Determinants of Satisfaction with Cashless Payments and Financial Apps

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Abstract. This paper examines the factors that influence user satisfaction and engagement with cashless payments and financial applications in Uzbekistan. The study, based on a sociological conducted in the Surkhandarya region, analyzes responses from over 400 individuals, considering socio-demographic factors such as age, education, employment, and income. The findings reveal that while a majority of respondents view digital payment systems positively, they still face significant barriers. These include underdeveloped infrastructure, limited digital literacy, and mistrust toward digital financial services among certain groups. Regression analysis shows that employment sector, education level, and income do not have a significant effect. The study's findings emphasize the importance of tailored educational programs and infrastructure upgrades to boost financial inclusion and digital service adoption. These initiatives are particularly crucial for older adults, less-educated individuals, and those employed in the informal sector.

Keywords: Fintech adaptation, socio-demographic factors, cashless payments.

1 Introduction

Uzbekistan began introducing bank cards in 2005. To expand their use, salaries of government and public sector employees were transferred to bank cards, gradually reducing cash payments. During the initial stage, users faced several challenges. Many retail outlets lacked payment terminals, while taxation issues encouraged entrepreneurs to prefer cash transactions. Another major problem was limited access to cash withdrawals, as many banks either did not provide this service or charged high commissions. As a result, prices often differed by payment method, cash, card, or bank transfer, despite legal restrictions. These problems negatively affected attitudes toward cashless payments.

Despite the conveniences offered by modern financial technologies, such as digital payments and mobile finance applications, part of the population still mistrusts these services. Therefore, this study aims to examine user satisfaction and identify the reasons behind public distrust of digital financial services.

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Consumer acceptance and satisfaction with digital payment systems have become an important focus of recent research. Trust, convenience, and perceived risk are widely recognized as key determinants of adoption [1]. Demographic factors such as age, education, and income also significantly influence intentions to use FinTech services, especially in developing and emerging markets [2].

Studies in India emphasize the importance of ease of use, security, and transaction speed in shaping satisfaction [3]. Similar findings are reported in Indonesia and Malaysia, where usability, performance, and trust are essential for retaining users [4]. Younger generations, particularly Gen Y and Gen Z, place greater value on branding, user experience, and interface design [5]. In Poland, payment choices are strongly influenced by transaction size and perceived security [6].

Research in South Korea shows that interface design, rewards, and speed are critical factors in mobile payment preferences [7]. Studies in Southeast Asia also highlight convenience and system functionality as important for continued use [8]. Meanwhile, evidence from Vietnam and Sub-Saharan Africa suggests that infrastructure and digital literacy significantly affect payment choices and FinTech adoption [9][10]. The rapid spread of contactless payments during the pandemic was additionally driven by hygiene, safety, convenience, and trust considerations [11] [12].

Although Uzbekistan has experienced rapid growth in digital payment usage over the past five years, a significant research gap remains. To date, no comprehensive study has systematically examined the factors influencing consumer satisfaction with FinTech payment services in the country. Filling this gap is important for understanding user behavior and improving service delivery in the Uzbek context.

2 Methods

The study is based on a structured survey of 400 residents of the Surkhandarya region of Uzbekistan. Data were collected at the end of 2023 through face-to-face questionnaires.

The survey included demographic, socio-economic, and behavioral indicators. Key variables considered in the analysis were age, gender, place of residence, education level, employment sector, monthly income, and the frequency of FinTech app usage. Respondents were also asked to evaluate their satisfaction with cashless payment services and identify possible concerns related to these technologies.

To examine the determinants of user satisfaction and distrust toward digital financial services, ordered logistic regression and binary logistic regression models were estimated in STATA. These methods are appropriate for analyzing ordinal and categorical outcomes.

3 Results and discussion

The study examined the problems that the population faces in using bank cards. The findings indicated that the primary impediment pertains to the underdeveloped payment infrastructure. Specifically, 35% of respondents noted that there are few retail outlets

in their area with POS terminals. This issue is particularly relevant for respondents living in rural areas, where access to services and amenities can be limited.

At the same time, it should be noted that most users have a positive view of bank card usage. Moreover, experience with bank cards often facilitates a smoother transition to the use of mobile payment applications in the future.

The study also examined the frequency of mobile payment app usage. The results show that 47.8% of respondents use such apps almost every day, while 32.8% use them occasionally (see Table 1). This indicates that a large share of the population actively relies on digital tools for financial transactions.

The analysis by age group shows that the most active users are young and middle-aged respondents. Daily usage was highest among individuals aged 26–35 (63.3%) and 18–25 (53.1%). By education level, respondents with higher education demonstrated the highest daily usage rate (61.2%).

