Impact Of Digital Financial Literacy On Digital Financial Inclusion

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Abstract: Global Financial Literacy Barometer released in the Financial Literacy and Education Summit 2012 in Chicago, revealed data about the financial literacy levels of 28 nations. India ranks the 23rd position among 28 nations for the financial literacy scale. This addresses the issue of the low level of financial literacy that persists in the nation. Every sector has been advancing their level of operations based on escalating technology. The financial sector in India to has been trying to enrich the usage of digital platforms. The main aim of this study is to measure the impact of digital financial literacy on digital financial inclusion. Seven dimensions are studied for both digital financial literacy and inclusion. Data from 200 respondents have been collected through a structured questionnaire. The current study is unique in terms of the sample chosen and being one of the few studies of its kind based on digitalized India.

Keywords: Digital Financial Literacy and Digital Financial Inclusion

1. INTRODUCTION

The main aim of the nation is to see a digitalized economy by inculcating the digital concept in every sector. Digital Financial Literacy is a combination of two concepts i.e. financial literacy and the digital platforms. Financial literacy means the level of attitude-behaviour and knowledge that an individual has in respect to financial products and services and also talks about how good an individual is at personal finance. Financial literacy guides the economy towards financial inclusion. Financial inclusion can be explained as rendering financial products and services to every social class in the nation. To begin with, it must be given to the below poverty line group because if a stable economy is the aim of any nation it needs to begin its development from the baseline. In the current research, the researchers are considering the digital aspect of inclusion as we are in the digital era. Financial education, consumer protection, and financial inclusion are essential ingredients for both the financial empowerment of individuals and the overall stability of financial markets and economies, particularly in the context of the changing pace of technological expansion and the advancement of digital financial services. Their significance has been globally acknowledged and endorsed by G20 leaders through high-level principles on Innovative Financial Inclusion (OECD, 2011). National Strategies for Financial Education (OECD, 2012), and Digital Financial Inclusion. Financial literacy and financial inclusion are present in the nation which is at a low scale. To contribute towards Digital India the current study tries to measure the level of digital financial literacy and digital financial inclusion in Bangalore. Also tries to understand the impact of digital financial literacy on digital financial inclusion. With the rising pace of technology and artificial intelligence, it is important to address the economy on the prominence of being a digitalized economy. According to the S&P Survey, 76% of the Indians are not financial literate which suggests that there is a need to increase the level of financial literacy. Being a part of the digital era indicates the need to fall in the brackets of Digital Financial Literacy through which digital financial inclusion could be attained. The benefits that the economy could witness if the nation falls under the brackets of digital financial inclusion could be priceless. This possibly will address issues such as reduction or no fake currencies in the market. Every move of the present government is to see a digital transformation in every sector. In terms of the financing sector, the government has been taking initiatives to create awareness about the digital platforms that every individual could use. Be it paying taxes to operating post office accounts, digital transformation is perceived in every sector.

2. REVIEW OF LITERATURE

The review helped in framing the issue that is witnessed in the area of digital financial inclusion and digital financial literacy. Digital financial literacy is the independent variable in the current study because the level of digital financial literacy can influence the level of Digital Financial Inclusion in the economy.

3. DIGITAL FINANCIAL LITERACY (DFL)

According to Ramakrishnan (2011), India has a good rank when it comes to financial technology and system. The real problem lies in the level of financial knowledge which is comparatively low. Lusardi et. al. (2013) suggest that financial literacy can help in bringing economic upbringing to the limelight. Experimental studies have shown that conducting financial literacy programmes helps in bringing change in the usage level to a certain extent. Kapadia et.al. (2018) established that financial inclusion, financial literacy, and consumer protection are the three major planks of financial stability. Financial literacy stimulates the demand side, making people aware of what they can demand. Fathima (2018) have suggested that focus need to be on empowering the Indian population in terms of Digital financial literacy. If a household can have a single person who is digitally and financially forward, the government plans and practices can be implemented and achieved. Prasad et.al. (2018) attempt to understand the difference between the level of awareness and the level of usage of digital financial literacy. The government and other financial institutions should work towards creating a higher awareness level for financial products and services with regard to digital platforms. Also, increase the level of ease to use applications that would help an illiterate person to feel more comfortable an also Shen et.at. (2018) understand the impact factor of financial education on the financial behavior. Financial literacy should be given importance and also hands-off experience. Only when they tend to use the knowledge that is imparted will they be motivated to try every avenue and know more about it.

