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Article

GENDER GAP IN UPI ADOPTION AND USAGE: A STUDY OF DIGITAL PAYMENT BEHAVIOUR AMONG MEN AND WOMEN IN UTTAR PRADESH

Anamika Yadav[1], Sudesh Srivastava[2]

[1] SBM, CSJMU, Kanpur, Uttar Pradesh, India.
Email: ay9260885@gmail.com
[2]SBM, CSJMU, Kanpur, Uttar Pradesh, India.

Abstract: The fast expansion of digital payment systems has transformed India's financial environment, with the Unified Payments Interface (UPI) emerging as the leading platform for digital payments. The fact that UPI makes transactions rapid, secure, and cheap makes it a game changer in financial inclusion, he continued. Despite digital payment technologies' increasing popularity, there is still a gender disparity in their usage and access. Digital literacy, smartphone ownership, financial independence, internet access, and cyber security are common issues that women confront. This study looks at how men and women in Uttar Pradesh use and utilise UPI differently. A quantitative research design was used in this study. Four hundred participants, evenly split between males and females, were polled using a standardised questionnaire to provide the main data. For this data analysis, we will be using descriptive statistics, t-tests, chi-square analysis, etc. Male and female consumers are likely to vary significantly in terms of knowledge, use frequency, trust, perceived security, and transaction value. This research adds to our understanding of digital financial inclusion depending on gender and offers policy suggestions to help close the digital payment adoption gap.
Keywords: UPI, Digital Payments, Gender Gap, Financial Inclusion, Digital Literacy, Uttar Pradesh

1. INTRODUCTION

One innovation that has changed the face of online payments is the Unified Payments Interface (UPI), created by the National Payments Corporation of India (NPCI). There is a significant role for women in this shift since they constitute a huge population. The capacity to conduct rapid money transfers, pay bills, and access credit has made UPI a crucial pillar for financial inclusion, particularly for underprivileged and rural people, according to the report.

This research delves at the unique obstacles and possibilities faced by women in the adoption of UPIs. In order to provide light on how UPI might promote women's empowerment and economic independence, it aims to examine trends and obstacles. Education, government efforts, and technology all have a role in the adoption process, according to the research[1].

When it comes to online banking, India has come a long way in the last decade. Digital India, Jan Dhan Yojana, Aadhaar, and mobile banking are some of the government efforts that have hastened the transition to a cashless economy. Launched in 2016 by NPCI, UPI has changed the digital transaction landscape by allowing for the instantaneous transmission of payments using mobile apps. Now, with a large portion of digital transactions processed via UPI, the digital payment ecosystem in India is robust. Merchants and customers alike have embraced UPI, leading to a meteoric rise in the service's transaction volume and value. These days, UPI not only helps a lot of people have access to financial services, but it also has a huge chunk of India's retail digital payment market share [2].

Nevertheless, several demographic groups still lack equal access to digital financial services, even if this has been a success. Digital technology and financial services are still not equally accessible to women and men. Fewer women possess smartphones, fewer are digitally literate, fewer have access to financial services, and women are more likely to be concerned about fraud and privacy. There is evidence that women are under-represented in the digital payment user base, and that gender disparities in digital access are still limiting women's involvement in the digital economy [3].

As the most populous state in India, Uttar Pradesh (UP) offers a useful setting in which to examine the gender gap in UPI use. Policymakers may better promote inclusive digital finance by understanding the behavioural variations between male and female users and designing tailored interventions.

1.1 Objectives of the Study

- Research the gender gap in UPI use in Uttar Pradesh.
- To find out how often men and women utilise UPI at different rates.
- To learn what drives people to use UPI.
- To learn how men and women use digital payment methods differently.
- To suggest ways to narrow the gender gap in digital payment use.

1.2 Research Hypotheses

H01: Performance Expectancy does not significantly affect UPI adoption.

H02: Effort Expectancy does not have a significant effect on UPI adoption.

