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# VARIABLES LEADING TO GROWTH OF E-WALLETS AND FAVOURITISM TOWARDS DIGITAL PAYMENT MODE

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## ABSTRACT

India has witnessed tremendous growth in the use of Digital payment due to cash crunch post- demonetization. Apart from that schemes like the Digital India Initiative has equally given a boost and motivated people to adopt a less-cash mode of payment. Payments made using Debit or Credit cards, Mobile wallets, Internet Banking etc are termed as Digital Payment. Further, consumer perception plays a significant role in the adoption of E-Wallet. Therefore with the help of the questionnaire, a survey was done in the West zone of Hyderabad and primary data were collected from 63 respondents. To reach a conclusion ANOVA and frequency analysis was carried out. Where ANOVA was used to indicate that there was no significant difference between the perception of respondents based on different demographic factors and various attributes chosen for study. Finally, from the analysis, it was understood that Education plays a vital role in the adoption of Digital payment mode. Further, it was also found that respondents prefer digital payment mode as it saves time and provides benefits like discounts and cash-backs.

**KEY WORDS:** E-Wallets,less-cash economy,Digital payment.

## INTRODUCTION

Demonetization in India had a huge impact on Indian Economy and revolutionized the way the payments were made by the consumers in their day to day life. This created a grabbing opportunity for various digital payment companies to expand their market share. It has now become a matter of fact that India is consistently moving from a cash economy to less-cash economy post demonetization. The usage of E-Wallets has become prominent and has become an integral part of many Indian Consumers. The usage of E-wallets saw a huge push due to cash crunch or less cash circulation at the time of demonetization of ₹500/- and ₹1000/-which amounts to 86% of cash circulation.

It is to be noted that India has recorded an all-time high transaction through mobile wallets both in terms of volume and value.There were around 368.45 million transactions out of which total worth was Rs 18,786 crore took place in October 2018. Further to mark comparison there were about 324.16 million transactions by volume and by value Rs 15,102 crore in September 2018, according to data

released on by the Reserve Bank of India (RBI) in October 2018.

Digital Payment applications such as Paytm, Freecharge and Mobikwik has been given velocity by the Indian government and many private sector companies, further Aadhaar Payment app and the UPI app are no exception. Bharat Interface for Money (BHIM) app was developed by National Payments Corporation of India (NPCI). Digital wallet companies have helped Indian consumers to shift from physical banking to digital mode. This led

to ease of money transfer even in rural areas too which was far from digital payment method. As there is tremendous scope in the digital payment industry, many foreign investors want to invest in it.

The following tables are taken from source mentioned below,these tables provide evidence in growth of digital payment)
(https://economictimes.indiatimes.com/industry/banking/finance/banking/demonetisation-impact-bharat-going-digital-for-payments/articleshow/66550675.cms)

## SURGE IN USE OF DEBIT CARDS AND MOBILE WALLETS (TABLE 1)

| FINANCIAL YEAR | DEBIT CARDS ( BILLION) | MOBILEWALLETS(BILLON) |
|---|---|---|
| FY15 | 0.8 | 0.32 |
| FY16 | 1.17 | 0.75 |
| FY17 | 2.4 | 1.9 |
| FY18 | 3.3 | 3.4 |

## SURGE IN USE OF UPI (TABLE 2)

| NOVEMBER | NO.OF BANKS | VOLUME(MILLION) | VALUE(CRORE) |
|---|---|---|---|
| 2016 | 30 | 0.2 | 100.5 |
| 2017 | 61 | 104.8 | 9,640.6 |
| 2018 | 128 | 482.3 | 74,978 |

## INTREPRETATION

From the above tables, it is evident that India is making a transition from physical banking culture to digital mode of payment. Further, if we look into the statistics provided in the table above it is evident that in case of UPI in November 2018 the transaction rose by about 359% by volume compared to November 2017 and by 677% by value. On the other hand, mobile Wallets usage has grown by 78% by value and 37.5% in the case of debit cards.

Therefore one can only conclude that the massive growth of digital payment mode would only lead to a decrease in the use of cash. However, it doesn't prove that India has gone completely Digital as it is heavily reliant on cash. To make the point clear it is to be noted that cash in circulation was about 9.8% more on June 22, 2018, when compared to June 23 in 2017.

India rapidly stepping towards the digital revolution. The future economy will be driven by a cashless transaction which will be possible only through digitalization of payment mechanism at a different location such as a smartphone, internet banking, card transaction etc.

