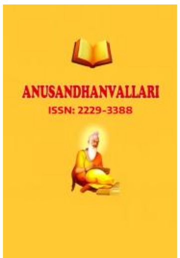

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Factors Influencing the Users Towards Unified Payments Interface

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Abstract: Unified Payment Interface (UPI) is a mobile payment system with a single interface made by the National Payments Corporation of India (NPCI). The Unified Payments Interface (UPI) is a system that groups numerous banking services, smooth fund routing, and merchant payments into a single mobile application that can be used by any bank that participates. With the help of Unified Payment Interface (UPI) you can transfer money from one bank account to another, which eliminates the need for customers to type in their bank information or other sensitive information every time they make a transaction. The virtual payment Address is sufficient to carry out the transactions. The data were collected from 524 users of UPI for the study. The analysis gives an understanding, about the factors which can influence the intensity of users' preference towards Unified Payment Interface (UPI) regarding fast fund transfer, around the clock, safe and security and users friendly.

Keywords: Mobile payment, Unified payment interface (UPI), Payment System, applications and Digital India.

Introduction

Unified Payment Interface (UPI) was launched and managed by the National Payments Corporation of India (NPCI), and regulated by the Reserve Bank of India (RBI), Unified Payment Interface (UPI) has transformed digital transactions, reform the process of transferring funds between individuals and businesses. It is a smart phone application used to transfer fund from one bank account to another easily, online purchases, online ticket booking and pay utility bills. UPI system, ensuring uniformity, security, and interoperability across all payment service providers and participating banks. UPI has employed advanced encryption protocols to safeguard sensitive information, ensuring that data remains trustworthy and uncompromised during transmission.

Review Of Literature

Dr. Namrata Khatri (2023), has conducted a study on **"Factors Influencing Customer's towards Digital Payment – A Study of Surat City"** To study the factors that customers consider while using digital payment. The study focuses to identify the factors that are considered while using digital payment and the frequency of usage and modes of digital payment. The major findings of factor analysis is that the most important factor that is considered by the customers while using digital payment is cost and convenience of use. The outcome of the study would provide an insight to digital payment services providers regarding various factors that customers consider while using digital payment. This will help the service providers to provide better services as per needs of the customers and will be able to serve them better.

Mr.Milind and A. Bhuva (2023) has titled their paper, **"A Study on Factors Influencing the Adoption and Usage of Unified Payment Interface (UPI) Among iGen in Mumbai"** The primary objective of the study is To look at the connections between UPI use and iGen in Mumbai's perceptions of its utility, usability, and reliability. A structured questionnaire is used to collect data from a sample of 200 respondents in Mumbai born between 2000 to 2010. According to the study's findings, Mumbai's iGen uses UPI as a payment method frequently. iGen in Mumbai typically believes that UPI is a helpful and simple payment system, which are a significant determinant of their adoption and usage of UPI. Yet, the study also makes clear that there can be some doubts about the degree of security and trust connected to UPI transactions. These results lead to the conclusion that emphasising the value and simplicity of UPI could be successful in fostering further uptake and usage of the payment system among Mumbai's iGen.

Objectives

The major objectives of the study are as follows:

1. To study the factors influencing towards UPI.

2. To offer suitable suggestions to the study.

Scope Of The Study

The research focuses on users of UPI in Madurai District alone and analyze the data in light of the above-mentioned objectives of the study.

Research Methodology

The area of the study has been confined to only the users in Madurai City. Primary and secondary data has been collected. Simple random sampling method has been used for sample selection purpose which covered 524 respondents who were surveyed through structured questionnaire. The period of the study is six months. The statistical tool used for the analysis of data in this study are Fridman Test.

