

# Customers' perception and satisfaction towards unified payment Interface (UPI) System with Special Reference To Chennai City

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## ABSTRACT

The banking industry is regarded as the "foundation of the national economy". The contemporary banking system is more sophisticated and intricate. In emerging nations, the function of banks is more innovative and intentional than in wealthy nations. The nation's banking system is a crucial pillar that underpins the financial system. The primary function of banks within the financial system is the aggregation of deposits and the allocation of credit across diverse economic sectors. The banking sector in our country has contributed significantly to economic operations and development. It is the second largest technology-driven sector and provides the highest revenue within the nation. Deposits and payments are influenced by the expansion of financial services via creative, knowledge-driven solutions and technical advancements. The payment sector was particularly beneficial in providing clarifications, notably with the emergence of online payment banks and small to medium-sized financial institutions. Commercial banks offer a variety of payment methods, including online banking, mobile wallets, and debit and credit cards.

**Keywords:** UnifiedPaymentInterface, mobilewallets, onlinebankingsystem.

## 1. INTRODUCTION

The banking system is a crucial component of the nation's economic framework. It is pivotal in attaining microeconomic objectives. The banking industry is regarded as the "backbone of the national economy." The contemporary banking system is more sophisticated and intricate. In emerging nations, the function of banks is more innovative and intentional than in wealthy nations. The nation's banking system is a crucial pillar that underpins the financial framework of the country. The primary function of banks within the financial system is the aggregation of deposits and the allocation of credit across diverse economic sectors. The banking sector in our country has contributed significantly to economic operations and

development. It is the second largest technology-driven sector and produces the highest revenue domestically. The expansion of banking services through creative, knowledge-driven solutions and technical advancements influences deposits and payments. The payment segment was particularly beneficial in providing clarifications, notably with the emergence of online payment banks and small to medium-sized financial institutions. Commercial banks offer a variety of payment methods, including online banking, mobile wallets, and debit and credit cards.

## 2. STATEMENT OF THE PROBLEM

The digitized advancement of India is entirely reliant on the involvement of the Unified Payment System application in both urban and rural development. Assistance from the Reserve Bank of India and the National Payments Corporation is crucial for the viability and prosperity of their mobile payment system. The unified payment system markedly differs from telephone-based online payment services and is only founded on customer-facing services. It offers greater advantages compared to the drawbacks of alternative online banking systems such as NEFT, RTGS, and IVRS. Customers receive numerous services from commercial banks, leading to increased confusion while utilizing unified payment services. The Unified Payment System enhances the credit infrastructure of globalization by including more specialized and worldwide regions, particularly targeting commercial bank customers in the Chennai district. Factors in developing a digital payment system for clients undervalue the influence and satisfaction derived from a mobile money transfer system. The perspectives of clients in the Chennai district are validated by experience. In the research domain, clients encounter numerous issues with the mobile payment method. This research aimed to evaluate customer comprehension and satisfaction with the Unified Payment Interface (UPI) system, particularly concerning commercial banks.

## 3. OBJECTIVES OF THE STUDY

- To delineate the Expansion and advancement of the Unified Payments Interface (UPI) system in Chennai City.
- To examine the perception and preference levels of customers regarding the UPI payment method in Chennai District.
- To assess the satisfaction level of clients regarding the UPI system in the current study.

## 4. RESEARCH METHODOLOGY

This study has been done with the commercial banks in the Chennai district of Tamil Nadu. The regions included for data gathering pertain to customers utilizing the unified payment systems of commercial banks in the research.

## 5. SAMPLING METHODOLOGY

The questionnaire was administered through personal meetings with the respondents. The participants in this study possessed a bank account at the time of the interview. They were sampled for convenience and gathered from various places (e.g., North, East, West, and South) next to commercial banks in the Chennai district of Tamil Nadu. The convenience sampling technique was employed to determine the sample size of commercial bank clients in the Chennai district. The study comprises a sample size of 928 clients within the designated area. Questionnaires were administered to 1,000 respondents, of which 928 were analyzed for the study.