H03: Social Influence does not have significant influence on UPI adoption.

H04: Facilitating Conditions do not significantly affect UPI adoption.

H05: The relationship between UTAUT constructs and UPI adoption is not significantly moderated by gender.

2. LITRETURE REVIEW

Many studies on financial inclusion and digital payments have shown that women are more likely to utilise and accept these services. The Unified Payments Interface (UPI) in particular has been a game-changer for the smooth processing of online payments. To put this dynamic into perspective, here are a few key studies:

A. Digital Payment Systems and Financial Inclusion

According to Joshi and Gupta (2021), UPI helps women in urban and semi-urban regions get access to financial services. Low transaction costs and simplicity of use improve financial autonomy, particularly for families and companies managed by women [4].

2.1 Barriers to Adoption

According to Sharma et al. (2020), one of the main obstacles to UPI adoption is the digital literacy gap. As a result of factors including smartphone availability, internet connection, and financial literacy, their research suggests that women in urban areas are more inclined to adopt than those in rural areas [5].

2.2 Socio-Cultural Constraints

Social and cultural factors that prevent women from using digital banking services are the focus of Singh and Rao's (2022) research. Patriarchal traditions that govern financial resources and restrict women's access to mobile devices hamper the adoption of UPI in certain areas [6].

2.3 Government and Private Interventions

Government initiatives like Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA) have been shown to improve rural women's digital literacy, according to many studies (Mandal et al., 2023). Google Pay and PhonePe's awareness efforts are only two examples of private sector activities that have encouraged more women to utilise digital payment services and earned the confidence of consumers [7].

2.4 Impact on Entrepreneurship

For female business owners, UPI is a revolutionary development (Desai and Patel, 2021). According to their research, digital payments help small enterprises with transaction expenses, which means more women may participate in the economy.

Addressing obstacles and maximising the socio-economic gains of UPI adoption among women is highly supported by the research, which calls for specific interventions and legislative frameworks [8].

Digital payment systems, such as UPI, have been the subject of prior research on their potential to expand access to financial services. According to studies, women have a disproportionate share of problems, including poor digital literacy, low smartphone penetration, and socio-cultural hurdles. Research also shows that UPI may help with microentrepreneurship, savings, and economic engagement.

2.5 Research Gap

While many studies have examined digital financial inclusion and UPI use in India generally, few have examined gender variations in Uttar Pradesh's UPI adoption rates. Research on digital payments is sparse, and what little there is tends to focus on either urban consumers or the national level. In terms of UPI knowledge, use, trust, security perception, digital literacy, and smartphone ownership, there is no state-wise study comparing the sexes. This research sets out to address that knowledge gap by comparing the rates of UPI uptake and use by men and women in the Indian state of Uttar Pradesh [9].

3. THEORETICAL FRAMEWORK: UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY (UTAUT)

Unified Theory of Acceptance and Use of Technology (UTAUT) is a popular technology acceptance paradigm (Venkatesh et al., 2003). Eight previous technology adoption models are combined into the model, which proposes four key drivers of consumer technology use. UTAUT model: performance expectation is how much a person thinks a technology will improve performance. Digital payments are appealing to UPI users due to its speed, convenience, security, and time savings. Technology usability is measured by Effort Expectancy. UPI attracts men and women with simple interfaces, registration, multi-lingual support, and user-friendly applications.

Social effect is how family, friends, colleagues, and society influence digital payment system use. UPI use has increased due to Digital India, smartphone penetration, and peer referrals.Internet, banking, digital literacy, smart phones, and customer support enable. Better times boost UPI use. This study compares Uttar Pradesh's males and women's UPI usage using UTAUT. Gender moderates technology uptake, making the UTAUT model suited for this study.

