post office recurring. Let SIPs continue because now you are buying units at cheaper NAVs The full form of SIP is Systematic Investment Plan, which means a systematic and disciplined approach for investing in mutual funds. An SIP helps you to benefit from volatility. In simple words, the fundamental advantage of investing in a mutual fund through an SIP is rupee-cost averaging, which acts as a hedge against the risk of market movements. In other words, with SIPs, you can buy a higher number of mutual fund units during volatile market conditions. This approach allows you to average out your cost of investing in mutual funds

3) Staggered Lump sum investment:

Investors having surplus should consider staggered lump sum investments. In the volatile market conditions is wise to invest surplus amount in staggered manner instead of in one go. For this one needs to invest the surplus amount in STP (systematic transfer plan) where in the surplus amount is invested in liquid fund from this fund the fixed amount is transferred at fixed interval to another scheme of the same fund house. In liquid fund there is negligible risk to the principal amount and since fixed amount is transferred at fixed interval to another fund which you have selected as per your risk appetite, due to this stagged investment risk arising out of volatility gets reduced to large extent, it acts as a short-term SIP and investor gets the benefit of rupee cost averaging.

As you may know, investing regularly through SIPs promotes discipline, averages out costs, reduces the impact of short-term market fluctuations, and facilitates wealth creation through compounding over the long term Given the imminent headwinds and volatility, staggered lump sums are more prudent than putting all your investible surplus at stake in one go.

If you are planning for long-term financial goals, Systematic Investment Plans (SIPs) would help you navigate market volatility as you systematically invest over a period of time.

As you may know, investing regularly through SIPs promotes discipline, averages out costs, reduces the impact of short-term market fluctuations, and facilitates wealth creation through compounding over the long term

4.Don't exit your mutual fund investments in haste:

When you see the loss in your mutual fund investment in falling market your first reaction would be would be to exit the investment and minimise your losses. However, it might not be the best decision. Thus, it is important for you to evaluate the performance of that particular investment, compare it to the performance of similar funds, and assess whether the fund is performing nearly the same with its peerto remain invested.

4. Rebalancing the portfolio:

When your exposure to mid and small cap mutual is more compared to large cap and hybrid fund rebalance your mutual fund by switching to large cap and hybrid fund, this may help you to minimise the further loses. Review your mutual fund portfolio periodically and rebalance it according to market conditions. As far as possible stick to your asset allocation strategy

In short, we can say volatility is part and parcel of capital market, It is the market's nature to rise and fall over short periods. One should avoid timing the market. Best approach to face the market volatility is to invest for a long period and avoid reacting to short-term market fluctuations. It is crucial to stay committed to your long-term goals and avoid making impulsive decisions such as discontinuing your SIPs or liquidating the investments in mutual funds, on the contrary ensure that you take calculated risks, do not panic, and make the most out of such market conditions by increasing your investments in equity funds instead of pausing or liquidating your mutual fund investmentsLast but not the least, one should expect reasonable returns in tune with risk taking ability and remain invested for long time to overcome the impact of market volatility.

Embracing Technology Shift and Artificial Intelligence in the Banking, Financial Services, and Insurance Sector

The digital revolution is reshaping the global economy, and the Banking, Financial Services, and Insurance (BFSI) sector is no exception. Traditionally reliant on legacy systems and manual processes, BFSI institutions are now embracing a sweeping technology shift. At the heart of this transformation is the integration of Artificial Intelligence (AI), which is playing a pivotal role in enhancing quality and driving down costs. This draft explores how the evolution of technologythrough digital transformation, cloud migration, and AIdriven automationis revolutionizing BFSI by improving service quality and achieving sustainable cost reduction.

CMA Prasenjit Deb
Advisor (Cost),
Department of Food and Public Distribution,
Ministry of Consumer Affairs,
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Introduction

BFSI is fundamental to economic stability and growth, serving as the backbone for capital allocation, risk management, and financial security. Historically, these institutions relied on traditional, often manual, processes that limited operational efficiency and customer engagement. However, today's competitive environment and rapidly advancing technology have forced banks, insurance companies, and financial service providers to adopt a digital-first approach. The dual objectives of quality improvement and cost reduction have become critical drivers for innovation. By integrating AI and other digital technologies, these organizations can not only enhance customer experiences but also streamline operations and reduce unnecessary expenditure. This transformation is not merely an upgrade of existing systems; it represents a strategic shift towards a future where agility, personalization, and operational excellence define competitive advantage. In the BFSI space too we are experiencing the same behaviour with the advent of technology such as Fintech, Insutech etc.

Technology Shift in BFSI

The journey from traditional methods to modern digital solutions is multifaceted. At the core of this shift is digital transformation—a comprehensive process that redefines how BFSI institutions operate, interact with customers, and manage data. Central to this transformation is the move toward cloud-based environments. Cloud migration allows banks and insurance companies to transition from capital-intensive, on-premises IT infrastructures to scalable, subscription-based models. By doing so, organizations can reduce upfront capital expenditure while gaining the flexibility to scale resources according to demand. This pay-as-you-go model helps optimize resource usage and minimizes waste, ultimately lowering operational costs. Moreover, cloud-based systems enable faster deployment of new applications and services, ensuring that institutions remain agile in a rapidly evolving market.

Another critical element of the technology shift is the widespread adoption of automation. Traditional banking, which once depended heavily on manual data entry, document processing, and routine customer interactions, is now being revolutionized by Robotic Process Automation (RPA). RPA automates repetitive tasks such as loan processing, compliance reporting, and account reconciliation. This not only speeds up operations but also reduces human error, contributing to both enhanced quality and lower operational costs. In addition, AI-powered intelligent document processing accelerates the extraction and analysis of data from vast volumes of paperwork, further streamlining internal workflows. These technologies are pivotal in transforming legacy systems that have long hindered innovation in the sector.

Furthermore, the evolution toward a customer-centric model has necessitated seamless integration across multiple digital channels. Traditional branch-based operations are giving way to omni-channel experiences where customers can interact with their banks via mobile apps, websites, and virtual assistants with equal ease. This transition is essential for meeting modern customer expectations for personalized, immediate, and consistent service. Digital platforms not only provide a unified view of customer data but also facilitate targeted marketing and product recommendations based on individual behaviours and preferences. In this new era, technology is not simply a tool—it is the foundation upon which customer trust and loyalty are built.

Role of Artificial Intelligence in Enhancing Quality and Reducing Costs

Artificial Intelligence stands at the forefront of the digital transformation in BFSI, offering powerful solutions to long-standing challenges. AI technologies such as machine learning, natural language processing, and predictive analytics are driving significant improvements in service quality while simultaneously reducing operational expenses.

One of the most visible applications of AI in BFSI is the use of chatbots and virtual assistants. These AI-powered tools provide round-the-clock customer service, handling routine inquiries and processing simple transactions without human intervention. This not only enhances customer satisfaction by offering immediate responses but also significantly cuts down the cost of maintaining large customer support teams. Additionally, these virtual assistants are continually learning from customer interactions, enabling them to provide increasingly personalized and efficient service over time.

AI also plays a crucial role in risk management and fraud detection. By analyzing vast datasets in real time, AI systems can identify unusual patterns that may indicate fraudulent activities. This early detection capability is invaluable for preventing financial losses and protecting customer data. Furthermore, AI-driven predictive analytics enable financial institutions to assess credit risk more accurately, streamlining loan underwriting processes and reducing the incidence of non-performing assets. With more precise risk assessment tools, banks can make better-informed decisions, thus minimizing financial risk and reducing the costs associated with loan defaults and fraud.

Another critical application of AI is in the optimization of back-office operations. AI algorithms can sift through large volumes of customer data to detect inefficiencies, predict customer behaviour, and even map out the entire customer journey. This allows banks to anticipate customer needs and proactively offer solutions, thereby not only improving service quality but also opening new avenues for cross-selling and up-selling financial products. As AI continues to evolve, its ability to integrate with other digital tools, such as cloud platforms and RPA, creates a synergistic effect that further drives efficiency gains and cost savings.

Moreover, the adoption of AI in operational processes leads to substantial quality improvements. Automated systems reduce human error, ensuring that transactions are processed accurately and in compliance with regulatory standards. In addition, AI enhances decision-making by providing data-driven insights that support more precise, timely, and effective business strategies. These advancements contribute to a more robust, resilient financial ecosystem, capable of adapting to both market demands and regulatory pressures.

Quality Improvement in the Digital Era

Quality improvement in the BFSI sector is no longer solely about maintaining accuracy or compliance; it is about creating a superior customer experience and ensuring operational excellence at every touchpoint. By harnessing AI and other digital technologies, institutions can achieve a level of personalization and responsiveness that was once unattainable.

Personalized banking experiences are made possible by leveraging big data analytics. Banks now collect and analyse enormous volumes of customer data—from spending habits and transaction histories to online behaviour and feedback. This data is used to create highly customized financial products and services that cater to the individual needs of each customer. Whether it is a tailored savings plan, a customized loan product, or personalized investment advice, the emphasis is on delivering solutions that are relevant and timely. This level of personalization not only enhances customer satisfaction but also builds long-term loyalty, driving sustainable revenue growth.

Digital channels also play a critical role in quality improvement. An omni-channel approach ensures that customers receive a consistent and seamless experience regardless of the platform they choose—be it a mobile app, website, or even a physical branch. Unified data integration across these channels means that customer interactions are continuously tracked and analysed, providing banks with insights into areas of improvement and enabling them to refine their services in real time.

Quality is further enhanced by the predictive capabilities of AI. By forecasting customer needs and potential risks, AI allows financial institutions to address issues before they escalate. For example, proactive alerts about unusual account activity can prevent potential fraud, while predictive analytics can guide product development to better match emerging customer trends. The result is a more agile, responsive, and customer-focused organization that not only meets but exceeds customer expectations.

Cost Reduction Strategies Through Technological Integration

Cost reduction in the BFSI sector is a multifaceted challenge that requires a strategic and integrated approach. With rising operational costs driven by labour, regulatory compliance, and legacy systems, the imperative to reduce expenses without compromising quality has never been greater. Technology, particularly cloud computing and AI, offers viable solutions to this challenge.

Cloud transformation has emerged as a key driver of cost reduction. By migrating non-core functions such as customer relationship management, data storage, and employee collaboration tools to the cloud, banks can significantly lower their capital and operational expenditures. Cloud environments provide scalable resources that align with demand, enabling financial institutions to avoid the cost of over-provisioning hardware and IT infrastructure. Additionally, the built-in disaster recovery and advanced security features offered by cloud providers further reduce the financial burden of maintaining these systems in-house.

Automation through AI and RPA is another cornerstone of sustainable cost reduction. Routine tasks that once required extensive human laboursuch as data entry, transaction processing, and compliance reportingare now automated, freeing up resources that can be redirected toward more strategic initiatives. This reduction in manual processes not only decreases labour costs but also minimizes the risk of errors, which can be costly to rectify.

Moreover, the integration of AI in risk management and fraud detection reduces potential financial losses by identifying and mitigating threats before they escalate. This proactive approach to risk management ensures that banks can maintain their financial stability even in the face of emerging challenges, thereby reducing the costs associated with reactive measures and regulatory penalties.

Outsourcing non-core functions and optimizing branch networks are additional strategies that complement the technological shift. By focusing on digital channels and reducing reliance on physical branches, banks can significantly lower overhead costs associated with real estate, utilities, and staffing. This streamlined approach not only contributes to immediate cost savings but also positions institutions for long-term operational efficiency.

The cumulative effect of these strategies is a more agile, cost-efficient, and customer-focused BFSI sector. By integrating cloud-based solutions, AI-driven automation, and a customer-centric digital strategy, financial institutions can achieve substantial cost reductions while simultaneously elevating the quality of their services.

Role of Indian Cost Accounts Service Officers in BFSI Sector

The Indian Cost Accounts Service (ICoAS), the oldest organized accounting service, is comprised of CMA's and CA's who provide essential support services across various ministries and government departmentsthat majorly includes cost management and cost reduction, undertaking studies and providing suggestions in various policy matters.

Traditionally, the primary focus of finance professionals had been on cost management, cost reduction, budget adherence, and efficiency enhancement. However, as modern businesses become increasingly customer-centric, the objective has shifted from mere cost reduction to cost optimization, aiming to deliver maximum value to customers while maintaining competitive pricing structures. In this context, professionals play a pivotal role in aligning cost strategies with organizational objectives and strategic goals.

