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Digital Payments and Middle-Class Dependency on the Unorganised Sector: Insights from Urban and Semi-Urban Chennai

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Abstract-- In India's evolving economic environment, the unorganised sector remains vital in catering to the daily needs of the middle-class population. This study explores the extent of middle-class dependency on unorganised vendors and examines how the adoption of digital payment systems has transformed these interactions. Focused upon urban and semi-urban areas of Chennai, the research investigates key factors such as convenience, accessibility, and digital literacy that influence consumer choices. It also addresses common challenges like unreliable internet connectivity, transaction errors, and trust issues when transacting with small-scale vendors. Primary data is collected through structured surveys and interviews with middle-class households to assess usage patterns, payment preferences, and digital barriers. Additionally, the study compares digital payment adoption across different age and income groups. By shedding light on the integration of digital payments within the informal economy, the research provides meaningful insights into the financial behaviour of the urban middle class and suggests practical measures to enhance digital inclusion in the unorganised sector.

Keywords-- Digital Payments, Middle Class, Unorganised Sector, Consumer Behaviour, Informal Economy, Urban and Semi-Urban Chennai.

I. INTRODUCTION

The burgeoning dependency of the middle class on unorganised sectors is a pivotal force shaping the economic landscape of urban and semi-urban areas, particularly in rapidly developing cities such as Chennai. Despite their informal characteristics, unorganised sectors play an indispensable role in provisioning essential goods, services, and employment opportunities, thereby sustaining the daily lives of a significant segment of the population. This research project aims to undertake a comprehensive examination of the intricate dynamics through which middle-class consumers engage with unorganised vendors and service providers, thereby elucidating the economic relationships that underlie this dependency.

In recent years, India has witnessed a notable shift towards digital payment technologies, which have been instrumental in revolutionising financial transactions across the nation. While the traditional cash-based practices that dominate unorganised markets have provided a familiar framework for transactions, the advent of digital payments brings forth promises of enhanced convenience, transparency, and financial inclusion. However, the adoption of these digital payment systems within the unorganised sector reveals an uneven landscape, heavily influenced by critical factors such as technological literacy, consumer trust, and infrastructural challenges.

By exploring the interplay between the middle class's economic engagement with unorganised markets and the emerging role of digital payments, the research aims to uncover the critical enablers and barriers shaping this transition. Insights from this analysis will be valuable for policymakers, financial institutions, and technology developers seeking to foster inclusive economic growth, enhance digital adoption, and strengthen the unorganised sector's integration into the formal economy.

II. OBJECTIVES

1. To study middle-class dependency on unorganised sectors and the growing use of digital payments in India.
2. To understand the level of reliance of middle-class households on unorganised sectors for goods and services in urban and semi-urban Chennai.
3. To analyse the influence of digital payments on purchase behaviour within unorganised markets.
4. To identify the challenges and barriers faced by consumers when making digital transactions in the unorganised sector.
5. To compare digital payment usage trends among different age groups and income levels within the middle-class population.



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III. RESEARCH METHODOLOGY

1. *Population:* The population for this study comprises students, retired individuals, employed, and unemployed people.
2. *Sample Size:* The sample size for this study is 103 respondents.
3. *Sampling Technique:* Simple Random Sampling has been used.
4. *Data Collection:* The data for this study has been collected from both primary and secondary sources.
5. *Primary Data:* Collected through a structured questionnaire administered via Google Forms.
6. *Secondary Data:* Collected from journals, research papers, articles, and reports.

IV. REVIEW OF LITERATURE

1. Ma, Tingxi. (2025). Rethinking the Role of Informality as a Barrier to Financial Inclusion: Insights from an Indian Urban Setting. *South Asia: Journal of South Asian Studies*, 1–22.

Ma (2025) explores the role of informality as a barrier to financial inclusion in an urban Indian context. The study challenges conventional views that informal economic activities obstruct financial inclusion, offering nuanced insights into how informality intersects with access to formal financial services. It sheds light on the complexities middle-class consumers face in navigating financial inclusion pathways in informal urban settings.

2. Anjaneyulu, D., & Gurumurthy, M. (2025). *DIGITAL PAYMENT SYSTEMS IN INDIA*. Laxmi Book Publication.

Anjaneyulu and Gurumurthy (2025) discuss the growth of digital payments in India, focusing on UPI's role in enhancing financial inclusion and economic activity, including challenges like infrastructure and trust.

3. Sankararaman, G., Suresh, S., Rengarajan, V., & Thirumagal, P. G. (2025). Fintech Adoption In Urban India: A Study of Usage Patterns and Preferences in Chennai. *Advances in Consumer Research*, 2(4), 2367-2373.

Sankararaman et al. (2025) study fintech adoption in urban India, focusing on usage patterns and preferences in Chennai.

The research highlights factors driving fintech use, such as convenience and security, while identifying barriers like digital literacy and trust issues.