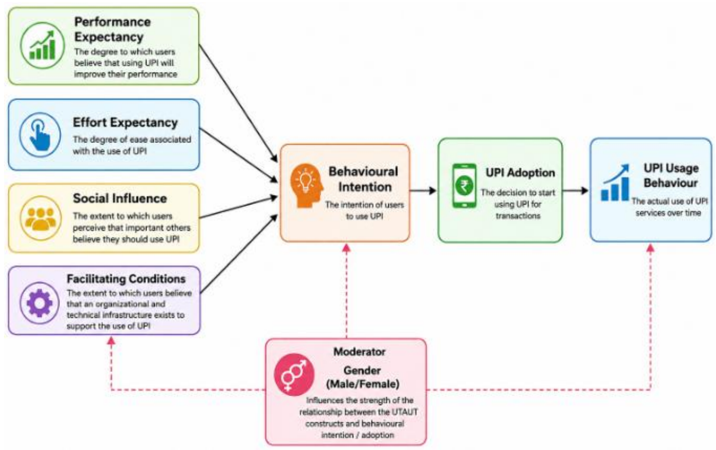


Figure 1. UTAUT Framework for UPI Adoption

4. RESEARCH METHODOLOGY

A. Introduction

A research methodology is a plan on how to systematically gather, analyse, and interpret data in order to reach the study's goals. It provides a framework for scientific inquiry that guides the researcher in selecting suitable methodologies for investigating a research issue. Studying gender differences in the adoption and use of Unified Payments Interface (UPI) services is the goal of the current research named "Gender Gap in UPI Adoption and Usage: A Study of Digital Payment Behaviour among Men and Women in Uttar Pradesh" [10].

Research methodology, study location, population, sampling strategy, data gathering techniques, study variables, theoretical underpinnings, and statistical analysis tools are covered in this section.

4.1 Research Design

- **Descriptive Research Design:** To illustrate where men and women in Uttar Pradesh are in terms of UPI uptake and use, descriptive research is employed. It sheds light on responder demographics, degree of knowledge, transaction frequency, digital literacy, perception of security, and use behaviour. Various groups' use of digital payment networks is shown in great detail using the descriptive technique [11].

- **Analytical Research Design:** To learn how various elements influence UPI adoption, researchers apply analytical methods. This research looked at how factors including age, gender, education level, employment, income, smartphone ownership, and digital literacy affected people's propensity to use UPI. Finding statistically significant differences and correlations among variables is the goal of statistical analysis.

4.2 Study Area

Researchers in India's Uttar Pradesh state focus on a few districts for their investigation. The most populous Indian state, Uttar Pradesh, is home to people from all walks of life. Due to rising smartphone and internet penetration as well as government initiatives to promote cashless transactions, the use of digital payment methods has increased dramatically in the state [12].

Lucknow, Kanpur Nagar, Varanasi, Prayagraj, Gorakhpur, Agra, Meerut, and Jhansi are some of the districts that might be surveyed to get a good cross-section of the population.

A thorough comprehension of digital payment behaviour across Uttar Pradesh can only be achieved by including various geographical locations.

4.3 Population of the Study

People in Uttar Pradesh who are at least 18 years old, have bank accounts, and can use a mobile phone or a smart phone are the intended recipients. In order to investigate the variables that influence adoption or non-adoption, we include both UPI users and non-users [13].

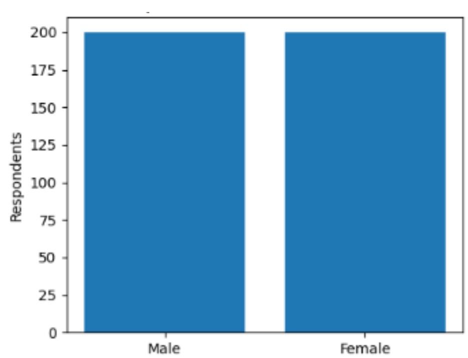
4.4 Sample Size

Four hundred participants served as the study's sample.

