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Financial Literacy and Its Impact on Cashless Economy to Foster Digital Payment: A Pilot Study in Twin Cities

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Abstract
Purpose *- The fast-growing digital financial technologies are changing payment systems and speeding up the global trend of becoming a cashless society. This study seeks to understand how the main behavioral and technological aspects: attitude towards digital payments, subjective norms, perceived behavioral control, intention to use digital payments, and adoption of digital payments affect the growth of a digital payment system. This research will explain the use of computerized payment from both consumers' and traders'/merchants' perspectives.*
Design/Methodology/Approach *- An empirical study design was used, obtaining responses from a total of 150 respondents, targeting 75 consumers and 75 traders or merchants. Participants completed structured questionnaires that utilized a five-point Likert scale. The completed surveys underwent multiple regression analysis to assess the associations among the factors and to evaluate the hypotheses formulated. The analysis was conducted in SPSS.*
Findings *- The regression results suggest that, generally, a positive attitude toward digital payments, favorable subjective norms, the intention to utilize online installments, and the adoption of digital payments positively influence the cashless economy. Perceived behavioral control, however, shows a negligible impact in certain situations. The results indicate that the behavioral intention and actual adoption of digital payment systems are significant to the promotion of cashless financial systems.*
Originality/Value *- This research adds to the existing body of literature by offering data from both consumers and merchants from an emerging economy perspective. Policymakers, banks, and service providers can rely on the findings to better understand how to engage consumers and merchants to increase the use of digital payments and advance their countries toward a digital economy.*

Keywords: *Digital Payment Adoption, Cashless Economy, Attitude, Subjective Norms, Perceived Behavioral Control, Intention to Use.*

1. Introduction

Financial technology (FinTech) developments have expanded financial services access worldwide. Digital financial services, a rapidly developing element of the global economy, simplify, secure, expedite, and modernize the way people conduct financial transactions. The digital evolution of economies is paralleled by a growing focus on financial literacy. Modern economies expect citizens to take sound money related resolution and be technologically adept to employment of monetary technologies. Financial literacy is the confidence and skills to understand financial services and products and to make prudent decisions. Studies show that the financially literate have better financial health because they engage with the financial system and are early adopters of financial technologies.

Digital financial services further the goal of financial inclusion and ease-of-access estimates as cashless economies. The combination of affordable smartphones, computers with internet access, and financial technologies has spurred the usage of electronic fund transfers, banking, and contactless payments. Investments in financial digital infrastructure paired with financial literacy initiatives are the focus of the global financial system.

Global shifts toward cashless economies have accelerated with strides in digital payments. The convenience of settlement, transparency of transactions, and unbroken streams of contact (QR) and mobile wallet payments have supplanted traditional cash transactions. Digital payment systems also help capture previously unbankable populations. Because digital payments rely on both infrastructure and users' skills to utilize and trust the system, the adoption of digital payments is bolstered by the presence of financial and digital literacy. A person with advanced online and monetary competencies is more likely to integrate cashless payments into their daily transactions.

Pakistan has made an important development in the digital financial services sector. The rise in the accessibility of smartphones and the internet, paired with the avalibility of mobile banking tools and digital payment programs, has expand avenues for financial inclusion. The State Bank of Pakistan has spearheaded initiatives to stimulate the usage of computarized monetary transactions with the Raast payment system. Easypaisa and JazzCash have provided mobile wallet services that broaden the financial services coverage to previously unbanked populations. Although the initiatives provided give evidence of the desire to promote a digital economy and lessen cash transactions, the continued use of cash for payment systems and limited financial literacy, trust, security, and lack digital financial services' operational knowledge remains an obstacle to the acceptance of online payment systems. This research aims to assess the importance of financial literacy for the facilitation of a cashless economy via online payment systems, specifically in the Twin Cities of Pakistan. To this end, this study aims identify/explore the factors that influence the adoption of digital payments through a systematic literature review. The study aims to estimate the adoption level of digital payments by the traders/merchants and consumers, specifically for their daily financial transactions. The study also aims to make focused demand-driven policy suggestions for traders/merchants and consumers to improve financial literacy and encourage the use of digital payments to transition to a cashless economy.

The study addresses the following research questions:

RQ1. What is the understanding level of people in the Twin Cities with regard to financial issues these days?
RQ2. What is the influence of financial literacy and being well informed on the acceptance of digital payments such as mobile wallets to pay?
RQ3. Will the knowledge of financial literacy assist individuals in spending less cash and become part of the digital world? What demographic things (like age, income, gender, and education) influence how financial knowledge connects to using digital payments?
RQ4. How does understanding digital financial awareness influence people's trust in payment apps like JazzCash, Easypaisa, and Raast?
RQ5. What factors stop financially literate people from using cashless payment systems, even though they have access?
This study offers relevant detail in regard to Pakistan's evolving digital economy. Policymakers and financial institutions are focusing on promoting digital financial inclusion; therefore, understanding the impact of monetary knowledge plays in inclusion will be beneficial in elevating the use of online transactions and deriving the full value of such systems.

