Fintech Frenzy: 
An engaging review of the transforming financial services

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Abstract
Advancements, opportunities, and challenges in financial technology (fintech) are comprehensively reviewed in this paper. Fintech, powered by AI and blockchain, revolutionises access to financial services. The narrative review analyses academic databases and industry reports, highlighting fintech themes like mobile payments, peer-to-peer lending, robo-advisors, and blockchain. Opportunities include accessible services, efficiency, and cost savings. However, challenges like cybersecurity, regulation, financial inclusion, resistance to change, and data privacy must be addressed. Responsible and ethical fintech practices are crucial for security, regulation compliance, inclusion, and confidentiality. Fintech's potential to transform finance and enhance lives worldwide is emphasised.

Keywords: financial technology; fintech opportunities; fintech challenges; innovation acceptance;

1.0 Introduction
Emerging technologies have recently transformed our lives, with Artificial Intelligence (AI) leading the way. AI enables machines to perform incredible tasks and has applications in various fields, from self-driving cars to medical diagnosis. Financial technology (fintech) has also emerged as a prominent force, revolutionising how we manage finances. Fintech harnesses the power of technology to deliver financial services more efficiently, challenging traditional institutions and introducing unprecedented conveniences to the financial landscape (Hermiyetti, 2023).

One notable manifestation of fintech’s impact is evident in the realm of mobile payment applications. These apps facilitate seamless transactions with a mere tap on a smartphone, effectively eliminating the need for physical currency (Byrum, 2022). Moreover, peer-to-peer lending platforms have gained significant traction, providing alternative avenues for borrowers and investors beyond the confinements of traditional banking channels. This inclusivity fosters a more dynamic and accessible financial ecosystem.
Despite the transformative potential of fintech, it is imperative to conduct a systematic review to comprehensively understand its current state, implications, challenges, and future trends, as shared by Zahian et al. (2023). Therefore, this paper explores fintech’s advancements, opportunities, challenges, and transformative influence on the financial services industry. By meticulously analysing existing literature, this study seeks to provide a nuanced understanding of fintech’s implications for financial institutions, customers, and the broader financial ecosystem.

This study aims to investigate the advancements, opportunities, challenges, and transformative impact of fintech on the financial services industry. Specifically, the objectives are to identify key trends in fintech adoption, determine financial institutions’ challenges in integrating fintech solutions, and establish potential strategies for overcoming these challenges.

2.0 Methodology
This review article utilises a narrative or traditional literature review approach to explore fintech comprehensively. The aim is to provide a comprehensive understanding of the impact and trends of fintech on the financial industry (Webster & Watson, 2002). The research question guiding this review focuses on the influence of fintech on finance, guiding the selection and analysis of relevant studies. A thorough literature search was performed across academic database repositories such as PubMed, Google Scholar, WOS, and Scopus to conduct this review. The search utilised keywords like “fintech,” “financial technology,” and “digital finance” to ensure comprehensive coverage. Additionally, reference lists of relevant articles and books were examined to identify additional sources.

Selected studies were evaluated based on their relevance to fintech and their contribution to understanding its impact on the financial industry. Factors such as fintech focus, insights on industry impact, regulatory considerations, adoption patterns, and associated benefits and challenges were considered. Extracted data were analysed for common themes and patterns, while any discrepancies were noted and explored. The review article is structured with an introduction providing background information, a methodology section explaining the approach, results presenting key findings, a discussion on fintech’s impact and trends, and a conclusion. The narrative methodology allows for a comprehensive presentation of the current state of knowledge on fintech, addressing significant aspects and potential gaps in the existing literature.

By employing this narrative review methodology, this article aims to offer valuable insights into the impact and trends of fintech on the financial industry, contributing to a deeper understanding of this rapidly evolving field. The findings of the review are discussed in the following sections.