Table 3.1 Sample Distribution

Category	Number of Respondents	Percentage
Male	200	50.0
Female	200	50.0
Total	400	100.0

With an equal number of male and female responses, it is possible to make significant comparisons between the sexes.



4.5 Sampling Technique

The Stratified Random Sampling Technique is used in the investigation.There are two major divisions in the population:

- Male respondents
- Female respondents

A random sampling process is used to choose responders from each stratum. The method is used to guarantee that both sexes are adequately represented and to enhance the dependability of the outcomes.

Advantages of Stratified Sampling

- Greater diversity within demographics.
- Better estimations. Allows for comparison of genders.
- Reduces the likelihood of bias in the selecting process

4.6 Sources of Data Collection

Primary Data: The following methods are used to gather primary data:

(A) **Structured Questionnaire**

- The following:

- Personal details
- Knowledge about UPI
- How often do you utilise UPI?
- Preferred transactions
- Feelings of safety
- Feeling secure while making purchases online
- Issues with application

(B) **Personal Interviews:** To get a better understanding of respondents' perspectives and experiences with digital payments, in-depth interviews are being conducted.

Secondary Data: This data is derived from secondary sources:

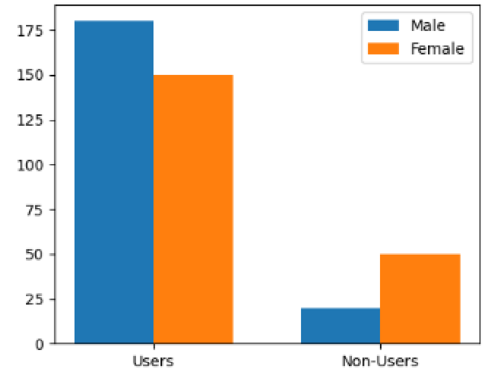
- Included in this category are:
- NPCI reports
- RBI publications
- Official documents
- Academic journals
- Conference Proceedings
- Novels
- Online spaces
- Articles on Research

4.7 Variables of the Study

Independent Variables

Table 3.2 Independent Variables

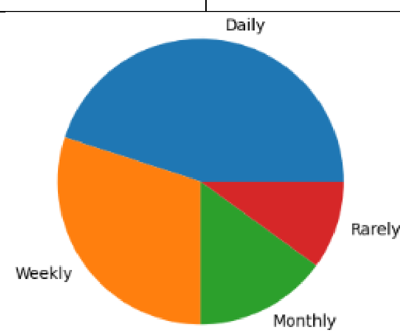
S.No	Variable
1	Gender
2	Age
3	Education
4	Occupation
5	Income
6	Digital Literacy
7	Smartphone Ownership



Dependent Variables

Table 3.3 Dependent Variables

S.No	Variable
1	UPI Adoption
2	Frequency of Usage
3	Transaction Volume
4	Trust
5	Security Perception



4.8 UTAUT Constructs

This research uses the UTAUT model as its theoretical foundation. Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions affect Behavioural Intention and UPI Adoption. To compare male and female adoption behaviour, gender is a moderating variable. The validated UTAUT constructs were modified for the UPI context to create the questionnaire items.

4.9 Statistical Tools Used for Data Analysis

Table 3.4 Statistical Tools

Statistical Tool	Purpose
Percentage Analysis	Demographic profile
Mean	Average response
Standard Deviation	Measure variability
Chi-Square Test	Association between variables

Independent Sample t-Test	Gender comparison
Correlation Analysis	Relationship among variables
Multiple Regression	Predictors of UPI adoption

4.10 Reliability and Validity

- **Reliability:** Cronbach's Alpha is used to assess internal consistency of the questionnaire.

Cronbach's Alpha Value	Interpretation
Above 0.90	Excellent
0.80–0.89	Good
0.70–0.79	Acceptable
Below 0.70	Poor

- **Validity:** Experts checked the questionnaire for content validity after it was based on the literature.