2. Literature Review, Theoretical Background and Hypotheses Development

2.1 Theoretical Background

This research incorporates the Theory of Planned Behavior (TPB), the Technology Acceptance Model (TAM), and Social Role Theory (SRT). These theories explain how financial literacy and behavioral attributes relate to participation in digital financial services and the creation of a cashless economy. TPB states that behavior is determine by the someones behaviour, subjective norms, and perceived behavioral control. Consumers are more inclined to act when they have a positive attitude toward the act, receive social or community support, and believe they have the resources and ability necessary to perform the act. Consumers' willingness to replace cash payment with alternative payment forms is largely determined by these variables.
TPB states that behavior is influenced by attitude, subjective norms, and perceived behavioral control. TPB states that consumers are more inclined to perform an act when they have a positive attitude toward the act, receive support from their social environment, and are of the belief that they have the necessary resources and skills to perform the act. When it comes to digital payments, TPB provides the best explanation for consumers' behavior and the use of financial transactions that are cashless.
More specific to the adoption of technology, the Technology Acceptance Model uses perceived usefulness and perceived ease of use. A person is are more likely to adopt online trnsactions systems that are advantageous, convenient, efficient, and user friendly. Financial literacy can improve perception and instill confidence to use innovative technologies for financial transactions.
Social Role Theory elaborates on how behavior is determine by a multitude of variables such as social expectations, demographics, and the environment. The theory posits that the social context, along with the socioeconomic environment, and the availability of technology, have a great effect on the financial choices individuals make and their inclination to adopt new technologies. Therefore, SRT encompasses the social and environmental aspects that may promote or limit engagement in online monetary practices and the advancement of a digital economy.

In combination, the aforementioned theories address the balance of both the behavioral and technological components of the consumers' involvement in digital payments and the support of the cashless economy.

2.2 Financial Literacy

Monetary knowledge is the capacity to acknowledge and process a variety of money-related abilities, including, but not limited to, personal finance, investing, and understanding financial markets. Recently, understanding finances has become more critical as digital technologies for conducting finance have advanced. Understanding finance means one can better evaluate products and services, understand the risks, and make the right decisions.

The research shows that individuals with financial literacy not only understand finance but also understand digital payment methods better. Financial literacy shows individuals better understand and evaluate the advantages of electronic financial transactions. In general, people with more financial knowledge are better able to adapt to a new financial environment.

There is more research built upon the idea that monetary knowledge is the foundation for financial inclusion. More digital payment methods have meant more understanding of finance is needed to feel comfortable using the services. Understanding finance helps people understand digital payment methods and the digital economy. This means financial literacy is essential to using digital payment methods as cashless transactions become the norm.

2.3 Attitude Toward Digital Payments and Cashless Economy

Attitudes describe whether someone evaluates something positively or negatively. In digital payments, attitudes describe how people think of digital payment systems in terms of usefulness and convenience, along with the perceived safety and reliability of the systems. Positive attitudes toward the technologies used in digital payments result in the use and incorporation of the technologies into daily activities in place of cash transactions.

Previous research has demonstrated that people consider the use of mobile transactions process more likely the more they see the systems as beneficial and convenient. People are even more likely to consider the use of online transactions systems the more positive their point of view are toward online payment systems and the more convenient they perceive cash transactions to be. Positive views toward the mobile payment process will be strengthened the more consumers perceive transactions to be quick, easy, and accessible.

People are expected to have positive attitudes toward the increasing convenience of digital payment systems looking toward a future of a cashless economy. People are even more likely to view digital payment systems favorably the more advantages they see in digital payment systems, and cash will decline in use even more.

H1: Attitude toward digital payments has a useful and meaningful impact on the cashless economy.

2.4 Subjective Norms and Cashless Economy

Subjective norms are the social pressures people perceive, both positively and negatively, from their families, friends, and coworkers regarding the performance of a specific behavior. In particular, social pressures significantly influence the decisions of people who are the first consumers of certain emerging technologies and novel financial services.

The available literature indicates the tendency of many individuals toward adopting a digital payment system if they are offered positive social recommendations and feedback for the system within their social context. Subjective digital financial technologies are offered to the consumers of the system who are positively socially recommended to use the system. Trusting a digital payment system socially recommends participation in digital payment systems and in financial transactions.

Because the recommended digital payment systems are becoming widely adopted, the social acceptance of these systems will drive the growing adoption of these systems and the decreasing reliance on cash systems. Thus, it is highly probable that subjective norms will greatly influence the development of a cashless economy.

H2: Subjective norms have a useful and informative impact on the cashless economy.

2.5 Perceived Behavioral Control and Cashless Economy

Perceived behavioral control indicates how a person perceives their behavior to successfully complete a task and the resources that are available to them. In the case of online transaction systems, perceived behavioral control would be how confident a consumer is that they are able to utilize mobile payment processs and associated digital monetary technologies.

Consumers with the right amount of monetary and online knowledge, including the right infrastructure, are expected to conduct computarized financial payments. The combination of having a smartphone and access to reliable internet, banking services, and digital payment applications all contributes to the consumer's sense of confidence in being able to conduct financial transactions. The reverse of all mentioned factors is also true and contributes to the inability to conduct transactions.

Once perceived behavioral control is at a certain level, consumers feel more confident and certain in utilizing digital financial technologies and are more likely to conduct cashless transactions. Because of this, it is also expected to have a positive effect in developing a cashless economy.

H3: Perceived behavioral control has a useful and significant impact on the cashless economy.

2.6 Intention to Use Digital Payments and Cashless Economy

Behavioral plans are seen as the readiness of an individual to perform a particular behavior. Intentions are an essential construct in deciding the adoption of a technology, as the Theory of Planned Behavior says, it is the strongest predictor of behavior. Within the context of digital payments, the plans to utilize mobile payment process indicates the willingness of individuals to perform financial transactions using online payment systems.

It has been consistently observed in past research that the adoption and continuous use of technology becomes easier when users exhibit high levels of intention to use the technology. People who are more likely to use digital payment systems in the future are those who currently use electronic payment systems instead of cash. Digital payment systems attract users who intend to use those systems, resulting in more users, and payment systems are used more frequently.

The greater the intention of the users to use the digital payment technology, the easier it will be to achieve a cashless economy. Therefore, the intention to use digital payment technologies will be instrumental in achieving a cashless economy.

