
Financial Technology Issues from Developing Countries Perspective: Role and Challenges a Systematic Literature Review

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ABSTRACT: This article aims to explain the acceptance of the use of financial technology based on the perspective of developing countries. The ease of obtaining financial services has an impact on the development of financial services business from traditional to financial technology based. The development of financial technology has changed the way and attitude of the public in conducting financial transactions. However, the potential benefits of technology-based financial services have not been fully adopted simultaneously, especially in developing countries. This is due to several conditions both related to demographics and socio-culture which result in different perspectives on financial technology. 31 papers were found to be pertinent to the study topic “explain the role and challenges in the adoption of financial technology in developing countries” after 215 articles had been chosen.

KEYWORDS: Financial Technology, Developing Countries, Digital Finance

1. INTRODUCTION

Financial technology (Financial technology) has brought many changes and advance in the financial industry. Financial technology *has revolutionized various market activities, especially the banking, trading, insurance and risk management industries.* The emergence of technology-based financial service innovations is not only utilized by financial companies in the banking sector but encourages the development of other technology-based non-bank financial services businesses. *Financial technology companies,* which include start-ups, technology companies and financial institutions are leveraging emerging technologies such as data, artificial intelligence, *blockchain, and edge computing* to make financial services more accessible and efficient. The change in financial services from physical services to more advanced financial services based on digital technology has succeeded in changing people's behaviour regarding how to use financial services.

Term of *Financial technology* refers to new industries in the financial sector that utilize technology to improve overall financial activity. (Schueffel, 2018). In particular *Financial technology* Leading to innovation and disruption in the financial sector that utilizes the availability of communication, especially through the internet and automatic processing of information. Gomber et al., (2017) stated that *Financial Technology* more emphasis is placed on innovation and technological development, and this explains the fact that most companies *Financial Technology* does not come from the financial sector but can also be an Information Technology company that creates new solutions to financial industry problems.

Financial technology differs from traditional finance, by utilizing technology to provide financial services, operating on a P2P basis to reduce transaction costs but has the potential for competition against the existing financial industry. While *financial technology* provides significant benefits such as increased access to financial services and reduced costs, there are potential risks such as increased vulnerability to *cybercrime* and lack of regulatory oversight. Policymakers must carefully consider these risks and benefits and ensure all activities are compliant with applicable regulations to protect consumers and ensure financial stability.

Development *Financial technology* through various start-up businesses in the financial sector, there have been significant changes in various industries. Palmié et al., (2020) mention, there are technological developments that lead to disruptive innovations in the ecosystem *Financial Technology* has a tremendous impact on the development of financial sector services. This condition is also supported by the growth of cellular phone users which eventually raises opportunities for growth in usage *Mobile Finance* like *Mobile Payment* and *Mobile Banking* (Lee, 2018). The financial industry strives to provide improved financial services that not only make it easy for consumers to access account information but also conduct financial transactions through telephone devices.

The positive impact of *financial technology* and financial inclusion on growth can be seen in developed countries. By utilizing financial technology, these countries are able to reduce income inequality and poverty, as well as increase access to capital and become opportunities for underprivileged communities. The use of financial *technology* in financial services has boosted

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entrepreneurship, job creation and economic growth. In addition, financial *technology* helps increase transparency and efficiency in financial transactions, thereby reducing the potential for abuse of trust.

This condition raises a strong desire for developing countries, especially Asia, to adopt *financial technology* to encourage inclusive growth. The fact shows that there is still limited access to formal financial services, making it difficult to invest or start a business. The existence of *financial technology* has an opportunity to bridge this gap, by providing low-cost financial services that are accessible to all parties so as to increase access to capital that leads to increased investment, job creation and economic growth.

Developing countries have been trying to adopt financial *technology* as part of modernizing the financial system. However, there are many challenges faced by developing countries in accepting the existence of *financial technology*, especially when related to the willingness and readiness of the community to accept and use technology in everyday life.

Studies on financial technology are increasingly attracting attention, as evidenced by the increasing number of publications of articles related to financial technology.