## DIGITAL PAYMENT MODES IN INDIA

The following are the various mode of digital payment available in India. These are:

A. **Online or mobile wallets:** Internet and Smartphone applications serve as usage platform. Wallets can be used to store money either from Credit or Debit card. Transaction limit for the consumer is ₹20,000/- per month while merchant wallet limit is ₹50,000/- per month after self-declaration and can be

increased to ₹100,000/- after KYC verification.

B. **Prepaid credit cards:** Certain amount is pre-loaded to the individual's bank account. One can imagine it to be similar to that of a gift card where customers can make purchases using the balance in their card -and not on borrowed credit from the bank. Further, it can be recharged like a mobile phone but within the prescribed limit.

C. **Debit/RuPay cards:** Cards are linked to the bank account of an individual which can be used at shops, ATMs, online wallets, micro-ATMs, and e-commerce purchases. Trends show that Debit cards usage in India has overtaken credit cards usage.

D. **AEPS:** AEPS stands for Aadhaar Enabled Payment System which uses the 12-digit unique Aadhaar identification number which allows bank-to-bank transactions at Point of Service. Further balance enquiry, cash deposit, cash withdrawal, and Aadhaar to Aadhaar fund transfers are some of its key features.

E. **USSD:** It stands for Unstructured Supplementary Service Data based mobile banking. Merchant's bank account is linked to the individual's bank account and is used via mobile phone on GSM network for payments up to ₹5,000/- per day per customer.

F. **UPI:** The United Payments Interface (UPI) helps to integrate multiple bank accounts onto a single mobile application platform (of any participating bank). Further, it merges multiple banking features that ensure seamless fund routing and merchant payments.

The aim of the present study is to find how respondents are adopting digital payment. The response was collected from 63 respondents to analyse there perception, preferences and satisfaction level of digital payment.

## OBJECTIVES AND HYPOTHESIS

**THE FOLLOWING ARE THE TOP FIVE PAYMENT WALLET OF INDIA.(TABLE 3)**
(Source:https://www.livemint.com/Companies/fxk2s JoKy7aQd9apRKEXqL/Top-5-trending-mobile-wallets-in-India.html)

| Mobile Wallets | Features |
|---|---|
| **Paytm** | 1. Secure Transaction<br>2. User-friendly application and easy to use.<br>3. Paytm bank's expansion into e-commerce,ticketing and distribution of financial products.<br>**4.** Available both on Android and iOS. |
| **MobiKwik** | 1. Person can add money via his debit or credit card.<br>2. Various transaction on mobile,DTH electricity bill etc.<br>**3.** Available on iOS,Android and Windows Phone. |
| **JioMoney** | 1. Simple interface and well structured app.<br>2. All options like recharge,send request money etc are available on homepage itself.<br>3. Available on Google Play Store and Apple App Store. |
| **Oxigen** | 1. lively looking interface.<br>2. It also has banner on special schemes running on top.<br>3. Used to ask for money, pay bills and get recharges.<br>4. Users feel transaction security.<br>5. Processed over 2 billion transactions till date with current transaction rate of 720 million transaction per annum.<br>6. Available only on Android. |
| **State Bank Buddy** | 1. Reminds to settle dues,money transfer<br>2. Available in 13 languages.<br>**3.** Available in Google Playstore and Apple store. |

The objective of the study was to find out customer perception and impact of demographic factors on the adoption of digital payment mode restricted to west zone of Hyderabad. In pursuance of the above objectives, the following null hypotheses were formulated for testing:

$H_{01}$ : There is no significant difference, between the gender of respondents and their perception on various attributes considered in study.

$H_{02}$ : There is no significant difference, between the age of respondents and their perception on various attributes considered in study.

$H_{03}$ : There is no significant difference, between the education level of respondents and their perception on various attributes considered in study.

$H_{04}$ : There is no significant difference, between the profession of respondents and their perception on various attributes considered in study.

$H_{05}$ : There is no significant difference, between the financial status of respondents and their perception on various attributes considered in study.

## SCOPE OF STUDY

- The scope of study is limited to understanding, how respondents perceive the idea of digital payment and how frequently they are using in their life.
- The scope of this study is to understand what are the the different parameter or the

attributes the consumer takes into account before following certain e-wallet.
- The study also provides scope in understanding the level of digital payment acceptance based on parameters or demographic profile like Education, age, Sex, Financial status etc.

## LIMITATIONS OF THE STUDY

- The study was restricted to west zone of Hyderabad only.
- This study is time- bounded and the consumer perception may vary in future with development of new technology or new user-friendly interface app in digital payment mode sector.
- For the sake of research all data collected is assumed to be unbiased.

