Digital Payments and Their Impact on The Indian Economy

by

Abhishek Agarwal

DISSERTATION

Presented to the Swiss School of Business and Management Geneva

In Partial Fulfillment

Of the Requirements

For the Degree

DOCTOR OF BUSINESS ADMINISTRATION

SWISS SCHOOL OF BUSINESS AND MANAGEMENT GENEVA

MARCH, 2024

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by

Abhishek Agarwal

Supervised by

Derrald Stice

APPROVED BY

Meskina Olesya, PhD.

Dissertation chair

RECEIVED/APPROVED BY:

Admissions Director

ABSTRACT
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Abhishek Agarwal
2024

Dissertation Chair: Meskina Olesya, PhD

The Indian economy has witnessed a significant transformation over the past few years, driven in part by the rapid adoption of digital payments. This paper aims to provide a comprehensive analysis of the impact of digital payments on various aspects of the Indian economy. The paper begins by providing an overview of the digital payments landscape in India, highlighting the key players and trends. It then examines the impact of digital payments on financial inclusion, and consumer behavior. The paper also discusses the challenges and opportunities associated with the adoption of digital payments in India. Finally, the paper concludes with policy recommendations to promote the further growth and adoption of digital payments in the country.

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CHAPTER 1:
INTRODUCTION

1.1 Research Background

Digital payments have emerged as a transformative force within the Indian economy, reshaping monetary exchanges and impacting different sectors (National Payment Corporation of India, 2022). The expansion of Digital payment strategies, driven by innovative progressions and changing buyer inclinations, has gathered noteworthy attention from policymakers, financial analysts, and industry partners alike. India's journey towards becoming a less-cash economy, quickened by demonetisation and the advancement of Digital payment stages, underscores the government's commitment to cultivating budgetary consideration, straightforwardness, and effectiveness.

The allotment of progressed payments has seen exponential advancement over a long time, affected by factors such as the wide availability of smartphones, the advancement of web arrangements, and the extension of progressed payments infrastructure (Shankar,2021). Flexible payment applications, wallets, Unified Payments Interface (UPI), and other electronic payment systems have picked up the balance, promoting consolation, security, and cost-effectiveness to clients and businesses alike. This move towards progressed trades has paved the way to revolutionise the way cash-related trade is conducted, driving financial joining, diminishing reliance on cash, and overhauling the adequacy of the economy.

Besides, the COVID-19 pandemic has animated the determination of progressed payments, as social isolating measures and security concerns have prompted a speedy move towards contactless payment methodologies. Businesses and clients dynamically turned to digital payments for

conducting trades, highlighting the flexibility and adaptability of progressed payment courses of action in times of crisis.

Against this foundation, understanding the multifaceted influence of Digital payments on the Indian economy is essential. This task analyses the distinctive estimations of this influence and explores how digital payments affect money-related improvement, budgetary thought, client behaviour, government courses of action, and regulatory frameworks (Kumar,2020).

Digital payments can contribute to financial development by improving the productivity of budgetary exchanges, diminishing exchange costs, and invigorating utilisation and venture. By encouraging quicker and more secure exchanges, digital payments can streamline commerce operations, move forward cash stream administration, and cultivate business and development. In addition, digitising payments can empower businesses to reach unused markets and grow their client base, driving financial development and work creation.

Digital payments are vital in advancing monetary consideration by giving underserved populaces the right to formal budgetary administrations (Established for Advancement and Inquire about in Keeping Money Technology,2019). By advertising low-cost and user-friendly options to conventional money channels, digital payment arrangements can enable people with restrictions to keep money foundations, participate in the formal economy, spare cash, get credit, and construct resources. In addition, digital payments can encourage government exchanges and social welfare programs, guaranteeing that benefits reach aspiring beneficiaries conveniently and straightforwardly.

The selection of Digital payments has reshaped customer behaviour, driving changes in investing designs, inclinations, and desires (Niti Aayog2021). Digital payment stages offer shoppers more prominent comfort, adaptability, and security, empowering them to grasp cashless exchanges for a wide range of buys, counting retail, transportation, and amusement. Moreover, the accessibility of Digital payment alternatives has fueled the development of e-commerce and online retailing, changing how shoppers shop and execute.

Governments play a pivotal part in forming the digital payments scene through arrangements and directions that advance development, competition, and customer protection (Reserve Bank of India

2021). In India, various associations, such as the Digital India campaign and the Pradhan Mantri Jan Dhan Yojana (PMJDY), have established a digital payment biological system. In contrast, administrative measures, including the Save Bank of India's (RBI) rules on interoperability and security benchmarks, have sought to guarantee the security and unwavering quality of Digital payment systems (Internet and Portable Affiliation of India 2022). Administrative challenges such as covering locales, compliance requirements, and information protection concerns continue to cultivate a conducive environment for developing Digital payments.

Whereas digital payments offer critical openings for financial development and money-related incorporation, they also pose challenges that should be addressed. Security concerns, including extortion, information breaches, and cyberattacks, undermine buyer belief and certainty in digital payment platforms (Planning Commission, Government of India,2018). In addition, digital payment, constrained web networks, and moo digital payment rates in rustic and farther regions posture boundaries to selection, compounding money-related avoidance. Tending to these challenges requires concerted endeavours from governments, businesses, and respectful society to contribute to the framework, upgrade security measures, advance digital education, and guarantee administrative clarity.

In conclusion, digital payments have risen as an effective enabler of financial development, financial inclusion, and innovative advancement in India. In any case, realizing the complete potential of digital payments requires tending to different challenges and successfully saddling openings. By investigating the effect of Digital payments on the Indian economy and society, this investigation points to supplying essential bits of knowledge for policymakers, businesses, and other partners looking to explore the advancing scene of India's digital economy (Bajaj2020). Through collaborative endeavours and imaginative arrangements, India can use digital payments to construct a more comprehensive, flexible, and affluent future for all its citizens.

1.1.1 Digital Payment Ecosystem: Global and Indian Aspects

The worldwide digital payments scene envelops a differing cluster of payments and advances that encourage electronic exchanges over diverse districts and economies. In progressing economies such as the USA and Europe, a vast extent of digital payment strategies, counting versatile payments, contactless cards, and online money-keeping have picked up far-reaching

acknowledgement. Portable payment apps like Apple Pay and Google Pay and peer-to-peer payment stages like Venmo and PayPal have revolutionized how shoppers conduct exchanges and advertising comfort and security. So also, in districts like Africa, versatile cash administrations such as M-Pesa have developed as an effective apparatus for money-related incorporation, granting clients to exchange cash, pay bills, and get to other budgetary administrations through their portable phones (Mani, 2021). These worldwide patterns emphasize the expanding digitization of monetary administrations and the developing significance of digital payments in driving financial development and monetary consideration worldwide.

Within India, the digital payments environment has seen fast advancement and extension over time, moved by government-led activities and innovative advancements. The Unified Payments Interface (UPI), propelled by the National Payments Corporation of India (NPCI), has developed as a game-changer, encouraging consistent and momentary finance exchanges between bank accounts through versatile phones (Service of Gadgets and Data Technology,2021). UPI has picked up far-reaching appropriation due to its straightforwardness, interoperability, and moo exchange costs, with major Digital payment players like Google Pay, PhonePe, and Paytm leveraging the UPI framework to offer user-friendly payment arrangements. Moreover, digital payment, such as Paytm, FreeCharge, and Mobikwik, have picked up notoriety among clients for their comfort and ease of utilise, permitting users to store reserves carefully and make fast exchanges for different administrations and utilities (Kant, 2021). Also, conventional money channels like net-keeping money and debit/credit cards play a critical part within the digital payment biological system, advertising a wide range of online and offline payment choices to shoppers and businesses alike. By and large, the digital payment scene in India is characterised by advancement, competition, and quick selection, with digital payments getting progressively coordinated into the day-to-day lives of Indian shoppers and driving the country's move towards a **less-cash economy.**

1.1.2 Digital Payment Adoption Trends in India

Digital payment appropriation patterns universally show varieties over diverse districts, reflecting a combination of financial components, mechanical framework, and administrative systems. In developed economies such as the USA and Europe, Digital payment selection has been driven by tall smartphone infiltration, strong web networks, and buyer inclinations for comfort and security

(Bhatia,2020). Versatile digital apps, contactless cards, and online managing accounts have picked up critical footing, with shoppers progressively grasping cashless exchanges for their regular needs. Districts like Africa have seen a one-of-a-kind direction of Digital payment appropriation, characterised by the fast development of portable cash administrations like M-Pesa, which have played an essential part in advancing monetary consideration and engaging underserved populaces.

Within the Indian setting, computerized payment selection has experienced an exceptional surge over the past few years, fueled by government activities, innovative advancement, and changing shopper behaviour. Researchers have broadly inquired about and archived the variables affecting Digital payment appropriation in India, shedding light on different measurements of this wonder. Things have highlighted the role of variables such as ease of utilisation, security, belief, seen value, and social impact in forming consumers' demeanours and eagerness towards computerized payments (Huang, 2017). Besides, inquiries have investigated the effect of statistical factors, such as age, pay, instruction, and urban-rural isolation, on computerised payment appropriation designs, uncovering experiences into the assorted needs and inclinations of diverse buyer fragments.

Besides, researchers have inspected the part of government approaches, administrative systems, and framework advancement in driving Digital payment selection in India. Activities such as demonetisation, the Pradhan Mantri Jan Dhan Yojana (PMJDY), and the advancement of Digital payment stages like UPI have played a pivotal part in catalysing the move towards a less-cash economy (Singh2018). Furthermore, collaborations between open and private partners, ventures in the computerized foundation, and endeavours to improve money-related proficiency have created an empowering environment for digital payment appropriation nationwide.

Overall, the insightful investigation of digital payment appropriation in India gives essential insights into the elements, challenges, and openings related to the progressing digitisation of budgetary administrations. By analysing these patterns and understanding the fundamental drivers, policymakers, businesses, and other partners can define successful methodologies to advance comprehensive and feasible computerised payment environments, eventually contributing to the development and advancement of the Indian economy.

Digital payment appropriation patterns universally display varieties over diverse locales, reflecting a combination of financial components, innovative foundations, and administrative systems. In

progressing economies like the USA and Europe, computerised payment selection has been driven by tall smartphone infiltration, vigorous web networks, and buyer inclinations for comfort and security. Portable payment apps, contactless cards, and online managing accounts have picked up noteworthy footing, with customers progressively grasping cashless exchanges for their regular needs (Credit Suisse. 2018). In contrast, locales like Africa have seen an exciting direction of computerised digital selection, characterised by the quick development of versatile cash administrations like M-Pesa. These have played a significant part in advancing monetary incorporation and enabling underserved populations.

Within the Indian setting, Digital payment selection has experienced a surprising surge in the last long time, fueled by government activities, mechanical development, and changing buyer behaviour. Researchers have broadly inquired about and reported the components affecting Digital payment selection in India, shedding light on different measurements of this marvel. Ponders have highlighted components such as ease of utilisation, security, belief, seen value, and social impact in forming consumers' states of mind and eagerness towards digital payments. Besides, inquiries have investigated the effect of statistical factors, such as age, pay, instruction, and urban-rural partition, on digital payment selection designs, uncovering bits of knowledge about the differing needs and inclinations of distinctive shopper fragments.

Besides, researchers have inspected the part of government approaches, administrative systems, and framework advancement in driving Digital payment appropriation in India. Activities such as demonetisation, the Pradhan Mantri Jan Dhan Yojana (PMJDY), and the advancement of Digital payment stages like UPI have played a vital part in catalysing the move towards a less-cash economy (Mbogo, 2010). Also, collaborations between open and private partners, speculations in digital payment, and endeavours to upgrade monetary education have made an empowering environment for Digital payment appropriation over the nation.

The scholarly investigation on digital payment selection in India generally provides essential knowledge on the elements, challenges, and openings related to the progressing digitization of money-related administrations. By analysing these patterns and understanding the fundamental drivers, policymakers, businesses, and other partners can define compelling procedures to advance

comprehensive and feasible computerised payment biological systems, eventually contributing to the development and improvement of the Indian economy (IMF, 2015).

Different worldwide patterns and residential components have affected the selection of computerised payments in India, forming the advancement of the computerized payments biological system within the nation. The move towards computerized payments has been driven by mechanical headways, changing buyer inclinations, and administrative changes aimed at advancing money-related consideration and improving efficiency in budgetary transactions (Hugh,2013). Within the USA and Europe, for example, the broad appropriation of versatile payment apps and contactless payment strategies has changed how customers conduct exchanges, advertising comfort and security in a progressively cashless society. So also, in Africa, portable cash administrations have risen as an effective apparatus for monetary incorporation, empowering clients to get to a vast extent of money-related administrations through their versatile phones, bridging the hole between the kept money and unbanked populaces.

In India, government arrangements, innovative development, and socio-economic components unique to the nation have affected computerised payment selection. Activities such as demonetisation and using the Merchandise and Administrations Charge (GST) have catalysed computerised payment selection, driving the move towards a less-cash economy. Moreover, the fast expansion of smartphones, the development of web networks, and the accessibility of reasonable computerised payment frameworks have encouraged the broad appropriation of Digital payment strategies such as UPI, versatile wallets, and online banking (Humphrey, 2010). Furthermore, government-led activities such as the Pradhan Mantri Jan Dhan Yojana (PMJDY) have played a significant part in advancing budgetary incorporation by giving money administrations to millions of unbanked people, subsequently making a conducive environment for digital payment adoption.

Researchers have conducted broad inquiries about the components affecting computerised payment selection in India, investigating different measurements such as buyer states of mind, recognitions, and behaviours towards computerised payments. Considers have highlighted the significance of variables such as comfort, security, and belief and seen convenience in consumer selection and utilisation behaviour (IBM,2007). Moreover, statistical factors such as age, wage,

instruction, and topographical area have been found to impact computerized payment appropriation designs, with more youthful, urban, and higher-income individuals exhibiting higher levels of appropriation and utilization. Besides, the investigation has recognized the role of social impact and peer systems in driving digital payment selection, highlighting the significance of word-of-mouth suggestions and social standards in forming customer behaviour.

Further, a few openings and challenges lie ahead with the development of computerized payments in India. On the one hand, the quick pace of innovative development and the developing acknowledgement of Digital payment strategies show gigantic openings for further growth and advancement within the Digital payment ecosystem (ICRIER2013). On the other hand, challenges such as cybersecurity threats, computerized education obstructions, and infrastructural imperatives ought to be addressed to guarantee comprehensive and economical digital payment selection in all sections of society. By tending to these challenges and leveraging the openings displayed by Digital payments, India can realize its vision of becoming a driving digital economy and driving comprehensive development and improvement for all its citizens.

1.1.3 Digital Payment and Economic Growth

The impact of computerized payment selection on financial development has risen as a central point for analysts and policymakers worldwide, provoking a broad examination of its effect on different features of the economy. In created economies, the selection of computerized payments has been related to a few components contributing to financial development, including expanded effectiveness, efficiency picks up, budgetary incorporation, and innovation (Steinbeis, 2014). Eminently, the broad selection of Digital payment strategies, such as versatile managing an account, contactless payments, and online exchanges, has streamlined monetary forms, diminished exchange costs, and improved the significant productivity of the money-related framework. This, in turn, has encouraged more prominent capital assignment, venture, and utilization, in this manner applying positive impacts on financial development.

In addition, digital payment appropriation has unpredictably been connected to efficiency picks up in created economies. Businesses and people benefit from quicker, more helpful, and secure payment strategies, decreasing the time and assets required for budgetary exchanges. Thus, digital payments empower businesses to concentrate on centre exercises and distribute assets more

productively, improving efficiency levels in different divisions of the economy (Arora,2018). Also, the digitization of monetary administrations has invigorated development and business enterprise, creating modern trade openings, cultivating competition, and driving financial dynamism.

Within the Indian setting, Digital payment selection has developed as an urgent driver of financial development, with the government and policymakers advancing towards a less-cash economy. The appropriation of computerized payment strategies such as Unified payments Interface (UPI), versatile wallets, and online keeping money has experienced quick speeding up over a long time, catalyzed by activities such as demonetization, the Pradhan Mantri Jan Dhan Yojana (PMJDY), and the advancement of Digital payment stages. This move towards computerized payments has contributed to more prominent budgetary considerations, made strides in proficiency in money-related transactions, and upgraded straightforwardness within the economy.

Besides, computerized payment selection has transformed different segments of the Indian economy, including retail, e-commerce, and money-related innovation (fintech). The far-reaching accessibility of Digital payment alternatives has encouraged the development of e-commerce stages, empowering businesses to extend their client base and drive deals through helpful and secure computerized exchanges. Additionally, digitising budgetary administrations has impelled advancement within the fintech segment, driving inventive items and administrations such as peer-to-peer lending, computerized loaning, and robo-advisory administrations.

The impact of computerized payment selection on financial development in both created economies and India underscores its significance as a catalyst for money-related incorporation, productivity, and development. By grasping computerized payments and tackling mechanical progressions, nations can open unused development openings, improve efficiency, and cultivate comprehensive financial development (Joseph 2008). To realize the benefits of digital payment selection, policymakers must address a few challenges, including cybersecurity dangers, digital education boundaries, and infrastructural imperatives, to guarantee evenhanded get-to and support for all sections of society. Through concerted endeavours and key mediations, computerized payments can move financial development and thrive in the long term.

In conclusion, the transformative potential of computerized payment selection on financial development cannot be downplayed. As computerized payments progressively coordinate into ordinary exchanges, they are essential in driving productivity, efficiency, and innovation across economies worldwide. Within the Indian setting, the quick take-up of Digital payment strategies signals a promising direction towards a more comprehensive and technologically driven economy. To maximize the benefits of digital payment selection, policymakers must prioritise endeavours to address existing challenges and make an empowering environment conducive to maintained development (Ashish, 2018). Through collaborative activity and vital arranging, Digital payments can serve as a powerful engine for financial advancement and societal progression within the digital age.

1.1.4 Challenges in the Adoption of Digital Payments in India

The adoption of digital payments in India encounters many challenges, reflecting a complex interplay of factors ranging from infrastructural limitations to cultural preferences and regulatory uncertainties. These challenges pose significant obstacles to the widespread adoption of digital payment methods, impeding India's progress towards achieving a less cash economy (Bansi, 2012). Understanding and addressing these challenges is imperative to unlock the transformative potential of digital payments and propel India towards a more inclusive and digitally driven economic drive.

One of the foremost challenges hindering the adoption of digital payments in India is the inadequacy of digital infrastructure, particularly in rural and remote areas (Deepika 2018). Limited access to reliable internet connectivity and electricity infrastructure restricts the seamless use of digital payment platforms, exacerbating the digital divide between urban and rural populations. Inadequate digital infrastructure not only impedes access to digital payment services but also compromises the quality of service delivery, hindering the adoption of digital payment solutions among underserved communities.

Security concerns represent another critical barrier to adopting digital payments in India. Instances of fraud, data breaches, and cybersecurity threats undermine consumer trust and confidence in digital payment platforms, hindering their widespread acceptance. Strengthening security measures, implementing robust authentication protocols, and raising awareness about

cybersecurity best practices are essential to mitigate security risks and enhance consumer confidence in digital transactions.

Moreover, India's deeply ingrained reliance on cash transactions poses a formidable challenge to the transition towards digital payments (Dennehy, 2015). Due to factors such as familiarity, convenience, and trust, cash continues to be the preferred mode of payment for a significant portion of the population. Overcoming this entrenched preference for cash requires a concerted effort to educate the populace about the benefits of digital transactions and incentivize the adoption of cashless payment methods through targeted initiatives and incentives.

Interoperability issues further complicate the drive of digital payments in India, as the lack of seamless compatibility between different payment platforms creates friction for users. Fragmentation in the digital payment ecosystem requires users to navigate multiple platforms, leading to inefficiencies, inconvenience, and a suboptimal user experience. Standardizing interoperability protocols, fostering collaboration among industry stakeholders, and incentivizing the adoption of interoperable payment solutions are essential to streamline transactions and enhance the interoperability of digital payment platforms (Dhamija2017).

Addressing these multifaceted challenges requires a collaborative effort involving governments, financial institutions, technology companies, and other stakeholders. Investing in infrastructure development, expanding digital literacy programs, enhancing security measures, promoting interoperability, and streamlining regulatory frameworks are all critical components of a comprehensive strategy to promote the widespread adoption of digital payments in India. By overcoming these challenges, India can unlock the transformative potential of digital payments, driving financial inclusion, fostering economic growth, and paving the way towards a more inclusive and prosperous future for all its citizens.

