# An Insight into Adaptation of Online Payment Applications Among Digital Indian Customers

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## ABSTRACT

The biggest advantage of cashless transactions for society is that the traceability. Because they're readable, it's all above the table and doesn't generate black money or shadow economy. Also it helps better tax income which may be invested back in infrastructure and welfare. The initiative taken by the government of India will have an enormous impact on increasing the utilization opportunities, reduce cash related robberies and thefts and thereby reducing the danger of carrying cash. This world has moved from cash transactions to cashless transactions with the development of the digital transactions and digital India initiative. The focus of this paper is on the usage of online payment Applications (APPs) by the digital adaptation of Indian Customers. Based on the literature survey the key beneficial Applications were identified. This paper makes a descriptive study among 100 respondents. The concluding observations of the study were that there is no significant relationship between age and credit card, mobile wallets, Mobile Banking, Prepaid Payment Instrument (PPI), Unified Payment Interface (UPI), Mobile Applications (APPs).

#### Keywords: Credit card, Debit card, Google pay, Debit card, and Phone Pe.

### **INTRODUCTION**

Digital transactions are defined as transactions during which the customer authorizes the transfer of cash through electronic means, and therefore the funds flow directly from one account to a different. These accounts might be held in banks, or with entities/ providers. A cashless economy is where financial dealings aren't being wiped out the terms of currency notes, coins or physical cash money. It had been in trend by barter age of cashless transaction and other methods of interchange like food crops or other goods. However, the new concepts of cashless transactions in cashless economy are made with the assistance of digital currencies where money is exchanged and recorded only within the electronic digital form. Mobile Wallets Mobile wallets became a convenient way of creating payments without cash. Once the consumer load money into their mobile wallet, they will use it wherever it's accepted. The

foremost popular mobile wallet that's trending is Paytm. UPI Applications (Unified Payment Interface). UPI has altered the way the individual transact. At the core of UPIs functionality is that the incontrovertible fact that our mobile numbers are registered with our respective banks and linked to our accounts. The contact number linked with the bank account helps to create a virtual link address to send or receive money without the help of the bank account details. Debit and Credit Cards Debit and credit cards have caught on as a way of cashless trading. An openend credit is taken into account by many to be harmless because the consumer transacting with money in their account. The danger with a MasterCard is extravagance. Debit and credit cards are often wont to make purchases online also as over-the-counter at a store. IMPS are a service that is initiated by the National Payment Corporation of India. The pre-condition to avail IMPS services is that a user must also register for mobile banking. If the user has registered their mobile numbers, the user can avail the facility of the IMPS service without the internet. Money are often sent or received 27\*7, and there's no cut-off time for transactions.

### LITERATURE REVIEW

**Kamakodi 2022** This payment solution eliminates the need to carry cash, or even a wallet for that matter, and offers unparalleled and superior customer experience to cater to their day-today shopping needs. Rupay On-The-Go carries all the security features, notifications and controls of a regular card, and users can transact with the comfort of their safety.

Nikita Prasad 2021contactless prepaid cards which will serve as a multi-purpose card for citizens, providing a one-stop solution for making various kinds of payments in the city and across the country. It is a Ru-Pay powered co-branded, contactless prepaid card, which will facilitate various digital payments like tax and utility bill payments at the GCC centres. The card helps in making retail payments and also in other e-commerce websites across the country. Samaya Dharma Raj 2021 the contactless payment solution technology will eliminate the need to carry physical cash or any other cards by enabling the easiest way of "tap, pay, go" mechanism. It is expected to "revolutionise contactless payments with a superior customer experience that is smart, fashionable, super quick, convenient, and completely secure," the statement noted.

**Nalin Bansal 2021**"The future of digital payments with contactless mobility" For our dream to build a digital world to come alive, wireless technologies has a critical role to play. While the first step towards that dream is availability, "speed & convenience" at which you can access your world will constitute the next level of innovation.

**Chandralekha.V** (2019) 'A study on cashless economy in India" The future of the cashless India is promising as the reply of the nation people towards this move of the government and the government is more likely to near the digital transactions. GDP increase will shoot up with the digital payment gateways through the e-commerce. This will increase the credibility of the country and make a rise in investments.

