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Nexus between Digital Economy and Digital Financial Inclusion

Extending banking and financial services to people with the goal to integrate everyone in the society into financial milieu, regardless of wealth or savings, is known as financial inclusion. One of the key pillars in advancing the nation's economy and financial inclusion is the use of digital payments. By facilitating access to and usage of a wider range of financial services and products, an increase in digital payments will promote greater inclusion into the financial system. The country's adoption of digital financial services is accelerated through partnerships between financial institutions and digital platforms. Covid-19's abrupt breakout has caused a new payment environment to emerge, and India's digitalization has been growing rapidly as a result of digital adoption. People have switched over to non-personal-shopping and payment modes as a result of the epidemic. By concentrating on the key factors of financial inclusion, namely access, usage, and quality, the article is an attempt to assess the influence of the coronavirus pandemic (COVID-19) on financial inclusion and digital financial inclusion. For this research, a questionnaire is drawn up, and information is gathered from respondents in various Indian industries. SEM methodology was employed in this investigation. The findings demonstrated a favourable relationship between access, use, and quality of financial services and digital financial inclusion, which in turn supports the development of the digital economy.

Keywords: Covid-19 – Digital economy – Digital financial inclusion – Digital transaction – Financial inclusion – Financial services

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1. Introduction

Currently, the definition of "financial inclusion" is quite broad across the board, which is best understood in the context of “financial exclusion" (Morgan, 2014). Financial inclusion is the process of ensuring that the disadvantaged groups, such as the more vulnerable geographical locations in the country and low-income sections of the society, have access to financial services, and timely, and adequate credit at a fair cost (Committee on FI – Chairman: Dr. C Rangarajan, RBI, 2008). Providing access to financial services, such as savings accounts, insurance credit plans, loans, and other financial products can have a positive effect on the socio-economic development of these disadvantaged groups. Thus, financial inclusion can be seen as the process of providing low-income people and vulnerable sections of society with access to financial services that would otherwise remain inaccessible. By facilitating easier access to these services, the process of financial inclusion can be speeded up and enable the economically disadvantaged to improve their socio-economic condition, leading to increased economic growth and stability.

Financial inclusion is a powerful incentive for socio-economic development, as it allows those who are economically disadvantaged to take advantage of available financial products and services that they would not have access to otherwise. Since FI is anticipated to have a positive impact on the financial well-being of the people and the growth of the economy, academics, strategy developers and participants in the financial market are paying more attention to it (Demirguc-Kunt, Beck, & Honohan, 2008; The All-Party Parliamentary Group on Micro-finance, 2011). Financial inclusion (FI) is a key strategy to address poverty and reduce income inequality in many countries.

There are serious discussions going on among writers, educators, and institutions on the importance of financial inclusion. Each of them has a different perspective on the process of financial inclusion, and its expected success, particularly among the poorer segments of the society (The World Bank, 2015; Karpowicz, 2014; Akudugu, 2013; Han & Sherraden, 2009; Mullainathan & Shafi, 2009). If large segments of the society, beyond the banking and insurance sectors, are included, financial inclusion may have a greater impact and produce more positive result on the general population (Naceur *et al.*, 2015). Financial inclusion as a strategy (FI) has been increasingly discussed in the past few

years, with academics, strategy developers, and participants in the financial market, and, all have recognized its potential to impact both financial well-being and economic growth.

The arguments for financial inclusion are often based on the notion of "benefits for all", where everyone has access to the financial products and services that they need. Abubakar *et al.* (2020) have identified financial inclusion as one of the factors that can help the country's development. They hypothesize that, on the off-chance that it grows more quickly than the population, it would produce a better financial inclusion report and accelerate monetary growth. Credit amounts extended to economic activities can increase interest in undertaking activities with higher income potential and value; hence promoting monetary development through credit is to be encouraged and thus increase the output of the country.

Financial inclusion (Febya, 2011) implies also that as the financial inclusion rate increases, people in the rural and urban areas are more likely to engage themselves in economic activities due to the improved availability of credit. This increased access to credit can have a positive effect on economic activities by increasing the capital of an individual, which in turn can lead to increased production and higher standards of living for the population. By raising the saving rates, mobilizing and pooling funds, increasing the investment information and generating environment, enabling and promoting foreign capital inflows, and optimizing capital allocation, financial inclusion promotes monetary development through capital accumulation and technical innovation (World Bank). Between 2014 and 2017, 515 million adults worldwide opened bank accounts or availed portable cash management systems – a world record (Global Findex). This indicates a rise in the percentage – from 62% to 69% – of adults who own a bank account. This indeed is a substantial shift, demonstrating how access to financial services has opened up to previously excluded individuals, such as low-income earners or those living in rural areas. Thus, the expansion of financial inclusion has led to numerous benefits, particularly for those who were excluded from traditional banking services. Despite this development, inequities persist as 1.7 billion adults lack access to banking. Methodically, Subrahmanyam and Acharya (2017) have demonstrated how financial inclusion may unmistakably lead to more rapid growth. They use a multiplier model to