Research Gap

After the review of literature, it is found that a number of studies conducted on the customer attitude towards mobile payment apps, influence of mobile payment apps and users' preference towards UPI. However, no such study had been done on various factors influencing users towards UPI. Hence the researcher has been taken cover the above gap and bring out the detailed study in the topic "Factors Influencing the Users Towards Unified Payments Interface"

Factors Influences Users Towards UPI

This paper attempts to assess the several factors influence users towards UPI for making digital payment transactions. The variables that influence users' choice for UPI while making digital payments are referred to as "factors" in this framework. The factors that influence users toward UPI in the current study are classified as Convenience Factors, Efficiency Factors, Trust Factors, Security and Privacy Factors, Services Factors and Expediency Factors. The respondents are asked to rank the Six factors as stated earlier on a five-point Likert scale: Strongly disagree, strongly agree, Agree, Neutral, and Disagree. These ratings have been given scores of 5, 4, 3, 2, and 1, correspondingly.

1.1 Convenience Factors

The Convenience factors influence users towards UPI for making digital payments are listed with the help of reviews. There are confined to Anywhere any-time banking payment services, Learning to use an UPI is easy, User friendly, Clear and understandable Payment system, Making auto-payment, Make receipt and payment easily, Faster than NEFT/RTGS/IMPS, Useful for Small transactions, QR code- based payments, and Bill sharing with your friends.

1.1. a Difference between the mean score of convenience factors among the UPI Users

An attempt has been made to find out the difference among the variables in the convenience factors and it was attracted by the UPI users have been ranked by using Friedman test with the help of the mean score.

Null hypothesis: There is no significant difference between the mean score of the convenience factors and it was attracted by the UPI users.

Table-1 Test Statistics Of Friedman Test For Convenience Factors

N	524
Chi-Square	719.838
Df	9
Asymp. Sig.	.000
Significant	**Significant**

Source: Computed Data

The examined from table (1) demonstrates that the computed value for convenience factor among the variables. Since the “p value” is less than 0.05 (0.000) indicates that the null hypothesis is rejected at the 5 percent level of significance. Hence it was concluded that there is a significant difference between mean scores of the convenience factors influence the users towards UPI payment system.

Table 2 Convenience Factors Influence The Users Towards Upi Payment System

S.No	Convenience Factors	Mean Score	Rank
1.	Anywhere any-time banking payment services	6.78	I
2.	Learning to use an Unified Payment System is easy	5.19	VII
3.	User Friendly	6.02	IV
4.	Clear and understandable Paymentsystem	5.30	VI
5.	Making auto-payment	3.56	X
6.	Make receipt and payment easily	5.63	V
7.	Faster than NEFT/RTGS/IMPS	4.91	VIII
8.	Useful for Small transactions	6.43	II
9.	QR code- based payments	6.30	III
10.	Bill sharing with your friends	4.89	IX

Source: Computed Data.

The table 2 reveals that the convenience factors influence the users towards UPI payment system in the study area. On the basis of the mean score calculated, Anywhere any-time banking payment services is the first important factor that attract the users towards UPI with the mean score of 6.78, Useful for small transactions has got the second convenience factor by the users of UPI with the mean score of 6.43, QR code based payments has the third factor which influence the users towards UPI with the mean score of 6.30, User friendly has the fourth factor that motivate the users with the mean score of 6.02, Make receipt and Payment easily has the fifth factor inspire the users to use UPI with the mean score of 5.63, Clear and understandable Paymentsystem has got the sixth factor instigate the users towards UPI with the mean score of 5.30, Learning to use an Unified Payment System is easy has the seventh factor attract the users towards UPI with the mean score of 5.19, Faster than NEFT/RTGS/IMPS has got eight factor influences users towards UPI with the mean score of 4.91,Bill sharing with your friends has got the ninth factor inspire the users towards UPI with mean score of 4.89 and Making auto-payment has the tenth factor attract the users with the mean score of 3.56.

1.2 Efficiency Factors

The efficiency factors influence users towards UPI for making digital payments are listed with the help of reviews. There are confined to Better funds management, Instant transfer, Free fund transfer, No Installation Cost and Cash back and offers.

1.2.a Difference between the mean score of Efficiency factors among the UPI Users

An attempt has been made to find out the difference among the variables in the efficiency factors and it was attracted by the UPI users have been ranked by using Friedman test with the help of the mean score.

Null hypothesis: There is no significant difference between the mean score of the Efficiency factors and it was attracted by the UPI users.

