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Adaptation of Digital Payment System among Rural Consumers in Enhancing the Performance of the MFI

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Abstract

This research investigates the integration of digital payment systems among rural consumers to enhance the performance of microfinance institutions in Thanjavur district. The findings reveal a significant acceptance of digital payment systems by both Microfinance Institutions (MFIs) and their consumers, highlighting the ease of use and suitability of these systems. Moreover, various facilities such as Automated Teller Machines (ATMs), internet payments, debit and credit cards, and mobile apps are gaining traction. This underscores the urgency for financial institutions to further promote digital access in rural areas and improve their performance while empowering consumers with effective financial knowledge.

Keywords: Digital Payment, Rural Consumer, Consumer Adaptation, MFI

Introduction

The emergence of Information and Communication Technology (ICT) has profoundly impacted both individuals and organizations alike. The rapid expansion of digital capabilities has swiftly transformed various management domains, including marketing, operations, finance, and overall organizational performance. Particularly within the banking and financial services sector, there has been a notable shift from cash-based transactions to digital payments due to the widespread adoption of ICT. This transition has alleviated numerous challenges associated with traditional brick-and-mortar transactions, such as long queues, time-consuming processes, and overcrowded environments.

The introduction of Electronic Payment Systems (EPS) has revolutionized the interaction between consumers and service providers, seamlessly transitioning from physical branches to digitized operations. Key benefits of digitized transactions include reduced queues, enhanced convenience, core banking solutions facilitating location-independent banking, decreased reliance on cash transactions, and efficient deployment of staff to serve customers. Furthermore, digitization has brought about significant improvements in transaction security, accessibility, transparency, speed, cost-effectiveness, value-added services, and tracking

mechanisms, fostering personalized engagement and meticulous documentation processes. The adoption of EPS has propelled banks towards professionalization and operational standardization, leading to a customer-centric approach and strengthened customer relationships. EPS encompasses a multitude of channels, including debit cards, credit cards, e-cash transactions, ATMs, and Point-of-Sale (POS) terminals, enabling institutions to enhance operational efficiency and financial performance, particularly in Newly Industrialized Economies (NIEs). As Briggs and Brooks (2011) assert, digital payment is facilitated by financial institutions and conducted entirely through digital operations. Peter and Babatunde (2012) conceptualize digital payment as money transfer conducted via internet-based operations, while Adeoti and Osotimehin (2012) define it as online payment through digital means. Digital payment encompasses a range of platforms and applications for conducting transactions digitally.

Popular Digital Payment Methods

1. **Plastic Cards:** These cards enable account holders to access their funds through automated teller machines (ATMs) using a secure password. There are two main types of cards: debit cards, issued to all account holders, and credit cards, which are issued upon request and approval based on eligibility criteria.
2. **UPI (Unified Payment Interface):** UPI facilitates fund transfers via mobile apps, allowing users to transfer funds between different accounts using UPI-enabled apps such as BHIM, SBI UPI, and PhonePe.
3. **Mobile Wallets:** Mobile wallets provide a digital cash storage solution for various transactions. Users can download wallet apps such as Google Pay and Jio Money, link them to their bank accounts, and utilize them for digital payments.
4. **Internet Banking:** Internet banking offers several popular transaction methods, including National Electronic Fund Transfer (NEFT), Real Time Gross Settlement (RTGS), Electronic Clearing System (ECS), and Immediate Payment Service (IMPS). These platforms allow individuals or institutions to conduct money transfers through their bank's official website interface.
5. **Mobile Banking:** Customers can download their bank's mobile application and use it to conduct transactions. Mobile banking requires a smartphone with an Android application capability.

The Integration of Microfinance Institutions (MFIs) with Electronic Payment Systems

MFIs are in the nascent stages of implementing digital payments, akin to public and private sector banks. The impetus provided by demonetization and the Covid-19 pandemic has bolstered efforts to fortify payment infrastructure, particularly reaching the last consumer in rural markets. This momentum has persisted even post-pandemic. Presently, MFIs are leveraging Aadhar Enabled Payment System (AePS), Unified Payments Interface (UPI) platforms like Google Pay and PhonePe, and the National Automated Clearing House (NACH) for their primary digitized payment systems.

