A Synthesis on Enablers of Digital Finance in emerging economies. Lessons from Zambia

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***Abstract*: Using Zambia as a case study, this study conducted a brief literature review on the synthesis of facilitators of digital finance in emerging economies. The study stated what several academics have argued regarding the weather that drive the expansion of digital finance in emerging nations, like political, legal, economic, and technical settings. An exhaustive electronic mining of peer-reviewed papers and books on Springer, Google Scholar, and ScienceDirect to locate appropriate material on the subject matter is required for productive study. To narrow down on acceptable articles from which to extract information for the research, a good evaluation fit was undertaken. The conclusions of the review revealed that changes within the political, economic, legal, and technical settings have an honest and negative influence on digital finance in emerging nations. For instance, this research found that, in terms of legislative reforms, there has been a positive adoption of digital money following the passage of the National Payment Systems Act in 2007. On the financial front, digital financial inclusion innovation brings long-term financial performance benefits, like cheaper expenses and fewer bank branches. External elements like political, legal, economic, and technological settings even have an influence on the expansion of digital finance, in step with this text. Furthermore, this research suggests that exogenous elements like political, legal, economic, and technological settings have a sway on the emergence of digital finance in emerging economies. Countries with more complex financial systems, per this study, enjoy better economic development, faster poverty reduction, and greater income equality.**

***Keywords*: Digital Finance , Emerging Economies; Legal; Political, and Technology Environment.**

INTRODUCTION

Financial services Consumers, digital finance providers, governments, and therefore the economy all enjoy digital finance and financial inclusion, yet variety of obstacles still exist that, if addressed, might make digital finance function better for people, companies, and governments. the issues raised during this paper are pertinent to the continuing discussion and efforts geared toward increasing financial inclusion in emerging and developing countries through digital finance. Financial inclusion may be a economic system during which all economic actors, particularly those in undeveloped areas and with low incomes, have access to effective financial services. A solid financial inclusion system could be a prerequisite for increasing the depth and breadth of monetary services. Financial inclusion has been a serious public policy focus within the aftermath of the financial crisis, and it's been set as an officer goal in additional than 50 nations and regions throughout the globe by 2014. Financial inclusion is defined as "access to appropriate, low-cost, fair, and safe financial products and services from mainstream service providers. Since 2010, the G-20 and therefore the IBRD have launched a push to expand financial inclusion in poor nations so as to assist developing and rising economies lower poverty levels (GPFI, 2010). Today, policymakers and students are that specialize in the importance of digital finance and financial inclusion for poverty reduction and economic process, attributable to a slew of concerns that, if addressed, might make digital finance operate better for people, enterprises, governments, and also the economy. Financial services users, digital finance providers, governments, and therefore the economy all take pleasure in digital finance and financial inclusion, including increased access to finance for the poor and government expenditure

Banking technology-based product and repair enhancements are currently considered a cutting-edge method of providing financial services to current customers. it's also vital to expand product availability and financial services for people without bank accounts (unbanked).Both financial inclusion and digital finance have the potential to spice up the event of places that have previously been excluded from financial services. On the opposite hand, several academics have studied the implementation impact of digital financial inclusion, like closing the income gap and optimizing resource allocation within the financial sector. it's critical to higher understand the factors and mechanisms of digital financial inclusion development (Liu et al., 2021). The restriction on rural vitalization is that the inefficient and unequal distribution of economic resources within the twin urban-rural financial system. it's vital to get insight into the event status of digital financial inclusion, identify bottlenecks and hurdles encountered, which function the muse for the formation of appropriate policies, and support the long-term viability of the arena. This paper seeks to answer the question: What are the enablers of digital Finance in emerging economiesWhat are a number of the policy environments that are in place?