In the Banking, Financial Services, and Insurance (BFSI) sector, finance professionalscan contribute significantly by:

1. *Analysing Cost Structures:* They evaluate cost structures to identify areas that can enhance profitability without compromising service quality, ensuring that financial institutions can remain competitive while maintaining operational efficiency. Important tools for cost optimizationinclude Target costing, Activity based costing and Life cycle costing.

2. *Cost Optimization Across Value Chains:* Finance professionals identify and implement cost optimization opportunities throughout the BFSI value chain, addressing inefficiencies, redundancies, and resource wastage in core operational processes, thus enabling sustainable profitability and growth.

3. *Supporting Sustainable Growth:* By developing cost models that integrate social and environmental factors, finance professionals may assist BFSI organizations in aligning their financial strategies with sustainable growth goals, ensuring long-term profitability while addressing broader socio-environmental considerations.

Thus, role offinance professionals are crucial in risk assessment and sustainable growth in the BFSI sector.

Conclusion

The technology shift sweeping through the BFSI sector is not just a trendit is a strategic necessity driven by evolving customer expectations, competitive pressures, and the imperative to improve quality while reducing costs. Through digital transformation, cloud migration, and the integration of AI, financial institutions are reimagining their operations from the ground up. These advancements enable more personalized customer interactions, improved risk management, and streamlined operations that lead to sustainable cost reductions.

In embracing these changes, BFSI institutions are not only better positioned to meet the challenges of today's digital economy but also to innovate for the future. The convergence of technology and finance is creating a dynamic landscape where quality improvement and cost reduction go hand in hand, ensuring long-term growth and stability in an increasingly competitive environment. The journey toward a fully digital, AIdriven future is well underway, and those institutions that adapt quickly will be the ones that lead the next wave of innovation in banking, financial services, and insurance.

National Seminar on Banking and Insurance on "Enhancing efficiency in Banking and Insurance by Leveraging on Risk and Cost Management"


Chief Guest
Ms. Sujata Saunik, IAS
Hon'ble Chief Secretary, Government of Maharashtra
Guests of Honour
CMA Prasenjit Deb
Advisor (Cost), Department of Food and Public Distribution
Ministry of Consumer Affairs, Food and Public Distribution
Government of India
Shri Gopal Murli Bhagat
Deputy Chief Executive/ Officiating Chief Executive
Indian Banks' Association
Shri Vinod Jaiswal
Chief General Manager
Organisational Planning and Systems and Procedures
State Bank of India
Eminent Speakers
CMA P. Vasudevan
Executive Director
Reserve Bank of India
CMA Arti Ajit Patil
Managing Director & CEO
Saraswat Co-operative Bank Ltd.
Shri S. N. Bhattacharya
Secretary General
Life Insurance Council
Shri Inderjeet Singh
Secretary General
Non-Life Insurance Council
CMA G. Srinivasan
MD and CEO
Galaxy Health Insurance Ltd
CMA Asim Kumar Mukhopadhyay
MD & CEO
TML Smart City Mobility Solutions Ltd.
Shri T. Babu Paul
Executive Director
National Insurance Co. Ltd.
Ms Jyoti Vaswani
CIO
Canara HSBC Life Insurance
Shri Rajiv Gupta
President
PB Fintech Ltd
Shri Sumit Shantilal Bohra
President
Insurance Brokers' Association of India
Shri C. S. Ayyapan
General Manager
The New India Assurance Co. Ltd.
Shri NDSV Nageswara Rao
General Manager (IT)
State Bank of India
Dr. Saurabh Maheshwari
Consultant Insurtech Person
CMA (Dr.) Tarun Agarwal
Former Director
National Insurance Academy, Chairing
CMA (Dr.) Paritosh Basu
Senior Director (Services)
Stagility Consulting Pvt. Ltd.
CMA B. K. Unhelkar
LICian
Retired in Executive Director Grade
CMA Sudipta Roy
Founder
Finlabs India
CMA Gopal Gosain
Independent Director
Nainital Bank
Shri Subhrajit Mukhopadhyay
Executive Director
Edelweiss Life Insurance Co. Ltd.
CMA (Dr.) P. Siva Rama Prasad
Former AGM
State Bank of India
Shri Topendra Bhattacharjee
Ex Banker and CEO
Bargad.ai
CMA (Dr.) Ashok Kumar Jain
Promoter & Director
Blue Umbrella Risk Management &
Insurance Brokers Pvt. Ltd.
CMA Sankalp Wadhwa
Consultant

Inaugural Session: *Date: 16th January, 2025*

Speech by Ms. Sujata Saunik, IAS, Hon'ble Chief Secretary, Government of Maharashtra as the Chief Guest for the session:

She started the session on the topic of Enhancing efficiency in Banking and Insurance by Leveraging on Risk and Cost Management and stated that it is a very crucial aspectthat our Nation urgently needs today. She stated that many developed nations around the world are already following this principle and our nation stands on the brink of rapid development in the face of climate crisis. So, it is very important that in India which is a sub-continent by itself also adopt similar kind of policies. She categorized that India's journey to become Viksit Bharat by 2047 is both a remarkable opportunity and a profound responsibility. She stated that as we integrate with the Global Financial System we face significant challenges and this conclave aims to enhance efficiency in banking and insurance sectors without compromising on the aspect of risk and cost management. Strategic Cost Management is vital for optimizing resources and creating along term value. CMAs can play a key role in aligning business practices with India's development goals, and therefore this National Seminar is actually a step in the right direction. We must now address the increased risks that is cyber-attacks which pose significant threats to the financial eco system. She stated that Government of Maharashtra has launched various initiatives like Maha Cyber at Mhape to combat cyber threats at the cost of approximately Rs.850 crores and it is located at Nagpur where they are able to use tools like AI immediately to get feedback on crime and huge data sets in order to interpret those data for immediate action. These initiatives highlighted the Maharashtra's commitment to safeguard it's citizen and maintaining trust in the digital and financial ecosystem. She urged all the participants to engage actively, share their insights and suggestions and to collaborate on innovative solutions so that after the end of this seminar they can come with a suggestive framework on what can be done and what canchange and she is ready to work collectively in order to create a robust and risk free financial system. She quoted Mahatma Gandhi to highlight that our future depends on what we do in present and wished this conference great success.

Speech by Shri Gopal Murli Bhagat, Chief Executive (Officiating), IBA, Guest of Honour:

He stated that process re-engineering can incur additional costs as we copied the manual process and tried to fit it in the computerized environment. He opined that this is where the CMAs will fit into the picture and this is required in order to reducethe operational cost involved in undertaking various processes by the institutions. He stated that CMAs can contribute significantly in strengthening the balance sheet of banks and commercially it is now a golden period for CMAs.

Speech by Shri Vinod Jaiswal, CGM, SBI as Guest of Honour:

He started the speech stating that tremendous changes have happened in the financial sector. Regarding various challenges faced by the banks, he mentioned about regulatory compliance, technological disruptions, competitive pressures and evolving customer expectations which have necessitated a fundamental shift in how we operate in the present financial world. He emphasized that both banking and insurance are integral to our economy and efficiency is the foundation of their success. Efficiency is not just about cutting costs but about optimizing operations, managing risks effectively, and ensuring customer satisfaction.

He added that two key pillars of risk management and cost management are central to achieving this efficiency and added that they are not isolated functions but interdependent processes that must be strategically aligned to deliver the sustainable growth. Risk and cost management are intertwined and effective risk management can help reduce costs by minimizing losses and reducing the need for costly risk mitigation strategies. Poor risk management can lead to inefficiencies and increased costs in terms of penalties, fraud or reputational damage. Conversely, cutting costs without understanding associated risks can expose the institutions to vulnerabilities. Risk is inherent in banking and Risk Management is the cornerstone of efficiency. Effective risk management is the foundation upon which efficiency is built. We should start identifying, assessing, and mitigating riskse.g. credit, market, operation and liquidity, and then we can minimize losses, reduce volatility, and create a stable environment for growth. Cost management is the second pillar in driving efficiency. The current economic environment demands a fine balance between cost optimization and value delivery. In banking, cost management is more than just a line item—it's a strategic imperative. Operational efficiency directly impacts our bottom line. Cost management is critical to the sustainability of our businesses. He elaborated that by optimizing costs, one can improve profitability, increase competitivenessand enhance shareholder value. It involves streamlining operations, reducing waste, and improving process efficiency. He emphasised that cost cutting should never compromise service efficiency. He stated that we are at the forefront of shaping the financial landscape. By adopting robust risk and cost management practices, we can enhance efficiency, drive growth, and build trust among our customers. The practitioners i.e., CMAs, being created by this esteemed institution ICMAI will come into picture to help the Bankers and Insurers in these endeavours. The integration of technology- be it AI, block chain, or data analytics—will play a pivotal role in achieving these goals. But above all, we must remain customer-centric, ensuring that every efficiency gain translates into better service and greater value for those we serve. Finally, he concluded that to embrace this opportunity to lead with resilience, innovation, and purpose. Together, he highlighted, we can build a stronger and more efficient financial ecosystem.

Embracing Technology Shift and Artificial Intelligence in the Banking, Financial Services, and Insurance Sector:

(Excerpts from CMA Prasenjit Deb, Advisor (Cost), Department of Food and Public Distribution, Ministry of Consumer Affairs, Government of India keynote speech delivered on January 16, 2025, at the National Seminar on Banking and Insurance organised by the Banking, Financial Services, and Insurance Board of the ICMAI) is provided at Page No.111 to 115

Speech by CMA G. Srinivasan, MD & CEO, Galaxy Health Insurance Ltd.:

He stated the perspective of insurance that the objective of the Prime Minister for a Viksit Bharat starts with the objective of making everyone in this country adequately insured. The sector has seen substantial progress in the last few decades. In the year 2023-24, the total life and non-life insurance premium is about Rs. 11.2 lakh croreswith the life insurance dominating Rs. 8.3 lakh crore and non-life sector Rs. 2.9 lakh crore. The insurance sector had issued now about 37 crore policies covering many individuals. Insurance sector contributes close to 3.8 % of GDP of the country. The sector is expected to grow 20% CAGR both in life and non-life sectors. It is one of those sectors creating employment and revenue. It provides long term capital required for infrastructure creation. India's contribution is 3.8% of GDP compared to global average of 7.1% which means it has a long way to go. Reaching out to people is now a challenge and technology plays an important role here. The pricing of Insurance products that is the premium amount, managing cost, which is a major component in the Insurance sector. The management of claims, enterprise risk management, internal Audit, risk selection and fraud management are the major areas where CMAs can contribute immensely in the insurance sector.

Welcome Address by CMA Chittaranjan Chattopadhyay, Chairman, BFSIB, ICMAI :

As a BFSI Chairman he gave the objective for selecting the theme for this event, "Enhancing Efficiency in Banking and Insurance by Leveraging Risk and Cost Management," as it is highly pertinent in today's economic landscape. He reminded that as we look forward to become a developed nation by 2047, it is imperative for us to make our banking and insurance sector more safe and efficient. Though our banking sector is showing growth and profit during the recent years but stiff competition among the participating banks is posing a serious operational risk for them. He categorized that appropriate profitability of the banking institutions can be ensured by appropriate risk and cost management. Regarding the Insurance sector, he stated that data from 2020 to 2024, which is available in the IRDAI website, shows that net claims increased from Rs.1,08,390 crores to Rs.1,72,290 crores. However, the underwriting loss increased from Rs. 23,720 crores in 2020 to Rs. 28,555 crores in 2024, after reaching a peak of Rs. 32,797 crores in 2023. The Underwriting Result (Profit/Loss from a particular insurance product excluding Investment Income) of General and Health Insurers including Public Sector and Specialised Insurers, over the last 5 years, as published on IRDAI's website, have been reporting huge losses over the last 5 years. He stated that maintenance of Cost Records and subsequent Cost Audit would enable Insurers to correctly identify and analyse product and sales channel profitability to obtain an accurate and appropriate information regarding costs. He observed that currently no such information is mandated which may or may not be analysed by Committees and Boards of Insurers. Further, Cost Accounting and Auditing would enable the identification and modification of non-value-added activities and improvement in underwriting profitability. The periodic Cost Audit reports to the Audit Committee and Product Management Committee of Insurers is required to increase profitability by helping appropriate pricing of the insurance products and outsource and modify non-value-added activities. In the background of these developments, the Institute has decided to conduct this national level seminar to address these issues in detail through interaction with eminent speakers. During this one and half days, the objective is for discussing, among others, risk mitigation techniques, cost effectiveness of these techniques, implementation strategies and also methods of accurate pricing of various banking and insurance products. He highlighted the fact that ICMAI is the only institute which has a comprehensive publication on infrastructure financing and requested the members to make use of that. He stated that ICMAI has a very cost effective certificate course on Fintech which is very useful for the members to prepare themselves for the future. He requested all the participants to engage themselves with the proceedings and get maximum benefits out of these deliberations.