1.2 Statement of the Problem

First and foremost, despite significant advancements in digital infrastructure, including the proliferation of smartphones and internet connectivity, a significant digital divide persists, particularly in rural and semi-urban areas. This digital disparity inhibits widespread access to and adoption of digital payment solutions, exacerbating financial exclusion and hindering efforts towards a more inclusive digital economy (Gupta, 2019). Bridging this divide through targeted

interventions and infrastructure development initiatives is crucial in ensuring equitable access to digital financial services for all population segments, fostering greater financial inclusion and empowerment.

Moreover, the drive for digital payments in India is marred by persistent challenges pertaining to security and trust. Fraud, data breaches, and cybersecurity threats undermine consumer confidence in digital payment platforms, impeding the transition from cash-based transactions (Jain Chhavi2018). Addressing these security concerns is paramount in fostering trust and promoting the widespread adoption of digital payments. Implementing robust security measures, including multi-factor authentication, encryption protocols, and real-time fraud detection systems, can help mitigate risks and enhance the security posture of digital payment platforms, thereby instilling greater confidence among users.

Additionally, the lack of interoperability among various digital payment systems presents a significant obstacle to seamless transactions. Fragmentation in the digital payment ecosystem necessitates users to navigate multiple platforms, leading to inefficiencies, inconvenience, and a suboptimal user experience (Kaur Manpreet2017). Overcoming these interoperability challenges is crucial in facilitating the seamless transfer of funds and enhancing the overall usability of digital payment solutions. Standardizing interoperability protocols, fostering collaboration among industry stakeholders, and incentivizing the adoption of interoperable payment solutions can help streamline transactions and enhance the interoperability of digital payment platforms, thereby improving user convenience and driving greater adoption.

Furthermore, regulatory ambiguities and inconsistencies substantially hinder innovation and growth within the digital payments sector. A clear and conducive regulatory framework is essential to foster competition, spur innovation, and ensure consumer protection in the digital payment ecosystem. However, the current regulatory drive in India is characterized by fragmented regulations, overlapping jurisdictions, and varying compliance requirements across different regions and sectors, creating uncertainty and hindering the growth of digital payment solutions (Shakira 2017). Streamlining regulations and clarifying compliance requirements are imperative steps towards creating an enabling environment that promotes the development and adoption of digital payment solutions. Establishing a harmonized regulatory framework that balances fostering

innovation and ensuring consumer protection can help create a level playing field for digital payment providers, encouraging investment, innovation, and growth within the sector.

Finally, while efforts have been made to promote digital literacy and awareness, there remains a pervasive lack of understanding and trust surrounding digital financial services among specific population segments. Enhancing digital literacy and conducting targeted awareness campaigns are essential in empowering individuals with the knowledge and skills to leverage digital payment platforms effectively. Building trust through transparent communication, user-friendly interfaces, and reliable customer support services can help alleviate apprehensions and encourage greater adoption of digital payment solutions among users. Investing in digital literacy programs, promoting financial education initiatives, and leveraging technology to enhance user experience and accessibility are essential steps towards building a digitally inclusive society where all individuals can participate and benefit from the digital economy.

1.3 Aims and Objectives

The study aims to investigate the influence of different digital payment tools and processes in the Indian economy.

- To assess digital payment adoption across demographics in India.
- To analyze digital payments' impact on financial inclusion.
- To examine digital payments' role in enhancing transparency.
- To explore digital payments' potential for fostering innovation

1.4 Research Questions

- How widely are digital payments used across different demographic groups in India?
- What impact do digital payments have on financial inclusion?
- How do digital payments contribute to transparency in financial transactions?
- In what ways do digital payments drive innovation in various sectors?

1.5 Significance of the Study

The significance of the present study is multifaceted, encompassing both practical applications and theoretical advancements in the realm of digital payments within the Indian context. From a practical standpoint, this research addresses pressing challenges and issues that impede the

country's widespread adoption of digital payment methods (Unisa Rahmath2017). By conducting a thorough analysis of the current drive, identifying key barriers, and proposing practical solutions, this study aims to provide valuable insights for policymakers, industry stakeholders, and practitioners, enabling them to devise effective strategies to promote the adoption of digital payment solutions across various sectors of the economy.

Moreover, the practical significance of this research extends to its potential to enhance financial inclusion and empower marginalized communities. In India, where a significant proportion of the population remains underserved by traditional banking services, digital payments offer a transformative opportunity to expand access to financial services and empower individuals with greater control over their financial lives. By bridging the digital divide, addressing security concerns, promoting interoperability, and streamlining regulatory frameworks, the findings of this study have the potential to catalyze the adoption of digital payment solutions among marginalized communities, thereby facilitating more significant participation in the formal economy and improving access to credit, savings, and other financial services.

Furthermore, from a theoretical perspective, this study contributes to the existing body of knowledge by advancing our understanding of the dynamics underlying the adoption and diffusion of digital payment technologies in emerging markets like India. Drawing upon insights from interdisciplinary fields such as economics, sociology, psychology, and information technology, this research offers novel theoretical frameworks and conceptual models to elucidate the complex interplay of factors influencing user behaviour, institutional dynamics, and market forces in the context of digital payments.

Additionally, this study contributes to theoretical debates surrounding the role of regulatory frameworks, market structures, and technological innovations in shaping the evolution of digital payment ecosystems (T.M. Dinesh, 2018). By examining the interdependencies between various stakeholders, analyzing emerging trends, and anticipating future developments, this research provides valuable theoretical insights that can inform academic scholarship and guide policymakers in navigating the complexities of the digital payments drive.

In conclusion, the significance of this study is manifold, encompassing its practical relevance for addressing real-world challenges, its potential to drive positive social impact through enhanced

financial inclusion, its theoretical contributions to advancing our understanding of digital payments in emerging markets, and its capacity to inform policy decisions and industry practices. By combining empirical research with theoretical insights, this study aims to contribute to developing a more inclusive, secure, and efficient digital payment ecosystem in India and beyond, thereby paving the way for a brighter and more prosperous future for all.

1.6 Scope of the Study

This inquiry will comprehensively look at the effect of computerized payments on the Indian economy, including different measurements. It will analyze the predominant Digital payment strategies such as versatile wallets, UPI, and web managing an account, assessing their entrance and utilisation designs over distinctive statistic portions. Besides, they will dig into the financial consequences of computerized payments, counting their commitment to GDP development, work era, and, by and large, economic development. Furthermore, it will evaluate the part of Digital payments in advancing money-related incorporation, analyzing their adequacy in giving access to managing an account of administrations for underserved populations(T.M. Dinesh, 2018). The investigation will scrutinize shopper behaviour with respect to computerised payments, government activities and arrangements, advertising elements, technological advancements, and financial suggestions. Additionally, it will investigate future patterns in digital payments and suggest how partners can improve their effect on the Indian economy.

1.7 Limitations of the Study

Despite the comprehensive scope sketched, it is fundamental to recognize a few impediments that will affect the investigation results. Firstly, the study's dependence on auxiliary information sources and existing writing may oblige the profundity of investigation, potentially overlooking nuanced bits of knowledge that might be gathered from essential information collection. Moreover, the energetic nature of the Digital payments drive presents a challenge in capturing real-time patterns and advancements as the industry experiences quick advancement and development. Besides, the study's centre on the Indian setting may constrain its generalizability to other nations or locales with diverse financial settings and infrastructural drives (Gupta, 2019). Asset imperatives, counting time and budget impediments, may also confine the research's scope and profundity. Finally, potential predispositions in information sources or techniques seem present in

discoveries' translation and legitimacy. Despite these limitations, they think about points to supply profitable bits of knowledge about the effect of digital payments on the Indian economy, whereas they recognise its inborn impediments.

1.8 Structure of the Dissertation

Introduction:

This section will provide an overview of the research topic, including its significance, relevance, and objectives. It will set the study context and outline the dissertation's structure.

Literature Review:

This module will review existing literature on digital payments in India, covering theoretical frameworks, empirical studies, and industry reports. It will examine key concepts, trends, challenges, and opportunities in the field, providing a foundation for the subsequent analysis.

Research Methodology:

This section will outline the research methodology employed in the dissertation, including research design, data collection methods, sampling techniques, and data analysis procedures. It will justify the chosen methodology and provide a rationale for its suitability in addressing the research objectives.

Data Analysis

The "Data Analysis and Interpretation" section of the dissertation will focus on analyzing the data collected during the research process and interpreting the findings in relation to the research objectives.

Conclusion and recommendation

The "Conclusion and Recommendations" section of the dissertation will culminate the research study, summarizing the key findings, discussing their implications, and providing actionable recommendations.

CHAPTER 2:
LITERATURE REVIEW

2.1 Introduction

Digital payment in India led to a cashless economy and a digitally empowered fellowship. Digital Payments are promoted by launching various digital payment modes such as banking cards, mobile wallets, internet banking, and mobile banking. Digital Payments have changed the approach in banking dealing and paved the way to foil financial Synonyms/Hypernyms (Ordered by Estimated Frequency) of noun transactions. Adapting to the new payment method was convenient for the people, as a single touch would do the marketing. The trend in usage of these styles is high, and the estimate of digitalization in all landing fields has been the reason for this wage increase in digital payment systems. Thus, introducing digital payments in India can be a cashless society and a stone's throw to digitalization. This chapter will explore the literature relevant to the supportive research on digital payments and their impact on the Indian economy. The findings of different research studies conducted worldwide related to the said topic are given. The results are followed by highlighting the gaps in existing research in this area and the contribution of the present study towards filling this research gap.

What do we mean by Digital Payment?

"Digital payment" refers to a payment type made via digital methods. The payer and the payee use digital channels to transmit and receive cash in digital payments. It was also known as electronic payment. Digital payment does not involve hard currency, and the transaction is online. It is indeed a convenient and time-saving method of making payments. We must take money out of our account when discussing money transfers. Consumers then use this money to make purchases at stores. A businessperson goes to the bank to deposit the funds they receive from us. That cycle is exhausting for both their retailer and us. Regardless, the money is immediately transferred from our account to the retailer's digital payments account. This cycle is pre-programmed, so neither the store nor we need to go to the bank (Rashi Singhal 2020).

2.2 Digital Payment Ecosystem

NFC or MST transmission wave stage organizations have created a way of exchanging information using NFC (Near Field Communication) and MST (Magnetic Secure Transmission) technology. We can install shippers through its remote communication appealing waves by swiping our card using POS (Point of Sales) equipment. Consumers can use this service simply by installing an MST-enabled app, but our phone should also support NFC. After enrolling our card particulars, customers may conduct contactless swaps on any of the dealers' POS terminals using our telephone (Rashi Singhal 2020).

Digital wallet payment system

Money has been loaded into wallets at this stage. Consumers could also add money using computerized wallet programs by introducing e-wallets. However, we must transfer assets to almost the same wallet. This appears to mean that when we have the PayTM or SBI's Buddy application installed on our phones, researchers can transfer money to another person's PayTM wallet or SBI's Buddy application, which also has such applications installed. Similarly, they cannot transfer funds from our PayTM wallet to our SBI Buddy wallet application. Other e-wallets, for example, were available there in the computerized marketplace, MobiKwik, Freecharge, Oxigen, Reliance Money, Paypal, Buddy, Lime, Payzapp, Pocket, Yes Pay, etc. (Rashi Singhal 2020).

USSD code payments system

However, if they do not have a mobile phone or a web office, one could still make payments by calling the USSD(Unstructured Supplementary Service Data) number from our primary phone following the specified instructions. That is a GSM-based invention in which people communicate using text messages. That stage serves as a conduit between media transmission and, for the most part, banking and monetary administrations. With each banking application, they get an additional dial number, and we need to check with our specialist business when exchanging payments (Rashi Singhal, 2020).

Mobile Money Identifier (MMID)

MMID, as we enrol the mobile number with the bank, they are issued a seven-digit unique number. For such specific interbank reserves move, any individual who needs to send money and individuals who need to receive money need both have MMID. However, they can only transport a restricted number of items every day using MMID. Almost all banks offer the option of making small payments (Rashi Singhal, 2020).

UPI App-based payments platform

UPI has devised a person's ability to create a virtual location by which we can move money without divulging the record number and IFS code to the collector. UPI operates continually, implying that money was transferred in real-time. UPI also supports alternative methods of transferring reserves. For example, it could be accessed with any banking program, such as HDFC UPI, SBI UPI, ICICI UPI, AXIS UPI, and, in practice, a diverse spectrum of commercial and governmental banks. Most banks have integrated their UPI component into their mobile banking application (Rashi Singhal 2020).

QR Code-based payment system

QR code is another alternative method of exchanging payments, in which we verify the trader's QR code to complete the transaction. Many computerized payment apps, such as BHIM and other banking applications, facilitate the exchange of payments. The dark squares of the QR code store information about just the items, and after filtering the code, the data is sent to the mobile phone, and the payments are completed. Consumers need not enter anything physically when using the QR code office. The government has shipped the Bharat QR code to push the computerized payment activities in the appropriate direction (Rashi Singhal 2020).

Biometric Verification Continues to Grow in Influence

Protecting against theft and fraud will be at the forefront of organizations and people's minds as mobile, invisible, or real-time payments become more widespread. More businesses use mobile biometric solutions to defend themselves from cyber-attacks or identity theft. As per Juniper Research, biometric authentication could safeguard $2 trillion in mobile transactions through 2023.

According to Juniper Research, the number of smartphones with biometric hardware such as facial recognition and iris scanning will approach 1 billion within the next five years. Payments are being verified in innovative ways thanks to biometric technology. Amazon has started incorporating palm-scanning verification technology into its physical stores.

2.3 Digital Payment and Economic Growth

The Indian economy has been proliferating, and people's competence levels are also increasing, but this is decided by the number of people enrolled in schools and colleges. Therefore, the education rate cannot be used to assess it for many people who specialise in working in a workplace, whether a PC, a mobile device, or any other working framework. Perhaps a working-class person nowadays will get a high-quality Android phone, so they will lack complete knowledge of using it effectively. Even if some individuals grasp how to do it, many dread utilizing banking via the internet because of online fakes, cybercrimes, constrained competence, uneducated on online guidelines, etc. Furthermore, people living in rural areas prefer to visit banks rather than conduct business online because many believe that the presumed worth of a worker is so much more important to themselves. If they find themselves in dire circumstances, they know who to turn to, yet conducting online business does not bind them to a specific person. Instead, the government has tried connecting clients' Aadhar numbers to find criminals.

Nonetheless, many people reduced the ledgers to avoid paying taxes to the government. Individuals discover new strategies or strategies to save themselves with every new application of rules. In the initial view, it is necessary to modify the image of the individuals, stating that whatever is being performed is fundamental for their betterment. This may seem inconvenient and absurd to use now, but this will pay off in the long run. This resulted from individual perceptions and some participants' lack of financial competence. Banks' functions to disseminate these data were essential, and representatives must keep current. Low and non-internet access is one significant barrier to converting a paper-based economy to a computerized one. Many government banks do not have a web network when it comes to web availability. These problems are much more prevalent at higher elevations. As a result, achieving the goal of computerizing the economy is impossible without using web offices. ATMs frequently contain cash but cannot distribute the funds because they cannot read the card without open online access. Clients feel safe going to the

bank and running errands with these typical difficulties. Besides these concerns, it was observed that people assume that when using net banking, ATMs, and other e-banking services, they would be burdened with an unnecessary burden of paying various fees. Therefore, it will endeavour not to use these offices in the future. Furthermore, whenever it relates to implementing these offices in the provincial areas, challenges such as the lack of foundation offices, the harsh landscape, and the lack of electricity are all common problems in India.

Over the last several years, India's booming digital payment sector has developed significantly, leading the way in the P2P (person-to-person) and P2M (person-to-merchant) segments of payment digitisation. The Union Budget for 2022-23 allows the finance minister to develop its digital payment ecosystem to spell out the government's strategy for financial inclusion through digitisation (Firstpost Jan 2022).

Pushing digital payments

The COVID-19 epidemic has advanced the payment industry's digitalisation, boosting digital payment systems. In FY2021, more than 40 billion digital transactions worth more than quadrillion rupees were recorded; making digital payments is among the fastest-growing fintech areas (Firstpost Jan 2022). To improve the digital payment environment, the government needs to solve the industry's issues, such as internet availability, promotion of UPI (United Payments Intersurface) transactions, and reduction of transaction costs. Last year, the government took some commendable steps in this area, further establishing a Rs 1,500 crore fund to stimulate the business and offset losses caused by the MDR waiver on UPI and RuPay transact. The industry will seek comparable incentives for low transaction costs (Firstpost Jan 2022).

Promote prepaid transactions through UPI.

UPI is now at the vanguard of the digital payment industry, facilitating online transactions via a user-friendly interface. Cash still reigns supreme, and despite its widespread use during the epidemic, UPI accounts for little fewer than 10% of all digital retail payments. In addition, the government can use UPI in the Budget to make more significant advances in low-penetration areas. They expect the finance minister to support the Reserve Bank of India's (RBI) proposal to route smaller transactions through UPI app on-device wallets. The wallet would function as a prepaid

instrument, lowering total bank transaction volume. As a result, the possibility of such a transactional failure is reduced, and merchant acceptability is increased (Firstpost Jan 2022).

2.4 Digital Payment and Influence on Business

Digital payment techniques, compared to other types of transactions, such as money withdrawals, are more beneficial and secure. However, that kind of payment promotes transparency and accountability, lowers exchange costs, and reduces the size of both the shadow and informal sectors. There would be no additional printing costs because the RBI had to burn 7935 crores to print its freshly scheduled money during the demonetisation stage. Sets aside funds and time-Whereas real money becomes vulnerable to tax evasion, black money, or counterfeit cash, digital cash is vulnerable to data breaches and fraud on the internet. For example, India experienced its worst data breach in a month, putting 3.2 million credit cards in danger. Expenses relating to information interruptions are increasing in India (Rashi Singhal, 2020). Although UPI has spearheaded the digital revolution in the payment industry, additional innovation across various tech platforms is required to support inter-bank P2P or P2M transactions. The proliferation of competing payment platforms will encourage innovation and force traditional payment systems to include incorporated online payments, broadening the scope of the digital payment sector even more. This will also promote innovation in improving access and delivery (Firstpost Jan 2022).

As platforms emerge, they should see a more significant push towards last-mile connectivity across new areas. Budgetary incentives, such as subsidies and tax breaks, can aid in adopting innovative business solutions by encouraging enterprises to increase their R&D spending (Firstpost Jan, 2022).

Looping in NBFCs and fintech(s) to widen the ambit NBFCs and fintech, such as neo banks, have already had significant success in reaching neglected groups that banks mostly have disregarded. "The finance minister could play an important role even further in widening this digital payment ecosystem and ensuring financial inclusion among some of the unbanked population by encouraging their participation in the P2P or P2M digital banking landscape." This will help to formalize the economy. In addition, the Union Budget could play a vital role in ensuring that the digital payment sector realises its full potential since it approaches a tipping point. Doing so will make significant advances towards its goal of a Digital India. Initiatives like Atmanirbhar Bharat

have been quite effective in attracting more businesses to payment systems, but they have a long way to go to guarantee a robust and diverse digital economy (Firstpost Jan 2022).

According to Rashi Singhal (2020), Digital financials seem to be a contemporary worldview that provides enormous benefits to banks in terms of increasing help and efficiency and its consumers in terms of ease of payments and access to banking services 24*7, seven days a week. It's also developed using a state-of-the-art innovation basis to change internal cycles and external interfaces. Gone are the days when people waited in enormous lines at banks, hoping that the time would come to withdraw cash or store money. Consumers may then go to the bank to wait in huge lines without worrying about the financial hours. As a result, individuals were unwilling to modify their trade habits. At the same time, digital payment was available, but following the demonetization, they were left with little choice but to conduct such transactions using digital payment. "Expanding online usage, flexible entry, and government initiatives like Digital India are catalysts for substantial growth with digital payment. A shopper's perception of digital payment seems to significantly and positively impact its adoption." As among the most extensive banking and monetary services providers in our range of geographical hinterlands, business banks provide unrivalled customer service. Client delight must always be communicated to build a loyal customer base. However, the crux of the problem would be that financial institutions, both private and public, must provide high-quality support to achieve better execution. This study examines the use and significance of digital payment systems in India.

Gunjan Sharma and Kushagra Kulshreshtha(2019) predicated on such a pattern of descriptive research. These participants in this study are persons whose intentions for using a mobile wallet were unclear. Using exploratory factor analysis, researchers came up with one of the most important aspects influencing people's desire to adopt the same. They would add to our ongoing study by highlighting the elements that force users to choose between using a mobile wallet and not using one.

Arpita Pandey and Arjun Singh Rathore(2019) state that digital payments have attracted various investors and paved the road for modernization and a cashless India. It is also to see if people are adopting technology. Researchers gathered secondary information from academic articles, publications, and government databases. It concluded that several individuals will not have their

Aadhaar connected to avoid paying taxes and that many parts of India lack internet access, making digital India impossible.