H4: Intention to use digital payments has a positive and significant effect on the cashless economy.

2.7 Digital Payment Adoption and Cashless Economy

The term 'online payment adoption' refers to how people engage with the electronic methods available for completing financial transactions. Popular ways of conducting electronic transactions such as online banking, Internet banking, and mobile wallets, as well as payment methods that use QR codes and contactless systems, fall within this definition. The utilization of online transaction systems has come to represent the modernization of finance and the digitization of the economy.

From the analysis that is available, the acceptance of mobile payments is critical to the development of a cashless economy. The various systems that offer electronic payments are also convenient, efficient, and secure, and encourage individuals and businesses to engage in electronic transactions and to use cash even less. The availability of payment systems and electronic transactions helps to combine people into the legal monetary system and serves to include financially marginalized populations.

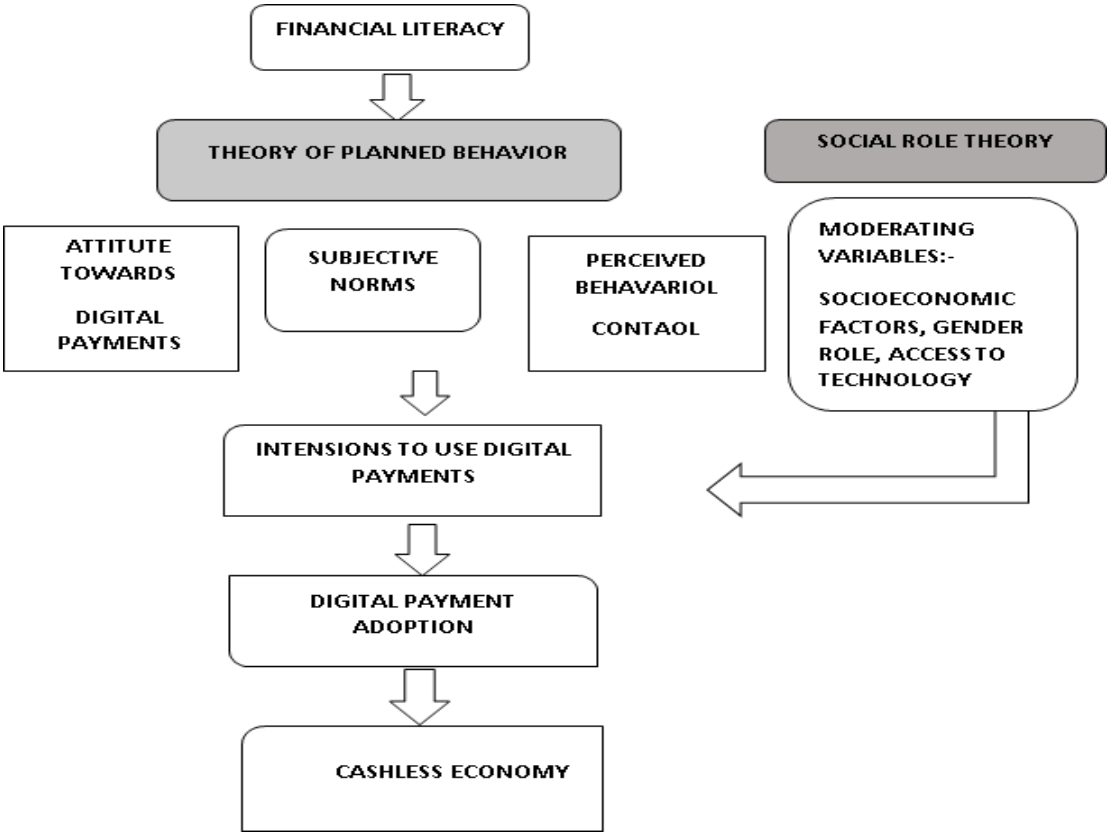
The rapid embedding of systems that enable digital payments has also leapfrogged economies to a cashless state, and the acceptance of online payments further benefits economies by reducing the cost of money transactions and enhancing transparency. The more that consumers use and accept digital payment systems, the more sustainable the cashless economy will be.

H5: Digital payment adoption has a positive and significant effect on the cashless economy.

2.8 Conceptual Framework

Building on the previous studies and the associated theory, this review establishes a conceptual idea identifying elements involved in the emergence of a cashless economy. Financial literacy is placed as the foundational construct, whereas attitude to digital payments, subjective norm, perceived behavioral control, intention to use digital payments, and adoption of digital payments are viewed as the significant variables. The explained factor of the model is a cashless economy.

According to the model, a cashless economy is developed when there are positive attitudes to digital payments, positive social pressures, perceived behavioral control, intention to use digital payment systems, and greater technology adoption of digital payments. Monetary knowledge provide individuals with the grip and the awareness of using digital transactions and, therefore, supports the adoption of cashless payments.



3. Methodology

3.1 Study Design

This research used the numerical approach to explore the determinants of a cashless economy. A cross-sectional design was used to gather information from participants once. The quantitative approach was best suited to the study as it allowed the relationships of variables to be empirically measured and the hypotheses stated to be tested. The study sought to explore how the acceptance of online payments and the intention to utilized digital payments, in inclusion to attitudes towards digital payments, subjective norms, and perceived behavioral control, affect the digital economy.

3.2 Target Population and Sampling

The subjects for this research included consumers and traders/merchants involved in economic transactions and who experience the use of online payment systems. Since consumers and merchants have a core contribution to the acceptance and usage of mobile transactions systems, their perspectives were considered imperative in this research.