## FRAMEWORKANALYSIS

PercentageAnalysis,DescriptiveStatistics,Chi-Square Test.

## LIMITATIONSOFTHESTUDY

The geographical scope of the study is confined to the Chennai district; hence, the findings cannot be extrapolated to other regions of the state or country. Additionally, the duration of the investigation is restricted. Consequently, the observations may not be relevant to the forthcoming season.

## REVIEW OF LITERATURE

**Jayaram Narayanan (2021)**, This article establishes that social separation during the COVID-19 pandemic is a crucial norm; the unified payment interface is akin to a blessing. The real-time payment system has emerged as the most significant financial innovation in India since independence. It contributes to making countries among the fastest-growing digital economies globally.

**S. Dinesh et al. (2021)**, In this study, "faceless, paperless, cashless" represents a key role and slogan of Digital India. To promote cashless transactions and transform India into a less-cash society, many types of digital payments are available. The modes include banking cards, Aadhaar Enabled Payment System (AEPS), Unified Payment Interface(UPI),mobile wallets,pointofsalesystems,Unstructured Supplementary Service Data (USSD), and Micro-ATMs. The present study concentrates on client perceptions and attitudes regarding digital payment systems. The research aims to examine customer perceptions regarding the digital transformation of the banking sector through mobile banking in Bangalore.

**A. David and M. Jeevan (2021)**, In their study, smart phones have become an integral aspect of the lifestyle of mobile users, who may now utilize their devices to conduct monetary transactions through applications. Numerous services are utilized by customers, including mobile wallets, money transfer, bill payment, and point of sale transactions. This report found that each respondent possesses a smart phone, facilitating service providers' ability to engage this demographic. **Sunny Gupta and Dr. Dinesh Chand (2021)**, conducted a study on customer perceptions of the Unified Payment Interfacein India. A study utilizing the field survey approach collecteddatafrom 100 respondents to evaluate their perceptionsofbankingservices. The finding indicates respondent spossessa favorable attitude to wards UPI transactions foruseinaless-cashworld. **Mrs. R. Naveena and Dr. V. Mathankumar (2021)**, highlighted that India is a developing country and technology is advancing the world to the next generation. The realm of technology is advancing rapidly. In this industry, fully digitalized banking institutions performed well.

## RESULTS&DISCUSSIONS

**EvaluationOfAssociationBetweenDemographicVariablesAndUPICustomers'Perception on UPI Payment System in Chennai district**

**Table-1 Age Group and UPI Customers' Perception**

Age Group	Number of Respondents	Mean Score	S.D	Range	Perception Level		
					Poor	Fair	Good
Below 25 years	499 (53.80%)	68.81	7.99	52.90-93.21	113 (22.60%)	163 (32.70%)	223 (44.70%)
26-50 years	333 (35.90%)	<b>70.43</b>	8.33	55.78-91.11	71 (21.30%)	126 (37.80%)	136 (40.80%)
Above 51 years	96 (10.30%)	68.07	6.26	56.16-82.12	<b>0 (0.00%)</b>	60 (62.50%)	36 (37.50%)
<b>Total</b>	<b>928</b>	<b>69.32</b>	7.99	<b>40.31</b>	<b>184 (19.80%)</b>	<b>349 (37.60%)</b>	<b>395 (42.60%)</b>
Chi-square: 41.810		DF: 4	Sig. 0.000	Ho: Rejected	<b>Outcome:</b> Significant		

**Source:** Survey data

Among the 928 respondents, 499 customers (53.80%) in the below 25 years age group exhibited a mean perception score of 68.81 (SD=7.99), with scores ranging from 52.90 to 93.21. A total of 333 customers, representing 35.90%, fall within the 26-50 years age group, exhibiting a mean perception score of 70.43 (SD=8.33), with scores ranging from 55.78 to 91.11. A total of 96 customers, representing 10.30% of the sample, who are in the age group above 51 years, have a mean perception score of 68.07 (SD=6.26), with scores ranging from 56.16 to 82.12. The average score indicates that customers aged 26-50 in the Chennai district exhibit a higher level of perception.