Shilpa Bhimrao Gaonker(2018) this study aimed to discover the limitations of a cashless economy. The causes that impacted the economy should move towards a cashless society, the benefits, and what initiatives the government is taking to support cashless transactions. The research used secondary sources, namely RBI, GOI, and MEDIANAMA reports. In addition, they will contribute to our ongoing study by highlighting the difficulties and strategies to overcome them and make India a cashless economy.

Vivendra Chavda(2018) said that Gandhi Nagar's rural residents were polled using non-probability convenience sampling. This research aimed to discover how rural respondents felt about digital payments. He stated that there had been limited persons aware of both the digital payments, and very few people used the same to pay the significant bills. The study article would contribute to our existing research by addressing the situation within rural regions such as Gandhi Nagar, which presents a challenge for the Indian economy regarding digital payment uptake.

Nithin and Baiju(2018) evaluated the most used payment instrument for transactions to answer the issue of how demonetization affected payment instrument usage. The research is based on monthly secondary data from the Reserve Bank of India (RBI). Demonetization harmed digitalisation because it would not accelerate the expansion of digital payments in India, according to the data evaluated using the Intervention Analysis in Timeseries (ITSA) approach. That research study aims to add to our ongoing investigation into whether digital payments could make India's economy a superpower, as it discusses the effects of demonetisation on digital payments because the government has made this step toward digitisation.

Ibrahim P. A., Nasir Zameer(2018) The influence of a cashless economy on the MSME sector was investigated, and how India is moving toward a cashless economy. This study report consists of secondary data analyzed using descriptive statistics. According to this study report, the cashless economy would assist in reducing corruption and money laundering. The MSME found it challenging to adapt to the abrupt shift to a cashless economy, but the bright outlook pushed them to do the same. They would add to the new study since it addresses the impact on MSME, which would be critical for job creation in the nation.

Harish Tigari(2018) evaluated how digitization has influenced the Indian economy and assessed the proportion of the population adopting digitalised payments and other services. The research report is based on secondary information. We will contribute to the new issue by demonstrating if that has genuinely transformed the economy and aided India's transition to a cashless economy.

China.Babu(2018) evaluated the amount of knowledge of digital payments within the economy and the benefits obtained from them. A convenience sampling approach was utilized to compile the research study based on a sample survey of 200 consumers across India. This research stated that Indian customers strongly understand cashless payments and that cashless payment methods benefit the Indian economy. This would add to a recent study that suggests the degree of acceptability of digital payments in India.

Pratap Dr Ganga Kumar Binha(2018) assessed the benefits and drawbacks of both the M wallet and the hurdles and stimulators towards the cashless economy. This research is based on a 100-person survey, with the results evaluated using the simple percentage technique. Researchers concluded that mobile phones are gaining acceptance, with discounts and incentives being the primary cause of this adoption. This document will be valuable in composing the reasons for the success of digital payments.

Sujith and Julie (2017) sought to highlight the concerns and obstacles that electronic payment systems face and provide some solutions to help enhance the e-payment system. In addition, the e-payment system gives extra options. Their investigation discovered that the digital revolution has now made digital payments simple. The study also found that the spread of cell networks, the internet, and power extended digital payments to more rural places. The quantity of digital payments will undoubtedly rise as a result of this.

Pankaj Yadav (2017) Based on the systematic research technique and a survey of 350 persons in the consumer sector throughout India. This piece was written to determine the severity of circumstances that compel a client to utilise a mobile wallet. The study found that the convenience of its use, perceived risk, perceived trust, perceived service quality, and perceived cost had no impact on consumers' intentions of using mobile wallets; therefore, the only element that influenced customers' intentions would be its perceived utility. He would contribute to the ongoing

research on whether digital payments could help India's economy grow by highlighting the variables that must be changed to encourage people to utilise digital payments.

Zahoor Ahmad Shah(2017) examined the infrastructural conditions in India that are required to support digital payment and digital forms of payment. This study is based on secondary data from the RBI NCPI. This study suggests how new technology has paved the door for more digital products. Nevertheless, India has a long way to go in creatively accepting and utilizing such technology. This study report would add to the ongoing investigation into whether digital payments could make India's economy a superpower by highlighting the elements that must be changed to encourage people to utilize digital payments. He will contribute to the ongoing research on whether digital payments can help India's economy become a superpower by describing the technologies and payment mechanisms India has access to.

Rajwinder Kaur (2017) analysed the efforts adopted by the authorities to keep records of digitalisation and calculated the growth rate through an examination of both the usage of electronic channels. That study is purely descriptive. The study used 100 people from SBS Nagar in Punjab as a sample. The sampling method employed was convenience sampling. The report stated that although consumers used to have a favourable attitude toward digital payments, government incentives were ineffective since cash still was king. This study report may add to our ongoing investigation into whether digital payments will help India's economy become world-class. It contains information on the government's half-hearted incentives that have failed to entice consumers to use digital payments.

Mrunal Chetan Bhai Joshi (2017) examined a digital payment trend through multiple modalities and new digital payment methods. That research is based on secondary data, which were analysed using cross-tabulation, trend percentage analysis, and other techniques. She stated that digital payments have grown in popularity over the previous three years, and individuals were eager to try new payment methods. This report may result in new research by highlighting the increased digital payments and reduced reliance on cash.

Alim Maherali (2017) The importance of digital payments in raising government tax income has been demonstrated. They utilised secondary data from the World Bank's Global Fintech report and

primary raw obtained from the World Bank's web database. The number of significant ideas used here was connected to individual tax revenues and their economic influence.

Pushpa et al. (2017) showed that many payment methods were displayed and the Indian government's readiness to adopt a cashless economy. Researchers gathered information from secondary sources such as government papers, journals, and verified websites. This report indicated that the RBI government activities substantially raised awareness regarding non-cash payments.

Prasad et al. (2017) briefed us about the present technological infrastructure for digital payment systems in certain places and the elements that impact users' attitudes regarding different payment providers. For example, researchers collected primary data and employed a questionnaire in 2 rural locations in Karnataka. Researchers concluded that greater transaction security was required even to get rural regions to adopt DPS entirely using UPI mobile wallets.

Asim Husain(2017) evaluated the aspects contributing to cashless transactions to assess the government's involvement in promoting a cashless transaction system in The country. The study is descriptive, analytical, or comparative. This research focused on five Uttar Pradesh cities. This researcher employed a basic random sample strategy to collect data. Questionnaires gather primary data, whereas secondary information is gathered from publications, periodicals, and journals, among other sources. The study found that customers are drawn to digital payments because of the multiple benefits. Also, while not entirely successful, government actions helped build a buzz around digital payments.

Mamta et al. (2016) "The Study of Electronic Payment Systems" is the title of an essay. "The goal of this inquiry was to identify the concerns and obstacles that electronic payment systems face, as well as to provide a little solution for improving the quality of these systems. Successful electronic payment system implementations depended on how customers perceive safety and defence aspects, just as sellers were notably handled, boosting market faith in the system."

Preeti Garg and Manvi Panchal's (2016) "Study Here on Introduction of Cashless Economy in India 2016: Benefits and Challenges" is the article's title. The viewpoints of individuals here on the presentation of India's cashless economy were considered in this article. The investigation was

conducted in the Delhi region, and data was acquired through an organised poll and analysed using the basic rate approach. Respondents' responses suggest that even a cashless economy would aid in detecting dark money and counterfeit money, the fight against unlawful intimidation, the reduction of money-related burglaries, and improving our nation's financial growth. Digital extortion, a high incidence of ignorance, personal temperament, and a lack of transparency and efficacy within the digital payment system are significant challenges that might derail the implementation of the strategy. The analysis discovered that India's cashless economy presentation is on the right track. It contributes to India's economic development and prosperity.

Vidya Shree DV, Yamuna N. and Nitua Shree G (2015) "A Research on New Dynamics in Digital Payment Systems - with Special Reference to Paytm and Pay U Money," according to the publication. Both the study papers focus now on the potential of technological digital payment methods on clients and any concerns. According to the study, individuals have become increasingly aware of online payments through mobile applications, and indeed, the rate of development is increasing faster. For example, Paytm or Pay U Cash, according to the study, provide straightforward payment structures compared to digital payment systems.

Olena Slozko And Anna Pelo(2014) The researchers discovered a link between GDP growth and rising payment usage and how digital payments affect economic development. To conclude, they performed a correlation analysis. This report stated that digital payments improved the economy's productivity; however, digital payments benefited GDP growth.

Lavish Bhandari(2008) examined the unorganized sector of the economy in terms of its reliance on cash. This research article is entirely based on secondary sources. He believes that significant swaths of the unorganized sector rely on cash. Technological advancements can assist in penetrating the unorganized sector, reducing reliance on cash, and increasing the use of digital payments. The material can also erect further roadblocks on the path to a cashless economy.

2.5 Digital Payment and Inequality/Poverty Reduction

Digital payment systems have revolutionized how financial transactions are conducted, offering a range of benefits, including convenience, speed, and enhanced security. In developed economies, these systems are deeply integrated into the financial infrastructure, facilitating seamless public

and private transactions. The widespread adoption of digital payments in these regions has been supported by robust technological infrastructure, high internet penetration, and a solid regulatory framework that ensures consumer protection and market stability.

Impact on Inequality and Poverty Reduction in Developed Economies

The advent of digital payment systems in developed economies has significantly influenced the financial inclusion landscape, with profound implications for reducing inequality and poverty. In regions like the USA and Europe, where the financial infrastructure is robust, and internet penetration is high, the integration of digital payments into everyday transactions has not only enhanced the convenience and efficiency of financial activities but has also served as a critical tool in bridging economic disparities (Dixit & Ghosh, 2013). Digital payment platforms have extended banking and financial services to broader population segments, including those traditionally marginalized or underserved by conventional banking systems. This democratization of financial services has played a pivotal role in reducing the number of unbanked individuals, thereby addressing an essential aspect of financial inequality. By providing easy access to banking services, credit, and online marketplaces, digital payments empower individuals and small businesses, enabling them to participate more fully in the economy (Abimbola et al., 2018).

Furthermore, the shift towards digital transactions has facilitated better financial management among individuals, fostering savings and investment habits that contribute to long-term financial stability and resilience (Chibba, 2009). For small and medium-sized enterprises, the reduced transaction costs and increased operational efficiency associated with digital payments have catalyzed growth and employment opportunities, further stimulating economic development and reducing poverty. The impact of digital payments on inequality and poverty in developed economies is also evident in how these systems have been leveraged to implement social welfare programs. Governments have increasingly adopted digital payment mechanisms to disburse benefits, subsidies, and other social support, ensuring that aid reaches beneficiaries promptly and securely. This direct and efficient transfer mechanism minimizes leakages and corruption, ensuring that resources are allocated more effectively to those in need (Abor et al., 2018).

The widespread adoption of digital payment systems in developed economies has had a transformative effect on financial inclusion, significantly contributing to reducing inequality and

poverty. By facilitating greater access to financial services, enhancing the efficiency of economic transactions, and ensuring the targeted delivery of social welfare benefits, digital payments have emerged as a potent tool in pursuing a more inclusive and equitable economic system. As these technologies continue to evolve and penetrate various aspects of economic life, their role in fostering social equity and economic development is expected to grow even more pronounced (Fadun, 2014).

The Scenario in India

India's journey towards digital payment adoption presents a unique narrative in the context of its burgeoning digital economy and the challenges posed by its vast socio-economic diversity. The country has witnessed a remarkable digital transformation, particularly in the financial sector, spurred by government initiatives and a vibrant fintech ecosystem (Fadun, 2014). This shift towards digital payments is crucial in reshaping India's economic landscape, offering new opportunities for financial inclusion and poverty alleviation. The Indian government's push for a 'Digital India' has been instrumental in promoting digital payments nationwide. Initiatives such as the Unified Payments Interface (UPI) system have revolutionized how transactions are conducted, offering a seamless and real-time payment mechanism accessible to a broad swath of the population. This democratisation of financial services has been particularly impactful in rural and semi-urban areas, where traditional banking infrastructure is sparse (Baltagi et al., 2009). By leveraging mobile technology, digital payment platforms have extended their reach to the country's remotest corners, bringing a significant portion of the population into the fold of the formal economy for the first time (Banerjee, 2020).

The proliferation of digital payments in India has had far-reaching implications for financial inclusion. It has enabled millions of previously unbanked individuals to access banking services, save money, and secure transactions (Gautam et al., 2021). This increased participation in the formal financial system empowers individuals and small businesses, fosters economic opportunities, and contributes to the overall reduction of poverty. Moreover, adopting digital payments has facilitated the efficient delivery of government services and social welfare programs (Dixit & Ghosh, 2013). Direct Benefit Transfer (DBT) schemes, for instance, use digital payment systems to transfer subsidies and benefits directly into beneficiaries' bank accounts, reducing

leakage and ensuring that aid reaches those who need it most. This targeted approach to welfare enhances the effectiveness of social safety nets and contributes to poverty alleviation (Gupte et al., 2012).

Comparative Insights and Lessons

The comparative analysis between the impact of digital payments on inequality and poverty reduction in developed economies and India offers valuable insights and lessons that can inform future strategies in both contexts. With their advanced financial infrastructure and high digital literacy, developed economies have demonstrated how digital payments can enhance financial inclusion by integrating broader population segments into the formal economy. This has led to improved financial management among individuals and growth opportunities for small and medium-sized enterprises, contributing to economic resilience and poverty reduction (Durrani et al., 2011).

In contrast, India's experience with digital payments highlights the transformative potential of these technologies in a rapidly developing economy with significant socio-economic challenges. The Indian government's proactive approach to promoting digital infrastructure and the innovative use of mobile technology has been pivotal in extending financial services to underserved regions and populations. This has facilitated greater financial inclusion and ensured that government welfare schemes are more effectively targeted and delivered, directly impacting poverty alleviation efforts. One of the key lessons from the comparison is the critical role of government policy and support in the successful adoption of digital payments. Government initiatives have played a significant role in encouraging digital financial services in both developed economies and India. However, the Indian model of leveraging mobile technology for financial inclusion offers a replicable strategy for other developing countries with similar socio-economic profiles and challenges.

Furthermore, the importance of building a robust digital infrastructure and ensuring cybersecurity cannot be overstated. The experiences from developed economies underscore the need for a secure and reliable digital payments ecosystem to foster user trust and widespread adoption. This is particularly relevant for India and other developing economies, where the rapid growth of digital

payments must be matched with enhancements in cybersecurity measures to protect consumers (Chibba, 2009).

Another critical insight is the need for financial literacy and consumer education. The successful integration of digital payments into everyday life requires access to technology and an understanding of how to use these tools effectively. Both developed, and India's experiences highlight the ongoing need for education and outreach programs to ensure that the benefits of digital payments are fully realized across all segments of society. The comparative analysis of digital payments in developed economies and India reveals the universal benefits of these technologies in fostering financial inclusion and reducing poverty (Bhimavarapu & Rastogi, 2020).

2.6 Digital Payment Adoption Trends in India

Mobile Payment Solutions

The surge in mobile payment solutions marks a significant trend in India's digital payment landscape, propelled by the widespread adoption of smartphones and enhanced internet connectivity (Gochhwal, 2017). These platforms, such as Paytm, Google Pay, and BHIM, have revolutionized how financial transactions are conducted, making it possible for a broad population to engage in digital commerce. Mobile payment solutions stand out for their accessibility, allowing users to conduct transactions with just a few taps on their smartphones, thus democratizing access to financial services across diverse socio-economic segments (Kauffman, 2007).

The impact of mobile payment platforms in India extends beyond mere convenience. They have been instrumental in bridging the financial inclusion gap, especially in rural and semi-urban areas where traditional banking infrastructure is sparse or non-existent. These platforms have empowered small merchants and consumers by facilitating small-scale transactions, enabling them to participate in the digital economy. The simplicity and user-friendly interfaces of mobile payment apps have encouraged widespread adoption, making digital payments a preferred choice for a growing number of Indians (Bezhovski, 2016).

Moreover, integrating mobile payment solutions with India's Unified Payments Interface (UPI) system has enhanced their utility and appeal. UPI's interoperable framework allows users to link multiple bank accounts to a single mobile application, simplifying transactions and fostering a

seamless digital payment environment (Aithal et al., 2015). This integration has significantly contributed to the exponential growth in UPI transactions, highlighting the pivotal role of mobile payment solutions in India's digital payment revolution. Mobile payment solutions are at the forefront of India's transition towards a digital economy. Their widespread adoption reflects a transformative shift in financial behaviours, marking a new era of inclusivity and accessibility in financial services driven by the convenience and efficiency of mobile technology (Sieder, 2017).

Government Initiatives

Government initiatives have played a crucial role in shaping the digital payment ecosystem in India, acting as a catalyst for the widespread adoption and integration of digital financial services. The Indian government's commitment to creating a 'Digital India' has been evident through various policies and programs to enhance digital infrastructure and promote cashless transactions (Ramya et al., 2017). A landmark move in this direction was the demonetization drive in 2016, which, despite its controversies, it significantly accelerated the shift towards digital payments by creating a cash crunch, thereby nudging consumers and merchants towards adopting digital payment methods (Gochhwal, 2017). Another pivotal government initiative is the Unified Payments Interface (UPI), which has transformed the digital payment landscape by providing a standardized platform that allows instant money transfers between banks using mobile devices. UPI's user-friendly and interoperable nature has made it immensely popular, contributing to its rapid adoption across the country. This system underscores the government's vision of fostering an inclusive digital economy by making digital transactions accessible and straightforward for the average citizen (Al-Okaily et al., 2020).

The government has also focused on enhancing financial inclusion through the Pradhan Mantri Jan-Dhan Yojana (PMJDY), aimed at providing affordable access to financial services such as bank accounts, remittances, credit, insurance, and pensions (Reserve Bank of India, 2020). This scheme has been instrumental in bringing a significant portion of the population into the formal banking system, thereby facilitating their access to digital payment solutions. These initiatives, coupled with regulatory support and incentives for digital transactions, have fostered a conducive environment for digital payments and instilled a sense of trust and security among users. The government's proactive approach to promoting digital payments has been integral to India's

journey towards becoming a less cash-dependent economy, highlighting the power of policy in driving technological adoption and financial innovation (Alkhowaiter, 2020).

Demographic Influence

The demographic influence on adopting digital payments in India presents a fascinating aspect of the country's shift towards a digital economy (Devadutta & Devi, 2021). The younger demographic, particularly millennials and Generation Z has been at the forefront of embracing digital payment solutions, driven by their comfort with technology and digital platforms. Having grown up in the digital age, this tech-savvy cohort shows a strong preference for the convenience, speed, and efficiency offered by digital transactions, making them pivotal in the widespread acceptance and use of digital payment methods (Singh et al., 2015).

However, the adoption of digital payments is not confined to the younger generations alone. There is a growing trend among older demographics, who increasingly recognise the benefits of digital payments (Gupta & Chand, 2021). Initiatives aimed at improving digital literacy and the development of user-friendly payment interfaces have played a significant role in this shift. The ease of conducting transactions, coupled with the enhanced security features of digital payment platforms, has alleviated concerns and encouraged a broader spectrum of the population to transition towards digital financial transactions. Moreover, the demographic influence extends beyond age to encompass various socio-economic segments. With their higher levels of income and education, urban areas were the early adopters of digital payments (Sukanya & Subbulakshmi, 2021).

Socio-Economic Impact

The socio-economic impact of digital payment adoption in India is profound, reshaping the financial landscape and contributing to the country's economic development (Arora, 2016). By facilitating seamless and efficient transactions, digital payments have significantly reduced the reliance on cash, increasing transparency and reducing transaction costs. This shift has benefited small and medium enterprises (SMEs), constituting a substantial portion of the Indian economy. Digital payments have enabled these businesses to expand their customer base beyond local

boundaries, improve cash flow management, and access credit more efficiently, contributing to their growth and, by extension, job creation and economic expansion (Sahil et al., 2022).

Moreover, digital payments have played a pivotal role in enhancing financial inclusion, a critical aspect of socio-economic development. By bringing banking and financial services to the underserved and unbanked segments of the population, digital payment platforms have empowered millions with the ability to save, invest, and participate in the formal economy (Gupta & Chand, 2021). This inclusivity fosters a more equitable economic environment, reducing disparities and poverty. The impact of digital payments extends to the delivery of government services and social welfare programs. Directly transferring benefits, subsidies, and pensions through digital platforms have streamlined processes, reduced leakages, and ensured that aid reaches the intended beneficiaries efficiently (Virshree, 2019).

