

User Perception On Benefits And Problems Associated With Digital Transactions In The Covid Era

Dr. Praveen Paul Jeyapaul¹, Dr. Jaya Christa S.T.²

¹Professor, Mepco School of Management Studies, Mepco Schlenk Engineering College, Sivakasi, TN, India ORCID ID: orcid.org/0000-0002-3849-4291

²Associate Professor, Department of Electrical and Electronics Engineering, Mepco Schlenk Engineering College, Sivakasi, TN, India ORCID ID: orcid.org/0000-0001-9033-4407

ABSTRACT

Digital transactions are given a big push in India and this becomes more relevant given the COVID pandemic situation since handling of hard cash may be a vector of the deadly virus. Consumer transformation to digital transaction depends on their perceived benefits and problems. Thus the main objective of the study was to examine the consumers' perception of benefits and problems associated with digital transactions. Primary data was collected from 122 respondents who use digital payment modes in a suburban area of Virudhunagar in India. Data was collected using a structured questionnaire with five point Likert scale. Chi square for cross tabulation was used to find if there was a significant difference between the difference groups of respondents. Linear regression was used to find the impact of the factors on the overall preference towards digital transactions. It was found that a large portion of the respondents have used debit cards followed by net banking Paytm and Google pay and few respondents have used credit cards, Phonepe, etc. Fear of misuse of personal information and fear of losing security and safety of financial information had significant impact on the overall preference of digital transactions. It is suggested that if service providers can instil enough confidence on the security of data then most of the consumers will be confident on the digital transactions.

Keywords: Digital transaction, Perceived Benefits, Perceived Problems, Security, Safety

1. INTRODUCTION

The Indian government is giving a big push to build a cashless economy in India. The most significant way to go forward in this direction is to encourage digital payments. Even though the efforts started in 2016, the COVID pandemic that followed much later made the efforts of the government much relevant. Digital payment or electronic payment is a way of payment for purchases and other services which is made through digital, electronic or online modes. In digital payments, both the payer and payee use digital modes to send and receive money. Money transaction could be done through credit or debit cards, net banking services offered by banks, National Electronic Fund Transfer (NEFT), Immediate Payment Service (IMPS), Electronic Clearing Service (ECS), mobile wallets, mobile apps, any of the pre-paid mechanisms or other similar ways (Ministry of Finance, Government of India 2016, February). In India, the government had

demonetized Indian currency on 8th November 2016 and has introduced steps for promotion of digital payments through cards and other digital means and has paved ways to improve the ease of digital transactions for both individuals and businesses.

This move by the Indian government is aimed at reducing the overall cash transactions in the country with an objective to (a) reduce tax avoidance both by individuals and businesses (especially small businesses), (b) reduce the circulation and the subsequent impact of counterfeit money, (c) reduce costs associated with the management of cash in the economy and (d) build a comprehensive transaction history of individuals with a view to enable improved credit access and financial inclusion especially among the underprivileged sections of the society (Centre for Development of Advanced Computing 2019).

After the Indian government's push to build a cashless economy in India, the central bank of India had recorded a prodigious growth in digital transactions till March 2019. This growth in digital transactions indicated that the digital push is gaining momentum. Motivated by this trend the central bank is targeting on volumes four times by 2021. The Reserve bank of India (RBI) reports that during 2018-19, digital transactions in India grew by 19.5 per cent in value terms compared to a growth of 22.2 per cent during 2017-18. A big volume of these digital transactions are accounted for by Real-Time Gross Settlement (RTGS) transactions in value terms (82.8 per cent). Further, the retail component of digital transactions (excluding RTGS customers and interbank transactions) has seen a growth of 59.3 per cent in terms of volume during 2018-19, as against 50.8 per cent growth in the previous year (Mathew, 2019).

In financial year 2018 to 2019, India has observed an enormous growth of 383% in digital payments (Kumar, 2019). At this juncture, National Payments Corporation of India (NPCI) released Unified Payments Interface (UPI), a system that gives consumers access to multiple participating bank accounts into a single mobile application of any bank. Shortly after the launch of UPI, most banks joined hands to provide UPI as a payment mode to the merchants and consumers. This created a good ecosystem for the general public to go for digital transactions (Mathew, 2019).

Many traders believe that online payments will increase the selling price of products due to service charge, thereby decreasing their competitiveness (Acharyya, 2016). This belief will only discourage the traders and their customers from adopting digital transactions. Further, in India cash transaction is still considered mainstream which is evident from the fact that cash transactions have regained the levels as it was before demonetization (Sharma, 2020). Another factor hindering the successful implementation of digitization is the lack of clarity in government policies and infrastructural bottlenecks such as poor internet connectivity, according to a report by ASSOCHAM-Deloitte (Press Trust of India, 2017). In India, a large section of the population does not have an active bank account. This too makes digitalization of transactions next to impossible (Sharma, 2020).

