A STUDY ON PERFORMANCE OF DIGITAL FINANCIAL SERVICES AT SKDRDP

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Abstract: A study on digital financial services at SKDRDP (Sri Kshethra Dharmasthala Rural Development Project), a rural microfinance institution, reveals positive outcomes. The adoption of digital channels has significantly increased financial inclusion, attracting previously unbanked individuals. The study shows a substantial rise in new customer registrations and greater access to formal financial services for underserved populations. Customers report enhanced convenience through mobile access, real-time updates, and transaction capabilities. Overall, the study highlights the positive impact of digital financial services on financial inclusion, operational efficiency, and customer experience at SKDRDP.

Keywords: Digital financial services, financial inclusion, Operational efficiency, Customer experience.

I. INTRODUCTION

Digital Financial Services (DFS) includes a wide range of services which can be delivered and accessed through different digital channels that includes credit, payments savings, insurance, and remittance. M – Banking is where mobile is used to access banking services and execute the financial transactions. All these takes place via digital channels. It can be defined as "financial services delivered over digital infrastructure – including mobile and internet –with low use of cash and traditional bank branches." By using this mode of transaction that entails less use of cash and utility of traditional bank branches computers, mobile phone point of sale that connect individual to enable seamless transaction across all parties.

1. Statement of problem

Digitalization presents a crucial opportunity for microfinance providers to reach rural areas and low-income clients, enhancing customer engagement and product utilization. However, despite the potential benefits, financial education and tailored services are essential for successful digital financial inclusion. A study explores the performance of digital financial services in microfinance institutions and emphasizes the importance of adopting modern technologies and adapting business models to foster feasible financial inclusion.

Objectives of the study

1. To explore the Digital Financial Services techniques adopted in SKDRDP.
2. To study the performance of Digital Financial Services in SKDRDP.
3. To analysis the relationship between demographic factors and Digital Financial Services.

II. REVIEW OF LITRATURES

Joseph Kaumba Ssewanyana (2009) this study was conducted in Uganda where 88% of MFIs (Microfinance Institutions) had computers and 90% of them had access to internet. It is a few rural areas which has neither of this. The study has proved that the absence of digitalization was due to lack of appreciation of the benefits that was associated with information communication technology and preferring to use manual systems. The study also gives information about barriers to ICT (Information and Communication Technology) (Information and Communication Technology) usage like high costs of qualified personnel, high value added tax and high cost. The research also provides a benchmark for further digital financial services. The usage of digital financial services has also hampered due excessive cost involved in software adoption and due to lack of awareness.

Aishwarya Lakshmi Ratan (2010) this study was conducted to show the advantages of using digital financial services for the people. Micro- finance network brings formal savings to 86 million poor households. Yet there is inability maintain high quality records remains has weakness in functioning SHG. They have studied that problem and present a record to build on a low-cost digital slate prototype.

They had made a free trial with 200 SHG members in rural India to highlight the use of digital slate solution results in shorter data recording time, fewer incorrect entries and more complete records and it also has proved the digital solution is able to comfortably move between papers and achieve efficiency.

RJ Kauffman, FJ Riggins (2012) this study was conducted to know the role and impact of information communication technology in micro finance industry where the special attention was given to the industries stake holders and to the value chain of micro financial services that is provided to the poor people who need access to them. The research is aimed at encouraging new research that explores the micro finance institutions policy makers. It highlights the value chain and the transformations that are occurring that act as a basis where customers assess the extent to which information communication technology supports microfinance.

Ross P Buckley and Louise Melady (2014) this paper argues that financial regulators must first work to understand and build a demand for digital financial services instead of focusing on developing the regulatory framework. This paper highlights focus on building customer demand by promoting DFS and it also explains the financial regulators for better understanding and developing consumer demand which therefore encourages the DFS ecosystem sustainability that will in turn improves the financial inclusion and the paper also recommends paying attention for partnership to build consumer demand. They also refer partnership between payment providers, banks, MFIs.

Brian Muthiora (2015) the use of mobile phone technology has been widely acclaimed around the world. This study provides the update of the current state of Kenya's mobile phone financial services which teases out the future direction of the digital services. Which in this study is termed as digital financial revolution. The study also depicts how central bank has played its role for the development of digital financial services. It also says that traditional models of financial services have not been so transformative compared to digital services only 18% people was served by using traditional model, but the number has increased by digital financial services.