Introduction by CMA Neeraj D. Joshi, Chairman, Management Accounting Committee, Cost Accounting Standards Board, Committee on Artificial Intelligence and Council Member, ICMAI :

After welcoming the dignitaries and participants, he observed that the banking and insurance sector, while processing any of the credit proposals or any of the financing proposals, looks predominantly on the financial side of the reporting. He emphasized that cost efficiency and operational informationare equally important for decision making. He added that this gives more of a micro level analysis at an operational level and that is precisely to be discussed in this two day seminar. These deliberations will include, inter alia, how the techniques of costing, techniques of efficiency measurement and the techniques of performance management can help the bank and insurance sector in identifying a viable project. It can validate the decisions of supplying of loans and insurance cover and identify the risks in time and initiate corrective actions.He mentioned that as the head of the AI Committee of the ICMAI, he is looking into the aspect of AI as a predictive analytical tool and observed that this endeavor is expected to help BFSI sector. He informed that ICMAI has taken started peer review process and multi-purpose empanelment scheme for facilitating bank audit.He informed that, as per the Government notifications, the stock auditneeds to be done by a practicing CMA. He concluded his comments by wishing success to this conference.

Introduction by CMA Manoj Kumar Anand, Chairman, Professional Development & CPE Committee, Infrastructure Committee, Technical Cell (Cost Audit & Statutory Compliances) and Council Member, ICMAI :

He thanked and welcomed all the speakers and discussed about the meeting with the former RBI Governor, Shri Shaktikanta Das, informing him about a publication on Costing in Financial Services in the Banking Sector. Former Governor appreciated the effort taken by the institute and requested ICMAI to update the publication. He showed his keen interest in understanding the benchmarking and optimization of different resources and optimization of costing of such services in different banks. Shri Anand informed that t and the Institute is working on that project. He stated that more and more banking institutions and insurance companies are showing interest in providing various audit and certification work to the CMAs, which is very encouraging.He also concluded his comments by wishing success to this conference.

Address by CMA T C A Srinivasa Prasad, Vice President, ICMAI :

He addressed the gathering and stated that the National Seminar is undertaken as a knowledge enhancement activity in which in order to have more takeaways it is necessary to listen more and acquire more knowledge and thereafter put it into practice. In this process we can be a partner of growth on the banking and insurance sector and can take care of our members and the Nation can march successfully with the pride towards the objective of Viksit Bharat. He concluded his comments by stating that institute is firmly behind the members who are associated with developments in banking and insurance sector and wished success to this conference.

Technical Session: 1

CMA Asim Kumar Mukhopadhyay, MD & CEO, TML Smart City Mobility Solutions Limited

He started his deliberation by stating that CMAs can play a pivotal role in Banking and Insurance Sector. He emphasized that Techno Financial phenomenon is most important facet. He showcased few cases where efforts have been made by his company to make everyone digitally trained. One of the examples is the "Samarth" policy, which Tata Motors has introduced and this is a welfare program specifically designed to support commercial vehicle drivers. He insisted that Insurance can be a very big solution for various challenges and costing is fundamentally important. He elaborately that we need to have an end to end management system. He stated that technology has been the biggest disruptor as far as the banking industry is concerned. It has enhanced customer awareness and expectations, improved productivity and brought in new business models. He discussed about the impact of technology, the key cost drivers, the cost management strategies, ESG consideration and increased competition, VUCA World, which are some key areas of technological advantages. He elaborated that the Institute can work with the bankers and with the insurance industry on the shoot cost approach. He pointed out that, among others, out sourcing non-core functions and off shoring, branch optimization and consolidation, branch rationalization, increased use of ATMs and Self-Service Options, cost awareness, strategic partnerships and alliances, Data Driven Decision Making and Analytics, are the new areas of developments and CMAs can have a vital role to play in these areas. . His key takeaways included strategic cost management which is required to stay competitive, a multi-pronged approach as key to success, embracing technology and innovation which are essential for staying competitive. He added that continuous investment in cyber security and development of secured technological platforms and imbibing ESG considerations into cost management are most pertinent.

CMA Sankalp Wadhwa, Consultant

He deliberated and stated that the financial services industry is facing enormous challenges in terms of cost computation, cost reduction and achieving profit and growth objectives. This is evident from the following:

- Increased market competition in terms of price, overcapacity and new distribution models.

- Increased pressure on financial and institutional providers to enhance their understanding and transparency of costs.

As of now, main trends which are taking place in the finance function are as follows.

- Rising operating costs in the financial services industry. This is on account of tight regulatory structure, increased scrutiny and expectation of management regarding availability of vital information in the shortest possible time.

- Reporting requirements have increased and the entire process has become time-consuming in light of extensive spreadsheets and preparation of costly proceedings. However, with emergence of technology and big data analysis tools, speed and flexibility of reporting have been attained.

- Sustained growth is a challenge in the light of rising competition, declining ROIs and inaccessibility to capital. This demands timely availability of information on costs, profitability and performance. This information will help to do more robust analysis and will strengthen the ground for strategic decision-making.

He added that to take care of this, it is vital that appropriate cost management and profitability analysis (CMPA) is undertaken so as to create value. CMPA is an efficient tool that provides timely, reliable and relevant information on costs and profitability of an organisation.

Shri Gopal Murli Bhagat, Chief Executive(Officiating Chief Executive), IBA-chaired the session and provided a ring side approach of the topic.

CMA Harshad Shamkant Deshpande, Chairman, Journal & Publications Committee and Council Member, ICMAI gave the vote of thanks.

Technical Session: 2

CMA G. Srinivasan, Chairman of the session:

He started the session stating that the insurance is a product of trust and the banking infrastructure is 12 times bigger than Insurance sector and bancassurance enhances the scope of insurance products to reach the intended objectives.

He deliberated that the objective of the Government is insurance for all by 2047 and in the session he moderated the session and raised various pertinent questions pertaining to the Bankassurance and the interplay of technology, after sales service and banking channel as a cohesive partnership for proper marketing and selling of the Insurance products.

The other key observations of the other panelists are stated as follows:

Shri Subhrajit Mukhopadhyay, Executive Director, Edelweiss Life Insurance Co. Ltd. :

He stated that the vision of Government to fulfill the goal of Vikshit Bharat and harped the point that insurance is still considered to be a push product and not a pull product. He stated that the awareness mechanism should be strengthened about insurance from all stakeholders as it form the foundation of financial planning. Financial literacy be enhanced and he also highlighted various challenges like perils of lack of proper advisory support digital resulting in misspelling and elaborated the contours of digital sales and how the Bank works as an assurance partner in providing accessibility and enhances the affordability.

Product quality improved over long term product and savings and investment is doing well through such collaborative efforts of banking.

He also stated that proper standardized advisory support is necessary and especially to the vulnerable senior citizens so that proper due care is undertaken and insurance is sold after assessing the needs of the customers.

He highlighted the cost aspect of bank assurance as a channel partner and concluded that the front end and back end of the process has to be simplified for proper solutions to the customer and make the life of a customer simpler and easier.

Shri T. Babu Paul, Executive Director, National Insurance Co. Ltd.:

He stated that the market penetration of very less and fillip has resulted due to COVID-19. He stated that the goal of 2047 of insurance for all is a challenge for inclusive growth. He stated that the regulator vision of insurance coverage for all andNon-Life Insurance Company cannot take off unlike there is an awareness about the benefits of life insurance and proper knowhow of the products.

He also stated that bankers should cover the proper each loan with proper insurance coverage and protect the interest of the customers. He also highlighted that sensitization procedures are to be undertaken by all key personnel.

He further stated that for effective after sales service the minimum information flow along with SOPs are required to be undertaken in order to cater proper customer service. The claims process was to be done in a proper seamless manner for the interests of the customers. We know that bankers are an integral part of making the objective of insurance for all.

Shri C. S. Ayyapan, General Manager, The New India Assurance Co. Ltd. started the discussion with the theme that presently Insurance is bundled of life and non-life combined and servicing is paramount. In 2047 the opportunities for regulators and companies is paramount. With the advent of physical model, artificial intelligence will have tremendous impact on the future growth of the insurance sector.

He further stated that the retail banking and insurance as the solution provider in order to enabler more penetration for life and non-life insurance Companies.

Banks as a channel partners should help the customers through a customer centric approach.

The need of the hour is proper after sales service which at many times is not proper. He highlighted that in case of bank assurance channel and proper IT enabled services are to be synced with CRM software for proper customer management.

Ms. Jyoti Vaswani, CIO of Canara HSBC Life Insurance started her conversation with the advent of challenges and opportunities which are presently prevalent. She stated that that all stakeholders must ensure proper conducive environment for the insurance company to prosper and grow. She stated that affordable product is the challenge and a seamless purchase experience is the core objective. The bank assurance is the most relevant channel and the banking channel will ensure and enable more acquisition of customers. A loan and insurance is possible in present environment through the bank assurance format.

She stated that customer trust is most important aspect and insurance companies should protect the interests of gullible customers from any mis-selling and proper financial planning and proper guidance has to be done by the insurers companies which can be ensured through training.

Specific products are to be focussed but the objective is now to reach the needs of the customers. The products would be very customized and proper data analytics process be undertaken along with AI techniques has to be used for proper targeting. Nowadays, sassy Insurance has been created and how it impacts and their significance was stated at length.

In conclusion she stated that Bank assurance system will enable a holistic banking ecosystem with a key lever of technology for enabling insurance for all. The Government will be a partner along with technology which will be an enabler for the Government's vision of insurance for all by 2047.

CMA Ashok Kumar Jain, BFSI Board Member provided the concluding remarks. He stated the penetration aspects and other highlights of the discussion.

CMA Suresh R Gunjalli, Council Member, ICMAI provided the vote of thanks.

Technical Session: 3

Speech by CMA Gopal Gosain, Independent Director, Nainital Bank on "Predicting the Probability of Loan Default of Banks through Expected Credit Loss Provisions" :

It's an apt time for the CMAs to enter into the banking area. Firms can survive only on the efficiencies, the entry and exit barriers and CMAs can improve on the operational efficiencies. Profitability and costing is significant in today's technological aspect and in terms of implementing the guidelines, the regulator is taking cautious approach. Economy also adopts best practices for maintaining a resilient economy. Due to the challenges faced by the banks in terms of loans, the provisioning of loans comes into picture. Stability of banks is very important. Additional Capital is required for maintaining expected credit loss. He discussed on the probability of default, behaviour pattern in default, recovery on secured loans. Documentation and proper representation is required in portfolio selection, behaviour of pool assets to be monitored. Their needs a clear understanding of limitations and advantages, needs to have an in-depth knowledge on risk management level. There should be a proper decision making and value addition in the business.

