

AI's Role in Crafting India's Financial Future

Volume 30



Table Of Contents

01	About the Institute
02	Finance HoD's Message
03	Editorial
04	Cover Story
05	Alumni Article
06	Faculty Article
07	Student Articles
08	Student Achievements

About the Institute

Founded in 1995 by Shri Niranjnlal Dalmia, N. L. Dalmia Institute of Management Studies and Research (NLDIMSR) was established on principles of academic excellence and holistic development. His vision was to create an Institution that imparts knowledge and shapes tomorrow's leaders. Since its inception, the Institute has consistently cultivated individuals who redefine success, excelling academically while being socially responsible.

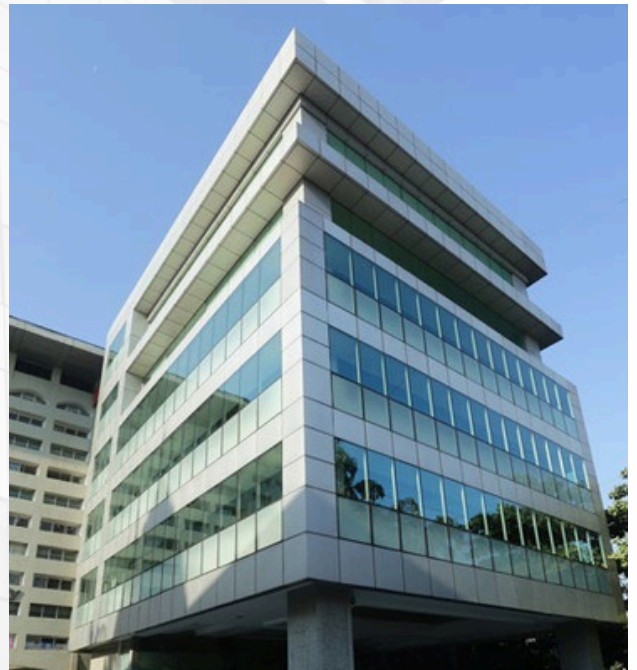
The Institute holds approval from the All India Council for Technical Education (AICTE). It has been accredited with an A+ Grade by the National Assessment and Accreditation Council (NAAC) in its 2nd Cycle and the South Asian Quality Assurance System (SAQS) for 5 years, attesting to its academic excellence and infrastructure. Its Post Graduate Diploma in Management (PGDM) program holds accreditation from the National Board of Accreditation (NBA), ensuring the highest industry standards, and is also approved by the Association of Indian Universities (AIU), making it equivalent to an MBA which empowers students to thrive in today's dynamic business environment.

The Institute is proud to be a member of the esteemed associations like AACSB, AIMA, AIMS, BMA, CII, EFMD, IMC, IFA, and AMDISA, which enhance its reputation among academia and industry professionals. It hosted the 12th edition of the prestigious India Finance Conference (IFC), becoming the 4th and only non-IIM partner of the Indian Finance Association (IFA) in 2023, alongside IIM Ahmedabad, IIM Bangalore and IIM Calcutta.

Each program blends theoretical knowledge with practical application, equipping students with skills demanded by today's competitive business landscape. N. L. Dalmia is committed to accessibility, flexibility and continuous academic excellence through its Open and Distance Learning (ODL) and Online Learning (OL) programs, empowering learners to upskill, upgrade and unlock new opportunities. The Institute also offers an Executive PGDM program specifically designed for working professionals to gain a competitive edge.

The infrastructure, including South Asia's largest standalone Bloomberg lab with 24 terminals, a state-of-the-art library, modern technologically equipped classrooms, an ICT lab with industry-leading tools, and an auditorium with a seating capacity of 320, reflects its commitment to a holistic learning environment. Recognised as India's 1st Bloomberg Experiential Learning Partner (ELP), the Institute's students have achieved notable records in the Asia Book of Records, World Book of Records and India Book of Records.

NLDIMSR stands as a testament to its unwavering dedication to shaping futures and fostering a legacy of lifelong learning and eagerly anticipates scaling new heights and setting benchmarks in the realm of management education.



Finance HOD's Message



I am delighted to present the 30th issue of Delta, dedicated to a contemporary and pertinent theme of the digital era i.e. Artificial Intelligence (AI).

As we navigate the rapidly evolving landscape of technology, Artificial Intelligence (AI) has emerged as a powerful catalyst, reshaping industries across the globe. The financial sector in India is no exception. It's undergoing a digital revolution, with AI at its core.

AI, with its ability to process vast amounts of data and identify intricate patterns, is poised to transform the way we perceive and interact with finance. It promises to enhance efficiency, accuracy, and customer experience while mitigating risks and unlocking new opportunities.

While the potential benefits of AI are immense, it's crucial to approach its implementation with caution and foresight. Ethical considerations, data privacy, and cybersecurity must remain top priorities. As we embrace this technological revolution, it's imperative to strike a balance between innovation and responsibility.

By investing in AI research, fostering a skilled workforce, and creating a conducive regulatory environment, India can position itself as a global leader in financial technology.

To glimpse the future of finance, let's explore the insightful perspectives of our young minds. They envision harnessing AI to create a more inclusive, efficient, and prosperous financial landscape for our nation. I extend my gratitude to all contributors and the Delta Team for their commitment to impactful themes.

Happy Reading!

Dr. Priti Aggarwal,

Professor - Finance & HOD Finance

Artificial Intelligence (AI) has transcended the realm of science fiction to become a cornerstone of modern innovation, fundamentally altering the way economies grow, businesses operate, and individuals connect with financial systems. It is not just a technology but a transformative force redefining India's financial future.

The 30th edition of Delta takes an in-depth look at this transformative journey, exploring the theme "AI's Role in Crafting India's Financial Future." This theme opens a universe of possibilities, delving into how AI is reshaping India's financial landscape with unprecedented speed and efficiency.

AI is no longer confined to enhancing operational efficiency; it is driving financial inclusion in rural India, strengthening cybersecurity to safeguard digital transactions, and revolutionizing the capital markets with predictive analytics. It is empowering regulatory frameworks, fostering sustainable finance through ESG investing, and supporting government initiatives like Digital India and Make in India. These advancements are not just technological; they are the building blocks of an equitable, inclusive, and robust financial ecosystem.

This volume features thought-provoking perspectives on AI's multifaceted impact, from its role in fostering innovation to addressing challenges such as ethical concerns, data privacy, and the evolving nature of work. These insights underscore the dynamic interplay between technology and finance in shaping a resilient economic future for India.

We are immensely grateful to our students, alumni, and faculty who have contributed their expertise and creativity to this edition. Their passion and dedication have enriched every page of this magazine. We would like to extend our gratitude towards the Institute, our CEO Prof. Dr. Seema Saini for providing us with a platform along with HOD Finance Prof. Dr. Priti Aggarwal and our Faculty-in-Charge, Dr. Shilpa Peswani for their constant encouragement and guidance in publishing this magazine.