LITERARTURE REVIEW

According to Liu et al. (2021), the benefits of mixing digital finance and financial inclusion are drawing the public's attention to the many benefits that digital technology advancements and financial inclusion offer the populace. On the one hand, digital finance has the potential to form financial inclusion considerably more efficient. From comprehensive content analysis, it's clear that digital financial literacy may pave the way for the expansion of economic inclusion (Goyal & Kumar, 2021). Leong et al. (2018) provided insight on how digital technologies might increase financial inclusion for previously excluded market segments. Hernandez (2017) has demonstrated how blockchain and digital finance technologies is also accustomed create opportunities for financially disadvantaged people (Hernandez, 2017). By partnering with the financial industry, information and communication technologies (ICT) might assist in overcoming the financial infrastructure divide (Mushtaq, 2019). Mobile money services are expected to boost financial inclusion under sustainable business models (David-West et al., 2020). Increased digital banking usage, on the opposite hand, may end in increased financial data inclusion instead of improved financial inclusion (Malady, 2016).Digital-based FI practices include the poor in global capital accumulation procedures, which are particularly adapted to shaping financialized subjectivities (Kear, 2013). In contrast, digital financial inclusion may end in enhanced economic efficiency for stakeholder groups. the expected benefits of digital financial inclusion may be fully realized by neglecting the expense of digital transactional platforms (Ozili, 2018).

Digital financial inclusion innovation has long-term benefits for banking performance, like lower costs and fewer bank branches (Scott et al., 2017). A platform provided by digital finance encourages more financial transactions, which results in more government income, which benefits governments, who may then have direct influence by concentrating their efforts (Kemfert and Schmalz, 2019). Consumers' ability to defend against transitory income shocks has been harmed by digital financial inclusion, partially because online purchases may make consumption overly sensitive to income (Lai et al., 2020).Kemal discovered via his research that digital payment allows female recipients to get social income in a very secure and comfy manner (Kemal, 2019). Foreign portfolio investment within the variety of FDI is additionally on the increase as a results of the expansion in digital financial inclusion (Li et al., 2019). Berger et al. checked out the planning and implementation of knowledge and communication technologies, which, if applied properly, can deliver excellent financial services to the poor (Berger & Nakata, 2013).

The digital finance innovation process has quickened dramatically, and digital financial inclusion has progressed at a breakneck pace. there's no doubt that digital financial inclusion could be a promising future entry point for excluded and disadvantaged communities within the sphere of formal financial services. A successful digital financial inclusion program must be fitted to the target demographic and provided in a very sustainable and affordable manner.

Conceptual framework on political, Legal, Technological, Economic Factors Impact on Digital Finance in Emerging Economies.