demonstrate that financial inclusion has a greater positive impact than interest-based financial turn-of-event models. Furthermore, the authors conclude that financial inclusion can provide greater access to a variety of services, such as insurance and investment opportunities, thus creating more economic stability for people who were previously excluded from such areas and services. These authors are optimistic about the potential for increased economic stability brought about by financial inclusion, particularly in the developing world. In their findings they make the case that the more widely financial services are made accessible to the more would be the boost to productivity, growth and greater the economic stability. They further argue that financial inclusion not only increases access to financial services but also expands economic opportunities for the people, enabling them to better cope with unexpected economic shocks.

The advocates of financial inclusion demonstrate its importance as a key component of the accumulation of assets as a driving financial advancement approach. Additionally, greater access to formal credit increases economic independence in work, reducing the problems associated with unemployment in an economy. In addition, the combination of these components could also provide greater access to insurance and other financial products – all of which are designed to improve an individual's overall financial well-being. Therefore, by providing digitized financial services, governments, and financial institutions can help to improve the economic condition of developing nations, as well as ensure that more people can access important financial products and services. This would ensure that individuals, regardless of their economic standing, can access the financial products and services that can help them build up their personal wealth and ensure financial security. By promoting financial inclusion and access to digitized financial services, governments can foster a more equitable economic system that ensures all citizens have the ability to gain access to financial products and services. This would allow individuals to access the tools and resources necessary to gain economic stability, thereby help create a more secure future for themselves and their families. Furthermore, by increasing financial inclusion and access to digitized financial services, governments and financial institutions can ensure that the populations of developing nations are able to reap the economic benefits associated with modern digital technology.

Literature Review

The Financial Technology (FinTech) industry is made up of businesses that use technology to transform the financial systems by delivering various financial products and services (Coffie *et al*, 2020). Assuring consumers and businesses of transparent, reasonable, and safe financial products and services is a big step forward. The existence of fintech in the financial assistance industry enables financial experts to provide a broad range of new administrative measures which would enable delegates and regulatory levels to make swaps more successful and less prone to errors (Cumming *et al*, 2018). Additionally, FinTech is an online platform in contrast to traditional funding methods. The most obvious trend is the rapid growth of mobile finance, which enables users to conduct a significant number of transactions online. Additionally, Financial technology works speedily with organisations to have access to financial services and exchange services – right from examining the financial status to making payments, withdrawals changing assets, and so on. The three main parts of FI are Access, Usage, and Quality (World Bank Group, 2013). By providing customers with an easier and more secure way to access financial services, FinTech improves access to a wide range of services such as banking, lending, insurance, investments and payments. As the FinTech industry has grown, its application of technology has revolutionized the world of finance. FinTech has revolutionized the way financial services are provided by making them accessible, easier to use and more reliable. The purpose of financial administration is to make available via advanced stages to contribute to the reduction of poverty and the goals of financial inclusion of developing economies (United Nations, 2016). Any digitized financial service should ideally have three essential components: (a) digital transactional platform, (b) retail agents, and (c) the usage of a device, most frequently a mobile phone, by clients and agents to conduct transactions through the platform (CGAP, 2015).

The importance of financial inclusion can be seen in the way that it can help to create more job opportunities, reduce poverty and ensure that individuals have better access to financial services. Increased access to financial services via formal credit can be beneficial for both the economic development of a country, as well as the individuals. By ensuring that digitalized financial services have these components, governments, and financial institutions can provide individuals with the ability to access credit, invest, save,

and spend money more efficiently. These components are the keys the in helping to ensure that people have access to the financial services they need and can make use of them for their benefit. With more financial inclusion, individuals have the opportunity to be financially included in the formal economy and gain access to financial services that can help them build a better future for themselves. By ensuring that these financial services are available to all the citizens, they can help to reduce poverty, create economic stability, and allow the people to invest in their development. Furthermore, by making sure that digitized financial services are available to all people, regardless of their economic or social status, governments can create a more equitable system in which everyone has an equal opportunity to have access and benefit from the same financial resources. Governments, therefore, have the responsibility to create financial inclusion by providing access to appropriate banking and other financial services, encouraging the use of technology-driven services and products like mobile money, and investing in the infrastructure that can support financial inclusion. This would enable citizens to become more self-reliant and empowered in the face of economic uncertainties, allowing them to make decisions that will help improve their overall financial worth. With these steps in place, governments can make significant strides toward achieving financial inclusion for all citizens and create a more equitable system of economic access and prosperity.

