Factors Influencing Digital Payment: With Special Reference to UPI Apps

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Abstract
Tremendous change in payment system after demonetization leads to the entry of various payment apps like google pay, paypal, paytm, phonepe etc. The transformation towards digitalization in payment, benefits both consumers and business organizations. Enormous factors influence the utility of digital payment. This paper focuses on the analysis of determinants of the usage of payment app. Primary data are collected from 148 respondents through questionnaire and the collected data are analysed using statistical tools Percentage analysis, ANOVA, and Chi-square.
Keywords: Digitalisation, Payment Apps

Introduction

Many Changes took place in every field of activity in this dynamicworld. Digitalisation is one of the tremendous change factor even from a small deal to a big deal. The interference of digitalisation payment system has created a huge change in the payment method among consumers. There occurs a smooth shift from traditional cash payment to digital payment. As demonetization was introduced in India, the digital wallet companies attired the opportunities with both the hands to enlarge their market share. It has created huge growth opening for digital payment in India and has offered an exclusive platform for adoption of digital payment, as an alternative to cash for Indian consumers. This transformation in payment system leads to the emergence of several digital payment applications, including the Aadhaar Payment app, the UPI app, and the Bharat Interface for Money (BHIM) app was developed by National Payments Corporation of India (NPCI) Digital transfers using apps has resulted in behavioral change and helped in the implementation of digital payment. They make ease of money transfer in rural areas which was not touched earlier by the digital payment method.As it is expected that thedigital payment industry has a huge scope of tremendous expansion in India foreign digital payment companies are trying to grab the opportunities. Though there are various methods of digital payment , in this paper the objective is focussed on the analysis of consumers' preference towards the UPI method which include various apps such as

Digital Payment Modes in India

The cash transactions that take place via digital or online modes with no physical exchange of money are called digital payment.The payer and the payee, use only electronic mediums to exchange money. Several measures have been undertaken to promote and encourage digital payments in India.

There are various types and methods of digital payments available in India. They are: Banking Cards, Unstructured Supplementary Service Data (USSD), Online or mobile wallets, Prepaid credit cards Debit/RuPay cards, AEPS (Aadhaar Enabled Payment System), (UPI) Unified Payments Interface, Mobile Wallets, Bank Prepaid Cards, PoS Terminals, Internet Banking and mobile baking.

The digital payments bring multiple benefits the table. One of the most significant advantages of digital payment is the all-in-one experience they provide to customers. The assistances such as reduced dependency on cash, fast transfer speed, and the ease of transacting make online payments a preferred choice. Traditional payment approaches like cash and cheques lead to risk, steps, and physical presence. Digital payment, provide us a comfortable environment in which we an send and receive funds from anywhere in the world at the click of a button.

As customers transact more online when they see the ease, convenience, and security of online payments the money movement increases and online business contributes to the progress of the economy. Handling and dealing in cash is a tedious task. With digital payments, one can retain their funds secured in online format smoothly.

Unified Payment Interface (UPI)

Unified Payment Interface which is known as UPI, has expanded immense popularity. It controls multiple bank accounts (of any participating banks) into a single mobile application that allows several banking features, unified fund routing, and merchant payments under a single roof. Presently, 224 banks are live on the UPI. UPI apps have aided to make cashless transactions–an aspect that changed from merely a luxury to a necessity during the coronavirus pandemic The top UPI apps used in India right now are Google Pay, PhonePe, Paytm, Amazon Pay, BHIM Axis Pay Jio Pay WhatsApp Pay, and Mobikwik. Any UPI client app may be used and multiple bank accounts may be connected to single app. Possibility of instant payment through Immediate Payment Service (IMPS) which is faster than NEFT is the major plus point of UPI apps. Two Factor authentication process, Virtual Payment Address which is a unique ID given by the bank , Bill

Sharing facility available, The facility of complaints filing from mobile are the main features of UPI.

Objectives of the Study
The objectives of the study are as follows:
1. To study the concept of Digital payment and Unified Payment Interface
2. To analyse the factors influencing the usage of Payment apps

Hypotheses of the Study
H1: There is significant difference between age and preference towards the usage of payment apps.
H2: There is significant difference between gender and preference towards the usage of payment apps.
H3: There is significant difference between educational qualification and preference towards the usage of payment apps.
H4: There is significant difference between annual income and preference towards the usage of payment apps.
H5: There is significant difference between residential area and preference towards the usage of payment apps.
H6: There is significant difference between nature of job and preference towards the usage of payment apps.

Research Methodology
For this study, the descriptive research design is used. Totally 148 respondents are selected from both rural and urban area of TamilNadu using convenient sampling method. Questionnaire method is used to collect the primary data. Secondary data are collected from eesearch thesis and journals. The Cronbach alpha value for the variables are obtained as 0.90 and hence it is decided that the data are reliable. The data are analysed using percentage method, mean ranking and ANOVA.

