**A STUDY ON ASSESSING THE DYNAMICS BEHIND USER SATISFACTION WITH UPI**

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**ABSTRACT**

Digital technology has brought significant changes to every sphere of society. The Unified Payments Interface (UPI) has revolutionized digital financial transactions in India. Digital banking has converted traditional banking and added additional dimensions to the banking sector. Therefore, this research aims to explore users' satisfaction levels with UPI transactions and identify the key influences that contribute to user satisfaction with UPI transactions. UPI is a significant development compared to existing payment systems in terms of cost, Ease of use for consumers, payment times, and security, and it has witnessed good user adoption. A Unified Payments Interface (UPI) is a smartphone claim that allows users to hand over money between bank accounts. UPI has driven financial inclusion and digitalization in India, making it easier for individuals, especially in rural areas, to access financial services.

**Keywords**: Unified Payments Interface (UPI), User satisfaction, Digital financial transactions.

**1. INTRODUCTION**

In a world progressively shaped by technological improvements, the financial sector in India has witnessed a significant transformation with the introduction of the Unified Payments Interface (UPI). As digital financial transactions become more integral to everyday life, UPI has emerged as a pivotal development, offering users a streamlined, cost-effective, and secure method for managing their finances. UPI was first launched in India by Dr. Raghuram G Rajan, Governor, RBI at Mumbai on 11th April 2016. The digital payment system is an electronic operation made at the point of sale for services and products through net banking or card payment. UPI is a payment system through which any customer croft a bank account can lead and receive money through a UPI-based app. The main benefit of adopting an e-payment app is customer convenience because they can pay with their mobile phones instantaneously by scanning a QR code or using contactless payments. Numerous e-payment options are available, including Airtel Money, Free Charge, Google Pay, JIO Money, Paytm, and Phonepe. We all are habituated to using these payment apps; these apps have effectively integrated into our daily lives. These applications use UPI for transactional purposes.

**2. REVIEW OF LITERATURE**

**Kumar, R., & Mehta, P. (2021)** identified critical factors affecting user satisfaction with UPI, highlighting that user experiences significantly influence satisfaction levels. Their study reveals that interface design, user interaction, and service reliability are pivotal in overall user satisfaction. The research suggests that addressing user feedback and continuously improving service quality are essential for enhancing user experiences and satisfaction in the digital payment landscape.

**Singh, A., & Yadav, J. (2022)** investigated the diverse perspectives of UPI users, examining how various aspects of transaction experiences correlate with overall satisfaction. The authors emphasize the importance of gathering and analyzing user feedback to refine UPI services. Their study indicates that understanding users' needs and addressing their concerns can improve service delivery and higher satisfaction levels.

**Sharma, S., & Tyagi, R. (2023)** focused on the Technology Acceptance Model (TAM) to highlight the critical role of perceived Ease of use in achieving higher satisfaction rates among UPI users. Their research found that a user-friendly interface significantly enhances the likelihood of users accepting and continuing to use UPI. UPI applications can improve user satisfaction and engagement by simplifying navigation and minimizing complexity.

**Gupta, R., & Sharma, L. (2024)** analyzed user preferences for UPI, establishing a clear link between transaction speed and user satisfaction. Their research highlights that faster transaction times contribute to greater user trust and loyalty, as users perceive quick processing as a sign of efficiency and Reliability. The authors advocate for continuous improvements in transaction speed to enhance user experiences and satisfaction.

**3. OBJECTIVES**

* To measure users' satisfaction with the Unified Payments Interface (UPI).
* To identify the significant aspects that contribute to user satisfaction with UPI transactions.

**RESEARCH METHODOLOGY**

Through rigorous inquiry and systematic investigation, the research seeks to bring forth novel insights, unravel intricate complexities, and revolutionize our understanding of the world. It is the torchbearer of progress, leading us toward a deeper comprehension of our reality and paving the way for transformative breakthroughs that shape our future. The entire research was done in quantitative and descriptive research methods. Quantitative research was adopted with numbers as the base for statistical analysis and the relevant statistical test using statistical tools. Primary data was collected through a structured online questionnaire distributed to UPI users. A convenience sampling system was employed to gather data from respondents who actively use UPI for their transactions. The total sample size is 103.