3.0 Finding of Financial Technology Review

3.1 Background of Financial Technology
The first wave of fintech innovation in the 1990s was focused on providing online banking and brokerage services. These early fintech companies, such as E-Trade and PayPal, paved the way for developing other online financial services, including peer-to-peer lending and crowdfunding (Haines & Rambhai, 2020). The rise of mobile technology in the 2000s further expanded the capabilities of fintech, allowing for the development of mobile payment systems, mobile banking apps, and mobile trading platforms. The journey of fintech is a story of innovation, disruption, and transformation in the financial industry, with the potential to make financial services more accessible, efficient, and inclusive for everyone (Gomber et al., 2018).

The most recent wave of fintech innovation has been driven by new technologies, such as artificial intelligence and blockchain, enabling new, more efficient financial services. The growth of fintech has also led to increased competition and disruption in the financial industry, with traditional banks and financial institutions facing competition from new, agile fintech startups. Fintech is a rapidly growing sector that encompasses a wide range of financial services that utilise digital technologies. It refers to the innovative use of technology to deliver financial services in new and more efficient ways, from mobile payment solutions to online lending platforms.

One of the main functions of fintech in our daily lives is the way it makes financial services more accessible and convenient. With mobile applications and online platforms, people can now access various financial services from the comfort of their homes (Ediagbonya & Tioluwani, 2023). For example, individuals can make payments, transfer funds, and invest in stocks and other securities through mobile devices. Fintech is also improving financial inclusion by providing services to people who previously did not have access to traditional banking services (Zaidi & Shah, 2023). For example, in developing countries, mobile money platforms provide a safe and secure way for people to transact and manage their finances. Thus, fintech is transforming how we interact with money and making financial services more accessible, convenient, and efficient for everyone.

The 2021 Global Fintech Rankings reported significant changes in countries’ ranking in the fintech ecosystem. Although the United States and the United Kingdom are in the top 2 positions, Saudi Arabia, Uruguay, and China show a shift in their position in the list of the world’s fintech ecosystem leaders. This phenomenon explains that this technology is rising with its rapid acceptance and use worldwide. This positive sign proves that fintech is a technological revolution in finance that improves all-around capabilities.

3.2 Financial Ecosystem
The fintech ecosystem refers to the interconnected network of entities, stakeholders, and resources involved in developing, delivering, and adopting financial technology solutions (Clere, 2022). It encompasses various participants, including FinTech startups, government, financial customers, traditional financial institutions, and technology developers. The fintech ecosystem is characterised by collaboration, innovation, and technological integration into various aspects of financial services. It represents the convergence of finance and
technology, aiming to leverage technological advancements to revolutionise and improve traditional financial processes, products, and services.

1. Fintech startups use technology to improve and automate financial services for consumers or businesses. Fintech startups often focus on mobile payments, digital lending, robo-advisory, blockchain, cryptocurrency, insurance technology, and more (Thiruma Valavan A, 2023). They bring new ideas, disruptive business models, and technological advancements to the financial industry.

2. Governments play a crucial role in regulating the fintech industry and creating a conducive environment for innovation (Hu et al., 2022). Governments also provide support through initiatives like regulatory sandboxes, incubators, and grants, fostering innovation and growth in the Fintech sector. Additionally, governments collaborate with Fintech companies to enhance financial inclusion, promote digital identity frameworks, and drive economic development.

3. Financial customers refer to individuals and businesses that use Fintech products and services. They are the end-users of Fintech solutions and include retail consumers, small and medium-sized enterprises, and large corporations. Fintech solutions cater to their diverse needs, such as convenient payment methods, quick access to credit, personalised investment options, automated financial planning, and more.

4. Traditional financial institutions like banks, credit unions, insurance companies, and investment firms are integral to the Fintech ecosystem. They collaborate with or compete against Fintech startups to leverage technology and enhance their operations. Many traditional financial institutions partner with FinTech companies to access innovative solutions, improve customer experience, streamline processes, and explore new business opportunities (Baftijari & Hebibi, 2022).