One hundred and fifty participants were surveyed in this research, of whom seventy-five were consumers, and seventy-five were traders/merchants. Relatively to their familiarity with digital payment systems, the participants were given a structured research tool. The sample was designed to reflect the

demand (consumers) and supply (merchants) participants of online payment process, and therefore, to portray the drivers of a digital economy.

3.3 Data Collection Procedure

Researchers used the self-administered questionnaire as the first step in the study. The goal of the questionnaire was to understand subjective opinions on the part that online transaction systems play in building a electronic economy. The first draft of the questionnaire was examined and adjusted to improve measurement item clarity and relevance.

The participants of the survey were consumers, traders or merchants who had interacted with digital payment systems. The responses that were collected were analyzed and compiled in preparation for statistical analysis.

3.4 Measurement of Variables

There were five independent variables in the research, that are: attitude toward digital payments, subjective norms, perceived behavioral control, digital payment intention and the use of digital payments. The dependent variable was the cashless economy.

There were questions in the questionnaire that were rated using a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Respondents were able to quantify the degree to which they agreed with each statement and it significantly improved the data analysis ease and effectiveness.

3.5 Model Specification

To examine the effect of the in predictor factors on the cashless economy, the following multiple regression model was developed:

$CE = \beta_o + \beta_1 ATDP + \beta_2 SN + \beta_3 PBC + \beta_4 IUDP + \beta_5 DPA + \varepsilon$

Where:

CE = Cashless Economy

ATDP = Attitude Toward Digital Payments

SN = Subjective Norms

PBC = Perceived Behavioral Control

IUDP = Intention to Use Digital Payments

DPA = Digital Payment Adoption

β_o = Constant Term

β_1–β_5 = Regression Coefficients

ε = Error Term

3.6 Analysis of Data

The data were collected and study using the Statistical Package for Social Sciences (SPSS). Multiple regression analysis was used to test the suggested hypothesis and analyze the relation among the factors. Multiple regression is one of the commonly employed analysis techniques in the behavioral and social science research as it helps researchers analyze the relationship of numerous independent variables to a single dependent variable.

In the current study, multiple regression was use to analyze the impact of attitude toward digital payments, subjective norms, perceived behavioral control, intention to use digital payments, and the adoption of digital payments on the cashless economy.

4. Results and Discussion

4.1 Regression Analysis

To study the determinants of a cashless economy among both consumer respondents and trader/merchant respondents, separate multiple regressions were performed. The constructs of perceived behavioral control, attitude toward digital payments, subjective norm, intention to use digital payments, digital payment adoption, and cashless economy were assessed.

4.1.1 Consumer Perspective

4.1.1.1 Model Summary

Model	R	R square	Adjusted R-squared	Std. Error of estimation
1	.697	.485	.448	.60055

Table 4.1 a. Predictors: (Constant), IUDP, PBC, ADP, SN, ATDP b. Dependent Variable: CE

The consumer sample regression results show that the model only has moderate explanatory power concerning the Cashless Economy. With R equal to 0.697, there is a powerful positive correlation between the dependent and independent factors. With an R-squared value of 0.485, it can be said that the model accounts for about 48.5% of the difference of Cashless Economy. The model explains strong power as indicates by the R-squared value of 0.448 which is even better after evaluating for the number of predictors.

4.1.1.2 Analysis of Variance (ANOVA)

Model	Source	Sum of squares	Df	Mean square	F	Sig.
1	Regression Residual Total	23.455 24.886 48.341	5 69 74	4.691 .361	13.006	.000

Table 4.2 a. Dependent Variable: CE b. Predictors: (constant), PBC, ATDP, ADP, SN, IUDP

The ANOVA outcomes indicate that the overall model is statistically significant with F = 13.006 and p = 0.000. This confirms that all the variables have significant impact on the cashless economy among the consumers.

4.1.1.3 Regression Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.163	.754		.217	.829
	PBC	.035	.161	.019	.215	.831
	ATDP	.390	.147	.289	2.661	.009
	ADP	.318	.150	.250	2.117	.034
	SN	.551	.150	.115	3.671	.001
	IUDP	.476	.118	.439	4.034	.000

Table 4.3 Regression coefficient a. Dependent Variable: CE

The regression analysis confirms the model's validity and capacity to explain variation in consumers' cashless economy behaviors. Results reveal the positive impact of the elements of the Theory of Planned Behavior (i.e., attitude toward digital payments, subjective norms, and intention to use digital payments) on the cashless economy. The results also show that the adoption of digital payments affects the cashless economy, while the lack of control does not affect the cashless economy. The findings indicated that the lack of control had a positive relationship with the cashless economy, which is not statistically significant (β = 0.035, p = 0.831). Although consumers who feel more in control and are more capable of using cashless digital payment technologies report a greater inclination to perform cashless transactions, this inclination is not strong and does not become significant. Therefore, the lack of control is not a significant factor in the cashless economy.

Conversely, positive attitude towards digital payments had a positive and significant association with the cashless economy (β = 0.390, p = 0.009). This shows that consumers who see digital payments as beneficial, easy, and helpful appreciate cashless transactions. An attitude that favors the digital payment technology translates to appreciation of the growth of the cashless economy.

Adoption of digital payments also had a significant positive association with the cashless economy (β = 0.318, p = 0.034). Consumers who use digital payment methods transact cashless and use cash less. This significantly shows that use of the technology is important for cashless economic transactions.

Subjective norms positively affected the cashless economy as well (β = 0.551, p = 0.001). This result shows that the consumers' family, friends, and peers encourage the consumers to use digital payments and cashless financial transactions. Therefore, the social support of digital payments significantly affects the consumers' decision-making.