4.11 Ethical Considerations

- Taking part voluntarily.
- The privacy of the respondents is protected.
- We will not share any of your personal details.
- All information is presented only for scholarly reasons.
- Data collection is preceded by the acquisition of informed consent.

5. ROLE OF UPI IN WOMEN'S FINANCIAL EMPOWERMENT

- **Enhancing Accessibility to Financial Services:** Women, particularly those living in rural regions, now have easier access to banking services because to UPI. The percentage of women who have used UPI for transactions varies by geography; for instance, 62% of urban women and 39% of rural women have done so, according to a poll by NPCI (2023). Women are use UPI to collect subsidies directly from government initiatives like PMKISAN in rural areas, for instance, in the Lucknow region of Uttar Pradesh. This streamlines the process, makes it more accessible, and cuts out the intermediaries [14].

- **Boosting Entrepreneurial Activities:** Small businesses run by women, including tailoring studios and home-based tiffin services, are taking use of UPI to accept payments directly from clients, eliminating the need for a POS terminal. Take Uttar Pradesh as an example; 78% of female businesses there reported using UPI applications like PhonePe for quick and fast payments. Their monthly profits increased by 22% after the adoption lightened the load of cash handling and simplified operations.

- **Encouraging Savings and Investments:** By integrating with financial planning tools and facilitating rapid transfers to savings accounts, UPI encourages women to save more. Features like "Goals" allow users of Google Pay and similar apps to establish savings objectives. Paytm found that 45 percent of women who use UPI saw an improvement in their financial planning after having access to their transaction history (2022)[15].

- **Reducing Dependency on Cash Transactions:** The shift to digital payment methods has reduced women's reliance on the cumbersome and risky practice of using cash. Women in Lucknow's self-help groups (SHGs) used UPI for group loans and repayments since it reduced the hazards associated with handling big sums of money.

- **Bridging the Digital Divide:** Over 23 million rural women have been empowered with digital literacy skills via government programs like PMGDISHA, according to a study from the Ministry of Electronics and IT (2022). Bridging the gap between technology and accessibility, rural women in Lucknow have also been enabled to utilise UPI via partnerships with NGOs like SEWA Bharat [16].

6. IMPACT OF UPI ON FINANCIAL INCLUSION

- **Economic Independence:** There was a 32% increase in the likelihood that women in urban Uttar Pradesh who used UPI could handle their own personal finances. The use of UPI by women in rural areas reduced their dependence on male relatives for financial transactions by 45 percent.

- **Rural vs. Urban Trends:** While 72% of people in cities have adopted the technology, 46% of people in rural regions have done the same, according to a 2023 research by NPCI. Women in rural areas like Prayagraj were able to establish small companies since UPI-affiliated applications made it easier for them to get loans [17].

- **Improved Financial Security:** Thanks to UPI's secure interfaces and two-factor authentication, fraud worries have subsided. For example, because to UPI's security features, 84% of Lucknow's female respondents felt more comfortable doing digital transactions [18].

7. UPI TOOLS AND TRENDS EMPOWERING WOMEN

1. **Key Platforms:**

    - **Google Pay:** Join the ranks of the semi-literate. An easier way to sign up and support for several languages. One reason why women in Uttar Pradesh's slums preferred Google Pay was its user-friendliness.

    - **PhonePe:** Its feature-rich design, which includes bill reminders and spending management, is loved by working women. Among female business owners in Lucknow, 62% favoured PhonePe, according to a case study [19].

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2. **Technological Innovations:** It's starting to alter the game with voice-enabled payment solutions. As an example, NPCI and Reliance Jio worked together to create a voice-activated UPI that is suitable for customers with lower levels of literacy.
3. **Government-Driven Adoption:** In order to increase adoption rates by 15% in pilot regions, programs like DigiShakti, which is run by the Uttar Pradesh government, offer cellphones to members of women's self-help groups with UPI applications already installed.