Access

It is believed that gaining access to financial services from financial institutions is essential for reducing/eliminating poverty, encouraging shared prosperity, and supporting inclusive and sustainable economic growth (Kumar, 2013; Lal, 2018). The accessibility dimension calculates the percentage of low-income individuals or nations that use banking services. It is widely acknowledged that having access to financial services is essential to both social and economic growth. A society with access to financial tools invests in its members' education, funding initiatives, and fosters the growth of their entrepreneurial endeavours (Demirguc-Kunt, 2017). Economic growth will be slower in countries with poor access to or financial intermediation (Beck *et al.*, 2007). According to the research by Alemu (2014), the biggest barrier to boosting financial inclusion is a lack of physical access to financial institutions. In India, families headed by women are 6% less likely to obtain informal financing, and, 8% less likely to get formal financing

compared to households headed by men. Additionally, households headed by women use formal loans 20% less frequently than households headed by men. Education level and the current wage rates are the key factors that restrict females' usage of and access to financial services (Ghosh & Vinod, 2017).

Based on the above literature review, we propose the following hypothesis:

- **HA1:** *Access influences digital financial inclusion enhancing digital economy significantly.*

Usage

Usage is measured by the percentage of the population that is "banked," or has an account with a recognized financial institution (Mialou, Amidzic & Massara, 2017; Park & Mercado, 2018). The factors that affect financial inclusion were researched by Abdu and Adem in 2021. Their findings demonstrated a favourable and substantial association between financial inclusion in the area and use of financial literacy and availability of mobile banking. According to the Financial Access Survey, 2021, in 2020, access to and use of financial services at commercial banks were mostly consistent for nations across all income classes. Bathula and Gupta (2021) conducted a comparative study of the individual-level influences on a few key variables that represent the aspects of financial inclusion and digital financial inclusion, i. e., usage, availing data from the World Bank's 2017 Global Findex. The authors came to the conclusion that using financial services is favourably correlated with education and workforce engagement (employment).

Based on the above literature review, we propose the following hypothesis:

- **HA2**: *Usage influences digital financial inclusion enhancing digital economy significantly.*

Quality

The quality measure indicates whether or not the financial products and services meet the demands of consumers, the variety of alternatives that are accessible to them, and the level of knowledge and understanding that they have regarding financial products (World Bank). Financial inclusion is described in the strategy as "effective use of a wide variety of quality, cheap and accessible financial services, supplied in a fair and transparent way

through formal and legally regulated businesses, by all Zimbabweans" (Reserve Bank of Zimbabwe, 2016). Financial depth and outreach are positively correlated with the quality of the institutional environment and the extent of credit information sharing, as evidenced by higher bank branch and ATM penetration as well as higher deposit accounts per capita, according to Demirguc-Kunt and Peria's (2007) study. Therefore, in order to ensure that financial products and services match customer needs and are available at a fair price, it is essential that the institutional environment is conducive and reliable and credit information is widely shared. When permitting a substantial portion of the population to use financial intermediaries, countries need to create and ensure credit-worthy and highly-professionalized institutions through strong governance (Eldomiaty *et al.*, 2020). The ability to establish such national institutions the country needs to develop resources and take fundamental financial decisions based on good governance concepts of moral, intellectual, economic and political considerations.

Based on the above literature review, we propose the following hypothesis:

- **HA3:** *Quality influences digital financial inclusion enhancing digital economy significantly.*

Digital Financial Inclusion and Digital Economy

Worldwide digitalization has affected all industries and turned non-digital economies into digital economies, whose operation is reliant on internet technology (Tapscott, 1996 & Mesenbourg, 2001). Digital transformation is acknowledged as a potent accelerator of inclusiveness and of global economic growth (Bansal, 2014). With the digitalization of all industries, there has been a shift from traditional marketplaces to digital platforms, allowing for a larger number of businesses to participate in global trade. Furthermore, with digital platforms, businesses are no longer limited by geographical boundaries, and can reach a far larger market than ever before. (Beck *et al.*, 2014; Fung, 2009; Avgerou, 2008). It has grown into a powerful platform for the creation of new markets and the enhancement of service provision in all important sectors. Recognizing the pervasiveness of digitalization and seeking to boost financial inclusion status by using technological interventions as a major variable, the financial industry is no longer an exception in this regard (Singh, 2017; Kumar and Joseph, 2014). This digital revolution has opened up a wide array of possibilities for the financial industry, with numerous opportunities for

businesses to tap into new markets and strengthen their competitive advantages by leveraging technology to improve customer service, reduce costs and increase operational efficiencies.