**5. DATA AND INTERPRETATION**

**Table 1: Showing the percentage analysis of the demographic variables**

|  |  |  |  |
| --- | --- | --- | --- |
| **Demographic variable** | | **Frequency** | **Percent** |
| Age Group | 18-25 | 55 | 53.4 |
| 26-35 | 27 | 26.2 |
| 36-55 | 15 | 14.6 |
| 55 and above | 6 | 5.8 |
| Gender | Male | 59 | 57.3 |
| Female | 44 | 42.7 |
| Education Level | Bachelor's Degree | 29 | 28.2 |
| Master's Degree | 64 | 62.1 |
| Doctoral Degree | 10 | 9.7 |
| Employment Status | Employed | 49 | 47.6 |
| Student | 49 | 47.6 |
| Retired | 5 | 4.9 |
| Frequency of UPI Use | Daily | 74 | 71.8 |
| Weekly | 21 | 20.4 |
| Monthly | 4 | 3.9 |
| Rarely | 4 | 3.9 |

*Source: Computed from Primary survey*

**Result:**Most respondents are 18-25 (53.4%), with the next largest group being 26-35 (26.2%). There is a higher proportion of males (57.3%) than females (42.7%). Most participants hold a Master's degree (62.1%), followed by those with a Bachelor's degree (28.2%) and a Doctoral degree (9.7%). Employment status shows an equal split between employed individuals and students, at 47.6%, while 4.9% are retired. In terms of UPI usage, the majority use it daily (71.8%), with smaller proportions using it weekly (20.4%), monthly (3.9%), or rarely (3.9%).

**Table 2: Showing Karl Pearson's correlation between User Satisfaction with UPI and the independent variables.**

H0: There is no significant correlation between User Satisfaction with UPI and the independent variables.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Correlation** | | **Ease of Use** | **Transaction Speed** | **Perceived Security** | **Reliability** |
| Ease of Use | Pearson Correlation | 1 | 0.708 | 0.692 | 0.638 |
| Sig. (2-tailed) |  | 0.000\*\* | 0.000\*\* | 0 |
| N | 103 | 103 | 103 | 103 |
| Transaction Speed | Pearson Correlation | .708\*\* | 1 | 0.800\* | 0.699\*\* |
| Sig. (2-tailed) | 0 | 0 | 0 | 0 |
| N | 103 | 103 | 103 | 103 |
| Perceived Security | Pearson Correlation | 0.638\*\* | 0.699\*\* | 0.734\*\* | 0.734\*\* |
| Sig. (2-tailed) | 0 | 0 | 0 | 0 |
| N | 103 | 103 | 103 | 103 |
| Satisfaction | Pearson Correlation | 0.659\*\* | 0.566\*\* | 0.474\*\* | 1\*\* |
| Sig. (2-tailed) | 0 | 0 | 0 |  |
| N | 103 | 103 | 103 | 103 |

*Note: \*\*denotes significance at a 1% level*

*\* denotes significant at 5% level*

**Result:**Correlation analysis is carried out on users' satisfaction with UPI payments. It is found that all the variable factors are significantly and highly correlated among the variables. It is noted from the above table the P value is less than 1 % significant level, hence rejecting the null hypothesis. Hence, there is a significant correlation between user satisfaction and UPI Payments.

**Table 3: Showing the model summary**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model Summary** | | | | |
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** |
| 1 | 0.704a | 0.495 | 0.475 | 1.5827 |

**Table 4: Showing the One Way ANOVA Test significant association between User satisfaction and factors influencing User satisfaction towards UPI.**

**H0: Ease of Use, Transaction Speed, Perceived Security, and Reliability** do not significantly explain the variation in **User Satisfaction with UPI.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ANOVA** | | | | | |
|  |  | **Sum of Squares** | **df** | **Mean Square** | **F** |
| EaseofUse | Between Groups | 6.535 | 3 | 2.178 | 0.376 |
| Within Groups | 573.989 | 99 | 5.798 |  |
| Total | 580.524 | 102 |  |  |
| Transaction Speed | Between Groups | 19.362 | 3 | 6.454 | 1.062 |
| Within Groups | 601.415 | 99 | 6.075 |  |
| Total | 620.777 | 102 |  |  |
| Perceived Security | Between Groups | 16.314 | 3 | 5.438 | 0.879 |
| Within Groups | 612.152 | 99 | 6.183 |  |
| Total | 628.466 | 102 |  |  |
| Reliability | Between Groups | 12.955 | 3 | 4.318 | 0.88 |
| Within Groups | 485.763 | 99 | 4.907 |  |
| Total | 498.718 | 102 |  |  |  |

**Result:   
The table highlights the one-way ANOVA test for identifying whether there is any significant association between user satisfaction and factors influencing user satisfaction toward UPI. We reject the null proposition since the p-value in the ANOVA table is less than 0.01 (significant at the 1% level).**

**Table 5: Showing variables in Multiple Regression Analysis**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Coefficients | | | | | | |
| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. |
| 1 |  | B | Std. Error | Beta |  |  |
| (Constant) | 3.728 | 0.917 |  | 4.065 | 0 |
| Ease of Use | 0.456 | 0.099 | 0.499 | 4.603 | 0 |
| Transaction Speed | 0.187 | 0.116 | 0.211 | 1.616 | 0.109 |
| Perceived Security | -0.224 | 0.118 | -0.255 | -1.903 | 0.06 |
| Reliability | 0.29 | 0.11 | 0.293 | 2.621 | 0.01 |
|  | a.       Dependent Variable: User satisfaction with UPI. | | | | | |
| b.      Predictors: (Constant): Ease of use, Transaction speed, Perceived Security, Reliability. | | | | | |

**The multiple correlation coefficient of** 0.704 measures the notch of connection between the authentic values and the foreseen values of the Adjustment. Because the prophesied values are attained as a linear combination of Ease of use (X1), Transaction speed (X2), Perceived Security (X3), and Reliability (X4), the coefficient value of 0.704 indicates that the relationship between Adjustment and the five independent variables is quite strong and positive.

