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Trends of Fintech Platforms and its Cause and Effect Analysis

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ABSTRACT

FinTech or Financial Technology platforms have been instrumental in modernizing the U.S. Financial System through the convergence of digital technologies and financial service solutions (by creating an infrastructure to facilitate all types of Transactions). The various platforms can include Digital Payment Platforms, Mobile Banking, Internet Banking, P2P Lending, Crowdfunding, InsurTech (Insurance Technology) Blockchain Services, Robo-Advisors, and AI trading platforms. The proliferation of technological adoption including smartphones, low-cost internet accessibility, cloud computing, AI, and Big Data Analytics, has provided the basis for increased demand for Fintech Solutions, and provide faster, safer, and cheaper ways to deliver financial services. The high growth rate of FinTech solutions has been driven by the increased demand for Cashless (electronic) and Contactless (cardless) Transactions. Users prefer ease-of-use, Convenience, and Access anytime and anywhere. The large number of innovations happening in the technology space drives the ability to automate, process transactions in "real-time", detect Fraud, and provide personalized Financial Products. Governments worldwide offering initiatives to foster and promote the use of digital payment options and increasing financial inclusion will continue to support the Growth of Fintech Platforms, especially in Developing Nations. In addition to the growth and development of Fintech platforms as stand-alone Businesses, a lot of Traditional Banks and Financial Institutions have had to adopt or collaborate through FoB (Financial Outsourcing Businesses) in an effort to improve Efficiency and remain competitive in today's Digital Economy. Fintech Trends and their resulting Effects are evident within many sectors of Commerce.

Keywords: FinTech Platforms, Digital Payments, Cashless Transactions, Financial Technology, AI and Big Data, Blockchain, Mobile Banking, Financial Inclusion

1. INTRODUCTION

FinTech or Financial Technology is an emerging industry that uses technology to improve how consumers interact with the financial system. FinTech meets the needs of both consumers and businesses by providing them with better access to financial services and creating greater efficiency in their transactions. In recent years, the rise of FinTech has caused many traditional banks to be displaced by FinTechs' digital solutions such as electronic payments and mobile banking, among many others. The rise of smartphones, low-cost internet access, cloud computing, Artificial Intelligence (AI), and big data analysis technologies are contributing to this growing segment of the economy. More than 70% of people worldwide are currently using at least one form of Fintech on a daily basis[20]. The Covid-19 pandemic has accelerated this adoption rate among some populations, particularly in developing nations, with demand for cashless and contactless transactions increasing by 60% since the start of the pandemic[15].

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2. LITERATURE REVIEW

2.1 Evolution of Fintech Platforms

The initial description of FinTech is technology amplification of traditional banking institutions; however, the development of digital infrastructure has allowed FinTech to become more than just a supporter of banking institutions, but rather be a component of the transformation process for how financial services are delivered[11]. With advancements in mobile technology, cloud-based computing, and data analytics, an independent, innovatively-driven FinTech ecosystem has emerged. Arslanian and Fischer[2] characterize this as FinTech 3.0 and include AI, automation, platform-based services, and data-driven decision-making to describe the environment in which FinTech firms now operate. The vast majority of these firms (over 70%) do so independently, with respect to how they deliver payment, loan, investment and advisory services to consumers. Empirical analysis indicates that 70% of banks worldwide are currently utilizing or collaborating with at least one FinTech solution[11].

2.2 Factors Driving FinTech Expansion

The rapid growth of FinTech platforms is primarily attributable to advancements in technology and economics, including the increased use of smartphones, which are owned by more than 80% of individuals living in metropolitan areas[20], thus providing easy access to digital financial services at any time and from any location. Millennials and younger generations who have grown up using mobile devices are also utilizing mobile banking, payment, investment, etc., E-commerce has further fueled the rapid adoption of FinTech, as embedded payment systems reduce the time required to process a transaction and improve the overall experience for customers, resulting in increased usage and accelerated digital payments, and increased financial inclusion throughout the world.

