

A Study on Ease of Use, Awareness, and Adoption of UPI Services Among Young Consumers

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ABSTRACT

The rapid advancement of digital technology has significantly transformed the financial ecosystem worldwide. In India, the Unified Payments Interface (UPI) has emerged as one of the most revolutionary digital payment systems, enabling instant, secure, and seamless financial transactions. Young consumers, being technologically adept and highly receptive to digital innovations, represent the largest user segment of UPI services. This study examines the ease of use, awareness, and adoption of UPI services among young consumers. It explores the factors influencing UPI adoption and highlights the role of perceived ease of use, awareness, security, convenience, and trust in shaping user behavior. The study is based on primary data collected from 150 respondents, who were selected using the convenience sampling technique. The findings reveal that awareness and ease of use significantly influence the adoption of UPI services. Furthermore, promotional campaigns, smartphone penetration, and government initiatives have accelerated digital payment adoption among young consumers. The study concludes by recommending strategies to improve financial literacy, strengthen cybersecurity measures, and enhance digital infrastructure for sustainable growth of digital payment systems.

Keywords: *Unified Payments Interface (UPI), Digital Payments, Young Consumers, Ease of Use, Awareness, Adoption and Financial Technology...*

INTRODUCTION:

Digital payment systems have revolutionized the global financial landscape by replacing traditional cash-based transactions with convenient electronic payment methods. India has witnessed remarkable growth in digital payments following initiatives promoting a cashless economy and digital financial inclusion. Among various digital payment platforms, the Unified Payments Interface (UPI), developed by the National Payments Corporation of India, has become one of the world's fastest-growing real-time payment systems.

UPI enables users to transfer funds instantly between bank accounts using smartphones without requiring bank

account details. The simplicity, interoperability, and accessibility of UPI have made it highly popular among consumers, particularly young individuals who are comfortable using digital technologies. Factors such as widespread smartphone usage, affordable internet connectivity, increasing e-commerce transactions, and digital banking services have accelerated UPI adoption among youth.

Young consumers constitute an important demographic because they actively engage in online shopping, food delivery, ride-hailing services, entertainment subscriptions, educational payments, and peer-to-peer fund transfers. Their familiarity with mobile applications

and digital ecosystems has significantly contributed to the rapid expansion of UPI transactions across India.

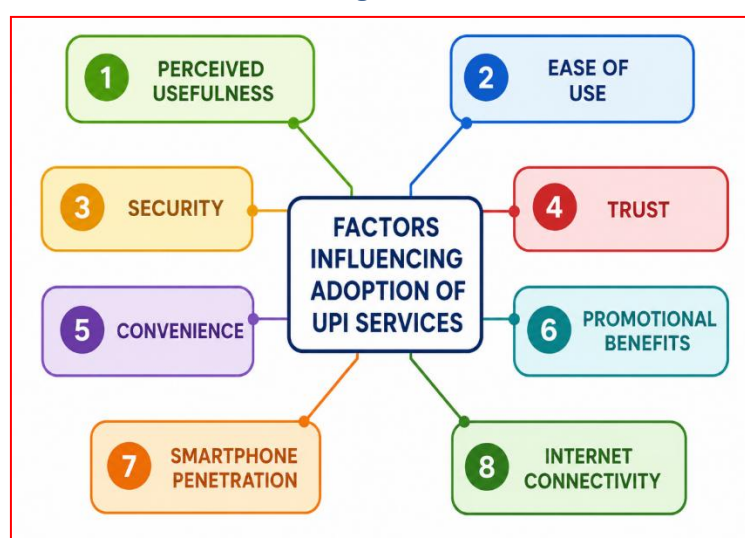
Despite widespread adoption, several challenges continue to influence UPI usage, including cybersecurity concerns, fraud risks, digital literacy gaps, and network-related issues. Understanding the awareness, ease of use, and adoption behavior of young consumers is therefore essential for policymakers, financial institutions, and fintech companies to enhance digital payment services.

Research Background

The Unified Payments Interface has transformed India's digital payment ecosystem by providing a fast, secure, and convenient platform for financial transactions. Young consumers have emerged as the leading adopters of UPI

services because of their technological familiarity, widespread smartphone usage, and preference for cashless transactions. The study demonstrates that awareness and ease of use are the most influential factors driving UPI adoption. Perceived usefulness, trust, convenience, and promotional incentives further strengthen consumer acceptance, while cybersecurity concerns and digital literacy gaps remain significant challenges. Strengthening consumer education, improving security measures, expanding digital infrastructure, and enhancing user experience will ensure sustained adoption of UPI services. As digital payments continue to evolve, UPI is expected to play a pivotal role in promoting financial inclusion, supporting economic growth, and advancing India's vision of a digitally empowered economy.

