FINTECH AND ITS IMPACT ON FINANCIAL SERVICES

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Abstract: This article aims to analyse the main trends of the financial technology (fintech) between 2017 and 2023 and their influence on the financial services sector. Analyzing essential trend, investments, and technology the paper underlines the changes caused by fintech in the field of financial services. The methodology of the research implies monographical observation, statistical generalization, logical and futuristic foresight.

Keywords: Fintech, financial services, digital payments, mobile banking, blockchain, cryptocurrency, AI, peer-to-peer lending, robo-advisors, insurtech, regtech.

Introduction

Financial technology or fintech has become one of the most outstanding areas that has introduced innovative products and solutions in the financial sector. Fintech on the other hand is defined as the use of new and advanced technologies focused on improving and or directly challenging banking and financial solutions. These are mobile banking, online lending, cryptocurrency, blockchain, Fintech start-ups, peer to peer lending, robo advisors, insurtechs, regtechs and digital payments. Hence, the aim of this article is to give insight into the past five years of activities in the fintech subsector and its transformative change of the financial services industry from the year 2017 up to 2023.

Literature review

One increasingly popular area of the financial markets and products is the financial technology, or technology for short, commonly referred to as fintech, which has renewed the services and processes of the financial industry.

Fintech, or financial technology, refers to innovative technology that aims to compete with traditional financial methods in the delivery of financial services. It encompasses a wide range of applications, including mobile banking, online lending, and cryptocurrency. Arner, D. W., Barberis, J., & Buckley, R. P. (2016). “The Evolution of Fintech: A New Post-Crisis Paradigm?” Georgetown Journal of International Law.

Financial services encompass a broad range of businesses that manage money, including banks, credit card companies, insurance companies, accountancy firms, consumer finance companies, stock brokerages, and investment funds. Mishkin, F. S. (2019). “The Economics of Money, Banking, and Financial Markets”. Pearson.

Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions remotely using a mobile device such as a smartphone or tablet. Donner, J., & Tellez, C. A. (2008). “Mobile Banking and Economic Development: Linking Adoption, Impact, and Use”. Asian Journal of Communication.

Cryptocurrency is a digital or virtual currency that uses cryptography for security. It operates independently of a central bank and can be used for various transactions, investments, and as a medium of exchange. Nakamoto, S. (2008). “Bitcoin: A Peer-to-Peer Electronic Cash System”.

Blockchain is a distributed ledger technology that underpins cryptocurrencies and records transactions across many computers so that the record cannot be altered retroactively. It enhances transparency and security in financial transactions. Tapscott, D., & Tapscott, A. (2016). “Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World”. Penguin.

Peer-to-Peer (P2P) Lending: Peer-to-peer lending is a method of debt financing that enables individuals to borrow and lend money without the use of an official financial institution as an intermediary. It connects borrowers directly with lenders through online platforms. Pierrakis, Y., & Collins, L. (2013). “Banking on Each Other: Peer-to-Peer Lending to Business: Evidence from Funding Circle”. Nesta.

Robo-Advisors: Robo-advisors are digital platforms that provide automated, algorithm-driven financial planning services with little to no human supervision. They offer financial advice or investment management online. Lam, J. (2016). “Robo-Advisors: A Portfolio Management Perspective”. CFA Institute Research Foundation.

Insurtech is the use of technology innovations designed to squeeze out savings and efficiency from the current insurance industry model. It includes the development of new products and services that use AI, big data, and other technologies to improve the insurance value chain. Schanz, K. U. (2015). “Harnessing Technology to Narrow the Insurance Protection Gap”. The Geneva Association.

Regtech, or regulatory technology, refers to technology that is used to help companies comply with regulations efficiently and inexpensively. It leverages big data and machine learning to support regulatory compliance. Arner, D. W., Barberis, J., & Buckley, R. P. (2017). “Fintech, Regtech, and the Reconceptualization of Financial Regulation”. Northwestern Journal of International Law & Business.

Digital payments refer to transactions that are made through digital or online modes, with no physical exchange of money involved. This includes electronic payments, mobile payments, and contactless payments. Dahlberg, T., Guo, J., & Ondrus, J. (2015). “A Critical Review of Mobile Payment Research”. Electronic Commerce Research and Applications.