Out of the independent variables, the intention to use digital payments, was the strongest of the predictors of the cashless economy (β = 0.476, p = 0.000). The consumers who have a higher intention of using the digital payment systems engage a lot more to cashless transactions. This affirms that the intention of the consumers is by far the most important of the variables to drive participation in the cashless economy.

Overall, the consumer-side analysis supports hypotheses H1, H2, H4, and H5, and does not support H3. Findings indicate that consumers' positive attitudes, social influence, and the adoption and intention of using digital payments, positively affect the development of a cashless economy.

4.1.2 Traders and Merchants Perspective

Regression analysis of traders and merchants shows that the model is significant and the predictors provide important information regarding the emerging cashless economy. The results reveal that the effect of the adoption of digital payments, subjective norms, and digital payment use intention are significant with respect to the cashless economy. Conversely, the constructs of perceived behavioral control and attitude toward digital payments are not significant.

4.1.2.1 Model Summary

Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	.538	.289	.138	.59076

Table 4.4 a. Predictors: (Constant), IUDP, SN, PBC, ADP, ATDP b. Dependent Variable: CE

For traders and merchants, the regression model also shows moderate explanatory power. The R value is 0.538, while the R Square is 0.289, meaning that 28.9% variation in Cashless Economy is explained by the model. The Adjusted R Square is 0.138, indicating a lower but acceptable explanatory level after adjustment.

4.1.2.2 Analysis Of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.874	5	1.175	3.366	.009
	Residual	24.081	69	.349		
	Total	29.955	74			

Table 4.5 a. Dependent Variable: CE b. Predictors: (Constant), IUDP, SN, PBC, ADP, ATDP
The ANOVA results indicate that the overall model is statistically significant with F = 3.366 and p = 0.009, confirming that the predictors jointly influence Cashless Economy in the merchant sector.

4.1.2.3 Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.534	.30		1.78	.08
	PBC	.95	0.50	.073	1.90	.059
	ATDP	.021	.178	.014	.120	.905
	ADP	.220	.100	.077	2.20	.025
	SN	.52	.260	.150	2.00	.049
	IUDP	.427	.122	.400	3.50	.001

Table 4.6 Regression coefficient a. Dependent Variable: CE

Perceived behavioral control was positively related to the cashless economy, but the relationship was not statistically significant (β = 0.95, p > 0.05). This means that merchants' belief in their ability to use digital payment technologies was not likely to influence their participation in a cashless economy. Even though traders and merchants likely lean on technological capability, it doesn't appear to be the most critical factor in cashless economy participation.

In a similar vein, attitude toward digital payment technologies was also found to have a statistically insignificant and very small effect on the cashless economy (β = 0.021 p = 0.905). This implies that a positive attitude toward digital payment systems will not drive significant changes in cashless economic operations in the business sector.

Adoption of digital payments, on the other hand, had a statistically significant and positive effect on the cashless economy (β = 0.220, p = 0.025). Traders and merchants that adopted digital payment technologies were more likely to aid the cashless economy by offering payment options to their customers. This result indicates that with the adoption of digital payment technologies, a cashless economy is attainable.

In addition, subjective norms had a significant positive effect on the cashless economy (β = 0.52, p = 0.049). The influence of customers, business associates, family, and society impels merchants to adopt digital payment technologies and engage in cashless economic operations. Thus social and market demand influence the payment behavior of merchants.

Of the research subjects surveyed, traders and merchants exhibited the clearest intention to employ digital payments (β = 0.427, p = 0.001). More willing merchants are much more likely to endorse and participate in cashless economic activities. The implication with the surveyed merchants is that more intentional merchants will encourage and enable digital financial transformations in the commercial space.

Broadly interpreting the trader and merchant evidence allows a conclusion that H2, H4, and H5 hold, while H1 and H3 fail. The evidence suggests that the positive outcomes of the cashless economy will be most greatly influenced in the business community by the actual adoption of digital payment systems, social influence, and the intention to use digital payment systems.

5. Discussion of Findings

This study provides greater understanding of factors engaging both consumers and traders/merchants in the transition to a cashless economy. The regression analysis indicates the impact of digital behavior in shaping cashless economic behavior across different segments.

In the case of consumers, the cashless economy is significantly impacted by attitudes toward digital payments, subjective norms, intent to employ digital payments, and the adoption of digital payments. From these results, it can be concluded that consumers are largely impacted by psychological and behavioral factors that are driven by perceptions, social influences, and ultimate engagement. The analysis did reveal, however, that the perception of behavioral control was not significant, indicating that the mere belief or perception of self-efficacy was not sufficient in the adoption of cashless behavior.

In the case of traders/merchants, subjective norms, intent to employ digital payments, and the adoption of digital payments, were significant, while attitudes and the perception of behavioral control were not. This indicates that for traders/merchants, the actual adoption of behavior and some form of market pressure supersedes cognitive and perceptual factors.

In the context of both traders/merchants and consumers, the results of the study provide evidence that the greatest predictors of the cashless economy are the adoption of digital payments and the intentional engagement of users.

5.1 Theoretical Implications

This research provides a novel combination of the Theory of Planned Behavior (TPB), the Technology Acceptance Model (TAM), and Social Role Theory (SRT) in the existing literature.

Considering TPB, the study proves that digital payment attitudes, subjective norms, and perceived behavior control influence individual outcomes of cashless behavior within the context of this study. The study shows that the intent to behave is the primary predictor of financial behavior, especially usage of digital payment.

The study, within the context of the Technology Acceptance Model, illustrates that when individuals believed that an offered system (digital payment) had value and they actually used it, they were more inclined to practice cashless financial transactions. The study shows that individuals would adopt digital payment systems, and consequently, a cashless economy, when they believed that the systems were both useful and easy to use.

