

A STUDY ON IMPACT OF ADAPTABILITY AND ACCESSIBILITY OF DIGITAL PAYMENT SYSTEMS AND ITS IMPACT ON GROWTH AND DEVELOPMENT OF ECONOMY

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ABSTRACT

The study aims to investigate the impact of the adaptability and accessibility of digital payment systems on growth and development of an economy. This study will help to understand the relationship between the adoptions of digital payment systems by different sectors of the economy. It explores the impact of digital payment systems on various economic indicators, such as GDP growth, exchange rate, financial inclusion, and income distribution. It also helps policymakers, financial institutions, and business owners who seek to leverage digital payment system potential to drive economic growth and development.

Keywords: Digital Payment, Financial Inclusion, Adaptability, Accessibility, Economy Growth.

INTRODUCTION

Digital Payment

The Payments and Settlement Act, 2007 defines “Any transfer of funds that is initiated by a person by way of instruction, authorization, or order to a bank to debit or credit an account maintained with that bank through electronic means and includes point of sale transfers; automated teller machine transactions, direct deposits or withdrawal of funds, transfers initiated by telephone, internet and, card payment” Pradhan et al. (2021); Anshari et al. (2019); Al-Okaily et al. (2020); Alkhowaiter, (2020); Adhikary et al. (2021).

Digitizing brings several benefits such as cost reduction, enhanced efficiency, and improved transparency. It also presents an opportunity to establish robust infrastructure and expand the adoption of digital payment methods. Digital Payment System (DPS) enables governments to transition their social welfare, salary, procurement payments, taxation, and licensing receipts into digital formats. The Govt. of India gives the highest priority to promotion of digital payments for every section of society (Adhikary et al. 2021). The government encourages customers and merchants to transact in different modes of digital payment by providing various tax and non-tax benefits and many more incentives. As digital payment services accelerated drastically due to the advancement of technology and regulators will lead to operating new specialist payment services without a banking license Niankara, (2023); Joshi et al. (2019); Dzandu et al. (2022).

Objective

1. To understand the role of digital payment systems in the growth of a nation's/ state's economy.
2. To explore the growth pattern of digital payment systems since 2017.
3. To explore the role of digital payments to accelerate the pace of financial inclusion.
4. To know the share of impact of digital payment on growth of different sectors of economy.
5. To suggest the key findings of the study to the policy makers for better development of the society.

Methodology

In this study, secondary data have been used which is collected from different sites such as RBI, NPCI, Digidhan, IBEF, etc. The data has also been obtained from the Ministry of Electronics and Information Technology, the Ministry of Revenue Department, etc., and some other sources. Some specific sector and sub-sector departmental fact sources were taken from the database for the study Mohan Kumar (2022); Chaveesuk et al. (2021).

Role of Adopting Digital Payment System for the Growth of the Economy

1. Increasing transactional efficiency
2. Transparency in transactions
3. Encourage E-commerce and digital transaction
4. Increasing smartphone adoption
5. Strong push from government and regulators towards adoption of digital payment system.

The key motivation for exploring the digital payment system in India digital payment helps in reduction of operational costs involved in physical cash management, fostering financial inclusion, bringing resilience, efficiency, and innovation, adding efficiency to the settlement system, boosting innovation in cross-border payments space and providing the public with uses that any private virtual currencies can provide, without the associated risks. Reforms of digital payment which provide banking from anywhere, expanding the base of financial inclusion, subsidy to end beneficiary's account, use of next technologies, Scaling-up the merchant acceptance infrastructure, UPI referral, and cashback schemes and digital literacy and awareness.