2.7 Challenges in the Adoption of Digital Payments in India

Infrastructure Limitations

Infrastructure limitations are a primary hurdle in India's widespread adoption of digital payments. Despite considerable progress in digital infrastructure, significant disparities remain, particularly in rural and remote areas where internet connectivity and access to digital devices are often inadequate. These regions face challenges such as slow internet speeds, intermittent connectivity, and, in some cases, a complete lack of internet servicesseverely impedingde the feasibility and reliability og digital transactions. Moreover, the availability and affordability of smartphones and other digital devices necessary for accessing digital payment platforms can be a constraint for a significant portion of the population. While mobile phone penetration has increased dramatically in India, the transition to smartphones equipped with the necessary features for digital payments is not uniform across all demographics and regions. This digital divide limits the potential reach of digital payment solutions, confining their benefits to urban and semi-urban areas with better infrastructure (Dhanya, 2019).

The issue of power supply is another infrastructural challenge that impacts the adoption of digital payments. Inconsistent and unreliable electricity supply in many parts of the country affects the operation of digital devices and network infrastructure, further complicating the digital payment

process. Addressing these infrastructure limitations requires a concerted effort from the public and private sectors. Investment in enhancing digital connectivity, making digital devices more affordable, and improving electricity supply in underserved areas are critical steps towards creating a conducive environment for digital payments (Singhal, 2021).

Digital Literacy and Awareness

Digital literacy and awareness represent significant challenges in the broader adoption of digital payments across India. While urban and younger populations may be more familiar with digital technologies, a considerable gap exists among older generations and in rural areas. This gap is not just about the ability to use digital devices but also encompasses understanding the nuances of digital transactions, such as navigating apps, understanding transaction processes, and being aware of security practices (Kumar, 2019). The lack of digital literacy can lead to apprehension and resistance towards adopting digital payments, with individuals preferring traditional cash transactions over digital methods due to unfamiliarity and perceived complexity. Moreover, the absence of awareness about digital payment platforms' benefits and safety features further exacerbates this challenge. Many potential users remain sceptical about the security of online transactions, fearing fraud and loss of money, which is a deterrent to the adoption of digital payment methods (Sujith & Julie, 2017).

Addressing this challenge requires targeted educational and outreach programs to enhance digital literacy across all population segments (Chitsimran et al., 2020). Initiatives such as training workshops, awareness campaigns, and user-friendly guides can be crucial in demystifying digital payments and building user confidence. Financial institutions, government bodies, and fintech companies must collaborate in these efforts, ensuring that educational materials are accessible, easy to understand, and available in multiple languages to cater to India's diverse population (Shobha, 2020).

Security Concerns and Trust Issues

Security concerns and trust issues are significant barriers to adopting digital payments in India, impacting user confidence and willingness to engage with digital financial services. As digital payment platforms become more prevalent, so do the risks associated with online fraud, phishing

attacks, and data breaches. These security threats pose a risk to users' financial assets and their personal information, making security a top priority for both consumers and service providers. The fear of falling victim to cybercrime can deter individuals from using digital payment methods, particularly among those new to digital transactions or with limited digital literacy. Reports of financial fraud and scams related to digital payments often receive wide publicity, further eroding public trust in these systems. Moreover, the complexity of digital payment ecosystems can make it challenging for users to understand how their data is being protected, leading to apprehension about the safety of conducting transactions online (Bama & Gunasundari, 2016).

Digital payment providers and regulatory bodies must implement and enforce stringent security measures to address these concerns. This includes using advanced encryption technologies, secure authentication methods, and continuous monitoring of transactions to detect and prevent fraudulent activities. Additionally, educating users about safe digital payment practices is essential in building trust (Pranjali & Bhushan, 2017).

Financial Inclusion Gaps

Despite significant strides towards digitalization, financial inclusion gaps remain a prominent challenge in India's widespread adoption of digital payments. A considerable segment of the Indian population still lacks access to essential banking services, a prerequisite for engaging with digital payment systems (Sujth & Julie, 2017). This gap is more pronounced in rural areas and lower-income groups, where traditional banking infrastructure is limited or non-existent, and financial literacy is low. The disparity in financial inclusion not only hinders the ability of these populations to participate in the digital economy but also perpetuates socio-economic inequalities. Without access to digital payment platforms, these individuals are excluded from the myriad benefits of digital financial services, such as the ability to make secure transactions, access to credit, and the convenience of online payments. Furthermore, the reliance on cash transactions in these communities can exacerbate issues related to security, transaction costs, and financial management (Ingle & Pardeshi, 2012).

Bridging these financial inclusion gaps requires concerted efforts from the government, financial institutions, and fintech companies. Initiatives aimed at expanding banking infrastructure to underserved areas, coupled with the promotion of low-cost digital financial products, are essential.

Additionally, tailored financial education programs can empower individuals with the knowledge and skills to navigate the digital financial landscape (Roy & Sahoo, 2016).

2.8 Digital Payment Adoption Models

Adopting digital payments in India is a complex process influenced by various technological, social, economic, and individual preferences. Scholars have applied several models and theories to understand this multifaceted phenomenon. These models help dissect the factors that drive or impede the adoption of digital payment systems. This section delves into prominent adoption models and analyses their application in studies focused on the Indian digital payment landscape.

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) posits that two main factors, perceived usefulness and perceived ease of use, determine the acceptance and usage of new technology (Mardhiyah et al., 2021). In India's digital payments context, studies leveraging TAM have found that the more users perceive digital payment systems as beneficial and user-friendly, the higher their adoption rate. Simplifying the user interface and enhancing the perceived utility of digital payments can significantly boost their acceptance among Indian users. This insight is crucial for developers and policymakers aiming to increase digital payment penetration across diverse Indian demographics (Ikhsan, 2020).

Unified Theory of Acceptance and Use of Technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology (UTAUT) expands upon TAM by integrating additional determinants like social influence and facilitating conditions into the adoption process (Zhou et al., 2010). UTAUT-based studies in India highlight the critical role of social norms and the availability of necessary infrastructure and support systems in adopting digital payments. These findings underscore the importance of cultivating a supportive social and infrastructural environment to encourage the widespread adoption of digital payments in India, especially in regions lagging in digital infrastructure (Venkatesh et al., 2016).

Diffusion of Innovation (DOI) Theory

The Diffusion of Innovation (DOI) Theory explains the adoption process of new technologies through various attributes such as relative advantage, compatibility, complexity, trialability, and observability (Les Robinson, 2009). Applying DOI to India's digital payment adoption reveals that innovations aligning with users' existing values and needs, which are easily testable and observable in their networks, tend to be adopted more readily. This suggests that digital payment solutions in India should be designed with a deep understanding of local contexts and communicated effectively to potential users to enhance their adoption (Sutee Pheeraphuttharangkoon & Jyoti Choudrie, (2012).

Consumer Adoption Process (CAP) Model

The Consumer Adoption Process (CAP) Model outlines consumers' sequential stages when adopting new products or services, from initial awareness to confirmation and continued use. Studies applying the CAP model to the Indian digital payment scenario emphasize the importance of awareness and positive reinforcement at each stage to ensure a smooth transition towards regular use. These studies advocate for targeted marketing strategies and user education to elevate the consumer's journey from mere awareness to loyalty towards digital payment platforms (Sanakulov & Karjaluoto, 2015).

Mobile Payment Acceptance Model (MPAM)

Specifically tailored to understand the adoption of mobile payment systems, the Mobile Payment Acceptance Model (MPAM) considers factors such as trust, perceived risk, and lifestyle compatibility (Mun et al., 2017). In India, research based on MPAM highlights the pivotal role of establishing trust and mitigating perceived risks associated with mobile payments. Ensuring that mobile payment solutions are in sync with the diverse lifestyles and preferences of the Indian population can significantly enhance their adoption. This points towards the need for secure, flexible, and user-centric mobile payment solutions in the Indian market (Shaikh & Karjaluoto, 2015).

2.9 Research Gap

This study article would add to our understanding by analysing the frequency of transactions done by salaried or business classes via e-payments and determining which is more cash-intensive: Identifying the link between government activities and the growth of digital transactions. One aspect of our study that we may analyse is the helpfulness of digital payments for individuals. Do they encourage saving or overspending, for example? Do they promote budgeting? Suppose we discover that now the advantages surpass the costs on average, as most people believe. In that case, we may make explicit recommendations to improve the prevalence of individual payments. Various quantitative and qualitative data from government agencies and other sources will be required for this study. The data should next be examined and organised to fulfil the research's goal, as most data, whether in raw state or not, was likely to be available to the public on government agencies' official websites. The research has a good chance of being effective.

2.10 Summary

- The government must periodically direct a financial education mission to make the wider populace aware of the benefits of electronic payments.
- As part of the government's "Make in India" initiative, RuPay cards and Aadhar-based payment systems should be given special attention. Therefore, the government should eliminate the assistance charge on credit cards and advance payments.
- Encourages all segments to gradually use non-cash electronic payment options instead of cash. Plans such as the Lucky Grahak Yojana and Digidhan are examples. The Vyapar Yojana should continue to empower electronic payment options.
- The following procedures are recommended for a seamless implementation of the money-free framework in India.
- The government must develop a simple and productive e-payment infrastructure and strategies, such as legalising payment banks and advancing portable wallets used by the government and RBI to facilitate credit-only transactions.
- In addition to necessary financial skills, schools may impart them.
- To promote monetary incorporation via business journalists, e-SevaKendras, and other organisations authorised to create small receipts and perform payment exchanges using Aadhar e-confirmation.
- Women should indeed be trained via missions to speed up the receipt of digital payments. Women will strengthen as a result of their financial prowess. This will result in advanced societal turmoil.

2.11 Conclusion

The influence of digitisation just on the Indian economy is examined in this chapter. Per the study, greater transparency, accountability, and security measures are the key determinants impacting the performance of the government's dream project, Digital India. As a result, the government bears a greater responsibility to ensure that certain digitalisation is more transparent and cost-effective. One of the key motives for demonetisation, which would be to create the buzz of a cashless economy, will indeed be examined in this study. Various digital payment wallets have expanded the company due to the implementation of demonetisation. In addition, the government is

encouraging consumers to utilise electronic payments rather than cash. The government's efforts were combined with discounts and deals provided through private sector entities such as Paytm, Phonepe, and others.

CHAPTER 3:
RESEARCH METHODOLOGY

3.1 Introduction

The Research Methodology chapter is a crucial component of any scholarly study, serving as the blueprint that outlines the systematic approach undertaken to investigate the research questions and hypotheses. This chapter delineates the logical sequence of steps the researcher has followed to ensure the integrity and credibility of the study's findings, making it fundamental for understanding the research process and evaluating its outcomes. At its core, research methodology encompasses the techniques, procedures, and methods employed in collecting, analysing, and interpreting data. It bridges the theoretical underpinnings of the study with the empirical world, guiding the researcher from the conceptual phase to the tangible data analysis. This chapter begins by discussing the research design, which sets the overall framework for the study and details the reasoning approach adopted, whether inductive, deductive, or a combination of both. The chapter then elaborates on the data collection methods, highlighting the tools and instruments used to gather primary and secondary data and the rationale behind their selection. The population, sampling method, and size section then specify the scope of the study and the strategies employed to select participants, ensuring the representativeness and relevance of the data collected.

Furthermore, the chapter addresses the instrumentation involved in the study, including developing and validating the survey instrument. It outlines the data analysis and interpretation procedures, detailing the statistical techniques and software used. Lastly, ethical considerations are discussed, emphasizing the measures taken to uphold ethical standards throughout the research process.

3.2 Research Paradigm

The Research Paradigm section is pivotal in delineating the theoretical framework and philosophical underpinnings that guide the study's methodological approach. This section explores various research paradigms, notably positivism and interpretivism, which offer distinct perspectives on knowledge creation and interpretation.

Positivism, the chosen paradigm for this research, is grounded in the belief that reality is stable and can be observed and described objectively without interfering with the studied phenomena. It

aligns with the scientific method, emphasising quantifiable observations and the use of statistical methods to analyse data. This paradigm is particularly suited to studies in economics and technology, where data can often be measured and quantified (Arpita Pandey, 2018). The adoption of positivism in this thesis is justified by the nature of the inquiry into digital payments, which involves analysing empirical data to understand their impact on the Indian economy. The positivist approach allows for the collection of quantifiable data on transaction volumes, economic growth indicators, and other relevant metrics, facilitating an objective analysis of trends and impacts (Rehman & Alharthi, 2016)

Interpretivism, on the other hand, posits that knowledge is subjective and constructed through social constructs and interactions. While interpretivism offers profound insights into the human aspects behind economic phenomena, such as the societal acceptance and cultural integration of digital payments, this approach is less emphasised in the current study. The focus remains on empirical data and measurable outcomes, where positivism's clear, structured methodology is most effective (NITI Aayog, 2018).

The selection of a positivist research philosophy is further justified by the study's aim to provide concrete, actionable insights into the effects of digital payments on various economic parameters within the Indian context (Rehman & Alharthi, 2016). By leveraging positivist methods, the research seeks to establish a reliable, evidence-based understanding of how digital payments contribute to economic growth, financial inclusion, and India's digital economy's expansion. This approach ensures that findings are grounded in empirical evidence, providing a solid foundation for policy recommendations and future research (Zandi et al., 2013).

3.3 Research Approach

The Research Approach section of a study delineates the methodology employed to conduct research, guiding the collection, analysis, and interpretation of data. Broadly categorised into qualitative, quantitative, and mixed-method approaches, each serves distinct research objectives and is influenced by the underlying research paradigm.

Qualitative research is characterised by its focus on exploring phenomena in a detailed and holistic manner, often through interviews, observations, and textual analysis. It seeks to understand the 'how' and 'why' behind human behaviour, social interactions, and cultural phenomena, providing rich, in-depth insights. Conversely, the quantitative research approach selected for this study is grounded in the collection and statistical analysis of numerical data. It aims to quantify relationships between variables, test hypotheses, and produce generalisable findings that can be applied to larger populations. The mixed-method approach combines elements of both, offering a comprehensive understanding by correlating qualitative insights with quantitative data.

Several factors underpin the choice of a quantitative research approach for this study. Firstly, the study's objective to assess the impact of digital payments on the Indian economy necessitates the analysis of large datasets, including transaction volumes, economic indicators, and growth rates, which are best suited to quantitative analysis (Balnaves & Caputi, 2001). This approach allows for measuring and comparing data over time, providing precise, objective results that can highlight trends, patterns, and correlations. Furthermore, the quantitative approach facilitates using statistical tools and models to test hypotheses and validate theoretical frameworks. For instance, in exploring the relationship between digital payment adoption and economic growth, the study can employ regression analysis to quantify the strength and direction of this relationship, controlling for other influencing factors. This provides a robust basis for drawing conclusions and making policy recommendations (Khemlani, 2018)).

The justification for the quantitative approach also extends to its capacity for generalisation. By employing carefully designed sampling methods and ensuring the sample's representativeness, the findings from this study can be extrapolated to the broader Indian economy. This is particularly valuable in policy-making and strategic planning, where evidence-based decisions are crucial. However, the quantitative research approach is instrumental in achieving the objectives of this

study. Enabling the systematic collection, analysis, and interpretation of numerical data provides a clear, objective foundation for understanding the impact of digital payments on the Indian economy. This approach ensures that conclusions are grounded in empirical evidence, enhancing the reliability and validity of the study's findings (Neuman, 2014).

3.4 Research Design

The Research Design section is a critical component of any study, outlining the strategy and structure that will be employed to address the research questions and objectives. It acts as a blueprint, guiding the researcher through data collection, analysis, and interpretation (Vagner, 2007). In research methodologies, designs can be categorised into descriptive, explanatory, and exploratory. Descriptive research design is employed when the goal is to portray an accurate profile of persons, events, or situations. This type of design helps obtain information about the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. On the other hand, explanatory research design goes beyond description and seeks to find reasons for the phenomena or to establish causal relationships between variables. It is often used in studies that delve into the why and how of decision-making, not just what, where, and when (Akhtar, 2016).

The exploratory research design chosen for this study is particularly suited to situations where the research is preliminary. Exploratory design is ideal when the problem is not well defined or understood, and there is a need to explore new areas where little information is available (Petrova & Mehra, 2010). It is a valuable tool for gaining insights, asking new questions, and assessing phenomena in a new light. The justification for selecting an exploratory research design for this study lies in the evolving nature of digital payments and their multifaceted impact on the Indian economy. Given the rapid technological advancements and policy changes in the digital finance sector, an exploratory approach allows for a flexible, in-depth investigation of emerging trends, behaviours, and outcomes associated with digital payment adoption. This approach supports the study's aim to uncover underlying mechanisms, identify new variables, and formulate more precise research questions that can be addressed in subsequent research (Huang et al., 2007).

Furthermore, the exploratory design is conducive to using diverse methodologies and integrating various data sources, enabling a comprehensive understanding of the complex dynamics

(Venkatesh & Bala, 2008). It facilitates the examination of the impact of digital payments from multiple angles, including economic growth, financial inclusion, consumer behaviour, and regulatory frameworks, providing a holistic view of the subject matter. The exploratory research design equips this study with the flexibility and depth required to navigate the uncharted territories of digital payments in the Indian economy. It lays the groundwork for future research, paving the way for more targeted, hypothesis-driven studies as new findings and insights emerge from the exploratory phase (Mallat, 2007).

3.5 Reasoning Approaches

Research reasoning approaches provide a framework for researchers moving from initial ideas to conclusions (Khemlani, 2018). Inductive, deductive, and mixed approaches are most commonly employed, each offering a unique pathway for constructing and validating knowledge. Inductive reasoning is a bottom-up approach where researchers begin with specific observations or data and work towards broader generalisations and theories. This method is often exploratory, allowing patterns, themes, and categories to emerge from the data, which can lead to the formulation of new theories or hypotheses. It is beneficial in new or unexplored research areas where existing theories might not apply (Dahlberg et al., 2008).

Deductive reasoning, on the other hand, operates from the top down. It starts with a theory or hypothesis and moves towards specific observations to test the theory. This approach is more structured than inductive reasoning and is used to validate or falsify existing theories. Deductive reasoning is prevalent in studies where the research aims to test hypotheses derived from existing theories. Mixed reasoning combines elements of both inductive and deductive approaches, allowing for a more flexible research process. Researchers may begin with a theory but remain open to new themes and patterns emerging from the data, which can lead to the refinement of the original theory or the development of a new one (Soiferman, 2010).

The deductive reasoning approach has been chosen for this study, and the rationale behind this selection is multifaceted. Firstly, the study aims to test specific hypotheses concerning the impact of digital payments on the Indian economy (Humbani & Wiese, 2019). These hypotheses are grounded in existing economic theories and previous empirical findings, making deductive reasoning the most appropriate approach for systematically testing these predefined concepts.

Furthermore, deductive reasoning allows for a clear and focused research strategy, enabling the formulation of measurable and testable hypotheses. This is particularly important in the context of this study, where quantifiable data on digital payment transactions, economic growth indicators, and other relevant metrics are central to the analysis. By applying statistical methods to test the hypotheses, the deductive approach facilitates a rigorous and objective evaluation of the relationships between digital payments and economic outcomes (Hazzi & Maldaon, 2015).

Moreover, deductive reasoning in this study is justified by its potential to contribute to the existing body of knowledge (Ganesha H. R. & Aithal, 2022). By testing and potentially validating theories within the Indian economic context, the study can offer empirical evidence to support or challenge existing theories, thereby enriching the academic discourse on digital payments and their economic implications. The deductive reasoning approach is integral to the study's aim of providing empirical evidence on the impact of digital payments on the Indian economy. It offers a structured methodology for hypothesis testing, ensuring the research is guided by theory while contributing to the subject's theoretical and empirical understanding (Karoubi et al., 2016).

3.6 Data collection method

The Data Collection Method section is a crucial component of any research framework, delineating how data will be gathered to address the research questions and objectives (Rimando et al., 2015). Effective data collection is foundational to the study's validity, reliability, and overall success, as it ensures that the information used for analysis is pertinent, accurate, and reflective of the research context. Data collection can be broadly categorised into primary and secondary methods in research methodologies. Primary data collection involves directly acquiring data from sources specifically for the study. This approach allows researchers to collect specific, up-to-date information directly relevant to their research questions. Secondary data collection, on the other hand, involves using existing data, such as published research, government reports, and other publicly available datasets (Taherdoost, 2016).

A primary data collection approach has been chosen for the present study, with data to be gathered through a quantitative questionnaire developed from standard scales. This method is particularly suited to the research objectives, which necessitate collecting specific, nuanced information directly from individuals about their experiences, perceptions, and behaviours regarding digital

payments in the Indian economy (Pandey & Pandey, 2015). The rationale behind using a quantitative questionnaire developed from established scales is multifaceted. Firstly, this approach ensures the standardisation of data collection, allowing for the comparison and aggregation of responses across a large sample. Standard scales provide a validated framework for measuring constructs of interest, enhancing the reliability and validity of the data collected. This is particularly important in a quantitative study, where statistical analysis requires consistent, measurable data points (Taherdoost, 2016).

