



User Behaviour and Digital Payment Ecosystem: An Audit of Connections between usage Attributes and Demographic Profile

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ABSTRACT: The digital systems have become an indispensable facet in the payment mechanism in the last few years as the mobile and internet technology has gathered pace. The use and its implementation is still a key and can't be considered a certainty despite sound plans as the demand side for such systems is still a measure created by opinions, whims and fancies of end-users. The perspectives and viewpoints of the final users do create an important input behind the design and the applicability of digital payment systems. The current research is one such effort to create an understanding behind a basic mechanism which caters to various factors having an influence on the final usage of digital payment systems. The results indicate that education is a significant factor playing a prominent role in determining the dynamics of digital payment systems.

Keywords: Digital Payments, Payment Mechanism, User Behaviour, User Interface, User Perception Immediately.

Abbreviations: GDP, Gross Domestic Product; UNESCO, United Nations Educational Scientific and Cultural Organization.

I. INTRODUCTION

Every disruption creates a place for new ideas and opportunities. The government introduced demonetization coupled with Digital India Campaign to transform India into a cashless and paperless economy. Such systems triggered the growth of digital payment ecosystem in India thereby leading to the development and boost in the formation of digital wallet companies and broadening of E-Banking services and this opportunity was well garbed by the companies and banks. It has created a huge and unique platform for digital payment ecosystems serving Indian users. Simultaneously, the Digital India Programme was also launched under the flagship of Government of India with a vision to make India digitally empowered economy. Awareness of digital payment system was rigorously conducted which also led to the inclusion of digital payment system in rural India as well to a larger extent resulting in the hassle-free transfer of monetary transactions.

All these factors have acted as a catalyst and triggered the growth of the digital payment system in India. Post demonetization Digital system is the need in today's society. So the scope for the digital system is seen to be increasing by leaps and bounds.

II. OBJECTIVE

This paper has been written with the objective of creating a framework to find out what usage attributes

are influenced by the demographic profile of the consumers using digital payment systems.

III. METHODS AND MATERIALS

The present research is based upon the data collected from respondents across Lucknow. An exhaustive schedule was framed and a pilot study was conducted to verify the relevance and its adaptability to Lucknow region. The responses were elicited and captured to draw inferences regarding the perception of Consumer towards a rapid shift in usage of digital payment systems in India. Most responses were coded and were taken on a bipolar five-point Likert scale. The answers were coded into SPSS 25 for data analysis.

H₁: There is no significant variation in the perception of respondents for diverse aspects of digital payment in terms of income.

H₂: There is no significant variation in the perception of respondents for diverse aspects of digital payment in terms of education.

H₃: There is no significant variation in the perception of respondents for diverse aspects of digital payment in terms of age.

H₄: There is no significant variation in the perception of respondents for diverse aspects of digital payment in terms of occupation

H₅: There is no significant variation in the perception of respondents for diverse aspects of digital payment in terms of gender.

Sampling Unit: The target population comprises the Consumers who have been using the digital payment systems in Lucknow.

Sample Size: Sample size was 200 Consumers using the digital payment systems from Lucknow. The justification for the adequacy comes from previous researches done in a similar context.

Sampling Technique: Selection of respondents is done using Intercept interview method for the compilation of primary data. Efforts were taken to record the inputs as it is without personal bias or distortions.

IV. REVIEW OF LITERATURE

Pathania (2016) in his article highlighted some of the benefits which nations can tap with the implementation of cashless transactions. It can lead to an increase in GDP, as more payments will be via cards and online payment banks and this will lead to reduced social cost [6]. Increase in financial inclusion with the acceptance of e-payments will lead to a reduction of the underground economy. Depletion in cash payment system will enable the growth of many industries like, e-commerce etc, as the growth of such industries is contingent to trusted online transactions.

Sharma *et al.*, (2016) analysed the potential for the cashless economy in India, by organising a survey in Jodhpur city, where an extensive household survey was conducted. The survey estimated the extent to which households made the non-cash expenditure. It revealed various factors like, security, internet connection, loss of card, hackers activity, lack of technology, which were the major concerns of worries of households, due to which the household abstained from switching towards a cashless economy [9].

Vidya shree (2015) in one of the papers analysed the influence of digital payment systems and it was found that mobile applications are more popular among people while making online payments, along with an increase in its growth rate [2]. According to the study it was also found that Paytm and Pay U money, compared to other digital payment options, have easy payment structures.