4. DIGITAL FINANCIAL INCLUSION (DFI)

Financial Inclusion plays a significant role in reducing or even eliminating poverty from the nation. The major plank to help have financial inclusion is financial literacy. Kapadia et.al. (2018) the demand side issues in financial inclusion include having knowledge of financial products and services, credit absorption capacity, etc. These issues are faced by both developing and developed countries. As per the analysis of Ravi Kumar (2018) the growth level in the financial sector over the years in terms of technology has seen an increase not only in terms of product and service classification in the financial sector but also has witnessed the increase in the usage level of products and services by the people in the nation. Shen et.at. (2018) tries to understand the impact factor of financial education on financial behaviour i.e. financial behaviour would explain the level of usage of particular products and services. Importance of the Ramakrishna (2011) financial products is known only when the financial literacy level goes high this would create demand for the financial products. It is also said that financial literacy can improvise financial inclusion and financial development which would contribute towards financial stability. The literature discussed helped the researchers in framing the hypothesis for the current study

H1: Digital Financial Literacy has an impact on Digital Financial Inclusion.

RESEARCH METHODOLOGY

This study tries to understand the level of Digital Financial Literacy and Digital Financial Inclusion in Bangalore. The current study is descriptive in nature. A structured questionnaire was used to collect data. The questionnaire was framed using different sets of published questionnaires. Questionnaires that were considered was mainly based on Financial Literacy and Financial Inclusion. The digital aspect has been added to every area in the final questionnaire. The questionnaire consists of sets of seven questions for both Digital Financial Literacy and Digital Financial Inclusion. Awareness related questions were used in measuring Digital Financial Literacy and a set of questions related to usage facilitated the measurement of Digital Financial Inclusion. All the questions were asked on a 5 point scale. The percentage of score helped in understanding the level of digital financial literacy and digital financial inclusion of every individual used in the sample. The Reliability and Validity of the questionnaire were analysed using Smart PLS version 3. In the current study, the researchers have used a sample size of 200 to measure Digital Financial Literacy and Digital Financial Inclusion. The software package of Smart PLS was used to evaluate the model.

ANALYSIS

The structured questionnaire was circulated among the people in Bangalore. Both digital financial literacy and digital financial inclusion had 7 sets of questions each. Every question used five-point scale measurement. The total score stood at 280 for both digital financial literacy and digital financial inclusion. The 7 sets of questions were based on digital products, services, savings, and E-wallets and so on. Every area had sets of questions to measure each. The total scores for the main 7 dimensions were summed and a final score for both digital financial inclusion and digital financial literacy were considered. The scores received were calculated with the total score that is 280 to understand the level of digital financial literacy and digital financial inclusion among the individuals present in the survey. Descriptive statistics results are shown in Table: 1 talks about the mean values of both digital financial literacy and digital financial inclusion. The mean score of digital financial literacy is comparatively higher than the mean scores of digital financial inclusion.

Table: 1 *Descriptive statistics*

Variables	Mean	SD	Skewness	Kurtosis
DFI	174.12	46.79	-0.083	-0.352
DFL	214.92	38.497	-1.29	2.656

The reliability and validity of the questionnaire were analyzed using Smart PLS Version 3. Composite Reliability (CR) scores were used for the purpose of understanding the reliability of the questionnaire. CR was used because it considers all the loadings of the indicators. As per Table: 2 CR suggest that the tools that were used to measure the latent variables are reliable based on the scores shown on Table: 2 as any score above 0.7 is considered to have good composite reliability. AVE Scores for both are higher than 0.5 which indicates that the tools have convergent validity.

Table: 2 *Composite Reliability*

	Cronbach's Alpha	rho_A	CR	AVE
DFI	0.8631	0.8799	0.8949	0.5518
DFL	0.8318	0.8399	0.8742	0.5000

Divergent validity was measured using the cross-loadings of the indicators. All indicators loaded on to the respective latent variable with loadings greater than 0.4. This suggests that the measurement model is both reliable and valid. Therefore it can be used to measure the relationship between Digital Financial Literacy and Digital Financial Inclusion.