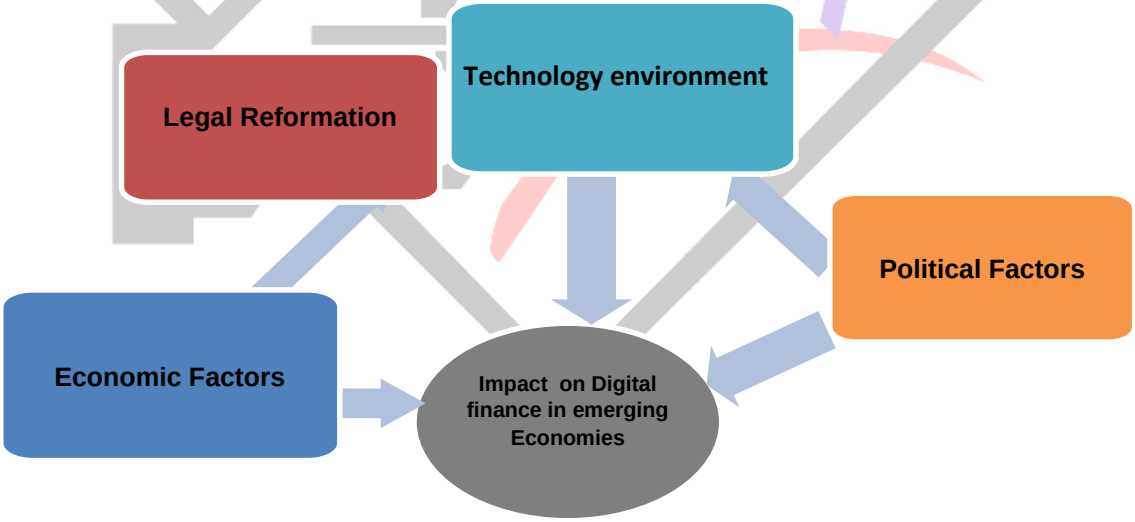

Figure 1. Impact of political, Legal, Technological, Economic Factors on Digital finance in emerging Economies.

The conceptual framework shown in Figure 1 points to impact of political, legal, economic and technology environment on digital finance in emerging economies based on existing literature

Political Factors on Digital Finance

The purpose of financial services made available through digital platforms is to help emerging economies achieve their poverty reduction and financial inclusion goals (United Nations, 2016). A digital transactional platform, retail agents, and the usage of a device, most typically a mobile phone by clients and agents to transact via the digital platform are the three fundamental components of any digital financial service (CGAP, 2015).There are certain advantages to using digital finance. Because almost half of people in the developing world currently hold a mobile phone, digital finance can lead to increased financial inclusion, the development

of financial services to non-financial industries, and the provision of basic services to individuals (World Bank, 2014). In developing nations, a number of political considerations have aided the development of digital money.

First, through updating policy frameworks and fostering digital literacy, authorities are supporting digital innovation and acceptance. Many nations are developing digital ID systems to help the over one billion illegal persons get access to the financial system while also ensuring transaction security. The Aadhaar experience in India is especially illuminating (D'Silva et al. 2019).Second, authorities in emerging economies are implementing 'rapid payments,' which could allow banks and qualifying non-banks to deliver near-real-time payments 24 hours a day, seven days a week (Bech et al. 2017). Furthermore, 'open banking' projects enable third-party payment services, decoupling transaction accounts from banks and giving clients more authority. This might assist to increase competition.

Legal Environment on Digital Finance

Regulators and the government work together to provide a conducive climate for the development of Digital Finance services while also maintaining financial integrity, stability, competition, and consumer protection to varying degrees and through a number of techniques (Addai, 2020). For emerging countries, we divide regulatory responses to digital innovation and initiatives to enhance digital transformation into four categories: "wait and see," "test and learn," "innovation facilitators," and "regulatory laws and reforms." We looked at how far our countries have come in terms of developing an enabling fintech policy, legal, and regulatory environment, using tools like sandboxes and innovation hubs (Addai, 2020).

Governments profit from digital finance because it provides a platform for more aggregate spending, which leads to higher tax collection as the volume of financial transactions increases (Manyika et al., 2016). Sixth, financial and monetary system authorities gain from digital finance since widespread use may dramatically limit the circulation of bad (or false) money, among other things. Customers may also profit from digital finance by having more control over their own finances, making rapid financial decisions, and being able to send and receive payments in seconds. E-money serves as a bridge to commercial bank money, as it must be completely insured by commercial bank money in most countries (Feyen, Frost and Natarajan, 2020). E-money may be kept and traded simply on a phone or online, and monies can be moved via digital channels as well as physical agent sites. Many customers in emerging economies, particularly those who reside in rural regions, would benefit from this (Feyen, Frost and Natarajan, 2020).

Data security is an issue for both regulators and customers. The widespread use of digital technologies has increased the pervasiveness and scale of cyber-attacks, posing a serious threat to the security and privacy of customers' data on digital channels; and regulators' increased awareness of cyber risks may prompt them to reconsider the efficiency-security trade-off in financial services (Caruana, 2016). Strong consumer protection standards that apply to digital financial services will be crucial in establishing the trust and confidence that customers require. Customers who are aware that their data is vulnerable to cyber-attacks may lose faith in digital channels. Financial and banking changes can assist users in receiving better, more secure, and creative digital financing. As a result, new digital financial services (DFS) rules should address the efficiency difficulties connected with DFS security that DFS providers desire, as well as client data security concerns.

