

Status and Trends of Digital Payments in Jharkhand Post-Demonetization

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Abstract: *This dissertation explores the status and trends of digital payments by investigating the factors that influence adoption and usage rates across various demographics, particularly within the healthcare sector. Employing a mixed-methods approach, the research synthesizes comprehensive quantitative data on transaction volumes, user demographics, and technological access with qualitative insights into consumer attitudes towards digital payment systems. The findings reveal a significant correlation between technological proficiency and the willingness to adopt digital payment solutions, with notable disparities among age groups and income levels. Specifically, younger demographics exhibit higher adoption rates, while older adults express concerns regarding security and usability, impacting their engagement with digital payments. This study underscores the critical role of understanding demographic nuances in fostering widespread acceptance of digital payment technologies, particularly in healthcare, where seamless transactions can enhance patient experience and operational efficiency. The implications of these findings extend beyond mere transactional convenience; they suggest that tailored educational initiatives and user-friendly technologies are essential for increasing digital payment adoption among diverse populations. As the healthcare sector increasingly integrates digital payment systems, these insights provide valuable guidance for policymakers and providers aiming to optimize service delivery and improve accessibility. Ultimately, this research contributes to the broader discourse on digital finance, offering strategic recommendations that can shape the future of financial transactions in healthcare and potentially throughout various other sectors.*

Keywords: Digital Payments, Technology, Cash, Finance

1. Introduction

The rapid evolution of digital payment systems has fundamentally reshaped how consumers and businesses transact, particularly in the wake of technological advancements and changing consumer expectations. With the onset of the digital era, the global landscape of finance has witnessed an unprecedented shift toward cashless transactions, characterized by the proliferation of financial technologies (fintech) that offer convenient, efficient, and secure payment solutions (Mulyono et al., 2024). In emerging markets, such as India and Indonesia, mobile payment platforms and electronic wallets have surged in popularity, facilitating smoother transactions not only for urban consumers but also contributing to financial inclusion in rural areas (Marsha Rachmanda Putri et al., 2024) (Nandini Sujit Phatak, 2023). However, despite this growth, the adoption of digital payment systems remains inconsistent across demographics, largely influenced by factors such as digital literacy, perceived security risks, and user experience (Ratih Anindita Wardhani et al., 2023) (Drashti Rank, 2023). This dissertation seeks to address the critical research problem of understanding the status and trends of digital payments within this dynamic environment, particularly examining how various factors influence adoption rates, user behavior, and the overall impact on economic participation among diverse populations. The primary objective of this research is to systematically investigate the determinants of digital payment adoption and usage trends, focusing on demographic disparities and technological accessibility. Additionally, this study aims to analyze the implications of digital payments on financial behaviors and consumer attitudes, particularly in sectors like healthcare, wherein seamless transactions can significantly enhance operational efficiency and user experience (Cheng Ma et al., 2023) (Dimpal Singhania et al., 2023). By shedding light on the nuances of consumer behavior related to digital payment adoption, this research will provide valuable insights into the barriers and facilitators of embracing cashless technologies. The significance of this

research lies not only in its academic contributions but also in its practical implications for policymakers, financial institutions, and businesses. As digital payment systems continue to evolve, understanding the factors that drive or hinder their acceptance can inform the development of targeted strategies to enhance usage, particularly among underserved communities (Anderes Gui et al., 2023) (Bhawna Agarwal et al., 2022). Furthermore, insights drawn from this study will contribute to the broader discourse on digital finance, offering strategic recommendations that can guide future enhancements in payment technologies, ultimately fostering greater financial inclusion and economic development (R. Manrai et al., 2021) (Surjandy et al., 2024). As the landscape of digital transactions continues to shift, this research underscores the necessity of grasping the socioeconomic dynamics that underpin digital payment trends, ensuring a more inclusive and efficient financial ecosystem.

2. Literature Review

The rapid evolution of digital payments has transformed the global financial landscape, reshaping the ways in which consumers, businesses, and governments conduct transactions. From the advent of credit cards in the mid-20th century to the rising prominence of mobile wallets and cryptocurrencies in the 21st century, technological advancements have continually fostered new methods for exchanging value. This literature review aims to provide a comprehensive overview of the status and trends of digital payments, highlighting their significance in facilitating convenience, security, and efficiency in financial transactions. As societies move toward a more cashless economy, understanding the dynamics of digital payment systems is crucial for multiple stakeholders, including policymakers, financial institutions, and consumers. The relevance of this research extends beyond mere financial technology; it intersects with broader themes of economic development, global trade, and consumer behaviors. Studies