Review of Literature
Somanjoli Mohapatra (2017) stated that the UPI pursues to make money transfers easy, quick and hassle free. The explosion of smart phones, the availability of an online verifiable identity, universal admittance to banking and the biometric sensors in phones will proactively encourage electronic payment systems .

Radhika Basavaraj Kakade, Prof. Nupur A. Veshne (2017) reported that the UPI make digital transaction for individuals as easy as sending text messages and bring enormous efficiency in the system and help India become a truly cashless economy.

Roshna Thomas, Dr. Abhijeet Chatterjee (2017) The study reported that UPI is a tool with like-minded features that can make monetary transactions easy and reasonable to the customers .A strong Aadhar platform (UID) combined with statistics for the country pertaining to increased financial inclusion, Smartphone adoption and telecom subscription indicate prospects for UPI.

Ravish Rana (2017) In their study described that adoption of digital payment is influenced by the education level of the customer. If a person has studied beyond matriculation and internet savvy, he or she will be persuaded to use the digital payment mode. It was also found that in the metropolitan area, the opportunity of acceptance of digital payment is much higher.

Pappu Rajan and Saranya G (2018) studied customer perspective of digital banking services using univariate and bi variate techniques and observed that the accessibility of digital banking is undertaken while considering only persons that are deemed physically fit in the society.

(Suravi Halder, Sherin P Thomas, Ratchana R, 2018) tried to find out the awareness and usage level present among the urban youth of Bangalore about Unified Payment Interface (UPI) apps and also compares the top rated bank based UPI apps and the government BHIM app, to understand the growing penetration and issues concerning the apps.

Anjali R and Suresh A, (2019) attempted to study the customer satisfaction of Bharat Interface for Money (BHIM) and found that all the independent variables selected (Security, Perceived ease of use, Customer service, Speed of transaction) had a positive relationship with the dependent variable customer satisfaction.

Usha M and Ramesh Kumar K, (2019) analysed the customer perception towards Paytm apps and factors influencing customers to use Paytm in Karur district. It has been observed that the factors such as convenience, ease of use, security, multi-utility and fast service significantly affect the satisfaction level and use of Paytm application.

Kamatchi Easwaran K (2019) found that there is significant relationship between the customer perception and demographic factors on adoption of digital mode of payment .

Results and Discussion

The data under the parameters of socio-economic profile, preference towards usage of payment apps, different payment apps, reasons for not using payment apps, problems faced by the respondents when using payment apps and benefits of payment apps. The collected data are analysed using percentage method, mean ranking and ANOVA and the results are discussed as follows:

Socio-Economic Profile of the Respondents

The respondents' socioeconomic profile such as gender, age, educational qualification, marital status, annual income are analysed using percentage analysis as follows:

Table 1.0 Socio-Economic Profile of the Respondents

S. No	Characteristics	Categories	Percentage
1	Gender	Male	68
		Female	32
2	Age	Up to 20	17
		21-30	21
		31-40	23
		41-50	23
		51-60	11
		Above 60	5
3	Education	Below S.S.L.C	18
		S.S.L.C	25
		H.S.C	36
		Diploma or Degree	21
4	Marital status	Married	72
		Unmarried	28
5	Annual Income	Up to 2,00,000	25
		2,00,001 – 4,00,000	29
		4,00,001 – 6,00,000	31
		Above 6,00,000	15

Table 1.0. reveals that 68 per cent of the respondents are male and 32 per cent are female. In the age group, it is found that 23 per cent are in the age group of 41-50, another 23 per cent are in the age group of 31-40, followed by 21 per cent in the age group of 21-30 years , 17 per cent in the age group of up to 20 years, 11 percent in the age group of 51-60 years and 5 percent in the age group of above 60 years. Regarding the educational qualification, it is found that 36 per cent of the respondents' educational qualification is H.S.C followed by S.S.L.C (25%), Diploma or Degree holders (21%) and below S.S.L.C (18%). Overall72 per cent of the respondents are married and 28 per cent are unmarried. In the case of annual income it is found that 31 per cent of the respondents' annual income is 4,00,001 – 6,00,000, 29 per cent of the respondents' annual income is 2,00,001 – 4,00,00025 per cent of the respondents' annual income is up to 2,00,000 and 15 per cent of the respondents' annual income is above 6,00,000.

