

عنوان البحث

التطورات في التكنولوجيا المالية

developments in financial technology

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العام الدراسي:

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الملخص:

Abstract: Digital transformation creates challenges in all industries and business sectors. The development of digital transformation has also clearly triggered the emergence of fintech (financial technology) initiatives, which are recognized as some of the most important innovations in the financial industry. These initiatives are developing rapidly, driven in part by the sharing economy, regulations, and information technology. However, research in the field of fintech remains in its infancy. Fintech offers several services, such as funding, payment (including electronic wallets), e-aggregators, e-trading, and e-insurance, and cryptocurrencies such as Bitcoin. This provides an opportunity to more closely examine fintech's research challenges and trends. This study aims to (1) determine the state of the art of financial technology research; (2) identify gaps in the financial technology research field; and (3) identify challenges and trends for future research potential. The novel proposal in this study includes theoretical contributions regarding financial technology. Using the systematic literature review approach of Kitchenham, in addition to thematic analysis, meta-analysis and observation to validate the quality of literature and analysis, the results of this study provide a theoretical basis fintech research from an information systems perspective, including the formulation of fintech technology concepts and their development.

Keywords: financial technology; fintech; systematic literature review; thematic analysis; meta-analysis

by Ryan Randy Suryono, Indra Budi, and Betty Purwandari

1. Introduction

Fintech is a new financial industry that applies technology to improve financial activities. Moreover, according to Leong and Sung (2018), fintech can also be considered as “any innovative ideas that improve financial service processes by proposing technology solutions according to different business situations”. Advances in e-finance and mobile technology for financial companies, which drove the innovation of fintech, emerged after the global financial crisis in 2008. This development was characterized by integration in e-finance innovation, Internet technology, social networking services, social media, artificial intelligence, and big analytic data. This challenges many traditional financial institutions, such as banks, to develop their business models in a more practical direction. In addition, start-ups saw this as an opportunity to enter the financial services industry. Two types of start-ups are relevant to this research, e-commerce and financial technology (fintech). Fintech is one of the most important innovations in the financial services industry and is driven by economic sharing, regulation, policy, and information technology. Like that of banks, the business model of fintech also focuses on payment and loan services. In addition, it includes personal financial consulting services, crowdfunding, virtual currencies, and security (e.g., cyber security). Zavolokina et al. examined how fintech is perceived. The term “fintech” can be interpreted as the application of information technology in the fields of finance, financial innovation, and digital innovation, in addition to start-ups (the financial service industry outside of banks). There are six fintech business models: insurance services, crowdfunding, payment, lending, wealth management, and capital markets. Clearly, the greater the level of development of financial technology services, the greater the challenges for businesses. Online loan services have caused controversy in communities, including moral hazard, loan defaults, and information asymmetry. The case of money laundering via Bitcoin has also been widely discussed. For this reason, it is important for regulators to formulate how this innovation should be addressed in the rules. Regulators encourage innovation in the financial sector and apply the principles of consumer protection and risk management to obtain safe and appropriate financial services. The history of technological innovation in the financial sector began with the emergence of checks as a means of payment (1945). Subsequently, the Bank of America produced the first credit card (1958), and ATMs appeared to help process financial transactions in 1967, followed by the issuance of a debit card as a transaction tool. In the 1990s, supported by the advancement of the Internet, Internet banking was launched. In the 2000s, fintech developments of mobile payments and crowdfunding were introduced. This shows that fintech is a fast-growing industry, and it is thus necessary to review previous research to capture the evolution of financial services. To increase the understanding of academics, industry players, and regulators about the extent to which the fintech industry is developing, it is necessary to conduct a literature review. . The results of this analysis were validated by experts. Finally, this research provides an overview of the challenges, problems, and trends in the fintech sector.

For the topic “Developments in FinTech”, some potential problems that could be:

1-Historical challenges of the new financial law: How are the new financial components regulated and framed? What legal and regulatory details do you face?

2-Adverse social impacts: What are the potential benefits and risks of financial choices to individuals, societies and economies?

3-Cybersecurity and privacy: How can the security and privacy of financial data and digital financial transactions be ensured?

4-Fintech startup: What factors have contributed to the creation of financial applications and solutions by digital consumers?

5-Our quest in financial services: How can technology enable new financial services? What are the emerging companies in this field?

6-What financial technology is available in national banks and financial institutions? What are their types to adapt to these changes?

In 2024, developments in financial technology (FinTech) are of great importance for many reasons:

1-Continuous innovation: Recent years have witnessed an acceleration in the emergence of new financial technologies, such as cryptocurrencies, crowdfunding, and digital banking. Research in this area will help understand these innovations and future trends.

2-Digital transformation of the financial sector: Financial institutions are increasingly adopting modern technologies to improve services and reduce costs. Understanding these digital transformations is vital for all participants in the financial sector.

3- Impact on financial inclusion: Fintech has the potential to expand access to financial services to broader segments of the population. Research in this area will shed light on how to achieve greater financial inclusion.

4- Regulatory challenges: The emergence of new technologies poses new regulatory challenges. The research will help formulate appropriate policies and regulatory framework for these developments.

5- Economic and social impacts: Developments in FinTech will have wide-ranging impacts on the economy and society. Research in this area will help understand and plan for these impacts.

In general, research on the topic of developments in financial technology is of great importance for understanding emerging trends and challenges in the financial sector and their impact on the economy and society.

أهداف الدراسة:

Main objectives of this study could be:

1- Explore emerging innovations and applications in FinTech:

- Analysis of modern financial technologies such as cryptocurrencies, crowdfunding, and digital banking.
- Study how these applications work and evaluate their benefits and challenges .