2. REVIEW OF LITERATURE

The Government of India is encouraging everybody to shift to digital payments and is making substantial efforts to reduce the use of cash by businesses and common man alike. In this effort, during November 2016, the Indian government demonetized the existing INR 500 and INR 1,000 Rupee bank notes and introduced new form of rupee notes in these and other denominations (Ligon et al., 2019). Raghavendra Bhat has explicated that this demonetization exercise by the Indian government has accelerated the shift to digital banking in India. Since November 2016, following the demonetization, there has been an exponential growth in the number of digital transactions in the country. Supported by the thrust given by the Government for digitalization of financial transactions, it seems that people of India have finally accepted or embraced the digital economy who were already only comfortable with cash transactions. Presently the demand for cash is diminishing –albeit slowly (Bhat, 2017).

Mobile e-commerce and M-payments was in its infancy during the early 2000s and was gaining growing attention from both business and academic communities (Dewan & Chen, 2005). Over the time, innovation in digital technologies has led to better adoption of digital payments which has boosted the slow penetration of financial inclusion (Tiwari et al., 2019). Customers' acceptance of mobile payment procedures largely depends on cost of internet, security, and convenience. The factors considered for digital payments are optimism and awareness of digital technology, trust, confidence, compatibility and infrastructure, benefits, risk and security for measuring the perception of users of digital technology. (Kreyer et al., 2003).

Many researchers have analyzed the factors that impact on the adoption of digital payment platforms. For example, (Mallat, 2006) considers the factors such as freedom of time and place, accessibility, outcomes for remote installments. It was also observed that education has influence on the usage of the digital payment modes. Another research used the factors influencing the adoption of internet based banking services based on ease of use, internet banking cost, security, trust, speed of transaction and website ambience (Dahlberg et al., 2008). On a similar note, Nayak and Agarwal (2008) studied the elements that impact the choice of credit cards based on the offers on those cards among customers. The factors considered here are benefit offers, limited time offers, premium advantages, money benefits, simplicity of installments, installment charges, card advantages and time advantage. Pulina tried to identify the factors affecting the type of credit card used (Pulina, 2011).

A study by Adeoti and Oshotimehin observing the consumer adoption of point of sale terminals (PoS) for enabling digital transaction, found that factors such as nativity or origin of the PoS equipment, perceived security of PoS terminal, ease of use, proliferation or easy availability of PoS equipment, convenience, intention to use, perceived complexity of the technology of PoS terminal are some of the factors that influence the use and subsequent adoption of PoS terminals. It is recommended that manufacturers of PoS equipment and associated service providers for data connectivity should make efforts to improve the security of transactions and communicate the same to the target audience, make the technology available widely so that the visibility increases and ensure the convenience of use. All the above recommendations or measures will radically reduce cash transactions especially in developing economies (Adeoti & Oshotimehin, 2011).

In a study by Akinola on digital payment the factors considered are fear over privacy issues and computer hackers and the study conclude that security is clearly of crucial importance. Other factors considered are convenience (Akinola, 2012). Akinyemi et al., in their research on acceptance and satisfaction of E-Banking system, have used the factors perceived ease of use, perceived usefulness, perceived credibility and trust that influences the consumers' attitude on e-banking system (Akinyemi et al., 2013). Problems of cashless system of payment are network reliability, fraud, security, transaction charges, literacy, and inadequate infrastructural development (Nwankwo & Eze, 2013). Similar studies also give the factors that influence digital payments such as self-efficacy, ease of use, trust and security exert significant influences on consumers' perception towards e-payment (Teoh et al., 2013).

The key quality attributes of internet banking services can be identified by analyzing internet banking customer and their comments on banking experience. They are the quality of basic services, the strength of the financial products, brand reputation, and the quality of customer service and experience. Findings also show that simplicity and security are crucial aspects for online offerings (Barquin & Vinayak 2015, March). Another study measured the psychology of students in using the cashless transactions and considered the factors like convenience and generational point of entry to new technology among others. It was found that most important feature is that feature of convenience when using cashless financial transactions is the

ease of use associated and also the lack of time faced with the use of cashless payment (Cristobal et al. 2018 April).

Some measures that influence consumer's intention to use e-payment system as complied by Junadi and Sfenrianto are Culture, Perceived Security, Performance Expectancy, Effort Expectancy, Social Influence and Intention to Use Electronic Payment System (Junadi & Sfenrianto, 2015). The factors in a research considered to observe the behavior of customers towards online banking services were trust, societal impact, and security (Taheam et al., 2016).

3. METHODOLOGY

The objectives of this study are to know the users awareness towards online payment modes who reside in semi urban and rural parts of a district in Tamilnadu; to identify the perceived benefits of online transactions by these denizens; and to find the problems faced by them with online transaction. In order to answer the research questions, primary data was collected from 122 respondents who use digital payment modes in a suburban area of Virudhunagar in India. The nature of data used for this research is both Primary data and Secondary data. Data was collected using a structured questionnaire with five point Likert scale whose responses ranged from Strongly Agree to Strongly Disagree through online survey method. The research is descriptive in nature. To know more about the profile of respondents certain demographics were included in the questionnaire such as gender, age, income, occupation etc.