Figure: 1



Ease of Use of UPI Services; an overview

1. Simple Registration Process: A simple registration process is one of the most important factors influencing the adoption of Unified Payments Interface (UPI) services among young consumers. UPI applications are designed to enable users to register quickly by linking their mobile number with a bank account and creating a secure UPI Personal Identification Number (PIN). The process generally requires minimal documentation and can be completed within a few minutes, making it convenient even for first-time users. The ease of registration reduces technological barriers and encourages individuals with varying levels of digital literacy to adopt digital payment platforms. Moreover, integration with Aadhaar, mobile banking, and debit card authentication simplifies account verification. A straightforward onboarding experience enhances user confidence and minimizes the likelihood of registration abandonment. As a result, consumers perceive UPI applications as accessible and efficient, leading to higher acceptance and continued usage. Therefore, a simple registration process plays a significant role in promoting financial inclusion and accelerating the adoption of digital payment systems.

2. User-Friendly Interface: A user-friendly interface is a critical determinant of customer satisfaction and

continued usage of UPI services. Modern UPI applications feature intuitive designs, easy navigation, and clearly labeled functions that enable users to perform transactions without requiring advanced technical knowledge. Simple menu structures, multilingual support, QR code scanning, and visual transaction confirmations enhance the overall user experience. Young consumers, who frequently use smartphones, appreciate applications that offer seamless interactions and quick access to payment features. An attractive and responsive interface minimizes confusion and reduces transaction errors, thereby increasing user confidence. Furthermore, continuous updates and usability improvements based on customer feedback contribute to greater engagement and retention. Accessibility features, including voice assistance and regional language options, further expand UPI adoption across diverse user groups. Consequently, a well-designed user interface not only improves customer convenience but also strengthens trust in digital payment platforms, encouraging regular usage and positive word-of-mouth recommendations among consumers.

3. Instant Transactions: Instant transaction capability is one of the defining features of UPI services and a major reason for their widespread adoption. Unlike traditional banking systems that may require several hours or days

for fund transfers, UPI enables real-time money transfers between bank accounts, regardless of the participating banks. This speed enhances convenience for consumers, merchants, and service providers. Immediate transaction confirmation through notifications and SMS alerts further reassures users about payment completion. Young consumers particularly value the ability to make instant payments for shopping, dining, utility bills, online purchases, and peer-to-peer transfers. Real-time settlement also improves cash flow management for businesses and eliminates delays associated with conventional payment methods. Additionally, instant transactions reduce dependency on cash and support a more efficient digital economy. The combination of speed, reliability, and convenience significantly enhances customer satisfaction, making instant transactions a key driver of UPI adoption among the younger population.

4. Multiple Payment Options: Multiple payment options offered through UPI significantly enhance its flexibility and usability. Users can transfer money using mobile numbers, Virtual Payment Addresses (VPAs), QR codes, Aadhaar numbers, bank account details, or account numbers with IFSC codes. This variety enables consumers to choose the most convenient payment method based on the transaction context. Integration with online shopping platforms, utility service providers, educational institutions, and government agencies further broadens UPI's application. Young consumers appreciate the ability to make payments for tuition fees, subscriptions, food delivery, transportation, and entertainment using a single platform. The interoperability of UPI across different banks and payment applications eliminates the need for multiple digital wallets. Additionally, features such as recurring payments, bill payments, and merchant transactions increase user convenience. By offering diverse payment alternatives through a unified platform, UPI improves customer experience, encourages frequent usage, and contributes significantly to the growth of India's digital payment ecosystem.

5. 24×7 Availability : The round-the-clock availability of UPI services is a major advantage over traditional banking channels. Unlike bank branches and many conventional payment systems that operate within fixed business hours, UPI allows users to perform transactions anytime and anywhere. This continuous accessibility is particularly beneficial for students, working professionals, and online shoppers who require immediate payment services beyond regular banking hours. Whether paying utility bills, transferring emergency funds, shopping online, or settling peer-to-peer payments, users can complete transactions without waiting for bank operating times. The uninterrupted availability also supports businesses by enabling customers to make payments at any hour, thereby improving customer service and operational efficiency. Furthermore, the robust technological infrastructure of UPI ensures secure and reliable transactions throughout the day. The convenience of 24×7 accessibility enhances user satisfaction, increases transaction frequency, and reinforces consumer trust, making it a significant factor driving the widespread adoption of UPI services among young consumers.