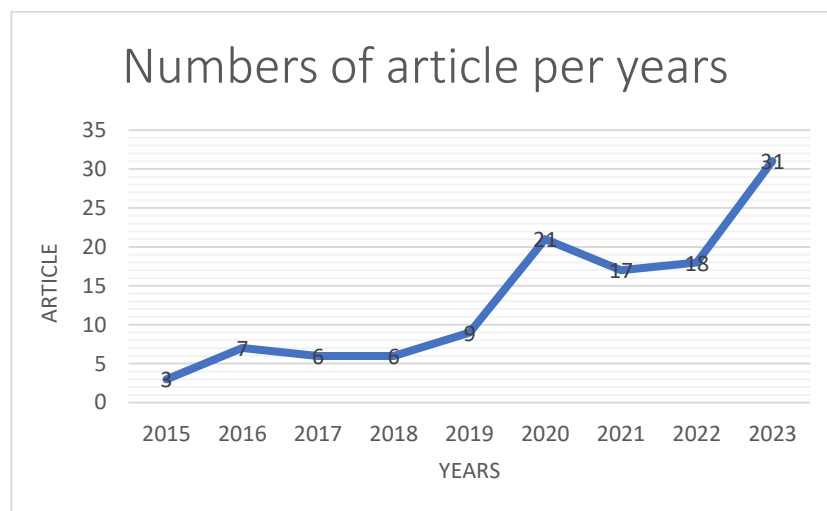


Figure 1. Number of published articles on *financial technology* from 2015-2023

Figure 1 provides information on the development of studies on *financial technology* from 2015 to mid-2023 which is used as a reference in this literature study. The increasing number of articles every year shows that the topic of financial technology *still receives considerable attention for academics and researchers to explore more interesting issues related to financial technology.*

To provide a more systematic and directed explanation related to the topic to be reviewed, the author analyzed the search results of 118 research results with the main question (Research Question) as follows:

RQ1: What is the role of *financial technology* in developing countries?

RQ2: What are the challenges of *financial technology adoption* in developing countries?

Rq3: Do cultural differences impact the adoption of *financial technology* in developing countries?

2. LITERATURE SEARCH METHODS

This literature study uses several research results that explain the role of financial technology, *challenges and cultural impacts on the adoption of financial technology* in developing countries.

a. REVIEW METHODS

To conduct an analysis of the latest literature on *Financial Technology*, the author uses an approach *systematic literature review (SLR)* by using Scientific Procedurals and Rationales for Systematic Literature Review protocol (SPAR-4-SLR Protocol used by Paul et al., (2021) with the following stages:

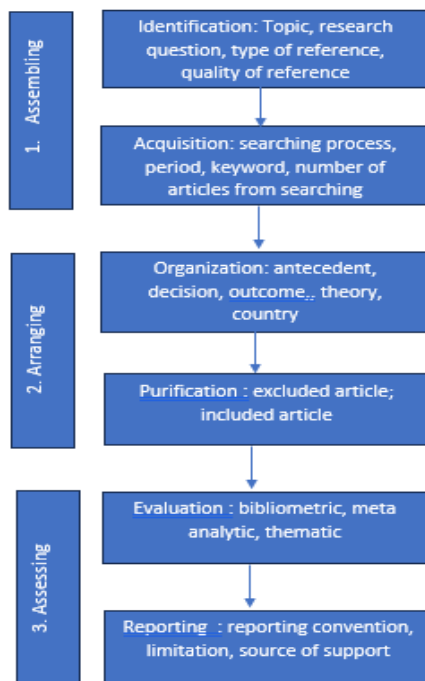


Figure 2. The procedure of the stages
Source: (Paul et al., 2021),

b. DATA BASE REVIEW AND SEARCH PROCESS

The review process begins with identification of the topic. In this study, the topic is *financial technology* based on the perspective of developing countries. This topic is interesting considering that the adoption of *financial technology* in developing countries has not been carried out as in developed countries. This is because there are several conditions that have not supported the adoption of *financial technology* in all developing countries. This phenomenon raises several research questions that will be used as a basis in the preparation process so that it can provide a clear and systematic explanation. The references used in this literature review were obtained from several sources, namely Scopus, SeforRa, ScienceDirect, and Google Scholar with the keywords financial technology and *Develop Countries Perspective on Financial technology* in the period starting from 2015 to August 2023. Figure 3 below provides information related to the article search and selection process.