Two major factors were considered for research such as perceived benefits of digital payments and perceived problems of digital payments. Based on the review, under benefits of digital payments, the items included were, Simplicity; Easy to use; convenience of anywhere and at any time; track expenses; safety of not carrying cash and time saving. Under perceived problems of digital payments, the items included were, fear of misuse of personal information; fear of security and safety (bank account details); knowledge required to operate digital payments; poor internet connection leading to the transaction failure; extra service charges levied.

To examine the relationship between the demographic variables, chi-square (χ^2) statistic was used. To find the impact of all the antecedents and establish a causal relationship on the overall preference of digital transactions, linear regression was carried out. The linear regression equation takes the form: $Y=a+bx+e$. Where, Y is the true dependent, 'b' is the regression coefficient for the corresponding x (independent) terms representing the amount the dependent variable y changes when the independent changes 1 unit. The 'a' is the constant or intercept where the regression line intercepts the y axis, and e is the error term reflected in the residual. The data was analysed using IBM® SPSS®.

4. ANALYSIS AND RESULTS

In the first part of this section, the respondents' opinion on the perceived benefits of online transactions by the residents who reside in semi urban and rural parts of a district in Tamilnadu is discussed. In the second part, the problems faced by the respondents with online transaction are studied.

4.1 PERCEIVED BENEFITS OF DIGITAL PAYMENTS

The general characteristics of the opinion of the respondents on the various factors taken up for the perceived benefits of digital payment are examined initially, and then the data is further examined. The Table 1 shows the mean, standard deviation and factor importance for the various factors taken up for the study. The factors with higher mean score is considered to be given higher importance by the respondents while factors with lower mean scores are considered to be lesser important. The most important factor is given an importance value of '1' and the least important factor is given a importance value of '6'.

TABLE 1: Mean and Standard Deviation for items under perceived benefits of digital payments

Sl.	Perceived Benefits of Digital Payment	\bar{x}	σ	Importance
1.	Simplicity	3.92	1.13	4
2.	Easy to use	3.84	1.13	5
3.	Convenience of anywhere and any time	3.82	1.09	6
4.	Track expenses	4.07	0.97	2
5.	Safety of not carrying cash	4.02	0.94	3
6.	Time saving	4.36	0.84	1

While observing Table 1 for the factor influencing the Perceived Benefits of Digital Payment, it can be seen that the respondents in the sample feel that ‘time saving’ in digital payment mode is an important factor (mean value (\bar{x}) is 4.36 for a maximum possible score of 5, standard deviation (σ) is 0.84). The next factor considered to be important as the benefit of digital payment is it helps the respondents to track their expenses easily (\bar{x} is 4.07 for a maximum score of 5, $\sigma = 0.97$). Further, Safety of not carrying cash is considered to be the next important factor that motivates them to use digital payments ($\bar{x} = 4.02$ for a maximum score of 5, $\sigma = 0.94$). This is followed by factors simplicity ($\bar{x} = 3.92$, $\sigma = 1.13$), easy to use ($\bar{x} = 3.84$, $\sigma = 1.13$) and Convenience of using digital payments anywhere and anytime ($\bar{x} = 3.82$, $\sigma = 1.09$).

To analyze if there is a significant difference on the opinion on the various factors of perception of benefits of digital payments between the different demographic groups of respondents, chi square test is applied. First a cross tabulation is made between the different groups of the respondents with their opinion on the perceived benefits of digital transactions. Subsequently the chi square test is conducted on the other groups of respondents and all the values are compiled together for the respective opinion on benefits of digital payments.

4.2 Distribution of respondents on different factors of perceived benefits in using digital transactions

The cross tabulation and the related χ^2 results for the factor various factors pertaining to the perceived benefits of digital payments and the demographics are presented in the Table 2 and Table 3. The outcome of the count of the respondents categorized into various groups based on their opinion on ‘simplicity’, easy to use’ and ‘convenience’ is presented in Table 2 while the factors ‘track expenses’, ‘safety of not carrying cash’ and ‘time saving’ are given in Table 3.

TABLE 2: Crosstab between the factors of perceived benefits in using digital transactions and the demographics

Demography		Simplicity						Easy to Use						Convenience					
		A*	N#	D ^s	Total	Sig	χ^2	A	N	D	Total	Sig	χ^2	A	N	D	Total	Sig	χ^2
Gender	Female	46	32	7	85	.025	11.12	55	21	9	85	.042	9.89	63	8	14	85	.378	4.21
	Male	29	6	2	37			24	5	8	37			24	5	8	37		
Age	<20	7	1	0	8	.000	41.43	7	1	0	8	.323	13.66	8	0	0	8	.001	33.84
	21-30	64	29	7	100			66	19	15	100			73	7	20	100		
	31-40	2	6	0	8			4	4	0	8			4	4	0	8		