Different Modes of Digital Payment

1. IMPS (November 2010): [Immediate Payment Service]
2. AEPS (November 2010): [Aadhaar Enabled Payment System]
3. Rupay (March 2012)
4. NACH (December 2012): [National Automated Clearing House]
5. NUUP(August 2014): [National Unified USSD Platform*99#]
6. UPI (August 2016): [Unified Payment Interface]
7. NETC (December 2016): [National Electronic Toll Collection]
8. BBPS (October 2017): [Bharat Bill Payment System]
9. RuPay NCMC (March 2019) [National Common Mobility Card]

IMPS: IMPS facilitates immediate 24*7 electronic fund transfer among peer to peer, person to account and person to merchant settlement through mobile, internet and ATMs. It is a multidimensional and multichannel platform that helps in making payments possible within a fraction of second- with all the standards and integrity sustained for security for large amount of transactions.

UPI: In 2016 NPCI (National Payment Corporation of India) introduced UPI as a collection of standard Application Programming Interface specializations in performing payment online. UPI performs a variety of functions such as fulfilling a money request, in-app payment within the same mobile of the customer, DTH payment from home or anywhere, UPI auto pay, credit card bill payment, peer-to-peer, and merchant payment.

AEPS: Aadhaar authentication is the process wherein, UIDAI(Central Identities Data Repository - CIDR) has the data of Aadhaar holder such as aadhaar number, and personal

information such as, biometric/demographic information which is used for matching the information of Aadhaar holder submitted in UIDAI.

Rupay: Rupay is India's proud response to international payment networks, establishing itself as the country's first fully domestic card payment network. Rupay not only promotes the growth of digital transactions but also protects against phishing. Rupay stands as a symbol of our national identity and pride of our country's capabilities and achievements in the world of financial technology.

NACH: NPCI has introduced NACH which is a web-based solution that helps banks, financial institutions, corporates, and the government to conduct electronic fund transfers on a large scale, particularly for recurring and periodic in nature. This system proves beneficial for facilitating substantial transactions related to distributing subsidies, dividends, interest, salaries, pensions etc.

NUUP: *99# services have been introduced to get banking services benefit to each section of society across the country. By dialing *99# on the mobile phone an interactive menu is displayed and customers get benefit of this scheme in remote areas also. It includes many functions such as an interbank account to account transactions, balance inquiries, and changing UPI PIN besides a host of other services to all GSM mobiles in remote areas of the country.

NETC: NETC system enables payment of toll plazas by using Radio identification technology. It provides consistent nationwide toll payment solution which includes dispute management and clearing house services for settlement. It consists of business rules, a collection of specialized processes and technical capabilities that enables customers to utilize FASTag mode at any toll plaza.

BBPS: Bharat BillPay is the mode of payment that provide immediate payment confirmation through SMS or receipt. It offers uncountable Bill collection categories like water bills, telecom, DTH and electricity bills, etc., and other recurring transactions such as insurance premiums, mutual funds, school fees, institution fees, FASTag recharge, and other payments etc.

RuPay NCMC: NCMC stands for National Common Mobility Card payment. This innovative card envisions the widespread adoption of cashless payments across various public transport systems in the country, including buses, cab, metros, and many more. NCMC cards leads a pivotal role in expanding the reach of digital payment mechanisms within public transportation.

NEFT: National Electronic Fund transfers system is launched by RBI. It is the system through which funds are transfer by customers from one bank to another bank in India. It is safe, reliable, economical, and efficient system of funds transfer between the banks.

RTGS: Real Time Gross Settlement system is developed by RBI which helps to fund transfer between banks on "real-time" and "gross basis". Real-time means the transaction is done quickly as soon as processed. Gross settlement refers to the settlement of transaction is done one to one basis without netting and bundling with other transactions and settlement means one's transaction is processed then it can't be revocable Shaikh et al. (2023).