## LITERATURE REVIEW

**Bamasak O (2011)** has carried out the study in Saudi Arabia and found that m-payment has a broader scope in future. Many of the mobile phone users reported that unauthorized use of mobile phones and issues relating to data security while making a payment was a bothering factor.

**Dahlberg T, Mallat N, Oorni A (2003)** found that Privacy and Security were the major concerns

for many of the consumers which narrow down the scope of adopting digital payment solutions.

**Doan N (2014)** Consumer adoption in mobile wallet illustrated that adoption of mobile wallet among consumers in Finland as early stages of the Innovation-Decision Process. Further mobiles are increasingly being used by consumers for making payments. "Digital Wallet" function similar to that of physical wallet that we carry with us , Further it is observed that it is becoming an integral part of consumers day to day life. Here smartphones plays the same function as that of physical wallets. A (2008) Past, present and future of mobile payments research, came up with comprehensive model 'Payment Mode Influencing Consumer Purchase Model' which was proposed by Braga and Mazzon. The factors considered in this model were like temporal orientation and separation, the pain of payment constructs and self-control for the digital wallet as a new payment model. Two most important factors of mobile payments research were consumer perspective of mobile payments and technologies

**Wamuyu PK (2014)** found from his observation that Digital wallet offered numerous benefits while transferring money. To mention a few conveniences, security and affordability are some of the benefits. Unprecedented growth in technology led to the growth of an opened plethora of modes of payments through which consumers can do transactions are more convenient, accessible and acceptable, According to **Soman D (2001)**, consumers use mobile payment app which provides various benefits. One example mentioned here is flexible payment digital wallet brands that provide extra convenience to consumers.

**Rathore HS (2016)** observed that convenience in buying products online which reduces the time that the consumer has to buy by going from one location to another location. Therefore it was one of the contributing factors in the adoption of the digital wallet.

**Mallat N (2004)** found that mobile payment is dynamic in nature and lack of other payment methods and various factors relating to a situation determines the adoption of Digital Wallet. The study was conducted in Finland. Digital wallet payments bring extra convenience to shoppers by offering flexible payment additions and accelerating exchanges.

The following are the factors that are motivating consumers to make the transition from physical banking to digital banking are:

**Saves time and Ease of use:** Wallets are easy to use as it helps the consumers can make the payment with a single touch. All they have to do is link their account to the wallet and they are good to go. Further, they need not fill in all details again and again.

**Security, Convenient and information stored under one roof:** Digital wallets Wallets are useful in keeping the track record of multiple accounts under one roof which ultimately helps us in better management further most of the wallets are secured which can't be tampered.

**Attractive discount:** Most of the E-wallet companies offer huge discounts and cash-backs that helps the consumer to pay less for more. Apart from that these companies also provide few vouchers from time to time which can be redeemed within the prescribed time limit.

# FUTURE OF INDIA'S DIGITAL PAYMENT

- According to Google-BCG Report estimation India's digital payments industry would grow to US$500 billion by 2020.
- Therefore contribution would reach to 15 per cent of the country's GDP. Thus it will become an important driver of growth is India's vast smartphone user base – the second largest in the world.

# RESEARCH METHODOLOGY

- The current study is based on primary data collected from 63 respondents from the west zone of Hyderabad. Further to record responses a well-structured questionnaire was designed. The questionnaire was designed to study variables leading to the growth of E-wallets and assess why people are preferring digital payment mode.
- A likert five-point scale was used for obtaining responses. The responses have been collected by means of face-to-face interviews by authors.

## SAMPLE SIZE
In this survey, the sample size was 63.

## SAMPLING PROCEDURE
Intercept interview method was used to collect the primary form of data. Purpose of this research was explained to the respondents and further questions were explained to them in case they lacked clarity on any particular question.No personal bias were allowed while recording the responses.

# RESEARCH AND STATISTICAL TOOLS EMPLOYED

- ANOVA and frequency analysis was employed for the study.
- SPSS 23 was used to perform statistical analysis.
- Cronbach's Alpha test was used to check the reliability of the data.
- Frequency analysis of the factors under study, indicate overall satisfaction levels of respondents with digital payment mode.
- ANOVA was carried out to find the variance in the responses and to test the hypothesis.

## RELIABILITY ANALYSIS SCALE(ALPHA) (TABLE 4)

| Reliability Statistics | |
|---|---|
| Cronbach's Alpha | N of Items |
| .735 | 13 |

## INTERPRETATION
- The value of cron-bach's alpha is greater than 0.7 hence the questionnaire and data collected are reliable.