Economic Environment

Digital finance has the potential to give poor individuals in developing nations with inexpensive, convenient, and secure financial services (CGAP). Millions of impoverished clients throughout the world can benefit from recent improvements in the accessibility and affordability of digital financial services, which can help them transition from cash-based transactions to formal digital financial transactions on safe digital platforms (CGAP).Digital finance also has the potential to boost the gross domestic product (GDP) of digitalised economies by facilitating access to a wide range of financial products and services thus improving GDP levels. Customers and the economy in which they and their family live can benefit from better economic stability and financial intermediation brought on by digital finance. Governments profit from digital finance because it provides a platform for more aggregate spending, which leads to higher tax collection as the volume of financial transactions increases (Manyika et al., 2016). Sixth, financial and monetary system authorities gain from digital finance since widespread use may dramatically limit the circulation of bad (or false) money, among other things. Customers may also profit from digital finance by having more control over their own finances, making rapid financial decisions, and being able to send and receive payments in seconds.

Technological Environment on Digital Finance

Digital finance innovation has the potential to improve banking performance in the long run. The implementation of SWIFT, a network-based technology infrastructure and set of standards for international interbank telephony, has an influence on bank performance (Scott, Van Reenen, and Zachariadis, 2017). The researchers looked at 6848 banks across 29 European and American nations. They discover that SWIFT adoption has a significant long-term impact on profitability; (ii) that these profitability impacts are stronger for small banks than for large banks; and (iii) that there are significant network effects on performance.

Technology has the ability to provide convenience. Digital finance companies that operate through online platforms may give consumers greater convenience by giving access to such services and making them available at all times from any location as long as there is Internet connection. This allows digital finance companies to assist clients in avoiding the need to visit a bank to conduct financial transactions. According to the literature, FI promotes economic growth through the use of ICT. For excluded and marginalized people, ICT in financial inclusion provides digital access to formal financial services. A high level of ICT

dissemination has a positive impact on financial development and boosts economic growth (Sassi and Goaied 2013, Falahaty and Jusoh 2013).

Digital Financial Services access and use in Zambia

The benefits of combining digital finance and financial inclusion, according to Liu et al. (2021), are calling public attention to the various benefits that digital technology improvements and financial inclusion provide the people. On the one hand, digital finance has the potential to significantly improve the efficiency of financial inclusion. According to a thorough content study, digital financial literacy may pave the path for greater economic inclusion (Goyal & Kumar, 2021). Leong et al. (2018) discussed how digital technology might help previously underserved market segments get access to financial services. Hernandez (2017) has shown how blockchain and digital finance technology may be used to help persons who are financially disadvantaged (Hernandez, 2017).

Information and communication technology (ICT) may be able to help bridge the financial infrastructure gap by cooperating with the financial industry (Mushtaq, 2019). Under sustainable business models, mobile money services are likely to increase financial inclusion (David-West et al., 2020). On the other side, more digital banking usage may result in higher financial data inclusion rather than enhanced financial inclusion (Malady, 2016). The impoverished are included in digital-based FI practices, which are particularly adaptable to moulding financialized subjectivities in global capital accumulation operations (Kear, 2013). Digital financial inclusion, on the other hand, may result in increased economic efficiency for stakeholder groups. By ignoring the cost of digital transactional platforms, the predicted advantages of digital financial inclusion may be completely achieved (Ozili, 2018). Long-term benefits of digital financial inclusion innovation for banking performance include cheaper costs and fewer bank branches (Scott et al., 2017). A digital finance platform stimulates more financial transactions, which leads to more government revenue, which helps governments, who may then have direct influence by concentrating their efforts (Kemfert and Schmalz, 2019). Digital financial inclusion has hurt consumers' capacity to guard against temporary income shocks, partly because online purchases may make consumption unduly sensitive to income (Lai et al., 2020). Through his investigation, Kemal learned that digital payment allows female users to receive social assistance in a more safe and comfortable manner (Kemal, 2019). As a result of the increased number of FDI, foreign portfolio investment is also on the rise.