Furthermore, using a questionnaire facilitates the efficient collection of data from a broad cross-section of the population, enabling the study to capture a wide range of perspectives and experiences with digital payments. This is crucial for understanding the varied impact of digital payments across different demographics, regions, and socioeconomic groups within the Indian economy (Kabir, 2016). In addition, the primary data collection through a questionnaire allows for the collection of contemporaneous data, reflecting the current state of digital payment usage and its impact. This is particularly relevant given the rapidly evolving nature of digital finance, where recent developments and trends can significantly influence consumer behaviour and economic outcomes. The choice of a primary data collection method, specifically through a quantitative questionnaire developed from standard scales, is grounded in the need for reliable, standardised, and current data that directly addresses the research questions. This approach ensures the high-quality data collection essential for the rigorous analysis and robust findings the study aims to achieve (Frechtling, 2002).

3.7 Population, Sampling Method and Size

In the context of this study, which focuses on understanding the impact of digital payments on the Indian economy, the population encompasses a broad spectrum of stakeholders involved in or affected by digital transactions. This includes consumers, merchants, financial institutions, and regulatory bodies. Given the diverse nature of this population, a strategic approach to sampling is essential to ensure that the data collected is representative and comprehensive. The sampling method chosen for this study is purposive sampling, a non-probability sampling technique where participants are selected based on their knowledge, experience, or role related to digital payments. This method is particularly effective for studies like this one, where a deep understanding of specific phenomena is sought from individuals directly involved or affected by it. Purposive

sampling allows for the targeted selection of individuals who can provide relevant, insightful data, thereby enhancing the depth and relevance of the study's findings.

Regarding the sample size, the study aims to survey a substantial number of participants to ensure a robust data set that reflects a wide range of experiences and perspectives. The exact number will be determined based on a balance between statistical power and practical considerations such as time, resources, and accessibility of participants. A larger sample size enhances the study's ability to detect significant effects and increases the generalizability of the findings to the broader population. For primary data collection, the study will employ a survey-based questionnaire instrument to generate objective, quantifiable answers to research questions. This approach is well-suited to the study's quantitative nature, allowing for systematic data collection across a broad participant base. The questionnaire will be meticulously developed to ensure clarity, relevance, and the avoidance of bias, thus ensuring the reliability and validity of the data collected.

Secondary data will complement the primary data from reputable and authoritative entities such as the Reserve Bank of India (RBI) and other government websites. This data will provide a contextual backdrop, enriching the primary data collected through the survey and offering a broader understanding of the digital payments landscape in India. The strategic selection of population, sampling method, and size underpins the credibility and relevance of the study. By combining purposive sampling with a carefully designed survey instrument and integrating secondary data, the research is poised to yield insightful, applicable findings that contribute meaningfully to the discourse on digital payments in the Indian economy.

3.8 Instrumentation

The section of the research study is critical, mainly when primary data collection involves a questionnaire. This section details the questionnaire's development, validation, and refinement, ensuring its effectiveness in gathering the intended data. The development of the questionnaire for this study began with a comprehensive review of existing literature to identify critical variables and constructs relevant to the impact of digital payments on the Indian economy. Based on this review, initial items were drafted to capture a range of responses pertaining to consumer behaviour, merchant acceptance, regulatory impact, and economic outcomes associated with digital payment adoption.

To ensure content validity, a panel of experts comprising academicians, industry practitioners, and policymakers in the digital finance field evaluated the initial draft of the questionnaire. Their feedback was instrumental in refining the questions for clarity, relevance, and comprehensiveness, ensuring that each item accurately represented the construct it was intended to measure. Following the expert review, the questionnaire underwent a pilot study involving a smaller subset of the target population. The purpose of this pilot study was twofold: to test the questionnaire for any issues related to understandability, flow, and length and to preliminarily assess the reliability and validity of the measured constructs. Participants in the pilot study were also asked to provide feedback on any difficulties they encountered or suggestions for improvement. The results of the pilot study were invaluable in further refining the questionnaire. Analysis of the pilot data allowed for question-wording, order, and scale adjustments to enhance the instrument's reliability and ensure that each question effectively captured the desired information. The pilot study also provided preliminary insights into the variability and distribution of responses, informing the final adjustments to the questionnaire design.

Notably, the pilot study confirmed the questionnaire's overall feasibility for the main study, indicating that participants found it understandable and appropriately comprehensive. This process of rigorous development, expert review, and pilot testing ensures that the final questionnaire is a valid and reliable instrument for data collection, capable of accurately capturing the nuances of digital payment usage and its economic impacts. The careful instrumentation process undertaken for this study ensures that the questionnaire is well-equipped to gather meaningful, high-quality data. The iterative development and refinement, guided by expert input and empirical testing through a pilot study, underscore the instrument's capability to contribute valuable insights into the study's research objectives.

3.9 Data Analysis and Interpretation

Upon collection, the data from the survey-based questionnaires will undergo a preliminary screening process to ensure completeness and accuracy. This step involves checking for missing data, outliers, and inconsistencies that might skew the analysis. Ensuring data quality is crucial for the reliability of the subsequent statistical analysis. The data analysis core will be carried out using SPSS (Statistical Package for the Social Sciences), a powerful tool for statistical analysis and data management. SPSS is particularly well-suited for handling large datasets, like the one expected

from this study, and provides a comprehensive suite of statistical functions that can be used to explore, analyse, and interpret data. The statistical analysis method chosen for this study involves a combination of descriptive and inferential statistics. Descriptive statistics will summarise the data, providing insights into the responses' central tendencies, distributions, and variability. This will include means, medians, modes, ranges, and standard deviations, offering a snapshot of the data's overall characteristics.

Inferential statistics will extend beyond mere description, enabling the examination of relationships between variables and testing hypotheses. Techniques such as correlation analysis, regression analysis, and ANOVA (Analysis of Variance) will explore the relationships between digital payment adoption and various economic indicators. This will help understand the extent and nature of digital payments' impact on the Indian economy, providing empirical evidence to support or refute the study's hypotheses. The rationale for employing SPSS and statistical analysis lies in their ability to handle complex datasets and extract meaningful patterns and relationships from the data. Combining descriptive and inferential statistics allows for a comprehensive analysis that describes the data and provides insights into causal relationships and predictive models. This approach ensures that the analysis is robust, objective, and capable of providing actionable insights. This study's data analysis and interpretation will be conducted meticulously, employing SPSS to perform descriptive and inferential statistical analyses. This methodical process will ensure that the study's findings are grounded in solid empirical evidence, providing a reliable basis for understanding the impact of digital payments on the Indian economy.

3.10 Ethical Considerations

This section not only focuses on methodological rigour but also places significant emphasis on ethical considerations. Upholding ethical standards is paramount in any research endeavour, mainly involving human participants and sensitive data. This study, exploring the impact of digital payments on the Indian economy through survey-based questionnaires, is committed to maintaining the highest ethical standards. Privacy is a cornerstone of the ethical framework guiding this study. Ensuring the confidentiality of participants' responses is crucial, especially given the financial nature of the subject matter. To this end, all data collected will be anonymised, with any identifying information removed or obscured to prevent the possibility of tracing data

back to individual participants. This measure safeguards participants' privacy while allowing for the free and honest expression of opinions and experiences.

Moreover, the study adheres to the principle of informed consent. Before participation, all respondents are provided with comprehensive information about the study's purpose, participation, the use of collected data, and their rights as participants, including the right to withdraw at any point without penalty. This transparency ensures that participants fully know their involvement and consent to participate under clear terms. Validity and reliability are also central to the ethical considerations of this study. Ensuring the validity of the research involves employing well-established, rigorously tested instruments and methodologies to gather data. The questionnaire, developed from standard scales and refined through expert review and a pilot study, is designed to accurately capture the relevant dimensions of digital payment usage and its economic impacts. This careful construction and validation process ensures that the collected data reflects the studied phenomena, enhancing the study's overall validity.

Reliability is addressed through consistent data collection and analysis procedures. Using SPSS for statistical analysis provides a systematic approach to data handling, reducing the risk of human error and bias in data interpretation. Moreover, the study's methodology, including the sampling and data analysis methods, is documented and replicable, allowing for the verification of findings through future research. The ethical considerations in the data analysis and interpretation section underscore the commitment to privacy, informed consent, validity, and reliability. These principles ensure the integrity of the research process and the protection of participants while enhancing the credibility and impact of the study's findings on digital payments and the Indian economy.

CHAPTER 4:
RESULTS AND DISCUSSION

Demographic analysis

The study gathered data and information from a questionnaire and additional sources. The sample size considered for the study was 385 respondents, of which data and information were collected. It has been analysed that most respondents were male, indicating 46.2%. On the other hand, the female respondents were 43.1%. This provides an insight that male actively participated in providing their response during the data collection process.

Further, considering age as another demographic factor, most respondents responded that they were between 18 and 30 years old, i.e., 39.0%. Conversely, the lowest respondent age was 51-60, i.e. 2.6%. The educational background of respondents indicated that the majority, i.e. 69.1%, were graduated or above. 1.0% of respondents only perceived primary and secondary education. Furthermore, the marital status depicted that most respondents, i.e. 48.1%, were single. In addition, considering income as a factor indicated that the majority of respondents, i.e. 33.8% income, were 20,00,000 or more. On the other hand, the least earned income was 15,00,000-19,99,999, i.e. 1.8%. Apart from this, the majority of employment-type respondents, 25.2%, were salaried/full-time employees. The lowest percentage of employment was 7.5%, in which respondents retired.

Statistical analysis

The statistical analysis was done by taking into account the five-point Likert scale. The results were obtained by considering five related aspects: strongly disagree, disagree, neutral, agree, and strongly agree. Different variables were used in this case based on the conceptual framework developed in the literature review chapter. The first variable identified was the acceptance level of e-payment methods. Based on this variable, five additional items were involved to analyse the data and information. The results show that most respondents, i.e. 44.2%, agreed that their e-payment methods can be used easily without additional instruction. Considering the facts from the literature, it was determined that it is easy for consumers to use digital payment wallets in the market. Consumers could also add money using computerized wallet programs by introducing e-wallets. The assets can also transferred to almost the same wallet. Various UPI-app-based payment platforms can be accessed through any banking program, such as SBI UPI, ICICI UPI, AXIS UPI, and HDFC UPI. It was determined that if consumers do not have a mobile phone or web office,

payment can be made by calling the USSD (Unstructured et al.) number from the primary phone and following the specified instructions (Rashi Singhal, 2020).

The second item depicted that the majority of respondents, i.e. 31.4%, agreed that e-payment methods are more convenient and easy to use than traditional payment modes. The facts from the literature indicate that the pandemic has advanced the payment industry's digitalisation, boosting digital payment systems. In FY2021, more than 40 billion digital transactions worth more than quadrillion rupees were recorded. It was determined that making digital payments is among the fastest-growing fintech areas (Rashi Singhal, 2020). To improve the digital payment environment, the government needs to solve the industry's issues, such as the availability of the Internet, UPI transactions, and transaction costs. It was determined that UPI is now at the vanguard of the digital payment industry, facilitating online transactions via a user-friendly interface. The government can use UPI in the budget to significantly advance in low-penetration areas.

Further, the third item indicated that most respondents, i.e. 40.3%, agreed with the statement that there is a variety of e-payment options in India. Considering the facts of the literature review, a Mobile Money Identifier (MMID) is a digital payment option in which a mobile number is enrolled with the bank, and a seven-digit unique number is issued. The specific interbank reserves move; any individual who needs to send and receive money must have MMID. On the other side, they can only transport restricted item numbers every day using MMID. QR Code-based payment system is another alternative method of exchanging payments, in which we verify the trader's QR code and complete the transaction. Most computerised payment apps, such as Bharat Interface for Money (BHIM) and other banking applications, facilitate the exchange of instalments.

The fourth item depicted that most respondents, i.e. 39.5%, agreed that e-payments are generally safe and secure. Integrating mobile payment solutions with India's Unified Payments Interface system has enhanced their appeal and utility. UPI's interoperable framework allows users to link multiple bank accounts to a single mobile application, simplifying transactions and fostering a seamless digital payment environment. Mobile payment solutions are at the forefront of India's transition towards a digital economy (Aithal et al., 2015). The fifth item indicated that most respondents, i.e. 39.2%, agreed that businesses must offer e-payment options alongside traditional payment methods. Considering the facts from the literature, it has been analysed that adopting

different e-payment options helps promote prepaid transactions with the help of UPI. With traditional payment modes, companies also have to adopt UPI payments. It has been observed that the government uses UPI in the budget to make more significant advances in low-penetration areas. The wallet would function as a prepaid instrument, lowering total bank transaction volume. As a result, the possibilities of such transactional failure are reduced, and merchant acceptability is enhanced (Abimbola et al., 2018)).

The second variable identified was the impact of digital payments on the Indian economy. The first item under this variable depicted that most respondents, i.e., 49.6%, agreed that digital payment methods have reduced transaction costs and enhanced efficiency in the Indian Economy. Similarly, the second item indicated that most respondents, i.e. 39.2%, agree that digital payment methods enhance innovation and entrepreneurial activities within the Indian economy. The facts from the literature depicted that digital payment techniques, compared to other transaction types, including money withdrawals, are more beneficial and secure (Abimbola et al., 2018)). This kind of payment promotes accountability and transparency, lowers exchange costs, and reduces the size of both the shadow and informal segments. UPI has revolutionised the industry and involves additional innovation across different tech platforms to support inter-bank P2P or P2M transactions.

The third item depicted that the majority of respondents, i.e. 42.9%, agreed that digital payment systems have significantly contributed to the growth of the Indian economy. The fourth item indicated that the majority of respondents, i.e. 46.5%, agreed that the reduction of cash transactions through digital payments plays a significant role in curbing black money and corruption in India. The facts from the literature depicted that digital payment systems revolutionized the financial transactions conducted, and offered a range of benefits involving speed, convenience, and increasing security. In developed economies, systems are integrated into the financial infrastructure, facilitating seamless transactions in both private as well as public sectors (Dixit & Ghosh, 2013).

The fifth item indicated that a majority of respondents, i.e. 43.4%, agreed that digital payment solutions are driving the digital economy within the country. The surge in mobile payment solutions marks a significant trend in India’s digital payment landscape, propelled by the

widespread adoption of smartphones and increasing interest in connectivity (Gochhwal, 2017). Platforms such as Google Pay, Paytm, and BHIM revolutionized the financial transactions are conducted and made it possible for a broad spectrum of the population to engage in digital commerce. Mobile payment solutions stand out for their accessibility, allowing users to conduct transactions with just a few taps on smartphones and access financial services across diverse socio-economic segments (Kauffman, 2007).

The third variable considered was the benefits of digital payments. The first item indicated that most respondents, 42.9%, agreed that digital payment contributes to better financial management and tracking of expenses. The second item depicted that the majority of respondents, i.e. 46.2%, agreed that digital payment methods efficiently reduce the time required for transactions. The literature depicted in India shows that the adoption of digital payment systems is a complex process affected by social, technological, economic, and individual preferences. The Technology Acceptance Model (TAM) posits that perceived usefulness and ease of use determine the acceptance and usage of new technology. In the Indian context, digital payments leveraging TAM found that the more users perceive digital systems as beneficial and user-friendly, the higher their adoption rate.

The third item indicated that most respondents, i.e. 44.4, agreed that digital payment significantly promotes cashless transactions and reduces reliance on physical currency. The fourth item depicted the majority of respondents, i.e. 39.2%, agreed that digital payments foster innovation within the Indian economic setting. Considering the facts from the literature, digital payments should see a push towards last-mile connectivity across new areas as platforms emerge, such as budgetary incentives, including tax breaks and subsidies, aid in adopting innovative business solutions by encouraging enterprises to enhance their spending on R&D (Firstpost Jan 2022).

The fifth item indicated that most respondents, i.e. 40.3%, agreed that digital payment methods are convenient for conducting international transactions. Considering the literature, it has been analyzed that adopting digital payments is becoming a trend in India. Mobile payment solutions are considered to have a significant rise, are also easily accessible, and allow users to conduct transactions with few taps on their smartphones, thus democratizing access to financial services

across diverse socio-economic segments. Integrating mobile payment solutions with India's Unified Payment Interface (UPI) enhanced further appeal and utility (Bezhovski, 2016).

Apart from this, the fourth variable is the challenges faced while making digital payments. The first item indicated that the majority of respondents, i.e. 38.2%, agree that people are concerned regarding the security of their personal and financial information when making digital payments. 37.1% of respondents faced difficulty understanding and navigating the user interface of digital payment applications or websites. Considering the facts from the literature, it has been evaluated that security concerns and trust issues are considered barriers to adopting digital payment in India, affecting users' confidence and willingness to engage with digital financial services. Digital payment platforms are becoming prevalent, and so are the risks linked with phishing attacks, data breaches, and online fraud. Security threats pose risks to users' financial assets and personal information, making security a top priority for service providers and consumers (Bama & Gunasundari, 2016).

The third item depicted that most respondents, i.e., 44.9%, agreed they faced technical issues such as technical errors and glitches while making digital payments. Further, the fourth item indicated that the majority % of respondents, i.e. 28.3%, encounter compatibility issues between different digital payment platforms or devices. Similarly, the fifth item depicted 38.7% of respondents agreed that they face issues while reporting any problem to the customer service executives. The facts from the literature indicate that reports of financial frauds and scams related to digital payments receive wide publicity, further eroding public trust in these systems. Not adopting an effective technological model also creates technical issues during digital payments.

The fifth variable is considered a suggestion for increasing digital payment activities. Here, the first item indicated that most respondents, i.e. 40.0%, believed it is crucial to expand the acceptance of digital payment methods to smaller merchants and rural areas. Considering the facts from the literature, it has been analyzed that the diffusion of innovation theory motivates the adoption process of new technologies through different attributes, including compatibility, complexity, relative advantage, observability, and trialability (Les Robinson, 2009). Applying this theory to India's digital payment adoption reveals that innovations align with users' existing needs and values and which are easily testable and observable in their networks tend to be more readily.

The second item indicated that the majority of respondents, i.e. 46.8%, agreed with the statement that it would be beneficial to work to improve the accessibility of digital payment platforms for individuals with limited internet or smartphone access. Further, the third item indicated that 40.5% of respondents strongly agreed that raising awareness through educational campaigns about digital payments' benefits and safety measures is significant. Considering the facts from the literature, it has been analyzed that digital literacy and awareness represent significant issues in the broader adoption of digital payments across India. Urban and younger populations may be more familiar with digital technologies, but a considerable gap exists between older generations and rural areas. Initiatives such as training workshops, awareness campaigns, and user-friendly guides can be crucial in demystifying digital payments and building user confidence. Financial institutions, government bodies, and fintech companies must collaborate in these efforts, ensuring that educational materials are accessible, easy to understand, and available in multiple languages to cater to India's diverse population (Shobha, 2020).

The fourth item indicated that the majority of respondents, i.e. 43.6%, strongly agree that improving the security features of digital payment systems can enhance the confidence and trust among the users. Similarly, the majority of respondents, i.e. 48.3%, agree that offering incentives such as cashback or rewards for digital payments would encourage their usage. The facts from the literature have been analyzed, and providing security features of digital payment systems must address these concerns. Digital payment providers and regulatory bodies must execute and enforce stringent security measures. This involves using advanced encryption technologies, secure authentication methods, and continuous monitoring of transactions to detect and prevent fraudulent activities. Educating users about safe digital payment practices is essential for building trust (Pranjali & Bhushan, 2017).

The sixth variable is related to cash kept. Further, the first item indicated that 43.1% strongly agreed that adopting digital payments reduces the amount of cash kept on hand. Compared with the literature fact, it has been analyzed that cash is still considered to reign supreme, and its widespread use during the epidemic, UPI accounts for little fewer than 10% of digital retail payments. It has been evaluated that the government can use UPI in the budget to make significant advances in areas with low penetration. The wallet would function as a prepaid instrument,

lowering total bank transaction volume. The possibilities of such transactional failure are reduced, and merchant acceptability is enhanced (Firstpost Jan 2022).

The second item indicated that 41.8% of respondents agreed that digital payments are more convenient than cash transactions. Considering the facts in the literature, it has been concluded that digital payments are more convenient and considered a safer payment mode. In cash transactions, there is a risk of cash being stolen, but in digital payments, payment is made directly through the customer account. Various digital payment applications are developed with the help of which payments can be made and accordingly supported to save time for customers. The third item depicted that most respondents, i.e. 41.0%, agreed that digital payments have replaced traditional cash transactions in daily life. In addition, India's experience with digital payments highlighted the transformative potential of these technologies in a rapidly developing economy with socio-economic challenges. The proactive approach adopted by the government promoted digital infrastructure and innovative use of mobile technology, which are pivotal in extending financial services to underserved regions and populations. Mobile payment platforms have a more significant influence on consumers. The simplicity and user-friendly interfaces of mobile payment apps have encouraged widespread adoption, making digital payments a preferred choice for a growing number of Indians (Bezhovski, 2016). Integrating mobile payment solutions with India's UPI system enhanced their appeal and utility. This allows users to link multiple bank accounts to a single mobile application, creating a seamless digital payment environment and simplifying transactions.