This study also extends Social Role Theory in that social and contextual influences were found to impact the behavior of both consumers and merchants. Subjective norms in this study demonstrate that the use and acceptance of digital payment systems were influenced by societal and peer pressures and market forces.

The combination of TPB, TAM, and SRT provides a multifaceted understanding of the drivers of a cashless economy across psychology, technology, and social domains.

5.2 Practical Implications

Policymakers, stakeholders in financial institutions, and providers of digital payment services will find much of this research useful. Digital payments are vital in building a cashless economy. Therefore, the need to increase the availability of digital financial services and the ease and access to those services is evident.

To achieve this goal, positive digital payment attitudes and payment trust building campaigns should target consumers. Since social influence is a significant predictor of behavioral outcomes, promoting digital payment adoption in the community should impact cashless transactions.

Traders and merchants should experience fewer digital payment obstacles and their payment system barriers should be reduced. Their payment system should be incentivized to encourage digital payment adoption. Since the intention to use digital payments is a strong predictor of adoption, creating willingness and motivation to use digital payments among the stakeholders will achieve the desired digital payment adoption.

User experience and the digital financial service ecosystems will help the cashless economy the best.

5.3 Conclusion

This research was conducted to study both consumers' and traders' perspectives and examine cashless economy constructs. Cashless transactions were positively determined to be influenced by behavioral and adoption constructs.

Analysis showed that the use of the digital payment system and the intention to use digital payments are the primary drivers of the cashless economy. Subjective norms were also significant and are likely to influence both the consumer and the merchant. On the other hand, perceived behavioral control was found to be negligible, which indicates that having confidence in the system is not likely to promote Merchant's participation in cashless systems.

Generally, the study recommends that to promote the cashless economy systems, digital payment systems should be promoted, and behavioral intentions of people should be positively influenced.

5.4 Limitations and Future Research

This study has acknowledged some limitations. The total sample size was restricted to 150 individuals in total: 75 consumers and 75 traders/merchants. As a result, findings may not be able to be generalized to a broader population. More limitations surfaced by this research as multiple behavioral factors were only partially addressed. This excluded a number of other possible determinants such as trust, security, and government policies.

To increase the reliability and scope of future studies, more expansive and heterogeneous samples should be utilized. More determinants should be integrated as well to study the effects of increased cashless transactions in terms of the technological framework, law and policy, and the integration of finance. Lastly, multi-session studies are recommended to trace the behavioral changes in regard to digital payments.

References

Allgood, S., & Walstad, W. (2013). Financial literacy and credit card behaviors: A cross-sectional analysis by age. *Numeracy, 6*(2), Article 3. https://doi.org/10.5038/1936-4660.6.2.3

Afroze, D., & Rista, F. I. (2022). Mobile financial services (MFS) and digital inclusion: A study on customers' retention and perceptions. *Qualitative Research in Financial Markets, 14*(5), 768–785. doi:10.1108/QRFM-06-2021-0095

Al Animat, M. E. (2023). Legal perspectives and distinctions electronic and traditional banks. *Lex ET Scientia International Journal, 30*(2), 151–171.

Agarwal, A. (2024). Digital payments and their impact on the Indian economy (Doctoral dissertation, Swiss School of Business and Management, Geneva).

Ambarwati, D., & Sasongko, N. (2024). The influence of financial literacy, digital payment, and interest in using e-commerce on MSME income: A case study on MSME traders in the trade sector in Surakarta City. *Jurnal Ilmiah Komputerisasi Akuntansi, 17*(2), 432–449. doi:10.51903/kompak.v17i2.2184

Arbole, S. S., & Sriwastaw, S. K. (2024). Bytes of inclusion: How digital payments drive financial empowerment in Karnataka's hinterlands. *International Journal of Advanced Multidisciplinary Scientific Research, 7*(11), 135–152. doi:10.31426/ijamsr.2024.7.11.7923

Ardini, L., Fahlevi, M., Dandi, M., Dahlan, O. P., & Dahlan, S. P. (2024). Digital financial literacy and its impact on financial skills and financial goals in Indonesia's digital payment ecosystem. *Economic Studies (Ikonomicheski Izsledvania), 33*(7), 181–200.

Arora, P., & Banerji, R. (2024). The impact of digital banking service quality on customer loyalty: An interplay between customer experience and customer satisfaction. *Asian Economic and Financial Review, 14*(9), 712–733. doi:10.55493/5002.v14i9.5199

Asaif, J. M., Suripto, S., Wardianto, K. B., & Wulandari, J. (2025). The influence of digital financial literacy, perceived ease of use, perceived usefulness, social and political on the intention and use behavior of using QRIS as a payment system in traditional retail. *The Eastasouth Journal of Social Science and Humanities, 2*(3), 302–312. doi:10.58812/esssh.v2i03.587

Asri, D. K., Tamtomo, J., Billah, M. K., & Simanjuntak, E. R. (2025). Beyond UTAUT: Integrating digital literacy and voluntariness of use to understand cashless payment behavior. *Jurnal Aplikasi Manajemen, 23*(1), 340–364. doi:10.21776/ub.jam.2025.023.1.20

Barkhordari, M., Nourollah, Z., Mashayekhi, H., Mashayekhi, Y., & Ahangar, M. S. (2016). Factors influencing adoption of e-payment systems: An empirical study on Iranian customers. Information Systems and e-Business Management. https://doi.org/10.1007/s10257-016-0311-1

Babalola, O. E. (2024). Financial inclusiveness and the role of digital currency in the direction toward a cashless economy in the USA. *Universal Academic Journal of Education, Science and Technology, 6*(1), 99–115.