Despite significant progress in extending digital payment systems to micro borrowers, predominantly in rural India, challenges remain. While there is a plethora of Android-based and customized digital transmission options, smartphone penetration in rural areas, especially among women, remains limited. Additionally, issues such as inadequate internet connectivity, low financial literacy, gender disparity, and inequality hinder rural users' access to digital payment systems. The loan disbursement process, from registration to disbursement, remains predominantly non-digital, with less than 10 percent of loan payments and repayments conducted digitally.

Although digital solutions offer holistic benefits at both consumer and company levels, they pose a significant cost burden for many small-sized MFIs. Building a digital platform may be financially unfeasible for them. As a proactive approach, small MFIs can consider partnering with innovative fintech service providers. Three viable options include third-party EMI solutions, networking models through agents, and digital models based on added mobile phone features.

1. **Third-Party Agent Networking Model:** Small MFIs can explore partnership opportunities with digital financial service providers to leverage their extensive network of agents. This collaboration allows consumers to conduct banking transactions with the assistance of third-party agents, reducing reliance on physical brick-and-mortar branches. Users can perform tasks such as deposits, savings, loan repayment, and access relevant information through these agents.
2. **Cash Management Solutions with Digital Financial Service Providers:** A significant portion of MFIs' operations involves daily cash collection activities. These collections typically occur multiple times a month at various levels. Incorporating digitization into these processes can significantly reduce time and costs, particularly at the branch level. MFIs can capitalize on this opportunity by transitioning to cash-lite transactions, depositing their daily collections at nearby cash drop points.
3. **Mobile Phone Features-Based Payment Options:** Another option for MFIs is the implementation of UPI. UPI offers fast and secure transactions accessible via smartphones and feature-based phone systems. However, due to limited smartphone availability and gender disparities, adoption of this option among microfinance users is low. To address this, MFIs must focus on empowering these underserved markets through awareness campaigns, building trust in technology-based operations, and addressing financial literacy challenges. Aggressive engagement with potential and existing consumers, along with training and capacity building initiatives, is crucial for future growth.

The Study thus Addressed the Following Research Questions

- Whether the EPS has significantly empowered the rural people in and around Thanjavur District?
- What are all factors influencing EPS promotion and usage in the rural setting of a financial service provider?
- What are all the factors that influence the assessment of customer satisfaction level among rural customers?

I. Theoretical Framework and Hypothesis

Factors Influencing Online Banking Adoption

This paper delves into the factors influencing online payments and related transactions, shedding light on the expanding awareness and implementation of online financial transactions by financial institutions. The study results reveal a significant positive correlation ($p < .01$) between the utilization of online payment modes and adoption, indicating a positive effect on the use of Electronic Payment Systems (EPS). Despite a notably small sample size, the study outcomes have broader implications (Rahmath Safeena, Hema Date, and Abdullah Kamani, 2011).

The ease of use and suitability of transactions are heavily influenced by financial institutions' websites and mobile apps, reducing the complexity and cost-effectiveness of direct transactions (Akila Sundara & Amila Perera, 2018). Customer attitude towards the inclination and adoption of electronic transactions is crucial for the perceived behavioral control in using e-banking services (Dhanushanthini Ajanthan, 2018).

The strategic business outlook of banks has significantly evolved, emphasizing cost reduction and early adoption of technology to deliver superior customer value. However, the perceived benefits of electronic transactions also pose risks, including errors and threats to traditional brick-and-mortar banking, especially for rural banks. New generation banks and financial institutions are embracing digital payments culture holistically, engaging consumers through innovative channels tailored to their needs and expectations (Skikanth and Dr. Kanakipathi Srinivasa Rao, 2013).