Table: 3 *Cross Loadings*

Cross Loadings		
	DFL	DFI
BENEFIT(A)	0.7865	0.6948
TYPESOFTRANS(A)	0.6768	0.5197
INSURANCE(A)	0.6032	0.4561
MOBILEWALLETS(A)	0.7211	0.5302
PDT(A)	0.7356	0.5418
SAVINGS(A)	0.6428	0.6072
SERVICES(A)	0.7652	0.6163
BENEFITS(U)	0.7067	0.8241
DAILYTRANS(U)	0.7294	0.8115
INSURANCE(U)	0.4573	0.6101
MOBILEWALLETS(U)	0.6057	0.7552
PDTS(U)	0.5618	0.7297
SAVINGS(U)	0.4368	0.6252
SERVICES(U)	0.6427	0.8119

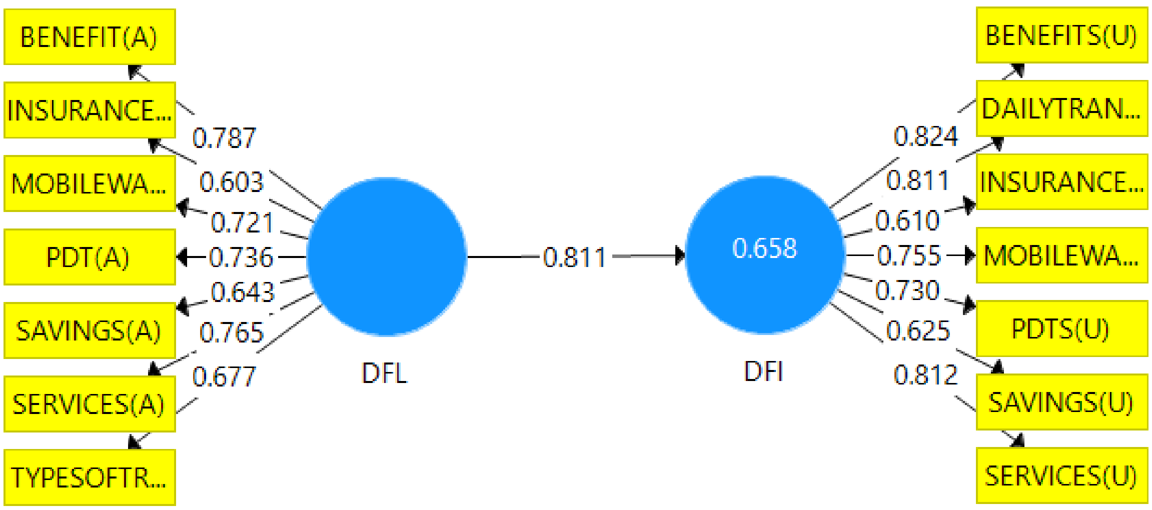
The next step in the analysis involved the testing of the model. The proposed model represents the relationship between the variables of digital financial inclusion and digital financial literacy. The analysis of the structural model suggests that the relationship between the variables is significant with $p<0.05$. The path value was found to be 0.81 and Digital Financial Literacy was found to explain 65% of the variance in Digital Financial Inclusion levels. The values for the path and the significance levels have been given in Table 4.

Table 4: *Path Coefficient*

	Original Sample (O)	STDEV	T Statistics	P Value
DFL-> DFI	0.8111	0.0213	38.15	0.000

The output of the analysis of the structural model is given in Fig. 1. The conceptual model, framed by the researcher attempts to represent the relationship between Digital Financial Literacy and Digital Financial Inclusion. Model testing provided with scores for each indicator which helps in the measurement of the level of contribution by each indicator towards both digital financial literacy and digital financial inclusion. Based on the scores the model is created. Based on the degree of scores for each indicator the structural model as per Fig.1 indicates the level at which each indicator contributes. All the loadings are seen higher than 0.4. Benefits of Mobile Wallets contribute the highest in both cases. The correlation score between Digital Financial Literacy and Digital Financial Inclusion is 0.8111 and there is 65.8% impact by Digital Financial Literacy on Digital Financial Inclusion.