5. Technology developers are the companies and individuals who create and provide the underlying technological infrastructure, tools, and software Fintech companies use. This includes developers of mobile applications, cloud computing platforms, data analytics tools, A.I. algorithms, blockchain protocols, cybersecurity solutions, and more. Technology developers play a crucial role in enabling the development and operation of Fintech solutions by providing the necessary building blocks and expertise.

Thus, the Fintech ecosystem is a collaborative network where each ecosystem component interacts, cooperates, and competes to drive innovation, improve financial services, and transform financial transactions.

4.0 Opportunities and Challenges

4.1 Opportunities

Fintech presents many opportunities for people and industry, ranging from increased access to financial services to improved efficiency and cost savings. For individuals, fintech offers a range of benefits. Mobile payment systems and digital wallets have made transactions more accessible and convenient. In contrast, mobile banking apps allow people to manage their finances from anywhere, anytime (Kanaan et al., 2023). Fintech has also enabled new forms of financing, such as peer-to-peer lending and crowdfunding, which provide alternative options for borrowing and investing. Additionally, fintech can improve financial inclusion, as people in underserved communities or developing countries can access financial services through mobile money platforms and other fintech solutions (Goswami et al., 2022).

For industry, fintech offers a range of benefits as well. Fintech companies are disrupting traditional financial institutions, driving innovation and competition in the industry. The study by Anitha and Devi (2022) believes that fintech increases efficiency and cost savings as financial institutions adopt new technologies to improve their operations. Fintech is also driving the development of new business models, such as robo-advisory services, which automate investment advice and management and are more cost-effective than traditional financial advisors.

According to the Fintech Malaysia Report 2022, BigPay’s US$ 100 million funding round accounted for a large chunk of Malaysia’s 2021 total funding. Despite setting a high record, Malaysia still lags behind its neighbours like Singapore, the Philippines, Vietnam, and Indonesia, yet shows a considerable opportunity for development for fintech. Opportunities in mobile payment, e-money, wealth tech, insurance, and others open space for this technology to be fully used to optimise well-being.

Therefore, the opportunities of fintech are vast, with the potential to transform how we access and use financial services and improve the efficiency and competitiveness of the financial industry. As fintech continues to evolve, we expect to see even more innovative solutions that benefit individuals and industry.

4.2 Challenges

While fintech presents many opportunities for people and industry, it also poses significant challenges that must be addressed. Some of the critical challenges of fintech include:

1. Cybersecurity: As fintech solutions rely on digital technologies and platforms, they are susceptible to cyberattacks and security breaches (Rehman et al., 2023). This can put people's personal information and financial data at risk and damage the reputation of fintech companies.

2. Regulation: Fintech operates in a complex regulatory environment, with many jurisdictions and regulations to navigate. Compliance with relevant laws and regulations can significantly challenge fintech companies.

3. Financial inclusion: While fintech has the potential to improve financial inclusion, it can also create new forms of exclusion (Ediagbonya & Tioluwani, 2023). For example, people without access to digital technologies or who lack the necessary digital literacy skills may be excluded from fintech solutions.
4. Resistance to change: The financial industry has traditionally been slow to adopt new technologies, and there may be resistance to change from established players (Varma et al., 2022). This can make it difficult for fintech companies to gain a foothold in the market.

5. Data privacy: Fintech companies often collect and use large amounts of personal and financial data, raising concerns about privacy and data protection (Alekseenko, 2022). Ensuring that people's data is protected and used appropriately is a critical challenge for fintech companies.

These challenges illustrate the need for responsible and ethical fintech practices prioritising security, regulation, inclusion, and privacy. As fintech continues to grow and evolve, it will be essential to address these challenges to realise the full potential of this innovative and disruptive sector.

5.0 Acceptance of Financial Technology

The acceptance of fintech has grown in recent years as more people and businesses become aware of these technologies' benefits and convenience. One of the main drivers of fintech acceptance is the increasing use of smartphones and other mobile devices, which allow people to access financial services anywhere, anytime. In addition, fintech solutions are often cheaper and more efficient than traditional financial services, making them an attractive option for cost-conscious consumers and businesses.

