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A Study on Factors Affecting Digital Payment and Its Impact on Consumer Behaviour

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Abstract

This study explores how consumers' attitudes toward digital payment systems are shaped and how those attitudes impact actual usage behavior. This research considers variables derived from the Technology Acceptance Model (TAM) and the Theory of Planned Behaviour (TPB), such as social influence, trust, and perceived ease of use. A cross-section of consumers was surveyed in order to evaluate the hypothesis. Social influence, trust, and perceived ease of use are the three most important factors influencing behavioural intention towards digital payment, according to the data. The results also showed that behavioural intention had a favourable effect on actual usage behaviour. If companies and governments are serious about encouraging the use of digital payment methods, these results will help shed light on customer behaviour in this space.

Keywords: Digital payment, Consumer behaviour, Trust, Behaviour intention

Introduction

Technological developments and shifting customer tastes have contributed to the meteoric rise in popularity of online payment systems in recent years. The global epidemic has accelerated this trend, making contactless purchases more and more significant. Businesses and lawmakers who want to cash in on this trend and encourage the use of digital payment methods must have a firm grasp of the elements that impact consumer behaviour towards digital payments.

Thanks to the convenience, speed, and security offered by digital payments, consumer behaviour has been radically transformed. No longer are customers limited to using only their actual cards or cash for purchases; they can do it whenever and anywhere they like. A rise in both overall spending and impulsive purchases has resulted from this convenience. Plus, customers may keep a closer eye on their money using the tracking and management features offered by digital payment platforms. People are now more cognizant of their spending habits and make more deliberate purchasing decisions as a consequence of this. Consumers sought safer ways to complete transactions during the COVID-19 pandemic, which drove the introduction of contactless payment technologies. Because of the comfort and security associated with contactless payments, this tendency is likely to persist long after the pandemic has passed. In general, customers' buying patterns, tastes, and general financial behaviour have all been affected by the rise of digital payment methods.

Theories of planned behaviour (TPB) and technology acceptance model (TAM) are helpful frameworks for researching how consumers embrace new technologies. In contrast to TPB, which takes into account other elements such subjective standards and perceived behavioural control, TAM argues that an individual's intention to use a technology is largely determined by their perceptions of its usefulness and simplicity of use. This research aims to combine these frameworks in order to identify the main factors that influence how consumers behave with regard to digital payment systems.

Literature review

The adoption of digital payment systems has become increasingly prevalent in recent years, reshaping the way individuals conduct financial transactions. Several factors influence the adoption of digital payment methods, ranging from technological infrastructure to consumer trust and regulatory environments.

A robust technological infrastructure is essential for facilitating digital payment adoption (Laukkanen et al., 2007). Factors such as internet connectivity, smartphone penetration, and digital literacy play a significant role in determining the ease of access to digital payment platforms (Hassan et al., 2020). Higher adoption rates of digital payments are typically found in areas with superior technological infrastructure because of the accessibility and ease that these systems provide.

Consumer trust and perceived security of digital payment systems are critical factors influencing adoption (Dwivedi et al., 2020). Trust is built through the implementation of secure payment gateways, robust data encryption methods, and transparent policies regarding data protection (Kim et al., 2019).

The perceived usefulness and ease of use of digital payment systems also play a crucial role in adoption (Venkatesh et al., 2003). User-friendly interfaces, quick transaction processing times, and seamless integration with existing systems enhance the adoption rates of digital payment methods (Alalwan et al., 2018).

Perceived risk, including concerns about financial loss and privacy, can impact consumer willingness to adopt digital payment methods (Kim et al., 2019). Clear communication of security measures and privacy policies can help mitigate these concerns and increase adoption rates (Yousaf et al., 2019). Consumers adopt digital payment methods when they feel confident that their financial information is secure and protected.

Peer influence and social norms also play a role in digital payment adoption (Lu et al., 2019). Positive word-of-mouth recommendations and social media endorsements can drive adoption rates by increasing consumer trust and confidence in digital payment systems (Venkatesh et al., 2003). Digital payment solutions are embraced by consumers when they observe members of their social circle utilizing and recommending them.

The regulatory environment, including data protection laws and consumer rights, can impact digital payment adoption (Hassan et al., 2020). Clear regulations and enforcement mechanisms promote trust and confidence in digital transactions, leading to higher adoption rates (Dwivedi et al., 2020). When consumers believe that their rights are upheld and that there are unambiguous regulations controlling digital transactions, they are more likely to utilize digital payment methods.

Impact on Consumer Behaviour

Digital payment systems have revolutionized the way consumers transact, offering convenience, accessibility, and security. This review explores how digital payments influence consumer behaviour, including transaction volumes, financial management, shopping behaviour, brand loyalty, and personalized marketing.

