

Empowering Rural Sector: The promising impact of digitisation of payments – A Technological Step towards Transformation

Keerthi Kulkarni^{1*}, Dr. Rashmi Sattigeri², Ameet V Kulkarni³

¹Assistant Professor KLETU, Belagavi

²Assistant Professor VTU, Belagavi

³Assistant Professor KLSIMER, Belagavi

Abstract. The Subcontinent has become the fifth largest economy in the world as a result of the implementation of instant payment systems that are allowed by technology. These systems are the major indications of what are considered to be promising economies. People living in rural areas have been given more authority as a result of the implementation of personalized banking systems, which has also led to increased openness in these transactions. The digitization of technology has changed the transaction process and the country's strength.

Keywords: Technology, Rural Population, and Payment system

1. Overview

With its vast territory and diverse population, the seventh-largest country in the world is India. Census India estimates that our nation's population is over 145 crore, making us the most populated nation in the world, according to official papers from the Indian government and the World Bank's inventory. Data from NITI Ayog sheds light on demographic dividend and shows how important human resources are. Indian census data shows that over 60% of the population is involved in some form of agriculture or small business, and that 67% of the population lives in rural areas. The rural population's rising disposable income has spurred a spending spree on fast-moving consumer goods (FMCG), durables, food, and more. India has a large rural population (65% of the total) and a large agricultural sector (47% of the total), according to the Economic Survey 2022–23. In an effort to promote development that is more equitable and inclusive, the government has made a deliberate effort to improve the level of living in rural areas. In pursuit of its aim of "transforming lives and livelihoods through proactive socio-economic inclusion, integration, and empowerment of rural India," the government has been active in the rural economy. (See ESR 2022–23 for further reference). Several indicators of rural residents' quality of life have improved since 2015–16, the data from the National Family Health Survey for the years 2019–21 indicate. Access to power, the availability of improved supplies of drinking water, coverage under health insurance systems, and other similar factors are among the factors that fall under this category. Progress towards women's empowerment is shown in the increasing number of women who own bank accounts, utilize mobile phones, and participate in household decision-making.

* Corresponding author: keerthikulkarni17@gmail.com

2. Digital revolution in India

In addition to having far-reaching effects on India's economy, the demonetisation policy has accelerated the transition to digital payment methods across the nation. Noteworthy is the fact that cashless transactions made up ten percent of the total transactions in Nigeria prior to the year 2016. There are a number of variables that have contributed to India's quick adoption of digital ecosystems. These factors include government backing for digitalization, greater connectivity and usage of internet and smartphones, and a thriving e-commerce business. India is highly supportive of digital technologies with campaigns like Digital India, A few examples include Startup India and Make in India. These plans aim to foster an entrepreneurial climate while also advancing digital solutions in healthcare, education, and agriculture. Another vital factor that have influenced the growth of the digital ecosystem especially in India is the rise in internet and Smart phoneusage. In the year 2023, the total internet users in India has risen to 800 million as stated by the Internet and Mobile Association of India. There is also an increase in the number of people using internet and as a result the Mobile Wallet usage have tremendously increased and is expected to be 900 million in India by 2025. In an ambitious effort to boost digital transactions and decrease cash transactions, the 2017-18 Union Budget sets a goal of 2,500 crore digital transactions utilizing UPI, USSD, Aadhar Pay, IMPS, and debit cards. Due torising internet and smartphone use in India, digital payments systems have become more popular. Digital payments including mobile wallets, UPI, and cards havegrown rapidly. India's digital payments system has increased due to government assistance, internet and smartphone use, and web-based business. The UPI permits real-time bank transactions, and the BHIM app allows digital transactions. The Unified Payments Interface (UPI), developed by the National Payments Corporation of India (NPCI) in 2016, has seen fast growth in India. Here are India's UPI's major milestones and YoY growth data through January 2023.

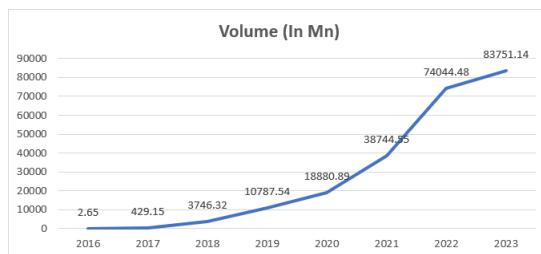


Figure 1. Number one graph (Source: National Informatics Centre.)

