

Adoption and Usage of Digital Financial Services in Karnataka, India : Spatial, Gender and Age Disparities

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Abstract

Financial services are digitized to widen access to finance and ensure transparency in financial transactions using technologies such as "Artificial Intelligence" (AI), "Machine Learning" (ML), "Big Data Analytics" (BDA), and "Blockchain Technology" (BT). Digital Financial Services (DFS) have increasingly been adopted by customers as the DFS are safe and secure, affordable, faster, convenient, and accessed anytime. The government and the RBI have taken many initiatives to promote DFS. Further, Digital Financial Services Providers (DFSP) - FinTech companies and formal financial institutions - come up with innovative DFS to suit the needs of the customers. As a result, DFS adoption and usage have grown multifold. The pandemic indirectly enhanced the adoption and usage of DFS. India has been the number one country in the world in real-time payments with 20.5 billion transactions in the year 2020 and DFS has not penetrated uniformly across gender, ages, and regions.

JEL Code : D1, D14, D91

Keywords : Digital; Financial Services; Disparities; Technology; India.

I. Introduction

DIGITIZATION OF FINANCIAL services started in India a decade ago with the objectives of broadening access, ensuring transparency and serving the unserved population. The digitization of financial services is driven by modern technologies such as AI, ML, BDA and BT. New-age technologies, the pro-digital policy of India and digitization have paved the way for the

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of Groen, Klapper, Miller and Woolnough, (2020). Perceptions of factors that determine adoptions of DFS, perceptions on the adoption of DFS, DFL and perceptions on factors determining non-adoption of DFS are independent of gender, marital status and area, but depend on age and annual income of the adults. "Peer influence, technological benefits, perceived risk and perceived trust" significantly affect the adoption of DFS. The direct relation between factors that determine the adoption of DFS and the adoption of DFS is significant. DFL significantly mediates the relationship between factors that determine the adoption of DFS and the adoption of DFS.

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Annexure
Interview Questions
Table A1
Section A

1.	Gender	Male	Female
2.	Age		
	19 years to 24 years		
	25 years to 40 years		
	41 years to 56 years		
	More than 56 years		
3.	Marital status	Married	Single
4.	Education		
	School education		
	Bachelor's degree		
	Master's degree		
	Others		
5.	Annual income		
	Up to Rs 2,00,000		
	Rs 2,00,001 to Rs 5,00,000		
	More than Rs 5,00,000		
6.	Area of Residence	Rural	Urban

Source : Self Formulated

Table A2
Section B

7. Choose the most suitable choice given against each statement.

SDA - Strongly Disagree, DA - Disagree, N - Neutral, A - Agree, SA - Strongly Agree

Statements	DSA	DA	N	A	SA
Internet and digital finance services were useful in performing financial transactions during pandemic					
Lockdown imposed due to the pandemic made me use DFS					
I am not interested in having physical access to financial services due to pandemic					
Digital Financial Services reduce the pandemic risk exposure and enhance the quality of services					
My relatives recommended the use of Digital Financial Services					
My family member, admired by me the most, influenced me to use DFS					
I use DFS as my friends and colleagues use them					
I use DFS as it is a symbol of lifestyle and pride in the society					
DFS has multiple benefits					
I can easily and quickly access DFS					
DFS provides a speedy financial solution as compared to traditional financial services					
DFS is simple to use					
DFS is safe and secured					
DFS provides a better user experience					
I am exposed to a higher amount of risk when I use DFS					
The success of digital financial transactions is highly uncertain					
My privacy is more vulnerable when I use DFS					
I trust the technologies used in DFS					
I believe that Digital Financial Services are reliable					
Digital Financial Services are trustworthy					

(Contd)

Table A2 (Continued)

8. Your opinion on the following statements				
Statements	DSA	DA	N	A SA
I prefer to adopt and use DFS regularly				
I will use DFS in future also				
I recommend DFS to my friends and relatives				
9. Your opinion on the following statements				
Statements	DSA	DA	N	A SA
I can conduct online searches using my digital device(s) (Smartphone/PC/Laptop)				
I can send and receive emails on my own				
I shop online				
I use mobile banking				
I use internet banking				
I prepare a budget for my personal finance every month				
I tend to live for today and do not bother much about tomorrow				
I rarely do impulse purchases				
I prefer to spend money rather than to save				
Suppose you have borrowed Rs 1000 at an annual rate of interest of 12%. The monthly interest payable is Rs 10.				
Suppose you receive 8% interest from the bank deposits when the inflation is at 6%.				
Your effective rate of return (interest) is 6%.				
I am aware of digital payment methods such as Phonepe, GPay, Amazon pay, UPI and so on				
I know about online trading of financial securities				
I know about digital lending methods such as Peer to Peer lending, App-based lending, supply chain finance and so on.				
Insurance products can be purchased online.				
I am aware that I am exposed to various risks such as phishing and spyware when I perform a digital financial transaction				
I know how to protect myself against risks such as phishing, spyware and other risks				
I never share my one-time password with anyone.				
I never share username, password and PIN with anyone.				
I initiate and complete digital financial transactions such as digital payments, remittances on my own				
I can resolve errors that happen in a digital financial transaction				
I prefer to use digital financial transactions rather than conventional ones.				
Continuous use of digital financial products and services makes me confident and error-free.				
I am aware that I can approach the appropriate forum				
If I become a victim to any digital risk while doing any digital financial transaction.				
I am aware of the existence of the ombudsman scheme for digital transactions in India since 2019.				
I find digital financial products or services that suit my financial needs				
I find digital financial products or services that facilitate my financial goals.				

(Contd ...)

Table A2 (Continued)

Customized digital financial products or services are available in the market.

Digital financial products or services are expensive to maintain.

DFSPs charge more fees to provide digital financial services.

DFSPs provide all relevant information on DFS.

I have a variety of choices of digital financial products and services.

My spouse handles personal finance.

So, I do not much bother about personal financial management.

A female member of my family participates in financial decision-making.

I manage the day-to-day finances of my home.

I set financial goals for my family

I can decide on the type of digital financial products or services that helps in the accomplishment of my financial goals.

I can choose the right Digital Financial Service Provider (DFSP).

I would like to use the best of my financial and digital knowledge and skill while I deal with DFS.

I feel satisfied when I initiate and complete the DFS transactions.

I would like to practice positive financial behaviors such as responsible borrowing, savings for emergencies, etc.

I never borrow money for the abnormal rate of interest even though my situation compels me.

I deal with digital financial transactions as it is pride.

I prefer digital financial transaction as it provides rewards, incentives, cash back, and other benefits.

I use DFS because other people positively see me.

I do not want to practice my financial knowledge and skill even though I am aware of the benefits that I derive from practicing them.

I do not want to be rational in digital financial transactions even though I do not have a reason for doing so.

Source : Self Formulated

Table A3
Section C

10. Your opinion on the following statements

Statements	D	S	A	N	A	S	A
Lack of access to digital device is a reason for non-adoption and usage of DFS							
Lack of access to internet is a a reason for non-adoption and usage of DFS							
Adoption and usage of DFS requires digital literacy							
Adoption and usage of DFS requires financial literacy							
Lack of trust is a reason for non-adoption and usage of DFS							
Fear of losing money prevents adoption and usage of DFS							
Privacy concerns prevent adoption and usage of DFS							

Source : Self Formulated