5.1 Acceptance by People

Fintech companies are gaining widespread acceptance as they offer convenient and user-friendly financial services accessible through mobile platforms, tapping into the large population that owns smartphones in many countries. This accessibility and ease of use contribute to the growing adoption of fintech solutions, transforming how people manage their finances and reinforcing the shift toward digital banking and mobile payments.

A post-pandemic study by Shahzad et al. (2022) revealed that consumers' trust, perceived ease of use, and customer innovation in Fintech services substantially impact the attitude toward adoption and behavioural intention to use fintech in the retail and cooperative sectors. This study argues that increasing user trust in security guarantees for sensitive information such as personal data and transactions strengthens the user's confidence to use this technology.

In addition, social influence, personal innovativeness, and effort expectancy influence users to use this technology, especially in developing countries. The financial sector and retail banking are gaining ground among customers. A study by Chan et al. (2022) in Australia proves that fintech can be accepted and applied to the Open Banking system by evaluating user confidence, performance expectancy, and customer financial literacy.

5.2 Acceptance by Organizations and Businesses

Businesses are also adopting fintech solutions to improve their operations and stay competitive. Fintech offers opportunities to streamline processes, automate tasks, and reduce costs, which can significantly benefit businesses of all sizes. One of the critical advantages of fintech for businesses is the opportunity to streamline their operations. Fintech solutions often use advanced software and platforms that automate and digitise manual tasks, such as data entry, document processing, and transaction management. By implementing these solutions, businesses can reduce the time and effort required to complete these tasks, increasing efficiency and productivity (Mahmud et al., 2022).

Moreover, fintech solutions can help organisations automate financial processes; for example, businesses can adopt automated accounting systems that handle bookkeeping, invoicing, and reconciliation tasks. This automation reduces the risk of human error and ensures accuracy in financial management, thereby enhancing overall financial efficiency. Cost reduction is another significant benefit of fintech adoption. The study by Devidze (2022) highlights that businesses can eliminate or minimise the need for traditional, resource-intensive processes by leveraging fintech solutions. This includes reducing paperwork, manual data entry, and physical infrastructure. Businesses can significantly cut operational costs by replacing these with more efficient and automated digital solutions.

Fintech also allows businesses to access various financial services through digital platforms (Senyo et al., 2023). This includes online banking, payment gateways, digital wallets, and peer-to-peer lending platforms. These services provide convenience and flexibility for businesses, allowing them to manage their finances, make transactions, and access credit or capital more efficiently. Furthermore, fintech solutions enable businesses to leverage data analytics and artificial intelligence. These technologies can provide valuable insights into customer behaviour, market trends, and financial patterns. By analysing this data, businesses can make more informed decisions, develop targeted marketing strategies, and personalise their services, ultimately enhancing their competitiveness.

6.0 The Future of Financial Technology

The future of fintech is both exciting and challenging, with rapid innovation and changing consumer behaviour driving the evolution of the financial industry. This study highlights some potential trends and developments that could shape the future of fintech:

1. The continued growth of mobile payments and digital wallets. Mobile payments and digital wallets have become increasingly popular in recent years, which is expected to continue. With smartphones' widespread adoption and convenience, more consumers make payments using their mobile devices (Belanche et al., 2022). Digital wallets, such as Apple Pay, Google Pay, and Samsung Pay, enable users to store their payment information securely and make seamless transactions with a simple tap or scan. This trend will likely expand further as the infrastructure supporting mobile payments continues improving.
2. Increasing use of AI and machine learning to personalise financial services. AI and machine learning (ML) are being integrated into fintech applications to enhance personalisation in financial services. A.I. algorithms can analyse large volumes of data and learn from user behaviour to provide personalised recommendations and tailored financial solutions (Mahalakshmi et al., 2022). This can include personalised investment advice, customised budgeting tools, or targeted financial products and services based on individual preferences and goals. AI and ML enable fintech companies to deliver more relevant and valuable customer offerings.