Scaling innovation in Fintech and Insurtech: Growth through collaboration and digital infrastructure (Panel Discussion):

The BFSI Board, ICMAI conducted a panel discussion on the topic, 'Scaling innovation in Fintech and Insurtech: Growth through collaboration and digital infrastructure' on 16th January, 2025 as part of the 'National Seminar on Banking and Insurance'. The session was moderated by Shri N.D.S.V. Nageswara Rao, General Manager (IT) of State Bank of India, has speakers Shri Nimish Agrawal, CEO, Finlabs India Pvt Ltd., Shri Rajiv Gupta, President, PB Fintech Ltd., Dr. Saurabh Maheshwari, International Trainer and Advisor. CMA Shri Chaitanya Mohrir, Treasurer, WIRC, ICMAI also graced the session. The moderator and the speakers are well established in their areas of operation and shared their knowledge as part of the panel discussion. Shri N.D.S.V. Nageswara Rao while initiating the discussion, thanked the ICMAI for selecting such an important topic and also thanked CMA P Vasudevan, Executive Director, Reserve Bank of India for sharing his valuable thoughts on the latest developments in the Fintech sector, UPI, ULI and so on. Further, while explaining his views on how the collaboration between different players has shaped the improvements in the financial system, Shri Nageswara Rao requested Dr. Saurabh to share his opinion on the latest trends in technological collaboration. Dr. Saurabh explained that when it comes to traditional banking and traditional insurance, the most important aspects are reliability, trust as well as customer satisfaction which have been created over the decades of their operations. He opined that what tech can bring up is customer satisfaction, agility, faster data processing, and all such things. So when these two things are clubbed together, obviously, new ecosystems will emerge and this is creating more opportunities for professionals and also making sure that the right services are given to the customers in a very poised and personalized manner. Nimish in his opening remarks explained how they have leveraged the digital public infrastructure at the start of their Fintech operations. Be it customer on boarding through Aadhaar or payment mechanisms like UPI, these have helped in reaching out to many customers at the quickest possible time. Shri Rajiv Gupta has elaborated with examples on how the issuance of insurance policy has become transformative from those manual days to the present technology platform offering innovative products, and faster processing. He concluded that only technology will ensure a large number of the population with insurance coverage. Responding to a question by the moderator on whether the Digital Public Infrastructure has democratized financial services, Dr. Saurabh fully agreed to the statement and explained with statistics how DPI is making waves in the financial ecosystem. Giving an example of how he waited for seven days during his college time to receive a remittance from his father, to the present day where any remittance will take less than seven seconds, he concluded that the DPI has revolutionized the entire payment methodologies. At the same time, he quoted the growing worries on account of cyber crimes and wanted the public to be aware of the tricks of the seamstress. The panel also discussed cost management and how the innovations will help in offering affordable services to customers. Rajiv explained that by using advanced technology, the operational expenses for claim processing have come down significantly, as online claims replaced paper submissions. Once the claim is uploaded, integration through API will help in the immediate processing of the claim, instead of waiting for the papers to reach the insurance company. Saurabh described that while the initial capes for technology may appear high, the same can be realised within 3 to 5 years by way of savings in operational expenses. So tools like robotic process automation, robot callers and detailed data analytics, support you in analyzing, positioning and putting the right cost in the right manner. It also helps out in ensuring the overall cost of acquisition of the customer will be much less than what exactly is being incurred now. While strategic cost management ensures that we will continue to innovate and at the same time reduce the cost, the moderator opined that one more important area is governance and risk management. The panel speakers discussed the subject in depth. From the discussions it was clear that , as it has been proven so many times that any governance is more effective if it is proactive than reactive. Clear Service Level Agreements between various stakeholders like bankers, insurers, and technology service providers is a key in governance. Proper control of the stakeholders by the regulators will also ensure trust in the system by the public. There is a need for higher corporate governance standards, which means transparency around customers connecting with them. One has to convince the regulator that they are not doing anything to harm the customer. Compliance with various regulations like Data Privacy and cyber security are important areas to address. Better risk management practices as well as ensuring compliance will give us long-term success and at the same time, provide a better customer experience. Whatever we do as part of BFSI, ultimately, it is the customer centricity and customer experience that is most important. CMA Chaitanya Mohrir, Treasurer, WIRC, ICMAI proposed the vote of thanks.

Date: 17th January, 2025

Panel discussion in Insurance: Expectations from the Industry :

CMA (Dr.) Tarun Agarwal, Former Director, National Insurance Academy and BFSI Member introduced the session about the risk management and impact of insurance in the lives of the individuals. He had set the tone of the discussion by stating that money is the most difficult thing to manage. He stated that insurance industry has lot of players e.g. insurers, insured, regulator, various service providers, so on and so forth.

Shri Inderjeet Singh, Secretary General, Non-Life Insurance Council there after stated the genesis of the insurance sector and spoke eloquently about the various stakeholders, their role and responsibilities, etc. He emphasised the necessity of insurance in the value chain of the insurance sector. He also stated the entire procedure of the claim process and the key roles of the various stakeholders and covered the expectations of the industry in his comments.

Shri S. N. Bhattacharya, Secretary General, Life Insurance Council in his speech stated the transformation of the Life Insurance Industry since independence. He stated that the penetration of life insurance is still very low and at present 34 crores of life insurance policies are only covered. He hoped that penetration will increase and more citizens would be under the ambit of insurance in the coming days.

CMA Ashok Jain in his comments highlighted that insurance market and the players have high expectations from the insurance regulator. He expects that the regulator will take note of the ground realities and challenges and will frame regulations accordingly. This, in his opinion, will sped up the penetration of the insurance products.

CMA Chittaranjan Chattopadhyay, Chairman, BFSIB stated that each year June month is observed as the Insurance Month by the BFSIB, ICMAI. He thereafter raised questions pertaining to the role of CMAs in the Insurance Sector and how they can leverage their skills in the insurance sector.

Shri Inderjeet Singh pointed out that the assessment of risks and assessment of loss can be undertaken by the CMAs in the insurance sector. CMAs can also partner with the engineers in areas of engineering and non-engineering roles the CMAs can play a vital role.

CMA Chittaranjan Chattopadhyay then pointed the role of CMAs in the pricing of the life insurance products to Life Insurance Council and ***Shri S.N. Bhattacharya*** stated that Internal Audit can be done by CMAs and they can do a lot of activities related to right pricing of life insurance products which normally the actuaries undertake.

CMA Chittaranjan Chattopadhyay requested thereafter ***Shri Inderjeet Singh*** about the role of pricing in case of health and motor insurance and ***Shri Inderjeet Singh*** stated that CMAs can play a pivotal role. CMAs can also play an important role as a surveyor and loss assessor.

CMA Chittaranjan Chattopadhyay further stated that the data analytics can be undertaken by the CMAs in the Insurance Sector and they can play a vital role in both the Life Insurance and Non-life Insurance.

CMA (Dr.) Ashok Jain, BFSI Board member provided the concluding remarks and the vote of thanks.

Speech by CMA (Dr.) P. Siva Rama Prasad, Former AGM, State Bank of India:

He deliberated on the topic of responsible and sustainable Lending. His presentation started with the vagaries of nature like the extreme weather conditions, pollutions that have an adverse repercussion on ecosystems, health, infrastructure and the economy. The bankers are also contributing in the lending activity to the important sectors of the economy. g. agriculture sector, industry sector and service sector since they are the backbone to the economic development of the country. If the banks are providing ESG linked loans which are focusing on environment, then to some extent problem is resolved. The ESG-linked loans focus on the Environment, Social, and Governance Aspects or Performance of the Borrower which is becoming a "New Norm" in the 'Banking Industry'. It not only brings up organizations towards more "Responsible Environmental, Social, Governance"–but the related efforts provides greater benefits like lower interest rates on various types of loans.

Banks play a crucial role in financing the transition to a low-carbon economy, mitigating the impacts of climate change and reducing banks' exposure to climate-related risks. The benefits of ESG Lending are improved transparency and accountability by disclosing ESG-related information and long-term sustainability of the financial system as a whole. The Bank has outlined sustainability objectives such as curbing carbon emissions, funding renewable energy ventures, championing diversity and inclusivity and responsible banking pertaining to the financial institutions that prioritize on Environmental, Social, and Governance (ESG) factors in their operations and investments.

A Reflective Overview of Banking & Insurance - Contemporary Developments and Way Forward:

(Excerpts from CMA (Dr.) Paritosh Basu 's keynote speech delivered on January 17, 2025, at the National Seminar on Banking and Insurance organised by the Banking, Financial Services, and Insurance

Board of the ICMAI) is provided at Page No.___

Speech by CMA Arti Ajit Patil, MD & CEO, Saraswat Co-operative Bank Ltd. :

She provided an insight on the operations of the cooperative sector. Banks in the cooperative sector are heterogeneous. She explained various initiatives undertaken by Saraswat Cooperative Bank which has been in existence for the last 106 years and has been profitable throughout and in previous year they have achieved a profit of Rs 502 crores with zero percent net NPA and gross NPA at 2.88 percent. She told that the Cooperative Bank is now heading towards with the determination to achieve zero percent Net NPA consistently. She asserted that the role of CMAs arrives in the assessment of commercial advances and the CMA curriculum provides the right insights to assess a project appraisal, working capital assessment and risk assessment. She emphasized that the knowledge of CMAs can be utilized in monitoring of advances specially in stock audit and unit inspection, strategic cost management and also in techno- economic viability of projects and concurrent audit. She explained the role of CMAs and how it can help in Digital Lending and Digital Projects in the banking sector.

Speech by Shri Topendra Bhattacharjee, Former Banker:

The speaker focused on the concept of digitalization and the weakness or vulnerabilities arising from such exposure. He started his session on data driven digitization which is extremely important for the financial institutions but observed that there is lack of cohesiveness in extraction / analysis of the data already available with financial institutions. He emphasised the importance of cohesiveness of data for not only customer benefits but also for proper risk management by the financial institution.

Banks are using metadata and customer data platform for cleaning all data to bring homogeneity for risk management, managing fraud control and also for marketing purposes. He stressed the concept of a unique ID, effective business intelligence which are the major features for the operating data. He stressed that new-age companies are emerging in the NEO Banking space in order to reach the customers and API (including open API) from NPCI and UPI are the platforms which are enabled through multiple applications available in the banking sectors for security purposes. The people are using these applications for their convenience. He highlighted that CMAs can contribute significantly in data analysis leading to better marketing strategy for the organisation. He emphasized on the Fintech landscapes viz. data monetization, segmented offering and distribution and explained the concept of embedded finance and insurance. He iterated that generative artificial intelligence (GenAI) is transforming the banking sector and GenAI provides innovative solutions to all the three major parts of a bank viz., front office, middle office and back and optimises efficiency, enhances security, increases customer satisfaction and standardizes the inputs into the system and improves the portfolio. He also explained the four layers in BFSI viz: the presence less layer, paperless layer, cash less layer and lastly the access layer governed by the digital personal data protection act. He discussed in detail various aspects of cyber threats and recommended cyber security measures to be followed by every user in the financial landscape.

Speech by CMA B. K. Unhelkar Retired LICian in Executive Director Grade :

He provided a brief overview on the contemporary insurance business and its development and the way forward. He discussed in detail the development of insurance markets in India, which in 2022 was the 10 th largest Insurance Market and in financial terms it is USD131 billion with 1.9% share in global insurance premium. The insurance sector market size in India today is roughly Rs. 8 lakh crore, which was Rs, 50,000 crore in the year 2000. He asserted that India is projected to become the sixth largest in market size by 2032 and would be one of the fastest growing insurance markets in the world. He emphasized that policyholders as consumers need to be handled with utmost care not only for on boarding but till conclusion of contract. The Human Life Value (HLV) & Policyholders' Reasonable Expectations (PRE) are two important terms for an insured's perspective. He added that there are several factors that get included in fixing the premium amount. He also told that Indian Regulator i.e. IRDAI is taking several steps to ensure that the insurance reaches to one and all and its vision of "Fully Insured India by 2047" would soon materialize with ardent efforts of the Government and active participations from the citizens of India.

Lighting of the Lamp
CMA T C A Srinivasa Prasad, Vice President, ICMAI (7th from right), CMA G. Srinivasan, MD and CEO, Galaxy Health Insurance Ltd. (5th from left), Shri Vinod Jaiswal, CGM, SBI (2ndfrom left), Shri Gopal Murli Bhagat, Chief Executive (Officiating), IBA (4th from left), CMA Prasenjit Deb, Advisor (Cost), Ministry of Consumer Affairs, Government of India(4th from right) and other Council Members, ICMAI were also present National Seminar on 16th January, 2025.

CMA Chittaranjan Chattopadhyay, Chairman, BFSIB & IAASB and ACMB of ICMAI addressing in the inaugural session of the National Seminar on 16th January 2025.

CMA T C A Srinivasa Prasad, Vice President, ICMAI felicitating Shri Gopal Murli Bhagat, Chief Executive (Officiating), IBA,National Seminar on 16th January 2025. (R to L)

CMA Neeraj D. Joshi, Chairman, Management Accounting Committee, Cost Accounting Standards Board, Committee on Artificial Intelligenceand Council Member, ICMAI felicitating CMA Prasenjit Deb, Advisor (Cost), Ministry of Consumer Affairs, Government of India,National Seminar on 16th January, 2025. (R to L)

CMA Mihir Vyas,Vice-Chairman, WIRC, ICMAI felicitating Shri Vinod Jaiswal, CGM, SBI, National Seminar on 16th January, 2025. (L to R)

Release of BFSI Chronicle 19th edition on 16th January, 2025 at Mumbai.

CMA G. Srinivasan, MD and CEO, Galaxy Health Insurance Ltd. addressing in the inaugural session in the National Seminar on 16th January 2025.