**Richa Goel, Seema Sahai, Anita Vinaik, Vikas Garg (2019)** "Moving from Cash to Cashless Economy: A Study of Consumer Perception towards Digital Transactions "offers and cash backs are the various factors that influence the people. There is a very long gap to become a fully a cashless economy for a flat and protected structure. Digital payment methods are mostly used by working professionals and business class people and corporates. **RESEARCH GAP** The researcher intends to spot the gap and makes a study on the digital insights on cashless transactions on the attitude of the consumers using mobile wallets. There have been several studies concerning the digital transaction its future scope, risks involved, upcoming progressiveness, and latest innovations which features a huge impact over the economy. But there have been only a few studies associated with consumer's perspective adaptation towards digital transactions. During this study the researcher has investigated the consumer's insights on digital transactions among digital users and has also identified a number of the variables concerning the digital transactions and consumer's insights towards the digital economy.

### **OBJECTIVES OF THE STUDY**

To identify the effectiveness of digitalized methods of payment adaptation among consumers and also to identify the different payment modes of transaction.

### HYPOTHESES FOR THE STUDY

H0<sub>1</sub>- There is no significant relationship between age and Debit cards
H0<sub>2</sub>- There is no significant relationship between age and credit cards
H0<sub>3</sub>- There is no significant relationship between age and mobile wallets
H0<sub>4</sub>- There is no significant relationship between age and net banking
H0<sub>5</sub>- There is no significant relationship between age and mobile banking
H0<sub>6</sub>- There is no significant relationship between age and PPI
H0<sub>7</sub>- There is no significant relationship between age and UPI
H0<sub>8</sub>- There is no significant relationship between age and mobile APPs
H0<sub>9</sub>. There is no association between Occupation and most preferred mobile transaction APPs.

Table-1 Research methodology						
Research Design	Descriptive					
Sampling area	Chennai city					
Sample Size	100					
Research Instrument	Self-designed structured printed questionnaire with scored using					
	a five - Point Likert scale					
Collection of Data	Primary data- questionnaire;					
	Secondary data- Journals					
Period of Study	January – June 2022					
Statistical Techniques	Correlation analysis, One-Way ANOVA and Cronbach's alpha.					
Source: Compiled by the Authors						

# **RESEARCH METHODOLOGY**

**Interpretation:** Table 1 consists of the research plan adopted in the study and design, techniques, sample, method of data approached for the research work along with information of statistical models used to evaluate the sampling data.

# DATA ANALYSIS AND INTERPRETATION

# **Demographic profile**

Table 2- Demographic profile						
Particulars	Freq.	%				
Age	Below 18 years	10	10.0			
	18-25 years	53	53.0			
	25-30 years	15	15.0			
	Above 30 years	22	22.0			
	Total	100	100.0			
Gender	Male	62	62.0			
	Female	38	38.0			
	Total	100	100.0			
Qualification	Below UG	15	15.0			
	UG	30	30.0			
	PG	40	40.0			

	Professional course	15	15.0			
	Total	100	100			
Occupation	Salaried	40	40.0			
	Business	10	10.0			
	Student	14	14.0			
	Profession	6	6.0			
	Retired	13	13.0			
	House wife	17	17.0			
	Total	100	100.0			
Income	Below Rs.20000	28	28.0			
	Rs.20000-Rs.30000	17	17.0			
	RS.30000-Rs.40000	45	45.0			
	Above Rs.40000	10	10.0			
	Total	100	100.0			
Source: Primary Data Analysis						

**Interpretation:** Table 2 shows that out of 100 respondents 10% of the respondents fall under the age group of below 18 years, 53% of the respondents are from the age group of 18-25 years, 15% come under the age group of 25-30 years and the remaining respondents are from the age group of above 30 years. There were 62% of the female respondents and 38% female respondents taken for the study. Out of 100 respondents, 15% of the respondents were below UG, 30% of the respondents were under-graduate, 40% of the respondents were post-graduate, and the balance 15% of the respondents were from the professional courses. Out of 100 respondents, 40% of the respondents to salaried group, 10% belong to business, 14% belong to student, 6% belong to profession, 13% belong to retired and 17% of the respondents belong to House wife. Out of 100 respondents, 28% of the respondents have monthly income of below Rs.20000, 17% of the respondents have Rs.20000-Rs.40000 and 10% of the respondents have a monthly income of above Rs.40000.