Accelerating Growth of Digital Payment

UPI has helped in reducing modes of cash requirement like ATMs and Branches which contraction in operational costs and improved experience of customers and also anchors a expanded retinue of fintech applications such as digital insurance products, micro pensions and flexible loans. The proportion of digital payment transaction turnover to current GDP to increase by 10.37% to 12.29% in the year 2019 and 2020 and further increase in 2021 is 14.80%. The country's fintech market has experienced remarkable progress, outpacing

other nations whose current GDP at US\$2.62 trillion and awaited to achieve US\$5 by 2026. The global average and world's fintech adoption rate is 64% and 87%. In September 2021, India's fintech market, valued at US\$31 billion (third largest in the world), had more than 2100 players. In India 47% internal fraud and leakage from pension payment has reduced. and Govt. save millions of dollars annually in administrative costs Government played active role in popularising digital payment instruments by organising different conferences, workshops and many other programs to boost digital transactions.

- **Digi Dhan Mela:** It is introduced on 31 December 2016 by our Prime Minister to attain "Faceless, Paperless, and Cashless" goal of India. Digidhan mission is mainly for promoting digital payment ecosystem. Digital payments have registered tremendous growth in India.
- **Digi Dhan Vyapari Yojana:** This scheme was launched December 2016 to promote digital transaction and reduce the cash transactions. Merchant and Trader can win weekly prize from 5000 to 50000 for accepting more digital payment like UPI, USSD, AEPS and Rupay card. To participate in this scheme merchants have to register themselves in Digi Dhan Vyapari Yojana Portal.
- **Lucky Grahak Yojana:** This scheme was launched in December 2016 by NPCI for promotion of digital payment in rural and urban areas of India. Customers who make digital transactions between Rs. 50 and Rs. 3000 are eligible for the lucky draw under the scheme. This scheme is open to all citizens and the winners are selected through a computerized random draw.
- **Cashback Offers at fuel stations:** Cashback offers at fuel stations are offered by banks, credit card companies and digital payment providers to encourage consumers to use their digital payment methods while purchasing fuel. Fuel stations benefit from increased sales volume and reduced transaction cost.

Impact of Digital Payment in Different Sectors of Economy

Impact of digital payment on primary sector: National Agriculture market (eNAM) provides all information and services for all Agriculture Produce Marketing Committee(APMC). It streamlined procedure enhances uniformity in agriculture marketing across the integrated markets. There is 585 mandis across 16 States & 2 UTs registered with 1.41 crore farmers and 1.21 lakh traders.

Impact of digital payment on secondary sector: The emergence of fintech companies has played vital role in digital transformation within financial sector. These innovative startups have disrupted traditional financial institution by leveraging technology to deliver groundbreaking products and services that challenges established norms. Digital transformation in the industry performs a wide range of initiatives, such as the development of mobile banking, integration of artificial intelligence for enhanced customer service. Digital transformation induces innovative products and services which helps in startups. (The & Communication, n.d.)

Impact of digital payment on tertiary sector: Tertiary sector is the fastest-moving sectors. India has established itself as a prominent global hub for digital capabilities, boasting an impressive 75% share of the worldwide digital talent pool. In India 5G wireless technology is expected to generate a substantial US\$10 billion business for Indian IT services firms between 2019 and 2025. India's digital economy is anticipated to reach a remarkable US\$1

trillion by 2025, and government want digital economy's contribution to GDP will be 20% within the same timeframe Shree et al. (2021).

CONCLUSION

This study has highlighted the significant impact on adaptability and accessibility of digital payment systems on the growth and development of the economy. Adoption of digital payment system depicts positive impact on economic growth and development by increasing financial inclusion, reducing transaction cost, and promoting financial innovation. Government helps in promoting digital payment system by developing necessary infrastructure and policies. Financial institutions can leverage digital payment systems to reach a broader customer base and promote financial inclusion, while businessmen can reduce transaction costs and increase efficiency by adopting digital payment system. This study emphasizes the potential benefits of a digital payment system for financial inclusion, transaction cost reduction, and financial innovation. It provides the foundation for future research. Future studies could inspect the digital payment system impact on specific economic sectors such as agriculture, healthcare, or investigate the impact of digital payment system on income distribution and poverty reduction.

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