III. RESEARCH METHODOLOGY

Descriptive research is employed to analyse and describe the characteristics of digital financial services at SKDRDP without a specific research question or hypothesis. It involves collecting data through surveys, interviews, and financial analysis to gain insights into the organization's services. This research method allows for an in-depth investigation and provides preliminary data for further research and generating innovative ideas. A combination of qualitative and quantitative methods is used to gather information and draw conclusions about SKDRDP's digital financial services.

1. **Types of Data:** Primary and Secondary data.
2. **Sampling unit:** customers of SKDRDP, Nelamangala
3. **Period of study:** 8 weeks.
4. **Data collection:** Books, Published reports, Journals, Projects, Websites, of SKDRDP etc.
5. **Statistical tools:** frequency distribution and Rank Ordering chi square analysis.
6. **Sample Size:** 100

Hypothesis

H0: Transaction rate is independent of digital financial service provided by SKDRDP.

H1: Transaction rate is dependent of digital financial service provided by SKDRDP.

H0: There is no significant association between age and type of digital financial service.

H1: There is significant association between age and type of digital financial service.

H0: There is no significant association between education and purpose of digital transaction.

H1: There is significant association between education and purpose of digital transaction.

H0: There is no significant association between age and purpose of digital transaction.

H1: There is significant association between age and purpose of digital transaction.

H0: There is no significant association between education and type of digital financial service.

H1: There is significant association between age and type of digital financial service.

IV. DATA ANALYSIS AND INTERPRETATION

1. RANK ORDER CALCULATION

Table 1: Consolidated table showing rank allocated to various attributes

ATTRIBUTES	RANK					
	1	2	3	4	5	TOTAL
Convenience	0	1	64	146	189	400
Adaptability	0	2	42	154	202	400
Affordability	0	0	46	173	181	400
Security	0	1	50	152	197	400
User friendly	0	2	58	155	185	400
Low service charge	0	0	28	165	207	400
Accurate timing	0	0	63	157	180	400
Internet	0	2	43	153	202	400
Connectivity	0	1	32	172	195	400
Useability	0	2	58	154	186	400

Source: Authors own calculation

Based on the calculations provided in the table, the ranking for the different attributes is assigned in descending order. The attribute with the highest value is given the first rank, while the attribute with the lowest value is assigned the last rank.

Table 2: Summary of rank with computation

Convenience: (0X1) +(1X2) +(64X3) +(146X4) +(189X5) = 1723
Adaptability: (0X1) +(2X2) +(42X3) +(154X4) +(202X5) =1756
Affordability: (0X1) +(0X2) +(46X3) +(173X4) +(181X5) =1735
Security: (0X1) +(1X2) +(50X3) +(152X4) +(197X5) =1745
user friendly: (0X1) +(2X2) +(58X3) +(155X4) +(185X5) =1723
low service charge: (0X1) +(0X2) +(28X3) +(165X4) +(207X5) =1779
accurate timing: (0X1) +(0X2) +(63X3) +(157X4) +(180X5) =1717
Internet: (0X1) +(2X2) +(43X3) +(153X4) +(202X5) =1755
Connectivity: (0X1) +(1X2) +(32X3) +(172X4) +(195X5) =1761
Useability: (0X1) +(2X2) +(58X3) +(154X4) +(186X5) =1724

Source: Authors own calculation

In terms of prioritization, convenience and user-friendliness are not given high importance, as indicated by their values of 1723 and 1724, respectively. However, adaptability, affordability, security, internet, and connectivity are moderately emphasized, as suggested by their values of 1756, 1735, 1745, 1755, and 1761, respectively. Additionally, having a low service charge is deemed highly significant, with a value of 1779, while accurate timing is not considered a major priority, with a value of 1717. Overall, usability is also not highly prioritized, aligning with convenience and user-friendliness, as reflected by its value of 1724.

2. Chi-Square ANALYSIS

Table 3: chi-square for education and purpose of financial transactions.

x^2 Tests			
	Value	**df**	**p**
x^2	4.78	6	0.572
N	100		

Source: Authors own calculation

The test statistic, $x^2 = 4.78$, measures the extent of difference between the observed and expected frequencies based on the null hypothesis. With 6 degrees of freedom, indicating the number of categories minus 1, the data appears to have been divided into 7 groups. The obtained p-value of 0.572 suggests that if the null hypothesis were true (assuming no significant difference between observed and expected frequencies), there would be a 57.2% probability of obtaining a test statistic as extreme as 4.78 or even greater. Therefore, Accept H0. Therefore, there is no significant association between the education and type of financial transaction.