Metri and Jindappa (2017) in their research paper Impact of Cashless Economy on Common Man in India, highlighted the basic concept of cashless transaction and related security issues [4]. In the paper, it has been stated that insufficient and inadequate infrastructure is among one the major obstacles for cashless transaction and Illiteracy tops the chart as per the report by UNESCO. As per Economic Times, Cybercrime like hacking is one of the major challenges for cashless transaction. The paper also highlighted the awareness of customers about smartphone and their use in rural India. The illiteracy rate in rural India, along with the lack of proper infrastructure facilities like internet access and

electricity supply result in poor implementation of cashless transactions in rural India.

Slozko and Pello (2015) emphasised in their paper the importance of E-payment system mechanism used by individuals and organizations and considered it to be a secured and easy way of making payments over the internet leading to the accomplishment of technological advancement [8]. Rakesh and Ramya (2014) in one of their researches studied the factors which impact the adoption of internet banking [7]. According to the paper, internet banking is influenced by people's consciousness towards its reliability, convenient usage and utility. Experts should focus on the benefits of adopting internet banking services and improved awareness to attract users.

Bolar (1970) suggested that in order to make strategic decisions in ameliorating technology interfaces in order to compete on various quality dimensions, it's vital to focus on customer's perception as well [1]. Whereas

Nitsure (2014) in his paper concluded that poor dissemination of information technology is the major problem being witnessed by the people of developing countries like India, which makes it difficult to implement adoption of E-Banking initiatives special attention was also drawn towards, some more problems like, security concerns, rules, regulation and management [5].

Zarrin Kafsh (2015), carried research on "Developing Consumer Adoption Model on Mobile wallets in Canada", where the study was conducted using convenience sampling, with a sample size of 530 respondents. Data analysis and interpretation were done using partial least square model where the results post data analysis show that there is a relation among perceived usage, perceived ease of use and perceived security in predicting the adoption of payment gateway [3].

V. DATA ANALYSIS, RESULTS AND DISCUSSION

Analysis 1: Cronbach's Alpha was carried out to assess the reliability of the questionnaire. The alpha value is greater than 0.50 indicating the reliability of the questionnaire items.

Table 1: Cronbach's Alpha for the Variables.

Cronbach's Alpha	Number of Items
0.651	11

Analysis 2: The demographic profile is shown in Table 2. It indicates that most respondents surveyed using digital payment systems were having an income between Rs. 3-6 Lakhs followed by up to Rs. 3 Lakhs. Most of them were graduates and postgraduates. The age group to which most respondents were between 20-35 years followed by respondents between 36-50 years. Most were working as employees in the private sector and the government sector.

Table 2: Demographic Profile.

Variable	Categories	Number	Percentage of Sample Size
Annual Income	Upto Rs. 3 Lakhs	74	37
	Rs. 3-6 Lakhs	92	46
	Rs. 6-9 Lakhs	22	11
	Above Rs. 9 Lakhs	12	6
Education	Post-Graduation and above	44	22
	Graduation	86	43

	Intermediate	42	21
	High School	28	14
Age	20-35 years	96	48
	36-50 years	68	34
	51 years & above	36	18
Occupation	Private Sector Employee	86	43
	Government Employee	48	24
	Self Employed	32	16
	Others	34	17
Gender	Male	132	66
	Female	68	34

Analysis 3: ANOVA is applied across the aspects of digital payment systems to find out whether significant variation exists in demographic profile in terms of

income, education, age, occupation and gender while assessing the usage attributes of digital payment systems among users.

Table 3: Relation between Aspects of Digital Payment System and Demographic Profile.

Aspects of Digital Payment System	Income		Education		Age	
	F	Sig.	F	Sig.	F	Sig.
Digital payment used	0.93	0.32	11.32	0.00	2.13	0.54
User Interface	0.84	0.36	91.53	0.00	2.32	0.35
Digital payment systems are handy than conventional systems	0.93	0.43	13.42	0.00	2.82	0.02
Service Charges of Using digital payment mode	1.77	0.10	51.75	0.00	0.65	0.23
Easier and More options in terms of payment gateways	1.87	0.22	19.65	0.00	0.83	0.65
Trust Factor with the service provider	0.46	0.65	14.43	0.00	1.99	0.12
Safety/ Security	2.00	0.21	11.65	0.00	1.34	0.41
Convenience in Usage	0.65	0.43	16.09	0.00	2.11	0.08
Perks for using Digital Payment Systems	1.99	0.12	21.54	0.00	0.45	0.54
Frequency of usage	0.88	0.51	84.77	0.00	0.65	0.43
Time Saving	2.10	0.22	62.88	0.00	1.65	0.06

Table 4: Relation between Aspects of Digital Payment System and Demographic Profile.