6. Awareness of UPI Services : Awareness of UPI services plays a fundamental role in influencing consumer adoption and continued usage of digital payment platforms. Awareness refers to the extent to which individuals understand the features, benefits, security measures, and operational procedures of UPI applications. Consumers with greater knowledge are more likely to trust the technology and confidently perform digital transactions. Awareness is created through advertising campaigns, educational initiatives, banking promotions, social media content, and peer recommendations. Young consumers who are informed about cashback offers, security practices, QR code payments, and mobile banking integration tend to adopt UPI more readily. Increased awareness also helps reduce misconceptions regarding cybersecurity risks and transaction failures. Financial literacy programs further strengthen understanding of digital payment systems, contributing to greater financial inclusion. Therefore, enhancing public awareness through continuous education and communication initiatives is essential for expanding UPI adoption, increasing transaction volumes, and promoting a secure and cashless digital economy.

7. Social Media : Social media has emerged as a powerful channel for promoting awareness and adoption of UPI services among young consumers. Platforms such as Instagram, Facebook, YouTube, WhatsApp, and X provide banks, fintech companies, and government agencies with opportunities to educate users about digital payment features, security practices, and promotional offers. Influencer marketing, customer testimonials, instructional videos, and interactive campaigns effectively increase consumer engagement and build trust in UPI platforms. Young individuals frequently rely on social media for information, making it an effective medium for shaping perceptions and encouraging behavioral change. Viral campaigns highlighting cashback rewards, QR code payments, and secure transactions further motivate first-time users to adopt UPI. Additionally, social media facilitates rapid dissemination of updates regarding new features and fraud prevention measures. Consequently, social media serves as an influential communication tool that enhances awareness, builds confidence, and significantly contributes to the widespread adoption of UPI services among youth.

8. Educational Institutions: Educational institutions play a significant role in increasing awareness and adoption of UPI services among students and young consumers. Colleges, universities, and schools increasingly encourage digital payments for tuition fees, examination fees, library services, hostel charges, and campus purchases. Exposure to UPI within educational environments familiarizes students with digital financial transactions at an early stage. Institutions also organize financial literacy workshops, seminars, and awareness programs that educate students about secure digital payment practices and cybersecurity measures. Many campuses promote cashless transactions through QR code-enabled cafeterias, bookstores, and administrative offices, making UPI an integral part of daily student life. Faculty members and student organizations also influence digital payment adoption through demonstrations and peer learning

activities. As digitally literate individuals enter the workforce, their familiarity with UPI contributes to sustained usage. Therefore, educational institutions serve as important catalysts in developing digital financial literacy and promoting widespread acceptance of UPI services.

9. Banks : Banks play a central role in promoting awareness, trust, and adoption of UPI services. As the primary financial institutions facilitating UPI transactions, banks provide customers with secure digital payment infrastructure, mobile banking applications, customer support, and financial education. They actively encourage customers to register for UPI services through branch assistance, digital campaigns, SMS notifications, and mobile banking platforms. Banks also organize awareness programs demonstrating the benefits of cashless transactions, security practices, and fraud prevention techniques. By continuously improving transaction security through two-factor authentication, encryption, and real-time monitoring, banks enhance customer confidence in digital payments. Additionally, collaborations with fintech companies enable banks to introduce innovative payment solutions and improve user experience. Efficient grievance redressal mechanisms further strengthen customer trust and satisfaction. Consequently, banks not only facilitate financial transactions but also contribute significantly to digital financial inclusion and the widespread acceptance of UPI services across different segments of society.

10. Government Initiatives Government initiatives have played a transformative role in promoting the adoption of UPI services and accelerating India's transition toward a digital economy. Various policy measures encourage cashless transactions through digital infrastructure development, financial inclusion programs, and nationwide awareness campaigns. Initiatives promoting Digital India have increased internet connectivity, smartphone usage, and access to digital financial services, particularly in rural and semi-urban areas. Government departments increasingly accept UPI payments for taxes, utility bills, transportation, and public services, encouraging citizens to adopt digital payment methods. Public awareness campaigns educate consumers about the benefits, convenience, and security of UPI transactions while emphasizing safe digital practices. Regulatory support from financial authorities ensures standardized security protocols and continuous innovation within the payment ecosystem. Incentives such as cashback schemes and merchant support programs further encourage digital payment adoption. Collectively, these government initiatives have strengthened public confidence and significantly expanded UPI usage across diverse demographic groups.