All these definitions collectively discuss on the aspects and the kind of change that fintech brings to the financial industry. Fintech is a key that has unlocked improvements in the particulars of the financial sector through employing new technologies which have boosted efficiency, flexibility, and security of transactions. Fintech in general, is innovation involving technology used or targeted at groups of consumers and businesses to deliver financial services. Some of the key subsectors in Fintech involve; mobile commerce and banking, Internet lending, cryptocurrencies/ blockchain solutions, P2P lending, robo-advisors, insurtech/regtech, and Fintech digital payments. Its has the ability to enhance and realize the opportunities of technology that create efficiency, access and security of financial services.

Research methodology.

A scientific and systematic approach to the conduct of this research was adopted with evident use of monographic observation, statistical abstraction, logical reasoning, and prospective methods of forecasting all being observed and utilized throughout the entire process of this research. Further, the approach to analysis and synthesis as well as methods of the scientific analysis and synthesis were applied in the work of the investigation successfully.

Research result

Here is a statistical data on fintech and its impact on financial services from 2017 to 2023, presented in a table:

Year	Total Fintech Investment (USD Billion)	Key Trends and Insights
2017	50.8	Growth in digital payments and mobile banking; rising interest in blockchain technology.
2018	111.8	Surge in venture capital funding; increased adoption of AI and machine learning in financial services.
2019	135.7	Expansion of peer-to-peer lending and robo-advisors; notable growth in insurtech.
2020	48.9	COVID-19 pandemic drives digital transformation; increased use of digital wallets and contactless payments.
2021	131.5	Record high investment; significant growth in cryptocurrency adoption and blockchain applications.
2022	196.0	Continued dominance of payment technologies; rise in AI-powered financial solutions.
2023	113.6	Decline in overall investment; focus on profitability and sustainability; increased interest in B2B fintech solutions and AI applications.

Key Insights:

- 2017-2020: Fintech business expanded significantly due to advancements in fields like digital payments, mobile banking, and even block chain. The COVID-19 crisis pushed up the digitization of the economy, raising the popularity of digital wallets and contactless payments.

- 2021: This year set a new record of fintech investment that mainly has stemmed from the rapidly growing fascination in cryptocurrencies as well as block chain solutions.

- 2022: They progressed on to establish more investments with specific emphasis on the payment technologies and Artificial Intelligence enabled solutions.

- 2023: There was a general reduction in the total investment, with an emphasis made on the profitability and long-term development. Fintech for business, money management, and payment systems moved to the foreground as well as artificial intelligence.

Sources:

KPMG's Pulse of Fintech reports highlight trends and investment data across regions and fintech subsectors.

G2's compilation of fintech statistics provides insights into fintech adoption, growth rates, and user preferences.

Analysis and Discussion of Results

The table describes investment and major factors related to fintech till 2023 starting from 2017 which will help the audiences to understand the growing changes in the new and highly effective sector of the fintech market influencing the financial sector in a great way. Key Trends and Insights:

➢ 2017: Total fintech investment: More than $50. 8 billion. The year was a record in adoption of digital payments and mobile banking services. These technologies started changing how people and companies used money, using consumer handhelds and the web. It also marked the beginning of interest in blockchain technology which was to later be applied in cryptocurrencies and decentralized finance.

➢ 2018: Total fintech investment: Three of those, namely, Coca Cola Company, JD Group and Wal-Mart, had clearly defined strategies with a total target market of more than $111 billion. 8 billion. A significant rise of the venture capital investments was registered, which can be attributed to the growing utilization of AI and machine learning in financial domain. These technologies include; The application of above technologies has led to more individualistic and effective financial solutions such as; The increase in funding was as a result of increased confidence in the fintech space as a disruptor of the conventional financial systems.

➢ 2019: Total fintech investment: two months ago today, the Alliance was still in town spending $135. 7 billion. The year posed considerable growth in the unfolding of Peer to Peer (P2P) lending limit and Robo advisors. P2P lending gave a channel to the borrowers and lenders directly interact without involving the middle man which is the bank. Robo-advisors brought an algorithm-based, easy to access investment advisory services to the mass markets for the management of their money.

There was also tremendous growth in the insurtech sector, it brought new ideas of how to improve the process of obtaining insurance.