2- Evaluating the digital transformation of financial institutions:

- Examining how financial institutions adopt modern technology and its impact on their operations and services.

Identifying the challenges and opportunities emerging from this digital

- transformation .

3- Analysis of the impact of FinTech on financial inclusion:

- Evaluate how financial technology can be used to expand access to financial services.
- Determine the extent of FinTech's success in promoting financial inclusion and the areas that need further development.

4-Exploring regulatory and legislative issues:

- Study the regulatory challenges emerging with the emergence of new financial technologies.
- Contributing to the development of an appropriate regulatory framework for these developments.

5-Evaluation of economic and social impacts:

- Analyze the broad impacts of FinTech developments on the economy and society .
- Identify the opportunities and challenges associated with these impacts.

By achieving these objectives, this study will help understand and guide developments in financial technology in a way that supports innovation, economic growth, and financial inclusion at scale.

Based on the main objectives of the study, the following main research questions can be asked:

1-What are the emerging financial technologies and innovations in the FinTech space? What are the main features and benefits of these applications?

2-How are financial institutions adopting new technologies and what are the challenges and opportunities associated with this digital transformation?

3-How successful has FinTech been in promoting financial inclusion and expanding access to financial services? What are the areas that need further development?

4-What regulatory and legislative issues are emerging with developments in the FinTech space? What is the most appropriate regulatory framework for these developments?

5-What are the broad economic and social impacts of FinTech developments? What are the opportunities and challenges associated with it?

By answering these research questions, the study will be able to provide comprehensive insights into developments in the field of financial technology and their impact on the financial sector, the economy, and society in general.

فروض الدراسة:

Based on the previous research questions and hypotheses, the following hypotheses can be formulated for the study:

1-There is a positive relationship between the adoption of modern financial technologies in financial institutions and the improvement of the efficiency and competitiveness of these institutions.

2-Increasing financial inclusion and expanding access to financial services is positively associated with the spread of FinTech applications, especially in marginalized regions and groups.

3-There is a relationship between the regulatory and legislative framework for financial technology and achieving a balance between innovation and risks in this field.

4-Developments in FinTech have a positive impact on economic productivity and the creation of new jobs, but may also lead to increased inequality and digital exclusion.

5-There is a relationship between the level of awareness and financial culture of users and the extent to which they adopt modern financial technology applications.

These hypotheses will help guide the research and analysis process, and will be tested by collecting data and empirical evidence during the study.

الدراسات السابقة:

"Fintech Adoption and Financial Inclusion: A Cross-Country Analysis"

بواسطة D Klapper, L., & Singer, D. (٢٠١٧). البنك الدولي.

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Parker, C., & Weber, B. W (٢٠١٨). مجلة النظم المالية.

"Blockchain Technology in Finance: Applications and Challenges" بواسطة

Tapscott, D., & Tapscott, A (٢٠١٦). مجلة مراجعة عمليات الأعمال.

"Mobile Money and Financial Development: The Case of M-Pesa in Kenya"

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والسياسة العامة.

Bridging the "Digital Divide" in Financial Services: The Fintech Revolution "

in Financial Inclusion بواسطة D Demirguc-Kunt, A., Klapper, L., & Singer, D.

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القانون والمالية.

المنطلقات النظرية للدراسة:

Depending on the nature of the topic and the objectives of the study, there are several theoretical starting points that can be relied upon:

1-Technological innovation theory: Explains how new technologies and innovations emerge and spread in various fields, including the field of financial technology. This theory helps understand the motives and factors for adopting modern financial technologies.

2-Financial intermediation theory: It examines the role of financial institutions in facilitating savings, investment, and resource allocation. This theory helps in understanding how new financial technologies affect the performance and efficiency of financial institutions.

3-Financial inclusion theory: It focuses on making financial services and products available to all segments of society, especially marginalized groups. This theory explains the role of modern financial technologies in achieving financial inclusion and expanding access to services.

4-Financial regulation and supervision theory: It examines the regulatory and legislative frameworks necessary to control and stabilize the financial sector. This theory helps in understanding the regulatory challenges caused by the emergence of financial technology.

5-Theory of Social and Economic Change: Explains the social and economic impacts of technological developments, including the impact on productivity, employment, and income inequality.

These theoretical premises will provide the conceptual and analytical framework for the study and help in interpreting the results and drawing recommendations.

المنهجية وطرق البحث:

The descriptive analytical approach:

- Collect data and information by reviewing literature and previous studies on the subject of financial technology.
- Analyzing qualitative and quantitative data to detect trends and developments in this field.
- Using descriptive and inferential statistics methods to analyze data.

أدوات الدراسة :

Questionnaire

الاستبيان

حدود الدراسة :

We will study this research within the following limits:

Spatial boundaries:

Kingdom of Saudi Arabia- Riyadh.

Time limits: Year 2024

Study population:

A group of people who work in technolog.

المراجع:

كتب:

1-The Fintech Book: The Financial Technology "
"Handbook for Investors, Entrepreneurs and Visionaries
تحرير Janos Barberis و Susanne Chishti

2-"Fintech in a Flash: Financial Technology Made Easy"
بواسطة Agustín Rubini

3-Blockchain Revolution: How the Technology Behind "
"Bitcoin is Changing Money, Business, and the World
بواسطة Alex Tapscott و Don Tapscott

مقالات علمية:

4- "The Rise of Fintech - Opportunities and Challenges"
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تقارير:

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9 "Fintech Regulatory Sandboxes and Financial Inclusion"

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المواقع الإلكترونية:

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11- Finovate (www.finovate.com)

12- Fintech Weekly (www.fintechweekly.com)