11. Peer Influence : Peer influence significantly affects the adoption and continued use of UPI services among young consumers. Friends, classmates, colleagues, and family members often serve as trusted sources of information regarding new technologies and digital payment applications. Positive experiences shared by peers increase confidence and reduce uncertainty associated with adopting UPI services. Young consumers frequently observe others using UPI for shopping, dining,

transportation, and online payments, encouraging them to adopt similar payment behaviors. Recommendations from peers regarding specific applications, security features, and promotional offers further strengthen adoption intentions. Social interactions also facilitate knowledge sharing about transaction procedures, fraud prevention, and troubleshooting techniques. As more individuals within a social network begin using UPI, network effects increase its perceived usefulness and convenience. Consequently, peer influence shapes consumer attitudes, enhances trust in digital payment systems, and motivates regular usage, making it an important social factor contributing to the widespread adoption of UPI services among young consumers.

Factors Influencing Adoption of UPI Services

1. Perceived Usefulness

Perceived usefulness refers to the degree to which an individual believes that using Unified Payments Interface (UPI) services enhances the efficiency and effectiveness of financial transactions. According to the Technology Acceptance Model (TAM), perceived usefulness is a key determinant of technology adoption. UPI enables users to transfer funds instantly, pay utility bills, recharge mobile services, make online purchases, and conduct merchant payments through a single platform. These capabilities save time, reduce transaction costs, and eliminate the need to carry cash or visit bank branches. Young consumers perceive UPI as a practical and efficient payment solution that simplifies their daily financial activities. The ability to perform secure transactions anytime and anywhere further increases its perceived value. As users experience greater convenience, speed, and reliability, they are more likely to develop positive attitudes toward UPI services. Consequently, perceived usefulness significantly influences consumers' intention to adopt and continuously use digital payment platforms.

2. Ease of Use

Ease of use refers to the extent to which consumers believe that using UPI services requires minimal effort and is free from complexity. A user-friendly payment system encourages individuals to adopt digital transactions by reducing technological barriers and increasing confidence. UPI applications are designed with intuitive interfaces, simple navigation, QR code scanning, multilingual support, and quick registration processes, enabling users to complete transactions efficiently. Young consumers, who frequently use smartphones, appreciate digital payment platforms that require limited technical knowledge. Clear instructions, instant transaction confirmations, and straightforward authentication procedures contribute to a positive user experience. Continuous improvements in application design further enhance usability and customer satisfaction. When consumers perceive UPI services as easy to learn and operate, they are more willing to integrate digital payments into their daily routines. Therefore, ease of use positively influences users' behavioral intention and plays a crucial role in the widespread adoption of UPI services.

3. Security

Security is one of the most critical factors influencing the adoption of UPI services. Consumers are more likely to use digital payment platforms when they believe their financial information and transactions are adequately protected. UPI incorporates multiple security mechanisms, including two-factor authentication, encrypted communication, secure UPI PIN verification, device authentication, and real-time transaction monitoring. These measures reduce the risk of unauthorized access, fraud, and identity theft. Financial institutions and payment service providers continuously strengthen cybersecurity protocols to protect users from emerging digital threats. Security awareness campaigns also educate consumers about safe digital payment practices, such as safeguarding UPI PINs and recognizing phishing attempts. Young consumers who perceive UPI as a secure payment system are more likely to trust and regularly use digital transactions. Therefore, maintaining robust security infrastructure and promoting cybersecurity awareness are essential for enhancing customer confidence and encouraging the sustained adoption of UPI services.

4. Trust

Trust refers to the confidence consumers place in UPI platforms, banks, and payment service providers to perform secure, accurate, and reliable financial transactions. It is a fundamental factor influencing users' willingness to adopt and continue using digital payment systems. Trust develops through consistent transaction performance, transparent policies, effective customer support, and strong security measures. Consumers are more likely to adopt UPI when they believe their personal and financial information is protected against fraud and misuse. Timely transaction confirmations, efficient grievance redressal mechanisms, and regulatory oversight further strengthen consumer confidence. Positive experiences shared by friends, family, and online communities also contribute to trust formation. Young consumers who trust UPI platforms perceive lower risks and greater reliability, leading to increased usage frequency. Consequently, trust serves as a significant psychological factor that enhances user satisfaction, promotes long-term loyalty, and supports the widespread adoption of digital payment technologies.