- In 2020, Total fintech investment: On average a firm spends more than $48 on delinquent accounts receivable from slow paying customers. 9 billion. COVID-19 revolutionized fintech businesses to an extent by making people resort to digital banking and prove that it is the future of money. Digital wallets as well as contactless payments were more prevalent, consumers and businesses embraced safer and more efficient ways in making transactions. There was also noticeable economic decline that affected different sectors but fintech remained to develop and respond to those challenges.
- 2021: Total fintech investment: The annual Total General Operating Expense was observed to be $131 of this amount $78 were drug related expenses. 5 billion. Global fintech investments hit their highest figures, mainly due to the rapidly growing popularity of cryptocurrencies and other blockchain technologies. This year was characterized by improvements in decentralized finance (DeFi), which aimed at offering financial solutions not through central banking systems. The increase of crypto related investments showed the market's interest in the new financial paradigm and the possibilities of using blockchain in the transformation of multiple spheres of economy.
- 2022: Total fintech investment: The press and publishing business total, by all accounts, sums to $196.0 billion on the basis of the information which has been gathered. Fintech continued to be of interest for investments with the primary focus on the payments and the use of Artificial Intelligence in financial services. In the future, there would be improvements in security for mobile payment platforms that will carry such risks, and also enhancements of the interfaces towards efficiently managing risk by the end users. By using the type of applications and artificial intelligence, the various spheres of the management, including the financial and risks, as well as clients' relations got improved. Fintech this year was able to demonstrate that the services that it offers are diverse and flexible enough to withstand alters in the market environment.
- 2023: Total fintech investment: It can reach $113.6 billion. That is, while the absolute level of investment had lowered, the programs became oriented at profitability, and at the rates of growth, not at their amount. The most popular priorities among the investors and fintech companies were 'scalability of the business' and 'growth'. The services of fintech in the B2B area expanded, though the term is oriented to ideal appropriate means to enhance business sectors and cash circulation frequencies. Even as written this remained relevant; it was implemented in improving several aspects in the financial discipline.

Fintech received significant funding in the 2017-2022 range, although, the funding received the maximum inflows in the year 2022. It was attributed to the advancements in electronic and mobile money, artificial intelligence, block chain among others. Of all the technological revolutions, AI, Blockchain & mobile banking were exceptional in as much as they affected the financial services industry as being efficient, innovative and secure. The pandemic deepened the level of digitisation meaning that the role of Fintech solutions is highly relevant for maintaining and invigorating the approach to financial transactions. To an extent, the decline of investition in 2023 indicated that a new trend has emerged of creation and maintaining fintechs – the emergence of B2B fintechs and the application of AI.

Conclusion and Recommendations

In this regard, the financial sector has benefited in the advancement the progression of fintech between the year 2017 to 2023. The advancement in diverse procedures including digital payments, mobile banking, blockchain, Machine Learning, and other many processes has transformed several traditional procedures in the finance sector. COVID-'19 crisis has given a strong stimulus to the development of digitalisation in the financial markets, thus entrenching the role of fintech.

Recommendations:

❖ The government and other bodies regulating the industry should establish conditions that are flexible and favourable in as much as encouraging the advancement of fintech will not destabilize consumer standard and the financial sector.

❖ Financial systems should complement with on-line service providers to capture better innovations in technology and services.

❖ Other possibilities of applying AI and blockchain technology could be also explored to create additional innovations in the sphere of finance and to optimize its performances and securities.

❖ Fintech has to work on inclusive innovation to open up the services that would be useful for the low income earner or the financially excluded segment of the population.

References

1. Arner, D. W., Barberis, J., & Buckley, R. P. (2016). "The Evolution of Fintech: A New Post-Crisis Paradigm?" Georgetown Journal of International Law.
2. Mishkin, F. S. (2019). "The Economics of Money, Banking, and Financial Markets". Pearson.
3. Donner, J., & Tellez, C. A. (2008). "Mobile Banking and Economic Development: Linking Adoption, Impact, and Use". Asian Journal of Communication.
4. Nakamoto, S. (2008). "Bitcoin: A Peer-to-Peer Electronic Cash System".
5. Tapscott, D., & Tapscott, A. (2016). "Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World". Penguin.
6. Pierrakis, Y., & Collins, L. (2013). "Banking on Each Other: Peer-to-Peer Lending to Business: Evidence from Funding Circle". Nesta.

7. Lam, J. (2016). “Robo-Advisors: A Portfolio Management Perspective”. CFA Institute Research Foundation.
8. Schanz, K. U. (2015). “Harnessing Technology to Narrow the Insurance Protection Gap”. The Geneva Association.
9. Arner, D. W., Barberis, J., & Buckley, R. P. (2017). “Fintech, Regtech, and the Reconceptualization of Financial Regulation”. Northwestern Journal of International Law & Business.
10. https://kpmg.com/xx/en/home/industries/financial-services/pulse-of-fintech.html.
11. https://learn.g2.com/fintech-statistics