Similarly, the fourth item indicated that 43.6% agreed that the availability of digital payment options has significantly reduced my tendency to carry physical cash. Considering the facts from the literature, it has been analyzed that digital payments are convenient and safe. Hence, customers in the present scenario prefer to make digital payments instead of carrying cash. Various digital payment methods exist, such as digital payment through QR codes, UPI payments, and MMID, which facilitate making payments within seconds. These applications replaced carrying cash by customers. In addition, different digital wallets facilitate the exchange of money through e-wallets, which allow money to be transferred to another person.

The fifth item depicted that most respondents, i.e. 41.0%, agreed that the prevalence of digital payments had diminished the need for cash in daily transactions. The facts from the literature state that adopting digital payments has continuously replaced cash while doing daily transactions. It is observed that many people reduced the ledgers to avoid paying taxes to the government. Over the last few years, India's booming digital payment sector has exhibited significant development, leading the way in the P2P (Person-to-person) and P2M (Person-to-merchant) segments of payment digitization. Similarly, the pandemic has pushed towards digitalization and digital payments (Firstpost Jan 2022).

Moreover, the cash-kept variable also involves five items. The first item indicates that 41.6% of respondents agreed that compared with cash, customers with digital payment methods tend to spend more. Additionally, 39.5% of respondents agreed that digital payment methods significantly increased their impulsive buying tendencies. Considering the facts from the literature, it has been analyzed that digitization affected the Indian economy, and the proportion of the population adopting digitalized payments and other services has been assessed (Harish Tigari, 2018). Consumer buying tendencies have gradually increased since the country's implementation of digital payment. It has been evaluated that the government in the country contributes towards a cashless transaction system. Customers adopted digital payments because of the multiple benefits. In developed economies, these systems are deeply integrated into the financial infrastructure, have high internet penetration, and have a robust regulatory framework.

The third item indicated that most respondents, i.e. 22.3%, were neutral that adopting digital payment methods has significantly reduced monthly expenditure. Further, 30.4% of respondents were neutral and stated that the financial situation will likely change in the next year due to increased reliance on digital payments. Also, 25.7% of respondents agreed they are satisfied with their control level over spending habits while using digital payment methods. Considering the facts from the literature, it has been evaluated that adopting digital payment systems in developed countries significantly affected the landscape of financial inclusion. It has been analyzed that digital payment platforms extended financial and banking services to broader population segments, including those traditionally marginalized or underserved by conventional banking systems. This also supported providing easy access to banking services, an online marketplace, and digital payment support to empower individuals and small businesses to participate in the economy.

Digital transactions also facilitated better finance management and fostered investment habits and savings, contributing to long-term financial resilience and stability (Chibba, 2009).

Regression analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.120[a]	.015	.012	.92312

a. Predictors: (Constant), EmploymentType

A regression analysis was conducted to evaluate the value of a variable based on the other variable's value. The variable that has been predicted is known as the dependent variable. With the help of regression analysis, the relationship between independent and dependent variables has been analyzed. The value of the standard error of the estimate determined from regression analysis is 0.92312.

ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.805	1	4.805	5.639	.018[b]
	Residual	326.373	383	.852		
	Total	331.178	384			

a. Dependent Variable: Acceptance Level

b. Predictors: (Constant), Employment Type

On the other side, the ANOVA test was also applied to determine the feasibility of the regression equations. The ANOVA test helps in depicting the statistical significance of the regression analysis that was done. The value of p obtained is 0.018. Further, It has been analyzed that type of employment can predict a 1.5% variance in the level of acceptance of e-payment methods. The

standard error obtained was approximately 0.92312, representing the average difference between observed and predicted values of the acceptance level.

Further, the predicted value of the acceptance level when the employment type is zero is represented by the coefficient for the constant term (3.913). The employment type predictor variable coefficient was -0.061, and with every one-unit increase in the employment type, the acceptance level decreased by 0.061 units. The results depicted that employment type has a modest but statistically significant impact on determining the acceptance level of e-payment methods.

Correlation analysis

The correlation analysis was carried out to determine the influence and importance of digital transactions in boosting the economy's growth. It has been analyzed that the correlation is significant at the 0.01 level. It has been evaluated that digital payment methods efficiently reduce the time required for transactions, considering the correlation coefficient of 0.473. It has been evaluated that there is a moderate correlation between digital payment methods contributing to better financial management and the perception that digital payment methods are efficient in reducing transaction time. In addition to this, digital payments play a significant role in the promotion of cashless transactions and the reduction in physical currency. There are positive correlations of 0.488 to 0.576, with moderate to strong correlations.

There is a positive correlation between the adoption of digital payment reducing the amount of cash on hand and the adoption of digital payments, which are likely to carry less physical cash. The correlation obtained was 0.206 to 0.575. Furthermore, the prevalence of digital payments has diminished the need for cash in daily transactions and other variables. There are positive correlations between them (0.198 to 0.631). This depicted that those who perceive a reduced cash need in daily transactions due to digital payments tend to have other positive perceptions about digital payments. The overall correlation findings depicted a positive association between different aspects of digital payments. This also indicated relevance and influence on economic growth and financial behaviour.

CHAPTER 5: RESULTS AND DISCUSSION

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.120[a]	.015	.012	.92312

a. Predictors: (Constant), EmploymentType

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.805	1	4.805	5.639	.018[b]
	Residual	326.373	383	.852		
	Total	331.178	384			

a. Dependent Variable: Acceptance Level

b. Predictors: (Constant), Employment Type

Figure 1: Regression and ANOVA Analysis

Result 1: Regression analysis has been conducted to analyse whether employment type (employee or businessmen) has any significant influence on the acceptance of the e-payment method, in which a t-value of (-2.375) has been noted which is below 0.05, suggesting employment type has a significant impact on the acceptance of different e-payment methods.

The current study has evaluated several professionals and has noted an increase in adoption among all groups which makes it different from other studies. The study conducted by Thapliyal (2024) has taken into consideration aspects regarding students and has shared that students have showcased a significant increase in usage of digital payment tools in order to do their daily transactions as students. In this context, it should be noted that the study took into account both school students as well as college students, and hence both studies affirm that students have increasingly adopted digital payment systems throughout the nation. In this context, both studies combined to provide a better perspective by highlighting the usage of digital payment by both school and college students. The current study has taken into consideration the viewpoint of freelancers are well, prior studies such as one conducted by Singh et al., (2023) noted the growth

of the digital payment system in India has benefitted freelancers who often work for clients throughout the country and globally as well which makes it technically impossible for them to go to each location and collect their money. The latter study has also suggested such leading to the growth of the freelancer economy in India which the current study does not negate. The current study has also highlighted that most freelancers do find digital payment systems currently available to be convenient as well as secure and allow them to do transactions which allows them to do their job efficiently. Further, self-employed individuals have also been taken into consideration in this study as such individuals often do major transactions and engage in business, and such has also been covered in a study by Raj (2024). The latter study took into account such individuals in rural regions, while some studies take into account Individuals in urban regions. The current study combines both and notes that irrespective of regional or industrial differences, the digital payment system is being widely adopted by self-employed persons in order to improve their business state and at the same time, also focus on business and not worry about payment concern as noted under traditional method. The current study has further taken into account retired Individuals who form a unique section of society who have already lived their professional lives as salaried employees or businessmen and also show lesser willingness, traditionally to accept new technologies. Such retired persons were taken into consideration in research by Walke (2022) who highlighted that retired individuals are using more digital payment systems. Therefore, it can be asserted that the current study is a combined work which has been done by several schools each of whom considered different demographic groups and asserted an increase in usage. Through empirical analysis, this gains more significance in establishing that each section of society finds the digital payment system convenient and also has a higher level of security and trust when compared to traditional cash transactions.

Correlations

	In my opinion, digital payments contribute to better financial management and tracking of expenses.	Digital payment methods are efficient in reducing the time required for transactions.	Digital payments play a significant role in promoting cashless transactions and reducing the reliance on physical currency.	Digital payments are fostering innovation within the Indian economic setting.	Digital payment methods are conveniently for conducting international transactions.	The adoption of digital payments reduces the amount of cash I keep on hand.	I found digital payments are convenient compared to cash transactions.	In my opinion, digital payments have replaced traditional cash transactions in my daily life.	The availability of digital payment options has significantly reduced my tendency to carry physical cash.	In my opinion, the prevalence of digital payments has diminished the need for cash in daily transactions.

Spearman's rho	In my opinion, digital payments contribute to better financial management and tracking of expenses.	Correlation Coefficient	1.000	.473**	.488**	.452**	.434**	.239**	.247**	.268**	.263**	.278**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.000	.000	.000	.000
		N	385	385	385	385	385	385	385	385	385	385
	Digital payment methods are efficient in red	Correlation Coefficient	.473**	1.000	.591**	.576**	.349**	.318**	.352**	.286**	.302**	.337**
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000	.000	.000	.000

	ucing the time required for transactions.	N	385	385	385	385	385	385	385	385	385	385
	Digital payments play a significant role in pro	Correlation Coefficient	.488**	.591**	1.000	.527**	.386**	.321**	.385**	.309**	.363**	.368**
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000	.000	.000	.000

	moting cashless transactions and reducing the reliance on physical currency.	N	385	385	385	385	385	385	385	385	385	385
	Digital payments are fostering innovation wit	Correlation Coefficient	.452**	.576**	.527**	1.000	.405**	.302**	.352**	.292**	.289**	.305**
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000	.000	.000	.000

	hin the Indi an eco no mic setti ng.	N	385	385	385	385	385	385	385	385	385	385
	Dig ital pay men t met hod s	Co rre lati on Co eff ici ent	.434**	.349**	.386**	.405**	1.000	.327**	.267**	.263**	.206**	.198**
	are con veni ent for	Sig. (2-tail ed)	.000	.000	.000	.000	.	.000	.000	.000	.000	.000
	con duct ing inte rnat iona l tran sact ions .	N	385	385	385	385	385	385	385	385	385	385
	The ado ptio n of digi tal pay men	Co rre lati on Co eff ici ent	.239**	.318**	.321**	.302**	.327**	1.000	.430**	.575**	.431**	.534**

	ts reduces the	Sig. (2-tailed)	.000	.000	.000	.000	.000	.	.000	.000	.000	.000
	amount of cash I keep on hand.	N	385	385	385	385	385	385	385	385	385	385
	I found digital payments	Correlation Coefficient	.247**	.352**	.385**	.352**	.267**	.430**	1.000	.460**	.543**	.469**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.	.000	.000	.000
	are convenient compared to cash transactions.	N	385	385	385	385	385	385	385	385	385	385
	In my opinion, digital pay	Correlation Coefficient	.268**	.286**	.309**	.292**	.263**	.575**	.460**	1.000	.484**	.631**

	ments have replaced traditional cash transactions in my daily life.	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.	.000	.000
		N	385	385	385	385	385	385	385	385	385	385
	The availability of digital payment options has	Correlation Coefficient	.263**	.302**	.363**	.289**	.206**	.431**	.543**	.484**	1.000	.536**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.	.000

	significantly reduced my tendency to carry physical cash.	N	385	385	385	385	385	385	385	385	385	385
	In my opinion, the prevalence of digital pay	Correlation Coefficient	.278**	.337**	.368**	.305**	.198**	.534**	.469**	.631**	.536**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.

	ments has diminished the need for cash in daily transactions.	N	385	385	385	385	385	385	385	385	385	385

**. Correlation is significant at the 0.01 level (2-tailed).

Figure 2: Regression Analysis

Result 2: Analysis has been done between the perception that digital payment leads to better financial management and the perception that digital payment methods are effective in reducing transaction time, for which correlation analysis has been conducted which led to a correlation coefficient of 0.473, or presence of moderate positive correlation between the two perceptions being considered.

While analysing the result, the study conducted by Roy (2022) shall be taken into consideration who noted the need for digital payment systems to reduce transaction time than traditional methods in case such has to become more efficient and is to be considered effective for adoption by different users. Such aspect has also been empirically affirmed in the current study which took into consideration different sections of society based on economic occupations. While considering this aspect, it should also be noted that the latter study has considered the digital payment system to be at the initial stage of development whereas such has not been considered in an initial study which aims to evaluate the existing state and rather not define in order to allow natural innovation. Another perspective had been adopted in the study conducted by Orman et al., (2022) who asserted that different digital payment systems develop as a means to address user needs hence higher transaction time has been a user barrier which has been resolved by several digital payment Innovations. Such a logical framework has been affirmed here by noting increase in volume and total transactions has happened as a result of reduction time. However, the current study with the same result has also highlighted such to be the result of allowing better financial management of

affairs as such allows tracking and identification of each transaction with ease leading to higher adoption and utilisation rate. While discussing the results, the study conducted by Phonna et al., (2022) shall also be considered who noted that customers may choose different digital payment systems based on ease of procession transaction as well as transaction speed. This study has asserted that this can lead to differences in usage rates among different systems. However, such an aspect has not been taken into consideration in the current study as the current study has attempted to have a broader view of the entire digital payment ecosystem which is operational in the country. Thus, it is affirmed here that it may happen that customers shift between different payment systems but the total volume and utilisation rate of digital payment systems have increased in the country. Less transaction time due to the adoption of different payment systems has been a major theme throughout academic research as also evident in a study conducted by Puneeth & Nethravathi (2021). Each of these studies however has taken into consideration different aspects ranging from ease of usage, convenience, and safety of user together to define the attributes which lead to higher rates of adoption and utilisation of such digital payment systems across the country. Thus, the current study is novel as such establishes a clear link on why more people have adopted such payment systems and also allows them to engage in financial management by better tracking their funds and expenses in daily life.

Result 3: Analysis has also been done regarding the benefit of Individuals that digital payment plays a significant role in promoting a cashless economy and reducing reliance on physical currency with other variables, in which correlation analysis was conducted which noted a positive correlation range of 0.488 to 0.576, suggesting the importance of digital payment system in reducing the need and challenges associated with physical cash payments for different transactions.

Digital payment system adoption and utilisation have been long correlated with the growth of a cashless economy and such needs to be carefully analysed. In this context, the study conducted by Aggarwal et al., (2021) major aspect who noted digital payment systems have been noted to contribute to the growth of a cashless economy provided such systems are available to use throughout the day, have higher research, and have a higher level of awareness among general people. Each of these aspects has already been covered in prior studies, hence the current study affirms the missing link noting positive results being evident from such factors and this has automatically led to a reduction in reliance the general public had towards physical currency and shifted towards the usage of digital payment system thus promoting cashless economy. In this context, the study and research gap observed by Ranjith et al., (2021) should also be considered who noted that digital payment system adoption as well as utilisation has the possibility to lead the nation to become a cashless economy, but the research gap lies in establishing such premise by taking into consideration empirical data from normal citizens who live regular life in country. Such has been addressed in the current study which took into account different professions from students to retired citizens and businessmen as well as salaried employees. This has led to the inference that each stakeholder group has witnessed an increase in transactions and all consider such leads to a

reduction in reliance on physical currency as well as aid in the promotion of a cashless economy. The current study has also affirmed as well as expanded the scope of the digital payments system in India which was taken into consideration by Mahesh (2021) who asserted that growth in the adoption of the UPI payment system has contributed to growth in the usage of digital payment ecosystem and hence leading to the achievement of the goal of cashless economy. While it has been already established that the UPI ecosystem has been one of the major digital payment systems, the current study does not limit itself to only UPI but rather builds upon all payment systems as other tools may have lesser usage but still contributes to the digital payment ecosystem. Thus, the results established in this study present a broader picture which covers the entire Indian digital payment ecosystem. Additionally, the study which has been conducted by Ghosh (2021) shall consider who has affirmed the relationship however established to occur due to different events such as the digital India initiative and demonetisation program which has been adopted by the Indian government. The current study has not looked at such rise and growth in the cashless economy from an event perspective rather through empirical analysis established such is being now promoted in daily transactions being done by individuals. Hence, it can be inferred that different events in history like demonetisation and digital India did lead to the promotion of a cashless economy which at some rate, has become a part of the daily lives of citizens throughout the country.

Result 4: Similarly, analysis has also been done regarding the aspect that digital payment method adoption leads to a reduction in the need for carrying cash with other variables in which correlation analysis was conducted and results have been found to suggest a positive relationship in the range of 0.206 to 0.575 which suggests people who utilise digital payment system often find such to be convenient than cash transactions and hence also need to carry less cash.

Empirical analysis done in this study has established it as a significant aspect that digital payment systems do lead to an increase in convenience. The study conducted by Manoharan et al., (2021) had already established such a narrative however the study faced the limitation of convenience due to the reduction in the need to carry cash being only examined during the pandemic which has led to significant changes in behaviour. Hence, the current study has as such evaluated the growth and convenience during the post-covid timeframe where the situation is considered to have become normal. Thus, it can be inferred that the public still finds digital payment systems to be more convenient compared to traditional methods which has led to a reduction in total cash carried by an individual. Further, India is a large nation where people's behaviour, especially regarding financial transactions, has been noted to be largely different based on regional aspects, thus the current study also serves as an expansion of the study which has been done by Divyapriya & Velanganni (2020) who did establish such results but at the same time, had only focused upon 100 respondents from Chennai city. The current study has expanded both the total number of participants and city count in order to establish that such a phenomenon is being observed throughout the nation that people are finding digital payment systems convenient and are more

likely to carry less cash owing to their belief of being able to utilise digital payment system to do daily transactions. In this discussion, it becomes important to highlight the results which have been published in a study by Shree et al., (2021) who asserted that even if a higher level of convenience exists for the usage of a digital payment system over a cash system, people will only show a higher level of usage once they have significant trust on digital payment system. The two aspects when combined together help address major research questions of why digital payment systems are increasing throughout the country and at the same people are shifting from carrying cash even in daily transactions. Thus, the two studies together affirm the key findings throughout the study. This study has also asserted the research gap which is evident in a study conducted by Jain (2023) who noted higher rate of adoption and utilisation of digital payment systems can be attributed to either customer satisfaction or security which is provided by such systems. The current study does not suggest such attributes to have less significance but at the same time, convenience is also a major attribute which is promoting the adoption of digital payment systems and is leading to a reduction in the need to carry cash for transactions ranging from members across different occupations. Therefore, this analysis has not negated the importance of other attributes like security, ease of usage, and satisfaction rate but highlights that convenience is also a major attribute which needs to be considered as the reason behind the significant daily increase in transactions.

Result 5: Similar to other aspects, this section analysed the influence of digital payments diminishing the need for carrying cash in daily transactions with other variables, which showcased a positive correlation value in the range of 0.198 to 0.631, suggesting people who perceptive digital transactions reduce the need for cash also have other positive perception regarding the digital payments.

This result highlights two major aspects firstly, the digital payments system has led to a reduction in the need to carry cash while also highlighting that there is a positive perception regarding digital payment as well, both of which had already been covered in a study conducted by Rajeswari et al., (2021). It should be noted that such study however has been limited to Coimbatore city, while the current study took into account the perception of different cities and urban as well as rural regions. Such an aspect is crucial to understand as the financial behaviour of individuals in one city is often not a reflection of the entire country, in which different regions exist and people may have different financial aspects as well owing to such regional variations under social and cultural aspects. The study by Banerjee & Pradhan (2022) also be considered who took into consideration different factors which motivate the user to adopt and utilise digital payment systems however such a study failed to take into account a crucial demographic variable, which is the occupation of the individual, and at the same time, also taking into account perception of both students as well as retired individuals. This study hence enhances the results which have been found by prior scholars and asserts that irrespective of any demographic difference, the public around the country is using digital payment systems and hence finds less need to carry cash and also has a positive perception regarding usage of such system in their daily lives to better manage their finance and daily

transactions. Similar results have been also highlighted in the study conducted by Garg & Goyal (2020) but such a study took into account primarily individuals who have been associated with the national capital region (NCR) with primary reference to Delhi. Thus, it has been one of the major research gaps that though positive perception has been noted but such has been covered in specific regions or in specific groups only, while the need is for comprehensive analysis, which takes into account different groups (based on occupation and demographic attributes) to establish that growth and adoption of digital payment chapter is applicable throughout the country and is leading to economic growth throughout. This has been addressed in the current study which focuses on each group and vast demographic sections. The study by Das & Mahapatra (2020) is also a similar study which affirms the results but limits the scope to only include Cuttack city. Hence, a major inference of such positive perception and growth throughout the country has been missing which has been addressed in the current study. Further, the current study has asserted that the adoption of digital payment has led to a reduction in the need to carry physical cash which is also a recurring them based on logical frameworks in prior studies that asserted that people pay either using a digital payment system or through cash and usage of digital payment system lead to less usage of cash.