CMA Prasenjit Deb, Advisor (Cost), Ministry of Consumer Affairs, Government of India addressing in the inaugural session in the National Seminar on 16th January, 2025.

Shri Gopal Murli Bhagat, Chief Executive (Officiating), IBA addressing in the inaugural session in the National Seminar on 16th January, 2025.

Ms. Sujata Saunik, IAS, Hon'ble Chief Secretary, Government of Maharashtra addressing in the inaugural session in the National Seminar on 16th January, 2025.

Shri Gopal Murli Bhagat, Chief Executive (Officiating), IBA (2nd from left), CMA Asim Kumar Mukhopadhyay, MD & CEO, TML Smart City Mobility Solutions Limited (extreme left), CMA Sankalp Wadhwa, Consultant (extreme right) and CMA Harshad Shamkant Deshpande, Chairman, Journal & Publications Committee and Council Member, ICMAI (2nd from right) in the 1st Technical session in the National Seminar on 16th January 2025.

CMA Asim Kumar Mukhopadhyay, MD & CEO, TML Smart City Mobility Solutions Limited addressing in the 1st Technical session in the National Seminar on 16th January, 2025.

CMA Sankalp Wadhwa, Consultant addressing in the 1st Technical session in the National Seminar on 16th January, 2025.

CMA Suresh Rachappa Gunjalli, Chairman, MSME & Start-up Promotion Board and Council Member, ICMAIfelicitating Shri T. Babu Paul, Executive Director, National Insurance Co. Ltd.National Seminar on 16th January, 2025. (R to L)

CMA Suresh Rachappa Gunjalli, Chairman, MSME & Start-up Promotion Board and Council Member, ICMAI felicitating Shri Subhrajit Mukhopadhyay, Executive Director, Edelweiss Life Insurance Co. Ltd. National Seminar on 16th January, 2025. (R to L)

CMA (Dr.) Ashish P. Thatte, Chairman, International Affairs Committee, Indirect Taxation Committee, Sustainability Standards Board and Council Member, ICMAI felicitating CMA P. Vasudevan, Executive Director, Reserve Bank of India, National Seminar on 16th January, 2025. (R to L)

CMA Chittaranjan Chattopadhyay (extreme left) with the speakers on the 5th Technical Session - Panel discussion on "Scaling innovation in FinTech and InsurTech: Growth Through Collaboration and Digital Infrastructure" along with CMA Chaitanya Mohrir, Treasurer, WIRC, ICMAI (extreme right).

CMA Chaitanya Mohrir, Treasurer, WIRC, ICMAI felicitating Shri Nimish Agarwal, Partner, Finlabs India, National Seminar on 16th January, 2025. (R to L)

CMA Chaitanya Mohrir, Treasurer, WIRC, ICMAI felicitating Shri Rajiv Gupta, President, PB Fintech Ltd. National Seminar on 16th January, 2025. (R to L)

CMA Chaitanya Mohrir, Treasurer, WIRC, ICMAI felicitating Shri NDSV Nageswara Rao, General Manager (IT), State Bank of India, National Seminar on 16th January, 2025. (R to L)

CMA Chaitanya Mohrir, Treasurer, WIRC, ICMAI felicitating Dr. Saurabh Maheshwari, Consultant, National Seminar on 16th January, 2025. (R to L)

Dr. Saurabh Maheshwari, Consultant, addressing in the 5th Technical session in the National Seminar on 16th January, 2025.

Shri Nimish Agarwal, Partner, Finlabs India, addressing in the 5th Technical session in the National Seminar on 16th January, 2025.

Shri Rajiv Gupta, President, PB Fintech Ltd. addressing in the 5th Technical session in the National Seminar on 16th January, 2025.

CMA Chittaranjan Chattopadhyay, Chairman, BFSIB & IAASB and ACMB of ICMAI felicitating CMA (Dr.) Tarun Agarwal, Former Director, National Insurance Academy, National Seminar on 17th January, 2025. (R to L)

CMA Chittaranjan Chattopadhyay, Chairman, BFSIB & IAASB and ACMB of ICMAI felicitating Shri S. N. Bhattacharya, Secretary General, Life Insurance Council at the Panel discussion in Insurance: Understanding of Industry Expectations held on 17th January, 2025. (L to R)

CMA Chittaranjan Chattopadhyay, Chairman, BFSIB & IAASB and ACMB of ICMAI felicitating Shri Inderjeet Singh, Secretary General, Non-Life Insurance Council at the Panel discussion in Insurance: Understanding of Industry Expectations held on 17th January, 2025. (L to R)

CMA Chittaranjan Chattopadhyay, Chairman, BFSIB & IAASB and ACMB of ICMAI (2nd from left) along with all panelists for the Panel discussion in Insurance: Understanding of Industry Expectations held on 17th January, 2025.

CMA (Dr.) Tarun Agarwal, Former Director, National Insurance Academy, addressing in the 6th Technical session in the National Seminar on 17th January, 2025.

Shri Inderjeet Singh, Secretary General, Non-Life Insurance Council, addressing in the 6th Technical session in the National Seminar on 17th January, 2025.

Shri S. N. Bhattacharya, Secretary General, Life Insurance Council, addressing in the 6th Technical session in the National Seminar on 17th January, 2025.

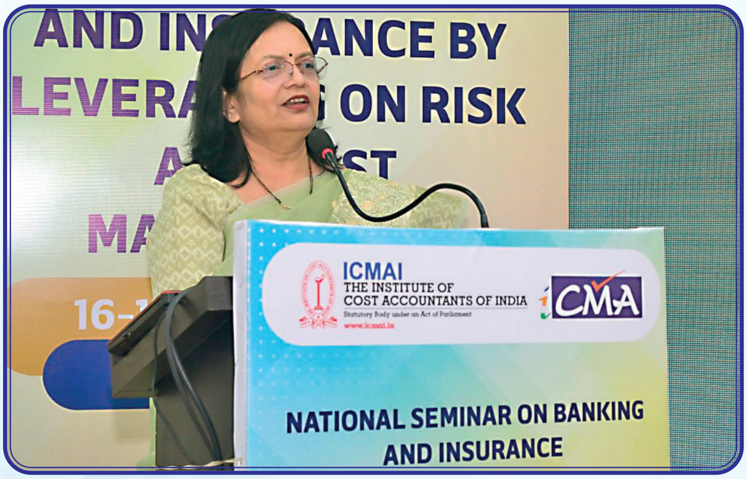
CMA Arti Patil, MD & CEO, Saraswat Co-operative Bank Ltd. being felicitated by CMA Chittaranjan Chattopadhyay, Chairman, BFSIB & IAASB and ACMB of ICMAI, National Seminar on 17th January, 2025. (R to L)

CMA (Dr.) Partosh Basu, Senior Director (Services), Stagility Consulting Pvt. Ltd. being felicitated by CMA P. N. Murthy, BFSI Board Member, National Seminar on 17th January, 2025. (L to R)

Shri Topendra Bhattacharjee, Former Banker and CEO, Bargadai being felicitated by CMA Chittaranjan Chattopadhyay , Chairman, BFSIB & IAASB and ACMB of ICMAI, National Seminar- on 17th January, 2025. (R to L)

CMA B. K. Unhelkar, Retired LICian in Executive Director Grade being felicitated by CMA P. N. Murthy, BFSI Board Member, National Seminar on 17th January, 2025. (L to R)

CMA (Dr.) Partosh Basu, Senior Director (Services), Stagility Consulting Pvt. Ltd. addressing in the 8th Technical session in the National Seminar on 17th January, 2025.



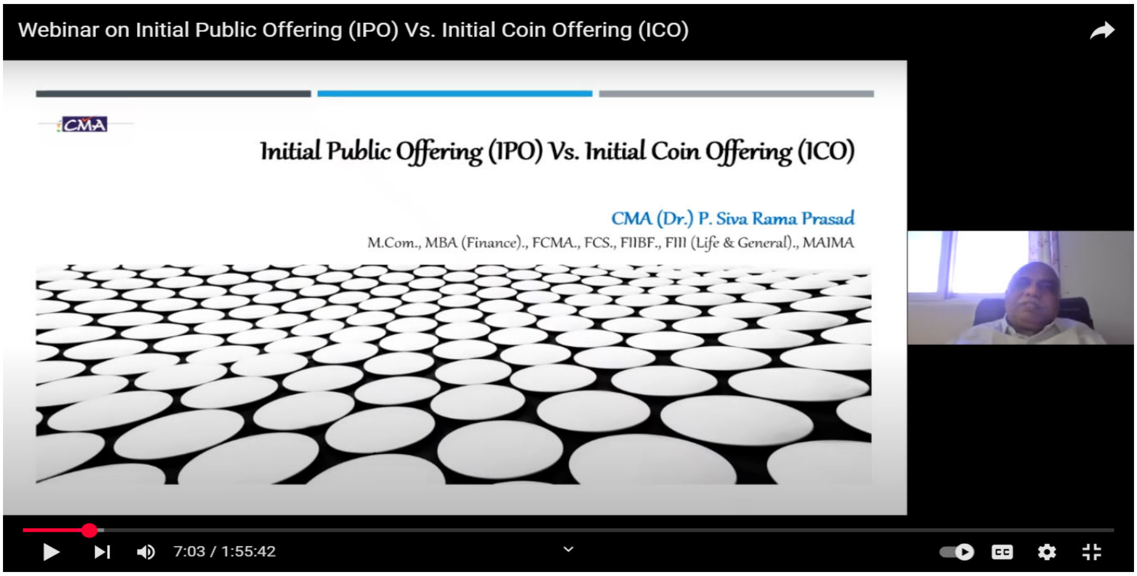
CMA Arti Patil, MD & CEO, Saraswat Co-operative Bank Ltd. addressing in the 8th Technical session in the National Seminar on 17th January, 2025.

Shri Topendra Bhattacharjee, Former Banker and CEO, Bargad.ai addressing in the 8th Technical session in the National Seminar on 17th January, 2025.

CMA B. K. Unhelkar, Retired LICian in Executive Director Grade addressing in the 8th Technical session in the National Seminar on 17th January, 2025.

Webinar on "Initial Public Offering (IPO) Vs. Initial Coin Offering (ICO)"

Date: 07/03/2025



The BFSI Board of ICMAI organized a webinar on"Initial Public Offering (IPO) Vs. Initial Coin Offering (ICO)" on7th March 2025, from 4:00 p.m. to 6:00 p.m. CMA (Dr.) P Siva Rama Prasad, Former Assistant General Manager, State Bank of India was the Speaker. He discussed on IPO Vs ICO where an Initial Coin Offering (ICO) is a special type of fundraising or capital raising activity in the Cryptocurrency or Blockchain Environment and it is used by cryptocurrency projects to gather capital to fund the development of a new application, service, or crypto coin. An initial public offering (IPO) is a stock market event while an ICO is a cryptocurrency event and both are ways for companies to raise funds. An IPO can help fund new growth or pay off debt and it requires disclosure of financial and business information.He discussed in brief on IPO processes where funds are raised through an IPO and it can provide the necessary resources for a company to fuel its growth plans and take advantage of new opportunities. There are various steps involved in IPO and there are certain guidelines of Initial Public Offering. He detailed about ICOs that have become a popular method for Startups to quickly and efficiently raise capital. During the ICO process, the cryptocurrency project team promotes the ICO calendar to make sure that potential investors know when and how to participate. However, he asserted that the lack of regulation has also paved the way for ICO scams making it essential for potential investors and since it operates in a more relaxed regulatory environment often with less oversight which can lead to a higher risk of fraud and scams. He briefed on some examples of ICO like Ethereum, launched in July 2014 and raised $ 18.4 million, and it introduced the concept of a programmable blockchain to the crypto world and Cardano in January 2017 and raised $ 62.2 million creating a more secure and scalable blockchain. He iterated that for MSME Corporates and Start up Companies in India, technology related IPOs are required to quick start of companies and least cost in mobilization of funds through IPOs and Initial Coin Offering (ICOs) are required for faster fundraising and has greater potential for more funds. There was a brief question and answer session and the event concluded with the vote of thanks by CMA Dibbendu Roy, Additional Director and Secretary andHoD, BFSIB, ICMAI.