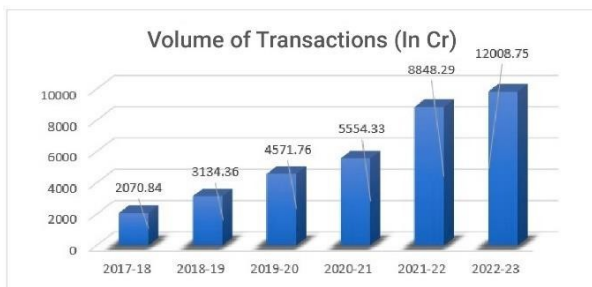


Figure 2. Digital payments in India have grown substantially year over year (Source: National Informatics Centre)

The digital payment dashboard integrates 118 public, commercial, regional, rural, and

international banks. The FY 2021-22 digital payment transactions totaled 8,840 Crores, with 87.20% seeded with Aadhaar numbers and 81.05% using mobile phones. The government of India has made public those statistics that demonstrate a parabolic rise in the use of digital payment methods in both the urban and rural areas of the country. In the fiscal year 2022-23, a total of 13,462 crore digital payment transactions were handled, while in the fiscal year 2017-18, just 2,071 crore were processed. This represents a compound annual growth rate of 45 percent. The total amount of digital payments hit 11,660 crore as of the end of the current fiscal year (2023-24), which is the 11th of December in the year 2023.

Table 1. Volume of Growth of Digital payments

Financial Year	Volume(in Crores)
2017-18	2,071
2018-19	3,134
2019-20	4,572
2020-21	5,554
2021-22	8,839
2022-23	13,462
2023-24 (Till 11 th Dec)	11,660

Source: RBI, NPCI, and DIGIDHAN Portal

3. Objectives of the Study:

1. We can comprehend India's rural economy.
2. Regarding the Development of India's Electronic Payment Methods
3. For the purpose of researching how rural populations react to online payment methods

4. Literature Review

Jha (2021) reported that several peasant farmers have benefitted from the implementation of precision agriculture methodologies, particularly in the areas of higher productivity and minimized expenses on inputs. However, the change is gradual mainly because of ignorance and the financial status of the smallholder farmers (Kumar et al., 2019).

According to the research conducted by Gupta and Singh published in October 2020, The MGNREGA has been successful in reducing the amount of poverty and migration in rural areas. In a similar vein, the Pradhan Mantri Gram Sadak Yojana (PMGSY) has improved connectivity, which has contributed to the expansion of market access for agricultural products.

Innovation in rural living standards comes from new technologies. Mobile phones and the Internet enable information and financial services diffusion. Technology has increased farmer pricing determination through platforms like eNAM (National Agriculture Market) (Sarkar & Roy, 2021). Due to limited digital literacy and poor infrastructure, rural communities struggle to use social media and communication technology effectively (Rao, 2019). Jha (2021) reported that several peasant farmers have benefitted from the implementation of precision agriculture methodologies, particularly in the areas of higher productivity and minimized expenses on inputs.

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Table 2. Online payment options (Source: Cashless India Portal)

Sl. No.	Modes
1	IMPS
2	UPI
3	Mobile Wallets
4	Internet Banking stem
5	ATMs
6	AEPS

For the change in rural India's payment systems to occur, digital payment is an independent variable, while income, occupation, wireless connection, and convenience are dependent variables. After demonetisation, many people in rural India realised the benefits of having a bank account, and the Pradhan Mantri Jaandhan Yojana helped open a lot of accounts with no deposit required. Businesses were already in a prime position when the mobile revolution reached rural areas. Wireless communication has risen to prominence as a primary means of contact for people of all socioeconomic backgrounds, thanks in large part to the quick adoption of new telecom technologies by the rural populace. The well-known Technology Acceptance Model adequately explains the role of digital payments and how they have become a convenience pattern, as well as the widespread adoption of technological improvements.

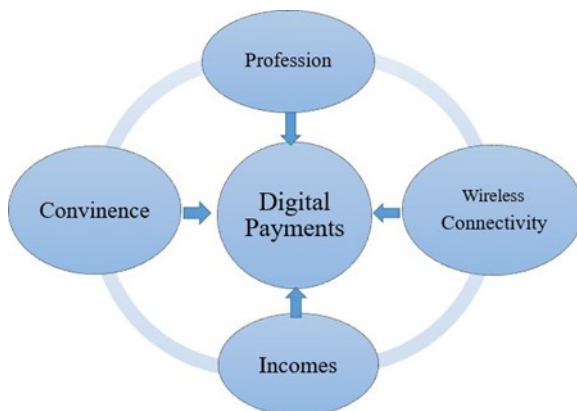


Figure 3. Conceptual Model

In the model above, we can see how digital payments and the variables that affect them are interdependent. Thanks to technological developments, consumers in rural areas can now opt for digital payments, which provide a number of advantages, including faster processing times and less hassle. Digital payment technologies became the engines of ease, speedy companies, and transference, but the Indian government had trouble convincing customers.

5. Conclusion

This study lays out the fundamentals of technology's impact on rural India's digital payment systems, including its relevance, acceptance, and transformation. In addition, ideas like demographics, technological adoption, and economic shifts would offer a sensible foundation for future studies.

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