



THE FUTURE OF BANKING AND FINTECH USING AI/ML

Abstract

The pace of new advancements in banking and fintech is accelerating. Think digital currencies allied with the cryptocurrency movement or competing with them, backed by national monetary systems and fiat currencies. The presence of fintechs in the payments and remittance sectors have resulted in the markets seeing changes in various spheres such as peer-to-peer lending, trade finance, insurance-related products and wealth management, to name a few. Collaborations of fintech companies and banks are resulting in hybrid models that combine mobile services with banking services.

There has probably never been a more exciting time to be in the banking and fintech sectors, or a more scary one.

Just a look back at the recent past shows how steeply the evolutionary curve for tech has climbed over the last 100 years. Customised user experiences in banking,

digital banking, online transactions and the incredible speed in transactions are just some of the examples of how the world of money has been revolutionised. The so-called third world countries seem to be leapfrogging their more developed counterparts and embracing digital

payment paradigms wholeheartedly: sample the India Stack-led Universal Payment Interface (UPI) in India that has percolated digital payments down to even street-side vendors in the country.



Standardise processes

Amidst all this excitement, some new technology has quietly entered the arena over the last decade and is supporting much of this advancement.

“Deutsche Bank links with NVIDIA to accelerate AI use”

“Fintech Innovation and the Digital Path of Banking in the Future”

“How New-Age Technologies Are Transforming Fintech And Crypto Industries”

A quick scan of such recent headlines brings home the unspoken truth that Artificial Intelligence (AI) and Machine Learning (ML) have truly arrived, particularly in the banking and fintech sectors. While technology has led to new models of financing and ushered in a new era in banking, the use of AI/ML has quickly

gained momentum in banking and fintech over the last few years. As per a 2020 Deloitte survey of IT and line-of-business executives, 86% of financial services AI adopters felt that AI would be very or critically important to their business's success in the next two years.

AI/ML has the potential to revolutionise the sectors by automating many processes, improving decision-making, and enhancing customer experience. Some specific areas where AI and ML may have a significant impact in the future include:

1. Risk assessment and fraud detection:

ML models sift through large amounts of data to identify patterns and anomalies that may indicate fraudulent activity. This can help banks and other financial institutions to detect and prevent fraud more efficiently and effectively.

2. Personalised financial planning and advice:

AI/ML can be used to analyse a person's financial history and goals to provide personalised recommendations and advice on financial planning and investment strategies.

3. Customer service: AI-powered chatbots and virtual assistants can handle routine customer inquiries and requests, freeing up human staff to handle more complex tasks.

4. Trading and investment: AI/ML can be used to analyse market trends and make informed decisions about buying and selling stocks and other financial assets.

5. Lending: AI/ML can be used to analyse a borrower's creditworthiness and make lending decisions more quickly and accurately.

Reimagining banking and fintech

What is intriguing for tech-watchers and forecasters beyond these somewhat expected evolutions in banking and fintech are notions of new paradigms in banking and new models of financing: will AI/ML throw up business models that are unheard of today? It's not just possible, but probable. Such business models shall require human innovation to take advantage of the speed, efficiency and cost savings that AI/ML offer bankers.

Consider a use case such as financial planning. While retail financial planning and investment advice is a thriving industry, it requires investors to have a certain minimum portfolio value before advisors consider them 'advice-worthy'. Most small investors are left to their own devices with generic guidance. Now, AI and ML can be used to analyse customer data and provide personalised financial planning and investment advice to everyone. This could allow banks to offer more targeted and customised financial products and services, such as personalised portfolios and investment strategies.

Banks are already using robo advisors, chatbots and virtual assistants to speed up customer service and provide more personalised interactions. Such efforts go a long way in engendering customer trust in banks.

Such efficiencies are not restricted to retail banking. For institutional investors, AI/ML-supported solutions may include better portfolio management backed by market trend analysis, more informed risk management and risk underwriting, real-time algorithmic trading that take advantage of short-term market movements and automated support for compliance and regulations, just to name a few.



A scary ride to nirvana

It goes without saying that the sector is rife with risks associated with cybercrime and fraud. As fraudsters and hackers get increasingly sophisticated, AI/ML solutions become inevitable. AI/ML-based solutions such as blockchain-based finance; biometric identification, verification and authentication solutions; fraud tracing and

flagging and predictive analytics can assist in mitigating such risks.

In fact, AI-based fraud detection solutions have been found to be superior to more traditional rule-based systems in making correlations between subtle activities and flagging ongoing fraud.

The use of AI/ML in the banking and fintech sectors is likely to continue to grow and evolve in the coming years, as these technologies become more sophisticated and embed themselves into the DNA of the industry.

* For organizations on the digital transformation journey, agility is key in responding to a rapidly changing technology and business landscape. Now more than ever, it is crucial to deliver and exceed on organizational expectations with a robust digital mindset backed by innovation. Enabling businesses to sense, learn, respond, and evolve like a living organism, will be imperative for business excellence going forward. A comprehensive, yet modular suite of services is doing exactly that. Equipping **organizations with intuitive decision-making** automatically at scale, actionable insights based on real-time solutions, anytime/anywhere experience, and in-depth data visibility across functions leading to hyper-productivity, [Live Enterprise](#) is building connected organizations that are innovating collaboratively for the future.

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