Aspects of Digital Payment System	Occupation		Gender	
	F	Sig.	F	Sig.
Digital payment used	4.23	0.00	0.09	0.55
User Interface	1.10	0.10	3.42	0.07
Digital payment systems are handy than conventional systems	2.13	0.68	0.52	0.33
Service Charges of Using digital payment mode	2.43	0.12	0.13	0.64
Easier and More options in terms of payment gateways	1.65	0.08	0.76	0.25
Trust Factor with the service provider	2.43	0.03	0.35	0.43
Safety/Security	1.77	0.09	1.88	0.15
Convenience in Usage	1.23	0.21	0.23	0.65
Perks for using Digital Payment Systems	1.99	0.05	0.89	0.24
Frequency of usage	2.65	0.00	0.00	0.87
Time Saving	1.88	0.10	7.54	0.00

The above analysis is an effort to comprehend the perception of Consumers regarding digital payment systems. The results indicate that most demographic characteristics including gender, age, income and occupation do not have an impact on the usage of digital payment systems. Education, however, has an impact on the usage of digital payment systems. Therefore, one of the policy interventions could be to educate the masses who further can use the digital payment systems. The acceptance of digital payment systems becomes higher in the case of respondents are having higher education. Hence, one of the key inputs from the current research is to use education as a leveraging point in speeding up the dynamics of digital payment systems. It can be seen from Table 3 and 4 that there is no significant variation in the perception of respondents for diverse aspects of digital payment in terms of income at 5% level of significance. Hence H₁ is accepted.

Similarly, there is no significant variation in the perception of respondents for diverse aspects of digital payment in terms of age, occupation and gender at 5% level of significance. Hence H₃, H₄ and H₅ are accepted. However, there is significant variation in the perception of respondents for diverse aspects of digital payment in terms of education at 5% level of significance. Hence H₂ is rejected. Therefore, education has a role to play as it influences the perception of respondents while using diverse digital payment systems.

VI. FUTURE SCOPE

The present study is an attempt to perusal the phenomenal assumptions and contextual realities of transformative digitization in Indian commerce industry and its correlation with the population with reference to their attitude and preferences. The study leads to an optimistic scope for identifying the conundrums from

corporate's point of view and other influential praxis that may lead to an enhanced payment ecosystem in the growing economy.

Conflict of Interest. The authors confirm that there are no known conflicts of interest associated with the publication of this paper.

REFERENCES

- [1]. Bolar, K. (1970). End-user acceptance of technology interface in transaction based environment. *The Journal of Internet Banking and Commerce*, 19(1), 1-16.
- [2]. Vidya shree, D.V., Yamuna N., Nithya Shree, G. (2015). A Study on new dynamics in Digital Payment System with special reference to Paytm and PayU Money. *International Journal of Applied Research*, 1(10), 1002-1005.
- [3]. Zarrin Kafsh, S. (2015). *Developing Consumer Adoption Model on Mobile Wallet in Canada* (Doctoral dissertation, Université d'Ottawa/University of Ottawa).

- [4]. Metri, B. P. & Jindappa, D. (2017). Impact of Cashless Economy on Common Man in India, *International Journal of Interdisciplinary Research* 3(3), 885-887.
- [5]. Nitsure, R. R. (2014). E-Banking: Challenges and Opportunities. *Economic and Political Weekly*.
- [6]. Pathania, R. (2016). Cashless India: Challenges and Benefits. *Live Mint*.
- [7]. Rakesh, H. M., & Ramya, T. J. (2014). A study on factors influencing consumer adoption of internet banking in India. *International Journal of Business and General Management*, 3(1), 49-56.
- [8]. Slozko, O., & Pelo, A. (2015). Problems and Risks of Digital Technologies Introduction into E-Payments. *Transformations in Business & Economics*, 14(1), 225-235.
- [9]. Taheam, K., Sharma, R., & Goswami, S. (2016). Drivers of Digital Wallet Usage: Implications for leveraging digital marketing. *International Journal of Economic Research*, 13(1), 175-186.

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