Table-3 Correlations- Digitalized methods										
		Age	Debit	Credit	Mobile	Net	Mobile	PPI	UPI	Mobile
			cards	cards	wallets	Banking	banking			APPs
Age	R	1	.059	.415**	.011	.900	.159	.170	142	.107
	Sig		.058	.000	.272	.000	.113	.092	.158	.288
Dabit cards	r		1	286**	.344**	.436**	.238*	.467**	.514**	.369**
Debit calus	Sig			.004	.000	.000	.017	.000	.000	.000
Credit	r			1	200*	.269**	352**	.153	.129	161
cards	Sig				.046	.007	.000	.128	.202	.109
Mobile	r				1	.456**	.616**	.736**	.504**	.863**
wallets	Sig					.000	.000	.000	.000	.000
Net	r					1	.322**	.843**	.939**	.464**
Banking	Sig						.001	.000	.000	.000
Mahila	r						1	.575**	.154	.496**
banking	Sig							.000	.127	.000
DDI	r							1	.753**	.527**
TT1	Sig								.000	.000
LIDI	r								1	.554**
UPI	Sig									.000
Mobile	r									1
APPs	Sig									
Source: Primary Data Analysis										

# **Correlation Analysis**

**Interpretation:** 

 $HO_1$ - There is no significant relationship between age and Debit cards the correlation table reveals that Pearson's coefficient of correlation value for the relationship between age and debit cards is 0.59, which shows a moderate positive correlation. Since, the p value is 0.058 which

is greater than 0.05, the null hypothesis is accepted. Hence, there is no significant relationship between age and debit cards in the digitalized mode of payment.

 $H0_2$ - There is no significant relationship between age and credit cards the correlation table reveals that Pearson's coefficient of correlation value for the relationship between age and credit cards is 0.415, which shows a moderate positive correlation. Since, the p value is 0.000 which is less than 0.05, the null hypothesis is rejected. Hence, there is a significant relationship between age and credit cards in the digitalized mode of payment.

 $H0_3$ - There is no significant relationship between age and mobile wallets. The correlation table reveals that Pearson's coefficient of correlation value for the relationship between age and mobile wallets is 0.011, which shows a low positive correlation. Since, the p value is 0.272 which is greater than 0.05, the null hypothesis is accepted. Hence, there is significant relationship between age and mobile wallets in the digitalized mode of payment.

H0<sub>4</sub>- **There is no significant relationship between age and net banking** the correlation table reveals that Pearson's coefficient of correlation value for the relationship between age and net banking is 0.900, which shows a high positive correlation. Since, the p value is 0.000 which is less than 0.05, the null hypothesis is rejected. Hence, there is no significant relationship between age and net banking in the digitalized mode of payment.

H0<sub>5</sub>- **There is no significant relationship between age and mobile banking** the correlation table reveals that Pearson's coefficient of correlation value for the relationship between age and mobile banking is 0.159, which shows a moderate positive correlation. Since, the p value is 0.113 which is greater than 0.05, the null hypothesis is accepted. Hence, there is significant relationship between age and mobile banking in the digitalized mode of payment.

 $H0_6$ - There is no significant relationship between age and PPI the correlation table reveals that Pearson's coefficient of correlation value for the relationship between age and PPI is 0.170, which shows a low positive correlation. Since, the p value is 0.092 which is greater than 0.05, the null hypothesis is accepted. Hence, there is significant relationship between age and PPI in the digitalized mode of payment.

 $H0_7$ - There is no significant relationship between age and UPI The correlation table reveals that Pearson's coefficient of correlation value for the relationship between age and UPI is 0.142, which shows a low positive correlation. Since, the p value is 0.158 which is greater than

0.05, the null hypothesis is accepted. Hence, there is significant relationship between age and UPI in the digitalized mode of payment.

 $HO_8$ - There is no significant relationship between age and mobile APPs the correlation table reveals that Pearson's coefficient of correlation value for the relationship between age and mobile APPs is 0.107, which shows a low positive correlation. Since, the p value is 0.288 which is greater than 0.05, the null hypothesis is accepted. Hence, there is significant relationship between age and mobile APPs in the digitalized mode of payment.