Infrequent use was more common among older respondents and those with lower education levels, suggesting differences in digital readiness and trust. A total of 9.8% of respondents expressed distrust toward mobile payment systems, while 4.8% did not have a bank card and 5.0% reported difficulties using mobile apps.

These findings indicate that age and education level are important factors influencing the use of modern digital payment systems.

The data analysis revealed that mobile payment app usage frequency is closely linked to respondents' employment sector. The most active users were employed in the private sector (66.7%) and the public sector (61.0%), as well as among entrepreneurs and business owners (56.4%). These results suggest a high level of digital engagement among formally employed individuals. One important contributing factor may be peer influence and workplace communication. Colleagues' positive experiences and the opportunity to learn digital skills in a professional setting appear to facilitate faster to modern digital technologies (see table 1).

In contrast, significantly lower levels of daily usage were observed among housewives (11.8%), agricultural workers (16.7%), and the self-employed (34.3%). Thus may be due to limited digital infrastructure and lower digital literacy levels within these groups. These categories also show a higher proportion of individuals who either do not have an bank card or do not know how to use mobile applications.

It was revealed through the data analysis that online payment applications are primarily used by the largest proportion of users (37.0%) for paying taxes and utility bills.

In addition to public service payments, people are using online payment apps more and more in daily retail transactions. Specifically, 22.2% of respondents reported using them to pay for goods in physical stores. This reflects a shift in consumer behavior where mobile apps are gradually replacing cash and traditional bank card payments in offline commerce.

Peer-to-peer (P2P) transfers constitute significant portion of usage. In fact, 16.1% of respondents indicated that they use mobile apps to send money to friends and family. This highlights the growing consumer trust in digital channels for personal financial transactions, especially for small, frequent transfers.

Mobile apps are also used for loan repayments. However, this is less common. It accounts for 13.9% of cases. The lower figure can be explained by two things: the regular pattern of these payments, and the fact that people often use special banking platforms to manage their loans.

Table 1. Frequency of Using Modern Payment Apps in Daily Life by employment sector (% of total)

Answers	Employment Sector						
	Public sector employee	Private sector employee	Self-employed (Freelancer)	Agriculture (livestock	Entrepreneur / Business owner	Homemaker / Housewife	Other
Yes, almost every day	61,0	66,7	34,3	16,7	56,4	11,8	61,2
Yes, occasionally	24,7	26,7	40,0	53,3	41,8	39,2	26,6
No, I don't trust these payments	11,7	2,2	8,6	6,7	1,8	21,6	9,3
No, I don't have a bank card	0,0	4,4	8,6	16,7	0,0	11,8	1,4
I can't use these apps	2,6	0,0	8,6	6,7	0,0	15,7	1,4

Source: Authors' work

At the other end of the spectrum, purchasing goods and services from websites is the least common use case. This suggests that e-commerce adoption remains limited, although the sector is expanding rapidly. However, important challenges persist, particularly limited delivery coverage and relatively high logistics costs, which hinder broader adoption.

The results of the logistic and ordered logit regression analyses show the key sociodemographic factors that determine the intensity of modern fintech application usage among the population (Table 3).

The Wald tests indicate that the employment sector has a substantial impact on the frequency of mobile payment app usage ($p < 0.01$) A much higher level of digital engagement is demonstrated by respondents employed in the private and public sectors, as well as entrepreneurs, compared to the self-employed, agricultural works, and homemakers. Marginal effects analysis shows that those with formal employment are most likely to be active fintech users.

Education level is also a crucial factor ($p<0.05$) statistical evidence shows that individuals with higher education levels are more likely to regularly use online payment services. Mobile payment applications are used regularly by respondents with higher education 15-20 percentage points more often than those with only secondary education, according to marginal effects analysis.

Another significant factor is age ($p<0.05$): as age increases, the probability of active app usage declines. This indicated that the primary drivers of digital transformation in the financial sector are younger and middle-aged groups.

Table 2. Results of Binary and Ordered Logit Regression for Fintech App Usage

VARIABLES	Binary Logit (SE)	Ordered Logit (SE)
Residance (Loc): Rural	-0.019 (0.228)	0.165 (0.201)
Gender (Gen): Female	-0.336 (0.244)	0.180 (0.224)
Job: Private sector	0.212 (0.374)	-0.345 (0.367)
Job: Self-employed	-1.097*** (0.417)	1.042*** (0.369)
Job: Agriculture	-1.872*** (0.542)	1.341*** (0.391)
Job: Entrepreneur	-0.243 (0.342)	0.007 (0.325)
Job: Homemaker	-1.979*** (0.498)	1.723*** (0.346)
Job: Other	-0.726* (0.426)	1.001** (0.392)
Edu = 2, Specialized secondary education	0.657* (0.392)	-0.577* (0.295)
Edu = 3, Higher education	1.119*** (0.365)	-1.077*** (0.293)
Age (Old)	-0.255** (0.102)	0.222*** (0.086)
Income (income)	0.018 (0.084)	-0.038 (0.077)

Standard errors in parentheses.
Reference categories: Loc = Urban; Gen = Male; Job = Public sector; Edu = Secondary.
Significance: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

The analysis show that gender and place of residence (urban/rural) do not make a statistically significant contribution to the likelihood of app usage ($p<0.05$). While income shows a positive but insignificant coefficient, it is also not statistically significant.