## FREQUENCY ANALYSIS
- Frequency analysis was used to understand consumer perception and their satisfaction with the help of attributes chosen for the study.
- The result is presented in Tables 5 and 6.
- Highly important and important responses indicate positive perception and not important is a negative agreement which indicates negative perception.
- Strongly agree and agree responses are indication of favoring the statement related to a particular attribute of digital payment and indicate satisfaction of respondents.Whereas,Disagree and strongly disagree responses indicate the opposition.

## RESPONDENT'S PROFILE
- The sample consists of 63 respondents.Male to Female ratio is 1.52:1.
- The number of Male respondents are 38 and the number of Female respondents are 25.

- It was found that out of 63 respondents 44 of them use e-wallets for certain purchases and 11 of them do not use e-wallet.
- 55.56% of respondents belonged to 21-25 age group and 23.31% of respondents belonged to age group of 26-30 years.
- From research, it is found that half of the respondents had post-graduation as their highest qualification. Further, it was also found that 26 of them had graduation, 2 of them below matriculation and 3 of them below 10+2 as their highest qualification. .
- 66.67% percent respondents were students, 23.81% were Employee and 9.52% were self employee.
- 60.32% of the respondents belonged to middle class,28.57% belonged to lower class and 11.11% belonged to upper class.
- 92% of respondents use digital payment mode for making purchases whereas 6.35% of them do not use it and 1.59% is not sure of using it.
- 92% of the respondents use Paytm, 3.17% of them use jio money and 3.17% of them use Mobikwik and rest use oxigen.

## FREQUENCY ANALYSIS OF RESPONDENTS PERCEPTION(TABLE 5)

| VARIABLES | Highly Important | Important | Neutral | Moderately important | Not at all important |
|---|---|---|---|---|---|
| Customer loyalty | 41 | 17 | 2 | 1 | 2 |
| Easy to use | 32 | 28 | 3 | 0 | 0 |
| Time Saving | 33 | 26 | 3 | 1 | 0 |
| Adoption of Mobile Wallet | 32 | 24 | 6 | 0 | 1 |
| Service charge | 23 | 23 | 13 | 3 | 1 |
| Transaction Security | 47 | 10 | 5 | 1 | 0 |

## INTERPRETATION:
From Above Frequency Analysis it is evident that Majority of respondents perceive adaptability of mobile wallet and transaction Security apart from features like Time Saving and Easy to use is highly important.

## FREQUENCY ANALYSIS OF RESPONDENTS SATISFACTION(TABLE-6)

| VARIABLES | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| Helps in making qualitative decision | 8 | 33 | 17 | 3 | 2 |
| Mobile wallets is more comfortable than the traditional methods while making a purchase. | 17 | 24 | 21 | 1 | 0 |
| Think that using online wallets can offer me a wider range of banking services and Payment options. | 13 | 41 | 7 | 2 | 0 |
| Mobile wallet is helpful. | 17 | 31 | 12 | 2 | 1 |
| Trust the wallet service providers. | 17 | 27 | 15 | 2 | 2 |
| Believe that Mobile wallets provides benefit to individual while making a purchase. | 22 | 32 | 7 | 2 | 0 |

## INTERPRETATION:

From Above Frequency Analysis it is evident that Majority of the respondents prefer Mobile Wallets as they believe it to provide them benefits like discounts on their purchase.Further respondents also strongly Agree or Agree that the service providers should be one that can gain trust of the users.

## HYPOTHESIS TESTING:

In order to test the hypothesis ANOVA Computation was carried out on SPSS 23. The results are given below. Table 7 gives the result of ANOVA computation on the basis of gender, age education, profession and Financial status of the respondents.

## ANOVA COMPUTATION(TABLE 7)

| VARIABLES | Gender | | Age | | Profession | | Financial status | | Education | |
|---|---|---|---|---|---|---|---|---|---|---|
| | F | .sig | F | .sig | F | .sig | F | .sig | F | .sig |
| Easy to use | 1.607 | .210 | 3.875 | .007 | 3.415 | .039 | .003 | .997 | .428 | .734 |
| Transaction Security | .014 | .907 | .899 | .470 | 2.503 | .090 | .274 | .761 | 14.145 | .000 |
| Time Saving | .135 | .715 | 1.833 | .135 | .733 | .485 | .560 | .574 | 8.681 | .000 |
| Adoption of Mobile Wallet | .000 | .985 | .833 | .510 | .930 | .400 | .435 | .649 | 6.045 | .001 |
| Service charges | .139 | .711 | 1.591 | .189 | 4.384 | .017 | .553 | .578 | .954 | .420 |
| Customer loyalty | .132 | .717 | 2.548 | .049 | 3.215 | .047 | .333 | .718 | 6.890 | .000 |
| Believe that Mobile wallets provides benefit to individual while making a purchase. | 3.193 | .079 | 9.828 | .000 | 2.235 | .116 | 2.125 | .128 | 5.662 | .002 |
| Helps in making qualitative decision | .735 | .394 | 3.661 | .010 | 1.132 | .329 | 1.259 | .219 | .903 | .045 |
| Mobile wallets is more comfortable than the traditional methods while making a purchase. | .017 | .89 | 5.053 | .001 | .052 | .949 | .199 | .820 | .331 | .803 |
| Think that using online wallets can offer me a wider range of banking services and Payment options. | .665 | .41 | .982 | .425 | .597 | .554 | .106 | .899 | 1.64 | .189 |
| Mobile wallet is helpful. | .011 | .91 | 3.292 | .017 | 1.549 | .221 | .317 | .729 | 7.92 | .000 |
| Trust the wallet service providers. | .522 | .47 | 1.380 | .252 | .237 | .790 | .317 | .729 | 2.02 | .020 |