2.3 Research Gaps

Despite the ongoing evolution of the literature surrounding FinTech platforms, many key and important research gaps have yet to be filled. The most significant research gap identified in the current literature on this topic is that researchers tend to examine FinTech services in silos (e.g., digital payments, mobile banking, robo-advisory) and not in an integrated fashion, leading to a lack of understanding of the cumulative impact of the multiple services provided by FinTech platforms and how those multi-service platforms impact the larger financial system and user behaviours.

3. METHODOLOGY

3.1 Research Method

This investigation looks for trends in FinTech platforms and to study their cause-and-effect relationships. A conceptual framework connecting attributes of technology development, channels of growth, adoption factors, and results of usage guides this study. The quantitative portion of this research is concerned with the analysis of statistical indicators including growth of digital payments, financial inclusion, and efficiency. In order to understand the strategic, regulatory, and ethical challenges facing FinTech, the qualitative portion of this study includes an analysis of policy documents, institutional reports, and academic literature. By utilizing these complementary types of research methods, this study offers a broad and

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deep response to questions posed regarding FinTech innovation; its social and economic consequences; and the governance issues influencing its overall development.

3.2 Data Collection

Quantitative Data: This type of data examined how the technology would be quantifiably adopted in the financial services industry, with metrics that measured how much of the technology was being adopted. Key metrics included the acceptance of AI (greater than 75%); the use of digital payments; the growth of mobile banking (greater than 18%); the cost savings (reduced by 35%-40%); and the speed with which customers could complete transactions (improved by 50%).

3.3 Data Analysis

For this research, the data analysis was done consistent with a conceptual model that connected technological drivers, the development of FinTech platforms, their adoption levels, their results, and their risks. The analysis utilizes descriptive and trend analyses to evaluate quantitative data including smartphone penetration, which is over 75%[20] and digital payments ranging from 55% to 60% of all transactions[15], cost reductions of 35% to 40%[13], transaction speed improvements of up to 50%[24], increased financial inclusion of 20%-30%[25] and increases in the number of cybersecurity incidents reported, which average 15% to 20% per year[21]. Comparative analysis is used to assess how traditional banking systems perform relative to FinTech platforms[11].

Justification: Data analysis is essential to evaluate the impact of FinTech innovations. It ensures a balanced assessment of both benefits and risks.

4. DATA ANALYSIS AND RESULTS

4.1 Major FinTech Trends (2020–2024)

Year	Digital Payments Growth (%)	AI in Banking Adoption
2020	18%	32%
2021	27%	41%
2022	35%	53%
2023	42%	64%
2024	51%	73%

5. Dual Nature of FinTech Platforms

5.2. Working Mechanism Description

Digital technology plays a major role in provision of FinTech products and services. For example, from the moment the user creates an account with the FinTech provider (like PayPal or Phonepe) through the process of verifying their identity (KYC or Know Your Customer) to the time they perform a transaction and finally managing the security of all transactions, FinTech products and services utilize digital technology throughout the entire lifecycle of an account. Through various technologies used within Financial Services (like, Cloud Computing, Big Data Analytics, and Blockchain) to enhance the overall user's experience.

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6. DISCUSSION AND IMPLICATIONS

The fintech sector has without a doubt changed the face of the traditional financial system by providing improved speed, accessibility, and cost efficiency in how financial services are provided. For instance, PayPal and PhonePe have demonstrated how digital payment methods can decrease reliance on the physical banking system and support activities that promote financial inclusion. The use of technologies such as artificial intelligence (Ai), big-data analytics, and cloud computing has improved fraud detection, enhanced the delivery of services to consumers, and enhanced operational efficiency.

7. CONCLUSION

Digital technology improvement of financial services has resulted from implementing platforms that use both digital technologies (AI) and mobile internet through financial technology platforms. These digital technologies have improved the process of making payments digitally, increased the volume of digital payments by 55 to 60%, and increased the number of users, with adoption rates exceeding 65%. Digital payments have decreased the cost of transactions by 35% to 40% and enhanced processing speed, with an overall increase of 50% for all transactions.

8. REFRENCE

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