***Fig: 1** Structural model*



IMPLICATIONS OF THE STUDY

The main aim of the researchers was to understand if there impact of Digital Financial Literacy on Digital Financial Inclusion. The results show that there is 65.8% of impact by Digital Financial Literacy on Digital Financial Inclusion which is higher than 50%. Considering the mean scores given on Table 1 the percentage of digital financial literacy among the respondents is 76.42% and that of digital financial inclusion is at 62.2%. From the above percentages, we can infer that digital financial literacy percentage is higher than digital financial inclusion because digital financial literacy is the contributor to digital financial inclusion. Since both the percentages are higher than 50% it can be said that the relationship is strong and so Digital Financial Literacy facilitates Digital Financial Inclusion. The findings of this study provide insights that can help in framing initiatives that contribute to economic and individualistic growth. The main aim of Digital India programs is to see digital growth in every sector. The financial sector has been trying hard to implement and get more people to use digital financial platforms. Economic growth is nurtured through Digital Financial Inclusion. Ramakrishnan (2011) suggests that if there is Digital Financial Inclusion the economy will be able to witness a financially developed and stable economy. In this research, the findings suggest that Digital Financial Literacy has an Impact on Digital Financial Inclusion. Therefore if awareness of all the digital products, services are increased the usage level would shoot high which would show significant changes in the inclusion level thus contributing towards economic growth. The second major implication of this study is individualistic growth. The results show that if awareness is high usage level is also quite high, this suggests that if people have good knowledge on the different products and services available in the market they would be motivated to use it which would not only contribute towards inclusion but also contribute towards growth in their own individualistic monetary benefits. Every digital product and service that is made available by financial institutions should also look into creating awareness about it in order to increase the usage level.

DISCUSSIONS OF THE STUDY

The emergence of this particular research was perceived mainly because of the less research done in the area of digital financial literacy and digital financial inclusion. Banerjee et. al. (2017) suggest that awareness can facilitate financial inclusion by increasing the usage level of all financial products and services. The underlining theory used by the researcher is the Theory of Cognitive Dissonance by Leon Festinger (1957) which suggests that there is an inconsistency between action and belief and that causes dissonance and can help in a change in behaviour action and attitude. The Theory of Cognitive Dissonance, when applied in the case of Digital Financial Literacy and Digital Financial Inclusion, suggests that there is an inconsistency between awareness and usage level of digital products and services which creates a dissonance. If the dissonance is addressed in the right manner change can be seen in both awareness and usage. Therefore this theory mainly contributes towards the basis of the problem addressed. Most researches contributed to the impact of financial literacy on financial inclusion. Banerjee et. al. (2017) the main findings of those researches suggests that financial literacy and financial inclusion has a mediating variable of awareness. Prasad et. al. (2017) and that awareness contributes towards literacy and usage contributes towards inclusion and has been proven. A structured questionnaire was framed by compiling questionnaires in the same area by introducing digital concepts. The model framed by the researcher has been proven to be true i.e. Digital Financial Literacy has an impact on Digital Financial Inclusion. A sample of 200 respondents was drawn and Smart PLS Version 3 was used to analyse the data. The results show that the hypothesis framed by the researcher is statistically significant. Also, the percentage of digital financial literacy stands at 76.42% and that of digital financial inclusion stands at 62.2 % which suggests that digital financial literacy contributes towards the increase in the inclusion rate which can be said as awareness facilitates usage level. Thus the theory of Cognitive Dissonance holds good for the current study.

CONCLUSION
S&P survey indicates that 76% of Indians are not financial literate. This issue needs to be addressed in the best possible manner because financial literacy contributes towards financial inclusion, development and stability and all this contributes towards economic growth. The percentage of digital financial literacy and digital financial inclusion stands at 76.42% and 62.2% respectively for the collected sample. This helps in understanding the conceptual model which helps in contributing towards the theory that digital financial awareness helps in facilitating digital financial usage .This study purely contributes towards the issue i.e. low level of financial literacy among Indians. The model can be used to identify different areas that need to be addressed under digital financial literacy in order to have digital financial inclusion in the nation.

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