	>41	2	2	2	6			2	2	2	6			2	2	2	6		
Occupation	Government employee	0	2	0	2	.005	34.02	0	2	0	2	.075	24.73	2	0	0	2	.000	42.69
	Home maker	0	4	2	6			3	3	0	6			3	3	0	6		
	Private employee	18	9	4	31			16	6	9	31			14	4	13	31		
	Self employed	7	0	0	7			7	0	0	7			7	0	0	7		
	Student	50	23	3	76			53	15	8	76			61	6	9	76		
Education	Secondary	2	0	0	2	.000	46.24	2	0	0	2	.024	23.43	0	2	0	2	.001	32.11
	HSC	0	2	2	4			0	2	2	4			2	0	0	4		
	UG	28	15	4	47			27	11	9	47			31	3	13	47		
	PG	45	21	3	69			50	13	6	69			54	8	7	69		

* – Agree; # – Neutral; \$ – Disagree

TABLE 3: Crosstab between the factors of perceived benefits in using digital transactions and the demographics

Demography		Track expenses					Safety of not carrying cash					Time Saving							
		A*	N#	D\$	Total	Sig	χ ²	A	N	D	Total	Sig	χ ²	A	N	D	Total	Sig	χ ²
Gender	Female	68	7	10	85	.505	2.34	60	18	7	85	.937	0.42	74	7	4	85	.838	1.43
	Male	25	5	7	37			27	8	2	37			31	4	2	37		
Age	<20	7	1	0	8	.005	23.75	6	2	0	8	.010	21.71	7	1	0	8	.005	28.46
	21-30	78	12	10	100			73	20	7	100			88	8	4	100		
	31-40	8	0	0	8			4	4	0	8			8	0	0	8		
	>41	0	4	2	6			4	0	2	6			2	2	2	6		
Occupation	Government employee	0	2	0	2	.000	34.91	2	0	0	2	.281	14.31	2	0	0	2	.222	19.97
	Home maker	5	0	1	6			4	2	0	6			5	0	1	6		
	Private employee	22	2	7	31			17	10	4	31			21	6	4	31		
	Self employed	7	0	0	7			7	0	0	7			7	0	0	7		
	Student	59	13	4	76			57	14	5	76			70	5	1	76		
Education	Secondary	0	2	0	2	.000	31.21	2	0	0	2	.023	19.26	0	0	2	2	.000	72.81
	HSC	2	0	2	4			2	0	2	4			2	2	0	4		
	UG	40	1	6	47			30	13	4	47			39	5	3	47		
	PG	51	14	4	69			53	13	3	69			64	4	1	69		

* – Agree; # – Neutral; \$ – Disagree

Observing the cross tabulation between the opinion on factor ‘simplicity’ to the gender of the respondents, it can be seen that most agree that simplicity of usage of digital modes of payment is a benefit of using digital payments. Very few respondents, both male and female disagree to this factor. To test if there is a significant difference in the opinion on ‘simplicity’ between the various demographic groups considered, a chi square test (χ^2) is carried out and the results are presented in the Tables. Based on the results of the other χ^2 tests we conclude that there is a significant difference on the opinion of ‘simplicity’ between the genders of respondents, differing age group of respondents, occupation, and education level of respondents.

In case of others factors too most of the respondents agree to the factors at varying degrees. Very few respondents, both male and female disagree to these factors. Most of the respondents agree that ‘ease of use’ of usage of digital modes of payment is a benefit of using digital payments. In ‘convenience’ as a factor influencing the perception of benefit of digital transactions, a large portion of the respondents, both males and females agree that the convenience of using digital payments anywhere, any time is a huge benefit of using the same.

Since all the financial transactions are recorded in digital payment mode, it becomes easy for individuals to track the expenses and monitor them effectively, thus ‘ease of tracking personal expenses’ when using digital payment, influencing the perception of benefits in digital payments. Carrying cash may not be safe while travelling or doing shopping during rush hours when there will be big crowds especially during festival seasons, digital transactions become a favored mode, thus the factor ‘safety of not carrying cash’ when using digital payment is considered important by the respondents. In case of ‘time saving’ as an element that influences the respondents’ perceived benefits of digital payments, most of the respondents opine that using digital payments saves time for them.

4.3 IMPACT OF PERCEIVED BENEFITS FACTORS OF DIGITAL TRANSACTION ON THE OVERALL PREFERENCE TO DIGITAL TRANSACTION

To analyze the impact of the variables such as Simplicity, Easy to use, Convenience of anywhere and anytime, Track expenses, Safety of not carrying cash, Time saving on the overall preference of the consumer towards the digital transactions, the linear regression was used. The linear regression was carried out separately for the six factors. The null hypothesis proposed for each of the regression carried out is that there is no significant difference in the impact from the factor considered on the overall preference towards the online transactions of the respondents. Table 4 shows the compiled results of the regressions carried out between the individual factors with overall preference to digital transaction.