Happy Reading!

Editor in Chief

Devyani Sharma

Sub Editor

Harshal Agarwal

Senior Copywriters

Vaishnavi Kendale, Swarali Joglekar, Rishikesh Pawar, Jaideep R Pisharody, Yoshita Vitekar, Karthik Nair, Kratika Yadav

Support Copywriters

Nemit Ghosalkar, Rochelle Vaz, Sanjana Dhakan, Khyati Jain, Lavina Salian, Prathamesh Dixit, Carlton Fernandes, Samiksha Shah, Shreerang Zawar, Vinit Chaudhari, Abhishek Singh, Mayuri Kadam

Finance Faculty

Dr. Priti Aggarwal, Dr. Jyoti Nair, Dr. Sachin Mittal, Dr. Chitra Gounder, Dr. Neeraj Gupta, Dr. Pinky Agarwal, Prof. Shailesh Kumar, Dr. Shilpa Peswani, Dr. Jai Kotecha, Prof. Prakash Rathod, Prof. Ritu Tuli

Art Direction & Execution

Saloni Jha & Marketing Team





Protecting India's Finance with AI: A New Era in Cybersecurity



Shreerang Zawar
PGDM 2024-26 (Finance)

"Artificial intelligence is not just a tool, it's a superpower that will reshape our digital world and secure our future," says Sundar Pichai, the CEO of Google.

As India moves toward a fully digital economy, AI plays an essential role in cybersecurity within the finance sector. The collaboration between AI and cybersecurity is much more than just responding to threats, it enhances the security efficacy as a whole by empowering financial institutions to predict and hold back cyber-attacks before they occur. The cyber threat landscape is evolving and AI has a crucial role in making the financial sector of India trustworthy and safe.

Cosmos Bank in Pune witnessed a cyber attack, illustrating the importance of cybersecurity. Over 94 crore rupees were stolen by hackers who gained access to the payment systems of the bank. They gained access to the server of the bank's ATM network and approved a series of withdrawals in over 28 countries globally in just a few hours. This episode exposed the vulnerabilities that many financial institutions still need to cope with, albeit, those which are still utilizing conventional security practices.

However, with AI becoming the norm for identifying anomalous behaviors and suspicious transactions, the attack would never have happened. This has made a proactive approach to cyber security by empowering AI with real-time analysis of big data for creating an edge in the fast-paced financial world today.

In today's India, online banking has become part and parcel of the daily life for millions, thanks to initiatives like Digital India and UPI, rising growth at a rapid pace across its financial sector. But with this rise in online transactions comes a new wave of cybercriminal activities, such as phishing and breaches. This is no longer enough, traditional security measures come into play once the threat has already been attacked. With AI, this scenario changes as they identify threats before they become a problem, creating a safer digital environment for every person.

Detecting unusual activities at speed and with high accuracy allows AI to bolster cybersecurity. For example, say a customer makes an attempt to log in from some distant location or performs multiple high-value transactions in quick succession; AI can immediately identify such behavior for further investigation. Focused surveillance like this mitigates fraud while ensuring customer data security, making it a great fit for the financial services sector.



There are several advantages to AI-driven cybersecurity, ranging from a quicker detection of threats to a better customer experience. On the other side, there are some challenges too, including high upfront investment and privacy issues. In the future, however, AI is expected to gain more autonomy and will require less human interference. Coupled with Blockchain technology, this creation of AI can ultimately help secure a transparent digital future.

"AI has the potential to make India's digital space secure and resilient; it's our strongest tool against evolving cyber threats" stated Vishal Sikka, the former CEO of Infosys. With sustained investment in AI supported by data protection and a skilled workforce, India can build a safe and trustworthy digital ecosystem, one that protects customers for financial institutions. As long as technology continues to evolve and grow, AI integration in banking will ensure that India has a protected digital future.

AI Powered Regtech: Transforming Compliance in India's Financial Landscape



Krishna Darak

Analyst - ISS Stoxx

PGDM 2022-24 (Finance)

In an era of tighter financial regulations, Regulatory Technology or RegTech is turning out to be revolutionary for financial institutions. RegTech applies cutting-edge technologies such as artificial intelligence and machine learning to automate regulatory compliance, transaction monitoring, and risk management. In India, where financial supervision is growing due to the rapid digitalization of the economy and the increased adoption of fintech, RegTech is helping to ensure the efficiency of compliance. With regulators such as the RBI, SEBI, and IRDAI strengthening their guidelines, financial institutions are increasingly turning to AI-based RegTech solutions to grasp the complexities of regulatory compliances.

The Rise of RegTech in India

The uptake of RegTech in India has been gaining momentum driven by multiple drivers. The rapid growth of fintech, digital payments, and lending platforms has necessitated the need for a more sophisticated compliance infrastructure. Traditional mechanisms of regulatory reporting and risk assessments are insufficient to cope with the increasing volumes of transactions. As a result, financial institutions are investing in AI-powered solutions that are capable of automating compliance monitoring, reporting anomalies, and delivering real-time reports. Studies by EY and Deloitte put the Indian RegTech market growing at a compound annual growth rate of 23-25% making it one of the fastest-growing segments of financial technology. Additionally, initiatives by the government such as Digital India, the Account Aggregator Framework, and RBI's SupTech (Supervisory Technology) initiatives have also accelerated the adoption of AI-based compliance solutions.

AI's Role in Making Regulatory Compliance Smoother

AI has transformed the area of regulatory compliance management by financial institutions to a large extent. Its most prominent application is in real-time compliance monitoring, where AI takes up the work of KYC and anti-money laundering verification. Financial institutions can verify the identity of customers instantly and flag suspicious transactions with the help of AI-powered systems, thereby avoiding regulatory breaches. AI is also transforming fraud detection and risk management by scrutinizing massive amounts of transaction data to identify suspicious patterns. ICICI Bank and HDFC Bank have already deployed AI-powered fraud detection models to enhance security and discourage financial crime.

Another area where AI is making a humongous difference is in the automation of regulatory reports. Compliance reporting which always entailed massive manual effort can now be automated through AI-powered systems that generate reports in real-time. This reduces errors, encourages timely filing, and boosts overall efficiency. SEBI, for instance, has employed AI-powered surveillance systems to identify insider trading and market manipulation, proving the growing application of AI in regulatory surveillance. AI-powered predictive analytics is also helping financial institutions forecast potential compliance risks, allowing them to act pre-emptively before violations occur.