Customer satisfaction with digital payments is crucial for enhancing operations and cross-selling opportunities through internet-enabled channels. Microfinance institutions (MFIs) must continuously strive to deliver value and satisfaction amid stiff industry competition, necessitating diligence in keeping abreast of fast-changing technology (Dr. A. Vinayagamoorthy & M. Ganesan, 2015). The adoption of e-banking hinges on bolstering telecom infrastructure, consumer education, and ensuring security and privacy (SaviourLusaya and Bornwell Kalumba, 2008).

Over the past two decades, rural consumers' satisfaction has significantly improved, emphasizing trustworthiness in terms of time, security, and convenience. Null hypotheses regarding trustworthiness were tested and accepted (Bhavesh J. Parmar, Darshan B. Ranpura, Chirag R. Patel, Nainesh Kumar, 2013).

III. Research Methodology

Research Design: This study is primarily empirical in nature and exploratory in approach. It aims to understand the adaption of the rural consumers in specific and try to assess the factors assessed while adopting in to the digital electronic payment system.

Scope of the Study: The scope of the study predominantly covers the rural consumers who resides in and around Thanjavur district alone. The potential target respondents will be identified and explored about the adaptation of electronic payment system by the MFIs in Thanjavur district. This information aims to help in understanding the performance of digital payment adaptation in rural areas.

Research Gap: The customer attitude towards electronic payment adaptation is fair and strong in the given location of the study. The present study will be used to identified the rural customer adaptation in Thanjavur district, Tamil Nadu. Customer attitudes toward electronic payment adaptation have been evolving over the years, driven by various factors such as convenience, security, and technological advancements. Here are some common attitudes that customers may have toward electronic payments: **Convenience:** Many customers appreciate the convenience of electronic payments, as they offer the ability to make transactions quickly and easily without the need for cash or physical cards. The ability to pay with a smartphone or other mobile device adds an extra layer of convenience, especially for on-the-go transactions. **Security Concerns:** While electronic payments offer convenience, some customers may express concerns about security. They may worry about the risk of fraud, identity theft, or unauthorized access to their financial information. However, advancements in encryption technology and security measures have helped to mitigate these concerns to a certain extent. **Trust in Technology:** Customers' trust in technology plays a significant role in their willingness to adopt electronic payments. Those who are more tech-savvy and comfortable with using digital platforms may be more inclined to embrace electronic payments, while others may be more hesitant due to a lack of familiarity or trust in the technology. **Preference for Traditional Methods:** Despite the convenience of electronic payments, some customers may still prefer traditional payment methods such as cash or checks. This could be due to personal preference, cultural factors, or simply a lack of access to digital payment infrastructure in certain regions. **Incentives and Rewards:** Many customers are motivated to use electronic payments by incentives and rewards offered by banks, credit card companies, and merchants.

Cashback rewards, discounts, and loyalty points can encourage customers to use electronic payment methods more frequently. **Accessibility and Inclusivity:** It's important to consider accessibility and inclusivity when promoting electronic payment adaptation. Some customers, such as the elderly or those with disabilities, may face challenges in using digital payment methods. Ensuring that electronic payment options are accessible to all customers is essential for widespread adoption. Overall, customer attitudes toward electronic payment adaptation vary depending on factors such as convenience, security, trust in technology, preferences, incentives, and accessibility. As technology continues to evolve and improve, and as society becomes increasingly digitalized, it's likely that electronic payments will continue to gain popularity among a broader segment of the population.

Sampling Design

Non-Probability Sampling technique is adapted here. The convenience sampling and snowball sampling has been adopted as a most suitable option to collect sample under that technique. Prior getting into the pilot survey, the survey questionnaire is framed and tested. After which, the survey questionnaire was distributed randomly to the rural consumers who access the MFI services in and around Thanjavur Districts with various service providers. The population is unknown. Hence, the sample size estimation is kept as 150 to 180 respondents has taken for research. The data collection for this study was completed over period of two months from March, 2023 to April, 2023.

Primary Data

It is a firsthand data collected directly from the field and it is a fresh one by nature. Also, it is collected mostly through personal interaction and survey from the customers using questionnaire.

