

A Study on Digital Payment System with Reference to NPCI in Tirunelveli City

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Abstract: *This study focuses on the use of digital payment systems in Tirunelveli city, with special reference to the National Payments Corporation of India (NPCI). NPCI is an umbrella organization that develops and operates retail payment systems in India, including UPI, RuPay, and BHIM. In Tirunelveli, digital payments have seen rapid growth due to increased smartphone usage and internet access. Small businesses, street vendors, and consumers are adopting UPI-based payments for everyday transactions. This shift is reducing dependency on cash and improving financial transparency. NPCI's platforms offer secure, fast, and low-cost payment solutions that benefit both urban and rural populations. The local economy is witnessing increased digital financial inclusion. Government initiatives and awareness campaigns are also encouraging digital transactions. The growth of smartphone usage, improved internet connectivity, and awareness campaigns by banks and the government have contributed to the increasing use of digital payments in the city. Many local businesses now accept UPI payments through QR codes, enabling faster and safer transactions. Digital payments have also improved transparency and reduced the need to handle cash, especially during the COVID-19 pandemic. NPCI's systems offer low transaction costs, real-time transfers, and user-friendly interfaces, which are ideal for both urban and semi-urban populations in Tirunelveli.*

Keywords: Digital Payment System, National Payment Corporation of India, Financial Inclusion, Cashless Transaction, E-Wallets, Tirunelveli

I. INTRODUCTION

Digital payment systems, powered by organizations like the National Payments Corporation of India (NPCI), have transformed financial transactions in cities such as Tirunelveli by enhancing speed, security Tirunelveli. and convenience in payments. In Tirunelveli, digital payment usage spans bank transfers, bill payments, shopping, and small-value merchant transactions, with users citing convenience, cost-savings, and improved customer service as leading reasons for adoption. Founded in 2008 as a “not-for-profit” initiative by the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA), NPCI serves as the umbrella organization for retail payment and settlement systems nationwide. The adoption of NPCI's services, like Unified Payments Interface (UPI), has played a major role in driving digital payments across diverse population segments, including urban and semi-urban areas of Tirunelveli digital payment systems facilitate transactions without the need for physical currency and can be conducted via various platforms, including mobile banking, cards, and online wallets.

STATEMENT OF THE PROBLEM:

Infrastructure challenges such as server downtime, slow transaction speeds, and inconsistent service availability create inconvenience and undermine confidence in digital payment systems, particularly during high usage periods. Transaction fees, merchant acceptance issues, and occasional technical glitches pose practical barriers to seamless digital payment usage and limit the enthusiasm of users and business owners. Despite government efforts to promote digital payments, many users in Tirunelveli still face problems such as limited awareness of digital payment options, lack of digital literacy, and apprehensions about cyber security and fraud risk.



OBJECTIVES:

- To analyze the demographic profile of the users or employees in Tirunelveli city.
- To identify challenges faced by users in adopting digital payments.
- To provide suggestions for improving and promoting digital payment systems in the region.

II. REVIEW

Leebana Gracy I, 2024, Stated the “A STUDY ON DIGITAL PAYMENTS AND USERS EXPERIENCE”. The Objectives of the study are the relationship between age usage of digital payments, analyze the factors that influences digital payments, explore the problems faced by users, understand the awareness of using digital payment application assess the user satisfaction level. The purpose of the study was primary data which was collected from respondents belonging to different age group, gender, occupation etc., and used secondary data like research articles, journals, and magazine. The sample size 50 around people Bangalore for the purpose of this study. The analysis tools were used Regression statistical tool was used for analyzing the primary data collected, with the use of SPSS software. The Findings of the study is the factor influence the use of digital payments is convenience which 23/60 respondents have opted, access to technology 19/60 response.

Pandey, 2022, stated that “A STUDY ON DIGITAL PAYMENTS SYSTEM AND CONSUMER PERCEPTION: AN EMPIRICAL SURVEY”. The objective of the study was examine digital payment system of India and understand various modes of digital payment in Indian Banking Industry before after pandemic and to understand the impact of user perception, payment systems of trust and experience of online fraud on the choice of mode of payments. The data used for the study primary data as well as secondary data collected from various articles, research papers and RBI websites. They collected data through questionnaire of 10 questions and 6 sub questions were designed to collect data. The finding of study all government regulator, services provides work together to improve payment systems and related infrastructure. The impact of fraud on digital options varies depending on the purpose of the transaction. Data was collected using random sampling therefore it only includes respondents willing to complete the survey online various central banks around the world conduct payments log surveys to assess useful variables at the individual level and observe their impact on payment behaviour. In the future, such surveys may be continued with a larger sample and in a more structured manner.

Jacob Kurian, 2022 stated that a “STUDY ON INDIA DIGITAL PAYMENTS AND THEIR IMPACT ON CONSUMERS”. The objective of the study to investigate the impact of respondents age on digital payments, examine the effect of customer education on digital payment usage, investigate the impact of a customer’s income status on their use of digital. The study is being carried out data collection structured questionnaire used, simple percentage, chi square were used. Secondary Primary data were used in this methodology. The finding of the data was acquired from Bangalore based sample. The survey goal was to check customers opinions about digital payment in relation to the concept of general banking. It shows that deploying technology for digital payments has enhanced the banking sectors performance and made it possible to accomplish goal of a cashless society.