Bakashaba, R., Musiita, B., & Nabachwa, S. (2024). The mediating role of access to digital finance on the relationship between financial literacy and performance of Uganda SMEs in Mbarara City. *Journal of Economics and Behavioral Studies, 16*(1), 140–151. doi:10.22610/jebs.v16i1(J).3716

Bhuiyan, M. R. I., Akter, M. S., & Islam, S. (2025). How does digital payment transform society as a cashless society? An empirical study in the developing economy. *Journal of Science and Technology Policy Management, 16*(4), 756–774. doi:10.1108/JSTPM-10-2023-0170

Celestin, M. (2019). The future of taxation in a cashless society: How digital payments and mobile money are changing tax collection. *Brainae Journal of Business, Sciences and Technology, 3*(6), 766–776. doi:10.5281/zenodo.15055110

Chaudhary, M. K., Adhikari, M., Ghimire, D. M., & Dhungana, M. (2024). Promoting sustainable financial services through cashless transactions: An empirical analysis of small and medium enterprises (SMEs) in Nepal. *Devkota Journal of Interdisciplinary Studies, 6*(1), 1–18. doi:10.3126/djis.v6i1.74978

Dewi, V. I., Febrian, E., Effendi, N., Anwar, M., & Nidar, S. R. (2020). Financial literacy and its variables: The evidence from Indonesia. *Economics & Sociology, 13*(3), 133–154. doi:10.14254/2071-789X.2020/13-3/9

Dhamija, A., Manrai, R., & Dhamija, D. (2025). Impact of financial service quality on customer loyalty and satisfaction among Indian consumers utilizing digital payments. In P. Ordóñez de Pablos, M. Lytras, A. Alkhaldi, & S. Malik (Eds.), *Insights into digital business, human resource management, and competitiveness* (pp. 251–276). Hershey, PA: IGI Global Scientific Publishing. doi:10.4018/979-8-3693-9440-3.ch011

Doan, L. T. M., Rahman, M., & Vo, X. V. (2025). Mitigating overconsumption through mindfulness: The role of cashless payments in impulsive buying and sustainable consumer behaviour. *Journal of Chinese Economic and Business Studies, 23*(2), 209–232. doi:10.1080/14765284.2024.2415728

Dubey, T. S., & Purnanandam, A. (2024). *Can cashless payments spur economic growth?* Unpublished manuscript.

Dzogbenuku, R. K., Amoako, G. K., Kumi, D. K., & Bonsu, G. A. (2022). Digital payments and financial wellbeing of the rural poor: The moderating role of age and gender. *Journal of International Consumer Marketing, 34*(2), 113–136. doi:10.1080/08961530.2021.1917468

Fahira, F., Suarni, A., & Sahib, M. K. (2024). The influence of digital financial literacy on the use of non-cash payments in Makassar City: Gender as a moderating variable. *IECON: International Economics and Business Conference, 2*(2), 1038–1054. doi:10.65246/53kbh208

Frączek, B., & Urbanek, A. (2021). Financial inclusion as an important factor influencing digital payments in passenger transport: A case study of EU countries. *Research in Transportation Business & Management, 41*, Article 100691. doi:10.1016/j.rtbm.2021.100691

Garg, N., & Singh, S. (2018). Financial literacy among youth. *International Journal of Social Economics, 45*(1), 173–186. https://doi.org/10.1108/IJSE-11-2016-0303

Geroche, J., & Gatchalian, J. B. (2022). Towards a cashless society in Thailand and the Philippines during the COVID-19 pandemic: Implications for improving financial and societal well-being. *Journal of Business, Ethics and Society, 2(1), 59–86.*

Geroche, J. B. (2025, April). *The effect of consumer trust in digital transactions on economic impact: The case of a cashless society*. Paper presented at the 3rd International Conference on Research Inclusivity and Sustainability, De La Salle University-Dasmariñas, Cavite, Philippines.

Graziano, E. A., Musella, F., & Petroccione, G. (2025). Cashless payment: Behavior changes and gender dynamics during the COVID-19 pandemic. *EuroMed Journal of Business, 20*(5), 54–74. doi:10.1108/EMJB-11-2023-0299

Hung, A. A., Parker, A. M., & Yoong, J. (2009). *Defining and measuring financial literacy* (RAND Working Paper No. WR-708). RAND Corporation. https://ssrn.com/abstract=1498674

Haritha, P. H. (2023). Mobile payment service adoption: Understanding customers for an application of emerging financial technology. *Information & Computer Security, 31*(2), 145–171. doi:10.1108/ICS-04-2022-0058

Hasan, Z. (2024). The impact of digital financial literacy on consumer protection, investor security, and financial transactions in Indonesia. *International Journal of Islamic Economics and Finance Research, 7*(2), 55–77. doi:10.53840/ijiefer165

Husain, A. (2021). *Cashless transaction systems: A study of paradigm shift in Indian consumer behaviour* (Doctoral dissertation). Dayalbagh Educational Institute, Agra, India.

Irawan, N. N., & Matoati, R. (2021). The influence of financial literacy and behavior in using fintech payments on the financial management of Jabodetabek students. *The Management Journal of Binaniaga, 6*(2), 117–132. doi:10.33062/mjb.v6i2.459

Junger, M., & Mietzner, M. (2020). Banking goes digital: The adoption of FinTech services by German households. *Finance Research Letters, 34*, Article 101260. doi:10.1016/j.frl.2019.08.008

Kimiyaghalam, F., & Safari, M. (2015). Review papers on definition of financial literacy and its measurement. SEGi Review, 8(1), 81–94.