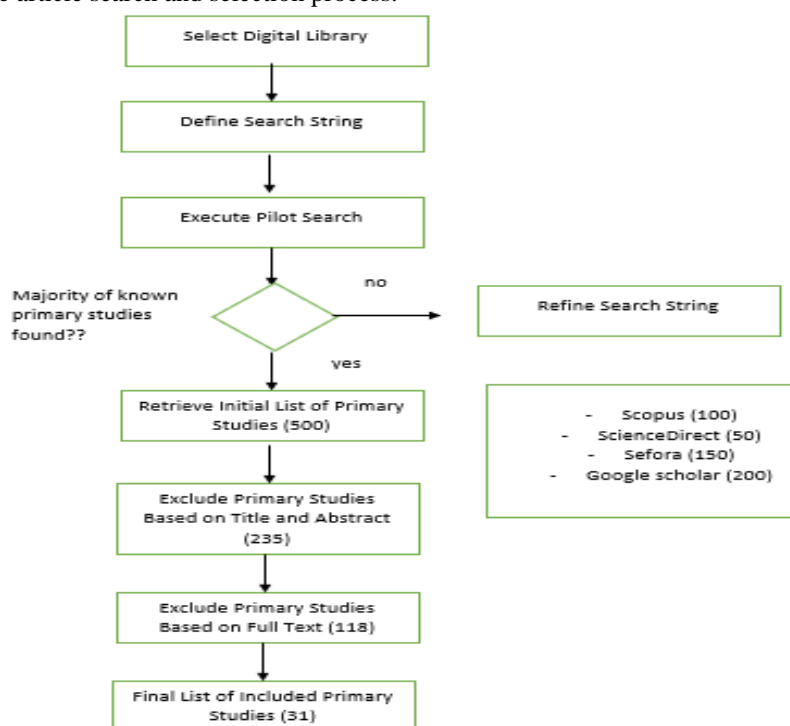


Figure 3. Article selection process

Source: data processed from several sources, 2023

3. FINDINGS AND DISCUSSION

THE ROLE OF FINANCIAL TECHNOLOGY IN DEVELOPING COUNTRIES

Based on the results of the literature study, an explanation was obtained that can answer the first research question about the role of *financial technology* in developing countries, namely:

1). Financial Inclusion

Existing financial technology enables those without a bank account to make remittance or other transaction on financial activities (Agelyne & Musau, 2021). Moreover Financial Technology also plays a role in helping business development and growth (Budiarti & Jannah, 2022), increased financial inclusion (Kurniasari et al., 2021), (Romadhon & Rahmadi, 2020).

2). Inclusive growth

Financial technology has a role in overcoming economic disparities and enhancing quality of financial services industry institutions which ultimately improve the financial condition of developing countries. (Heath-Brown, 2015). In addition, there is an influence Financial Technology on business performance and business continuity (Desiyanti et al., 2023).

3). Innovation

Financial technology makes life easier by providing new methods for gathering and using financial data, developing new financial product, business models and markets, creating new financial instruments and improving innovative services (Gomber, 2018;). Financial technology it updated its conventional business model to be more creative and innovative. Financial transactions can be completed using various applications that are cheaper, faster and secure (Paradise & Aryanti, 2019). The quality of innovation, industrial structure and strengthen cooperation and foreign exchange can be enhanced through the efficient use of financial technology resource. (Ye et al., 2023)

4). Efficiency

Financial technology provides cost reduction benefits in financial transactions because it can reduce the cost of physical assets thereby reducing overhead costs. (Meena, 2023). Adoption Financial Technology can also have an impact on increasing the company's economic added value (Huang, 2023). Financial industries that adopt digital technology are more productive than those that do not adopt financial technology (Sedunov, 2017).

