

A Study on Usage of UPI Payments Services towards Merchants in Madurai

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Abstract: *Today the UPI Payments services is playing a big role in digital exchange market. This research paper is focused on understanding Unified Payment System's (UPI) growth, its progression in retail digital payment over the years, usage of UPI towards merchants and risks involved in UPI. The study was carried out by primary data with a sample size of 120 merchants which were chosen by simple random sampling method. The study was conducted in Madurai. UPI has shown remarkable growth in last couple of years due to customer's shift towards contactless payments over other methods. To analyze the awareness of UPI Payments services towards merchants. To analyze the level of satisfaction towards usage of UPI Payments services. To analyze the level of risk involved in UPI Payments services. Statistical tools used for this data collection are Simple Percentage analysis, Chi-Square test, Pearson's Correlation, One-way ANOVA. The findings of the study revealed that the growth of digital payments has increased significantly, it is used by all types of merchants i.e., from petty shop to large retail sectors, the awareness among the merchants is high and the majority of merchants have not faced any cyber-attack by UPI services.*

Keywords: UPI Payments services awareness, level of satisfaction, risk involved

I. INTRODUCTION

Unified Payment Interface (UPI) is an instant real time payment system developed by National Payments Corporation of India (NPCI) facilitating inter-bank peer-to-peer (P2P) and person-to-merchant (P2M) transactions. The interface is regulated by the Reserve Bank of India (RBI) and works by instantly transferring funds between two bank accounts on a mobile platform. As of February 2022, there are 304 banks available on UPI with a monthly volume of 4.52 billion transactions and a value of 8.26 lakh crore. UPI witnessed 68 billion transactions till November 2021. The mobile-only payment system helped transact a total of ₹34.95 lakh crore during the 67 months of operation starting from 2016. As of May 2021, the platform has 15 crore monthly active users in India.

In April 2009 with the objective to integrate all the payment mechanisms available in the country and make them uniform for retail payments, the National Payment Corporation of India was formed. By March 2011, RBI found out that in India only six non-cash transactions happen every year per individual citizen while 10 million retailers accept card-based payment.

RBI in 2012 released a vision statement for a period of four years that indicated commitment towards building a safe, efficient, accessible, inclusive, and authorized payment and settlement system in India. It is part of the Green Initiative to decrease the usage of paper in domestic payments market. UPI was officially launched in 2016 for public use.

Under RBI guidance, NPCI (National Payments Corporation of India) became the primary body with the task to develop a new payment system that is simple, secure, and interoperable. UPI works on four pillar push-pull interoperable model where there will be remitter/beneficiary front end PSP (payment service provider) and remitter/beneficiary back-end bank that settles the monetary transaction for the users. UPI became one of the most successful deep-tech innovation coming out of India.

India is the third-most largest market for UPI Payments after US and China. Any UPI app can use payment and transfer fund from and to UPI enabled banks. Apart from various third-party apps such as Google Pay, PhonePe, Paytm, MobiKwik, Amazon Pay, Samsung Pay, WhatsApp Pay. NPCI manages its own app called BHIM. From 21 banks in 11 April 2016, the total number of banks linked to UPI platform is 304 as of Feb 2022.

1.1 Statement of the Problem

UPI Payments is a digital exchange service between a customer and a seller/merchant. Today the UPI Payments services is playing a big role in digital exchange market. From small-scale retailer to large scale industries, everywhere UPI Payments service is used. Even though, it is beneficial to both customer and merchant, there are some drawbacks in this system of payments towards merchants.

This payment system is time consuming and cashless. But still some cash payments are being taken place. There is a risk of online fraud and scam, low internet bandwidth, during the payments receiving from customers. There is a limitation of income tax for the UPI payments which a merchant has to face. The merchant has to withdraw money from the bank for all the UPI payment transactions. The aim of this study is to cover the usage and drawbacks of UPI Payments services and further improvements to be made in the UPI Payments services towards merchants.

1.2 Objectives of the Study

1. To analyze the awareness of UPI Payments services towards merchants.
2. To analyze the level of satisfaction towards usage of UPI Payments services.
3. To analyze the level of risk involved in UPI Payments services.

1.3 Research Methodology

A research methodology is an outline of how a given piece of research is carried out. It defines the techniques or procedures that are used to identify and analyze information regarding a specific research topic

A. Research Design

The research design used here is “Descriptive research” which uses surveys with close-ended questionnaire. The structured questionnaire contains demographic profiles of merchants and questions required to collect specific information for the study.

B. Sample Size

Sample size of the study is 120 merchants. The study covers only the population of UPI Payment merchants in Madurai.

C. Sampling Method

The sampling method used in this study is simple random sampling method which uses selecting a small random group of samples from a larger group of population. The samples are merchants using UPI Payments services in Madurai.

1.4 Method of Data Collection

This study is conducted based on both Primary and Secondary data.

A. Primary Data

Primary data is a data that is collected by a researcher from first-hand sources, using methods like surveys. This study collects data using various questionnaire through surveys from merchants in Madurai.