The cross tabulation results indicated that customers below 25 years of age exhibit a strong perception (44.70%) at the highest level, while those in the above 51 years age group demonstrate a poor perception (0.00%) at the lowest level in the current study. The chi-square analysis revealed a significant association between age groups and perceptions of the UPI payment system in the Chennai district. Therefore, customers aged below 25 years demonstrate a positive perception of the UPI payment system in the study.

**Table-2 Gender and UPI Customers' Perception**

Gender	Number of Respondents	Mean Score	S.D	Range	Perception Level		
					Poor	Fair	Good
Male	486 (52.40%)	<b>70.28</b>	8.34	52.90-93.21	102 (21.00%)	180 (37.00%)	204 (42.00%)
Female	442 (47.60%)	68.25	7.48	52.90-88.17	<b>82 (18.60%)</b>	169 (38.20%)	<b>191 (43.20%)</b>
<b>Total</b>	<b>928</b>	<b>69.32</b>	7.99	<b>40.31</b>	<b>184 (19.80%)</b>	<b>349 (37.60%)</b>	<b>395 (42.60%)</b>

Chi-square:.864	DF:2	Sig.0.649	Ho: Accepted	<b>Outcome:</b> Insignificant		
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**Source:**Surveydata

Among the 928 respondents, 486 customers identified as male, representing 52.40%. Their mean perception score was 70.28, with a standard deviation of 8.34, and scores ranged from 52.90 to 93.21. A total of 442 customers, representing 47.60%, are female, with a mean perception score of 68.25 (SD=7.48), ranging from 52.90 to 88.17.

The mean score results indicated that males exhibit a higher perception level in the Chennai district. The cross tabulation results indicated that females exhibit a favorable perception (43.20%) at a higher level, while their perception is less favorable (18.60%) at a lower level in the current study. The chi-square analysis indicates that there is no significant association between gender and perceptions of the UPI payment system in the Chennai district. Consequently, the female participant demonstrates a strong understanding of the UPI payment system in the study.

**Table-3Maritalstatus andUPIcustomers' perception**

Marital Status	Number of Respondents	Mean Score	S.D	Range	Perception Level		
					Poor	Fair	Good
Married	372 (40.10%)	69.02	7.83	52.90- 93.21	<b>54</b> <b>(14.50%)</b>	156 (41.90%)	<b>162</b> <b>(43.50%)</b>
Unmarried	556 (59.90%)	<b>69.51</b>	8.11	52.90- 91.11	130 (23.40%)	193 (34.70%)	233 (41.90%)
Total	928	<b>69.32</b>	7.99	40.31	184 (19.80%)	349 (37.60%)	395 (42.60%)

Chi-square:12.068	DF:2	Sig.0.002	Ho: Rejected	<b>Outcome:</b> Significant		
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**Source:**Surveydata

According to the table, among the 928 respondents, 372 customers (40.10%) who are married have a mean perception score of 69.02 (SD=7.83), with scores ranging from 52.90 to 93.21. A total of 556 customers, representing 59.90%, are unmarried, with a mean perception score of 69.51 (SD=8.11), ranging from 52.90 to 91.11. The average score findings indicated that unmarried individuals possess a higher level of perception in the Chennai district.

The cross tabulation results indicated that the married respondents exhibit a favorable perception at a higher level (43.50%) and a less favorable perception at a lower level (14.50%) in the current study. The chi-square result indicates a significant association

between marital status and perceptions of the UPI payment system in the Chennai district. Consequently, those who are married possess a favorable view of the UPI payment system in the study.