5. CONVENIENCE

Convenience is a major factor driving the adoption of UPI services among consumers. It refers to the ease and flexibility with which users can perform financial transactions without geographical or time constraints. UPI enables customers to transfer money, pay bills, purchase products, and conduct merchant payments using smartphones from virtually any location. Features such as QR code payments, mobile number transfers, and Virtual Payment Addresses (VPAs) simplify transaction processes and reduce the need for cash or physical banking services. The availability of UPI around the clock further enhances its convenience, allowing users to make payments whenever required. Young consumers particularly value this flexibility because it supports their fast-paced lifestyles and online shopping habits. The integration of multiple banking services into a single

application also reduces transaction complexity. Consequently, the convenience offered by UPI significantly improves customer satisfaction and encourages frequent usage of digital payment services.

6. Promotional Benefits

Promotional benefits significantly influence consumers' decisions to adopt and continue using UPI services. Banks, fintech companies, and digital payment providers frequently offer cashback rewards, discounts, referral bonuses, loyalty points, and promotional coupons to attract new users and encourage repeat transactions. These incentives increase the perceived value of digital payments and motivate consumers to choose UPI over traditional payment methods. Young consumers, in particular, respond positively to financial rewards that reduce purchase costs and enhance the overall payment experience. Promotional campaigns conducted during festivals, online shopping events, and special occasions further stimulate transaction frequency. In addition to monetary incentives, reward programs strengthen customer engagement and build long-term loyalty toward specific payment platforms. As consumers repeatedly experience financial benefits, they develop positive attitudes toward UPI usage. Therefore, promotional benefits serve as an effective marketing strategy that accelerates user acquisition, increases transaction volumes, and supports the continued growth of digital payment adoption.

7. Smartphone Penetration

Smartphone penetration is a key enabler of UPI adoption because smartphones provide the primary platform for accessing digital payment applications. The increasing affordability of smartphones, coupled with technological advancements, has expanded digital payment accessibility across urban and rural regions. Young consumers are among the largest users of smartphones and rely heavily on mobile applications for communication, shopping, education, and financial transactions. Modern smartphones support secure authentication methods such as biometric verification, fingerprint recognition, and facial recognition, enhancing the safety and convenience of UPI services. The availability of user-friendly payment applications further encourages consumers to perform transactions directly from their mobile devices. As smartphone ownership continues to grow, more individuals gain access to digital banking and financial services. Consequently, higher smartphone penetration contributes significantly to financial inclusion, increases digital literacy, and serves as a major driver of UPI adoption among young consumers and the broader population.

8. Internet Connectivity

Reliable internet connectivity is an essential factor influencing the adoption and effective use of UPI services. Since UPI transactions depend on real-time communication between banks and payment service providers, stable internet access is necessary for completing secure and uninterrupted transactions. The expansion of high-speed mobile internet through 4G and 5G networks has significantly improved the accessibility of digital payment services across India. Better internet

infrastructure enables users to perform instant fund transfers, online shopping, bill payments, and merchant transactions without delays. Young consumers, who frequently access online services through smartphones, benefit greatly from reliable internet connectivity that supports seamless digital experiences. Improved network coverage in rural and semi-urban areas has also expanded UPI adoption among previously underserved populations. Therefore, the availability of fast, affordable, and dependable internet connectivity enhances user satisfaction, strengthens confidence in digital payment systems, and plays a vital role in the widespread adoption of UPI services.

Objectives of the Study

The study aims to:

1. To examine the level of awareness regarding UPI services among young consumers.
2. To analyze the ease of use of UPI applications.
3. To suggest measures to improve the effectiveness and security of UPI services.

Research Methodology

The present study adopts a **quantitative research approach** to examine the ease of use, awareness, and adoption of Unified Payments Interface (UPI) services among young consumers. A **descriptive research design** was employed to analyze respondents' perceptions and identify the factors influencing UPI adoption.

The study is based on **primary data** collected from **150 respondents**, who were selected using the **convenience sampling technique**. This non-probability sampling method was chosen due to its practicality, accessibility, and suitability for collecting data from respondents who were readily available and actively using digital payment services.

The primary data were collected through a **structured questionnaire** administered using **Google Forms**. The questionnaire comprised two sections: the first section gathered demographic information such as age, gender, educational qualification, occupation, and monthly income, while the second section measured respondents' perceptions regarding the ease of use, awareness, and

adoption of UPI services using a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree."

