A STUDY ON DIGITAL PAYMENT SYSTEM USAGE BEHAVIOUR OF CUSTOMERS OF GUJARAT STATE

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ABSTRACT

The government of India is promoting the digital payments with the objective of to make seamless digital payments available to all Indian people in a way that is accessible, easy, affordable, rapid, and secure. Therefor this study is an attempt to know the digital payment usage behavior of customers of Gujarat state. The data is collected from primary sources through digital questionnaire and analyzed using IBM SPSS statistical software. This study concludes that majority of customers use digital payment system for daily and routine small amount transactions therefore it is suggested to the digital payment wallets or banks that they should offer strong security and privacy to attract and encourage customers to use digital payment system for other than small and routine transactions.

Keywords: *Digital Payment, Transactions, Customers, Usage Behavior, Association.*

INTRODUCTION

In recent years, India has experienced a technological revolution in governance. Government services have gradually been integrated, and today, last-mile delivery can be completed in seconds with the click of a mouse. As part of the Government of India's strategy to digitize the financial sector and economy, digital payment transactions have steadily increased in recent years. Furthermore, concerted initiatives have been taken to promote financial inclusion as one of the country's crucial national objectives.

One of Digital India's primary goals is to reach "Faceless, Paperless, Cashless" status. The Government of India has made digital payment promotion a top priority in order to bring every segment of our country into the formal fold of electronic payments. The objective is to make seamless digital payments available to all Indian people in a way that is accessible, easy, affordable, rapid, and secure.

There is little doubt that India's digital payment ecosystem has been revolutionized. In addition to the government's efforts, the people of India have demonstrated a strong willingness to embrace new technology. While some industrialized countries struggle with insufficient digital infrastructure for sending money to people' accounts, India has emerged as a pioneer in the production of digital assets that may serve as an example to many other countries. Furthermore, the Government of India is working tirelessly to position India as a worldwide leader in digital payment systems and to help it become one of the world's most efficient payment marketplaces.

TYPES OF DIGITAL PAYMENT METHODS IN INDIA

1.   Banking cards
2.   USSD - Unstructured Supplementary Service Data
3.   AEPS - Aadhaar Enabled Payment System
4.   UPI - Unified Payments Interface
5.   Mobile Wallets
6.   Bank pre-paid cards
7.   PoS terminals

8.   Internet Banking
9.   Mobile Banking
10.   Bharat Interface for Money (BHIM)

LITERATURE REVIEW:

(Kumar et al., 2019) noted that with recent technological advancements, a large endowment in the digital infrastructure sector, and significant regulatory push, consumers may now access fundamental financial services at a lesser cost and to an unprecedented degree. However, while these services have gained appeal among certain parts of society, such as the young, middle class, and upper middle class, a large number of individuals remain unserved. For digital financial services to prosper in India, people's behaviour and attitudes must change, as well as service providers' thorough awareness of their demands. Overall, digital financial services are an excellent instrument for providing basic financial services to the underserved and bringing them under the tent of financial inclusion. We can all agree that there is still a lot to be done in the sphere of the digital economy and digital financial services, but at the rate things are moving, we may hope to reach the objective of universal financial access by 2020. (Ozili, 2023) provided a brief summary of extant digital finance research in the literature, and highlighted some of the global advancements in digital finance. The researcher first demonstrated that digital finance has become a significant aspect of modern finance, with large applications in Fintech, embedded finance, open banking and decentralised finance, central bank digital currencies, and so on. Second, it identified some international determinants of digital finance, such as the need for efficiency in financial services delivery, achieving the United Nations Sustainable Development Goals using existing digital technologies, increasing financial inclusion through digital financial inclusion, and the need for efficient payments and payment settlement finality. The researcher also discovered that digital finance research is rapidly expanding, with recent papers investigating current topics in digital finance that are important for policy and practise. According to the researcher, the future of digital finance will be to create a digital environment that allows the offering of all types of financial products and services that can be customised and personalised to meet the unique needs of all users on a single digital platform and without the need for any form of human assistance or intermediary. The researcher then suggest some areas for future research which include the need for more research on how regulators can keep pace with emerging digital finance transformation, the need for more research on user information security and compliance, the need for more research on how to deal with bias caused by bad data, the need for more research on how to deal with algorithmic bias, and the need for more research on how to combine a risk-conscious culture with a higher risk appetite for digital finance transformation. (Kajol et al., 2022) identified the elements that impact DFT adoption and gives insight on research needs in this area. They found fifteen variables that inspire DFT adoption and five barriers to adoption. According to the literature, the most important elements influencing DFT adoption are perceived utility, perceived simplicity of use, compatibility, trust, security, effort expectation, performance expectancy, and enabling circumstances. The report identifies cost of usage, perceived risk, complexity, unwillingness to adapt, and privacy issues as primary barriers to DFT adoption.