Brochures – Courses Offered By The BFSI Board


iCMA
FINTECH
Brochure
Advance Certificate Course on
FinTech
Banking, Financial Services and Insurance Board
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Behind every successful business decision, there is always a CMA

Advance Certificate Course on FinTech | The Institute of Cost Accountants of India

About The Institute

The Institute of Cost Accountants of India (ICMAI) is a statutory body set up under an Act of Parliament in the year 1959. The Institute as a part of its obligation, regulates the profession of Cost and Management Accountancy, enrols students for its courses, provides coaching facilities to the students, organizes professional development programmes for the members and undertakes research programmes in the field of Cost and Management Accountancy. The Institute pursues the vision of cost competitiveness, cost management, efficient use of resources and structured approach to cost accounting as the key drivers of the profession. In today's world, the profession of conventional accounting and auditing has taken a back seat and cost and management accountants increasingly contributing towards the management of scarce resources like funds, land and apply strategic decisions. This has opened up further scope and tremendous opportunities for cost accountants in India and abroad.

International Affiliation

The Institute is a founder member of International Federation of Accountants (IFAC), Confederation of Asian and Pacific Accountants (CAPA) and South Asian Federation of Accountants (SAFA). The Institute is also an Associate Member of ASEAN Federation of Accountants (AFA) and member in the Council of International Integrated Reporting Council (IIRC), UK.

Institute's Network

Institute's headquarters is situated at Kolkata with another office at New Delhi. The Institute operates through four Regional Councils at Kolkata, Chennai, Delhi and Mumbai as well as through 117 Chapters situated in India, 11 Overseas Centres abroad, 2 Centres of Excellence, 61 CMA Support Centres and 401 Recognized Oral Coaching Centres.

Institute's Strength

The Institute is the largest Cost & Management Accounting body in the World, having a large base of about 1,00,000 CMAs either in practice or in employment and around 5,00,000 students pursuing the CMA Course.

Vision Statement

"The Institute of Cost Accountants of India would be the preferred source of resources and professionals for the financial leadership of enterprises globally."

Mission Statement

"The Cost and Management Accountant professionals would ethically drive enterprises globally by creating value to stakeholders in the socio-economic context through competencies drawn from the integration of strategy, management and accounting."

Course Objective

The Banking, Financial Services and Insurance Board is pleased to offer **"Advance Certificate Course on FinTech"**. It is pertinent to mention that there is a significant demand for FinTech-qualified individuals in GIFT City, Gandhinagar, and Ahmedabad. India's inaugural International Financial Services Centre (IFSC) at GIFT City offers Indian corporates expanded access to Global Financial Markets. Entities Established within the IFSC also enjoy numerous Tax Benefits. IFSCs play a Crucial Role in Fostering the development of "Fintech Hubs". Given the substantial number of Indian Professionals Working in "FinTech Abroad", India has the Potential to Emerge as a Prominent "Fintech Hub".

This Advanced Certificate Course on **FinTech** covers the following Learning Objectives:

- Foundations of Fintech.
- Deep Dive into Blockchain.
- Fintech Innovation in Banking.
- Fintech Transforming Wealth Management.
- Fintech Revolutionising Insurance.
- Exploring New Frontiers of Fintech.

Online Admission Link:
https://eicmai.in/advscc/DelegatesApplicationForm.aspx

CPE Credit: 10 hours
for members of The Institute of Cost Accountants of India

Course Eligibility

CMAs, Bankers (including Payment Banks, Small Finance Banks, Regional Rural Banks, Co-operative Banks, NBFCs., Scheduled Commercial Banks (Private Sectors, Public Sector and Foreign Banks), CMA Final Students, Graduates, IT Professionals.

Course Duration

a. Classroom Learning of 2 hours per day in the Weekend through online mode
b. 50 hours online Coaching
c. 3 months' course
d. Online Examination for 100 marks

Course Fees

Course Fees (including learning kit) of Rs. 10,000/- plus GST of 18%

Examination

Rs. 750 plus GST per attempt

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Advance Certificate Course on FinTech | The Institute of Cost Accountants of India

Detailed Course Content

1: Introduction to Fintech

- Cloud Computing and APIs.
- Opensource Architecture.
- Blockchain Technology and DApps.
- Business Intelligence: AI & ML.
- Cyber Security.
- Generative AI.

2: Technology Innovation & Fintech Evolution

- Understanding Financial Crisis.
- The building blocks of Blockchain.
- Public versus private blockchain.
- Understanding Smart Contracts.
- Web 2.0 versus Web.
- Decentralized finance.

3: Blockchain

- Fintech and Disruption in Banking.
- Banking as a Service Model.
- Loan Apps and P-2-P lending.
- Open Banking Architecture.
- Case Study.

4: Fintech and Banking

- Robo-advising: The Digital Financial advisor
- Goal Based Investing
- Disintermediation of Asset Management
- Digital transformation of Wealth Management
- Case Study

5: Fintech and Asset Management

- Usage based Insurance and Microinsurance
- Machine Underwriting and Smart Contracts
- Probabilistic to Deterministic Models
- Insuring the uninsured
- Case Study

6: Fintech and Insurance

- Global Payment Ecosystem
- Payment and Digital Wallets
- Programmable Payments
- B2B and B2C Payment services
- Case Study

7: Fintech and Payments

- iCOs, Bitcoin, and beyond
- Cyrpto as an asset class
- Crypto Trading Strategies
- Non-Fungible Tokens
- Case Study

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iCMA
FINTECH
Contact for further queries
CMA Dibbendu Roy, Additional Director & HoD at bfsi.hod@icmai.in
CMA (Dr.) Aditi Dasgupta, Joint Director at bfsi@icmai.in
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Banking, Financial Services & Insurance Board

iCMA

BROCHURE

CERTIFICATE COURSE ON CREDIT MANAGEMENT IN BANKS

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Certificate Course on Credit Management in Banks

Detailed Course Content (Syllabus-2024)

1. Introduction & Overview of Credit (Module 1)

a. **Principles of Lending:** Safety, Liquidity, Profitability, Purpose of the Loan, Diversification Risk.
b. **Credit. Policy:** Importance, Contents, Exposure Norms.
c. **Types of Borrowers:** Individuals, Proprietorship Firms, Partnership Firms, Private & Pubic Limited Companies, Limited Liability Partnerships (LLP).
d. **Types of Credit Facilities:** Various Types of Credit Facilities-Cash Credit, Overdrafts, Demand Loan, Term Loans, Bills Discounting.
e. **Credit Delivery:** Sole Banking Arrangement, Multiple Banking Arrangement, Consortium Lending, Syndication.
f. **Environmental Appraisal:**
Physical Risks: Flood Risk – Drought / Water Scarcity Risk – Storms Risk – Extreme Heat Risk – Wildfires Risk – Other Risks.
Transition Risks: Emissions / Intensity Risk (Scope 1 & 2) - Emission / Intensity Risk (Scope 3) – ESG – Indicators / Rating (Third Party).
g. **Credit Appraisal:** Validation of proposal, Dimensions of Credit Appraisals, Credit Risk, Credit Worthiness of Borrower, Purpose of Loan, Source of Repayment, Cash Flow, Collaterals, Guidelines on CERSAI.
h. **Project / Term Loan Appraisal:** Technical Appraisal, Commercial / Market Appraisal, Managerial Appraisal, Financial Appraisal, Economic Appraisal, Project Cost & Means of Finance, Cost of Production & Profitability, Sensitivity Analysis, Break-even Analysis, Capital Budgeting-Pay Back Period Method, Time Value Money, Net Present Value, Internal Rate of Return, Life of the Project.
i. **Credit Rating:** Objective of Rating, Internal & External Rating, Model Credit Rating, Measurement of Risk, Methodology of Rating, Internal & External Comparison, Model Rating Formats.
j. **Documentation:** Meaning, Importance, Types of documents, Requisites of documentation, stamping of different documents, Mode and time of Stamping, Remedy for un-stamped / under stamped documents, Documents of which registration is compulsory, Time limit of registration, Consequence of non-registration, Execution, Mode of Execution by different executants, Period of Limitation, Law of Limitation to Guarantor, Extension of period of limitation.
k. **Types of Charges:** Purpose, Various types of charges, Types of Security, Mode of charge, Lien, Negative Lien, Set Off, Assignment, Pledge, Right of Banker as a Pledgee, Duties as a Pledgee, Mode of Charges, Hypothecation, Mortgage - different types of mortgages, Difference between Simple and Equitable Mortgage.

2. Analysis of Financial Statements (Module 2)

a. **Analysis of Financial Statements:** Classification of Assets & Liabilities, Current Assets, Fixed Assets, Non-current Assets, Intangible & Fictitious Assets, Liabilities-Current Liabilities, Medium & Term Liabilities, Capital & Reserve.
b. Analysis of Profit & Loss Account, Auditor's Note.
c. **Ratio Analysis:** Classification of Ratios, Liquidity Ratios, Leverage Ratios, Activity Ratios, Profitability Ratios, Interpretation of important Financial Ratios, Fund Flow Statements and Cash Flow Statements.

Certificate Course on Credit Management in Banks

3. Working Capital Management (Module 3)

a. **Working Capital Assessment:** Concept of Working Capital, Gross Working Capital, Net Working Capital, Working Capital Gap, Components of Working Capital, Source of Working Capital, Operating / Working Cycle, Various Methods of Assessment of Working Capital, Computation of Working Capital - Turnover Method, MPBF Method, Cash Budget System, Analysis of CMA Data.
b. **Quasi Credit Facilities:** Advantages of Non-Fund Facilities, Various types of NFB Facilities, Various types Letter of Credits, Assessment of LC limits, Bills Purchase / Discounting under LC.
c. **Various types of Bank Guarantees:** Performance Guarantee, Financial Guarantees, Deferred Payment Guarantees, Types of Performance and Financial Guarantees, Assessment of Bank Guarantees Limit, Period of Claim under Guarantee.

4. Other Credits (Module 4)

a. **Export Finance:** Pre-Shipment Finance-Export Packing Credit in Rupees, Pre-Shipment Credit in Foreign Currency (PCFC), Post Shipment Rupee Export Finance, Purchase / Discount of Export Bills, Negotiation of Export Bills, ECGC Coverage in Export / Import Finance.

5. Monitoring, Supervision, Follow-up & Management of Impaired Assets (Module 5)

a. **Credit Monitoring, Supervision, Follow-Up:** Credit Monitoring-Check-list, Monitoring by using Various Statements, QIS Formats / Guidelines, Supervision & Follow Up Loans.
b. **Expected Credit Loss (ECL):** Introduction & Evolution of Provisioning of Banks in India- Incurred Loss Approach Vs. Expected Credit Loss Approach- "Loan Loss Provisioning based on ECL -IFRS 9-Calculation of ECL on Retail / Commercial Advances Examples.
c. **Management of Impaired Assets:** Income Recognition and Assets Classification, Guidelines, Provisioning Norms for NPA, Wilful Defaulters, Compromise, Legal Action, Lok Adalat, Debt Recovery Tribunal, SARFAESI Act, 2002, IBC-2016, Loans Write-Off.

Contact for further queries

CMA Dibbendu Roy, Additional Director & HoD at bfsi.hod@icmai.in
CMA (Dr.) Aditi Dasgupta, Joint Director at bfsi@icmai.in

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Behind Every Successful Business Decision, there is always a CMA

Certificate Course on Treasury and International Banking

About The Institute

The Institute of Cost Accountants of India was first established in **1944** as a registered company under the Companies Act with the objects of promoting, regulating and developing the profession of Cost Accountancy. On **28th May, 1959,** the Institute was established by a special **Act of Parliament,** namely, the **Cost and Works Accountants Act, 1959** as a statutory professional body for the regulation of the profession of Cost and Management accountancy. The Institute is under the administrative control of **Ministry of Corporate Affairs, Government of India.**

The Institute has since been continuously contributing to the growth of the industrial and economic climate of the country. The Institute is the only recognised statutory professional organisation and licensing body in India specialising exclusively in Cost and Management Accountancy.

International Affiliation

The Institute of Cost Accountants of India is Founder member of International Federation of Accountants (IFAC), Confederation of Asian & Pacific Accountants (CAPA) & South Asian Federation of Accountants (SAFA). The Institute, being the only institution from India, is a member of the Accounting Bodies Network (ABN) of The Prince's Accounting for Sustainability (A4S) Project, UK and International Valuation Standards Council (IVSC), UK.

Institute's Strength

The Institute is the largest Cost & Management Accounting body in the World, having a large base of about 1,00,000 CMAs either in practice or in employment and around 5,00,000 students pursuing the CMA Course.

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"The Cost and Management Accountant professionals would ethically drive enterprises globally by creating value to stakeholders in the socio-economic context through competencies drawn from the integration of strategy, management and accounting."