TABLE 4: Compiled regressions between the factors of perceived benefits of digital transaction and overall preference of digital payments

Factors	R	R ²	t	Reg Coeff.	Constant	Change Statistics		
						R ²	F	Sig.
Simplicity	.309	.096	3.56	.219	3.142	.096	12.671	.001
Easy to use	.291	.085	3.34	.207	3.207	.085	11.126	.001
Convenience	.321	.103	3.71	.236	3.098	.103	13.764	.000
Track expenses	.244	.060	2.762	.203	3.176	.060	7.628	.007
Safety of not carrying cash	.381	.145	4.520	.324	2.698	.145	20.427	.000
Time saving	.293	.086	3.355	.279	2.785	.086	11.253	.001

While observing Table 4, it is evident that the independent variable ‘simplicity’ has a significant impact on overall preference towards the digital transactions ($F = 12.671$; $p < 0.01$) explaining a variance of 9.6%. Here, since the significance value is less than 0.01, we accept the alternative hypothesis that the variable ‘simplicity’ has a significant impact on the overall preference towards digital transactions of the respondents. In this case, the F value is quite big which signifies the fact that the alternative hypothesis is that much true. The other independent variables namely Easy to use ($F = 11.126$; $p < 0.01$), Convenience ($F = 13.764$; $p < 0.01$), Track expenses ($F = 7.628$; $p < 0.01$), Safety of not carrying cash ($F = 20.427$; $p < 0.01$), and Time saving ($F = 11.253$; $p < 0.01$) also prove to have a significant impact on the overall preference of digital transactions. All the R values are higher which indicates a good level of prediction. It can also be seen from Table 4 that all the t values are bigger thereby the likelihood that the actual value of the parameter is not zero is higher. The factors ‘convenience’ and ‘safety of not carrying cash’ have better R^2 value signifying the fact that they explain a variance of 10.3% and 14.5% respectively. The regression equations of the individual regressions are presented below.

Y = Overall preference for digital transactions

$$Y = 3.142 + 0.219 \times \text{Simplicity} \tag{1}$$

$$Y = 3.207 + .207 \times \text{Easy to use} \tag{2}$$

$$Y = 3.098 + .236 \times \text{Convenience} \tag{3}$$

$$Y = 3.176 + .203 \times \text{Track expenses} \tag{4}$$

$$Y = 2.698 + .324 \times \text{Safety of not carrying cash} \tag{5}$$

$$Y = 2.785 + .279 \times \text{Time saving} \tag{6}$$

The regression equations signify that as the respondents’ opinion on simplicity, easy to use, convenience, ability to track expenses, safety of not carrying cash, time saving on digital payment increases, the feeling that their overall preference of digital transaction also increases. This could be explained by the fact that if respondents feel that the process involved in using digital transaction is simple and not complicated, the process involved is easy to use, digital transactions are convenient helping respondents use them from the convenience of their homes, tender exact change, easy to carry out the transactions etc., the respondents can easily track and monitor their expenses, they have the safety of not carrying cash when they go for shopping or they travel, and saves their time in terms of not having to wait in queues or travel out to shops.

4.4 PERCEIVED PROBLEMS OF DIGITAL PAYMENT

The characteristics of the opinion of the respondents on the various factors taken up for the perceived problems of digital payment are examined in this section through mean and standard deviation. Weighted average is found out by assigning different weights/credits to each of the responses sought in the rating scale. Since the statements in the questionnaire under this section were negative in nature, if respondents agree to a statement then that response was given low weightage and if respondents disagreed to a statement, that response was given higher weightage. Table 5 shows the mean, standard deviation for the various factors taken up for the study.

TABLE 5: Mean and Standard Deviation values for items under perceived problems of digital payments

Sl.	Problems of Digital Payment	\bar{x}	σ	Importance
1.	Fear of misuse of personal information	3.95	1.08	3
2.	Fear of security and safety of financial information	4.07	1.04	2

3.	Knowledge required	4.19	1.12	1
4.	Poor internet connection	3.72	1.23	5
5.	Extra service charges levied	3.75	1.04	4

The importance attached to the factor influencing the perceived problems of respondents on digital payment tabulated in Table 5 shows that the respondents perceive knowledge required to operate digital payments as the most important factor that influences their perception of difficulty with digital payments ($\bar{x} = 4.19$ for a maximum possible score of 5, $\sigma = 1.12$), followed by fear of security and safety ($\bar{x} = 4.07$, $\sigma = 1.04$), fear of misuse of personal information ($\bar{x} = 3.95$, $\sigma = 1.08$), service charges levied ($\bar{x} = 3.75$, $\sigma = 1.04$), and poor internet connection ($\bar{x} = 3.72$, $\sigma = 1.23$).

To investigate if there is a significant difference between the different demographic groups of respondents on their opinion on the various factors of perception of problems associated with digital payments, chi square test on cross tabulation is done. Initially a cross tabulation is made between the different groups of the respondents on their opinion of the perceived problems of digital transactions and consequently chi square test is conducted and all the values are compiled together for the respective opinion on problems of digital payments.