4. Devi, S. (2025). Impact of Digitization and UPI on Small Informal Businesses in India. *Journal of Advanced Management Studies*, 2(2), 1-4. Devi (2025) examines the impact of digitization and the Unified Payments Interface (UPI) on small informal businesses in India. The study finds that digitization improves transaction efficiency and transparency, though challenges like digital literacy and infrastructure gaps remain prominent.
5. Arendse, E., & Van Den Berg, C. (2024, May). Exploring the barriers to digital financial inclusion amongst businesses in the informal sector. In *2024 IST-Africa Conference (IST-Africa)* (pp. 1-11). IEEE. The study uses interviews and the UTAUT framework to understand adoption challenges of digital financial services. Findings show that lack of digital literacy, weak infrastructure, cash preference, and trust issues hinder FinTech usage.
6. Bajaj, T. K. D. (2024). An Exploratory Study on the Financial Inclusion of Digitalisation of the Indian Economy on the Rural and Urban Sectors in India and their role in meeting Macroeconomic Goals. *International Journal of Social Science and Economic Research*, 9(10), 4224. Bajaj (2024) presents an exploratory study on the role of digitalization in enhancing financial inclusion in both rural and urban Indian sectors, connecting it to broader macroeconomic goals. The research underscores digital financial services as catalysts for inclusive growth while pointing out persistent challenges in adoption.
7. Kumar, R. G., & Rajeswari, S. (2024). Mobile money as a catalyst for digital financial inclusion. Kumar and Rajeswari (2024) discuss mobile money as a significant catalyst for digital financial inclusion, emphasizing its role in increasing access to financial services for underserved populations and promoting economic participation.
8. Mathews, F., & Bhosale, A. (2021, September). Understanding the factors influencing street vendors towards use of digital payment systems in India. In *2021 9th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO)* (pp. 1-7). IEEE.

Mathews and Bhosale (2021) investigate factors influencing street vendors in India to adopt digital payment systems. They highlight motivation driven by convenience and safety but also emphasise concerns such as lack of awareness, technical difficulties, and resistance to change as barriers to adoption.

9. Chatterjee, A. (2020). Financial inclusion, information and communication technology diffusion, and economic growth: a panel data analysis. *Information Technology for Development*, 26(3), 607–635. Chatterjee (2020) examines the relationship between financial inclusion, the diffusion of information and communication technology (ICT), and economic growth through panel data analysis. The study highlights how the integration of ICT infrastructure significantly promotes financial inclusion, which in turn drives economic development, especially in emerging economies like India. It emphasises the role of mobile banking and digital payments in expanding access to financial services for underserved populations.
10. Krishna, S. (2020). Digital identity, datafication and social justice: understanding Aadhaar use among informal workers in south India. *Information Technology for Development*, 27(1), 67–90. Krishna (2020) studies the use of Aadhaar digital identity among informal workers in South India, focusing on issues of datafication and social justice. The research highlights how digital identity shapes access to services but also raises concerns around privacy and inequality.

V. DATA ANALYSIS AND INTERPRETATION

The data collected from 103 respondents in urban and semi-urban Chennai provides significant insights into the continued reliance of the middle-class on the unorganised sector and the evolving role of digital payments in shaping their purchasing behaviour. The results have been organised and interpreted under five thematic segments corresponding to the survey design.

5.1 Buying Patterns and Dependency on the Unorganised Sector

5.1.1 Overall Dependency Level:

The survey findings reveal a strong and sustained dependency of middle-class consumers on unorganised sector vendors.

A vast majority of respondents reported purchasing from such vendors either often or sometimes, indicating that these establishments remain integral to day-to-day household consumption.

5.1.2 Types of Purchases Made:

Essential goods and services dominate this engagement. Groceries are the most frequently purchased products from the unorganised sector, followed closely by household services and then street food. These categories highlight that the role of the unorganised sector extends beyond occasional convenience — it continues to be a primary channel for fulfilling everyday needs.

5.1.3 Reasons for Preference:

When exploring why these consumers choose unorganised vendors, convenience of location emerged as the foremost factor. Additionally, respondents emphasised affordability, personal relationships with familiar vendors, and the quickness of transactions. These reasons demonstrate that decisions are driven by both functional advantages and social familiarity.

5.1.4 Purchase Frequency for Essentials:

Nearly half of the participants agreed that they regularly purchase essential items from these vendors, further reinforcing this dependency.

5.1.5 Conclusion:

Overall, the results in this segment establishes that the unorganised sector remains deeply embedded in the lifestyle of the middle-class due to its accessibility, affordability, and trust-based relationships that organised retail outlets often lack.

5.2 Influence of Digital Payments on Buying Behaviour

5.2.1 Mode Adoption:

Digital payments have become a mainstream mode of transaction with unorganised vendors. A large share of respondents use digital payments often or always, reflecting high adoption in urban and semi-urban settings. UPI dominates this adoption, confirming its position as a widely accessible and preferred platform.