3. Adoption of Open Banking. Open Banking allows consumers to share their financial data securely with multiple financial service providers. Using standardised APIs (Application Programming Interfaces), consumers can grant permission to access their financial information by authorised third parties (Patki & Sople, 2022). This facilitates the development of innovative fintech solutions and enables the creation of tailored services based on comprehensive financial data. Open Banking promotes competition, encourages collaboration, and gives consumers greater control over their financial information.

4. The emergence of new business models, such as peer-to-peer lending and crowdfunding. Fintech has paved the way for alternative financing models like peer-to-peer (P2P) lending and crowdfunding. P2P lending platforms connect borrowers directly with lenders, eliminating the need for traditional intermediaries like banks (Sari, 2023). This gives individuals and small businesses more access to loans, often at competitive interest rates. Crowdfunding platforms enable entrepreneurs and innovators to raise funds from a large pool of individuals interested in supporting their projects. These models offer alternative avenues for funding and investment, disrupting traditional financial systems and opening up opportunities for lenders and borrowers.

While these trends offer many opportunities for innovation and growth, fintech faces challenges such as cybersecurity risks, regulatory compliance, and the need to address financial inclusion and data privacy concerns. However, fintech companies are well-positioned to address these challenges by continuing to develop innovative and user-friendly solutions tailored to individual users' specific needs. Ultimately, the future of fintech promises to create a more efficient, accessible, and inclusive financial system for everyone.

7.0 Conclusion
This review paper has delved into the transformative impact of fintech on the financial services industry. We began with an overview of the rapid advancements in emerging technologies, mainly focusing on the disruptive potential of AI and fintech. Fintech, in particular, has challenged traditional financial institutions and ushered in a wave of innovations, exemplified by the proliferation of mobile payment applications and peer-to-peer lending platforms, fundamentally altering the landscape of financial management. Our methodology section elucidated the narrative literature review approach undertaken, involving a comprehensive exploration of academic databases to discern relevant studies. The selected literature was rigorously evaluated for its pertinence to fintech and its contribution to our understanding of its ramifications in the financial sector. The resultant synthesis of findings revealed discernible themes and trends.

The examination of fintech's landscape uncovered a spectrum of opportunities and challenges. Fintech presents tantalising prospects such as enhanced access to financial services, heightened efficiency, cost efficiencies, and the emergence of novel business paradigms. Nonetheless, the journey is fraught with hurdles, including cybersecurity vulnerabilities, regulatory complexities, potential exclusionary practices, resistance to change, and privacy apprehensions, necessitating concerted efforts to navigate responsibly and ethically within the fintech sphere. Notably, the section on fintech adoption underscored a burgeoning acceptance among both individuals and enterprises, buoyed by the allure of convenience, cost-effectiveness, and accessibility conferred by fintech solutions, further propelled by the ubiquity of smartphones and intuitive user experiences.

This review paper provides a panoramic vista of fintech's trajectory, delineating its advancements, opportunities, challenges, and transformative potential in the financial realm. Through a meticulous examination of extant literature, this study enriches our comprehension of fintech's implications for stakeholders within the financial ecosystem. As fintech continues its evolutionary trajectory, it behoves us to address the identified challenges while leveraging the burgeoning opportunities to fully harness its transformative prowess in democratising financial access and utilisation.

Paper Contribution to Related Field of Study
The article contributes to the field of FinTech by providing a comprehensive overview of the subject, integrating multiple perspectives, and addressing opportunities and challenges. It enhances understanding, informs research and policymaking, and promotes awareness in the rapidly evolving landscape of FinTech. Suggestions for future research include conducting in-depth case studies on specific FinTech applications, exploring regulatory frameworks and ethical considerations, examining the socioeconomic impact of FinTech, and monitoring emerging trends and technologies.

References