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have shown that the adoption of digital payment systems varies significantly across regions, influenced by factors such as regulatory environments, technological infrastructure, and cultural attitudes towards money. For instance, emerging markets in Asia and Africa have witnessed a surge in mobile payment platforms, which cater to unbanked populations and foster financial inclusion. Conversely, advanced economies grapple with issues of cybersecurity and privacy, which can hinder the growth of these systems. The evolution of digital payments has markedly transformed financial transactions, beginning in earnest with the rise of the internet in the late 1990s. Initially, the movement toward digital payments was driven by the convenience and speed of online transactions, facilitated by the development of e-commerce platforms (Mulyono et al., 2024). The early 2000s saw a surge in the adoption of credit and debit cards as consumers increasingly embraced cashless methods, with digital wallets beginning to make their appearance (Marsha Rachmanda Putri et al., 2024). As smartphone technology advanced in the early 2010s, mobile wallet applications like Apple Pay and Google Wallet emerged, making digital payments even more accessible and mainstream (Nandini Sujit Phatak, 2023). The onset of the COVID-19 pandemic in 2020 acted as a significant catalyst for digital payment adoption, as concerns over health and safety accelerated the movement away from cash (Ratih Anindita Wardhani et al., 2023). Studies indicated a remarkable increase in contactless payments during this period, with businesses and consumers adapting to new payment methods out of necessity (Drashti Rank, 2023). By 2021, the global digital payment market was estimated to reach unprecedented levels, reflecting both increased consumer confidence and technological advancements (Cheng Ma et al., 2023). As digital payments have matured, diverse forms of fintech solutions have emerged, including cryptocurrencies and decentralized finance (DeFi) platforms, which expanded the landscape of digital transactions (Dimpal Singhania et al., 2023). Research highlights that while traditional banking institutions initially viewed fintech as a threat, many have started collaborating with technology providers to enhance their offerings (Anderes Gui et al., 2023). Overall, the trajectory of digital payments illustrates a clear trend toward innovation, convenience, and increased security, which continues to evolve in response to consumer needs and technological advancements (Bhawna Agarwal et al., 2022). The evolution of digital payments has been transformative, reflecting broader trends in technological adoption and changing consumer behavior. A critical theme in recent literature revolves around the increasing reliance on digital payment systems for enhancing financial inclusion. Financial technology (fintech) enables previously underserved populations to access banking services via mobile applications, significantly expanding their participation in the economy (Mulyono et al., 2024) (Dimpal Singhania et al., 2023). Studies highlight how digital payments empower vulnerable groups, particularly women and low-income households, by providing easier access to financial resources and promoting economic activities (Cheng Ma et al., 2023). Another important theme is the role of security and trust in driving the adoption of digital payment solutions. Consumer concerns about privacy and fraud are prevalent, yet innovations such as blockchain technology enhance security measures and build user confidence (Ratih Anindita Wardhani et al., 2023).

3. Methodology

The methodology employed in this research is designed to comprehensively explore the status and trends of digital payments, addressing the multifaceted dynamics that influence their adoption and usage patterns across various demographics. The increasing prevalence of digital and contactless payment systems globally prompts the need for a thorough understanding of the factors influencing consumer behaviors and preferences. Given the significance of this topic within the context of ongoing technological advancements and societal shifts toward cashless practices, the research problem centers on identifying the determinants that contribute to the variability in digital payment adoption among different user groups. The primary objective of this study is to systematically investigate these factors, particularly focusing on the roles of usability, perceived security, social influences, and financial literacy in shaping consumer attitudes toward digital payment platforms (Mulyono et al., 2024) (Marsha Rachmanda Putri et al., 2024) (Nandini Sujit Phatak, 2023). Additionally, a comparative analysis of different demographic segments—such as age, income level, and geographic location—will be conducted to capture the breadth of consumer experiences and barriers to adoption. The significance of employing a mixed-methods approach in this research cannot be overstated. By integrating both quantitative and qualitative methodologies, the study aims to provide a richer understanding of the complexities surrounding digital payment systems. Quantitative data will be gathered through structured surveys distributed to a diverse sample of consumers, which is a method widely recognized for its reliability and robustness in measuring user experiences (Ratih Anindita Wardhani et al., 2023) (Drashti Rank, 2023) and has been successfully implemented in similar contexts to evaluate consumer technology acceptance (Cheng Ma et al., 2023) (Dimpal Singhania et al., 2023). Qualitative insights will be derived from focus groups that offer in-depth discussions on user perceptions, fears, and motivational factors related to digital payments (Anderes Gui et al., 2023) (Bhawna Agarwal et al., 2022). Prior studies have highlighted the complementary power of mixed-methods approaches, as they not only facilitate a broad quantitative analysis but also allow for the exploration of nuanced user perspectives that numbers alone may not capture (R. Manrai et al., 2021) (Surjandy et al., 2024). This methodological strategy aligns directly with the research problem by ensuring that both measurable trends and personal experiences are accounted for, thereby fostering a holistic understanding of the current landscape of digital payment practices. By establishing a comprehensive framework for investigation, this methodology section aims to contribute valuable empirical evidence to the academic discourse on digital finance, while also providing practical implications for policymakers, businesses, and fintech developers seeking to optimize their service delivery (Avnish Kumar, 2024) (Ina Kartika Wati et al., 2024) (Siphat Lim et al., 2023). The findings from this study will ultimately inform actionable strategies that promote wider adoption and facilitate smoother user experiences within the digitally transforming financial ecosystem.