Challenges in AI-Powered RegTech Adoption

Despite its many benefits, India's large-scale embracement of AI-based RegTech solutions is hampered by some significant hurdles. Data privacy issues and cybersecurity concerns continue to be a pressing concern in light of the implementation of the Digital Personal Data Protection (DPDP) Act, 2023 requiring sophisticated data governance practices. The high cost of implementation is another handicap, especially for small banks and microfinance institutions which might not be able to afford AI-based compliance solutions. Another hurdle is regulatory ambiguity, as India still has to come up with a very transparent AI model of governance for financial institutions. RBI, SEBI, and IRDAI have issued some guidelines on some digital finance topics, but AI-specific compliance guidelines must become more transparent. Moreover, many traditional banks use legacy systems that are hard to harmonize with AI-based RegTech solutions and thus integration is a complex and time-consuming affair.

The Future of AI-Driven RegTech in India

Despite these challenges, the future of AI-driven RegTech in India is promising. Regulators are increasingly relying on SupTech (Supervisory Technology) solutions in order to enable more oversight and improve regulatory compliance by financial institutions. As AI keeps evolving, we can expect more coordination among regulators, banks, and RegTech startups towards creating more robust compliance frameworks. Further advances in AI governance and natural language processing and blockchain-based RegTech solutions will continue to fuel regulatory compliance innovation.



With the Indian financial sector being digitized, AI-driven RegTech will be a reliable companion to ensure efficient compliance, anti-fraud activities, and financial safeguarding. The convergence of AI and regulatory technology will rewrite the Indian financial scenario with regulatory compliance becoming not just unavoidable but also a major differentiator for financial institutions. With AI-driven RegTech being introduced, India can lead the way to an efficient, transparent, and secure future of finance.

Impact of AI in Financial Fraud Prevention



Prof. Dr. Chitra Gounder

Faculty - Finance

Nemit Ghosalkar

PGDM — Finance (2024-2026)

Financial Fraud would mean any activity that involves deception of material information/ funds/ assets on purpose, for individual or organizational gain, this is often done through illegal means such as falsifying records, misrepresentation, embezzlement, or insider trading.

As per the last reported number of 2023, Banks lost \$485.6 Billion globally to financial frauds. The annual cybercrime cost is also estimated to cross USD ~10.5 trillion by the end of 2025.

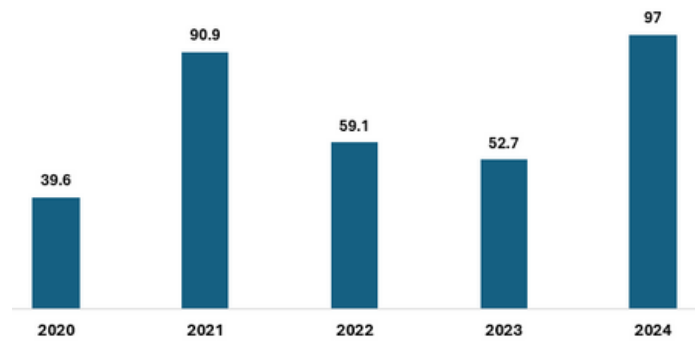
With these losses piling up and compounding significantly each year, smaller banks are in an even weaker position, considering their capacity to spend on security measures is already quite low.

Indian banks are also suffering from these issues, as per the RBI Report published in December for H1 FY25, Indian banks witnessed 18,461 fraud cases with losses mounting to INR 21,367 Crore.

However, these problems might be finally getting a solution, with the rise of Artificial Intelligence, banking security might just get a long-awaited update.

AI investment globally reached \$97 Billion in 2024, with most of it going towards R&D, results of these investments would soon turn towards real-world applications, enhancing security layers and decreasing processing time, and helping towards reducing banking frauds massively.

Global Investment in AI (USD Billion)



Source: Pitchbook

The prime example of AI applications in fraud prevention would be, the American giant JP Morgan, which is already implementing an in-house AI system, COiN (Contract Intelligence). JPMC has said it saves ~\$250 million annually, by preventing fraud.

With this new frontier for AI in banking where algorithms would be able to analyze transaction data to identify suspicious activities and detect fraud faster and more accurately than traditional methods, bank frauds could be reduced by almost 80%, and pave the way for a future where proactive, AI-driven security frameworks become the cornerstone of global financial integrity.

The Intersection of AI and Finance: A New Era in India



Tanisha Khandelwal
PGDM 2024-26 (Finance)

AI is profoundly transforming the financial landscape of India, bringing on growth, inclusivity, and sustainability. The phenomenal impact of AI in all avenues of financial inclusion, capital markets, regulatory frameworks, and sustainable finance is thus establishing an increasingly intertwined and efficient structure of finance across India.

AI perhaps makes one of the biggest contributions to affecting the penetration of banking services in rural areas by being able to tailor financial products for underserved individuals and small businesses through AI-based credit-scoring models that analyze alternative data sets on mobile usage and social media activity, among others for defining creditworthiness.

Artificial intelligence is changing trading and investment strategies through new algorithms that in real time analyze vast volumes of data. Hence the algorithm allows investors to make much more accurate decisions, increase market liquidity, and trade faster.



Generative AI models further assist investors in pointing out trends that start developing in markets, which enables them to change tack very quickly if they see that such trends are changing the conditions of the markets. According to the International Monetary Fund, increasing the role of AI in capital markets may impact market structure and stability, so AI needs to be incorporated responsibly.

Regulatory frameworks, as such, are now the core of the ethical and responsible use of AI in finance. RBI and SEBI are working on creating guidelines that encourage adoption in a transparent and fair manner. Clear governance structures would allow for the risks associated with the algorithms created by AI to be managed such that the operation of algorithms is free from bias or favouritism; this would increase stakeholder and consumer confidence and foster innovation while protecting consumers' interests.

Government initiatives such as Digital India and Make in India will further the adoption of AI in finance. They establish infrastructure and platforms to make it even easier for financial institutions to integrate AI into their operations. A more recent push is funding for AI Centers of Excellence in educational institutions, building a skilled workforce proficient in AI. There's an added stimulus from regulatory sandboxes that enable new entrants like startups to interact with established financial institutions, innovation indeed becomes the pillar by using AI-driven solutions for the sector.

It also advocates for sustainable finance through proper analysis and reporting of Environmental, Social, and Governance criteria. AI technologies help investors to make informed and responsible investment decisions suitable for sustainability goals. As the importance of ESG considerations increases, insight from AI proves helpful in transparent reporting and compliance, thus embracing resilience in the face of environmental issues.



This AI and finance trend changes the job composition. Automation will replace certain jobs, but it opens new opportunities in AI management, data analysis, and cybersecurity. Upskilling has therefore become usual, promoting career prospects and employee competencies. This development also strongly aligns with cybersecurity because digitized finance penetration requires advanced security. AI-based cybersecurity solutions predict anomalies in transactions and head potential risks in customer confidence.

AI is sure to usher in new avenues of innovation, inclusivity, and sustainability in the financial ecosystem in India. In fact, with government support through initiatives like Digital India, financial institutions and technology providers are well poised on the threshold for revolutionary economic growth. Strategic embracing of AI into financial services will bring access, security, and equity to financial services for a more prosperous and inclusive India.