Klapper, L., Lusardi, A., & van Oudheusden, P. (2015). *Financial literacy around the world: Insights from the Standard & Poor's Ratings Services Global Financial Literacy Survey.* World Bank Development Research Group. http://www.finlit.mhfi.com

Khalid, S. (2020). *Financial inclusion through mobile money in Pakistan: Analysis of the factors affecting its adoption and usage* (M.Phil. thesis). Pakistan Institute of Development Economics, Islamabad, Pakistan.

Koskelainen, T., Kalmi, P., Scornavacca, E., & Vartiainen, T. (2023). Financial literacy in the digital age: A research agenda. *Journal of Consumer Affairs, 57*(1), 507–528. doi:10.1111/joca.12510

Karki, S. (2023). Cashless economy: Awareness and adoption among university students in Kathmandu

Valley (Master's thesis, Tribhuvan University, Patan Multiple Campus, Nepal).

Khikmatullaev, I. K., & Miftahuddin, A. (2025). University students' adoption of cashless payments in Uzbekistan: Behavior, trust, and challenges. *Innovation Science and Technology, 5*(1), 33–42.

Meghana, K., & Tripathi, S. K. (2018). Digital payment system for economic sustainability: A case study of Gujarat Narmada Fertilizers and Chemicals Ltd in India. *Scientific Quarterly "Organization and Management", 2018*(4), 119–137. doi:10.29119/1899-6116.2018.44.8

Minphimai, A. (2023). *Digital payment, household consumption behavior, and financial literacy* (PIER Discussion Paper No. 219). Puey Ungphakorn Institute for Economic Research.

Okenema, E. F. (2025). Digital financial literacy and cashless payment adoption among Business Education undergraduates in Bayelsa State, Nigeria. *Nightingale International Journal of Educational Research and Development, 7*(8), 149–160. doi:10.70382/nijerd.v7i8.017

Putrevu, J., & Mertzanis, C. (2024). The adoption of digital payments in emerging economies: Challenges and policy responses. *Digital Policy, Regulation and Governance, 26*(5), 476–500. doi:10.1108/DPRG-06-2023-0077

Ramos-de-Luna, I., Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2019). Mobile payment is not all the same: The adoption of mobile payment systems depending on the technology applied. Technological Forecasting and Social Change, 146, 931–944. https://doi.org/10.1016/j.techfore.2018.09.018

Rachmatika, A. G., Saifi, M., & Worokinasih, S. (2023). The influence of financial literacy, financial technology on financial inclusion mediated by cashless policy. *Journal of Indonesian Applied Economics, 11*(1), 1–12. doi:10.21776/ub.jiae.2023.011.01.1

Respati, D. K., Widyastuti, U., Nuryati, T., Musyaffi, A. M., Handayani, B. D., & Ali, N. R. (2023). How do students' digital financial literacy and financial confidence influence their financial behavior and financial well-being? *Nurture, 17*(2), 40–50. doi:10.55951/nurture.v17i2.154

Rashid, M., Shamsi, M. A., Anwar, I., Saleem, I., & Yahya, A. T. (2025). Consumer intention to adopt e-wallets in rural India: An investigation by extending the technology acceptance model. *Cogent Business & Management, 12*(1), 2428776.

Salman, M., Rauf, N., & Murtaza, Z. (2024). Unlocking financial inclusion and economic empowerment in rural Pakistan: The interplay of financial literacy and infrastructure development in the impact of digital wallets. *Journal of Excellence in Management Sciences, 3*(3), 141–160.

Seldal, M. M. N., & Nyhus, E. K. (2022). Financial vulnerability, financial literacy, and the use of digital payment technologies. *Journal of Consumer Policy, 45*(2), 281–306. doi:10.1007/s10603-022-09512-9

Septiningrum, L., Agustanta, N., Ahdiyana, M., Widianto, H. W., Pambudi, A., Franco, G., & Hikmawati, F. (2024). Theoretical framework of cashless payment systems in

Indonesia: Analyzing condition in different era's. *Jurnal Natapraja: Kajian Ilmu Administrasi Negara, 12*(1), 25–42. doi:10.21831/natapraja.v12i1.85298

Shehadeh, M., Dawood, H. M., & Hussainey, K. (2024). Digital financial literacy and usage of cashless payments in Jordan: The moderating role of gender. *International Journal of Accounting & Information Management, 33*(2), 354–382. doi:10.1108/IJAIM-03-2024-0115

Shetty, N. K., Yashaswini, M., Kumar, S. M., & Shashikanth. (2024). Cash to digital: UPI adoption among micro businesses in Mysore. *Business and Economics Research Journal, 13*(6), 180–203.

Sutrisno, E., & Nainggolan, R. (2025). Unlocking the potential of digital payment: How financial habits drive digital payment adoption among Indonesia's MSMEs. *Jurnal Aplikasi Manajemen, 23*(1), 111–133. doi:10.21776/ub.jam.2025.023.1.07

Van Slyke, C., Comunale, C. L., & Belanger, F. (2002). Gender differences in perceptions of Web-based shopping. *Communications of the ACM, 45*(7), 82–86. doi:10.1145/545151.545155

Waliyuddin, M. A. (2023). *The effect of financial and digital literacy towards usage of QRIS payment* (Final project). Bandung Institute of Technology, Bandung, Indonesia.

Yoshino, N., Morgan, P. J., & Long, T. Q. (2020). *Financial literacy and fintech adoption in Japan* (ADBI Working Paper No. 1095). Tokyo, Japan: Asian Development Bank Institute.

Zhao, C., Li, X., & Yan, J. (2024). The effect of digital finance on residents' happiness: The case of mobile payments in China. *Electronic Commerce Research, 24,* 69–104. https://doi.org/10.1007/s10660-022-09549-5