

Digitisation of Payment Systems: A transformational step towards empowering the masses of rural India- A Conceptual Study

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Abstract - Rapid Payment systems enabled by technology are the key indicators of the promising economies and the systems have transformed the Sub Continent into the fifth Largest Economy in the world. The personalised banking systems have empowered the rural masses and the same is resulting into the transparency in the financial transactions. This paper throws lights on the influence of the digitisation through wireless communication technology which has added a catalyst to the developmental process of the country.

Key words: Digitisation, Rural Mass, Payment system

I. OVERVIEW

India being the seventh largest country in the world, it has got its own diversified population and culture. As per the official documents of Government of India and the catalogue of World Bank, it is evident that the country is having more than 141 crore population and we are the highest populous country in the world. The data signifies the relevance of human resource and throws lights on demographic dividend. As per the census reports of India around 67% of the people live in rural Areas and more than 60% of the masses engage themselves into agriculture and other small businesses. Since per capita incomes of the rural mass has witnessed significant growth, it has pointed its impact on increased purchases with respected to FMCG, durables, eatables and many more.

The Economic Survey 2022-23, notes that 65 percent of the country's population lives in rural India and 47% of the population dependent on Agriculture for livelihood. The Government's emphasis has been on improving the quality of life in rural areas to ensure more equitable and inclusive development. The aim of engagement of the government in the rural economy has been "transforming lives and livelihoods through proactive socio-economic inclusion, integration, and empowerment of rural India." (Stated in ESR 2022-23). The Survey refers to the National Family Health Survey data for 2019-21 which illustrates a significant improvement vis-à-vis 2015-16 in an array of indicators concerning the quality of rural lives, including, inter alia, access to electricity, presence of improved drinking water sources, coverage under health insurance schemes, etc. Women empowerment has also gained momentum, with visible progress in female participation in household decision-making, owning bank accounts, and use of mobile phones.

II. DIGITAL REVOLUTION IN INDIA

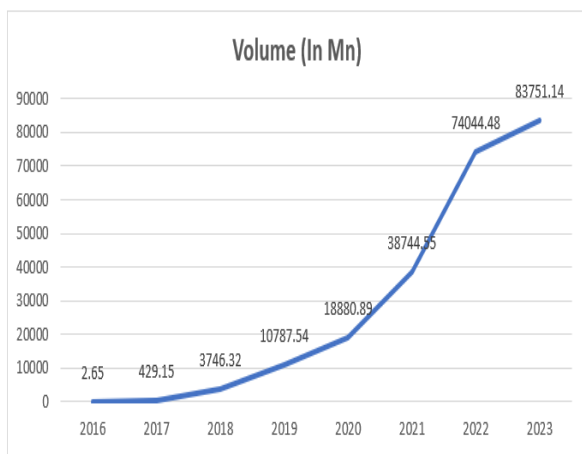
The demonetisation policy has a significant effect on Indian Economy and also added a catalyst to the digital payments in India. Before 2016, Digital payments were restricted to the 10% of the transactions. The growth of digital ecosystem in India has been driven by a number of factors, including the government's push towards digitalization, an increase in internet and smartphone penetration, and the rise of e-commerce. The Indian government has been actively promoting the use of digital technologies through various initiatives such as Digital India, Make in India, and Startup India. These initiatives aim to increase the use of digital technologies in various sectors such as healthcare, education, and agriculture, and also to create a conducive environment for start-ups to flourish. The increase in internet and smartphone penetration in India has also played a major role in the growth of the digital ecosystem. According to a report by the Internet and Mobile Association of India, the number of internet users in India has reached 800 million in 2023. This increase in internet users has also led to an increase in the number of mobile wallet users in India, which is expected to reach 900 million by 2025.

With Government's mission to target 2,500 crore digital transactions in 2017-18 Union Budget through UPI, USSD, Aadhar Pay, IMPS and debit cards for promoting digital payment transactions in the country, this has been a significant step towards the government's goal of increasing the use of digital payments and reducing the dependence on cash transactions. Digital payments have become increasingly important in India in recent years, as the country has seen a rapid increase in the adoption of smartphones and internet access. This has led to a significant increase in the use of digital payment methods, such as mobile wallets, UPI, and card payments.

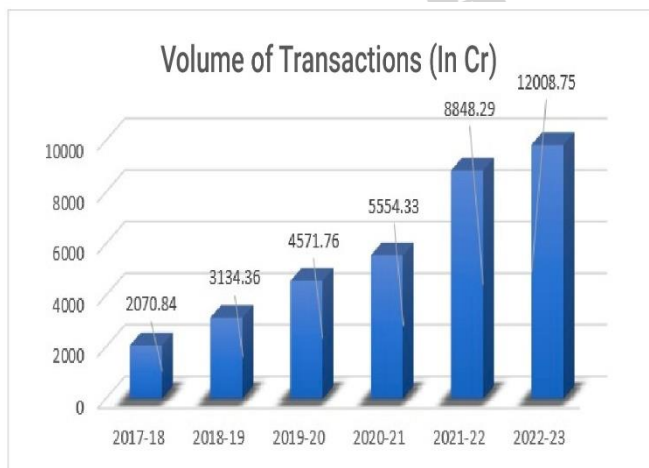
The digital payments ecosystem in India has also grown significantly in recent years, driven by a combination of government initiatives, an increase in internet and smartphone usage, and the rise of e-commerce. One of the key initiatives is the launch of the Unified Payments Interface (UPI), which allows for real-time inter-bank transactions, and the Bharat Interface for Money (BHIM) app, which simplifies the process of making digital transactions.