Table-3 Test Statistics Of Friedman Test For Efficiency Factors

N	524
Chi-Square	344.133
Df	4
Asymp. Sig.	.000
Significant	**Significant**

Source: Computed Data

The examined from table (3) demonstrates that the computed value for efficiency factor among the variables. Since the "p value" is less than 0.05 (0.000) indicates that the null hypothesis is rejected at the 5 percent level of significance. Hence it was concluded that there is a significant difference between mean scores of the efficiency factors influence the users towards UPI payment system.

Table 4 Efficiency Factors Influence The Users Towards Upi Payment System

S.No	Efficiency Factors	Mean Score	Rank
1.	Better funds management	2.66	IV
2.	Instant transfer	3.77	I
3.	Free fund transfer	2.91	III
4.	No Installation Cost	3.22	II
5.	Cash back and offers	2.44	V

Source: Computed Data.

It is revealed from the table 4 that the efficiency factors influence the users towards UPI payment system in the study area. On the basis of the mean score calculated, Instant transfer has been specified as the first factor influences the users towards UPI with the mean score of 3.77, No installation cost has been stated as the second factor attract the users of UPI with the mean score of 3.22, Free fund transfer has been has been selected as the third factor by the respondents with the mean score of 2.91, Better fund management has been stated as the fourth factor by the users with the mean score of 2.66 and Cash back and offers has been provided as the fifth factor by the sample respondents with the mean score of 2.44.

1.3 Trust Factors

The trust factors influence users towards UPI for making digital payments are listed with the help of reviews. There are confined to Possibilities share personal information with other sites, promotes trusting relationships between buyers and sellers, It will not lead to transaction fraud, Unified Payment Interface modes are safe and trustworthy and Positive experiences with use of payment systems.

1.3.a Difference between the mean score of Efficiency factors among the UPI Users

An attempt has been made to find out the difference among the variables in the trust factors and it was attracted by the UPI users have been ranked by using Friedman test with the help of the mean score.

Null hypothesis: There is no significant difference between the mean score of the trust factors and it was attracted by the UPI users.

Table-5 Test Statistics Of Friedman Test For Trust Factors

N	524
Chi-Square	117.505
Df	4
Asymp. Sig.	.000
Significant	**Significant**

Source: Computed Data

The examined from table (5) demonstrates that the computed value for trust factor among the variables. Since the “p value” is less than 0.05 (0.000) indicates that the null hypothesis is rejected at the 5 percent level of significance. Hence it was concluded that there is a significant difference between mean scores of the trust factors influence the users towards UPI payment system.

Table 6 Trust Factors Influence The Users Towards Upi Payment System

S.No	Trust Factors	Mean Score	Rank
1.	Possibilities share personal information with other sites	2.80	IV
2.	Promotes trusting relationshipsbetween buyers and sellers.	3.39	I
3.	It will not lead to transaction fraud	2.65	V
4.	Unified Payment Interface modes are safe and trustworthy.	2.92	III
5.	Positive experiences with use of payment systems.	3.24	II

Source: Computed Data.

It is revealed from the table 6 that the trust factors influence the users towards UPI payment system in the study area. On the basis of the mean score calculated, Promotes trusting relationshipsbetween buyers and sellers has been specified as the first factor influences the users towards UPI with the mean score of 3.39, Positive experiences with use of payment systems has been stated as the second factor attract the users of UPI with the mean score of 3.24, Unified Payment Interface modes are safe and trustworthy has been has been selected as the third factor by the respondents with the mean score of 2.92, Possibilities share personal information with other sites has been stated as the fourth factor by the users with the mean score of 2.80 and It will not lead to transaction fraud has been provided as the fifth factor by the sample respondents with the mean score of 2.65.

Anusandhanvallari
Vol 2025, No.1
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1.4 Security and Privacy Factors

The security and privacy factors influence users towards UPI for making digital payments are listed with the help of reviews. There are confined to Unified Payment Interface system is secured, Privacy in Bank Account, Secured mode of payment, Notification on Payment request, Unified Payment Interface PIN and Mobile PIN cannot be hacked, Encryption protect unauthorized access, when a specific merchant's account is hacked, your security cannot be compromised, Two-factor Authentication and Avoid hassle free of carrying cash.