Harnessing Artificial Intelligence to Transform Indian Banking and Financial Services



Kaushiki Sharma

PGDM 2024-26 (Finance)

“AI will change the way we work and run our businesses in the same way that the introduction of the internet did. AI decision-making in particular has the potential to raise global economic output, and is projected to add a staggering USD 13 trillion to the global economy by 2030.”

-Richard Potter, CEO & Co-founder at Peak

Artificial Intelligence (AI) utilizes mathematics and logic to imitate human thought. In the modern world, AI systems can progressively improve and adapt based on vast amounts of data an algorithm analyzes, performing repetitive loops rather efficiently. Within AI, the process of pattern recognition, the computer's ability to detect patterns without intensive programming efforts, is called machine learning (ML) and is referenced as a subset of AI.

The Indian government further understands this - recognizing AI as a game-changer: they are set to spend ₹21,936.90crores on the MeitY. They have created various committees to formulate policy frameworks for AI, technological capabilities, national missions, and other legal and ethical matters. India being a member of the GPAI enables India to show their commitment to G20 countries responsible for AI development, alongside countries like the US, UK and France.

In the domain of banking institutions, the Institute for Development and Research in Banking Technology (IDRBT) was the first one to commence AI, ML, and data science-related work since 2005 and continues to work in these areas.



Applications of AI in banks

- **Front office:** Handling customers, authenticating and identifying the customers by means of biometrics.
- **Middle office:** Detection of frauds on today's payments and management of the related risks, lending decision-making processes.
- **Back office:** Providing insight into business and strategy, driving efficiencies to backend processes.

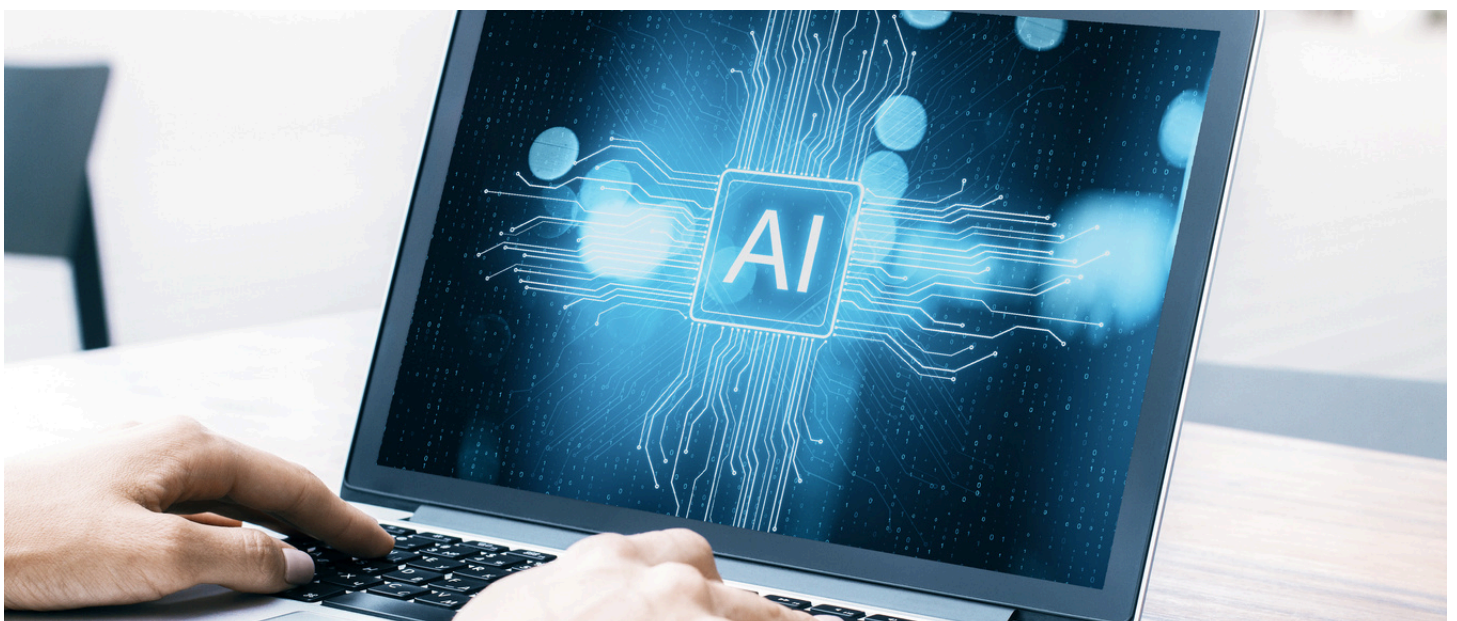
Benefits of AI in banking

- **Estimate potential for loan delinquency:** Identifying dangerous borrowers to only extend credit cards to safer borrowers.
- **Analysis of NACH mandate:** Preventive measures through timely identification and correction of account abnormalities in relation to takeovers.
- **Slippages in Mudra loans:** Reducing loan default through account-specific surveillance.
- **Fraud Prevention:** Investigating the object of Enterprise Fraud Risk Management systems, monitoring customer conduct for abnormalities.

Challenges and limitations of AI in banking

- **Availability of quality websites:** An AI system is fully based on data they are based on thus requiring strong data.
- **Human Capital:** The use, development, and upkeep of AI technologies require competent people which call for a huge investment whenever recruiting and training is necessary.
- **Privacy and Security:** Protecting the data of customers and protecting AI systems from the threats of cyber security is still a core and persistent problem.

These innovations have brought modernization in the Indian banking and finance sector through improved fraud detection and risk management and innovative customer-oriented services. The acceleration in the expansion of digital banking, and the aggressiveness with which AI is being integrated points to the Government of India's strategy in leveraging AI for economic growth. Through collaborations with other nations and through home-grown solutions, the country hopes to overcome challenges and ensure AI's safe application and take advantage of its potential across industries.



Building Tomorrow: How AI is Shaping the Future of Finance in India



Viral Gangar

PGDM 2023-25 (Finance)

Artificial Intelligence (AI) is transforming industries around the world, and India's financial sector is no exception. From helping rural communities access financial services to improving security and supporting sustainable investments, AI is setting the stage for a robust and future-ready financial landscape in India. Here's a closer look at how AI is playing a pivotal role in crafting India's financial future.

Financial Inclusion for Rural Areas

India has made financial inclusion a top priority, especially in rural areas. AI-powered chatbots and virtual assistants are helping by offering personalized advice to individuals with limited financial knowledge, empowering them to make better financial choices. Automated systems analyze financial data to create loan offers tailored to individual needs, enabling banks to manage risks while reaching more people. Additionally, machine learning enhances security by detecting potential fraud, allowing banks to confidently expand digital services to regions that previously had limited access. These AI-driven tools are essential for bridging the financial access gap between urban and rural communities.