RESEARCH METHODOLOGY:

Objective of the study
1.   To know the digital payment system usage behavior of customers of Gujarat state
2.   To identify the association between demographics and digital payment system usage behavior of customers

Research Design
The descriptive research design has been used for this study.

Sampling Design
The sample has been selected as per purposive sampling method (non-probability sampling) and only those customers who use digital payment system are selected for this study.

Period of the Study
The period of the study is ranging from November 2022 to January 2023.

Sources of Data
The data has been collected from primary sources i.e. through digital questionnaire.

Hypotheses of the Study

Sr. No.	Null Hypotheses
H_{01}	There is no significant association between gender and usage of digital payment system.
H_{02}	There is no significant association between family type and usage of digital payment system.
H_{03}	There is no significant association between age and usage of digital payment system.

Statistical Tools
- Cross-tabulation
- Chi-Square Test

Limitation of the study
- This study is limited to very small size of sample respondents which are selected using purposive sampling method.
- The data collection and analysis tools, techniques, and method used in this study have certain limitations and the same are applicable to this study.

DATA ANALYSIS:
Demographic Profile
Table 1: Demographic profile of respondents

Variable	Frequency	Percentage %
Gender		
Male	36	58%
Female	26	42%
Family Type		
Joint Family	36	58%
Nuclear Family	26	42%
Age		
Up to 19 years	11	18%
20 to 35 years	32	52%
36 to 55 years	18	29%
More than 55 years	1	2%
Total	62	100%

The above table presents the demographic profile of the variables considered under this study. The data shows that from total respondents 58% are male and 42% are female. The 58% respondents are from joint family while 42% respondents are from nuclear family. There are 18% respondents up to 19 years age, 52% respondents between 20 to 35 years age, 29% respondents between 36 to 55 years age, and 2% respondents with more than 55 years age.

Association between Gender and Usage of Digital Payment System
Table 2: Crosstab for gender and usage of digital payment system

			Usage of Digital Payment System			
			Daily and Routine Small Amount Transactions	Luxurious and Non-Routine Large Amount Transaction	When Discount and Reward Schemes are Available	Total
Gender	Male	Count	30	5	1	36
		% within Gender	83.3%	13.9%	2.8%	100.0%
	Female	Count	20	3	3	26

	% within Gender	76.9%	11.5%	11.5%	100.0%
Total	Count	50	8	4	62
	% within Gender	80.6%	12.9%	6.5%	100.0%

Table 3: Chi-Square Tests for gender and usage of digital payment system

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.938[a]	2	.380
Likelihood Ratio	1.945	2	.378
N of Valid Cases	62		

Table 4: Symmetric Measures for gender and usage of digital payment system

		Value	Approx. Sig.
Nominal by Nominal	Phi	.177	.380
	Cramer's V	.177	.380
N of Valid Cases		62	

Table 2 presents the cross tabulation of gender and usage of digital payments system by customers of Gujarat state. The cross-tabulation shows that 83.3% male use the digital payment system for daily and routine small amount transactions while 13.9% male use it for non-routine large amount transactions and remaining 2.8% male use it when discount and reward schemes are available. The cross-tabulation also shows that 76.9% female use the digital payment system for daily and routine small amount transactions while 11.5% female use it for non-routine large amount transactions and remaining 11.5% female use it when discount and reward schemes are available. In total 80.6% customers use the digital payment system for daily and routine small amount transactions while 12.9% customers use it for non-routine large amount transactions and remaining 6.5% customers use it when discount and reward schemes are available.

Table 3 presents the results of chi-square test for identifying the association between gender and usage of digital payment system by customers of Gujarat state. The p-value for the chi-square test is 0.380, which is more than 0.05. This indicates that null hypothesis cannot be rejected. This means there is no significant association between gender and usage of digital payment system by customers of Gujarat state.