The collected data were coded, tabulated, and analyzed using the **Statistical Package for the Social Sciences (SPSS)**. Descriptive statistical techniques, including frequency and percentage analysis, were used to summarize the demographic characteristics of the respondents. Inferential statistical tools such as the **Chi-square test** were employed to examine the association between demographic variables and awareness of UPI services. The findings provide insights into the factors influencing UPI adoption among young consumers and contribute to understanding consumer behavior toward digital payment systems.

Analysis, Findings and Results

Awareness is one of the most important determinants influencing the adoption of Unified Payments Interface (UPI) services among consumers. A higher level of awareness enables individuals to understand the features, benefits, security measures, and convenience associated with UPI, thereby encouraging its acceptance and regular usage. Demographic characteristics, particularly age, play a significant role in shaping awareness levels because different age groups vary in their exposure to digital technologies, financial literacy, and willingness to adopt innovative payment systems. Younger consumers are generally considered more technologically proficient, while middle-aged and older consumers may differ in their familiarity and experience with digital payment platforms. Therefore, examining the relationship between age and awareness provides valuable insights into consumer behavior and helps identify demographic segments that require targeted awareness campaigns. Understanding this association is essential for policymakers, banks, and fintech companies seeking to enhance digital financial inclusion and increase the adoption of UPI services across diverse population groups.

Table: 1

Age and level of Awareness towards Ease of Use and Adoption of UPI Services

Age group	Level of Awareness			Total
	Low	Moderate	High	
Young	14	29	12	55
	25.5%	52.7%	21.8%	100.0%
Middle	21	28	13	62
	33.9%	45.2%	21.0%	100.0%
Old	7	15	11	33
	21.2%	45.5%	33.3%	100.0%
Total	42	72	36	150
	28.0%	48.0%	24.0%	100.0%

The cross-tabulation of age group and level of awareness reveals variations in awareness across different age categories. Among the young respondents (55), 52.7% possess a moderate level of awareness, 25.5% exhibit low awareness, and 21.8% demonstrate high awareness. This indicates that the majority of young consumers have an average understanding of UPI services, although relatively fewer possess a high level of awareness.

Among the middle-aged respondents (62), 45.2% have moderate awareness, 33.9% report low awareness, and 21.0% exhibit high awareness. Compared with the young group, middle-aged respondents show a slightly higher proportion of low awareness, suggesting that a considerable segment may still require greater exposure to UPI-related information and digital financial education.

Among the older respondents (33), 45.5% have moderate awareness, 33.3% possess high awareness, and 21.2% report low awareness. Notably, the older age group records the highest proportion of respondents with high awareness, indicating that many older consumers who actively use digital financial services have developed a strong understanding of UPI features and benefits.

Overall, out of 150 respondents, 48.0% exhibit a moderate level of awareness, 28.0% have low awareness, and 24.0% demonstrate high awareness. The findings suggest that moderate awareness is predominant across all age groups, while differences exist in the distribution of low and high awareness. These results imply that awareness initiatives should continue to focus on all age segments, with particular emphasis on improving awareness among consumers who remain at lower levels of familiarity with

UPI services, thereby promoting greater adoption of digital payment systems

Table 2

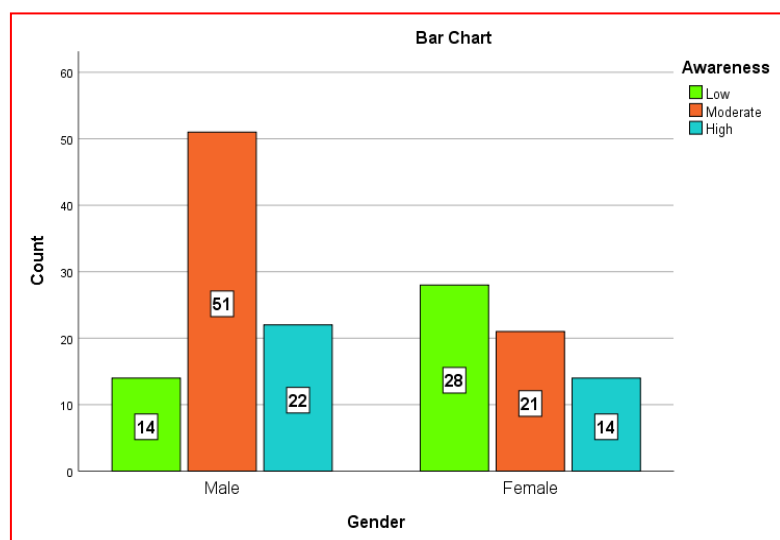
Chi-Square test

Test	Chi-Square	df	Sig.
Result	3.383	4	0.496

The Chi-Square test was conducted to examine whether there is a significant association between respondents' age group and their level of awareness of UPI services. The calculated Chi-Square value is 3.383 with 4 degrees of freedom, and the corresponding p-value (Sig.) is 0.496.