Secondary Data

It is the data which is already published and readily available for use. It has various sources namely books, articles, newspapers, popular magazines, research journals, web portals, and so on.

Data Findings and Interpretations

The study aims to investigate the adoption of the electronic payment system among rural consumers to enhance the performance of microfinance institutions in Thanjavur district. The study population consists entirely of female respondents, reflecting the focus on MFI-related surveys. Among the respondents, one-third fall within the age group of 20-30 years, while 56 percent belong to the 31-40 age bracket, and 15 percent are aged between 41-50 years. A majority of the respondents are married women who play a significant role in household activities. Forty-one percent of them have received education beyond the higher secondary level, and a small percentage (1.3%) are engaged in farming or related agricultural activities. The majority (98%) are private employees, with an annual family income of less than Rs. 1,00,000, while a small percentage (0.7%) earn between Rs. 1,00,000 to Rs. 1,50,000 per annum.

All respondents possess Android mobile phones for banking and financial activities, participating in monthly payments either independently or with assistance. A significant portion (56%) become aware of digital payments through vernacular newspapers, while 13 percent gain awareness through television and FM radio. Thirty-one percent are informed about digital payments through social media. Additionally, 24 percent utilize the G-Pay app for their financial transactions. Seventy-six percent of respondents transact amounts up to Rs. 10,000 digitally, while the remaining 24 percent spend less than Rs. 10,000 using digital media. Eighty-five percent have been using digital transactions for the past three years, with the remaining 15 percent adopting digital payments in the last 1 or 2 years.

Seventy percent strongly believe that electronic payment systems save time, while 10 percent perceive it as a safer alternative to handling physical cash. Five percent indicate that digital payments reduce transportation expenses, and 15 percent find the option to pay at any time convenient. Checking balance ranks as the primary usage option for 10 percent of respondents. Ninety percent use electronic payment systems for ease of fund transfer, with 53 percent strongly agreeing that it is convenient for them. Sixty-three percent believe that electronic payment systems are more efficient than traditional methods, while 78 percent agree that payment services keep customer information private, with 12 percent expressing neutrality on the matter. Twenty-three percent express trust that electronic payment systems will not lead to transaction fraud, and 48 percent perceive low risk associated with electronic payments. Sixty percent express satisfaction with the service, while 7 percent remain neutral on this aspect.

Results and Discussion

Table 1.1 Factor Analysis Outputs

Factor Load	Interpretation
0.7 & Above	EPS is way better and efficient than the traditional system of business and commercial transactions. It is really proved as the significant factor among the 10 factors with highest loading. It clear indicates that the present system is more efficient that the traditional one. The next factor which has got high factor loading is promised delivery. The respondents have felt that the electronic payment services are more prompt. The third highest factor loaded was the scope for less fraudulent activity in the electronic payment system. The confidence of less fraud via electronic mode was highly acknowledged by the respondents.
Between 0.5 to & 0.6	The EPS saves time and highly cost effective. It is easier to conduct any financial transaction through EPS with ease and effective way.
Less than 0.5	EPS is convenient, less risky and convenient for use. Satisfied with the service provided by the electronic payment system.

Digital electronic payment system must concentrate on the rural areas and ensure the access through proper channels. The digital electronic payment system companies should find ways to popularize EPS through intensive campaigns, incentivize the digital payments and impactful advertisement in all the possible creative media communication. New promotional strategies should be demonstrated to sensitize the consumers about the gender disparity, gap and inequality and promote the empowerment in the grassroot level since the key target audience of MFIs are women alone. It is important to obtain feedback and give solutions to consumers then and there through the field service representatives, marketing staffs and T&D employees of MFIs to enhance their services to a greater extent. It is very important to build trust, security and user-friendliness in the payment mechanism and make the consumer to believe and trust the EPS option as a best choice to them. It is very important to conduct a interaction sessions in the grassroot level and measure the outcome and improve in upcoming days.

