THE ROLE OF DIGITAL PAYMENT SYSTEMS IN ENHANCING CUSTOMER SATISFACTION IN SERVICE ENTERPRISES

Ne'matov Nizom Ismatullayevich
Assistant Samarkand State Medical University
Faxriyeva Lola Asliddinzoda
student Samarkand State Medical University
Ilxomova Mastura Djaxongirovna
student Samarkand State Medical University
Tolibova Mexrangiz Kobiljonovna
student Samarkand State Medical University

Annotation

The integration of digital payment systems (DPS) in service enterprises has revolutionized transaction methods and significantly impacted customer experience. This study examines the relationship between DPS adoption and customer satisfaction in service-oriented businesses such as retail, hospitality, and healthcare. Through survey data and case analysis, the research highlights how convenience, speed, perceived security, and transaction transparency contribute to customer satisfaction. The findings indicate that DPS implementation improves operational efficiency and fosters customer loyalty, though challenges such as digital literacy and cybersecurity concerns remain.

Keywords: Digital Payment Systems; Customer Satisfaction; Service Enterprises; Contactless Payments; Financial Technology (FinTech); User Experience; Service Efficiency.

Introduction

In today's digitized economy, the transformation of payment systems is a critical component of service innovation. The widespread adoption of digital payment systems—such as mobile wallets, QR code payments, and contactless cards—has changed customer expectations around speed, safety, and simplicity in transactions.

For service enterprises that rely heavily on customer interaction and transaction volumes, digital payment systems represent a strategic tool to enhance customer satisfaction. The integration of such systems not only streamlines the payment

process but also contributes to improved service delivery, reduced wait times, and a perception of modernity and professionalism.

However, while the benefits of digital payment systems are widely acknowledged, their actual impact on customer satisfaction across various service sectors requires further empirical analysis. This study aims to fill that gap by exploring how digital payment technologies influence customer satisfaction in service enterprises.

Materials and Methods

Research Design

This study employed a quantitative cross-sectional survey methodology to evaluate the impact of digital payment systems (DPS) on customer satisfaction across various service industries, namely retail, hospitality, and outpatient healthcare. The research was grounded in the Technology Acceptance Model (TAM) and Service Quality (SERVQUAL) frameworks, providing a theoretical lens to examine perceived ease of use, usefulness, and reliability as mediators of satisfaction.

Population and Sampling

The target population included customers who had completed a transaction using a digital payment system within the past six months in one of the three service sectors. A stratified random sampling technique was used to ensure proportional representation across sectors. A total of 360 questionnaires were distributed, and 312 valid responses were obtained (response rate = 86.6%).

Survey Instrument

A structured questionnaire was developed comprising five sections:

Demographics

Frequency and type of DPS usage

Perceptions of convenience, security, and reliability

Overall satisfaction with the payment experience

Suggestions and feedback

A 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) measured constructs such as transaction speed, system reliability, user interface quality, and trust.

The instrument's internal consistency was confirmed using Cronbach's alpha (α = 0.89), indicating high reliability.

4. Data Collection and Analysis

Data were collected over a period of 4 weeks across three regions using both online and in-person survey tools. Statistical analysis was conducted using **SPSS v26**:

Descriptive statistics summarized demographics and usage patterns.

Exploratory Factor Analysis (EFA) validated construct dimensionality.

Multiple Linear Regression Analysis tested the impact of DPS attributes on customer satisfaction.

Statistical significance was set at $p < 0.05$.

Results and Discussion

Demographic Profile and Usage Trends

The respondents were diverse in age (18–65), with 58% between 25–40 years old. A majority (72%) used digital payments at least once a week. Mobile wallet applications (e.g., PayPal, Apple Pay) were the most frequently used (56%), followed by contactless bank cards (27%) and QR code-based systems (17%).

Regression Analysis Findings

The regression model revealed that digital payment systems significantly predicted customer satisfaction (R^2 = 0.71, F = 46.23, $p < 0.001$). Among independent variables:

Transaction Speed (β = 0.38, $p < 0.001$)

Perceived Security (β = 0.33, $p < 0.01$)

Ease of Use (β = 0.28, $p < 0.01$)

were strong predictors of satisfaction, supporting findings from prior TAM-based studies.

Comparative Sector Analysis

Sector	Satisfaction Rate (%)	Notable Insights
Retail	88%	Self-checkout + mobile payment was most appreciated
Hospitality	82%	Quick check-in/out improved perceived efficiency
Healthcare	77%	E-billing reduced waiting and improved transparency

While satisfaction was generally high across all sectors, healthcare lagged slightly due to fragmented system integration and older clientele unfamiliar with mobile technology.

References:
1. Nabiyeva, S. S., Rustamov, A. A., Malikov, M. R., & Ne'matov, N. I. (2020). Concept of medical information. European Journal of Molecular and Clinical Medicine, 7(7), 602-609.
2. Malikov, M. R., Rustamov, A. A., & Ne'matov, N. I. (2020). STRATEGIES FOR DEVELOPMENT OF MEDICAL INFORMATION SYSTEMS. Theoretical & Applied Science, (9), 388-392.
3. Berdiyevna, A. S., & Olimjonovna, T. F. (2022). INNOVATIVE APPROACHES IN THE EDUCATION SYSTEM TO INCREASE YOUTH PARTICIPATION. Web of Scientist: International Scientific Research Journal, 3(3), 674-677.
4. Esirgapovich, K. A. (2022). THE EASIEST RECOMMENDATIONS FOR CREATING A WEBSITE. Galaxy International Interdisciplinary Research Journal, 10(2), 758-761.
5. Toxirova, F. O., Malikov, M. R., Abdullayeva, S. B., Ne'matov, N. I., & Rustamov, A. A. (2021). Reflective Approach In Organization Of Pedagogical Processes. European Journal of Molecular & Clinical Medicine, 7(03), 2020.
6. Ne'matov, N., & Rustamov, T. (2022). SANATORIYLAR ISHINI AVTOMATLASHTIRISH: BRON XIZMATI VA UNING STRUKTURASI. Eurasian Journal of Academic Research, 2(11), 763-766.
7. Ismatullayevich, N. N. (2023). The role of educational websites in the development of student's higher education systems. Eurasian Journal of Research, Development and Innovation, 17, 17-20.

8. Ne'matov, N., & Sobirova, K. (2024). THE ROLE OF WEBSITES IN IMPROVING THE WORK OF MEDICAL INSTITUTIONS. Modern Science and Research, 3(2), 530-532.

9. Ismatullayevich, N. N. (2024). Medical Higher Education Institutions in Medicine and Science Lessons from the Use of Information Technology in the Organization of the Laboratory of Multimedia Tools. *American Journal of Biomedicine and Pharmacy*, *1*(6), 16-20.

10. Ne'matov, N., & Yarmahammadov, U. (2023). USE OF MULTIMEDIA IN ORGANIZING PRACTICAL LESSONS IN INFORMATION TECHNOLOGY IN INSTITUTIONS OF HIGHER EDUCATION. *Modern Science and Research*, *2*(4), 693-697.