Revolutionizing Capital Markets

AI is transforming capital markets by enhancing data analysis, forecasting trends, and supporting informed investment decisions. Its capacity to process vast amounts of data enables it to detect market patterns and anticipate price movements, helping investors make more strategic choices. AI-powered algorithms are also utilized for automated trading, boosting efficiency, cutting costs, and enhancing market performance. Therefore, capital markets become more accurate and stronger, enabling more intelligent investing with reduced human mistakes.

Strengthening Cybersecurity

With the rise of digital transactions, ensuring cybersecurity has become a major focus. AI-driven technology enhances security measures by recognizing fraudulent behavior, pinpointing atypical actions, and safeguarding sensitive information instantly. By using AI technology to analyze transaction patterns and detect possible threats, financial institutions can stop fraud and unauthorized access. AI-driven Robotic Process Automation (RPA) assists in security measures by managing repetitive responsibilities, enabling human resources to concentrate on vital matters.

Supporting Sustainable Finance and Green Investments

Sustainable finance, which focuses on Environmental, Social, and Governance (ESG) criteria, is gaining traction in India. AI allows investors to review extensive data sets that assess companies' sustainability practices, aiding in making investment decisions that align with environmental objectives. AI is used in green finance to help distribute funds to environmentally friendly projects, thus supporting a sustainable future. By integrating AI with ESG strategies, India's financial sector can support responsible practices and foster eco-conscious growth.

The Changing Job Landscape

AI's integration into the financial sector is creating new roles, such as data scientists, machine learning engineers, and AI ethicists. These positions showcase the increasing need for expertise in AI-powered technologies and data analysis. Although AI improves decision-making and automates routine tasks, it also presents challenges concerning job loss and ethical issues. To address these challenges, the financial sector will need to invest in training and upskilling to prepare employees for an AI-integrated future, balancing technological progress with human insight.



AI's influence on India's financial sector extends beyond adding new tools; it is a transformative force reshaping the industry from the ground up. AI allows financial institutions to address the changing economy by enhancing financial inclusion in rural areas, increasing capital market efficiency, and facilitating sustainable investments. When India adopts AI in the financial sector, it has the potential to unlock high levels of efficiency, inclusivity, and innovation. By leveraging AI-driven tools, India can build a financial future that aligns with its growth ambitions and supports the diverse needs of its population, laying the foundation for a resilient, inclusive, and future-ready economy.

India's Path to Innovation and Sustainability through AI



Priyanka Iyer
PGDM 2023-25 (Finance)

Artificial intelligence has emerged as a transformative force in global economies and for a fast-growing nation like India, it represents unprecedented opportunities to enhance productivity, drive innovation & fuel economic growth. India's ambition to position itself as an AI powerhouse aligns with national priorities including digital transformation, infrastructure modernization and sustainable development. It will integrate AI across all sectors; it will help India to create an ecosystem wherein not only growth across other sectors accelerates but also solves some of the key societal problems, like job creation, including rural and environmental sustainability.

AI-driven productivity boosts across sectors - AI enhances productivity across agriculture, manufacturing, healthcare and services. In agriculture, AI-driven analytics can improve crop planning and yield forecasts, increasing food security and farmer incomes. Manufacturing benefits from AI-powered automation and quality check key to the Make in India initiative, lowering production costs and boosting competitiveness. In healthcare, AI enables remote diagnostics and telemedicine making quality care accessible across the country. The service sector uses AI chatbots and data analytics to elevate customer experiences which enhances productivity and contributes to GDP growth.



Job creation and skill transformation - Despite concerns over automation, AI is generating demand for highly skilled roles in data science, cyber security and machine learning. Initiatives like Skill India aim to upskill the workforce for AI-centric roles, transforming traditional jobs by creating new opportunities. By bridging the skill gap, AI supports a job market equipped to thrive in a digital economy.

AI in financial inclusion and rural development - AI-powered fintech solutions play a crucial role in financial inclusion, especially in rural areas with limited banking access. By using alternative data for credit scoring, AI enables financial services like loans & insurance to reach underserved populations, promoting economic resilience & empowering rural communities.

Enhancing Infrastructure and Governance - AI optimizes infrastructure networks from energy management to urban planning. For example- AI-driven smart grids reduce energy waste, while predictive urban planning improves traffic management & disaster response. AI also enhances governance by supporting data-driven policymaking, streamlining public resource management & increasing transparency.

A sustainable economic Future - AI supports India's sustainability goals through green finance and environmental monitoring. By optimizing resource use and tracking emissions, AI aligns with global standards for sustainable development. These initiatives not only attract ethical investors but also reduce long-term climatic risks, fostering economic resilience.



AI integration across sectors provides India with a foundation for sustained growth, inclusivity and sustainability. Through productivity gains, job creation, financial inclusion & governance improvements, AI is crafting a more innovative and resilient economic future for India. As India continues its AI journey, it sets a model for other emerging economies aiming to balance growth with sustainability in a digital world.

Artificial Intelligence: Transforming India's Financial Landscape



Abhishek Heda

PGDM 2024-26 (Finance)

India is on the brink of a financial revolution, where artificial intelligence (AI) is reshaping every facet of its economic landscape. With its potential to democratize financial services, AI is reaching from bustling cities to remote rural villages, redefining inclusion, security, and sustainability in finance.

Financial Inclusion and Digital Transformation

AI, combined with government initiatives like Digital India and UPI, is propelling financial inclusion to new heights. Rural India, home to 65% of the population, is experiencing a surge in smartphone-based services. AI-powered vernacular interfaces and automated KYC processes are bridging the gap for underserved communities, bringing essential banking services to millions. For example, AI-driven credit assessments use alternative data like mobile usage to evaluate loan eligibility, opening doors for the unbanked.

Capital Markets and Regulatory Technology

In India's fast-paced capital markets, AI algorithms are processing vast amounts of data in real time to inform sophisticated trading strategies. Machine learning models analyze historical data and market trends to improve accuracy in investment decisions, while natural language processing (NLP) gauges market sentiment from news and social media.



Simultaneously, AI-backed RegTech solutions are strengthening compliance frameworks, as systems monitor transactions to detect fraudulent patterns and enhance regulatory adherence. Notably, organizations like Zerodha are integrating AI to support traders and improve risk management, setting new industry standards.

Advancing Sustainable Finance

AI is also playing a vital role in driving sustainable finance, and supporting India's Environmental, Social, and Governance (ESG) initiatives. Advanced algorithms assess companies' ESG metrics, enabling investors to align their portfolios with sustainable goals. By connecting green projects with funding and assessing climate risks in investment portfolios, AI supports India's vision for a greener economy. AI-driven platforms like BluSmart are gaining traction, demonstrating how technology can link environmental goals with financial growth.