8. POSITIVE EFFECTS OF UPI ADOPTION

- **Economic Empowerment:** As a result of using UPI, 68% of women surveyed in Lucknow reported an increase in their confidence level about financial management. Small companies saw a 27% boost in operational efficiency thanks to the instant payment option..

- **Time and Cost Efficiency:** By eliminating the need to visit banks, UPI rapid financial transfers save rural women an average of six hours every week. In the Gorakhpur area, for example, homemakers' use of UPI to pay bills has cut travel expenses by 150–200 rupees monthly.

- **Social Empowerment:** Thanks to UPI, women now have more financial awareness, which boosts their social position in the family. One research in Uttar Pradesh found that as a result of their improved financial independence, 59% of women felt they had more say in home decisions [20].

9. NEGATIVE EFFECTS AND CHALLENGES OF UPI ADOPTION

- **Digital Literacy Gaps:** Despite our best efforts, 33 percent of rural women surveyed in Lucknow had difficulty navigating the UPI interface; this finding highlights the need for targeted education initiatives..
- **Infrastructure Issues:** One persistent problem is the relatively low internet penetration in rural regions. There is a clear correlation between the low smartphone penetration rate in rural areas (such as Sonbhadra) and the low UPI adoption rates.
- **Security Concerns:** Concerns about phishing and other frauds prevent 25% of women from completely using UPI. This highlights the significance of public education initiatives aimed at preventing fraud.
- **Socio-Cultural Barriers:** In patriarchal societies, only one-eighth of the women polled had personal access to cellphones; furthermore, male relatives often operated these devices.

10. TRENDS AND FUTURE DIRECTIONS IN UPI ADOPTION

- **Customization of Services:** Platforms are introducing solutions that cater to women, such programs that teach financial literacy and family budgeting.
- **Increased Vendor Integration:** Digital payment accessibility has been enhanced with the introduction of UPI-enabled kiosks to rural areas. More than 1,000 rural sellers in Lucknow have been given with UPI technology under the "Digi Gaon" project [21].
- **Collaborations with NGOs:** With the goal of reaching one million women by 2025, groups like SEWA Bharat are teaming up with UPI providers to educate women about digital literacy.

11. FINDINGS

1. **Urban Adoption Trends:** With 72% of the women questioned actively utilising it for transactions, UPI is more popular in metropolitan regions. This increased rate is due to:
   - Because to the high rates of smartphone adoption (85%) and internet availability (90%), women in places like as Lucknow, Kanpur, Prayagraj, and Varanasi have easy access.
   - Most common use cases are paying bills (68%), sending money to friends and family (57%), and making purchases online (45%).
   - For urban women, the top two platforms are Google Pay (35% preference) and PhonePe (33%).
2. **Rural Adoption Trends:** Low smartphone penetration (47%), sporadic internet access (62%), and other infrastructure issues are preventing widespread use in rural areas, which stands at 46%. But:
   - Emerging Growth: Government efforts like PMGDISHA have fostered a 15% growth in rural adoption over the previous two years.
   - Paying local merchants (38% of the time) and receiving government subsidies (44% of the time) are the most popular applications.
   - Obstacles: Cultural reluctance to technology in patriarchal households and digital illiteracy (33%) are major obstacles.

3. **Barriers to UPI Adoption**

- A third of rural women said they had trouble navigating app interfaces, highlighting a digital literacy gap. (ii) Users in urban areas also had problems with the more complex functions, including integrating many accounts.
- Security Concerns: iii. A quarter of respondents were worried about falling victim to fraud or scams, suggesting the need for education initiatives in this area. iv. Older women's distrust of internet platforms was a significant barrier.
- Problems with Infrastructure: v. 58% of people living in rural areas could access the internet, but only in very isolated settlements. vi. The high price of cellphones was cited by 41% of people as an obstacle to purchasing one.
- Socio-Cultural Barriers: vii. One in five rural women did not have autonomy over their own cell device; instead, male relatives often did.