**The coefficient of determination R-square affects the goodness-of-fit of the assessed sample regression p**lane (SRP) in terms of the quantity of the dissimilarity in the dependent variables elucidated by the fitted sample regression equation. Thus, the value of **R square is** 0.495, which simply means that about 49.50**%** of the variation in modification is explained by the estimated SRP that uses Ease of use, Transaction speed, Perceived Security, and Reliability as the independent variables, and R square value is important at 1 % level. The multiple regression equivalence is

Y = 3.728+0.456X1+0.187X2-0.224X3+0.29X4

Here, the coefficient of **X1** is 0.456, representing the partial effect of Ease of use on User Satisfaction towards UPI, holding the other variable star as constant.The assessed positive sign implies that such an effect is optimistic that User Satisfaction towards UPI would increase by 0.456 for every unit increase in the Convenience determinant of Consumer Attitude in online shopping. This coefficient value is noteworthy at the 1% level.

The coefficient of **X2** is 0.187, representing the transaction speed in UPI towards user satisfaction, holding the other variable quantity constant. The estimated confident sign implies that such an effect is positive and that User Satisfaction towards UPI would increase by 0.187 for coefficient value is significant at 1% level. Perceived Security (X3) coefficient is -0.224, indicating a negative relationship with User Satisfaction. For every unit increase in Perceived Security, User Satisfaction decreases by 0.224, but this relationship is marginally non-significant at the 1% level. The coefficient for Reliability (X4) is 0.290, showing that for every unit increase in Reliability, User Satisfaction increases by 0.290, holding other factors constant. This positive result is statistically significant at the 1% level. Based on the standardized coefficient, Ease of Use (0.456) is the strongest predictor of User Satisfaction with UPI, both being statistically significant at the 1% level, followed by Reliability (0.293) and Transaction speed (0.211) . Perceived Security has a negative impact on User Satisfaction, although this relationship is not as significant.

**6. DISCUSSIONS & CONCLUSION**

**Financial institutions must prioritize the optimization of transaction speeds to foster user trust and encourage frequent usage of UPI. Implementing robust security measures is essential; however, these measures mustn't compromise user experience. Educating users about security features can further enhance their confidence in using UPI. Consistent Reliability in service delivery is vital for maintaining user trust, necessitating regular updates and maintenance to mitigate technical issues. Furthermore, policymakers should create regulations promoting innovation while safeguarding user interests. Such initiatives will ultimately enhance user satisfaction and encourage broader adoption of UPI as a preferred payment method in India. The findings indicate that financial institutions must prioritize optimizing these aspects to enhance user experiences and foster greater adoption of UPI in India. Robust security measures and ongoing user education are essential to building trust, while policymakers should focus on regulations that encourage innovation and protect user interests. By addressing these dynamics, stakeholders can facilitate a more efficient and satisfying digital payment ecosystem, ultimately leading to broader acceptance of UPI as a preferred payment method.**

**References:**

* Singh, R., & Mehta, S. (2023). Reliability and Performance of UPI: User Perspectives and System Analysis. Financial Technology Journal, 19(3), 155-170.
* Kumar, V., & Singh, P. (2022). Security Perceptions and Adoption of UPI: An Empirical Analysis. International Journal of Digital Banking, 10(1), 45-59.
* Reddy, A., & Ali, M. (2024). Transaction Speed and Customer Support in UPI: Impact on User Satisfaction. Transactions on Financial Technology, 18(4), 204-219.
* Patel, R., & Sharma, A. (2021). User Experience and Satisfaction with UPI: An Empirical Study. International Journal of Digital Finance, 12(4), 89-102.
* Dr.M.N.Prakasha, A Study on Unified Payment Interface (UPI) Among University Students in Madikeri City, International Journal of Management (IJM), 14(2), 2023, pp. 1-8.
* Riya goswami1, shreya goswami2, dr. Pushpkant shakdwipee3. A study on satisfaction of digital payment Users with special reference to upi Transactions. Issn: 2348 – 814x
* Trishaa.b.(2024) the impact of consumer’s demand towards the general insurance schemes in an emerging economy. Issn 2249-9040 volume 14, no 17.
* Kulkarni, R., & Sharma, V. (2023). Consumer preferences and satisfaction with UPI in urban and rural India. *Journal of Financial Inclusion and Technology*, 19(3), 87-99.