As a result of the expansion of digital financial inclusion, foreign portfolio investment in the form of FDI is also on the rise (Li et al., 2019). Berger and colleagues investigated the planning and execution of knowledge and communication technologies, which, when used correctly, may provide good financial services to the poor (Berger & Nakata, 2013).

Enablers and Constraints of Digital Financial Services in Zambia

The Bank of Zambia has been a key player in the development of digital financial services. The National Payment Systems Directives on Electronic Money Issuance, published in 2015 and updated in 2018, were a critical step forward (Bank of Zambia 2018). These rules allow non-commercial banks to provide e-money services including issuing, distributing, and redeeming e-money via a distributor or agent. These rules also make it easier for e-money accounts to meet their know-your-customer requirements (World Bank, 2020). The completion of the nationwide payment switch (NPS) would most certainly strengthen the enabling environment for the expansion of digital financial services. The Zambia Electronic Clearing House (ZECH), which is overseen by the Bank of Zambia and administers the NPS project, has passed a critical milestone. The NPS initiative, which is overseen by the Bank of Zambia and controlled by the Zambia Electronic Clearing House (ZECH), achieved a key milestone in June 2019 when all domestic ATM transactions became interoperable. However, the completion of POS and mobile money transaction compatibility has been postponed, and it is currently expected in June 2020. The credit infrastructure needed to expand digital credit for consumers and companies has been constructed (World Bank, 2020).

Just a few instances are the Moveable Property (Security Interest) Act No. 3 of 2016, the construction of a web-based collateral registry for moveable assets in 2017, and the enactment of the Credit Reporting Act of 2018. Banks and microfinance institutions also submit information to a reputable private credit bureau (TransUnion). However, the effectiveness of both the moveable collateral register and the credit reporting system is now limited and must be upgraded for DFS to realize the full benefits. The incorporation of utility bill payment data into the credit information system is a critical credit reporting system enhancement that can benefit DFS customers (World Bank, 2020).

A variety of issues are impeding the growth of digital financial services in Zambia. This study addresses issues such as poor mobile and internet access, a lack of a digital identity, and insufficient digital abilities. Furthermore, in order for Zambia to fully benefit from the potential of digital financial services, the five areas listed below must be enhanced. The lack of full interoperability is hampering the growth of the mobile money market, as well as the development of new services and the provision of incentives for adoption. Users cannot make direct payments to the mobile wallets of other mobile network providers, however off-net transactions are feasible. In many countries where mobile money is thriving, agents provide mobile money services as one of several business lines (for example, corner shop, agricultural supply, pharmacy).

METHOD

This section contains research methods, including research design, participants, instruments, research procedures, data analysis techniques. In order to determine the impact of usage and uptake of branchless banking on household wellbeing, Propensity score matching approach will be used. This method will seek to make comparison between the wellbeing of adaptors of branchless banking with their counterfactual group that did not adopt. The research design is an inquiry strategy and framework that will be

utilized to find answers to research questions (Creswell, 1994). A correlational research strategy was used in this study. Because the study included tests to assess the link between variables, this is the case (Creswell, 2008). When the two channels are used together as a multichannel strategy, the study tested the effect of the independent variables, such as branchless banking, on the dependent variable, economic wellbeing of poor households, when the channels are used separately, and the effect of the dependent variables, such as financial inclusion, when the two channels are used together as a multichannel strategy.