The financial sector has undergone remarkable changes in the past two decades due to the introduction of digitalization. The world's digital economy is expanding quickly. It is one of the most significant triggers behind its development, intensity, and expansion. The development and selection of computerized improvements and plans of action will allow businesses to grow larger, access new markets more quickly, and better understand their customers. With the help of digitalization, businesses can streamline processes and provide efficient customer service, increase productivity by automating tasks, reduce overhead costs, improve data capture, provide for security and backup systems, adapt advanced analytics to make better decisions about marketing strategies and pricing models. This entire investment highlights the new job prospects and potential business this division must pursue throughout Asia and the Pacific. This also raises the expectations for improvements in standards of living, which are boosting the influence of this development mantra (Yuhelson *et. al.*, 2020). Even while we increasingly see the "digital economy" as channelling trade via industry sectors that rely on the internet and the World Wide Web, the phrase "digital economy" refers to an economy that is built on advances in digital calculation. The advanced economy is also known as the Internet Economy, New Economy, or Web Economy in some settings (Yuhelson *et. al.*, 2020). This raises the stakes for businesses that have invested in these potential areas, and, as such, it is essential for them to develop a presence on digital networks. This presence allows them to access information quickly, interact with customers and prospects in real-time, and market their goods and services efficiently. In order to benefit from the advantages of the digital economy, businesses must ensure that they are active on various networks and have the capacity to respond quickly and efficiently. Therefore, having a presence on digital networks is essential for businesses to take advantage of the growth potential in the digital economy.

Based on the above literature review, we propose the following hypothesis:

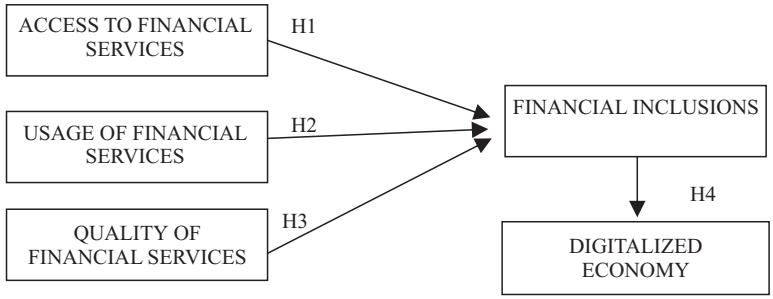
- **HA4:** *Digital financial inclusion influences enhancing digital economy significantly.*

Conceptual Model / Theoretical Model

The conceptual framework is mentioned in most important research works, discussed in some, and completely defined in a few. A review of the literature investigates how the conceptual framework is conceptualized and described. Figure 1 depicts the relationship between dependent and independent variables and the following alternate hypotheses have also been framed for the same.

- **HA1:** *Access influences digital financial inclusion enhancing digital economy significantly.*
- **HA2:** *Usage influences digital financial inclusion enhancing digital economy significantly.*
- **HA3:** *Quality influences digital financial inclusion enhancing digital economy significantly.*
- **HA4:** *Digital financial inclusion influences enhancing digital economy significantly.*

Figure 1: Conceptual Framework



Research Methodology

The objectives of the study, it was assumed, could be achieved by using empirical research design, as it helps in discovering the relationship between or among the selected variables. With the help of the literature survey conducted, a structured questionnaire to determine the factors to be included, was drawn up to obtain the primary data – both online and offline modes. This research is also based on observation and measurement of

phenomena as directly observed by the researcher.

The survey questionnaire includes five factors, namely:

1 Access to Digital Financial Service,

2 Usage of Digital Financial Service,

3 Quality of Digital Financial Service Related to Financial Inclusion,

4 Digital Financial Inclusion

5 Digital Economy.

The primary data was collected with a sample size of 270 respondents through the questionnaire. Random Sampling Method was adopted for data collection. According to Kline (1998) the sample size should ideally be, 26 x 10 = 260 (number of statements x 10) = 2,600.

Data Analysis

In order to achieve the results, a factor analysis was conducted. Respondents comprised a mix of businessmen, gig workers, industrialists, daily wage earners, professionals, college students, instructors, and households. In order to analyse the study's findings, each variable was first given a code. The codes assigned to each variable are displayed in Table 1 below.

Table 1 : Codes to Variables

S.No.	Codes	Variables
1	A	Access to Digital Financial Service
2	U	Usage of Digital financial service
3	Q	Quality of Digital financial service
4	DFI	Digital Financial Inclusion
5	DE	Digital Economy

Finalized Items

Table 2 (see Appendix) represents the finalized scale to be used for this research work. These are the statements reflecting the dimensions of financial inclusion on which final

testing was be done.