5.2.2 Vendor Selection Based on Accepted Payment Methods:

A notable finding is that digital payment availability positively influences purchase decisions. Many respondents stated they were more likely to buy from a vendor who accepts digital payments.



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This indicates that payment modernisation provides unorganised vendors with a competitive edge.

5.2.3 Spending Behaviour:

Although only a quarter of respondents explicitly choose vendors because of digital payment acceptance, the integration of digital payments has contributed to maintaining or even increasing the frequency of purchases from these vendors. Additionally, around half the participants reported spending more per transaction when paying digitally.

5.2.4 Conclusion:

In summary, digital payments are not merely a transactional change — they are enhancing vendor competitiveness and enabling higher spending, thereby strengthening economic flows into the unorganised sector.

5.3 Challenges Faced in Digital Payment Adoption

5.3.1 Connectivity & Technical Issues:

Despite wide acceptance, several operational limitations still disrupt seamless digital payment usage. Poor network connectivity is the most widespread challenge, which directly affects transaction success in open market areas and street vending locations.

5.3.2 Infrastructure & Vendor Limitations:

Respondents also reported concerns such as delayed confirmations, lack of vendor infrastructure (absence of QR codes), and limited acceptance among smaller vendors.

5.3.3 Security Concerns:

Security-related apprehensions exist, though only a minority view fraud risk as a major deterrent.

5.3.4 Transaction Failure Impact:

A significant behavioural outcome of these issues is the abandonment of purchases due to transaction failures. Nearly half of the respondents have either frequently or occasionally walked away from purchases when digital transactions failed.

5.3.5 Conclusion:

While overall trust in digital payments is high, the challenges identified indicate that technical infrastructure and transaction reliability must improve to sustain and grow digital payment usage in the unorganised sector.

5.4 Perceived Trends and Broader Impact

5.4.1 Demographic Influence:

Respondents believe that digital payment adoption is strongly influenced by demographics, especially age and income. Younger consumers are viewed as significantly more willing to transact digitally, while higher-income households are perceived to show greater preference for UPI and card-based payments.

5.4.2 Market Competitiveness:

Importantly, the majority of respondents agreed that digital payments have enhanced the competitiveness of unorganised vendors against large organised retail chains.

5.4.3 Conclusion:

This segment highlights that digital payments are recognised not only as a personal convenience but also as a structural shift improving market equality.

5.5 Expectations and Consumer Recommendations

5.5.1 Infrastructure Improvement:

Respondents requested better internet connectivity in market spaces.

5.5.2 Cost Considerations:

Zero or reduced transaction charges for small vendors were recommended.

5.5.3 Vendor Awareness & Training:

Training and awareness for vendors unfamiliar with digital interfaces were encouraged.

5.5.4 Ease of Use:

Simpler, faster payment options with fewer chances of failure were demanded.

5.5.5 Trust & Security:

Security reassurance through visible protective measures is expected.

5.5.6 Incentives:

Consumers favour incentives such as cashback and support for low-value transactions.

5.5.7 Conclusion

These suggestions show consumers are willing to continue using digital payments, provided convenience and security barriers are eliminated.



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The combined findings confirm that:

- ✓ The middle-class continues to rely heavily on the unorganised sector for essential daily needs
- ✓ Digital payments have become a major enabler in this relationship
- ✓ Yet operational barriers still restrict full usage and convenience

Digital payments are not replacing traditional market structures; instead, they are strengthening and modernising them. Continued improvements in connectivity, vendor capability, and reliability can further elevate the economic participation of these vendors and enhance convenience for consumers.

VI. FINDINGS

1. Middle-class households rely heavily on unorganised vendors for daily needs due to convenience and affordability.
2. Digital payments, especially UPI apps, are widely adopted, with younger groups showing higher usage.
3. Digital payment acceptance by vendors positively influences consumer choice and purchase frequency.
4. Key challenges include poor connectivity, failed transactions, and lack of transparency in vendor-linked accounts.
5. Adoption trends vary across age and income groups, with younger and higher-income respondents adapting faster.

VII. SUGGESTIONS

1. Promote digital literacy programs for consumers and vendors, especially among older groups.
2. Encourage vendors to use official business-linked UPI IDs for greater trust.
3. Improve internet and payment infrastructure to reduce failed transactions.
4. Strengthen consumer protection and quick grievance mechanisms for digital payments.
5. Provide government and fintech incentives to vendors adopting digital payments.
6. Integrate digital payments with loyalty programs and micro-credit facilities for wider benefits.

VIII. CONCLUSION

The study highlights the strong reliance of middle-class households on unorganised vendors and the growing role of digital payments in shaping their purchase behaviour. While digital adoption has improved convenience, transparency, and consumer choice, challenges such as trust issues, connectivity problems, and digital literacy gaps remain. Addressing these barriers through awareness, infrastructure support, and policy initiatives can enhance digital inclusion, strengthen the unorganised sector, and foster sustainable economic growth in urban and semi-urban Chennai.