Table-4 One-Way Anova								
		F	P value					
	Salarie d	Busines s	Studen t	Professio n	Retire d	Hous e wife	value	
Paytm	1.50 <sup>ab</sup> (0.57)	1.00 <sup>a</sup> (0.00)	1.50 <sup>ab</sup> (0.51)	1.73 <sup>b</sup> (0.70)	1.67 <sup>ab</sup> (0.70)	1.57 <sup>ab</sup> (0.78)	2.077	0.075*
PayPal	2.75 <sup>c</sup> (1.28)	1.00 <sup>a</sup> (0.00)	1.50 <sup>ab</sup> (0.51)	2.56 <sup>c</sup> (0.91)	2.33 <sup>bc</sup> (1.00)	2.00 <sup>bc</sup> (0.81)	8.431	0.000* *
Pay U	2.75 <sup>b</sup> (1.25)	1.00 <sup>a</sup> (0.00)	1.50 <sup>a</sup> (0.51)	2.85 <sup>b</sup> (0.84)	2.56 <sup>b</sup> (1.01)	2.29 <sup>b</sup> (0.95)	13.12 8	0.000* *
MobiKwi k	3.00 <sup>c</sup> (1.63)	1.00 <sup>a</sup> (0.00)	1.50 <sup>ab</sup> (0.51)	2.85 <sup>c</sup> (1.26)	2.56 <sup>bc</sup> (1.33)	2.40 <sup>bc</sup> (1.28)	6.911	0.000* *
Phonepe	2.50 <sup>c</sup> (1.29)	1.00 <sup>a</sup> (0.00)	1.50 <sup>ab</sup> (0.51)	2.56 <sup>c</sup> (0.91)	2.33 <sup>bc</sup> (1.00)	2.14 <sup>bc</sup> (0.90)	7.984	0.000* *
Airtel money	2.75 <sup>b</sup> (1.25)	1.00 <sup>a</sup> (0.00)	2.00 <sup>b</sup> (1.03)	2.56 <sup>b</sup> (0.91)	2.44 <sup>b</sup> (1.01)	2.14 <sup>b</sup> (0.90)	5.127	0.000* *
Google pay	2.75 <sup>b</sup> (2.06)	1.00 <sup>a</sup> (0.00)	1.50 <sup>ab</sup> (0.51)	2.75 <sup>b</sup> (1.49)	2.44 <sup>b</sup> (1.50)	1.86 <sup>ab</sup> (1.06)	4.488	0.001* *

# **One-way ANOVA**

Free	3.00 <sup>b</sup>	2.00 <sup>a</sup>	2.50 <sup>ab</sup>	2.71 <sup>ab</sup>	2.67 <sup>ab</sup>	2.43 <sup>ab</sup>	1 175	0.227*	
charge	(1.414)	(0.00)	(0.51)	(1.048)	(1.00)	(0.53)	1.175	0.327*	
Samsung	2.25 <sup>a</sup>	2.00 <sup>a</sup>	2.50 <sup>a</sup>	2.13 <sup>a</sup>	2.22 <sup>a</sup>	2.29 <sup>a</sup>	752	0.596*	
pay	(0.95)	(0.00)	(0.51)	(0.84)	(0.83)	(0.75)	.755	0.580*	
Amazon	3.00 <sup>b</sup>	1.00 <sup>a</sup>	2.50 <sup>b</sup>	2.85 <sup>b</sup>	2.78 <sup>b</sup>	2.43 <sup>b</sup>	4 5 1 7	0.001*	
Pay	(1.41)	(0.00)	(0.51)	(1.26)	(1.20)	(1.13)	4.517	*	
Apple	2.50 <sup>b</sup>	1.00 <sup>a</sup>	2.50 <sup>b</sup>	2.71 <sup>b</sup>	2.67 <sup>b</sup>	2.57 <sup>b</sup>	6.040	0.000*	
Pay	(1.00)	(0.00)	(0.51)	(0.89)	(0.86)	(0.97)	0.949	*	
Future	3.25 <sup>b</sup>	1.00 <sup>a</sup>	2.50 <sup>b</sup>	3.15 <sup>b</sup>	3.00 <sup>b</sup>	2.57 <sup>b</sup>	6 202	0.000*	
pay	(1.70)	(0.00)	(0.51)	(1.26)	(1.22)	(0.97)	0.202	*	
Yono SBI	2.25 <sup>b</sup>	1.00 <sup>a</sup>	2.00 <sup>b</sup>	2.13 <sup>b</sup>	2.11 <sup>b</sup>	2.00 <sup>b</sup>	6 470	0.000*	
	(0.95)	(0.00)	(0.00)	(0.64)	(0.60)	(0.57)	6.479	*	
Citi	2 25 <sup>b</sup>	1 00 <sup>a</sup>	2 50 <sup>b</sup>	2 13 <sup>b</sup>	2.22 <sup>b</sup>	2.14 <sup>b</sup>			
master	(1.50)	(0.00)	(0.51)	(1.12)	(1.09)	(0.90)	2.709	0.025*	
pass	(1.50)	(0.00)	(0.31)	(1.13)					
HDFC	1.75a <sup>b</sup>	1.00 <sup>a</sup>	2.00 <sup>b</sup>	1.98 <sup>b</sup>	2.00 <sup>b</sup>	2.14 <sup>b</sup>	2 (10	0.020*	
PayZapp	(0.95)	(0.00)	(0.00)	(0.93)	(0.86)	(0.90)	2.610	0.030*	
ICICI	2.25 <sup>b</sup>	1.00 <sup>a</sup>	2.50 <sup>b</sup>	2.42 <sup>b</sup>	2.44 <sup>b</sup>	2.43 <sup>b</sup>	2 796	0.004*	
Pockets	(1.50)	(0.00)	(0.51)	(1.06)	(1.01)	(0.78)	3.780	*	
BHIM	2.50 <sup>b</sup>	1.00 <sup>a</sup>	2.50 <sup>b</sup>	2.56 <sup>b</sup>	2.56 <sup>b</sup>	2.43 <sup>b</sup>	8 <b>2</b> 60	0.000*	
Axis pay	(1.00)	(0.00)	(0.51)	(0.73)	(0.72)	(0.78)	8.200	*	
Source: Primary Data Analysis									