1.4.a Difference between the mean score of security and privacy factors among the UPI Users

An attempt has been made to find out the difference among the variables in the security and privacy factors and it was attracted by the UPI users have been ranked by using Friedman test with the help of the mean score.

Null hypothesis: There is no significant difference between the mean score of the security and privacy factors and it was attracted by the UPI users.

Table-7 Test Statistics Of Friedman Test For Security And Privacy Factors

N	524
Chi-Square	504.205
Df	8
Asymp. Sig.	.000
Significant	**Significant**

Source: Computed Data

The examined from table 7 demonstrates that the computed value for security and privacy factor among the variables. Since the "p value" is less than 0.05 (0.000) indicates that the null hypothesis is rejected at the 5 percent level of significance. Hence it was concluded that there is a significant difference between mean scores of the security and privacy factors influence the users towards UPI payment system.

Table 8 Security And Privacy Factors Influence The Users Towards Upi Payment System

S.No	Security and privacy Factors	Mean Score	Rank
1.	Unified Payment Interface system is secured	5.39	IV
2.	Privacy in Bank Account	5.26	V
3.	Secured mode of payment	5.60	III
4.	Notification on Payment request.	5.84	II
5.	Unified Payment Interface PIN and Mobile PIN cannot be hacked	3.98	VIII
6.	Encryption protect unauthorized access	4.33	VII
7.	When a specific merchant's account is hacked, your securitycannot be compromised	3.89	IX
8.	Two-factor Authentication	4.83	VI
9.	Avoid hassle free of carrying cash	5.88	I

Source: Computed Data.

Anusandhanvallari
Vol 2025, No.1
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The table 8 reveals that the security and privacy factors influence the users towards UPI payment system in the study area. On the basis of the mean score calculated, Avoid hassle free of carrying cash is the first important factor that attract the users towards UPI with the mean score of 5.88, Notification on Payment request .has got the second convenience factor by the users of UPI with the mean score of 5.84, secured mode of payment has the third factor which influence the users towards UPI with the mean score of 5.60, Unified Payment Interface system is secured has the fourth factor that motivate the users with the mean score of 5.39, Privacy in Bank Account has the fifth factor inspire the users to use UPI with the mean score of 5.26, Two-factor Authentication has got the sixth factor instigate the users towards UPI with the mean score of 4.83, Encryption protect unauthorized access has the seventh factor attract the users towards UPI with the mean score of 4.33, Unified Payment Interface PIN and Mobile PIN cannot be hacked has got eight factor influences users towards UPI with the mean score of 3.98 and When a specific merchant's account is hacked, your security cannot be compromised has got the ninth factor inspire the users towards UPI with mean score of 3.89.

1.5 Services Factors

The services factors influence users towards UPI for making digital payments are listed with the help of reviews. There are confined to Balance Enquiry, Transaction History, helps to track day to day expenses, User can use different bank accounts, Notification of successful or decline transactions, One App, many Accounts, Availability of choices of Apps, No loss of interest and Maximum bank support.

1.5.a Difference between the mean score of convenience factors among the UPI Users

An attempt has been made to find out the difference among the variables in the services factors and it was attracted by the UPI users have been ranked by using Friedman test with the help of the mean score.

Null hypothesis: There is no significant difference between the mean score of the Services Factors and it was attracted by the UPI users.

Table-9 Test Statistics Of Friedman Test Forservices Factors

N	524
Chi-Square	429.142
Df	8
Asymp. Sig.	.000
Significant	**Significant**

Source: Computed Data

The examined from table (9) demonstrates that the computed value for services factor among the variables. Since the "p value" is less than 0.05 (0.000) indicates that the null hypothesis is rejected at the 5 percent level of significance. Hence it was concluded that there is a significant difference between mean scores of the services factors influence the users towards UPI payment system.