Factor Analysis

The KMO & Bartlett's Test and Cronbach Alpha were used to evaluate the sufficiency, reliability and validity of the data. As seen in the table 3, the outcomes are as follows.

- The KMO test produced a result that was greater than 0.60, which is regarded as acceptable.
- The sampling adequacy value of KMO is more than 0.7 for all parameters, suggesting that the sample was adequate.
- The usual range for Cronbach's alpha reliability coefficient is 0 to 1.

The score guidelines provided by George and Mallery (2003) are :

- 9 – Excellent; .
- 8 – Good; α >
- 7 – Considerable; >
- 6 – Uncertain; >.
- 5 – Poor and lacking;
- 4 – Inadmissible.

However, the total p-value for all variables is more than .8, which is regarded as excellent for the study.

The rotated component matrix, as shown in the Table (?), displays the loadings of each of the four factors that were found in the EFA. The schedule was changed to only include the items whose factor loading values were more than or equal to 0.50. The statements have been grouped into five parts.

(a) Statements from U1 to U7 have been classified as “Usage of Financial Services.”

(b) Statements from DFI1 to DFI4 have been named as "Digital Financial Inclusion."

(c) Statements from Q1 to Q5 are termed as “Quality of Financial Service.”

(d) Statements from A1 to A7 have been titled as “Access to Financial Services.”

(e) Statements DE1 to DE8 have been named as “Digital Economy of Financial Services.”

Convergent validity assesses whether different indicators or measures of the same construct are measuring the same underlying concept. In this study, it appears that the measures used to assess the factors of access, usage, and quality of digitalized financial services demonstrated convergent validity. This means, the indicators used to measure these factors were found to be consistent and aligned with the underlying construct they were intended to represent. The study provides evidence that the measures used to assess the factors of access, usage, and quality of digitalized financial services are reliable and accurately capture the intended concepts. This strengthens the validity and credibility of the study's findings and enhances confidence in the relationships and conclusions drawn from the analysis.

Table 3: Rotated Component Matrix

	Component					*KMO*	*CRONBACH ALPHA*	*CR*	*AVE*
	1	**2**	**3**	**4**	**5**				
U7	.850					.844	0.921	0.870	0.609
U2	.844								
U3	.840								
U6	.804								
U4	.582								
U1	.567								
U5	.657								
DFI3		.853				0.853	0.931	0.832	0.557
DFI4		.802							
DFI2		.764							
DFI1		.607							
DE2		.578							
Q4			.860			0.847	0.912	0.859	0.562
Q1			.793						
Q5			.764						
Q3			.756						
A6				.701		0.834	0.845	0.861	0.562
A2				.679					
A7				.639					
A1				.599					
A3				.565					
A4				.657					
A5				.764					

DE8					.777	0.836	0.849	0.884	0.614
DE4					.768				
DE7					.745				
DE3					.570				
Extraction Method : Principal Component Analysis. *Rotation Method*: Varimax with Kaiser Normalization. a. Rotation converged in 5 iterations.									

Structural Equation Modelling

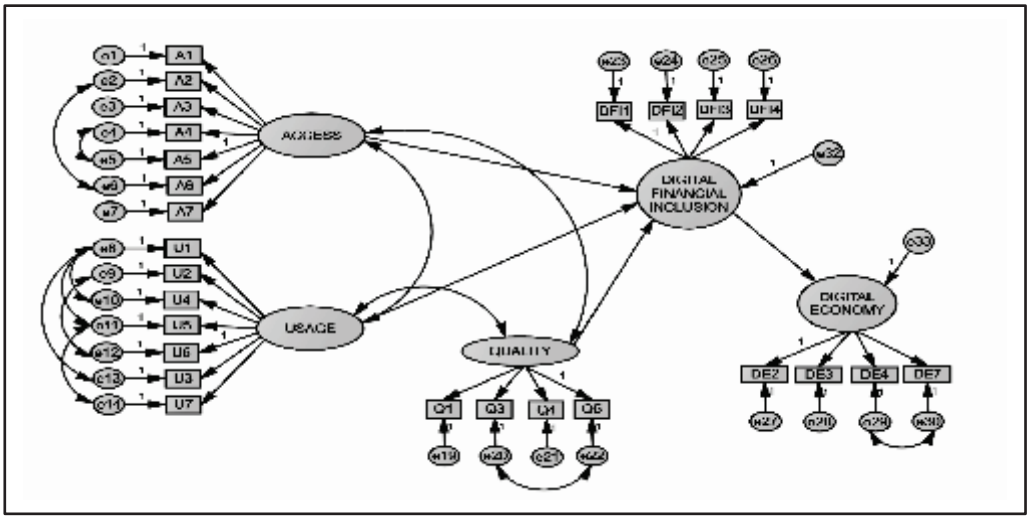
Structural Equation Modelling is a multivariate quantifiable inspection technique is used to disentangle structural connections. Dissecting the structural relationship between calculated variables and inactive constructs is used in this strategy, which combines component evaluation and various relapse investigations. There are concrete metrics that may be used to judge fit integrity. Below, together with their suitable edges, are the measures that need to be considered. RMSEA and SRMR should be taken into account, as stated by Pahlevan Sharif and Sharif Nia (2018) 3 gradual fit records. The proposed value for each record is displayed in the table below.