Cybersecurity and Workforce Evolution

As the financial sector becomes more digital, AI-powered cybersecurity systems are crucial for safeguarding India's financial infrastructure. These systems leverage deep learning to detect and prevent threats in real time, protecting millions of digital transactions. At the same time, AI is reshaping the workforce by automating repetitive tasks and creating specialized roles. Financial professionals are transforming into AI supervisors, focusing on high-value decision-making and strategy, which marks a shift toward a more adaptive, skilled workforce.

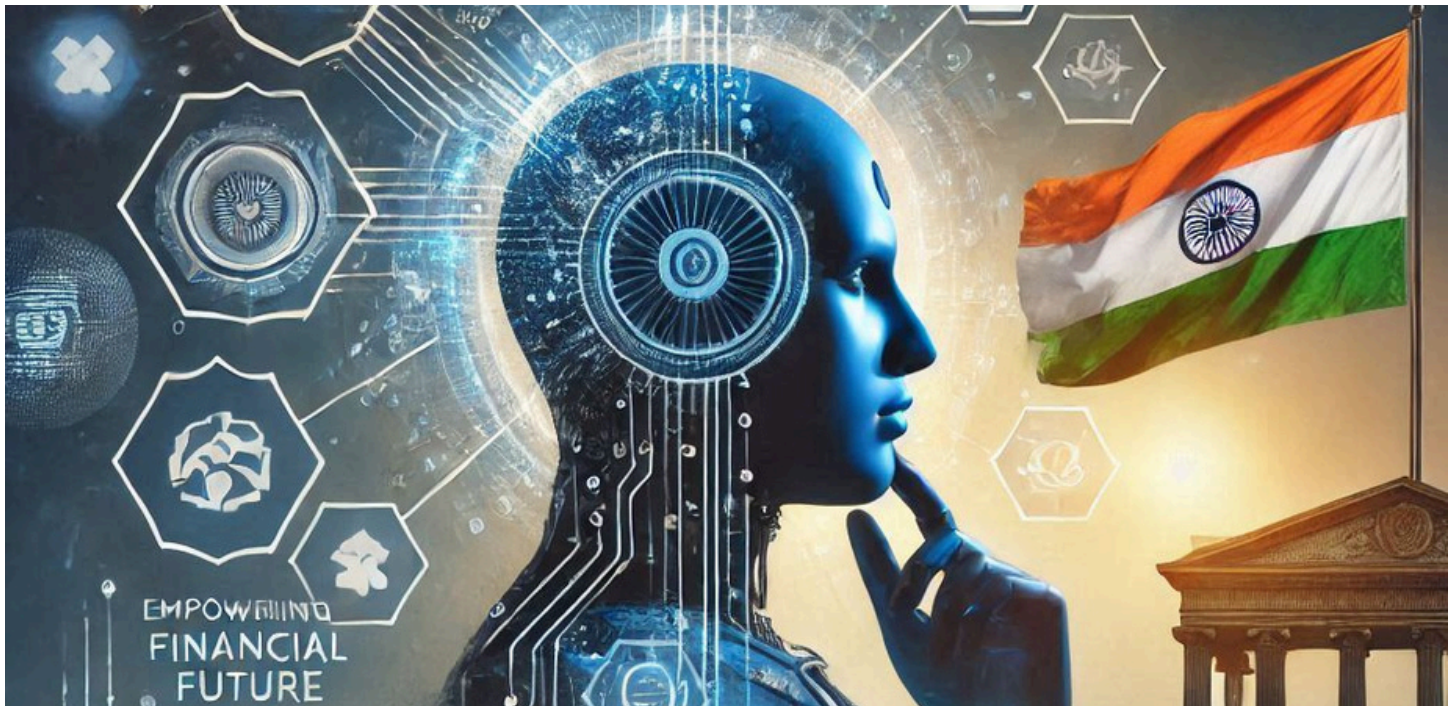
Economic and Future Outlook

The intersection of AI and finance is set to add \$957 billion to India's GDP by 2035, a testament to AI's transformative potential. With initiatives like Make in India encouraging domestic AI innovation, a robust ecosystem of fintech advancements is emerging. AI-driven tools, from robo-advisors to automated customer service, are enhancing service quality while reducing operational costs, and making financial services more accessible.



Conclusion

India's financial future is being shaped by the synergy between AI and financial innovation. This transformation promises not only economic growth but also inclusive development, sustainability, and security. As AI technology advances, India's financial landscape is likely to blend technological sophistication with social responsibility, setting an example for global financial inclusivity and progress.



Empowering India's Financial Future: The Transformative Role of AI



Shreyas Suple

PGDM 2023-25 (Finance)

AI goes to change India's financial profile by offering large opportunities and sweeping changes set to redefine the sector for decades—from taking financial inclusion to rural India to capital markets. It will create a future with finance that is more accessible, efficient and resilient. That transformative power of AI supports India's broader ambitions, especially those under government initiatives like Digital India and Make in India, which are driving toward using technology for a digitally empowered economy.

One of the most important impacts of AI is increasing financial inclusion, reaching even rural areas in India in environments with minimal amounts of traditional banking infrastructure. Biometric identification, mobile-based platforms, and predictive scoring for those living with limited means in remote regions can reach essential financial services without difficult commuting miles or strict conditions.

Analysis of alternative data, including transaction history and purchase behaviour, extends credit and other financial products through AI to previously "unbankable" individuals. So, it reaches out to millions in a formal financial system but indirectly extends their economic empowerment further toward India's larger growth.

India's capital markets are being fashioned through AI investment is more data-driven and easier. Algorithms are capable of processing massive market data in real time, which gives the investor the capability to make informed decisions quite promptly. The AI-generating robo-advisors provide information that was hitherto inaccessible to large institutions, thus leveling the playing field, so participation in the markets becomes a little more even. High-frequency and automated trades, with AI behind them, enable smoother, more efficient trading, which increases both market transparency and stability.

Ultimately, such innovations make investing accessible to a much broader audience than ever before, creating a more inclusive financial system.

Among the Indian government, pro- has been shown to be the strongest. This primarily contributes to programs such as Digital India and Make in India, where it fosters an environment to nurture AI innovations. It supports AI solutions harmonized with specific economic needs of India, such as promoting digital literacy or making it better in the country's financial infrastructure, through partnerships with the public sector, tech companies, and startups.

AI has also been fundamental in sustainable finance. Even as interest in ESG investment rises, AI facilitates the review of metrics of a company's sustainability and allows investors to make decisions that are more accurate and aligned with the mainstream trend of impact-driven decisions. Another area through which AI is linked to green finance is by scrutinizing carbon footprints and reviewing corporate sustainability improvement along the lines of India's commitment to achieving sustainable development and climate goals.

AI impacts markets and investments and redesigns the future of work and cybersecurity in finance. Routine work in finance becomes automated, leaving professionals free to make decisions at a more strategic level. With the expansion of digital finance, cyber risks also expand. AI-driven cybersecurity solution helps identify and deflect cyber risks in real time. AI protects sensitive financial data by building trust among users for digital financial systems.