4.5 DISTRIBUTION OF DIFFERENT GROUPS OF RESPONDENTS ON FACTORS OF PERCEIVED PROBLEMS USING DIGITAL TRANSACTIONS

The cross tabulation between the factors related to problems associated with digital transactions and the related χ^2 results are presented in the Table 6 and Table 7. The outcome of the count of the respondents categorized into various groups based on their opinion is given below.

TABLE 6: Crosstab between the factor of perceived problems in using digital transactions and the demographics

Demography		Misuse of personal info					Fear of security					Knowledge required							
		A*	N#	D ^s	Total	Sig	χ^2	A	N	D	Total	Sig	χ^2	A	N	D	Total	Sig	χ^2
Gender	Female	63	12	10	85	.042	9.89	4	29	8	85	.036	10.24	63	18	4	85	.054	9.29
	Male	24	11	2	37			2	7	4	37			22	11	4	37		
Age	<20	6	2	0	8	.132	17.49	7	1	0	8	.007	27.27	6	2	0	8	.000	42.22
	21-30	73	17	10	100			6	31	8	100			75	21	4	100		
	31-40	4	2	2	8			4	2	2	8			2	4	2	8		
	>41	4	2	0	6			2	2	2	6			2	2	2	6		
Occupation	Government employee	2	0	0	2	.067	25.16	2	0	0	2	.001	38.24	2	0	0	2	.006	33.42
	Home maker	5	0	1	6			5	0	1	6			3	2	1	6		
	Private employee	16	9	6	31			1	9	8	31			16	9	6	31		

	Self employed	7	0	0	7			5	2	0	7			5	2	0	7		
	Student	57	14	5	76			4	25	3	76			59	16	1	76		
								8											
Education	Secondary	2	0	0	2	.066	20.04	0	0	2	2			0	0	2	2	.000	67.79
	HSC	2	2	0	4			2	2	0	4			0	4	0	4		
	UG	28	12	7	47			2	11	7	47			30	12	5	47		
	PG	55	9	5	69			4	23	3	69			55	13	1	69		
								3											

* – Agree; # – Neutral; \$ – Disagree

TABLE 7: Crosstab between the factor of perceived problems in using digital transactions and the demographics

Demography		Poor internet					Extra service charges						
		A	N	D	Total	Sig	χ^2	A	N	D	Total	Sig	χ^2
Gender	Female	64	16	5	85	.027	10.99	53	18	14	85	.002	16.99
	Male	27	6	4	37			24	3	10	37		
Age	<20	6	2	0	8	.946	5.33	8	0	0	8	.002	31.55
	21-30	75	16	9	100			59	21	20	100		
	31-40	6	2	0	8			8	0	0	8		
	>41	4	2	0	6			2	0	4	6		
Occupation	Government employee	2	0	0	2	.047	26.54	2	0	0	2	.104	23.37
	Home maker	6	0	0	6			5	0	1	6		
	Private employee	20	7	4	31			14	6	11	31		
	Self employed	7	0	0	7			7	0	0	7		
	Student	56	15	5	76			49	15	12	76		
Education	Secondary	2	0	0	2	.631	9.83	0	0	2	2	.015	24.78
	HSC	2	2	0	4			2	0	2	4		
	UG	34	9	4	47			25	12	10	47		
	PG	53	11	5	69			50	9	10	69		

The results for fear of misuse of personal information’ (such as the users’ residential address, work information, income, family information etc.) and the demographics show that 71.31% of the respondents feel that their personal information may be misused by the parties involved in the digital transaction such as the seller or the money transaction service provider. Only small portion (9.83%) of the respondents are confident that their personal information shared with the seller or the bank will not be misused. Responses based on occupation, education and income also show that most of the respondents believe that their personal information will be misused. From the χ^2 test we conclude that there is no significant difference in the opinion between the respondents with differing age, occupation and education on their fear of misuse of personal information and we also conclude that there is a significant difference between the genders of respondents, and differing income level of respondents at $p > 0.05$.

Observing the results of others factor considered for perceived problems associated with digital transactions, most of the respondents agree to the fact that they fear losing the financial information to unscrupulous vendors or scammers (information such as credit card details, CVV/PIN numbers, bank

account details etc.). Most agree that knowledge required to operate digital transaction as a factor contributing to the problems associated with usage of digital transaction, where they need a basic knowledge on the workings on the transaction process. For some of the users, the process seems to be easy and less complicated, while for those who are not generally comfortable with operating online transactions, this seems to be complicated. This lack of knowledge acts as a problem for the proliferation of digital transactions.

Poor internet connections also act as a factor in contributing to the problems associated with digital transactions. Many times the payment process may not be completed and money will be deducted from one’s bank account while it may not reach the vendor. This will lead to truncated transactions where money is moved but the transaction is incomplete. Even though most often this problem will be addressed by the banks in a day or two, the problem caused by poor internet connection will give rise to a feeling of anxiety among the shoppers and they may restrain themselves from digital transaction.