Table 4 : Model Fit Indices

Model Fit Indices	Author	Recommended Value
CMIN/DF	Marsh & Hocevar1985	<5 indicating a reasonable fit
	Kline 1998	< 3 indicates an acceptable fit
GFI	Byrne 2001, Hair et.al 2006	> 0.7 indicates an acceptable fit
CFI	Bentler 1990	close to 0.9, indicates a relatively good fit
	Hu and Bentler 1999	>0.80 is permissible, >0.90 indicates a good fit, >0.95 indicates a great fit
RMSEA	Bentler 1990	<0.05 indicates a good fit, 0.05-0.10 indicates moderate fit,
SRMR	Sharif & Nia 2018, Bentler 1990	< .09 acceptable fit

Measurment Model

Figure 2 : Measurement Model



Fit Indices	*Measured Value*	*Recommended Value*	*References*
CMIN/DF	2.372	< 3 indicates an acceptable fit	Kline, 1998
CFI	0.944	>0.80 is permissible, >0.90 indicates a good fit, >0.95 indicates a great fit	Hu & Bentler, 1999
GFI	0.905	> 0.7 indicates an acceptable fit	Byrne 2001, Hair *et.al.,* 2006
RMSEA	0.065	<0.05 indicates a good fit, 0.05-0.10 indicates moderate fit	Bentler, 1990
SRMR	0.0522	< .09 acceptable fit	Sharif & Nia, 2018, Bentler, 1990

Table 5 : Regression Estimates for Figure 2

STANDARDIZED REGRESSION ESTIMATES			
			Estimate
DIGITAL_FINANCIAL_INCLUSION	<---	ACCESS	0.713
DIGITAL_FINANCIAL_INCLUSION	<---	USAGE	0.789
DIGITAL_FINANCIAL_INCLUSION	<---	QUALITY	0.577
DIGITAL_ECONOMY	<---	DIGITAL_FINANCIAL_INCLUSION	0.781

Table 5 represents the model fit indices for Figure 2. All the indices are in the range as per Table 4. Hence, the model is considered to be fit. Also, the factors, i. e., Access, Usage and Quality of Digitalized Financial Services were found to be significant at p=0.000. It is observed that access contributes 71% to digital financial inclusion; usage contributes 78%; whereas quality of financial services contributes 57% to digital financial inclusion. Also impact digital financial inclusion on digital economy is seen to be 78%.

In conclusion, this study has provided evidence that the model was a good fit, and, The Access, Usage and Quality of digitalized financial services all have a statistically significant impact on Digital Financial Inclusion. Access is also found to be a significant factor as it contributes 71% to the overall level of digital financial inclusion. This suggests that improving access to digital financial services, such as mobile banking or online payment platforms, is crucial for promoting digital financial inclusion.

The usage of digital financial services is also found to be a significant factor contributing 78% to the overall level of digital financial inclusion. This indicates that encouraging individuals to actively use digital financial services plays a vital role in increasing the level of digital financial inclusion.

The quality of digital financial services is another significant factor as it contributes 57% to the overall level of digital financial inclusion. This implies that providing high-quality and reliable digital financial services, including efficient customer support and secure transactions, is important in promoting digital financial inclusion. Table 5 indicates that digital financial inclusion has a significant impact on the digital economy, with a reported impact of 78%.

All this suggests that when a higher level of digital financial inclusion is achieved, it positively affects the growth and development of the digital economy. Digital financial inclusion can lead to increased digital transactions, financial innovation, and overall economic productivity within the digital realm. Overall, the findings highlight the importance of improving access, promoting usage, and ensuring the quality of digital financial services in enhancing digital financial inclusion. Additionally, the study suggests that a higher level of digital financial inclusion has a substantial positive impact on the digital economy, indicating its potential for driving economic growth and development within the digital sphere.