Association between Family Type and Usage of Digital Payment System
Table 5: Crosstab for family type and usage of digital payment system

			Usage of Digital Payment System			
			Daily and Routine Small Amount Transactions	Luxurious and Non-Routine Large Amount Transaction	When Discount and Reward Schemes are Available	Total
Family type	Joint family	Count	28	5	3	36
		% within Family type	77.8%	13.9%	8.3%	100.0%
	Nuclear family	Count	22	3	1	26
		% within Family type	84.6%	11.5%	3.8%	100.0%
Total		Count	50	8	4	62
		% within Family type	80.6%	12.9%	6.5%	100.0%

Table 6: Chi-Square Tests for family type and usage of digital payment system

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.623a	2	.732
Likelihood Ratio	.654	2	.721
Linear-by-Linear Association	.594	1	.441
N of Valid Cases	62		

Table 7: Symmetric Measures for family type and usage of digital payment system

		Value	Approx. Sig.
Nominal by Nominal	Phi	.100	.732
	Cramer's V	.100	.732
N of Valid Cases		62	

Table 5 presents the cross tabulation of family type and usage of digital payments system by customers of Gujarat state. The cross-tabulation shows that 77.8% joint family uses the digital payment system for daily and routine small amount transactions while 13.9% joint family uses it for non-routine large amount transactions and remaining 2.8% joint family uses it when discount and reward schemes are available. The cross-tabulation also shows that 84.6% nuclear family uses the digital payment system for daily and routine small amount transactions while 11.5% nuclear family uses it for non-routine large amount transactions and remaining 3.8% nuclear family uses it when discount and reward schemes are available. In total 80.6% customers use the digital payment system for daily and routine small amount transactions while 12.9% customers use it for non-routine large amount transactions and remaining 6.5% customers use it when discount and reward schemes are available.

Table 6 presents the results of chi-square test for identifying the association between family type and usage of digital payment system by customers of Gujarat state. The p-value for the chi-square test is 0.732, which is more than 0.05. This indicates that null hypothesis cannot be rejected. This means there is no significant association between family type and usage of digital payment system by customers of Gujarat state.

Association between Age and Usage of Digital Payment System
Table 8: Crosstab for Age and Usage of Digital Payment System

			Usage of Digital Payment System			
			Daily and Routine Small Amount Transactions	Luxurious and Non-Routine Large Amount Transaction	When Discount and Reward Schemes are Available	Total
Age	Up to 19 years	Count	7	2	2	11
		% within Age	63.6%	18.2%	18.2%	100.0%
	20 – 35 years	Count	27	4	1	32
		% within Age	84.4%	12.5%	3.1%	100.0%
	36 – 55 years	Count	15	2	1	18
		% within Age	83.3%	11.1%	5.6%	100.0%
	More than 55 years	Count	1	0	0	1
		% within Age	100.0%	0.0%	0.0%	100.0%

Total	Count	50	8	4	62
	% within Age	80.6%	12.9%	6.5%	100.0%

Table 9: Chi-Square Tests for Age and Usage of Digital Payment System

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.910[a]	6	.689
Likelihood Ratio	3.454	6	.750
Linear-by-Linear Association	1.810	1	.179
N of Valid Cases	62		

Table 10: Symmetric Measures for Age and Usage of Digital Payment System

		Value	Approx. Sig.
Nominal by Nominal	Phi	.251	.689
	Cramer's V	.178	.689
N of Valid Cases		62	

Table 8 presents the cross tabulation of age and usage of digital payments system by customers of Gujarat state. The cross-tabulation shows that 63.6% of up to 19 years age customers use the digital payment system for daily and routine small amount transactions while 18.2% of up to 19 years age customers use it for non-routine large amount transactions and remaining 18.2% of up to 19 years age customers use it when discount and reward schemes are available.