**Table-4 Educational qualification and UPI customers' perception**

Educational Qualification	Number of Respondents	Mean Score	S.D	Range	Perception Level		
					Poor	Fair	Good
Up to HSC level	132 (14.20%)	69.75	8.13	57.34- 93.21	36 (27.30%)	42 (31.80%)	54 (40.90%)
UG/PG Degree Level	508 (54.70%)	69.54	7.88	52.90- 91.11	82 (16.10%)	205 (40.40%)	221 (43.50%)
Professional Degree	216 (23.30%)	68.64	8.30	52.90- 88.17	54 (25.00%)	66 (30.60%)	96 (44.40%)
Others	72 (7.80%)	<b>68.97</b>	7.66	58.57- 85.42	12 (16.70%)	36 (50.00%)	24 (33.30%)
<b>Total</b>	<b>928</b>	<b>69.32</b>	7.99	<b>40.31</b>	<b>184 (19.80%)</b>	<b>349 (37.60%)</b>	<b>395 (42.60%)</b>
Chi-square:20.251		DF:6	Sig.0.002	Ho: Rejected	<b>Outcome:</b> Significant		

**Source:** Survey data

The table indicates that out of 928 respondents, 132 customers (14.20%) with an education level up to HSC have a mean perception score of 69.75 (SD=8.13), with scores ranging from 57.34 to 93.21. A total of 508 customers (54.70%) hold UG/PG degrees, with a mean perception score of 69.54 (SD=7.88), ranging from 52.90 to 91.11. A total of 216 customers (23.30%) hold a professional degree, with a mean perception score of 68.64 (SD=8.30), ranging from 52.90 to 88.17. A total of 72 customers, representing 7.80%, belong to other categories, with a mean perception score of 68.97 (SD=7.66), ranging from 58.57 to 85.42. The average score indicates that individuals in the Chennai district possess a higher level of perception.

The cross tabulation results indicate that respondents with a professional degree exhibit a strong perception (44.40%) at a higher level, while those with UG/PG degrees demonstrate a weaker perception (16.10%) at a lower level in the current study. The chi-square result indicates a significant association between educational qualifications and perceptions of the UPI payment system in the Chennai district. Consequently, those who are married exhibit a positive perception of the UPI payment system in the study.

## 6. FINDINGS OF THE RESEARCH

This study examines the perceptions of UPI customers in relation to demographic factors and variables associated with UPI usage. The following results present the insights of customers with a heightened perception of UPI services provided by commercial banks in the Chennai district, as detailed below:

Respondents aged 26 to 50 years

Male participants

Individuals who are not married

Additional educational qualifications possessed by respondents

The chi-square test result reveals the relationship between the demographic profile and customer

perceptions of UPI services in the Chennai district. The notable correlation exists between customer perceptions and independent variables including age group, marital status, and educational qualification.

## 7. SUGGESTIONS

The formulation of UPI payment services is essential for facilitating bill payments and money transfers through bank services in the study area.

It is essential for commercial banks to enhance awareness regarding the UPI payment system and implement safety measures to mitigate fraudulent activities in online transactions.

It is essential for banks to enhance their payment services to ensure seamless monetary transactions, thereby meeting customer needs effectively.

It is essential for banks to implement appropriate policy measures, and the formulation of the UPI payment system should be undertaken by the Reserve Bank of India (RBI), or alternatively, services should be extended to current customers.

The banks ought to adopt more accessible methods through the UPI payment system. The technologies utilized by banking institutions enhance customer acceptance significantly.

It is essential for banks to offer services tailored to the specific needs of their customers to improve satisfaction with UPI payment services in the study area.

## 8. CONCLUSIONS

The banks serve as the primary institutions where customers deposit their funds for future use. The banks operate under the regulation of the RBI, which stands for the Reserve Bank of India. In contemporary society, banks hold a crucial position in the everyday lives of all individuals. Individuals are increasingly utilizing banking services, facilitating seamless money transfers to family, relatives, and friends through mobile banking applications offered by financial institutions. In light of the aforementioned analysis and the findings thus far, it is evident that the banks provide significant assistance to their clients. Financial institutions ought to examine the challenges encountered by clients, including concerns related to security and the lack of accessibility to banking services. To address challenges associated with mobile banking, financial institutions must guarantee the effective operation of their mobile banking platforms and regularly enhance their security features. Banks ought to implement awareness programs that engage their customers by providing comprehensive information about mobile banking services, including the benefits and solutions for any issues that may arise while using these services. Therefore, this study holds significant importance and offers valuable insights in today's context. The rise in UPI users indicates a trend that suggests the potential for improved money circulation efficiency.

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