Since the p-value (0.496) is greater than the 0.05 level of significance, the association between age group and level of awareness is not statistically significant. Therefore, the null hypothesis (H_0) is accepted, and the alternative hypothesis (H_1) is rejected.

This result indicates that respondents' awareness of UPI services does not vary significantly across different age groups. Although descriptive statistics show minor differences in the proportions of low, moderate, and high awareness among young, middle-aged, and older respondents, these variations are not substantial enough to establish a statistically significant relationship. Overall, awareness of UPI services appears to be relatively consistent irrespective of age, suggesting that awareness initiatives and digital payment information have reached consumers across all age categories in a similar manner.



The Chi-Square analysis reveals no significant association between age group and the level of awareness of UPI services ($\chi^2 = 3.383$, $df = 4$, $p = 0.496 > 0.05$). Hence, respondents' age does not significantly influence their awareness of UPI services, indicating that awareness is distributed similarly across different age groups.

Gender and Level of Awareness

Gender is an important demographic factor that may influence consumers' awareness of Unified Payments Interface (UPI) services. Differences in digital literacy, access to technology, financial knowledge, and exposure to digital payment platforms can contribute to variations in awareness levels between male and female consumers. Higher awareness enables individuals to understand the benefits, features, and security aspects of UPI services,

thereby increasing their likelihood of adopting digital payment systems. Examining the relationship between gender and awareness helps identify whether awareness initiatives effectively reach both male and female consumers. Such analysis provides valuable insights for

banks, fintech companies, and policymakers to develop targeted educational programs that promote inclusive digital financial participation and enhance the adoption of UPI services.

Table: 3
Gender and level of Awareness

Gender	Level of Awareness			Total
	Low	Moderate	High	
Male	14	51	22	87
	16.1%	58.6%	25.3%	100.0%
Female	28	21	14	63
	44.4%	33.3%	22.2%	100.0%
Total	42	72	36	150
	28.0%	48.0%	24.0%	100.0%

The cross-tabulation between gender and the level of awareness indicates noticeable differences in awareness among male and female respondents.

Among the male respondents (87), 58.6% possess a moderate level of awareness, 25.3% exhibit high awareness, and 16.1% have low awareness. This suggests that the majority of male respondents have a moderate understanding of UPI services, while one-fourth demonstrate a high level of awareness. The relatively lower proportion of males with low awareness indicates better overall familiarity with digital payment systems.

Among the female respondents (63), 44.4% report low awareness, 33.3% possess moderate awareness, and 22.2% exhibit high awareness. The findings indicate that a larger proportion of female respondents fall into the low-awareness category compared to males, suggesting comparatively lower exposure to or familiarity with UPI services.

Overall, out of 150 respondents, 48.0% demonstrate a moderate level of awareness, 28.0% have low awareness, and 24.0% possess high awareness. The results reveal that male respondents generally exhibit higher levels of awareness than female respondents, particularly in terms of moderate awareness, whereas female respondents are more concentrated in the low-awareness category. These descriptive findings suggest the need for targeted awareness and digital financial literacy programs, especially among female consumers, to encourage greater understanding and adoption of UPI services.

The descriptive analysis indicates that male respondents exhibit relatively higher awareness of UPI services than female respondents. A majority of males (58.6%) have a moderate level of awareness, whereas a higher proportion of females (44.4%) fall under the low-awareness category. These findings suggest that gender differences exist in the

distribution of awareness levels, highlighting the importance of strengthening awareness initiatives among female consumers to promote inclusive adoption of UPI services.