Altogether, AI integration into India's financial sector will usher in a new age; the age of inclusivity, innovation, and resilience. The finance sector of India with its people driving the economy toward creating a digitally empowered and economically robust nation is better armed and prepared for the battle tomorrow will bring.



AI and the Digital Transformation of India's Capital Markets



Shivnandan Kalas

PGDM 2024-26 (Finance)

AI is thereby proving to be a game-changer in taking the sophistication level of the capital markets of the country to a new height in a very big shift in the financial landscape of India.

The National Stock Exchange has become the largest derivatives exchange in the world, thus representing large-scale technological advancements in India's market infrastructure.

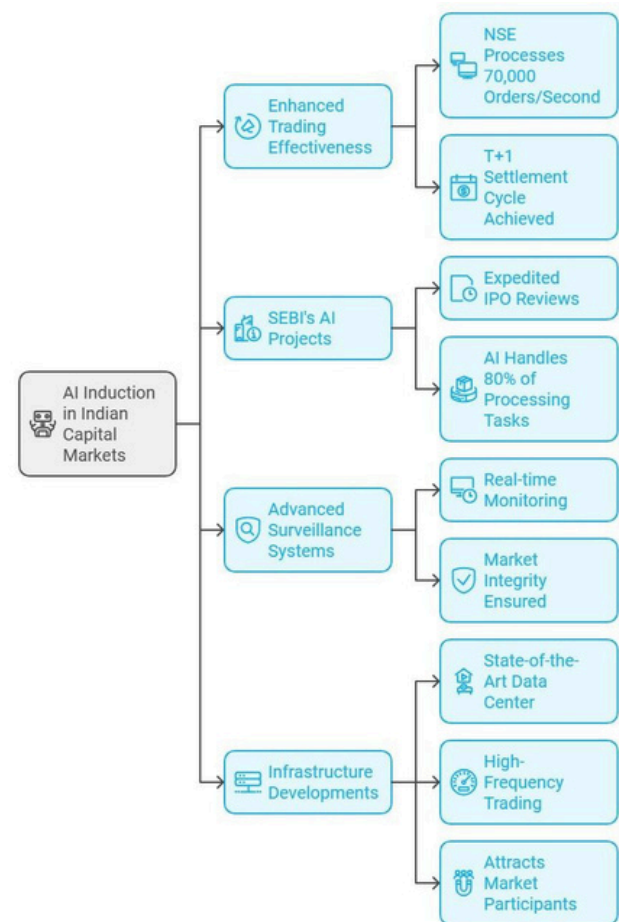
The other big thing that AI-driven systems have brought about is in trading effectiveness; it has allowed the infrastructure of NSE to process almost 70,000 orders per second. This, basically, has been very crucial in helping India arrive at the much-desired T+1 settlement cycle where it now finds itself in a rather elite club with only a handful of global markets that settle trades the next day.

SEBI is advancing with around a dozen AI projects, half of which aim to expedite approvals and provisions, said Madhabi Puri Buch at AMFI's annual meeting. SEBI now targets completing IPO reviews within three months of application, demonstrating the technology's impact. AI is used in processing public documents like REIT and InvIT annual reports, handling 80% of SEBI's processing tasks. SEBI is also integrating AI for IPO reviews, ensuring transparency and investor trust in its meticulous processes.

The participation in the market has risen to all-time highs with demat accounts at 13.3 crores as of January 2024.

And finally, a more subtle and significant proof of retail involvement is monthly SIP inflows already crossing ₹17,000 crores-plus and thus increasing investor confidence in the system of automated investment.

Following these technological advances came the rules.



SEBI mandated very advanced surveillance systems with AI capabilities that enable real-time monitoring of trading activity so that market manipulation could be automatically detected and flagged. Such systems today constitute the backbone of market integrity and process millions of trades daily.

Infrastructure developments have also been impressive. NSE operates a state-of-the-art data center in Mumbai that offers co-location services, high-frequency trading and automated trading interfaces, all of which will attract both domestic and international participants to deepen the market and offer liquidity.

It has significantly impacted market efficiency. Finalization of T+1 settlement in January 2023 has reduced market risk, improved capital efficiency, and made the markets more secure. Automated surveillance systems enhance market integrity, and digital adoption has made markets more accessible to retail investors across the nation.

Experts in the sector look forward and predict more innovation and developments with regard to applications of AI in capital markets. India's markets continue to foresee further digital transformation with regard to effective risk management standards with support from the regulatory environment as well as the necessary technological infrastructure.

The Induction of AI in the Indian capital markets is more than a technological turn of events; it represents the sign of a historic transformation of accessibility and efficiency in the market. With India among the world's top economies with growth rates to show entrustment of its financial markets to AI might become a beacon for other emerging economies around the globe.



AI: A Catalyst for Rural Financial Inclusion



Hari Rai

PGDM 2024-26 (Finance)

Bridging the Digital Divide:

Rural financial inclusion has long been a cornerstone of economic development and poverty reduction. However, geographical barriers and lack of access to traditional banking services have hindered progress in many regions. Artificial Intelligence (AI) is emerging as a powerful tool to overcome these challenges and empower rural communities.

Agent-Based Models: AI-driven agent-based models enable financial institutions to extend their services to remote areas through local agents. These agents, equipped with AI tools, can provide essential banking services like account opening, deposits, and withdrawals, bridging the gap between traditional banking and rural populations.

Financial Literacy: AI-powered chatbots and educational apps can deliver tailored financial literacy programs in local languages. These tools can provide customized advice on savings, investments, and credit, empowering rural individuals to make informed financial decisions.

Credit Scoring: Traditional credit scoring systems often exclude rural populations due to a lack of formal credit history. AI-powered predictive analytics can leverage alternative data sources, such as transaction history and mobile phone usage patterns, to assess creditworthiness and extend microcredit to unbanked rural customers.

Microfinance Operations

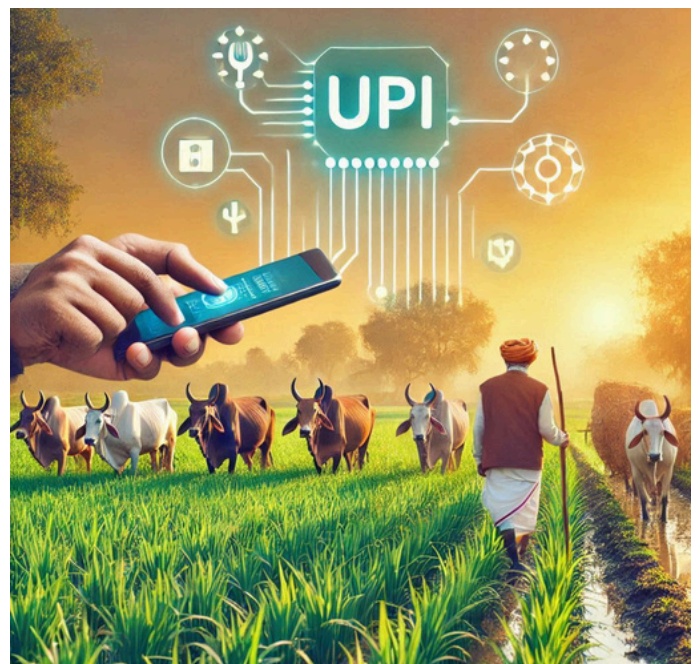
Streamlining Processes: AI can automate routine tasks like loan application processing, risk assessment, and customer support, improving efficiency and reducing costs for microfinance institutions. AI-powered supply chain platforms can optimize operations, minimize human bias, and enhance decision-making.