Result 6: In the last section, an analysis has been done of different attributes which have were considered during the questionnaire and a positive correlation has been found among the variables which need to be discussed. This has established that the perceived importance of such a digital payment system has a significant influence both on financial behaviour as well as the economic growth of the country. Such has been established by taking into account the perception of different demographic sections and economic occupations.

While considering this aspect, the study conducted by Rooj & Sengupta (2020) shall be taken into consideration who conducted a multivariate autoregression analysis and suggested adoption and usage of digital payment system did have a positive influence on economic growth in the country which has been affirmed in the current study. However, the prior study did not take into account retail digital payment transactions which have been done in the current, hence not only acting as an expansion of the current study but also noting that it is the collective transactions which are done by the general public as well as larger businesses, both of which have been noted to lead to positive economic growth. While considering the empirical results which have been derived in the current study, the study conducted by Angamuthu (2020) shall also be considered who developed a logical framework and noted there has been growth in both volumes as well as the total number of transactions which are done daily and such is growing primarily due to digital payment system being convenience as well as inexpensive. Such has been empirically established in the current study thus validating the logical framework which is established in the prior study. Additionally, the prior study established such a framework based primarily on rural India, however, the current study considered both rural and urban citizens from different occupations to generalise such aspects for the entire country. However, insights which have been presented through empirical analysis have to be considered from the lens of a study conducted by Bhavsar & Kumar (2021)

who affirmed the aspects which have been established in the study but at the same time, also asserted that cash usage and cash consumption is also growing in India. This presents a unique phenomenon where both digital payments, as well as cash consumption, are witnessing an increase, which can be considered a symbol of higher economic growth. The latter study noted positive shocks in the exhibit which will lead to higher adoption but such is negated in the current study as such shocks can lead to temporary growth while permanent growth can happen with sustained adoption and usage. Growth in value as well as volume terms has been also established in a study conducted by Bhavsar & Samanta (2022) which relates to a reduction in the usage of physical cash under the logical framework. Such a framework is based on the aspect that people have limited disposable income, which can either be spent as a cash transaction or can be spent as a digital transaction. Hence, growth in digital transactions has been considered to lead to a reduction in cash transactions. However, this aspect does not bring into focus economic growth as such considering the disposable income of individuals to be the same as before. The current study hence has negated the framework and noted both economic growth and digital payment also happening which can affirm earlier ideas of both economic growth as well as adoption and utilisation of digital payment systems.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Major Findings

Indian economy is a crucial global economy which consists of different industries from agriculture to services, with different layers of interconnection. Further, another major aspect has been the vast population of the country and diverse demographics ranging from students to retired individuals. However, each of them plays a role in the economy either by purchasing some services (students being the only purchasers in most cases) to selling certain products or services, hence money acts as an integral connection connecting economic functions throughout the country. The economy traditionally has been cash dependent with such being a major aspect in rural lives, however, the introduction of a digital payment system aims to revolutionise such aspects by attempting to mitigate the challenges in traditional cash transactions. Significant time has already passed with such a system being adopted throughout the nation, hence the current study has attempted to evaluate the impact of such a system and its adoption on the economic growth of the country.

The current study has evaluated public perception regarding the usage of digital payment tools and the benefits they offer in conducting daily transactions when compared to traditional cash-based transactions. 385 respondents which consist of both male and female members from different age and income groups have been selected. Such respondents come from different professions from students to salaried individuals to self-employed and businessmen to retired individuals from whom data has been collected through quantitative questionnaires and analysed. The quantitative research method has been adopted as such allows the collection of objective data and empirical analysis of such data which leads to the generalisation of findings which can be then inferred to be prevalent across the country.

Firstly, the current study has made a crucial distinction between salaried individuals who work as employees in different organisations and businessmen/self-employed individuals in society as well. This has led to a crucial inference that employment type has a significant impact on the acceptance of e-payment, suggesting the need to consider each section of society based on the financial occupation of individuals as well. After establishing such differences, the current study has taken into account the need to conduct daily transactions by an individual, as such transactions form a core part of not only the business and professional aspects one is engaged in but also in their daily life. Two clear aspects have emerged from quantitative analysis firstly, digital payment systems reduce the need to carry physical cash and be able to do all transactions efficiently, and secondly, such digital payment systems have led to a reduction in transaction time and made whole transactions more efficient which leads to higher level of convenience and satisfaction for the users. Further, while combining these aspects, it has also been noted that people have positive perceptions regarding the adoption and utilisation of digital payment systems, and finally digital

payment systems and all tools are noted to have a positive impact on the Indian economy. Therefore, it can be inferred that throughout the study, it has been established that the digital payment system has led to better efficiency, safety and security, and a reduction in transaction speed, leading to better functioning throughout the economy. After combining such aspects and considering the different sectors of the Indian economy, it can be inferred that digital payment system adoption and utilisation have a positive impact on the economy. However, the current study has focused on the digital payment system entirely as it has been assumed acceptance of services has already happened in several sections of society.

Thus, the current study has established that digital payment significantly aids citizens around the country primarily by reducing the need to carry digital cash and at the same time, improving transaction efficiency and aiding them to do daily transactions with more speed and security which leads to the overall growth of Indian economy as well. Further, it should be noted that it has also been established that people have positive perceptions regarding the utilisation and integration of digital payment systems in their daily lives which suggests a higher rate of public participation in utilise such systems suggesting initial barriers are addressed and now focus shall be in integration in order to promote higher economic growth.

6.2 Recommendations

The following recommendations have been suggested further to enhance the adoption and utilisation of digital payments to strengthen and improve the state of the Indian economy:

- New and improved security measures like encryption and facial detection must be adopted to ensure the security of transactions and party details.
- Local shopkeepers and self-employed individuals must be encouraged to adopt such payment systems in their daily operations for better efficiency.
- The government should organise awareness programs and campaigns so that such systems are adopted in remote and vulnerable regions as well.
- Individuals should also recognise their role in digital payments and take adequate steps to ensure the security of transaction amounts and personal details
- Government and businessmen shall collaborate together to develop internet and telecommunications infrastructure to ensure seamless connection for conducting transactions and payments
- Application developers and banking institutions shall collaborate together to ensure smooth and efficient transactions throughout the day for all transactions.
- The government should collaborate with businesses to develop new and innovative digital payment solutions which can address the unique demands of the Indian public.
- Government and financial institutions should collaborate to understand the specific needs of women entrepreneurs and start-up owners to aid them in the utilisation of digital payments

- Financial institutions shall provide support to digital payment systems by integrating their technologies with such applications for cross-functional ecosystem
- Government and financial institutions shall promote digital payments and new attributes in social media to encourage youth adoption as well.

6.3 Limitations

Certain methodological and technical limitations have been observed in the study which negatively influences the reliability and validity of results, but at the same time, attempts were made to incorporate such methodology and technical aspects which will address research questions. Firstly, the current study has been quantitative in order to address research questions through empirical analysis, however, the lack of qualitative analysis has led to a lack of taking into account the subjective perceptions of different individuals and how such influences the growth of the Indian economy and their attributes. Secondly, the study does take into account different demographic aspects such as gender and occupation ranging from students to entrepreneurs, but no distinction has been made which would have aided in specific aspects of how each section perceives digital payment and its influence on the Indian economy. Similarly, the current study does not take into account the entire Indian economy and does not take into account different industrial sectors as well. Thus, the current study can be noted to be general in approach, but such has been done to provide a comprehensive picture which takes into account all digital payment systems together and the roles played by all sections of society while using such payment systems on the growth of the Indian economy.

6.4 Contribution to the study

The current study has significant implications both for academic scholars as well as different stakeholders of the Indian economy. The current study has addressed the theoretical research gap regarding the influence of digital payment on the Indian economy by taking into account the perception of different stakeholders ranging from students to employed individuals and businessmen as well. Further, the current study has significant practical implications as well. The current study will aid different sectors as well as the government to further integrate different aspects of the Indian economy with a digital payment system which will aid in a smooth transition and also further growth of the Indian economy. Since the current study has taken into account the perception of different stakeholders based on financial occupation and has also included both students as well as retired persons, this study will aid government and application developers in understanding how each section of society perceives such digital payment systems to make modifications and ensure each member is able to utilise such system and also there is a net positive contribution to the growth of Indian economy which will also benefit all stakeholders involved. The questionnaire which has been developed to conduct the study can be further adopted by future scholars to analyse the impact of digital payments throughout the global economy and also modified to analyse the influence of specific digital payment tools.

6.5 Future Research and Concluding Remarks

Future researchers shall consider this research as foundational research and then conduct quantitative analysis which will take into specific aspects of each industry and also analyse implications for different digital payment applications ranging from internet banking to UPI. Further, future scholars shall further adopt qualitative research methodology in their research as well which will take into account the subjective perceptions of different individuals ranging from employees and businessmen to bank managers and digital payment application developers as well. Further, digital payment systems are being used around the world, and hence future scholars shall also engage in comparative analysis. Additionally, research also needs to be done with respect to women in the economy, students, and other professions to understand how each demographical section uses the payment system and perceived benefits as well as challenges.

Hence, the current study concludes by giving strong empirical evidence that the digital payment system does have a significant influence on the growth of the Indian economy and such is evident from different activities conducted by students, salaried individuals, businessmen, self-employed individuals, and retired individuals. However, several challenges like public perception and inefficiencies still exist which need to be considered for promoting timely adoption and transaction efficiency with both speed and security.

APPENDICES

Appendix A: Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Age	385	1	6	3.08	1.913	3.660
Gender	385	1	4	1.75	.910	.828
Education	385	1	5	4.49	.947	.896
Marital Status	385	1	3	1.63	.670	.448
Income	385	1	7	4.92	1.964	3.856
Employment Type	385	1	7	3.66	1.846	3.407
I can easily use e-payment methods of payment without additional instruction.	385	1	5	3.67	1.095	1.200
Compared to traditional modes of payment, e-payment methods are more convenient and easier to use.	385	1	5	3.64	1.253	1.569
I am satisfied with the variety of e-payment options in India.	385	1	5	3.65	1.175	1.380
I believe e-payment systems are generally safe and secure.	385	1	5	3.61	1.104	1.219

It is now increasingly important for businesses to offer e-payment options alongside traditional payment methods.	385	1	5	3.89	1.128	1.271
Digital Payment methods have reduced transaction costs and enhanced efficiency in Indian Economy.	385	1	5	3.65	1.075	1.156
Digital payment methods have fostered innovation and entrepreneurial activities within the Indian Economy.	385	1	5	3.82	1.087	1.182
Digital payment systems have significantly contributed to the growth of the Indian Economy.	385	1	5	3.73	1.121	1.256
The reduction of cash transactions through digital payments is playing a significant role in curbing black money and corruption in India	385	1	5	3.69	1.050	1.101

In my opinion, digital payment solutions are driving the digital economy within the country.	385	1	5	3.83	1.043	1.089
In my opinion, digital payments contribute to better financial management and tracking of expenses.	385	1	5	3.77	1.113	1.238
Digital payment methods are efficient in reducing the time required for transactions.	385	1	5	3.89	1.047	1.095
Digital payments play a significant role in promoting cashless transactions and reducing the reliance on physical currency.	385	1	5	3.90	1.073	1.151
Digital payments are fostering innovation within the Indian economic setting.	385	1	5	3.75	1.086	1.179
Digital payment methods are convenient for conducting international transactions.	385	1	5	3.47	1.130	1.276

I am concerned regarding the security of my personal and financial information when making digital payments.	385	1	5	3.44	1.140	1.300
I face difficulty in understanding and navigating the user interface of digital payment applications or websites.	385	1	5	3.24	1.298	1.684
I often encounter technical issues such as technical errors and glitches while making digital payments.	385	1	5	3.52	1.162	1.349
I often encounter compatibility issues between different digital payment platforms or devices.	385	1	5	3.36	1.268	1.607
I often face issues while reporting any problem to the customer service executives.	385	1	5	3.42	1.218	1.484

It is important to expand the acceptance of digital payment methods to smaller merchants and rural areas.	385	1	5	3.99	1.103	1.216
It would be beneficial to work to improve the accessibility of digital payment platforms for individuals with limited internet or smartphone access.	385	1	22	4.00	1.390	1.932
Raising awareness through educational campaigns about the benefits and safety measures of digital payments is significant.	385	1	5	4.05	1.065	1.135
Improving the security features of digital payment systems can enhance the confidence and trust among the users.	385	1	5	4.14	1.016	1.032
In my opinion, offering incentives such as cashback or rewards for digital payments would be in encouraging their usage.	385	1	5	4.14	.924	.853

The adoption of digital payments reduces the amount of cash I keep on hand.	385	1	5	4.17	.957	.917
I found digital payments are convenient compared to cash transactions.	385	1	5	4.09	.981	.963
In my opinion, digital payments have replaced traditional cash transactions in my daily life.	385	1	5	4.09	1.017	1.034
The availability of digital payment options has significantly reduced my tendency to carry physical cash.	385	1	5	4.11	.966	.934
In my opinion, the prevalence of digital payments has diminished the need for cash in daily transactions.	385	1	5	4.08	1.005	1.010
I often find myself overspending when using digital payment methods compared to cash.	385	1	5	4.02	1.085	1.177

I believe digital payment methods have significantly increased my impulsive buying tendencies.	385	1	5	4.03	1.070	1.145
The adoption of digital payment methods has significantly reduced my monthly expenditure.	385	1	5	2.85	1.363	1.859
My overall financial situation is likely to change in the next year as a result of increased reliance on digital payments.	385	1	5	3.13	1.256	1.579
I am satisfied with the level of control I have over my spending habits when using digital payment methods.	385	1	5	3.08	1.322	1.748
Valid N (listwise)	385					

- Attitudes towards E-payment methods: The statements provided regarding attitudes towards e-payment methods are scored from 1 to 5, with means ranging from 3.24 to 4.17 and standard deviations ranging from 0.910 to 1.363.
- Perceived benefits of digital payments: The statements related to the perceived benefits of digital payments are scored from 1 to 5, with means ranging from 3.65 to 4.17 and standard deviations ranging from 0.924 to 1.070.

- Perceived challenges of digital payments: The statements related to the perceived challenges of digital payments are scored from 1 to 5, with means ranging from 3.08 to 3.99 and standard deviations ranging from 1.016 to 1.390.
- Future expectations regarding digital payments: The statements related to future expectations are scored from 1 to 5, with means ranging from 2.85 to 4.05 and standard deviations from 1.016 to 1.363.
- This descriptive statistics data helps to understand respondents' demographics, attitudes, perceptions, experiences, and expectations towards digital payment methods.

Frequency Table

Age

		Frequency	Per cent	Valid Per Cent	Cumulative Per Cent
Valid	Under 18 years	77	20.0	20.0	20.0
	18-30 years	150	39.0	39.0	59.0
	31-40 years	30	7.8	7.8	66.8
	41-50 years	19	4.9	4.9	71.7
	51-60 years	10	2.6	2.6	74.3
	Above 60 years	99	25.7	25.7	100.0
	Total	385	100.0	100.0	

Gender

		Frequency	Per cent	Valid Per Cent	Cumulative Per Cent
Valid	Male	178	46.2	46.2	46.2
	Female	166	43.1	43.1	89.4
	Prefer not to disclose	41	10.6	10.6	100.0
	Total	385	100.0	100.0	

Education

		Frequency	Per cent	Valid Per Cent	Cumulative Per Cent
Valid	No Education	7	1.8	1.8	1.8
	Secondary Education	26	6.8	6.8	8.6
	Secondary education	4	1.0	1.0	9.6
	Diploma	82	21.3	21.3	30.9
	Graduation or above	266	69.1	69.1	100.0
	Total	385	100.0	100.0	

Marital Status

		Frequency	Per cent	Valid Per Cent	Cumulative Per Cent
Valid	Single	185	48.1	48.1	48.1
	Married	159	41.3	41.3	89.4
	Divorced	41	10.6	10.6	100.0
	Total	385	100.0	100.0	

Income

		Frequency	Per cent	Valid Per Cent	Cumulative Per Cent
Valid	Less than 2,00,000	18	4.7	4.7	4.7
	2,00,000 - 4,99,999	56	14.5	14.5	19.2
	5,00,000 - 9,99,999	33	8.6	8.6	27.8
	10,00,000 - 14,99,999	45	11.7	11.7	39.5
	15,00,000 - 19,99,999	7	1.8	1.8	41.3
	20,00,000 or more	130	33.8	33.8	75.1
	Prefer not to Disclose	96	24.9	24.9	100.0
	Total	385	100.0	100.0	

Employment Type

		Frequency	Per cent	Valid Per Cent	Cumulative Per Cent
Valid	Self-employed	47	12.2	12.2	12.2
	Salaried/Full-time Employee	97	25.2	25.2	37.4
	Part-time Employee	45	11.7	11.7	49.1
	Freelancer/Contractor	42	10.9	10.9	60.0
	Student	88	22.9	22.9	82.9
	Unemployed	37	9.6	9.6	92.5
	Retired	29	7.5	7.5	100.0
	Total	385	100.0	100.0	

I can easily use e-payment methods of payment without additional instruction.

		Frequency	Per cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	13	3.4	3.4	3.4
	Disagree	61	15.8	15.8	19.2
	Neutral	53	13.8	13.8	33.0
	Agree	170	44.2	44.2	77.1
	Strongly Agree	88	22.9	22.9	100.0
	Total	385	100.0	100.0	

Compared to traditional modes of payment, e-payment methods are more convenient and easier to use.

		Frequency	Per cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	23	6.0	6.0	6.0
	Disagree	68	17.7	17.7	23.6
	Neutral	53	13.8	13.8	37.4
	Agree	121	31.4	31.4	68.8
	Strongly Agree	120	31.2	31.2	100.0
	Total	385	100.0	100.0	

I am satisfied with the variety of e-payment options in India.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	24	6.2	6.2	6.2
	Disagree	52	13.5	13.5	19.7
	Neutral	57	14.8	14.8	34.5
	Agree	155	40.3	40.3	74.8
	Strongly Agree	97	25.2	25.2	100.0
	Total	385	100.0	100.0	

I believe e-payment systems are generally safe and secure.

		Frequency	Per cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	20	5.2	5.2	5.2
	Disagree	45	11.7	11.7	16.9
	Neutral	85	22.1	22.1	39.0
	Agree	152	39.5	39.5	78.4
	Strongly Agree	83	21.6	21.6	100.0
	Total	385	100.0	100.0	

It is now increasingly important for businesses to offer e-payment options alongside traditional payment methods.

		Frequency	Per cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	17	4.4	4.4	4.4
	Disagree	41	10.6	10.6	15.1
	Neutral	43	11.2	11.2	26.2
	Agree	151	39.2	39.2	65.5
	Strongly Agree	133	34.5	34.5	100.0
	Total	385	100.0	100.0	

Digital Payment methods have reduced transaction costs and enhanced efficiency in Indian Economy.