Course Objectives

Treasury Management is an essential function of a Bank or any Entity dealing with Large volume of funds. With the increased Globalization of Markets, it has become essential to have an in-depth knowledge of the functioning of the Domestic Money and Debt Markets as also the Foreign Exchange Markets for effective management of funds. On account of several Policy measures undertaken by Reserve Bank of India (RBI) and other Regulatory Authorities, different segment of financial markets (Money, Securities, Foreign Exchange and Derivatives Markets) have witnessed significant growth and development in terms of new financial instruments, number of players, volume of business, etc.

In the light of such developments, treasury functions in Banks, FIs and Corporates have grown manifold and therefore have become challenging to manage. Therefore, it has become indispensable for Banks, Financial Institutions and Corporates to make their newly inducted treasury officers well versed with various segment of the financial market, different products and operations, so that they not only serve their clients better, but also manage the risks inherent in Treasury.

Practicing CMAs who dealing with their Clients are in one way or other linked to Finance and Financial related Issues. Hence, they should possess Good knowledge of 'Treasury Operations', so that they can provide Value Addition Services to their Clients. Treasury Operations of Banks and Commercial Organizations are more are less with difference of Regulatory Compliance. Even in small business entities, Treasury Operations helps a lot to minimize the Cost of Borrowings and Maximize the Yield on Investments etc.

In addition to the above, this course is also useful to CMAs who are: -

- Empanelled with Banks for Treasury Audit and Forex Audit.
- For Forensic Audit of Treasury Operations / Forex Operations in Banking Industry
- In Credit Audit, if the Bank Sanctions Loans to Clients like Pre-shipment and Post Shipment Packing Credit Advance, this course is also useful.
- And also, useful to take up the Assignments like 'Concurrent Audit in Treasury Department' of Banks, Commercial entities etc.

The Course provides a holistic insight into the various dimensions in Bank Treasury and Forex Operations.

Online Admission Link:
https://eicmai.in/advscc/DelegatesApplicationForm.aspx

CPE Credit: 10 hours
for members of The Institute of Cost Accountants of India

Course Eligibility

FCMA/ACMA/those who have qualified Final CMA examination, Final year Students of the CMA Course/Any Graduate.

Course Duration

a) Classroom Learning of 3 hours per day in the Weekend through online mode
b) 50 Hours on-line Coaching.
c) 2 months course
d) Online Examination for 100 marks

Course Fees

Course Fees (including learning kit) of Rs. 6,000/- plus GST of 18%. Final year Students of the CMA course for an amount of Rs. 4,500 plus GST of 18%.

Special Discount for Corporates
For number of employees 5-10, discount is 15%. For number of employees more than 10, discount is 20%

Examination

Rs. 750 plus GST per attempt.

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Certificate Course on Treasury and International Banking

Syllabus

SECTION - 1

a. Introduction to the Money Market:

- ✓ Economic Function-Definition-Classification of Intermediaries
- ✓ Types of Markets-Participants-Nature of Domestic Market
- ✓ Repurchase Agreements

b. Capital Markets:

- ✓ Economic Function
- ✓ Classification of Instruments-by Issuer and Types
- ✓ Principles of Valuation

c. Foreign Exchange Markets:

- ✓ Introduction-Definitions-Direct and Indirect Quotations: Cross Rates, Factors affecting Exchange Rates
- ✓ Relationship with Market Operations-Financing Spot Operations Interest Arbitrage-Forward-Forward Business
- ✓ Forward Transactions-Factors affecting / influencing forward rates
- ✓ Premiums: Discounts, Forward Cross Rates
- ✓ Swap Transactions
- ✓ Outright Deals

d. External Markets:

- ✓ External Commercial Borrowings
- ✓ GDRs / ADRs

e. Derivatives Markets:

- ✓ Introduction – Definition and Characteristics of FUTURES, SWAPS and OPTIONS
- ✓ Elementary Hedge Applications

SECTION - 2

a. Scope and Function of Treasury Management:

- ✓ Objectives of Treasury
- ✓ Structure and Organisation
- ✓ Responsibilities of Treasury Manager

b. Cost Centre / Profit Centre:

- ✓ Financial Planning and Control
- ✓ Capital Budgeting
- ✓ Risk Analysis

c. Liquidity Management:

- ✓ Objectives
- ✓ Sources of Liquidity
- ✓ Maturity Concerns: Projected Cash Flow and Core Sources Contingency Plans
- ✓ Short term and Long-term Liquidity
- ✓ Maturity Ladder Limits
- ✓ Internal Control – The Need and Importance – Financial and Operational risks – Internal vs External Control Segregation of Duties among Front and Back Offices – Management Information – Netting

d. Treasury's Role in International Banking:

- ✓ Changing Global Scenario and Treasury Functions
- ✓ Treasury Structure- Front and Back Office
- ✓ Control of Dealing Operations – Trading Limits – Trading and Operational Policy – Moral and Ethical aspects
- ✓ Confirmations

e. Revaluation Mark to Market and Profit Calculations:

- ✓ Supervision and Exchange Control Departments
- ✓ RBI requirements
- ✓ Recent Developments in the Central Bank's Policy Framework

f. ESG Investments Trading:

- ✓ What is ESG Investing?
- ✓ How does ESG investing work?
- ✓ Why it is important to consider the environment while investing?
- ✓ How important it is to consider socially aware companies while investing?
- ✓ How important role does a company's corporate governance place for investors?
- ✓ Issuance requirements of Green Bonds.

SECTION - 3

a. Introduction:

- ✓ Meaning of Risk in Banking Operations-Financial and Non-Financial Risks
- ✓ Risk Process
- ✓ Key Risks in Relation to Treasury Management – Interest Rate Risk, Currency Risk, Liquidity Risk, Credit Risk and Operational Risk

Certificate Course on Treasury and International Banking

Syllabus

b. Measurement and Control of Risk:

- ✓ Identifying Measures and Controlling Risk – Statistical Methods
- ✓ Risk Exposure Analysis
- ✓ Risk Management Policies
- ✓ Fixation and Delegation of Limits
- ✓ Different Limits- Open Position / Asset Position Limits/ Deal Size/Individual Dealers/Stop Loss Limits

c. Assets Liability Management:

- ✓ Components of Assets and Liabilities – History of AL Management
- ✓ Organisational and Functions of ALCO
- ✓ Management and Interest rate Exposure / Liquidity
- ✓ Risk Adjusted Return on Capital
- ✓ Capital Adequacy Concerns

d. Hedging the Risk:

- ✓ Forward, Futures and Options Market
- ✓ Mechanics of Futures
- ✓ Foreign Currency Futures Market
- ✓ Options Market- Options Strategies
- ✓ Hedging Strategies and Arbitrage
- ✓ Call Options and Put Options

Contact for further queries

CMA Dibbendu Roy, Additional Director & HoD at bfsi.hod@icmai.in
CMA Dr. Aditi Dasgupta, Joint Director at bfsi@icmai.in

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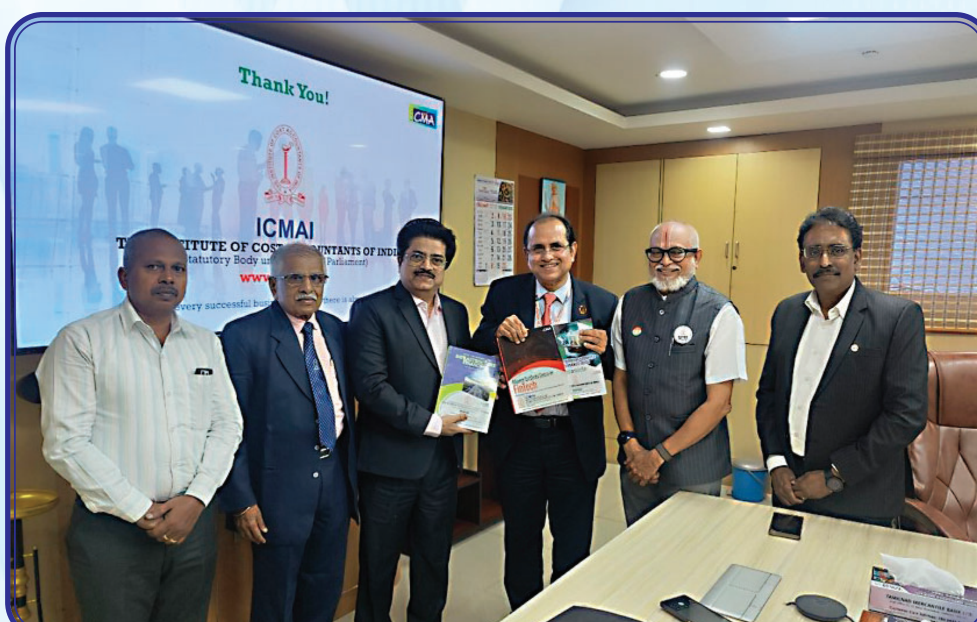
Snapshots

Shri Vinod Jaiswal, Chief General Manager, Organisational Planning and Systems and Procedures State Bank of India is presented by CMA Chittaranjan Chattopadhyay with a copy of the Aide Memoire on Infrastructure Financing (2nd and enlarged edition) on 10th January 2025 at SBI Headquarters, Mumbai. (R to L)



CMA Chittaranjan Chattopadhyay, Chairman, BFSIB, ICMAI (3rd from right), CMA T.C. A. Srinivasa Prasad, Vice President, ICMAI (2nd from right) along with CMA (Dr.) Kumararajan Sethurajan ,BFSIB Member, ICMAI (2nd from left) felicitating Shri Salee S Nair, MD & CEO, Tamilnad Mercentile Bank (3rd from left) on 22nd February 2025.

The Institute of Cost Accountants of India
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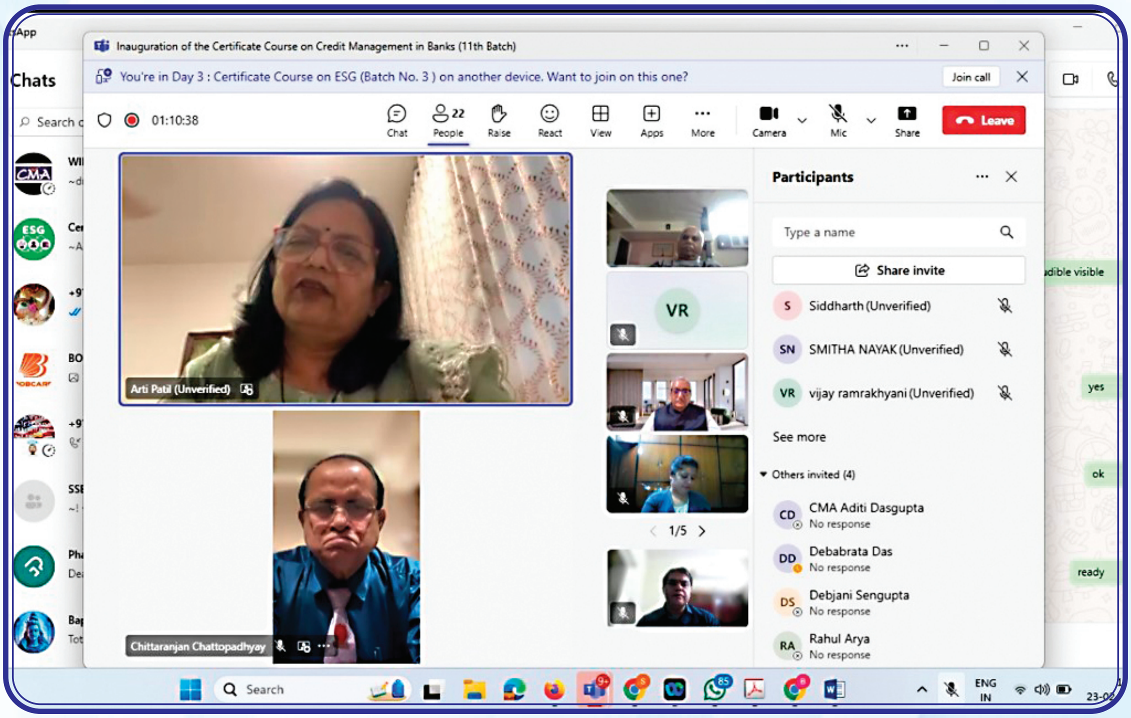
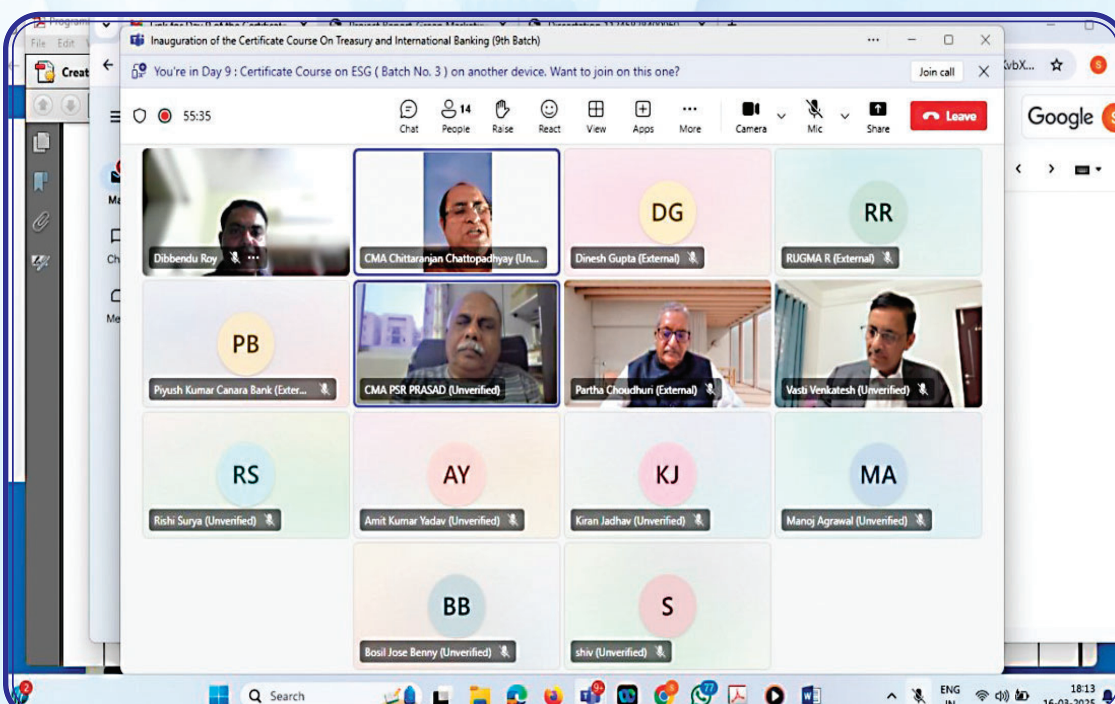