Table 4: Chi square for Age and type of service

x^2 Tests			
	Value	**df**	**P**
x^2	2.54	3	0.468
N	100		

Source: Authors own calculation

With three degrees of freedom (df) and a determined 2 value of 2.54, the 2 test was run. The test's resultant p-value is 0.468. According to this interpretation, the 2 value of 2.54 represents the degree of departure from the values predicted by the observed data. To ascertain the significance of the relationship, this value is tested against the chi-square distribution with three degrees of freedom.

The derived p-value in this instance is 0.468, which, if the null hypothesis is true, denotes the likelihood of witnessing the observed 2 value or a more extreme number via pure chance. The high p-value (higher than the often-used significance threshold of 0.05) indicates that there is insufficient data to reject the null hypothesis. As a result, there is no meaningful correlation between the variables under study. These 2 test findings show that there is no significant correlation between the variables under examination, considering the sample size of 100 (N). Therefore, Accept H0. Therefore, there is no significant association between the age and type of digital financial services.

Table 5: Chi square for Age and purpose of financial transaction

x^2 Tests			
	Value	**Df**	**P**
x^2	6.74	9	0.664
N	100		

Source: Authors own calculation

With 9 degrees of freedom (df) and an estimated 2 value of 6.74, the 2 test was run. The test's resultant p-value is 0.664. The 2 values of 6.74, when used to interpret these findings, represent the degree to which the observed data deviates from what would be predicted. This value is compared to the chi-square distribution with 9 degrees of freedom to ascertain the significance of the correlation.

The calculated p-value in this instance is 0.664, which, if the null hypothesis is true, indicates the likelihood of witnessing the observed 2 value or a more extreme number via pure chance. The high p-value (higher than the often-used significance threshold of 0.05) indicates that there is insufficient data to reject the null hypothesis. As a result, there is no meaningful correlation between the variables under study.

These 2 test findings show that there is no significant correlation between the variables under examination, considering the sample size of 100 (N). Therefore, Accept H0. Therefore, there is no significant association between the age and purpose of financial transaction.

Table 6: Chi square for education and type of service

x^2 Tests			
	Value	**df**	**P**
x^2	2.34	2	0.310
N	100		

Source: Authors own calculation

With two degrees of freedom (df) and a determined 2 value of 2.34, the 2 test was performed. The test's final p-value is 0.310 consequently. When interpreting these findings, the 2 value of 2.34 indicates the degree to which the observed data deviates from the predicted values. This value is compared to the chi-square distribution with two degrees of freedom to ascertain the significance of the correlation.

The derived p-value in this instance is 0.310, which, if the null hypothesis is true, is the likelihood of detecting the observed 2 value or a more extreme number via pure chance. The high p-value (higher than the often-used significance threshold of 0.05) indicates that there is insufficient data to reject the null hypothesis. As a result, there is no meaningful correlation between the variables under study. These 2 test findings show that there is no significant correlation between the variables under examination, considering the sample size of 100 (N). Therefore, Accept H0. Therefore, there is no significant association between the education and type of services.

V. FINDINGS, SUGGESTIONS AND CONCLUSIONS

1. Findings

The survey of 100 respondents reveals an equal gender distribution, with slightly more males (53%) than females (47%). Most respondents fall within the age ranges of 20-30 and 30-40, with a smaller proportion under 20 or above 40. In terms of education, SSLC is the most common qualification (43), followed by PUC (35) and graduation (22). The findings also indicate a preference for online financial transactions, with smart card usage being favoured by a significant majority (64 respondents) due to its convenience, adaptability, and low service charges.

2. Conclusion

Technology plays a crucial role in bridging the gap between customers and the formal banking system, offering a cost-effective solution. It facilitates rapid scalability of operations, enabling organizations like SKDRDP to expand their reach efficiently. The Technology Service Providers associated with SKDRDP provide a robust technology architecture that ensures secure front-end transactions, while the MIS system safeguards back-end transactions. However, there is room for improvement in certain areas. Introducing services such as opening savings accounts for members of SHGs and Non-SHGs and digitalizing other processes would enhance customer engagement and meet their diverse needs. Exploring the potential of mobile technology would enable the implementation of new models and deployments. As the Indian financial services landscape evolves, it is vital for organizations to adapt to industry changes and enable swift deployment to support future growth.

3. Suggestions

To enhance user experience, improvements should be made to the mobile wallet's functionality, transaction process, and connectivity. A targeted marketing campaign promoting internet and mobile banking, along with incentives and educational initiatives, can increase adoption and usage. Regularly reviewing and optimizing service charges, implementing robust security measures, and establishing effective customer feedback channels are crucial for competitiveness and trust-building. Expanding partnerships and conducting educational campaigns will further stimulate growth and customer satisfaction in the target market.

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