III. RESEARCH METHODOLOGY

This section describes the methodology which includes collection of data, construction of questionnaire and frame work of analysis. This research follows a descriptive and analytical approach to study the adoption and impact of digital payment systems in Tirunelveli city, with reference to the services provided by NPCI. Both primary and secondary data are used in the study. Primary data was collected through structured questionnaires and interviews conducted with local users, including shopkeepers, customers, vendors, and small business owners. A sample size of 100 respondents from different parts of Tirunelveli was selected using random sampling techniques. The questionnaire focused on their usage of NPCI platforms like UPI, BHIM, and RuPay, along with their experiences, preferences, and challenges.



TOOLS FOR ANALYSIS:

Apart from the necessary tables, charts, suitable statistical tools are applied for analysis and interpretation of data.

Percentage Analysis.

Simple Ranking techniques.

PERCENTAGE ANALYSIS:

AGE WISE CLASSIFICATION:

S.NO	AGE	NO.OF RESPONDENT	PERCENTAGE
1	Below 20 years	15	13
2	21- 30 years	50	44
3	31- 40 years	25	22
4	41- 50 years	24	21
	TOTAL	114	100

SOURCE: Primary data

INTERPRETATION:

From the above table 4.1, it clears that out of 114 respondents, 13 percentage of the respondents are come under the age group of below 20 years, 44 percentage of the respondents are belonging to the age group of 21-30 years, 22 percentage of the respondents are between the age group of 31-40 years and 21 percentage of the respondents are lies under the age group of above 50 years. Hence we concluded that most of the respondents are come under the age group of 21- 30 years.

GENDER WISE CLASSIFICATION:

S.NO	GENDER	NO.OF.RESPONDENTS	PERCENTAGE
1	Male	53	47
2	Female	61	53
	Total	114	100

SOURCE: Primary data

INTERPRETATION:

From the above table 4.2, it clears that out of 114 respondents, 47 percentage respondents are male, 53 percentage of respondents are female. Hence, we concluded that the majority of the respondents are female.

SIMPLE RANKING TECHNIQUES:

STATE THE OPINION ABOUT SATISFACTION LEVEL

S.NO	FACTORS	MEAN SCORE	RANK
1	Speed of transactions	458	II
2	Security of transactions	462	I
3	Ease of using the services	450	IV
4	Reliability	446	V
5	Customer support	454	III



INTERPRETATION:

From the above table, it is evident that among the various factors influencing the use of digital payment services, security of transactions holds the highest priority, with a mean score of 462 and is ranked first. This indicates that respondents consider secure transactions to be the most important factor when using digital payment systems. The speed of transactions ranks second, with a mean score of 458, showing that users also value quick and efficient payments. Customer support holds the third position with a score of 454, followed closely by the ease of using the services, which is ranked fourth with a score of 450. The least prioritized factor is reliability, with a mean score of 446, ranked fifth. Hence, it can be concluded that while all factors play a role, users place the highest importance on the security and speed of digital transactions.

FINDINGS

According to age-wise classification, the majority of the respondents belong to the age group of 21 to 30 years.

According to gender-wise classification, the majority of the respondents are female.

When evaluating factors that affect the use of digital payment services, transaction security ranks the highest, followed by speed and customer support.

SUGGESTION

Increase awareness campaigns to encourage more users, especially those outside the 21 to 30 age group, to adopt digital payment methods.

Promote digital payment usage among all genders equally by addressing any barriers that might limit adoption.

Emphasize the importance of security and transaction speed in future app improvements to align with user priorities.

IV. CONCLUSION

The adoption of digital payment systems in Tirunelveli, driven by the initiatives of the National Payments Corporation of India (NPCI), marks a transformative shift in the region's financial landscape. With platforms like UPI, BharatQR, AePS, and RuPay gaining traction, residents and businesses are increasingly embracing cashless transactions that offer speed, security, and convenience.

NPCI's efforts have not only enhanced financial inclusion in Tirunelveli but also empowered local merchants, street vendors, and rural communities to participate in the digital economy. The city's growing digital literacy, coupled with government support and mobile penetration, has created a fertile ground for sustained growth in digital payments.

As Tirunelveli continues to evolve into a digitally empowered district, the role of NPCI remains pivotal in ensuring interoperability, innovation, and trust across payment platforms. The journey ahead promises deeper integration, smarter solutions, and a more inclusive financial future for all.

REFERENCES

- [1]. **Leebana Gracy (2024)** studied digital payment **age, occupation, and awareness** significantly influenced the adoption rate. Younger consumers showed higher adoption compared to older age groups .access to technology 19/60 response. Highly used application for digital payment is Google pay 50% of respondents have opted.
- [2]. **Pandey, 2022**, stated that "a study on Digital Payments system and consumer Perception: An Empirical Survey". NATIONAL JOURNAL FOR INNOVATIVE RESEARCH IN MULTIDISCIPLINARY FIELD ISSN (O): 2455-0620 [Impact Factor: 9.47] Monthly, Peer-Reviewed, Refereed, Indexed Journal with IC Value: 86.87 Volume - 10, Issue - 5, May - 2024 Available online on – WWW.IJIRMF.COM Page 221
- [3]. **Jacob Kurian (2022)** – *A Study on India Digital Payments and Their Impact on Consumers* Investigate the **impact of respondents' age** on their adoption of digital payments. Kurian, J. (2022). *A Study on India Digital Payments and Their Impact on Consumers*. [Unpublished study / Research article details if available].