Conclusions

Today, the Electronic Payment System isn't just an option; it's a necessity. Service providers must acknowledge its significance and leverage its benefits. They should integrate it with existing channels to create a robust tool that delivers optimal value and enhances customer satisfaction, particularly for underserved populations. This integration also unlocks numerous cross-selling opportunities. The misconception that technology doesn't suit rural areas has been debunked by successful projects worldwide, such as m-pesa. Drawing inspiration from these models, microfinance institutions should nurture creativity and align their business models with technology-driven approaches in the years ahead.

Research Implications

The importance of “digital payment adaptation” in the Indian financial services industry has demonstrated significantly positive outcomes, with deep penetration that holds the potential to greatly enhance the lives of rural consumers. The results, both theoretical and practical, have been immensely beneficial. Theoretical insights have shed light on the significance of organizational capability and performance in digitally integrated transactions. Additionally, this research contributes to the literature on rural consumers’ attitudes and inclinations, addressing the proliferation of diffusion of innovation.

References

1. Ajanthan Dhanushanthini (2018) “Customers’ Adoption and use of E-Banking Services: A Study in Public Commercial Bank in Sri Lanka” *Global Journal of Management and Business Research*, Vol. 18, Issue No. 2, Version 1.0.
2. Grewel Dhruv, Levy Michael (2020). “Marketing Management”, 7th Ed., McGraw-Will Education, New York.
3. Johnson Robert, Clark Graham and Shulver Michael (2017). “Service Operations Management”, 4th Ed. Pearson Education Inc. New Delhi
4. Kotler Philip, Keller Lane Kevin, Koshy Abraham, Jha Mithileshwar (2016). “Marketing Management - A South Asian Perspective”, 14th Ed. Pearson Education Inc. New Delhi.
5. Kotler Philip, Keller Lane Kevin, Chernev, Sheth N. Jagdish and Shainesh (2023). “Marketing Management”, 16th Ed. Pearson Education Inc. New Delhi.
6. Lusaya Saviour and Kalumba Bornwell (2008). “The Challenges of Adopting the Use of E-Banking to the Customers: The Case of Kasama District Banking Customers”, *Journal of Applied Sciences and Research*, Vol. 12, Issue No. 4, August., Pp.250- 261.
7. Parmar J. Bhavesh J. Ranpura B. Darshana, Patel R. Chirag and Patel P. Naineshkumar (2013). “Rural Banking through Internet: A Study on Use of Internet Banking among Rural Consumers”, *Asian Journal of Management Research*, Vol. 12, No. 4, January.
8. Safeena Rahmath, Date Hema and Kammani Abdullah (2011). “Internet Banking Adoption in an Emerging Economy: Indian Consumer’s Perspective”, *International Arab Journal of e-Technology*, Vol. 2, No. 1, January.
9. Schiffman G. Leon, Wisenblit Joseph and Kumar Ramesh S. (2018). “Consumer Behaviour” 12th Ed. Pearson Education Inc. New Delhi
10. Schinler S. Pamela (2021). “Business Research Methods” 1st Ed. McGraw-Will Education (India) Pvt. Ltd. New Delhi.
11. Srikanth R., Kankipati and Rao Srinivasa (2013). “A study on customer’s Attitude towards e-banking in Hyderabad city”, *International Journal of Contemporary Issues*, Vol. 6, No. 4, January.
12. Sundara Akila and Amila (2018). “Factors Influencing On the Customer Adoption of Internet Banking System Special Reference to the Sampath Bank in Colombo District”, *International Journal of Scientific and Research Publications*, Vol. 8, Issue No. 2, February, ISSN. 2250-3153.
13. Writz Jochen, Lovelock Christopher, Chatterjee Jayanta (2017). “Services Marketing: People, Technology and Strategy” 8th Ed. Pearson Education Inc. New Delhi
14. Vinayagamorthy A. and Ganesan M. (2015) “A Study on Rural Consumer Perception towards Internet Banking Services in Salem District”, *International Journal of Applied Research*, Volume 1(12): Pp. 726-732.