These findings highlight the importance of access, usage and quality of digitalized financial services in order to promote greater financial inclusion in the digital economy. Thus, it is important for policymakers to focus on improving access, usage and quality of financial services so as to promote greater financial inclusion in the digital economy. It can be concluded that by increasing the Access, Usage and Quality of digitalized financial services, India's level of digital financial inclusion can be increased. Thus, is will in turn contribute to build a digital economy. As a result, more people will be able to participate in the digital economy resulting in an increase in economic growth, job creation, and improved economic mobility. By leveraging digital technology and improving access, usage, and quality of digital financial services, the governments would have the ability to increase levels of financial inclusion and further stimulate the growth of digital economies. This creates a virtuous cycle in which economic growth leads to increased access and usage of digital financial services, and vice versa. This can be accomplished by governments taking the lead to investing in digital infrastructure, including broadband networks that enable innovative financial products and services as well as mandating regulatory frameworks to avoid undesirable activities.

Figure 3 Path Analysis

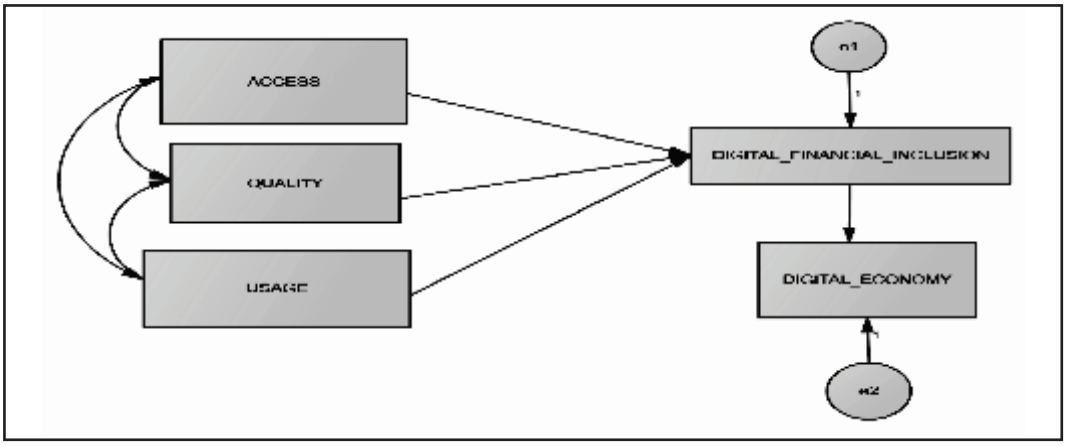


Table 6 : Model Fit indices for Fig. 3

MODEL FIT INDICES				
CMIN/DF	CFI	GFI	RMSEA	SRMR
2.119	0.998	0.998	0.044	.0081

The model fit scores for Figure 3 are shown in Table 6. As seen in Table 4, all indices fall within the range. As a result, the model is thought to be fit. Additionally, it was determined that the variables – Access, Usage, and Quality – of digitalized financial services were significant (p=0.000). As a result, it can be concluded that access, usage, and quality of financial services when digitalized can help stimulate the economy and more people will have access to digital services and products. This could lead to the further development of technology and systems, as well as a transformation in the global financial infrastructure. Thus, the digital economy offers a number of opportunities, such as increased access to financial services for underserved populations, improved security and privacy of online transactions, and reduced transaction costs. In conclusion, the digitalization of financial services has the potential to revolutionize the Indian economy and create a world-wide digital environment in which financial inclusion is the norm and individuals have greater control over their financial lives.

Conclusion

According to Beck *et al.* (2000), Chakravarty and Pal (2013), Demirgüç-Kunt *et al.* (2008), Dev (2006), Sarma and Pais (2011), financial inclusion is a cyclic intervention that ensures everyone in the economy can easily enter, access, and use the formal financial system. Since 2003, financial inclusion has been one of the key focus of development strategies (World Bank, 2003). Emerging nations have started prioritizing the increase in financial inclusion by making financial services accessible and encouraging their usage by citizens (ADB, 2014). This heightened focus has resulted in a positive correlation between the level of financial inclusion and economic growth, poverty reduction, and improved living standards. Access to financial and credit systems has been identified as crucial in the driving economic transformation.

Furthermore, the unexpected outbreak of the Covid-19 pandemic has created a new environment. As countries strive to recover from the economic downturn caused by the pandemic, there has been a shift towards creating a supportive environment for financial inclusion. This disruption has in fact accelerated the emphasis on digital platform for achieving financial inclusion. Cash transactions are gradually being replaced by digital payments, and, contactless transactions have become widely accepted. This shift plays a crucial role in ensuring that individuals without bank accounts and credit cards can also have access to financial services since digital payments options are now more accessible. Traditional payment methods are being replaced by digital exchanges as people adapt to the changing modes.