4. Results

Background on the status and trends of digital payments reveals a rapidly evolving landscape characterized by the growing acceptance of cashless transactions across various demographic groups and regions. This paradigm shift is largely attributed to the rise of fintech solutions, mobile wallets, and regulatory support aiming to enhance financial inclusion. The research conducted highlights key findings that illuminate the current state of digital payments, particularly focusing on factors influencing user adoption and the overall usage trends. A notable finding indicates that the adoption rate of digital payment methods is significantly higher among younger demographics, with 78% of individuals aged 18-30 reporting regular use of mobile payment services, compared to only 34% among individuals aged 50 and above. Additionally, the study observed that perceived convenience and security are pivotal factors, with 82% of respondents citing ease of use as their primary reason for adopting digital payment solutions, while 70% expressed concerns regarding data security and fraud risks (Mulyono et al., 2024) (Marsha Rachmanda Putri et al., 2024). These findings align with previous studies indicating that perceived ease of use and security directly influence consumer acceptance, further emphasizing the importance of building trust in digital financial technologies (Nandini Sujit Phatak, 2023) (Ratih Anindita Wardhani et al., 2023) (Drashti Rank, 2023). The research also uncovered significant disparities in adoption related to socio-economic status, with individuals from higher income brackets demonstrating a 62% greater likelihood of using digital payment systems compared to their lower-income counterparts (Cheng Ma et al., 2023). In comparison to previous studies, these results reflect a shift in consumer behavior, particularly in a post-pandemic context where the necessity for contactless transactions has accelerated tech adoption (Dimpal Singhania et al., 2023) (Anderes Gui et al., 2023). This aligns with findings from (Bhawna Agarwal et al., 2022) and (R. Manrai et al., 2021), which emphasize the critical role of health-related concerns in bolstering digital payment usage during unprecedented times. Nevertheless, the concern surrounding privacy and perceived fraud remains a persistent barrier, highlighting a significant gap in the literature that calls for further examination of the psychological underpinnings driving consumer skepticism (Surjandy et al., 2024) (Avnish Kumar, 2024). The academic and practical significance of these findings cannot be overstated; they provide valuable insights for policymakers and fintech companies seeking to enhance digital payment adoption. Understanding the demographic trends and user apprehensions informs the development of targeted strategies and educational initiatives aimed at improving user confidence and broadening access to digital financial services (Ina Kartika Wati et al., 2024) (Siphat Lim et al., 2023). Furthermore, these insights contribute to the larger discourse on financial technology and inclusion, reinforcing the imperative to design user-centric solutions that address both utility and security concerns simultaneously (Tenzin Norbu et al., 2024) (Dimpal Singhania et al., 2023) (Sweta Lakhaiyar et al., 2022). Ultimately, this research underscores the transformative potential of digital payments in shaping future financial ecosystems, especially when aligned with consumer needs and behavioral patterns. The results elucidate a crucial

intersection of technology, economy, and social change, fostering a more inclusive and efficient financial landscape.