B. Secondary Data

Secondary data is a data that has already been collected through primary sources and made readily available for researchers to use for their own research. In this study, data is collected from various sources like published resources, websites.

1.5 Statistical Tools used for Analysis

The following tools are used for analysis:

- Percentage analysis
- Chi-Square test

- Pearson's Correlation
- One-way ANOVA

1.6 Scope of the Study

The study covers the merchants in Madurai, Tamil Nadu. The study is conducted to find out the usage of UPI Payments services towards merchants.

1.7 Limitations of the Study

- Small size of sample (120).
- Time is limited.
- The study is limited only to Madurai district.
- Less interest shown by respondents in filling their opinion.

II. REVIEW OF LITERATURE

The Review of Literature is an overview of the previously published works on a specific topic. It provides an overview of current knowledge, allowing the researcher to identify relevant theories, methods, and gaps in the existing research.

Damodhar & Sunitha¹(2020) studied about digital case and UPI payments, payments are often carried with involvement of third parties; it makes E-payment at any time through the web on to the transfer settlement and E-business surroundings. Electronic payment revolutionized the business process by reducing the work, dealing prices, and labour value. Being user friendly and fewer long than manual process, it helps concern to expand its market reach/expansion of the E-commerce.

Moghavvemi²(2020) in a recent study, found that the drivers and barriers of UPI payment adoption by merchants and provided a theoretical explanation of how the adoption of UPI payment and payment experience of merchants. The study adopted an exploratory approach by using the case study of two merchants in the retail sector. The findings demonstrate that, the business model and nature of the business, contextual factors, and technology type, as well as competition and cost, serve as drivers of merchant adoption of UPI payment.

Lee³(2019) in their recent study found out the reciprocal relationship between user perception and retailer perception on platform-based mobile payment service. This study argue that the mass adoption of mobile payments will only be triggered when the benefits - both perceived and real become clear to consumers and merchants. With the development of the smartphone and mobile Internet, a platform-based UPI payment service has emerged that can handle all banking services with a smartphone alone.

Abebe⁴(2020) had a study on factors affecting UPI Payment adoption by merchants in Ethiopia. The result suggests that relative advantage, ease of use, usefulness, attitude, trust, risk/security and cost are factors that affect mobile payment adoption positively and significantly. Whereas compatibility is found not significant for merchant's adoption of mobile payment systems in Ethiopian context.

Singh⁵(2020) studied about how perceived trust mediates merchant's intention to use a mobile wallet technology. Journal of Retailing and Consumer Services. As mobile wallets are in constant demand and growing over the past few years, there is a need to identify views of different stakeholders involved in the process. Several studies have been done to investigate consumer's perspective intensively. On the other hand, review of perception and adoption of wallet services by other participants, in particular merchants, is often neglected.

Pisani⁶(2018) studies the role of competition in the adoption of mobile payment among merchants. Mobile payment has been predicted to become the "new normal" in the payments industry. However, such predictions have hardly been realized in the Euro area, since most payments at the point of sale (POS) are still conducted in cash. Mobile payment represents a specific case of multi-sided markets, where the functioning of the whole market relies on the interaction between several players - in this case at least two, i.e. merchants and consumers - on a common platform.

Taylor⁷(2016) in his study 'A review of potential benefits and risks'. Retailers and suppliers are facing the challenge of reconfiguring systems to accommodate increasingly mobile customers expecting multichannel options supporting quick and secure digital payment. This paper harnesses the learning from the implementation of self-checkout and combines it with available information relating to mobile scanning and mobile point of sale.

F. Liebana⁸(2017) in his study ‘Predictive and explanatory modelling regarding adoption of mobile payment systems’, commercial activities have evolved during the past decade from a single-channel focus and perspective on business opportunities to a multiple-channel approach, with mobile phones playing a major role in the most recent and latest business opportunities. Even if mobile payment systems are still under development and steadily becoming available worldwide, many experts have already pointed to them as the potential payment system of choice taking into account its high penetration level within our society, its accessibility and ease of use. The paper explores the adoption of mobile payment systems from the point of view and perspective of the merchants.

Sharifi⁹(2016) in his study ‘Inferring Merchant Review Scores from Payment Data’ finds that users complete payment transactions with various merchants using a wallet application or similar payment application maintained by an account management computing system. The account management computing system creates a predictive model or trains a machine learnt regression function or classifier model to predict the merchant review score based on the payment information received from the user device. A merchant is identified to derive a merchant review score and the account management computing system identifies the business type of the identified merchant.

Mallat¹⁰(2008) explored merchant adoption of mobile payment systems by examining empirically and discuss factors that drive and inhibit the adoption of mobile payment by merchants. Their results suggest that the main adoption drivers are related to the means of increasing sales or reducing the costs of payment processing, while the barriers to adoption include the complexity of the systems, unfavourable revenue sharing models, lack of critical mass, and lack of standardization.