		Frequency	Per cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	23	6.0	6.0	6.0
	Disagree	38	9.9	9.9	15.8
	Neutral	62	16.1	16.1	31.9
	Agree	191	49.6	49.6	81.6
	Strongly Agree	71	18.4	18.4	100.0
	Total	385	100.0	100.0	

Digital payment methods have fostered innovation and entrepreneurial activities within the Indian Economy.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	19	4.9	4.9	4.9
	Disagree	27	7.0	7.0	11.9
	Neutral	74	19.2	19.2	31.2
	Agree	151	39.2	39.2	70.4
	Strongly Agree	114	29.6	29.6	100.0
	Total	385	100.0	100.0	

Digital payment systems have significantly contributed to the growth of the Indian Economy.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	21	5.5	5.5	5.5
	Disagree	41	10.6	10.6	16.1
	Neutral	59	15.3	15.3	31.4
	Agree	165	42.9	42.9	74.3
	Strongly Agree	99	25.7	25.7	100.0
	Total	385	100.0	100.0	

The reduction of cash transactions through digital payments is playing a significant role in curbing black money and corruption in India

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	18	4.7	4.7	4.7
	Disagree	37	9.6	9.6	14.3
	Neutral	72	18.7	18.7	33.0
	Agree	179	46.5	46.5	79.5
	Strongly Agree	79	20.5	20.5	100.0
	Total	385	100.0	100.0	

In my opinion, digital payment solutions are driving the digital economy within the country.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	11	2.9	2.9	2.9
	Disagree	41	10.6	10.6	13.5
	Neutral	58	15.1	15.1	28.6
	Agree	167	43.4	43.4	71.9
	Strongly Agree	108	28.1	28.1	100.0
	Total	385	100.0	100.0	

In my opinion, digital payments contribute to better financial management and tracking of expenses.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	16	4.2	4.2	4.2
	Disagree	49	12.7	12.7	16.9
	Neutral	48	12.5	12.5	29.4
	Agree	165	42.9	42.9	72.2
	Strongly Agree	107	27.8	27.8	100.0
	Total	385	100.0	100.0	

Digital payment methods are efficient in reducing the time required for transactions.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	13	3.4	3.4	3.4
	Disagree	38	9.9	9.9	13.2
	Neutral	41	10.6	10.6	23.9
	Agree	178	46.2	46.2	70.1
	Strongly Agree	115	29.9	29.9	100.0
	Total	385	100.0	100.0	

Digital payments play a significant role in promoting cashless transactions and reducing the reliance on physical currency.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	14	3.6	3.6	3.6
	Disagree	40	10.4	10.4	14.0
	Neutral	39	10.1	10.1	24.2
	Agree	171	44.4	44.4	68.6
	Strongly Agree	121	31.4	31.4	100.0
	Total	385	100.0	100.0	

Digital payments are fostering innovation within the Indian economic setting.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	15	3.9	3.9	3.9
	Disagree	41	10.6	10.6	14.5
	Neutral	74	19.2	19.2	33.8
	Agree	151	39.2	39.2	73.0
	Strongly Agree	104	27.0	27.0	100.0
	Total	385	100.0	100.0	

Digital payment methods are convenient for conducting international transactions.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	11	2.9	2.9	2.9
	Disagree	93	24.2	24.2	27.0
	Neutral	55	14.3	14.3	41.3
	Agree	155	40.3	40.3	81.6
	Strongly Agree	71	18.4	18.4	100.0
	Total	385	100.0	100.0	

I am concerned regarding the security of my personal and financial information when making digital payments.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	19	4.9	4.9	4.9
	Disagree	76	19.7	19.7	24.7
	Neutral	74	19.2	19.2	43.9
	Agree	147	38.2	38.2	82.1
	Strongly Agree	69	17.9	17.9	100.0
	Total	385	100.0	100.0	

I face difficulty in understanding and navigating the user interface of digital payment applications or websites.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	52	13.5	13.5	13.5
	Disagree	70	18.2	18.2	31.7
	Neutral	58	15.1	15.1	46.8
	Agree	143	37.1	37.1	83.9
	Strongly Agree	62	16.1	16.1	100.0
	Total	385	100.0	100.0	

I often encounter technical issues such as technical errors and glitches while making digital payments.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	24	6.2	6.2	6.2
	Disagree	68	17.7	17.7	23.9
	Neutral	49	12.7	12.7	36.6
	Agree	173	44.9	44.9	81.6
	Strongly Agree	71	18.4	18.4	100.0
	Total	385	100.0	100.0	

I often encounter compatibility issues between different digital payment platforms or devices.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	34	8.8	8.8	8.8
	Disagree	75	19.5	19.5	28.3
	Neutral	80	20.8	20.8	49.1
	Agree	109	28.3	28.3	77.4
	Strongly Agree	87	22.6	22.6	100.0
	Total	385	100.0	100.0	

I often face issues while reporting any problem to the customer service executives.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	30	7.8	7.8	7.8
	Disagree	74	19.2	19.2	27.0
	Neutral	58	15.1	15.1	42.1
	Agree	149	38.7	38.7	80.8
	Strongly Agree	74	19.2	19.2	100.0
	Total	385	100.0	100.0	

It is important to expand the acceptance of digital payment methods to smaller merchants and rural areas.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	19	4.9	4.9	4.9
	Disagree	28	7.3	7.3	12.2
	Neutral	38	9.9	9.9	22.1
	Agree	154	40.0	40.0	62.1
	Strongly Agree	146	37.9	37.9	100.0
	Total	385	100.0	100.0	

It would be beneficial to work to improve the accessibility of digital payment platforms for individuals with limited internet or smartphone access.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	14	3.6	3.6	3.6
	Disagree	35	9.1	9.1	12.7
	Neutral	32	8.3	8.3	21.0
	Agree	180	46.8	46.8	67.8
	Strongly Agree	124	32.2	32.2	100.0
	Total	385	100.0	100.0	

Raising awareness through educational campaigns about the benefits and safety measures of digital payments is significant.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	17	4.4	4.4	4.4
	Disagree	22	5.7	5.7	10.1
	Neutral	40	10.4	10.4	20.5
	Agree	150	39.0	39.0	59.5
	Strongly Agree	156	40.5	40.5	100.0
	Total	385	100.0	100.0	

Improving the security features of digital payment systems can enhance the confidence and trust among the users.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	11	2.9	2.9	2.9
	Disagree	28	7.3	7.3	10.1
	Neutral	25	6.5	6.5	16.6
	Agree	153	39.7	39.7	56.4
	Strongly Agree	168	43.6	43.6	100.0
	Total	385	100.0	100.0	

In my opinion, offering incentives such as cashback or rewards for digital payments would be in encouraging their usage.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	11	2.9	2.9	2.9
	Disagree	16	4.2	4.2	7.0
	Neutral	27	7.0	7.0	14.0
	Agree	186	48.3	48.3	62.3
	Strongly Agree	145	37.7	37.7	100.0
	Total	385	100.0	100.0	

The adoption of digital payments reduces the amount of cash I keep on hand.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	9	2.3	2.3	2.3
	Disagree	21	5.5	5.5	7.8
	Neutral	32	8.3	8.3	16.1
	Agree	157	40.8	40.8	56.9
	Strongly Agree	166	43.1	43.1	100.0
	Total	385	100.0	100.0	

I found digital payments are convenient compared to cash transactions.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	10	2.6	2.6	2.6
	Disagree	23	6.0	6.0	8.6
	Neutral	40	10.4	10.4	19.0
	Agree	161	41.8	41.8	60.8
	Strongly Agree	151	39.2	39.2	100.0
	Total	385	100.0	100.0	

In my opinion, digital payments have replaced traditional cash transactions in my daily life.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	13	3.4	3.4	3.4
	Disagree	23	6.0	6.0	9.4
	Neutral	36	9.4	9.4	18.7
	Agree	158	41.0	41.0	59.7
	Strongly Agree	155	40.3	40.3	100.0
	Total	385	100.0	100.0	

The availability of digital payment options has significantly reduced my tendency to carry physical cash.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	10	2.6	2.6	2.6
	Disagree	22	5.7	5.7	8.3
	Neutral	35	9.1	9.1	17.4
	Agree	168	43.6	43.6	61.0
	Strongly Agree	150	39.0	39.0	100.0
	Total	385	100.0	100.0	

In my opinion, the prevalence of digital payments has diminished the need for cash in daily transactions.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	11	2.9	2.9	2.9
	Disagree	25	6.5	6.5	9.4
	Neutral	39	10.1	10.1	19.5
	Agree	158	41.0	41.0	60.5
	Strongly Agree	152	39.5	39.5	100.0
	Total	385	100.0	100.0	

I often find myself overspending when using digital payment methods compared to cash.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	19	4.9	4.9	4.9
	Disagree	25	6.5	6.5	11.4
	Neutral	33	8.6	8.6	20.0
	Agree	160	41.6	41.6	61.6
	Strongly Agree	148	38.4	38.4	100.0
	Total	385	100.0	100.0	

I believe digital payment methods have significantly increased my impulsive buying tendencies.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	15	3.9	3.9	3.9
	Disagree	29	7.5	7.5	11.4
	Neutral	38	9.9	9.9	21.3
	Agree	152	39.5	39.5	60.8
	Strongly Agree	151	39.2	39.2	100.0
	Total	385	100.0	100.0	

The adoption of digital payment methods has significantly reduced my monthly expenditure.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	82	21.3	21.3	21.3
	Disagree	84	21.8	21.8	43.1
	Neutral	86	22.3	22.3	65.5
	Agree	74	19.2	19.2	84.7
	Strongly Agree	59	15.3	15.3	100.0
	Total	385	100.0	100.0	

My overall financial situation is likely to change in the next year as a result of increased reliance on digital payments.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	53	13.8	13.8	13.8
	Disagree	60	15.6	15.6	29.4
	Neutral	117	30.4	30.4	59.7
	Agree	93	24.2	24.2	83.9
	Strongly Agree	62	16.1	16.1	100.0
	Total	385	100.0	100.0	

I am satisfied with the level of control I have over my spending habits when using digital payment methods.

		Frequency	Per Cent	Valid Per Cent	Cumulative Per Cent
Valid	Strongly Disagree	59	15.3	15.3	15.3
	Disagree	79	20.5	20.5	35.8
	Neutral	83	21.6	21.6	57.4
	Agree	99	25.7	25.7	83.1
	Strongly Agree	65	16.9	16.9	100.0
	Total	385	100.0	100.0	

Regression Analysis

To analyze the acceptance level of e-payment methods amongst the salaried class and the person who owns their own business, Ordinal Regression is employed

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.120[a]	.015	.012	.92312

a. Predictors: (Constant), Employment Type

The model explains that the employment type can predict approximately 1.5% of the variance in the acceptance level of e-payment methods. The adjusted R-squared, which considers the number of predictors in the model, is 0.012. The standard error of the estimate is approximately 0.92312, which represents the average difference between the observed and predicted values of the acceptance level.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.805	1	4.805	5.639	.018[b]
	Residual	326.373	383	.852		
	Total	331.178	384			

a. Dependent Variable: Acceptance Level

b. Predictors: (Constant), employment Type

The ANOVA table suggests that the employment type significantly predicts the acceptance level of e-payment methods as the regression model is statistically significant (p = 0.018).

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.913	.105		37.414	.000
	Employment Type	-.061	.026	-.120	-2.375	.018

a. Dependent Variable: Acceptance Level

The predicted value of the acceptance level when the employment type is zero is represented by the coefficient for the constant term (3.913). The coefficient for the Employment Type predictor variable is -0.061, which implies that for every one-unit increase in the employment type, the acceptance level decreases by 0.061 units. The t-value (-2.375) associated with the Employment Type coefficient is significant at the 0.05 level, suggesting that the employment type has a statistically significant effect on the acceptance level of e-payment methods.

Overall, the results suggest that the employment type has a modest but statistically significant impact on determining the acceptance level of e-payment methods.

Correlation Analysis

To analyze the impact and importance of digital transactions, which can boost the economy's growth, Correlation Analysis is used.

Correlations

	In my opinion, digital payments contribute to better financial management and tracking of expenses.	Digital payment methods are efficient in reducing the time required for transactions.	Digital payments play a significant role in promoting cashless transactions and reducing the reliance on physical currency.	Digital payments are fostering innovation within the Indian economic setting.	Digital payment methods are convenient for conducting international transactions.	The adoption of digital payments reduces the amount of cash I keep on hand.	I found digital payments are convenient compared to cash transactions.	In my opinion, digital payments have replaced traditional cash transactions in my daily life.	The availability of digital payment options has significantly reduced my tendency to carry physical cash.	In my opinion, the prevalence of digital payments has diminished the need for cash in daily transactions.

Spearman's rho	In my opinion, digital payments contribute to better financial management and tracking of expenses.	Correlation Coefficient	1.000	.473**	.488**	.452**	.434**	.239**	.247**	.268**	.263**	.278**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.000	.000	.000	.000
		N	385	385	385	385	385	385	385	385	385	385
	Digital payment methods are efficient in	Correlation Coefficient	.473**	1.000	.591**	.576**	.349**	.318**	.352**	.286**	.302**	.337**
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000	.000	.000	.000

	reducing the time required for transactions.	N	385	385	385	385	385	385	385	385	385	385
	Digital payments play a significant role in promoting cashless transactions and reducing the reliance on physical currency.	Correlation Coefficient	.488**	.591**	1.000	.527**	.386**	.321**	.385**	.309**	.363**	.368**
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000	.000	.000	.000
		N	385	385	385	385	385	385	385	385	385	385

	Digital payments are fostering innovation within the Indian economic setting.	Correlation Coefficient	.452**	.576**	.527**	1.000	.405**	.302**	.352**	.292**	.289**	.305**
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000	.000	.000	.000
		N	385	385	385	385	385	385	385	385	385	385
	Digital payment methods are convenient	Correlation Coefficient	.434**	.349**	.386**	.405**	1.000	.327**	.267**	.263**	.206**	.198**
		Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.000	.000	.000	.000

	for conducting international transactions.	N	385	385	385	385	385	385	385	385	385	385
	The adoption of digital payments reduces the amount of cash I keep on hand.	Correlation Coefficient	.239**	.318**	.321**	.302**	.327**	1.000	.430**	.575**	.431**	.534**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.	.000	.000	.000	.000
		N	385	385	385	385	385	385	385	385	385	385
	I found digital payments are convenient	Correlation Coefficient	.247**	.352**	.385**	.352**	.267**	.430**	1.000	.460**	.543**	.469**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.	.000	.000	.000

	compared to cash transactions.	N	385	385	385	385	385	385	385	385	385	385
	In my opinion, digital payments have replaced traditional cash transactions in my daily life.	Correlation Coefficient	.268**	.286**	.309**	.292**	.263**	.575**	.460**	1.000	.484**	.631**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.	.000	.000
		N	385	385	385	385	385	385	385	385	385	385
	The availability of	Correlation Coefficient	.263**	.302**	.363**	.289**	.206**	.431**	.543**	.484**	1.000	.536**

	digital payment options has significantly reduced my tendency to carry physical cash.	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.	.000
		N	385	385	385	385	385	385	385	385	385	385
	In my opinion, the prevalence of digital paym	Correlation Coefficient	.278**	.337**	.368**	.305**	.198**	.534**	.469**	.631**	.536**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.

	ents has diminished the need for cash in daily transactions.	N	385	385	385	385	385	385	385	385	385	385

**. Correlation is significant at the 0.01 level (2-tailed).

- When I use digital payments, I find it easier to manage my finances and track my expenses" and "Digital payment methods are efficient in reducing the time required for transactions": Correlation Coefficient: 0.473** A moderately positive correlation exists between believing that digital payments contribute to better financial management and the perception that digital payment methods are efficient in reducing transaction time.
- "Digital payments play a significant role in promoting cashless transactions and reducing the reliance on physical currency" and other variables: There are moderate to strong positive correlations (0.488** to 0.576**) between this variable and others. This indicates that those who believe in the importance of digital payments also tend to see the benefits in terms of reducing reliance on physical currency, fostering innovation, etc.
- "The adoption of digital payments reduces the amount of cash I keep on hand" and other variables: There are positive correlations (0.206** to 0.575**) between this variable and others. This suggests that individuals who adopt digital payments are likely to carry less physical cash and find digital payments more convenient compared to cash transactions.
- "In my opinion, the prevalence of digital payments has diminished the need for cash in daily transactions" and other variables: There are positive correlations (0.198** to 0.631**) between this variable and others. This indicates that those who perceive a

reduced need for cash in daily transactions due to digital payments also tend to have other positive perceptions about digital payments.

- Overall, the correlation analysis finds significant positive associations between various aspects of digital payments. This indicates their perceived importance and impact on financial behavior and economic growth.

Appendix B: Questionnaire Development

This questionnaire is designed to collect pertinent information from users of digital payment methods in India on how these payment methods are impacting the economy of the country. Particularly, this study aims to investigate the significance of digital payment methods, their acceptance levels, and how they affect the economic growth of a country. The Questionnaire given below is a tool chosen for collecting data for the research project titled **"Digital Payments and Their Impact on the Indian Economy"**. The participants are requested to respond attentively to all of the questions mentioned below. The respondents are assured that the information they provide will be used for research purposes only and will be kept confidential and un-identifiable to an individual or organization.

Part A Demographic Details:

1. Age Group (in Years):

    Under 18

    18-30

    31-40

    41-50

    51-60

    Above 60

2. Gender

    Male

    Female

    None-Binary

    Prefer not to disclose

3. Education Qualification

    No education

    Primary Education

    Secondary Education

    Diploma

Graduation or above.

4. Marital Status:

Single

Married

Divorced

Widowed

Separated

5. Yearly Household Income

Less than ₹2,00,000

₹2,00,000 - ₹4,99,999

₹5,00,000 - ₹9,99,999

₹10,00,000 - ₹14,99,999

₹15,00,000 - ₹19,99,999

₹20,00,000 or more

Prefer not to Disclose

6. Number of Family Members

1-3

4-6

7-9

10-12

More than 12 members

7. Employment Type:

- Self-employed
- Salaried/Full-time Employee
- Part-time Employee
- Freelancer/Contractor
- Student

- Unemployed
- Retired

Part B: Acceptance Level of E-Payment Methods

On a scale of 1-5, please indicate the degree to which you agree to the statements given below based on your experience. (SD = Strongly Disagree, D = Disagree, N = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree)

Statements	SD	D	N	A	SA
1. I can easily use e-payment methods of payment without additional instruction.					
2. Compared to traditional modes of payment, e-payment methods are more convenient and easy to use.					
3. I am satisfied with the variety of e-payment options in India.					
4. I believe e-payment systems are generally safe and secure.					
5. It is now increasingly important for businesses to offer e-payment options alongside traditional payment methods.					

Part C: Impact of Digital Payments on the Indian Economy

On a scale of 1-5, please indicate the degree to which you agree to the statements given below based on your experience. (SD = Strongly Disagree, D = Disagree, N = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree)

Statements	SD	D	N	A	SA
6. Digital Payment methods have reduced transaction costs and enhanced efficiency in Indian Economy.					
7. Digital payment methods have fostered innovation and entrepreneurial activities within the Indian Economy.					
8. Digital payment systems have significantly contributed to the growth of the Indian Economy.					
9. The reduction of cash transactions through digital payments is playing a significant role in curbing black money and corruption in India.					
10. In my opinion, digital payment solutions are driving the digital economy within the country.					

Part D: Benefits of digital payments

On a scale of 1-5, please indicate the degree to which you agree to the statements given below based on your experience. (SD = Strongly Disagree, D = Disagree, N = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree)

Statements	SD	D	N	A	SA

11. In my opinion, digital payments contribute to better financial management and tracking of expenses.					
12. Digital payment methods are efficient in reducing the time required for transactions.					
13. Digital payments play a significant role in promoting cashless transactions and reducing the reliance on physical currency.					
14. Digital payments are fostering innovation within the Indian economic setting.					
15. Digital payment methods are convenient for conducting international transactions.					

Part E: Challenges faced while making digital payments

On a scale of 1-5, please indicate the degree to which you agree to the statements given below based on your experience. (SD = Strongly Disagree, D = Disagree, N = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree)

Statements	SD	D	N	A	SA
16. I am concerned regarding the security of my personal and financial information when making digital payments.					
17. I face difficulty in understanding and navigating the user interface of digital					

payment applications or websites.					
18. I often encounter technical issues such as technical errors and glitches while making digital payments.					
19. I often encounter compatibility issues between different digital payment platforms or devices.					
20. I often face issues while reporting any problem to the customer service executives.					

Part F: Suggestions for Increasing Digital Payment Activities

On a scale of 1-5, please indicate the degree to which you agree to the statements given below based on your experience. (SD = Strongly Disagree, D = Disagree, N = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree)

Statements	SD	D	N	A	SA
21. It is important to expand the acceptance of digital payment methods to smaller merchants and rural areas.					
22. It would be beneficial to work to improve the accessibility of digital payment platforms for individuals with limited internet or smartphone access.					
23. Raising awareness through educational campaigns about the benefits and safety measures of digital payments is significant.					

24. Improving the security features of digital payment systems can enhance the confidence and trust among the users.					
25. In my opinion, offering incentives such as cashback or rewards for digital payments would be in encouraging their usage.					

Part G: Cash Kept

On a scale of 1-5, please indicate the degree to which you agree to the statements given below based on your experience. (SD = Strongly Disagree, D = Disagree, N = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree)

Statements	SD	D	N	A	SA
26. The adoption of digital payments reduces the amount of cash I keep on hand.					
27. I found digital payments are convenient compared to cash transactions.					
28. In my opinion, digital payments have replaced traditional cash transactions in my daily life.					
29. The availability of digital payment options has significantly reduced my tendency to carry physical cash.					
30. In my opinion, the prevalence of digital payments has diminished the need for cash in daily transactions.					

Part H: Cash Kept

On a scale of 1-5, please indicate the degree to which you agree to the statements given below based on your experience. (SD = Strongly Disagree, D = Disagree, N = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree)

Statements	SD	D	N	A	SA
31. I often find myself overspending when using digital payment methods compared to cash.					
32. I believe digital payment methods have significantly increased my impulsive buying tendencies.					
33. The adoption of digital payment methods has significantly reduced my monthly expenditure.					
34. My overall financial situation is likely to change in the next year as a result of increased reliance on digital payments.					
35. I am satisfied with the level of control I have over my spending habits when using digital payment methods.					

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