UPI (Unified Payments Interface) has seen significant growth in India since its launch in 2016 by National Payments Corporation of India (NPCI). Here are some highlights of the UPI journey in India with YoY (Year-on-Year) growth statistics till Jan 2023.

Source: National Informatics Centre Graph no.1



Year on Year growth for Digital Payments in India has been significant and can be referred below



Source: National Informatics Centre Graph No.2

Digital Payment Dashboard has been integrated with Integrated with 118 public sector, private sector, payments, regional, rural and foreign banks. In FY 2021-22, 8,840 Crores Digital Payment Transactions were achieved with 87.20% Current & Savings Accounts seeded with Aadhaar Number, 81.05% Current & Savings Accounts seeded with Mobile Number.

Government has published the data about the significant increase in the digital payments of India in both urban and rural areas. The total digital payment transactions volume increased from 2,071 crore in FY 2017-18 to 13,462 crore in FY 2022-23 at a CAGR of 45 per cent. During current FY 2023-24, digital payments transactions have reached 11,660 crore till 11.12.2023.

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: Reserve Bank of India (RBI), National Payments Corporation of India (NPCI) & DIGIDHAN Portal Table. No.1

Objectives of the Study:

- To understand the rural Economy of India.
- To the Evolution of the Digital payment systems of India
- To study the impact of digital payment systems on rural masses

III. LITERATURE REVIEW

According to Bhattacharya (2021), the adoption of precision agriculture techniques has shown potential in enhancing crop yields and reducing input costs. However, the transition is slow due to the lack of awareness and financial constraints among smallholder farmers (Kumar et al., 2019).

A study by Gupta and Singh (2020) reveals that MGNREGA has significantly reduced rural poverty and migration. Similarly, the Pradhan Mantri Gram Sadak Yojana (PMGSY) has improved rural connectivity, thereby facilitating better market access for agricultural produce (Chand & Srivastava, 2021).

Technology has emerged as a key driver of change in the rural economy. The penetration of mobile phones and the internet has opened new avenues for information dissemination and financial inclusion. Digital platforms like eNAM (National Agriculture Market) have facilitated better price discovery for farmers (Sarkar & Roy, 2021). However, digital literacy and infrastructure remain major hurdles in many rural areas (Rao, 2019)

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According to Sharma (2018), rural poverty rates remain high, particularly in states like Bihar and Uttar Pradesh. Gender disparities are also stark, with women having limited access to education and employment opportunities (Patel & Rani, 2020). Furthermore, the agrarian distress due to crop failures and indebtedness continues to be a critical issue (Deshpande & Arora, 2019).

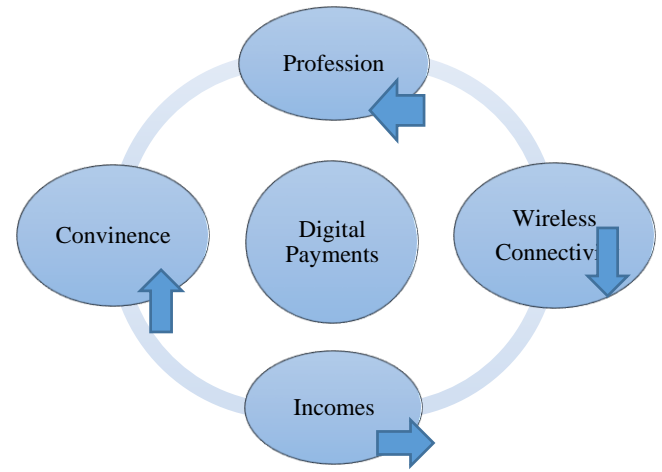
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Few Modes of Digital payments: Source: Cashless India Portal Table. No 2

Sl. No.	Modes
1	Mobile Wallets
2	UPI
3	IMPS
4	Bharat Bill Payment System
5	ATMs
6	Internet Banking
7	AEPS

Since the digital payment is an independent factor whereas incomes, profession, wireless connectivity and convenience becomes the dependent factors for the transformation of the payment systems in rural India. Post demonetisation people of rural India started understanding the importance of Bank accounts and through Pradhan Mantri Jaandhan Yojana vital amount of zero balance accounts were opened. In the same time mobile revolution entered into rural markets significantly positioned the businesses at optimum levels. Technology advancements in telecommunication sector were rapidly adopted by the rural masses and today wireless communication has become one of the top priority communication modes across all the social classes of the society. This adoption of the technological advancements by the entire masses is well explained by the famous model called Technology Acceptance Model which completely explains the position of digital payments and making it as a convenience pattern.

IV. CONCEPTUAL MODEL



The above model depicts the interrelation between the digital payments and the factors which are dependent on the same. The technical advancements have enabled the rural consumer to go for the digital payments with the view of the convenience and that results into time savings and rapid payment systems. Initially this was a challenge to the Government of India to position into the minds of the consumers but surprisingly tools of digital payments became the engines of convenience, quick businesses and transference.

V. CONCLUSION

This paper provides the basic understanding regarding the significance of technology, its acceptance and the way how it has transformed the digital payments systems in rural India. Further, the concepts such as technology acceptance, economic transformations and demographical characteristics would provide the wise scope for advanced research.

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