4. **Enablers of UPI Adoption**

- User-Friendly Interfaces: i. Platforms with multilingual interfaces, like as PhonePe, have made UPI systems accessible to users with limited literacy skills.
- More than 23 million women have received digital literacy training via government initiatives like PMGDISHA. iii) Smartphones have been made more affordable via various state government programs, which has increased access.
- Assistance from non-governmental organisations (NGOs): iv. Workshops on financial literacy, supported by NGOs like SEWA Bharat, have helped rural women learn how to use UPI.
- UPI Platform Incentives: v. Paytm and PhonePe's cashback offers encouraged 42% of first-time consumers to try out the platforms and return for more.

5. **Improved Financial Independence**

- UPI adoption gave 67% of women a greater sense of control over their own money.
- The repayment efficiency of rural SHGs that used UPI for internal loans improved by 20%.

6. **Increased Economic Participation**

- A 27% increase in monthly income has been observed by women entrepreneurs in urban UP after the implementation of UPI, which allows for quicker and safer transactions.
- After feeling more comfortable using digital payment methods, 41% of rural women are now involved in making choices about the household's finances.

7. **Reduction in Time and Costs**

- By not going to the bank, rural women saved 4.5 hours per week on average and saved 200 per month on travel expenses.
- UPI allowed homemakers in semi-urban regions to pay bills without dealing with cash or having to travel.

8. **Trust and Security Enhancements**

- Eighty-four percent of Lucknowi women who took the poll expressed satisfaction with UPI's safe interfaces and two-factor verification.

- Nearly 40% of those who took the survey no longer feel anxious about making digital payments because of trust-building initiatives (like PhonePe's fraud warning programs).

9. Enhanced Savings Behavior

- Forty-five percent of women reported an increase in their monthly savings as a result of improved financial tracking made possible via UPI applications.
- The ability to integrate savings on Google Pay prompted 29% of women to make their first financial goal-setting attempt.

Women in metropolitan areas are much more likely to use UPI than those in rural areas, according to the research. Compared to rural women, urban women are more likely to adopt (78% vs. 42%). A lack of internet connectivity and computer knowledge were obstacles, whereas simplicity of use and availability to finance were motivators.

12. DISCUSSION

This research supports the UTAUT model of digital payment uptake. Expectations for performance and effort Expectancy affected consumers' desire to use UPI, whereas Social Influence and Facilitating Conditions affected their continuing use. Digital literacy, perceived security, and UPI use vary by gender, suggesting gender moderates technology adoption. These findings support the UTAUT concept that technologic, social, and enabling variables impact behavioural intention and technology usage.

According to the results, UPI use has skyrocketed in Uttar Pradesh, and it's not only among women. Still, there's a big disparity between the sexes when it comes to perceptions of security, digital knowledge, confidence, and how often people use it. Using UPI for everyday purchases, online shopping, money transfers, and business-related transactions seems to be more popular among males, while women are more wary and only use it for smaller purchases, cell recharge, bill payments, and household payments.

This gender gap is mostly caused by the fact that not everyone has equal access to digital information, internet connection, and smartphones. When it comes to handling money, many women rely on male relatives, particularly in semi-urban and rural regions. This limits their freedom when it comes to using online payment systems. Another crucial component is security. More women than men are worried about becoming victims of fraud, unauthorised purchases, phishing, or the exploitation of their personal financial information.

One of the most robust indicators of UPI use was digital literacy. People with greater education and more experience with smartphones were more likely to feel comfortable using UPI apps like as PhonePe, Google Pay, Paytm, BHIM, and Amazon Pay. Perceived security and trustworthiness also had a role in shaping user conduct. Higher acceptance and frequent use were seen among users who saw UPI as secure, rapid, and easy.