Digital Payments: Enabling Seamless Transactions: AI-driven mobile payment solutions can facilitate secure and convenient digital transactions for rural consumers. These solutions can be integrated with local economic networks, promoting the adoption of digital payments and fostering financial inclusion.

The Road Ahead:

By leveraging AI, financial institutions can overcome the challenges of rural financial inclusion. AI-powered solutions can improve access, enhance financial literacy, enable credit access, optimize microfinance operations, and facilitate digital payments. These innovations have the potential to transform rural economies and empower millions of people worldwide.

As AI continues to evolve, it is crucial to ensure that its benefits are equitably distributed. By addressing issues such as digital literacy, infrastructure, and data privacy, we can harness the power of AI to create a more inclusive and prosperous future for rural communities.



India's Silent AI Revolution



Surabhi Agrawal

PGDM 2024-26 (Finance)

India is embracing Artificial Intelligence (AI) as a powerful tool to modernize its financial sector in this rapidly digitizing world. As one of the fastest-growing economies, AI is poised to play a transformative role in shaping India's financial landscape and driving efficiency and innovation. Let's delve into how AI is shaping India's Financial Future:-

Transforming Finance in India: The AI Revolution

Robo-advisors commonly known as automated advisory systems, are democratizing investment opportunities. Based on algorithms, it provides customized investment advice that assesses aspects like risk tolerance, individual goals and current market trends valuable to young and growing middle-class investors.

AI-powered algorithms have given rise to Algorithmic Trading in India, where vast volumes of financial data are processed to make fast and data-driven decisions. AI reduces human error by incorporating real-time market data and enhances trading precision which makes the Indian market more efficient.



AI-driven fraud detection is protecting Indian consumers and various financial institutions by reducing false positives and refining response times. AI's capacity to identify patterns enables it to detect suspicious transactions and prevention from fraudulent activities.

AI-Driven Financial Inclusion:

Primarily in rural areas, India is home to millions of unbanked and underbanked individuals. This scenario is transformed by AI-driven solutions by increasing access to financial services and bridging socioeconomic gaps:

Credit Access via Alternative Scoring Models:

Traditional credit scores often exclude those without formal banking histories. AI helps in solving this by analyzing alternative data. This enables banks to offer loans to those who would otherwise lack access to credit.

AI in Rural Banking: Chatbots and virtual assistants make financial services accessible to people in remote areas. These AI-powered tools educate rural populations on financial literacy and provide customer support, thereby boosting financial inclusion.

Digital Payments and Financial Literacy: Integrated with simplified interfaces and educational features, AI-powered mobile banking and digital payment platforms foster financial literacy and encourage digital adoption in India's rural areas.

Insurance Accessibility: AI can reduce the costs of insurance distribution and claims management, making the policies more affordable and accessible.



Sustainable Finance and AI: Supporting India's Economic Goals

AI is also a valuable asset in promoting sustainable finance, which is crucial to India's goals for economic growth and environmental sustainability. Sustainable Finance refers to making investment decisions that consider environmental, social and governance (ESG) criteria.

AI-driven automation optimizes energy use in data centers and reduces paper-based processes, lowering the carbon footprint of financial inclusions. These initiatives align with India's commitment to sustainable development goals.

In India, where clean energy initiatives are growing, this encourages investments in renewable energy and environmentally responsible businesses. AI can analyze vast amounts of ESG data to help investors identify companies with sustainable practices, reducing the risk of "greenwashing".

AI-driven insights allow investors to measure the social and environmental impact of their investments, driving funds toward various causes like healthcare, education, etc.

AI can assess the long-term environmental impact of lending activities that support green loans for projects that align with sustainable practices.

Economic Impact: AI's Contribution to Growth and Stability

The widespread adoption of AI in finance is expected to have a lasting positive impact on India's economic growth. By fostering financial inclusion, promoting sustainable finance and enhancing operational efficiency, AI is contributing to a robust and stable financial sector that supports India's long-term economic objectives.

Increased financial inclusion stimulates economic activity by empowering millions with access to credit and insurance.



The AI revolution brings new opportunities in various fields like fintech, cyber security, science, etc. Additionally, many financial institutions are investing in skill development programs to train their employees in AI—driven technologies.

AI's predictive capabilities improve financial resilience by identifying and mitigating risks. During crises like the COVID—19 pandemic, such AI-driven insights helped maintain stability in India's financial sector, ensuring efficient capital flows and aiding in economic recovery.

AI-powered credit assessment and risk management tools help SME's access the funds they need to grow. In India, where SME's are a significant contributor to the economy, this AI support can create jobs and promote regional economic development.

Challenges and Ethical Considerations

Despite the immense potential, AI's role in finance comes with challenges. Data privacy, algorithmic biases and regulatory compliance are some significant concerns. Ethical and transparent use of AI is essential, particularly in a diverse and complex market like India's. Clear guidelines and effective data protection laws are crucial to ensuring AI is used responsibly.



Conclusion

AI's integration into India's financial sector is a transformative force, redefining accessibility, efficiency and sustainability. By democratizing access to financial services, supporting sustainable investments and bolstering economic growth, AI is not just shaping India's financial future - it's crafting a more inclusive, resilient and sustainable economy. Embracing AI in finance will propel India toward its goal of becoming a \$5 trillion economy, setting an example for digital transformation in emerging economies worldwide.

Student Achievements

Competition Name	Position	Winners Name
Aahan 2024	Winner	Saloni Jha
	Runner-Up	Devyani Sharma
	Second Runner-Up	Vidhi Vasa
Nivesh Bazar	First Place	Gurvinder Singh
		Dhruv Purohit
TAPMI Bloomberg Olympiad	Critics Favourite Award	Chirag Bhattar
		Vishakha Sharma
		Naman Jain

DELTA

ENVISIONING CHANGE

A Magazine by Finance Forum



N. L. Dalmia[®]
**Institute of Management
Studies and Research**
(A School of Excellence of N. L. Dalmia Educational Society)

We Nurture. We Transform. We Create Global Business Leaders.

Srishti Complex, Sector I, Mira Road (E) Mumbai Metropolitan Region - 401 107
Maharashtra, India
Tel: + 6389-222-555