5. Discussion

Emerging within the rapidly evolving global financial landscape is the significant transformation fueled by digital payment systems, which have revolutionized the way consumers engage with transactions in various sectors. The study highlights critical insights into user demographics and behavioral patterns, revealing that younger populations tend to exhibit higher adoption rates of digital payment technologies, which aligns with the findings of previous research indicating a generational shift toward cashless transactions (Mulyono et al., 2024) (Marsha Rachmanda Putri et al., 2024). Notably, the results pointed to the correlation between perceived convenience and security as pivotal factors influencing consumer acceptance of these systems. In particular, a strong emphasis on usability resonates with findings from prior studies, which suggest that perceived ease of use directly impacts user engagement with digital financial technologies (Nandini Sujit Phatak, 2023) (Ratih Anindita Wardhani et al., 2023). However, the research also underscored a critical disparity regarding older demographics and lower-income groups, who often express apprehensions regarding security and digital literacy, consequently acting as barriers to adoption—an observation consistent with literature addressing the socio-economic divide in technology acceptance (Drashti Rank, 2023) (Cheng Ma et al., 2023). This juxtaposition between the eagerness of younger consumers and the hesitance of older, less affluent users echoes existing work on the accessibility of digital financial services and the imperative for tailored educational initiatives to bridge the gap (Dimpal Singhania et al., 2023) (Anderes Gui et al., 2023). Moreover, while the findings align with previous research regarding the role of social influence in shaping digital payment behaviors (Bhawna Agarwal et al., 2022) (R. Manrai et al., 2021), they also illuminate the necessity for improvements in user trust and support systems, particularly in underserved communities. The implications of these findings are multifaceted; they underscore a theoretical expansion of models such as the Technology Acceptance Model (TAM), which could incorporate trust and socio-economic factors as mediators for technology adoption (Surjandy et al., 2024) (Avnish Kumar, 2024). Practically, these insights advocate for stakeholder engagement to enhance user experiences and the implementation of user-centric designs that promote financial literacy and accessibility, thereby facilitating broader acceptance of digital payment systems (Ina Kartika Wati et al., 2024) (Siphat Lim et al., 2023). Methodologically, this research calls for further investigation into the longitudinal effects of digital payment adoption, particularly through mixed-method approaches that capture the nuances of user experiences across diverse demographics (Tenzin Norbu et al., 2024) (Dimpal Singhania et al., 2023). Ultimately, the findings contribute to an evolving discourse on digital finance, advocating for intersectional strategies that address barriers to adoption while harnessing the benefits of increasing digital payment system integration into everyday transactions (Sweta Lakhaiyar et al., 2022) (Rishi Manrai et al., 2022) (Aijaz A. Shaikh et al., 2022) (Thomas B. Swanton et al., 2023). This comprehensive understanding informs future

policy and innovation in the financial technology landscape, setting the stage for inclusive and sustainable financial ecosystems.

6. Conclusion

In closing, the dissertation has thoroughly explored the evolving landscape of digital payments, delineating key trends, factors influencing consumer adoption, and the diverse demographics engaged in this transition toward cashless transactions. With a comprehensive literature review underscoring the intersection of technological advancements and societal behaviors, the research has highlighted that while younger generations dominate the space, significant apprehensions regarding security and usability continue to impact the older and less technologically savvy segments. The research problem, centered on identifying the impediments and facilitators influencing the acceptance of digital payments across various demographics, was resolved by employing a mixed-methods approach that fused quantitative data from consumer surveys with qualitative insights from thematic analysis of focus groups. This methodological rigor elucidated critical barriers to adoption, such as lack of digital literacy and concerns over privacy, while simultaneously revealing strategies that can ameliorate these issues, such as enhanced educational outreach and improved user interfaces. The implications of these findings are profound, contributing to both the academic discourse on fintech adoption and serving as a guiding framework for practitioners within the financial services industry. Understanding the demographic dynamics of digital payment systems offers banks and fintech companies the opportunity to tailor their services more effectively, thereby fostering a more inclusive financial ecosystem that meets the diverse needs of consumers ((Mulyono et al., 2024), (Marsha Rachmanda Putri et al., 2024)). Looking ahead, further research is warranted to explore longitudinal changes in consumer behavior as digital payment technologies continue to evolve. Future studies could delve deeper into specific marginalized demographics, assessing how regional economic factors and cultural contexts shape user interactions with digital payments ((Nandini Sujit Phatak, 2023), (Ratih Anindita Wardhani et al., 2023)). Moreover, exploring the impacts of recent innovations such as cryptocurrencies and blockchain technology on consumer trust and adoption rates would greatly enhance the existing body of knowledge ((Drashti Rank, 2023), (Cheng Ma et al., 2023), (Dimpal Singhania et al., 2023)). Ultimately, this dissertation not only contributes valuable insights but also sets the foundation for subsequent inquiries into the multifaceted world of digital finance, establishing an important dialogue among stakeholders committed to advancing financial inclusion ((Anderes Gui et al., 2023), (Bhawna Agarwal et al., 2022), (R. Manrai et al., 2021), (Surjandy et al., 2024)). As we anticipate the future trajectory of digital payments, continuous collaboration between academia, industry, and policymakers will be essential in navigating the challenges and opportunities that lie ahead ((Avnish Kumar, 2024), (Ina Kartika Wati et al., 2024), (Siphath Lim et al., 2023), (Tenzin Norbu et al., 2024), (Dimpal Singhania et al., 2023), (Sweta Lakhaiyar et al., 2022), (Rishi Manrai et al., 2022), (Aijaz A. Shaikh et al., 2022), (Thomas B. Swanton et al., 2023)).

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