Digital payments offer unparalleled convenience and accessibility, allowing consumers to make transactions anytime without the need for physical cash (Alalwan et al., 2018). This convenience has led to increased transaction volumes as consumers opt for the ease of digital transactions (Dahlberg et al., 2015).

Digital payment systems enable better financial management through real-time tracking of transactions and budgeting tools (Kim et al., 2019). Consumers can easily monitor their spending patterns and make informed financial decisions, leading to improved budget control and financial management (Laukkanen et al., 2007).

Digital payments influence shopping behaviour by providing a seamless checkout experience and enabling quick, secure transactions (Venkatesh et al., 2003). This seamless experience encourages consumers to shop more frequently and spend more, especially in online shopping environments (Yousaf et al., 2019).

Customers who use digital payment methods could grow devoted towards brands that provide easy-to-use payment experiences. (Lu et al., 2019). Businesses can leverage this loyalty to drive repeat purchases and brand advocacy, ultimately leading to increased customer lifetime value (Dahlberg et al., 2015).

Digital payment systems collect transaction data that can be used for analytics and personalized marketing (Alalwan et al., 2018). By analyzing consumer behaviour, businesses can offer personalized offers and recommendations, enhancing customer engagement and loyalty (Yousaf et al., 2019).

Objectives

1. To identify the factors influencing consumer behaviour towards digital payment methods.
2. To analyse the impact of these factors on actual usage behaviour of digital payment methods.

Hypothesis:

Social influence has a significant positive influence on behavioural intention for digital payment.

Trust has a significant positive influence on behavioural intention for digital payment.

Perceived ease of use has a significant positive influence on behavioural intention for digital payment.

Behavioural intention has a significant positive influence on actual use behaviour for digital payment.

Research methodology.

To learn more about what influences consumers' attitudes and actions towards digital payment methods, as well as how those attitudes and actions translate into real usage, this study employed a quantitative research strategy. The study's theoretical underpinnings, the Technology Acceptance Model (TAM), illuminated consumers' perspectives and goals in relation to digital payment systems. Through the use of convenience sampling, 367 customers from a range of demographic backgrounds were chosen. An online and in-person structured questionnaire was used to gather data. Social impact, trust, perceived ease of use, behavioural intention towards digital payment, and actual usage behaviour were all factors that were asked about in the questionnaire. Using a Likert scale, we asked respondents to indicate the degree to which they agreed with statements. The SPSS and AMOS statistical packages were used for the analysis. The items used for measurement were subjected to reliability analysis to guarantee their internal consistency. Factor extraction was done using Principal Component Analysis (PCA), and the measurement model was made more valid by applying Varimax rotation with Kaiser normalisation.

Results and discussion

Table 1: Details of respondents (N=367)

Demographic	Items	Percentage
Gender	Male	68
	Female	32
Age in years	18- 25	13
	26-35	31
	36-45	42
	Above 45	12
Education	10^{TH}/10+2	17
	Undergraduate	53
	Post-graduate	21
	Doctorate	2
	Any other	7
Occupation	Student	15
	Housewife	21
	Businessman	19
	Working employees	45

Source: Primary data

The study's respondent demographics is given in the table. With 367 people taking part, 68% were men and 32% were women. With respect to the distribution of ages, 13% were under the age of 25, 31% were between the ages of 26 and 35, 42% were between the ages of 36 and 45, and 12% were older than 45. There were 17% with a 10th or 10+2 diploma, 53% with an undergraduate degree, 21% with a master's degree, 2% with a PhD, and 7% with other awards. A quarter were unemployed, a fifth were housewives, a fifth were businessmen, and a fifth were students (15%).

Table 2: Factors of digital payments and Cronbach's alpha values

Factors →		1	2	3	4
Cronbach's alpha →		0.808	0.785	0.821	0.840
Social influence (SI)	Q10	.877			
	Q8	.874			
	Q11	.874			
	Q9	.783			
Trust (TR)	Q5		.860		
	Q6		.834		
	Q7		.824		
	Q4		.812		
Behaviour intention towards digital payment (BI)	Q12			.899	
	Q14			.897	
	Q13			.872	
Perceived ease of use (PEU)	Q2				.817
	Q1				.796
	Q3				.788
	Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				

Results showing Cronbach's alpha coefficients ranging from 0.785 to 0.840 indicate strong internal consistency among the items evaluating social influence (SI), trust (TR), behavioural intention towards digital payment (BI), and perceived ease of use (PEU) in the reliability analysis. Strong measuring tools are likely indicated by the extremely reliable components within each construct. Extra support for the measurement model's validity came from using Principal Component Analysis for extraction and Varimax rotation with Kaiser normalisation.