Table 4
Chi-Square test

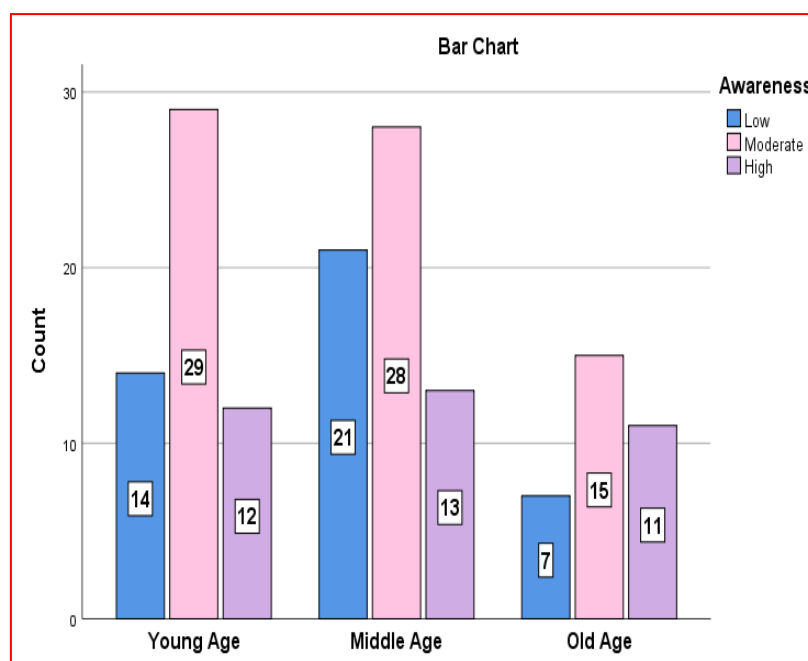
Test	Chi-Square	df	Sig.
Result	15.501	2	0.009

The Chi-Square test was performed to examine whether there is a significant association between respondents' gender and their level of awareness of UPI services. The calculated Chi-Square value is 15.501 with 2 degrees of freedom, and the corresponding p-value (Sig.) is 0.009.

Since the p-value (0.009) is less than the 0.05 level of significance, the relationship between gender and the level of awareness is statistically significant. Therefore, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted.

The result indicates that respondents' level of awareness of UPI services differs significantly based on gender. The descriptive statistics show that male respondents exhibit higher awareness than female respondents, with 58.6% of males having moderate awareness compared to 33.3% of females, while 44.4% of female respondents fall under the low-awareness category, compared to only 16.1% of males. These differences are statistically significant, suggesting that gender plays an important role in determining awareness of UPI services. The findings emphasize the need for targeted awareness and digital financial literacy initiatives, particularly among female

consumers, to promote equitable adoption of UPI services.



The Chi-Square analysis reveals a significant association between gender and the level of awareness of UPI services ($\chi^2 = 15.501$, $df = 2$, $p = 0.009 < 0.05$). Hence, respondents' gender significantly influences their awareness of UPI services. Male respondents demonstrate comparatively higher awareness than female respondents, indicating the need for focused awareness programs to bridge the gender gap in digital payment knowledge and encourage inclusive adoption of UPI services.

Suggestions

Based on the findings, the following recommendations are proposed.

- Conduct regular financial literacy and cybersecurity awareness programs.
- Strengthen fraud detection and cybersecurity mechanisms.
- Improve grievance redressal systems for faster complaint resolution.
- Enhance digital infrastructure in semi-urban and rural areas.
- Simplify application interfaces for first-time users.
- Promote responsible digital payment practices through educational campaigns.
- Introduce multilingual application support to improve accessibility.
- Encourage collaboration among banks, fintech companies, and educational institutions to increase awareness.

CONCLUSION

The analysis demonstrates that **gender has a significant influence on the level of awareness of UPI services** among the respondents. The Chi-Square test results ($\chi^2 = 15.501$, $df = 2$, $p = 0.009$) confirm a statistically significant association between gender and awareness levels. Male respondents exhibit comparatively higher levels of awareness, while a larger proportion of female respondents fall under the low-awareness category. This suggests that differences in digital exposure, financial literacy, and access to technology may contribute to variations in awareness between male and female consumers.

The findings highlight the importance of implementing **gender-inclusive awareness programs** to promote equitable adoption of UPI services. Banks, fintech companies, educational institutions, and government agencies should organize targeted digital literacy campaigns, workshops, and financial education initiatives, particularly for female consumers. Strengthening awareness among women will not only increase their confidence in using digital payment platforms but also contribute to greater financial inclusion, improved digital empowerment, and the continued growth of India's cashless economy. Overall, reducing the gender gap in UPI awareness is essential for achieving widespread and inclusive adoption of digital payment services...

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