The next aspect considered as a problem influencing the digital transaction is the ‘service charges levied for digital transactions’ by the vendors and service providers. In India, most of the digital transactions attract a service charge to a maximum of 18% on the total amount of transaction made. Most of the buyers and users of digital transactions are aware of this fact and go for decision on online transactions accordingly. Even though all the respondents knew about the service charges levied for digital transactions, most (63.11%) of them see that it is a problem affecting their digital transactions. This shows that most of the respondents are not happy with the charges on digital transactions.

4.6 IMPACT OF PERCEIVED PROBLEMS OF DIGITAL TRANSACTION ON THE OVERALL PREFERENCE TO DIGITAL TRANSACTION

To analyze the impact of the factors pertaining to the perceived problems associated with digital transactions such as fear of misuse of personal information, fear of losing security and safety of financial information, ‘knowledge required’ to operate digital transactions, poor internet connection, service charges levied on the overall preference of the consumer towards the digital transactions, separate linear regression was used. Table 8 shows the compiled results of the regressions carried out between the individual factors with overall preference to digital transaction.

TABLE 8: Compiled regressions between the factors of perceived problems of digital transactions and overall preference of digital payments

Factors	R	R ²	t	Reg Coeff.	Constant	Change Statistics		
						R ²	F	Sig.
Fear of misuse of personal information	.209	.044	12.487	-.271	3.387	.044	5.495	.021
Security and safety of financial information	.188	.035	12.803	-.145	3.454	.035	4.408	.038
Knowledge required	.148	.022	12.119	-	-	.022	2.692	.103
Poor internet Connection	.027	.001	14.436	-	-	.001	.091	.764
Service charges Levied	.075	.006	16.462	-	-	.006	.679	.412

The values presented in Table 8 shows that only the variables ‘fear of misuse of personal information’ (F = 5.495; p < 0.05) and ‘fear of losing security and safety of financial information’ (F = 4.408; p < 0.05) have a significant impact on overall preference towards the digital transactions explaining a variance of 4.4% and 3.5% respectively. The regression equations of those factors that have a significant impact on the overall preference for digital transactions are interpreted for further discussion.

Y = Overall preference for digital transactions

$$Y = 3.387 - 0.271 \times \text{Fear of misuse of personal information} \quad (7)$$

$$Y = 3.454 - 0.145 \times \text{Fear of losing security and safety of financial information} \quad (8)$$

The regression equations signify that as the respondents' opinion on 'fear of misuse of personal information' and 'fear of losing security and safety of financial information' on digital payment increases, the feeling that their overall preference of digital transaction decreases. It can be seen from the regressions carried out that of the five factors considered as problems associated with the digital transactions, only the factors pertaining to the fear of losing personal information and security contribute to the respondents feeling of problems associated with digital transactions. Other factors do not impact the respondents' perception of problem associated with digital transactions.

5. CONCLUSION

This research intends to study the behavior of consumers towards digital transactions in this COVID era. Sample size of 122 has been taken for the study and all of the respondents go online for digital transactions. Almost all respondents are aware of at least any one of the digital transaction methods such as net banking debit cards credit cards Google pay et cetera. A large portion of the respondents have used debit cards followed by net banking Paytm and Google pay. Very few respondents have used credit cards, Phonepe etc.

The research intended to study the perceived benefits and perceived problems associated with digital payments by the respondents. Most of the respondents have considered that digital transaction helps them save time. The second most important factor is the ability to track their expenses. The next factor which is considered important is the safety of not carrying cash on oneself while shopping during peak hours especially during festival season. Further, the next most important factor considered as a benefit of digital transaction is the simplicity of using these transactions followed by the factor shopping in the convenience of their home. The outcome of the regressions also confirms that all the factors considered have a significant impact on the overall preference towards digital transactions.

The next section of the study focused on the perceived problems associated with digital transactions. It was found that most of the respondents considered the knowledge required for operating digital transaction are one of the biggest problems associated with the same. This is followed by fear of security and safety of financial information and most of the respondents do not have the confidence that the financial Institutions or the vendors who handle their financial and personal information will provide the necessary security for that information. Most of the respondents were aware of the service charges levied and this is not considered to be a problem associated with digital transactions. Further, since most of the respondents had good internet connection, that also is not considered as a big issue in carrying out digital transactions. From the regression it was found that only the factors- fear of misuse of personal information and fear of losing security and safety of financial information had significant impact on the overall preference of digital transactions. Other factors had no significant impact on the overall perception of digital transactions.

From the results it can be concluded that if the banks and service providers address that fears of the users of digital transactions, they will be in a better position to convert a lot of general public to use more digital transactions. It is suggested that if service providers (the banks, merchants and payment processing service providers) can provide enough assurance about the security of consumer data such as the personal information and the financial information and instill enough confidence on the security of data then most of the consumers will be confident on the digital transactions. Further, conventional money transactions are time consuming and constrained by location of banks which is in converse to digital transactions. If this disadvantage of conventional money transactions and the advantages of digital transactions such as

simplicity of digital transactions, ease of use, convenience of anywhere and anytime, ability to track expenses, safety of not carrying cash, and time saving are highlighted, it will prove to be effective in convincing people to adopt digital transactions.