Table 3 Correlation among research constructs

Correlations						
		AU	BI	SI	TR	PEU
AU	Pearson Correlation	1	.649**	.392**	.540**	.614**
	Sig. (2-tailed)		.000	.000	.000	.000
BI	Pearson Correlation	.649**	1	.483**	.582**	.608**
	Sig. (2-tailed)	.000		.000	.000	.000
SI	Pearson Correlation	.392**	.483**	1	.469**	.410**
	Sig. (2-tailed)	.000	.000		.000	.000
TR	Pearson Correlation	.540**	.582**	.469**	1	.558**
	Sig. (2-tailed)	.000	.000	.000		.000
PEU	Pearson Correlation	.614**	.608**	.410**	.558**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
**. Correlation is significant at the 0.01 level (2-tailed).						

The acceptability of digital payments by consumers is influenced by a number of factors, and there are significant correlations between the key variables. There is a range of significant positive correlations (.392 to.649) between perceived ease of use (PEU), trust (TR), social influence (SI), and behavioral intention (BI) at the 0.01 (2-tailed) level with actual use (AU).

These findings imply that greater levels of behavioural intention, perceived ease of use, trust, and social influence are linked to greater levels of actual usage of digital payment methods.

Factor influencing digital payments using structure equation modelling (SEM):

SEM analysis using the Maximum Likelihood method was employed to examine the relationships between key variables influencing consumer behaviour in the adoption of digital payment methods. The criteria for acceptance of hypothesis based on path having p below less than 0.05 and critical ratio above 1.96.

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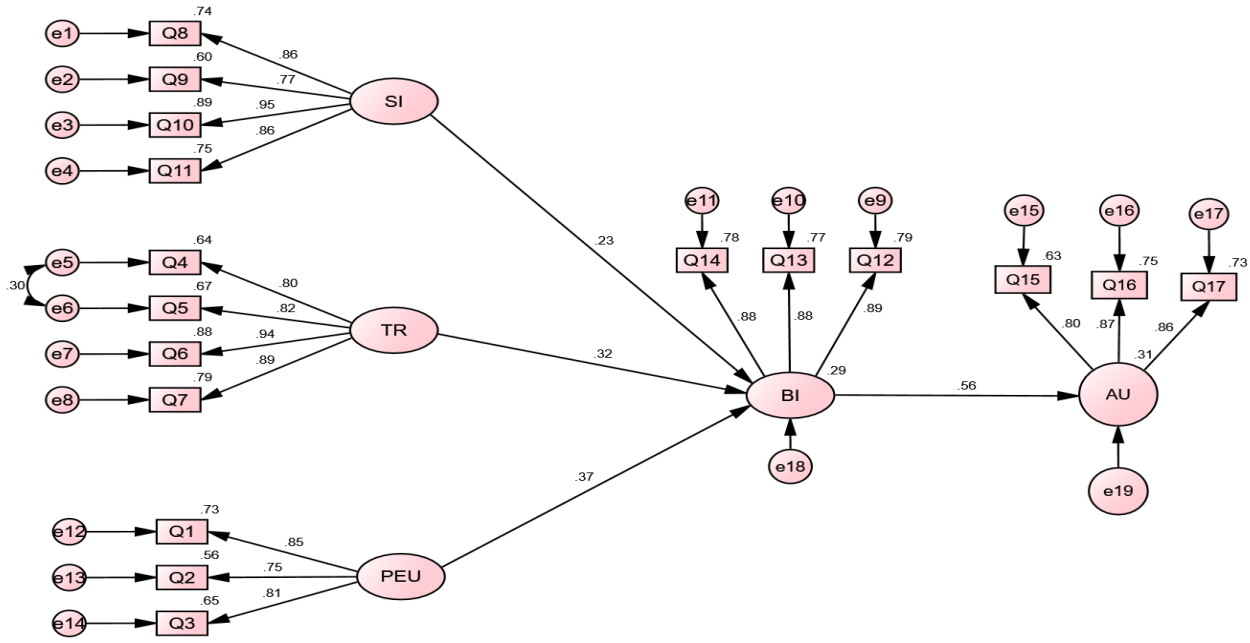
Figure 1: Structure model for digital payments behaviour intention



Note: Here, AU: Actual use, BI: Behaviour intention, PEU: Perceived ease of use, TR: Trust and SI: Social influence

Table 4: Hypothesis results

Hypotheses	Standardized regression weights	Standard error	Critical ratio	P	Result
Social influence→ Behaviour intention	0.229	.054	4.413	0.021	H1 supported
Trust → Behaviour intention	0.323	.061	6.032	0.001	H2 supported
Perceived ease of use → Behaviour intention	0.367	.060	6.506	0.000	H3 supported
Behaviour intention → Actual use behaviour	0.558	.047	9.450	0.000	H4 supported

Hypothesis testing has shown that there are substantial correlations between the variables. The first finding is that social influence significantly and positively affects behavioural intention (standardised regression weight: 0.229, p = 0.021). What this means is that people let their social circles shape their intentions before they act.