Note: 1. The value within bracket refers to SD

2. Different alphabet among Educational Qualifications denotes significant at 5% level

Interpretation: H0<sub>9</sub>. There is no association between Age group and most preferred mobile transaction APPs. Since P value is less than 0.01, null hypothesis is rejected at 1% level with regard to Paytm, PayU, MobiKwik, PhonePe, Airtel Money, Google Pay, Amazon Pay, Apple Pay, Future Pay, Yono SBI, and BHIM Axis Pay. Hence there is significance difference among Occupation with regard to the PayPal, PayU, MobiKwik, PhonePe, Airtel Money, Google Pay, Amazon Pay, Apple Pay, Amazon Pay, Apple Pay, Future Pay, Yono SBI, and BHIM Axis PayU, MobiKwik, PhonePe, Airtel Money, Google Pay, Amazon Pay, Apple Pay, Future Pay, Yono SBI, and BHIM Axis Pay.

Since P value is less than 0.05, the null hypothesis is rejected at 5% level with regard to Citi master pass, HDFC PayZapp, ICICI pockets. Hence there is significant difference among Occupation with regard to Citi master pass, HDFC PayZapp, ICICI pockets.

There is no significance difference among Occupation with regard to PayPal, Freecharge, Samsung Pay, since P value is greater than 0.05. Hence the null hypothesis is accepted at 5% level with regard to PayPal, Freecharge, and Samsung Pay.

#### FINDINGS FROM THE STUDY

**Demographic profile:** The majority respondents for the study were male from the age group of 18-25 years have completed their post-Graduate working in the private sector and earning Rs.30000-40000.

**Correlation Analysis:** There is no significant relationship between age and debit card and net banking. There is significant relationship between age and credit card, mobile wallets, mobile banking, PPI, UPI, mobile APPs.

**One-way ANOVA:** There is no significant difference among occupation with regard to PayPal, Free charge, and Samsung Pay. There is significant difference among occupation with regard to PayU, MobiKwik, PhonePe, Airtel Money, Google Pay, Amazon Pay, Future Pay, Apple Pay, Yono SBI, BHIM Axis Pay, Citi Master pass, HDFC PayZapp, ICICI pockets.

## CONCLUSION AND SUGGESTIONS

Going digital will help keep track of the monetary transactions happening and can pose more security on individual's wealth. Digital payments also will be a step for an eco-friendly environment because the usage of paper reduces. A drawback factor to the making of a digital India is going to be the high rates of illiteracy and poverty. Within the development of Indian Economy, banking sector plays a really important and crucial role. Banks must encourage their merchants by eliminating charges if they use certain number of transaction per month. Many government departments or institutions like electricity department are charging additional amount as service fee on card payments. Most of the people in India are price sensitive; government should encourage the citizens positively. The cardboard payments and net banking includes charges so people aren't interested to use them.

#### **SCOPE FOR FURTHER RESEARCH**

Further the study is often administered for evaluating the merchant's perception and gratification on the digital payment services. Future researchers can make the study on measuring the economies improvement before and after the digital payment services. The researchers can study the issues faced by the consumers while undergoing the digitalized transactions phase. Researchers also can specialise in customer's awareness and gratification on the digital payment services in rural areas in India.

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