The cross-tabulation also shows that 84.4% of between 20 to 35 years age customers use the digital payment system for daily and routine small amount transactions while 12.5% of between 20 to 35 years age customers use it for non-routine large amount transactions and remaining 3.1% of between 20 to 35 years age customers use it when discount and reward schemes are available. The cross-tabulation also shows that 83.3% of between 36 to 55 years age customers use the digital payment system for daily and routine small amount transactions while 11.1% of between 36 to 55 years age customers use it for non-routine large amount transactions and remaining 5.6% of between 36 to 55 years age customers use it when discount and reward schemes are available. The cross-tabulation also shows that 100% of more than 55 years age customers use the digital payment system for daily and routine small amount transactions while none of them use it for non-routine large amount transactions and when discount and reward schemes are available. In total 80.6% customers use the digital payment system for daily and routine small amount transactions while 12.9% customers use it for non-routine large amount transactions and remaining 6.5% customers use it when discount and reward schemes are available.

Table 9 presents the results of chi-square test for identifying the association between age and usage of digital payment system by customers of Gujarat state. The p-value for the chi-square test is 0.689, which is more than 0.05. This indicates that null hypothesis cannot be rejected. This means there is no significant association between age and usage of digital payment system by customers of Gujarat state.

MAJOR FINDINGS

- This study found that from total respondents 80.6% customers use the digital payment system for daily and routine small amount transactions.
- From total respondents 12.9% customers use it for non-routine large amount transactions and remaining 6.5% customers use it when discount and reward schemes are available.
- This study also found that there is no significant association between gender and customers digital payment system usage behavior.
- This study also found that there is no significant association between family type and customers' digital payment system usage behavior.
- This study also found that there is no significant association between age and customers digital payment system usage behavior.

CONCLUSION

The main objective of this study is to know the digital payment system usage behavior of customers of Gujarat state. This study found that majority of customers use the digital payment system for daily and routine small amount transactions while very small number of customers uses digital payment system for non-routine large amount transactions and when discount & reward schemes are available. The study also found that there is no significant association of demographical variables like gender, family type, and age with usage of digital payment system. This study concludes that majority of customers use digital payment system for daily and routine small amount transactions therefore it is suggested to the digital payment wallets or banks that they should offer strong security and privacy to attract and encourage customers to use digital payment system for other than small and routine transactions.

REFERENCES

[1] Kajol, K., Singh, R., & Paul, J. (2022). Adoption of digital financial transactions: A review of literature and future research agenda. *Technological Forecasting and Social Change*, *184*, 121991.

[2] Kumar, R., Mishra, V., & Saha, S. (2019). Digital financial services in India: An analysis of trends in digital payment.

[3] Ozili, P. K. (2023). Digital finance research and developments around the World: a literature review. *International Journal of Business Forecasting and Marketing Intelligence*, *8*(1), 35-51.

[4] Parmar, P., & Sheth, K. (2023). DIGITAL FINANCIAL TRANSACTION USAGE AND DEMOGRAPHICS OF CUSTOMERS: EVIDENCE FROM GUJARAT. *VIDYA - A JOURNAL OF GUJARAT UNIVERSITY*, 2(1), 91–96. https://doi.org/10.47413/vidya.v2i1.138

[5] Tripathi, S. (2020). A study on adoption of digital payment through mobile payment application with reference to Gujarat state. *International Journal of Trend in Scientific Research and Development.*

[6] https://www.researchgate.net/publication/333369877_DIGITAL_FINANCIAL_SERVICES_IN_INDIA_AN_ ANALYSIS_OF_TRENDS_IN_DIGITAL_PAYMENT [accessed Feb 04 2023]

[7] https://www.researchgate.net/publication/361637228_Digital_finance_research_and_developments_around _the_World_a_literature_review [accessed Feb 04 2023].

[8] https://pib.gov.in/FeaturesDeatils.aspx?NoteId=151163&ModuleId%20=%202#:~:text=UPI%20is%20an%20inst ant%20payment,merchant%20payments%20into%20one%20hood.

[9] https://www.bankbazaar.com/ifsc/digital-payment.html

[10] https://pib.gov.in/FeaturesDeatils.aspx

[11] http://cashlessindia.gov.in/digital_payment_methods.html

[12] https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3660907

[13] https://reader.elsevier.com/reader/sd/pii/S0040162522005121?token=F9E03417F3C17B7D09B8CD4A9F4FDD 0D442D40409C8BAB856754B592E242BC891B8D2B92716C49EC1B4F54E31B1AAD8C&originRegion=eu-west-1&originCreation=20230204172409