ACKNOWLEDGEMENT

The authors wish to thank the Authorities of Mepco Schlenk Engineering College for their continuous support and encouragement in this research.

REFERENCES

1. Acharyya, K. (2016). Demonetisation: Digital transactions meet roadblocks in rural India, effects felt everywhere FirstPost, December.
2. Adeoti, O. O. & Oshotimehin, K. O. (2011). Factors influencing consumers adoption of point of sale terminals in Nigeria. *Journal of Emerging Trends in Economics and Management Sciences*, 2 (5), 388-392.
3. Akinola, S. (2012). Cashless Society, Problems and Prospects, Data Mining Research Potentials. *International Journal of Computer Science and Telecommunications*, 3 (8), 49-55.
4. Akinyemi, I. O., Asani, E., & Adigun, A. A. (2013). An Investigation of Users' Acceptance and Satisfaction of E-Banking System as a Panacea towards a Cashless Economy in Nigeria. *Journal of Emerging Trends in Computing and Information Sciences*, 4 (12), 954-963.
5. Barquin, J. & Vinayak, H. 2015, March. "Digital Banking in Asia: What do consumers really want?" Asia Banking Practice, McKinsey & Company, Australia.
6. Bhat, M. (2017). Digital Banking - An Indian Perspective Financial Foresights - Digital Banking: New horizons in a cash-light India, April, 12-14.
7. Centre for Development of Advanced Computing, (2019). "Promotion of Payments through cards and digital means." India Development Gateway (InDG) Initiative, Hyderabad.
8. Cristobal, MA., Malayang, C., Sampan, MT., & Solina, ME. 2018 April. "A Research Study on the Effects of Cashless Transactions on People's Spending Behavior." Thesis, College of Saint Benilde, Manila, Manila.
9. Dahlberg, M., Mallat, S., Ondrus, J., & Zmijewska, J. (2008). Past, present and future of mobile payments research: A literature review. *Electronic Commerce Research and Applications*, 7 (2), 165-181.
10. Dewan, S. G. & Chen, L. (2005). Mobile Payment Adoption in the US: A Cross-industry, Crossplatform Solution. *Journal of Information Privacy and Security*, 1 (2), 4-28.
11. Junadi, & Sfenrianto, (2015). International Conference on Computer Science and Computational Intelligence (ICCSCI 2015), Jakarta, Indonesia (pp. 214 – 220).
12. Kreyer, N., Pousttchi, J., & Turowski, J. (2003). Mobile Payment Procedures: Scope and Characteristics. *e-Service Journal*, 2 (3), 7-22.
13. Kumar, S. (2019). India Sees 383% Growth in Digital Payments From FY'18 to FY'19 – The Era of Rising Fintech Razorpay, October.
14. Ligon, S., Mallick, S., Sheth, S., & Trachtman, S. (2019). What explains low adoption of digital payment technologies? Evidence from smallscale merchants in Jaipur, India. *PLoS ONE*, 14 (7: e0219450), 1-22.
15. Mallat, S. (2006). Exploring Consumer Adoption of Mobile Payments - A Qualitative Study. *Sprouts: Working Papers on Information Systems*, 6 (44), 1-14.

16. Mathew, G. (2019). Digital transactions set to rise four times by 2021: Reserve Bank of India The New Indian Express, June.
17. MoFGol. 2016, February. "Promotion of Payments through Cards and Digital Means." Office Memorandum, Department of Economic Affairs, Currency & Coinage Division, New Delhi.
18. Nayak, T. K. & Agarwal, M. (2008). Consumer's Behavior in Selecting Credit Cards. *Journal of Services Marketing*, 6 (4), 49-59.
19. Nwankwo,. & Eze,.. (2013). Electronic Payment in Cashless Economy of Nigeria: Problems and Prospect. *Journal of Management Research*, 5 (1), 138-151.
20. Press Trust of India, (2017). 'Digital India' faces multiple roadblocks *Economic Times*, January.
21. Pulina,. (2011). Consumer behaviour in the credit card market: a banking case study. *International Journal of Consumer studies*, 35 (1), 86-94.
22. Sharma, S. (2020). Cash still king, demonetisation effect gone; digital payments rising but face two key roadblocks *Financial Express*, May.
23. 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.
24. Teoh,.., Chong,.., Lin,.., & Chua,.. (2013). Factors affecting consumers' perception of electronic payment: an empirical analysis. *Internet Research*, 23 (4), 465-485.
25. Tiwari,.., Srivastava,.., & Kumar, S. (2019). Adoption of digital payment methods in India. *International Journal of Electronic Finance*, 9 (3), 217-229.