Certificate Course on Credit Management in Banks (11th Batch) Inauguration with CMA Arti Patil, Managing Director & CEO,Saraswat Co-operative Bank Ltd.on 23rd February, 2025.



Certificate Course on Treasury and International Banking (9th Batch) Inauguration with Shri Vasti Venkatesh, GM, Treasury, Central Bank of Indiaon 16th March, 2025.

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Activities of the BFSI board

The Banking, Financial Services & Insurance Board of the Institute and the BFSI department continued its various activities and initiatives from January-March2025, a synopsis of which is presented herein under -

A. National Seminar on Banking and Insurance on the topic of Enhancing Efficiency in Banking and Insurance held at Mumbai on 16th and 17th January, 2025

The BFSI Board, ICMAI in association with WIRC, ICMAI organized a National Seminar on Banking and Insurance on the topic of Enhancing Efficiency in Banking and Insurance by Leveraging on Risk and Cost Management at IMC, Chamber of Commerce and Industry, Mumbai on 16th and 17th January, 2025. During the inaugural session, the Chief Guest, Ms. Sujata Saunik, IAS, Hon'ble Chief Secretary - Government of Maharashtra, in her recorded message stated that CMAs have a pivotal role in implementation of various government schemes and programmes. She also welcomed suggestions from the Institute regarding different professional matters, which she assured would be suitably shared with government & regulators for needful implementation. Shri Gopal Murli Bhagat, Deputy Chief Executive/ Officiating Chief Executive, Indian Banks' Association was the Guest of Honour along with Shri Vinod Jaiswal, CGM – Organizational Planning & Systems & Procedures, SBI and CMA Prasenjit Deb Advisor (Cost), Department of Food and Public Distribution Ministry of Consumer Affairs, Food and Public Distribution, Government of India and CMA G. Srinivasan, MD & CEO, Galaxy Health Insurance Ltd. CMA T.C.A Srinivasa Prasad, Vice-President, ICMAI was a part of the inauguration session along with CMA M.K. Anand and CMA Neeraj Joshi, Council Members and CMA Chittaranjan Chattopadhyay, Chairman, BFSIB.

1st Technical session was on "Enhancing operational efficiency through cost profitability models". Shri Gopal Murli Bhagat, was Chairman of the Session. He is Deputy Chief Executive, Indian Banks' Association. CMA Asim Kumar Mukhopadhyay. MD & CEO, TML Smart City Mobility Solutions Limited, was the Key Note Speaker. CMA Sankalp Wadhwa, Consultant provided the presentation of various aspects of cost profitability models.

2nd Technical Session was on the topic "Bancassurance towards Insurance to all for 2047". CMA G. Srinivasan, Chairman of the session and the Speakers were Shri T. Babu Paul, Executive Director, National Insurance Co. Ltd., Shri Subhrajit Mukhopadhyay, Executive Director, Edelweiss Life Insurance Co. Ltd., Shri C.S Ayyapan, General Manager – The New India Assurance Company Ltd., Ms Jyoti Vaswani, CIO of Canara HSBC Life Insurance and CMA (Dr.) Ashok Jain, BFSIB Member, gave the special address.

3rd Technical Session on "Predicting the Probability of Loan Default of Banks through Expected Credit Loss Provisions". The speaker was CMA Gopal Gosain, Independent Director, Nainital Bank.

CMA P. Vasudevan, Executive Director, Reserve Bank of India, marked his gracious presence and spoke on Conference theme and the role of Digital Public Infrastructures (DPI) during Technical Session 4.

5th Technical session was "Panel discussion was on Scaling innovation in FinTech and InsurTech: Growth Through Collaboration and Digital Infrastructure" and Shri Nimish Agarwal , Partner Finlabs India, Shri Rajiv Gupta, President, PB Fintech Ltd., Shri NDSV Nageswara Rao, General Manager (IT), State Bank of India and Dr. Saurabh Maheshwari, Consultant Insurtech person were part of the panel discussions.

6th Technical Session was "Panel discussion in Insurance: Understanding of Industry Expectations".

Speakers were CMA (Dr.) Tarun Agarwal, Former Director, National Insurance Academy, who chaired the session, Shri S.N. Bhattacharya, Secretary General, Life Insurance Council, Shri Inderjeet Singh, Secretary General, Non-Life Insurance Council were the speakers and CMA (Dr.) Ashok Jain, BFSIB Member provided the concluding remarks.

7th Technical Session was on the topic of "Responsible and Sustainable Lending Opportunities" and speaker was CMA (Dr.) P. Siva Rama Prasad, Former AGM, State Bank of India.

During the 8th Technical session which was on the theme "Reflective overview of contemporary Banking & Insurance business – Developments and Way forward", speakers were CMA Arti Ajit Patil, MD & CEO, Saraswat Co-operative Bank Ltd, CMA (Dr.) Paritosh Basu Senior Director (Services), Stagility Consulting Pvt. Ltd., Shri Topendra Bhattacharjee, Former Banker and CMA B. K. Unhelkar, Former Executive Director of LIC.

The event ended with an open Question and Answers session resolved exquisitely by the eminent speakers. This two-day national seminar was highly interactive and exciting. The seminar witnessed presence of many luminaries, executives from various banks and insurance companies sharing their views on the subject and made it knowledgeable and enriching to the participants. The participants were greatly benefitted being part of the brainstorming sessions during the two-day seminar.

B. Release of the 19th issue of the BFSI Chronicle

In the National Seminar held on 16th January, 2025 the BFSI Chronicle for the 19th issue was released

C. Certificate Courses of BFSI

i) Advance Certificate Course on Fintech

The admission for the 2nd batch of Advance Certificate Course on Fintech has started.

ii) Certificate Courses on Certificate Course on Concurrent Audit of Banks

The admission for the 12th batch has started.

iii) Certificate Courses on Credit Management in Banks

The classes for the 11th batch of the Certificate Course of Credit Management in Banks started from 23rd February, 2025. CMA Arti Patil, MD & CEO, Saraswat Co-operative Bank Ltd. was the Chief Guest for the inaugural session.

iv) Certificate Course on Treasury and International Banking

The admission for the 9th batch of the Certificate Course of Treasury and International Banking started from 16th March, 2025. Shri Vasti Venkatesh, General Manager, Treasury, Central Bank of India was the Chief Guest for the inaugural session.

v) Investment Management in collaboration with NSE Academy

The classes for the Level-3 Batch No. 1 (Financial Derivatives & its application) has started from 1st February, 2025 and the Level-2 Batch No. 2 admission has also started.

The admission window for the above courses is stated as follows:
https://eicmai.in/OCMAC/BFSI/DelegatesApplicationForm-BFSI.aspx

D. Webinars

i. Initial Public Offering (IPO) Vs. Initial Coin Offering (ICO)

The BFSI Board of ICMAI organized a Webinar on Friday, 7th March 2025, 4:00 p.m. to 6:00 p.m. CMA (Dr.) P Siva Rama Prasad, Former Assistant General Manager, State Bank of India was the Speaker.

ii. Cyber Threats and Financial Frauds in the Digital Age: Strengthening Cyber Resilience in BFSI & Beyond

The BFSI Board of ICMAI organized an International Webinar on Friday, 21st March 2025, 4:00 p.m. to 6:00 p.m. in association with LOCCA UK.Mr. Simon Clayton-Mitchell, Cyber-Security and Technology Consultant and Mr. Andy Bates, Cyber Security Expert were the Speakers. CMA Udayan Guha, Secretary, LOCCA UK was the Moderator.

FINANCIAL SNIPPETS

- Public Sector Banks to finance Rs. 10 trillion for green energy projects by 2030
- Amalgamation of The Citizens Cooperative Bank and TJSB Sahakari Bank
- RBI bars New India Co-operative Bank from offering loans and deposits
- RBI imposes compensation for delays in credit data updates
- RBI approves the merger of the National Co-operative Bank Ltd. and Cosmos Co-operative Bank Ltd.
- RBI and National Centre for Financial Education (NCFE) have Launched Nationwide Campaigns to Boost Financial Literacy
- EXIM Bank raises $ 1 billion through overseas bond
- Banks write off bad loans worth Rs 16.35 lakh crore in last 10 years
- India's forex kitty jumps sharpest in 2 yrs, rises $15.26 bn to $653.96 bn
- India's economic growth to exceed 6.5% in FY26, says Moody's Ratings
- Total digital payment transactions grow by 46% from 8,839 crore in FY 2021-22 to 18,737 crore in FY 2023-24
- Slowdown in credit card growth continues, disbursement at 4-year low
- Woman credit seekers up 3x in 5 years, says Niti Aayog & Cibil report
- SEBI issues new norms on unclaimed funds and securities
- SEBI introduces Mutual Fund lite framework for Passive Schemes
- SEBI cracks down on stock trading frauds, recovers over Rs 1,083 crore in 5 years
- SEBI brings in stricter disclosure norms for IPO-bound companies
- SEBI extends deadline for reporting differential rights issues by AIFs
- NSE registered investor base crosses 11 crore
- Mutual Fund Investors can give names of 10 nominees
- AMFI releases 13-point proposal to push MF investment

- Indusind holdings to raise Rs. 800 crore for invesco MF buy
- 46 Million demat accounts added in 2024 total reaches 185 million
- Mutual Fund SIP crosses Rs. 26,000 crore for the 1st time
- 1st phase of Bima Sugam likely to be rolled out mid 2025
- IRDAI widens sandbox framework to fuel renovation
- Draft bill for 100 percent FDI in insurance to be sent in Cabinet
- New India Assurance has the lowest claim rejections in 2023-24
- IRDAI removes caps on commission expenses
- IRDAI lets insurers to undertake transactions in bond forwards for hedging
- LIC confirms plans to foray into health insurance sector
- A total of 55.02 crore Jan-Dhan accounts have been opened till 7th March 2025
- Govt seeks extra spend of over Rs 51,000 crore in FY25; Rs 7,000 crore for Unified Pension Scheme
- Investments from Indian diaspora in GIFT City funds surpass $7 bn
- Health insurance premiums cross Rs 1 lakh crore in 10 months, growth slows to 10%

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