The ordered logit regression findings confirm the binary model results: employment sector, education, and age are the main factors influencing the frequency and level of trust in fintech application.

4 Conclusion

The results indicate that although the overall attitude toward cashless payments and FinTech applications is positive, significant barriers remain for certain demographic groups.

Regression analysis shows that the main determinants of digital payment adoption are age, education, and employment sector. Younger and more educated respondents are more likely to actively use FinTech services. In contrast, self-employed individuals, agricultural workers, homemakers, and older adults are less likely to engage with digital financial tools. Gender, place of residence, and income level were not statistically significant predictors of active use.

These findings suggest that further progress in digital financial inclusion in Uzbekistan requires targeted policies aimed at underrepresented and less digitally literate groups. Expanding payment infrastructure, improving security and convenience, and strengthening educational programs for older adults, less educated individuals, and informal sector workers will be essential for wider adoption.

References

1. Alkadi, Rotana S, and Salma S Abed. 2023. Consumer acceptance of fintech app payment services: A systematic literature review and future research agenda. *Journal of Theoretical and Applied Electronic Commerce Research* 18. MDPI: 1838–1860. https://doi.org/10.3390/jtaer18040093.
2. Alshari, Hussein Ahmed, and M A Lokhande. 2022. The impact of demographic factors of clients' attitudes and their intentions to use FinTech services on the banking sector in the least developed countries. *Cogent Business & Management* 9. Taylor & Francis: 2114305. https://doi.org/10.1080/23311975.2022.2114305.
3. Tiwari, Neelu, and Naveen Kumar Singh. 2019. Factor affecting consumer satisfaction in cashless payment systems in India with respect to Paytm and BHIM. *International Journal of Recent Technology and Engineering* 8: 10–15. https://doi.org/10.35940/ijrte.C1002.0782S719.
4. Putra, Hafidz Risqiadi. 2020. Analysis of customer satisfaction factors on e-commerce payment system methods in Indonesia. *International Journal of Advanced Computer Science and Applications* 11. Science and Information (SAI) Organization Limited. https://doi.org/10.14569/IJACSA.2020.0110463.
5. Srivastava, S, A Mohta, and V Shunmugasundaram. 2024. Adoption of digital payment FinTech service by Gen Y and Gen Z users: evidence from India. Digital Policy, Regulation and Governance, 26 (1), 95–117. *Digital Policy, Regulation and Governance*: 95–117.
6. Świecka, Beata, Paweł Terefenko, and Dominik Paprotny. 2021. Transaction factors' influence on the choice of payment by Polish consumers. *Journal of Retailing and Consumer Services* 58. Elsevier: 102264. https://doi.org/10.1016/j.jretconser.2020.102264.
7. Choi, Hanbyul, Jonghwa Park, Junghwan Kim, and Yoonhyuk Jung. 2020. Consumer preferences of attributes of mobile payment services in South Korea. *Telematics and Informatics* 51. Elsevier: 101397.https://doi.org/10.1016/j.tele.2020.101397.
8. Sasongko, Danarto Tri, Putu Wuri Handayani, and Riri Satria. 2022. Analysis of factors affecting continuance use intention of the electronic money application in Indonesia. *Procedia Computer Science* 197. Elsevier: 42–50. https://doi.org/10.1016/j.procs.2021.12.116.
9. Nguyen, Cuong, Dung Dinh, and Thanh Doan. 2018. The determinants of the choices of payment methods for goods and services transaction in Vietnam. *International Journal of Applied Science* 1.
10. Soutter, Leigh, Kenzie Ferguson, and Michael Neubert. 2019. Digital payments: impact factors and mass adoption in Sub-Saharan Africa. *Technology Innovation Management Review* 9.
11. Al Nawayseh, Mohammad K. 2020. Fintech in COVID-19 and beyond: what factors are affecting customers' choice of fintech applications? *Journal of Open Innovation: Technology, Market, and Complexity* 6. MDPI: 153. https://doi.org/10.3390/joitmc6040153.
12. Neves, Catarina, Tiago Oliveira, Fernando Santini, and Luis Gutman. 2023. Adoption and use of digital financial services: A meta analysis of barriers and facilitators. *International Journal of Information Management Data Insights* 3. Elsevier: 100201. https://doi.org/10.1016/j.jjimei.2023.100201.

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