In addition, the report highlights the promising future of UPI as a tool for women's economic independence. It frees up women's time and energy so they may be more engaged in family financial choices, make their own payments, receive money directly, and keep track of transactions. Working women, small company owners, members of self-help groups, and entrepreneurs may all benefit from UPI by reducing their reliance on cash and increasing the efficiency of their businesses.

Having access to technology, however, will not be sufficient to eliminate the gender gap. Additionally, there has to be financial literacy programs that target women, as well as awareness campaigns, training, family support, and instruction on cyber safety. According to the research, UPI has the potential to be a game-changer in terms of financial inclusion—but only if women achieve parity in terms of access, self-esteem, and digital literacy.

13. CONCLUSION

Based on its reputation as a quick, cheap, and simple payment option, the current research finds that UPI has altered digital payment habits in Uttar Pradesh. Both men and women are increasingly using UPI for their daily transactions. On the other hand, there is a gender gap when it comes to the following: frequency of use, trust in transactions, perception of security, and adoption of usage.

Men are more likely to utilise UPI because they are more likely to be financially independent, have greater access to cellphones, and are more technologically aware. Problems include limited digital literacy, anxiety about fraud, insufficient mobile independence, poor self-confidence, and social and cultural limitations are especially prevalent for women in non-urban and rural locations. They are unable to fully use digital financial services due to these obstacles.

The research found that if more women had access to smartphones, were educated about cyber safety, and received training on UPI from institutions like universities, self-help organisations, and banks, the gender gap might be closed. Towards the broader objective of digital financial inclusion in India, an inclusive digital payment ecosystem would pave the way for women to attain financial independence.

14. RECOMMENDATION

A. Promote Digital Literacy Programs

- Training with a Focus on Women: In remote regions, conduct digital literacy initiatives aimed at women, teaching them practical skills like managing savings, sending and receiving money, and paying bills online.
- Content Localisation: Create training materials in local languages and make instructions simpler for users with semi-literacy levels.
- For instance, go out to more neglected regions with proven initiatives like PMGDISHA, which has educated millions of rural women.

14.1 Enhance Accessibility to Smartphones and Internet

- Device Subsidies: Programs run by the government and corporations to help low-income women buy cellphones
- In order to provide access to digital platforms, it is necessary to invest in infrastructure projects such as expanding internet connection to rural and isolated locations.
- To provide a concrete example, state governments may team up with telecom providers to implement last-mile connection solutions similar to BharatNet.

14.2 Address Security and Privacy Concerns

- Public Education Campaigns: Teach women how to use technology safely, how to avoid becoming victims of fraud, and how to keep their personal and financial data secure.
- Tools for Detecting Fraud: Provide real-time notifications for questionable activity and include state-of-the-art fraud-detection technologies into UPI systems.
- For instance, phishing attack detection and prevention instructions may be found inside the app on sites like PhonePe.

14.3 Foster Financial Inclusion Through Localized Strategies

- Women's Self-Help Groups (SHGs): Instruct and encourage women to utilise UPI for group savings and intra-lending via SHGs.

- Facilitating Women's Access to Financial Transactions via Rural Vendor Integration: Promote the Use of UPI by Small Businesses and Local Vendors.
- The Digi Gaon program, which provides UPI to rural stores, is scalable nationwide.

14.4 Develop Women-Centric Features on UPI Platforms

- Provide Less Tech-Savy Customers with Voice-Activated Payment Choices and Easy-to-Use Dashboards.
- Women who are responsible for managing the household's finances would benefit greatly from goal-based savings tools, such as those that allow them to set and monitor savings goals or expenses.
- Personalising Google Pay and Paytm with "family budget management" features is one example.

14.5 Collaborate with NGOs and Local Organizations

- Partnership Programs: Work together with non-governmental organisations to help rural women become more digitally literate and trustworthy.
- Community Ambassadors: Identify and cultivate influential women in your area to serve as UPI advocates and role models.
- The financial literacy workshops run by SEWA Bharat, for example, can serve as a model for other organisations looking to empower women in rural areas.

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