RESULT

The results indicate that Mobile money is favorably and strongly connected with financial inclusion in Sub-Saharan African nations. The mechanism underpinning this favorable relationship appears to be the initial degree of financial inclusion, which represents the 'leapfrogging' over traditional banking services by utilizing mobile money, according to the research (Timmer, 2020). Mobile money works because it provides a simple, low-cost, and dependable alternative to the current exclusive formal banking infrastructure, as well as a route to formal finance in places with poor financial inclusion.These findings add to a growing body of knowledge about the significance of mobile money in promoting financial inclusion in various countries. Despite the fact that mobile money helps the traditional banking system in Sub-Saharan Africa (Darlingtone et al., 2022).The study also reveals that branchless banking is assisting low-income rural populations with access concerns. In the assessment, mobile banking, which is a significant component of branchless banking, was shown to deliver a high level of convenience to rural residents when compared to traditional banking channels. Because there are no monthly fees and smaller transactions, branch banking has proven to be quite cost efficient (Majoma, 2016).

The study clearly shows that branchless banking has certain drawbacks. Only a tiny fraction of mobile banking users used it for agricultural input purchases and other purposes, with the bulk of users utilizing it for transactional purposes like as money transfers and airtime purchases (Meyer, 2015). This highlights the need to expand the present mobile banking offering into a more comprehensive product that may better assist farmers, such as credit services and clear savings facilities (Meyer, 2015). The current mobile banking savings platform, according to the study, is neither intuitive or user-friendly for the ordinary customer (Majoma, 2016).

DISCUSSION

Digital finance and financial inclusion benefit customers, digital finance providers, governments, and the economy. There are still a few roadblocks that, if overcome, may make digital money work better for consumers, businesses, and governments. The issues discussed in this article are relevant to the continuing debate and attempts to increase financial inclusion in emerging and developing nations via digital finance. Users of financial services, digital finance providers, governments, and the economy all gain from financial inclusion and digital finance. Expanding product availability and financial services for those without bank accounts is critical (unbanked). The inefficient and uneven allocation of financial resources within the dual urban-rural economic system is a constraint to rural vitalization.

Financial inclusion may be aided by increased digital financial knowledge. Information and communication technologies may be able to assist development of financial infrastructure in an economy the impoverished are included in digital-based FI practices, which are particularly adaptable to molding financialized subjectivities in global capital accumulation operations. Digital financial inclusion, on the other hand, may improve stakeholder groups' economic efficiency. The long-term benefits of digital financial inclusion innovation for banking include cheaper costs and fewer bank locations (Scott et al., 2017). More financial transactions are encouraged by the platform given by digital finance, which leads to more tax income, which helps governments. As a result of the development of digital financial inclusion, foreign portfolio investment (FDI) is also on the rise.

In comparison to Sub-Saharan African norms, Zambia has a high degree of financial inclusion, although it trails behind three of the four benchmark countries. The percentage of people over the age of 15 who have a financial account (both a bank account and a mobile money account) climbed from 21% in 2011 to 46% in 2017. Digital finance development and financial inclusion are hampered by a lack of mobile and internet connectivity, a lack of a digital identity, and a lack of digital skills. In emerging countries, e-commerce, online media, and innovative transportation methods are gaining appeal. Financial services are also changing, and in certain countries, other industries' adoption of technology-driven business models has exceeded that of other enterprises.

List of abbreviations

Abbreviations	Explanations
AQ	Abubaker Qutieshat
ATM	Automated Teller Machine
DFI	Digital financial services
DN	Derick Ndimbwa
FDI	Foreign Portfolio Investment
FI	Financial Inclusion
GDP	Gross Domestic Product
ICT	Information and Communications Technology
IBRD	International Bank for Reconstruction and Development
NPS	National Payment Systems
ZECH	Zambia Electronic Clearing House

Declarations

Availability of data and materials

Not applicable. This manuscript does not contain any data, this paper is a literature review of existing information on digital finance in emerging economies. Therefore, all data (peer-reviewed paper used for the paper is referenced

Competing interests

There are **No** competing interests in regard to this paper

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Authors' contributions

DN took lead in the following sections, introduction, literarture review, result, and discussion. While AQt took lead in the methodology of the study .DN was a major contributor in writing the manuscript. All authors read and approved the final manuscript.

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