Rank of Payment Apps on the Basis of Usage

Presently various UPI enabled payment apps are used by consumers. In order to find the majority used payment apps the respondents are asked to rank the different payment apps on the basis of their usage rate. The rank analysis is as shown below:

Table 2.0 Rank of Payment Apps on the Basis of Usage

SI. No	Variables	Mean	SD	Rank
1	Google pay (g pay)	4.065	0.932	I
2	Phone pe	4.011	1.063	II
3	Pay tm	4.003	1.032	III
4	Mobi kwik	3.943	0.967	IV
5	BHIM Axis pay	3.881	1.040	V
6	HDFC pay zap	3.5	1.009	VI
7	Yono by SBI	3.252	0.987	VII
8	Dhani	3.224	0.982	VIII
9	ICICI pockets	3.139	1.003	IX
10	Amazon pay	3.113	0.944	X

From the above Table it is inferred that among the ten given payment apps, Google pay got the first

rank followed by Phone pe, Pay tm, Mobi kwik, BHIM Axis pay, HDFC pay zap, Yono by SBI, Dhani, ICICI pockets and Amazon pay.

Reasons for Not Using Payment Apps
Table 3.0 Reasons for Not Using Payment Apps

The reasons for not using the payment apps were identified and the respondents were asked to rank according to their opinion. The analysis is as shown below:

SI. No	Variables	Mean	SD	Rank
1	Do not have the knowledge of using Payment apps	4.055	0.932	I
2	Stick to traditional cash payment	4.011	1.063	II
3	Fear of fraud	3.993	1.032	III
4	Feeling difficult in use	3.90	0.967	IV
5	No Internet connection	3.681	1.040	V
6	No android mobile	3.252	0.987	VI
7	Hate digital payment	3.224	0.982	VII
8	Not comfortable in using technological aspects	3.139	1.003	VIII

Among the eight reasons of not using payment apps, the reason of "do not have the knowledge of using payment apps" comes first which is followed by the reasons "stick to traditional cash payment", "Fear of fraud", "Feeling difficult", "no internet connection", "no android mobile", "Hate digital payment", and "Not comfortable in using technological aspects".

Problems in Using Payment Apps

The major problems faced by the respondents in using payment apps are identified as follows:

Table 4.0 Problems in Using Payment Apps

SI. No	Variables	Mean	Rank
1	Network Problem	4.52	I
2	Fear of Fradulant	4.40	II
3	Some shops do not have the facility	4.27	III
4	Technology is not user friendly	4.22	IV

The major problems faced by the respondents while using payment apps are identified as "network problem", "Fear of Fraudulant", " Some shops do not have the facility of Payment app", and "Technology is not user friendly".

Benefits of Using UPI Enabled Apps

The respondents are asked to rank the major benefits they are receiving through the usage of payment apps. The results are discussed as follows:

Table 5.0 Benefits of Using UPI Enabled Apps

SI. No	Variables	Mean	Rank
1	No need to expect change of money	4.52	I
2	Time saving	4.40	II
3	Keeping only mobile is convenient than keeping Wallet	4.27	III
4	No fear of theft of money	4.22	IV
5	No need to stand in ques for billing because in some shops they have more payment counter	3.76	V
6	Shops prefer digital payment than cash	3.52	VI
7	Easy in transferring money from one person to another without moving from one place to another	3.33	VII

It is found that the benefits such as "noneed to expect change of money", "time saving" and "keeping only mobile is convenient than keeping wallet" got the first three ranks. It is observed that the respondents feel convenient in the usage of payment apps instead of traditional cash payment.

Impact of Socio-Economic Factors on the Usage of Payment Apps

In order to find whether there is any significant difference between socio-economic factors and the usage of payment apps, the hypotheses framed are tested with ANOVA and the results are discussed as follows:

Null hypothesis: There is no significant difference between the socio economic factors such as age, educational qualification, gender, residential area, job nature and usage of payment apps.

Table 6.0 Impact of Socio-Economic factors on the Usage of Payment Apps

Group	F-Value	Sig.
Annual income	1.201	.276
Age	.581	.447
Gender	.048	.826
Educational Qualification	3.963	.049
Residential area	.664	.417
Nature of job	2.242	.137

The above table shows that there is significant difference between educational qualification and usage of payment apps. There is no significant difference between age and usage of payment apps. No significant difference between residential area and usage of payment apps, no significant difference between gender and usage of payment apps, no significant difference bwtween job nature and usage of payment apps are found.

Conclusion

In this study the concept of digital payment and Unified Payment Interface are discussed. An empirical study was conducted to analyse the factors influencing the preference towards payment apps and the findings are stated. It is found that the widely used payment apps are google pay, pay tm and phone pe. The main reasons for non-preference towards payment app are lack of technical know-how and the habit of stick on the usage of traditional cash payment. It is also found that socio-economic factors except educational qualification does not have influence on the usage of payment apps.

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