Table 10 Services Factors Influence The Users Towards Upi Payment System

S.No	Services Factors	Mean Score	Rank
1.	Balance Enquiry	5.21	V
2.	Transaction History	5.72	I

3.	Helps to track day to day expenses	5.54	III
4.	Users can use different bank accounts	5.57	II
5.	Notification of successful or decline transactions.	5.15	VI
6.	One App, many Accounts	5.25	IV
7.	Availability of choices of Apps	4.74	VII
8.	No loss of interest	3.73	IX
9.	Maximum bank support	4.10	VIII

Source: Computed Data.

The table 10 reveals that the services factors influence the users towards UPI payment system in the study area. On the basis of the mean score calculated, Transaction history has been expressed as the first major factor attract the UPI users with the mean score of 5.72, Users can use different bank accounts has been indicated as the second factor influence the respondents towards UPI with the mean score of 5.57, Helps to track day to day expenses has been expressed as the third factor by the sample respondents with the mean score of 5.54, One App, many Accounts has the fourth factor that motivate the users with the mean score of 5.25, Balance enquiry has the fifth factor inspire the users to use UPI with the mean score of 5.21, Notification of successful or decline transactions has got the sixth factor instigate the users towards UPI with the mean score of 5.15, Availability of choices of Apps has the seventh factor attract the users towards UPI with the mean score of 4.74, Maximum bank support has got eight factor influences users towards UPI with the mean score of 4.10 and No loss of interest has got the ninth factor inspire the users towards UPI with mean score of 3.73.

1.6 Expediency Factors

The Expediency factors influence users towards UPI for making digital payments are listed with the help of reviews. There are confined to simplified payment, Time saving, No bank details are required, Eco friendly, Merchant Payment with Single Application or In-App Payments and Access and manage all your bank accounts at one place.

1.6.a Difference between the mean score of Expediency factors among the UPI Users

An attempt has been made to find out the difference among the variables in the Expediency factors and it was attracted by the UPI users have been ranked by using Friedman test with the help of the mean score.

Null hypothesis: There is no significant difference between the mean score of the Expediency factors and it was attracted by the UPI users.

Table- 11 Test Statistics Of Friedman Test For Expediency Factors

N	524
Chi-Square	275.125
Df	5
Asymp. Sig.	.000
Significant	**Significant**

Source: Computed Data

It is examined from table 11 that the computed value for Expediency factor among the variables. Since the "p value" is less than 0.05 (0.000) indicates that the null hypothesis is ejected at the 5 percent level of significance. Hence it was concluded that there is a significant difference between mean scores of the Expediency factors influence the users towards UPI payment system.

Table 12 Expediency Factors Influence The Users Towards Upi Payment System

S.No	Expediency Factors	Mean Score	Rank
1.	Simplified Payment	3.81	II
2.	Time Saving	4.17	I
3.	No bank details are required	2.86	VI
4.	Eco friendly	3.34	IV
5.	Merchant Payment with Single Application or In-App Payments.	3.18	V
6.	Access and manage all your bank accounts at one place.	3.63	III

Source: Computed Data.

It is revealed from the table 12 that the expediency factors influence the users towards UPI payment system in the study area. On the basis of the mean score calculated, Time saving has been specified as the first factor influences the users towards UPI with the mean score of 4.17, Simplified payment has been stated as the second factor attract the users of UPI with the mean score of 3.81, Access and manage all your bank accounts at one place has been has been selected as the third factor by the respondents with the mean score of 3.63,Eco friendly has been stated as the fourth factor by the users with the mean score of 3.34, Merchant Payment with Single Application or In-App Payments has been provided as the fifth factor by the sample respondents with the mean score of 3.18 and No bank details is required has been stated by the respondents as sixth factor with the mean score of 2.86.

Conclusion

The Research interrogation was to Understand the factors influencing UPI user adoption levels and the objectives were to understand how the different factors played a role in usage of UPI payment system to carry out day-to-day financial transactions. The research was able to establish some relationship between few of the variables classified as convenience factors, efficiency factors, trust factors, security and privacy factors, services factors and expediency factors. This study highlights key factors like anywhere any-time banking payment services, better funds management, Possibilities share personal information with other sites, UPI payment system is secured and simple. Overall, the UPI have been used frequently and UPI providers keep improving their services for the better user experience.

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