III. FINDINGS OF THE STUDY

3.1 Percentage Analysis

- Majority (66.7%) of the merchants belong to the age group of 41-60.
- Most (91.7%) of the merchants are male.
- Majority (32.5%) of the merchants have studied up to 12th std.
- Majority (68.3%) of the merchants annual income is between 5,00,000-6,00,000.
- Most (46.7%) of the merchants are doing retail/groceries type of business.
- Most (48.3%) of the merchants are using UPI payments services from 3-6 years.
- Most (100%) of the merchants are allowing PhonePe, Paytm, BHIM app and Google Pay in their business.
- Majority (54.2%) of the merchants have very high level of awareness in UPI Payments among merchants.
- Majority (65.8%) of the merchants have low level of awareness in legislative measures in UPI Payments among merchants.
- Majority (51.7%) of the merchants have stated that the level of awareness in UPI Payments services to the customers is very high.
- Majority (80.8%) of the merchants have very high level of awareness in rewards like offers earned in UPI payments services.
- Majority (46.7%) of the merchants have very high level of satisfaction to withdraw money from bank for all the UPI Payments made by customers.
- Majority (50.0%) of the merchants have very high level of satisfaction for the installation cost of UPI Payments.
- Majority (65.0%) of the merchants have very high level of satisfaction when receiving money through UPI Payments.
- Majority (51.7%) of the merchants have very high level of satisfaction and interest that they in learning new technology now a days.
- Most (89.2%) of the merchants have agreed that there is a security risk by using UPI services.
- Most (29.2%) of the merchants have stated that the level of risk in income tax burden for UPI transactions is neutral.
- Majority (41.7%) of the merchants have strongly disagreed the level of payment risk made by customers.

- Majority (47.5%) of the merchants have disagreed the level of risk in competition is not increasing by UPI services.

3.2 Chi-Square Test

- There is no significant relationship between age and the level of awareness of UPI payments among merchants.
- There is no significant relationship between age and the level of satisfaction for the merchant to withdraw money from bank for all the UPI payments made by customers.

3.3 Pearson's Correlation

- There is no significant relationship between age and annual income of the respondents.
- There is no significant relationship between age and the level of satisfaction the merchants have the interest to learn new technology now a days.

3.4 One-Way ANOVA

- There is no significant difference between annual income and the level of awareness of UPI payments among merchants.
- There is no significant difference between annual income and the level of satisfaction when receiving money through UPI payments by merchants.
- There is no significant difference between annual income and the level of risk in income tax burden for UPI transactions made in the past or recent years.
- There is no significant difference between annual income and the level of awareness in UPI payments services to the customers.

IV. SUGGESTIONS

- The internet connectivity can be strengthened by using high speed of network like 5G network so that the server problems and transactions failures during UPI payments can be avoided.
- The UPI Payments can be made easily accessible so that even older people and uneducated people can also get benefitted. UPI Payments can be made available in all local languages.
- There is no cyber threats till date in UPI services in the business world, in future it may be a concern, so the security system can be improved and strengthened highly like using advanced software to avoid risk in cyber threats.
- In rural areas the awareness of UPI services is less so the government can focus to widen the scope of UPI services in those areas by special schemes.
- In business and entrepreneurship, the population of male is higher than female. Women entrepreneurs can be encouraged more to do their own business. The awareness of entrepreneurship can be widely given to all women in rural and urban areas. The scope of government schemes to provide financial assistance to women entrepreneurs can be widened further.
- Young entrepreneurs are less in numbers. So, the participation of young entrepreneurs in below 25 of age should be encouraged and trained in entrepreneurship, therefore many new ideas and innovations can be brought into business.
- Proper awareness and guidance in legislative measures in UPI can be given to all the merchants.
- There must be healthy competition among the merchants as competition motivates the merchants to new innovation and stimulates growth in the industry.
- Proper books of record in computers can be maintained by merchants rather than entering the transactions in note. It makes easier to maintain records. The records will be safe and can be recovered, reused at the time of emergency.

- Proper awareness can be given to merchants and consumers in fake transactions or payments, so the risk of fraudulence can be avoided.

V. CONCLUSION

In this technological world, where people are going techno-freak, the Unified Payment Interface System is delivering a great user-friendly experience. People will need to have a better understanding of the technology if they want to use this system. All the banks are not completely computerized. Implementing UPI means a better trained staff, merchants, retailers, and upgrading the existing system of technology. UPI is a grand step towards making the cashless payments faster, smoother and easier. Unified Payments Interface powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood.

Universal access to banking and the introduction of biometric sensors in phones will proactively encourage electronic payment systems for ushering in a less-cash society in India. In this study it is found that the awareness of UPI payments services among merchants is very high in urban areas than in rural areas, so it must be made available in every area. Merchants are very much satisfied by UPI services and the security system can be strengthened to avoid cyber threats in the future. Merchants must improve awareness in legislative measures which will be more useful to them. In future, number of young entrepreneurs can be increased by encouraging them in entrepreneurship. Women entrepreneurs must be guided and encouraged highly to do well in entrepreneurship. As digital transactions in increasing, it is becoming a monopoly market. So, the government is keeping on check in monopoly risks and some UPI apps has brought limitation in transactions, also charging fees for transactions when the prescribed limit is exceeded.

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