



ROLE OF FINTECH IN FINANCIAL MARKETS

Management

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KEYWORDS

The FinTech (Financial Technologies) market consists of sales of technology and platform based financial services and related goods. Companies in this market provide end-to-end process financial services and solutions to automate financial processes over the Internet.¹

The term fintech refers to the synergy between finance and technology, which is used to enhance business operations and the delivery of financial services. Fintech can take the form of software, a service, or a business that provides technologically advanced ways to make financial processes more efficient by disrupting traditional methods.²

Some of the most prominent applications of fintech are mobile payments, automated investment apps (Robo-advisors), cryptocurrency, online lending businesses, and crowdfunding platforms. There are some technologies that contribute to financial technology (Fintech) as follows.

Artificial Intelligence (AI) and Machine Learning (ML) contribution to fintech AI is a science that's used to construct intelligence using hardware and software solutions. ML is a field of study concerned with giving computers the ability to learn without being explicitly programmed. AI automates human intelligence based on the way human brain processes information. AI Makes computers appear to think like humans. AI is performed by computers that are executing lower-level instructions. In order to create usable AI solution, different disciplines are Finance, statistics, mathematics, psychology, etc.,

Artificial Intelligence (AI) and Machine Learning (ML) are some of the most used technologies in fintech, offering the potential to play an even bigger role in the finance industry as developments continue. Some of the fintech applications of AI and ML include credit scoring, fraud detection, regulatory compliance, and wealth management.

• Big Data and Data Analytics role in fintech

"Big Data" is the collective term used for the contemporary methodologies and technologies used to collect, organize, process and analyze large, diverse (structured and unstructured) and complex sets of data, while "customer / real-time / predictive analytics" mainly refers to specific types of analyses done on these data sets to find patterns and create business value. However, since the ultimate business goal of Big Data is not the data itself, but to get business insights into the data, the analytics part of the chain is the most visible and important for a business user, which explains why the terms are often interchanged.

Big data helps fintech create a digital log of a customer's banking activity, identify potential errors and provide seamless support. Data and forecasting can also help fintech recommend the right services/products based on their customers' individual spending behavior.

Big data improves the efficiency of risk-based pricing and risk management while significantly alleviating information asymmetry problems. Also, it helps to verify and collect the data, predict credit risk status, and detect fraud Data from customers and markets is of high value to fintech companies. Through large datasets, consumer preferences, spending habits, and investment behavior can be

extracted and used to develop predictive analytics.

Predictive analytics refers to predicting how consumers are likely to behave using past information and a mathematical algorithm. The collected data also helps in formulating marketing strategies and fraud detection algorithms.

• Robotic Process Automation (RPA) role in the fintech

Robotic Process Automation (RPA) refers to the process of assigning manual, repetitive tasks to robotics instead of humans in order to streamline workflows in financial institutions.

Nowadays, RPA has matured beyond doing mundane repetitive tasks and is seen as transformational technology that can bring tremendous value to the organization adopting it. The ability to create full audit trails is significant for improving the quality of work being done and eliminating human error. Once properly trained these robots will perform tasks with the same precision over and over again. These Robots can interact with applications irrespective of the technologies on which the applications are built.

Today, RPA is being widely accepted across industries and across the world. The Following industries can benefit a lot from RPA

BPO: with RPA and its benefits of concentrated costs the BPO sector can now depend less on outsourced labor.

Insurance sector: the complexity and number of tasks that must be managed in the insurance sector, from managing policies, to filing and processing claims across multiple platforms, provides an ideal environment for the use of RPA

Financial Sector: Day-to-day activities and handling a large data, to performing complex workflows, RPA has been helping to transform the financial sector into an efficient and reliable one.

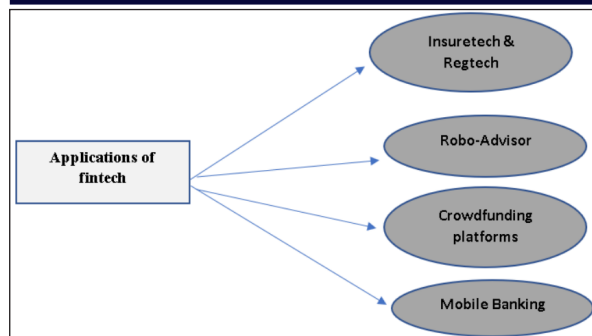
Utility companies: Gas, electricity and water companies deal with a lot of monetary transaction and can leverage RPA to automate tasks such as meter reading, billing, and processing customer payments.

Healthcare Sector: Data entry, patient scheduling, billing and claim processing are important areas, where RPA can be used. RPA will help in optimizing patient appointments, sending them automatic reminders of their appointments, and eliminating human error in patient records.

The most widespread applications of RPA in finance are statistics and data collection regulatory compliance management communication and marketing through e-mails and chatbots and transaction management

4. Blockchain

Blockchain technology is being adopted at a large scale in the financial industry, primarily due to its ability to securely store transaction records and other sensitive data. Each transaction is encrypted, and the chances of successful cyber-attacks are relatively low when blockchain technology is employed. Blockchain technology is also the backbone of many cryptocurrencies.



Applications of Fintech

1. Crowdfunding Platforms

Crowdfunding platforms like Kickstarter, GoFundMe, and Patreon are the result of developments in fintech. The platforms allow entrepreneurs and early-stage businesses to raise funds from all over the world, allowing them to bypass geographical boundaries and reach international markets and investors.

2. Mobile Banking

In the present scenario, most of the banks are providing types of mobile banking capabilities with some beneficiary schema and offers on their respective platforms.

Mobile payment applications and gateways are some of the most prevalent uses of fintech. Such applications allow users to carry out banking activities without physically visiting a bank. For example, he/she can't transfer money from Venmo to PayPal directly because there is no tie-up between them but he/she can do so by attaching the same bank account on both Venmo and PayPal. Once attached, transfer money from Venmo to the same bank account and add money from that same bank account to his/her PayPal account.

3. Robo-Advisors

Robo-advisors are online investment management services that use algorithms to allocate assets and generate portfolios for customers optimally. They allow users of all age groups to engage in investment activities at low fees with minimal manual effort.

4. Insurtech

Insurtech is a term, similar to fintech, for a company using technology to disrupt the insurance industry. The term insurtech refers to the application of technology to the insurance model, which allows companies to provide tailored insurance services and data security. Insurtech helps streamline the insurance process through online claims filing and policy management.

5. Regtech

Regtech (regulatory technology) focuses on the automation of compliance processes for financial institutions. It offers fast and cost-effective management of large amounts of data, including transaction records and compliance documents, such as corporate tax returns.

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