5). Improve the experience.

Financial services can be accessed more quickly by using financial technology. Mobile payment, digital wallets and online banking will make financial transactions easier and enhance customer experience (Meena, 2023), especially when faced with financial decision making (Jennifer & Widoatmodjo, 2023).

CHALLENGES OF FINANCIAL TECHNOLOGY ADOPTION IN DEVELOPING COUNTRIES

Developing countries are also faced with challenges in the adoption of *financial technology*. These constraints can hamper the potential benefits of using *financial technology*, especially in order to encourage increased economic growth. Here are some of the things that developing countries face in the adoption of *financial technology*:

1). Legal certainty

Inconsistent regulations can provide legal uncertainty for both companies and consumers Financial Technology, so as to hinder the adoption of new technologies. Financial technology It is growing rapidly, and there will be the possibility that regulations will not be able to keep pace with the pace of innovation Financial Technology (Meena, 2023).

2). Security

Financial technology Provides a lot of easy access to financing, but there are some potential risks associated with use Financial Technology, such as credit risk, misuse of funds and user data, money laundering and disruption to monetary stability. For this reason, a comprehensive regulation is needed along with aspects of supervision by the authorities is needed to make Financial Technology be part of the financial services sector (Abubakar & Handayani, 2018)

3). Infrastructure constraints

Deployment of infrastructure that provides internet networks for users Financial Technology Not yet evenly distributed across developing countries (Baptista, 2015). The adoption of financial technology requires considerable investment in supporting advice equipment. Support from the government is indispensable for the successful adoption of financial technology.

4). Education Level

Many individuals and small businesses in developing countries do not yet have financial literacy regarding service governance mechanisms Financial Technology. Low levels of education can be an obstacle to adoption Financial Technology, because users are not able to understand well the benefits and risks of use Financial Technology (Ntwiga, 2020; Signori, 2021)

5). High cost of internet access

Without affordable internet connectivity, individuals and businesses will find it difficult to access and benefit from fintech services. Limited internet infrastructure and the high cost of internet access can be barriers to adoption Financial Technology in developing countries (Liu & Huang, 2020).

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6). Distrust of technology

This phenomenon is caused by concerns about data security, which could be caused by ignorance of digital financial services. Distrust of new technologies is a condition that is often found in developing countries, so it is necessary to carry out comprehensive financial literacy for successful adoption Financial Technology (Jerene & Sharma, 2020).

IMPACT OF CULTURAL DIFFERENCES ON FINANCIAL TECHNOLOGY ADOPTION IN DEVELOPING COUNTRIES

Cultural differences can have an impact on the adoption of *financial technology* in developing countries through the following forms:

1). Trust

An important factor in adoption *Financial Technology*. In culturally different countries there will be different preferences towards the acceptance and use of new technologies. This condition will hamper efforts to ensure service adoption *Financial Technology* (Oudgou, 2021). Reluctance to use *Financial Technology* also caused by the potential misuse of personal data and forms *cybercrime* Other (Efrianto & Tresnawaty, 2021).

2). Attitude Towards Technology

The existence of different cultural attitudes towards technology will have an impact on acceptance and openness to new technology (Imam et al., 2022).

3). Social Norms

In some countries there are cultures that are more directing people's behavior to use cash transactions, while in other cultures, digital payments are more widely accepted for widespread use (Yuniarti & Safitri, 2022)

4. CONCLUSION

The continuous development of information digitalization, modernization and internet technology can limit the development of the traditional financial industry which will eventually bring major changes to all aspects of people's lives (Liu & Huang, 2020). Technology development in the field of financial services is one of the important factors in business decision making (Era Sugiartini & Wiagustini, 2020), because it will have an impact on financial behavior (Humaidi et al., 2020), financial inclusion (Telukdarie & Mungar, 2023), as well as business continuity.

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