## INTERPRETATION:

- The Null Hypothesis is accepted if significance value is greater than .05.
- The Null Hypothesis with respect to attributes vs Education has been rejected as

most of the parameters have significance value less than 0.05.

- The other Null Hypothesis has been accepted as the significance value attributes vs demographic variables like age, sex,

Profession and financial status have significance value more than 0.05 which indicates there is no relation between attributes and demographic profile.

## FINDINGS:

- It was found that the factors like Age, Sex, Financial status, Profession do not have significant relation with the attributes chosen for study.
- It was found that there is a significant relation between attributes perceived by the respondents and their Education level.
- Further it was found that majority of respondents preferred e-wallet app which are time saving, convenient to use, which can provide secure transaction ,provide benefits and that which has the potential to prove itself consumer loyal.
- It was also found that majority of them preferred Paytm e-wallet when compared to other wallets like Jio money, State Bank Buddy, Mobikwik etc.
- From opinion or suggestion part of the questionnaire it was found that respondents like Paytm because Transferring money takes place instantly to the bank from Paytm account,it is Safe to store customer's CVV number.Further, Paytm has launched an app password feature for Paytm Wallet in order to ensure the money is safe even if the customer lose or misplace his/her phone and the best thing a customer can use Paytm even without a Smartphone.

## SUGGESTIONS

- Few suggestion I have received with the help of research are that there are many places where extra service charges are added on using digital payment mode for example electricity bill payment,TSRTC bus pass etc. which is discouraging the use of digital payment mode, it has to be checked in-order to step ahead in terms of less-cash economy.
- Further, it is suggested that steps should be taken to allow merchants certain number of charge-less transactions, so that even they can give velocity to the idea of digital payment.
- There is need to promote awareness on pros and cons of the digital wallet as even from the research done it is evident that the people with lesser education are not aware about importance of it.

## RESULTS AND DISCUSSION

From the result of ANOVA computation, it is evident that there is no significant difference, between the gender of respondents and their perception of various attributes considered in study and female respondents. Hence null hypothesis $H_{01}$ is accepted. It is an indication that the perception

toward adopting digital payment mode against the various attributes remains the same for both male and female. Further, we also find from ANOVA computation that even other demographic variables like age, Financial status and profession doesn't vary for attributes considered. Thus we accept $H_{02}$, $H_{04}$, and $H_{05}$ null Hypothesis.However, it is not the same case with Education level. From ANOVA computation it is clear that the perception level of the respondents varies with education level. Hence we reject the $H_{03}$ null Hypothesis. Hence we conclude that Education level of respondent plays a significant role and a factor to pursue a person to use digital payment mode.

## SCOPE OF FURTHER RESEARCH

- Paytm has started a payment bank feature,a study on consumer perception towards it can be studied which has not been covered in this research.
- Further, a two-way comparative study can be done that how the shopkeepers perceive about the digital mode of payment and how the customers perceive about it and differences in their perception level which has not been covered in this research.

## CONCLUSION

The study conducted was an attempt to understand the perception level of the respondents against the attributes considered for various demographic factors like age, sex, Financial status, Education level etc.However it was found that Education level plays a motivating factor for a person to pursue digital payment mode. Further to mark the point and support it ANOVA computation was done which stated the result in favour of the above statement. A person is also inclined to digital payment mode if he is more adaptable with latest technology. Further, the challenges in the digital payment industry are that many of them lack awareness about the pros and cons of the usage. As per the reports, India stands 2nd in terms of fraudulent transactions by margin against Indonesia. It was also found that in the areas/region where the education level is high such as West-zone of Hyderabad the possibility of acceptance of digital payment is much higher.

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