Digital Financial Services (DFS) encompass a wide range of financial products and services accessed and delivered via digital systems, including payment settlements, sourcing credit avenues, having savings accounts, and obtaining insurance policy schemes. Digital systems rely on the internet, smartphones, ATMs, POS terminals, and other devices. The concept of DFS includes Mobile Financial Services (MFS) as well. However, digitization requires not only a conducive environment for digital money but also an improved digital infrastructure. Establishing an enabling environment is crucial to ensure financial inclusion and instill trust in the use of digital channels. Financial service providers must develop appropriate infrastructure and facilitate access to banking and other financial services for the unbanked population. Close collaboration between

financial service providers, government and regulators is necessary to create a robust digital infrastructure, implement secure customer- authentication methods, foster an inclusive digital payment ecosystem and safeguard data privacy. This requires a strong commitment from both the government and financial service providers to ensure that all citizens have equal and easy access to banking and financial services. Additionally, these agencies should closely collaborate with each other to establish credible, viable and comprehensive financial protection mechanisms and empower consumers, with a particular focus on fraud prevention and protecting particularly vulnerable population sections of the society. This would ensure that the unbanked population can have and benefit from the same level of financial services as it is available to those already having access to banking and other financial services.

Increased digitization with efficient financial administration can enable everyone in faster recovery from the traumatic impact of the pandemic. As nearly half the population of the developing world currently own mobile phones, digital money can facilitate greater and quicker financial inclusion by the expansion of financial services beyond the traditional domain, and provide basic services to the people (World Bank, 2014). Furthermore, the study suggests that the type, accessibility and utilization of digitalized financial services can contribute to the development of an efficient digital economy. This is particularly significant for individuals living in poverty since it has the potential to reduce the number of unbanked individuals. The digitization of financial administration positively impacts the expansion of financial inclusion. Some of the real benefits of digital money and financial inclusion include increased access to funding for the underprivileged, reduced cost of financial intermediation for banks and fintech providers, and enhanced governmental usage for legislative purposes. By enhancing access, usage, and the diversity of digital financial services, the country's financial inclusion can be bolstered.

In conclusion, the digitization of financial services has a positive impact on financial inclusion by increasing access, usage and the range of digital services and products. Digital money and financial inclusion can have far-reaching and lasting effects on the economy, especially for those nations with low levels of financial inclusion. Digital money can bridge the gap between those who have access to traditional banking services

and those who do not. By providing individuals with more access and control over their financial resources, digital money enables greater economic opportunities, leading to increased consumer spending, improved credit standing, and a healthier overall economy. This results in an improved level of financial inclusion by providing increased access to banking and other financial services, particularly for the underprivileged and those residing in rural areas. It also helps reduce the costs of financial intermediation for banks and FinTech providers, and enables governments to effectively utilize digital tools for legislative purposes. Ultimately, greater financial inclusion through digital money leads to improved economic and social benefits for individuals, banks, FinTech providers, governments, and the economy as a whole. As digital money continues to expand and gain acceptance, it has the potential to revolutionize the financial sector, addressing challenges such as financial inclusion, cost-saving, and increased efficiency. Digital money enables the access and usage of financial services by individuals traditionally excluded from the formal financial system due to limited access or income. By expanding access to financial services, digital money can help reduce poverty, create more economic opportunities, and contribute to faster economic growth and equitable distribution of wealth.

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(Table 2) Appendix

Variable	S. No.	*Statements*
Access to Digital Financial Service	A1	I have easy access to borrowing.
	A2	I have access to saving/ current/ FD/ RD account.
	A3	I can easily access insurance services.
	A4	I have access to mobile money
	A5	I can access my credit card.
	A6	I can access my debit card/ ATM.
	A7	I have easy access to internet banking.
Usage of Digital financial service	U1	I use my account only for depositing and withdrawing money.
	U2	I regularly save money in bank/s.
	U3	I use my bank account to get subsidies and assistance.
	U4	I regularly use debit card.
	U5	I feel that mobile money is easy to use.
	U6	I pay my bills over the internet.
	U7	I regularly use credit card.
Quality of Digital financial service	Q1	I believe that debit /credit card will assure me of error free transaction.
	Q3	I believe that there is prescribed and standardized disclosure format for consumer protection.
	Q4	I believe that banks/ post office/ LIC maintain transparency.
	Q5	Financial services I get are up to my satisfaction or as per my need.
Digital Financial Inclusion	DFI1	I believe increased access to financial services will lead to Financial Inclusion
	DFI2	I believe increased usage of financial services will lead to Financial Inclusion.
	DFI3	I believe increased quality of financial services will lead to Financial Inclusion.
	DFI6	DFI is helpful in building digital economy.
Digital Economy	DE2	I think technology plays a crucial role in building digital economy.
	DE3	I believe access of digitalized services can contribute towards digital economy
	DE4	The infrastructure required for digital services is adequate.
	DE7	I believe Usage of digitalized services can contribute to the digital economy