Secondly, a standardised regression weight of 0.323 (p = 0.001) indicates that trust has a beneficial influence on behavioural intention. This data demonstrates that people's propensity to utilise a system or service is influenced by their degree of trust in it.

The third point is that the standardised regression weight of 0.367 (p = 0.000) indicates that the perceived ease of use significantly influences the behavioural intention. In other words, if people think a system or service is easy to use, they are more inclined to use it.

Finally, a standardised regression weight of 0.558 (p = 0.000) indicates that behavioural intention is a robust predictor of actual use behaviour. It appears that there is a strong correlation between people's intentions and their actual behaviour when it comes to using a system or service.

These findings demonstrate how social influence, trust, and the impression of ease of use significantly impact people's intentions and actions. High levels of intention and actual use behaviour can be achieved through interventions that enhance trust and perceived ease of use.

Implications and conclusion

The study on factors affecting digital payment and its impact on consumer behaviour provides valuable insights into the dynamics of digital payment adoption. The findings underscore the significant influence of social factors, trust, and perceived ease of use on consumer behaviour towards digital payments. Social influence, in particular, plays a crucial role, highlighting the importance of peer recommendations and social networks in promoting adoption. Trust emerges as a key determinant, emphasizing the need for businesses to prioritize security and reliability to enhance consumer confidence. Perceived ease of use also emerges as a critical factor, suggesting that user-friendly interfaces and seamless experiences are essential for driving adoption. Importantly, the study highlights the predictive power of behavioural intention on actual usage behaviour, indicating that interventions aimed at influencing intention can directly impact adoption rates. These insights have important implications for businesses and policymakers, highlighting the importance of building trust, enhancing social influence, and improving usability to promote digital payment methods.

The study's findings provide managers in the digital payment sector with valuable information to help them make strategic decisions and put good practices into action that will increase customer acceptance and usage. Supervisors are recommended to leverage social media platforms and influencers to magnify favorable opinions, encouraging customers to accept and use digital payment methods more widely.
It is advised that managers place a high priority on fostering trust via open lines of communication and strong security protocols. Investing in security solutions and obtaining certifications might boost adoption by fostering confidence. Managers ought to prioritize ease of use in order to streamline the digital payment process. Adoption can be accelerated and satisfaction increased by ongoing iteration based on user feedback and usability testing. Marketing initiatives must to be coordinated to favorably affect the attitudes and intentions of consumers. Customized advertising that highlights ease of use, safety, and social acceptance can successfully change perceptions and promote adoption.

Conclusion

This study's findings lend credibility to the proposed connections between critical variables impacting the spread of digital payment systems. Critical predictors of behavioural intention, which in turn substantially predicts actual use behaviour, include social influence, trust, and perceived ease of use. In order to encourage the broad use of digital payment process in the dynamic digital economy, it is crucial to address customer attitudes and provide smooth user experiences.

References

1. Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., & Algharabat, R. (2018). Examining factors influencing Jordanian customers' intentions and adoption of internet banking: Extending UTAUT2 with risk. *Journal of Retailing and Consumer Services, 40*, 125-138.
2. Bailey, A. A., & Pearson, S. W. (1983). Development of a tool for measuring and analyzing computer user satisfaction. Management Science, 29(5), 530-545.
3. Chuttur, M. Y. (2009). Overview of the technology acceptance model: Origins, developments and future directions. Sprouts: Working Papers on Information Systems, 9(37), 1-23.
4. Dahlberg, T., Guo, J., & Ondrus, J. (2015). A critical review of mobile payment research. *Electronic Commerce Research and Applications, 14*(5), 265-284.
5. Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams, M. D. (2020). Re-examining the unified theory of acceptance and use of technology (UTAUT): Towards a revised theoretical model. *Information Systems Frontiers, 22*(3), 679-704.

6. Hassan, L., Rahman, M. M., & Haque, A. (2020). Factors affecting consumers' adoption of mobile banking: Empirical evidence from Bangladesh. *Journal of Retailing and Consumer Services, 52,* 101934.
7. Kim, J., Park, H., & Rha, J. Y. (2019). The role of risk perceptions in an extended technology acceptance model for mobile payment applications. *Computers in Human Behaviour, 101,* 61-71.
8. Laukkanen, T., Sinkkonen, S., Kivijärvi, M., Laukkanen, P., & Saarijärvi, H. (2007). Innovation resistance among mature consumers. *Journal of Consumer Marketing, 24*(7), 419-427.
9. Lu, J., Liu, C., & Yu, C. S. (2019). The role of social influence in adopting mobile payment services: An empirical study. *International Journal of Information Management, 44,* 76-86.
10. Mukherjee, A., & Nath, P. (2003). A model of trust in online relationship banking. International Journal of Bank Marketing, 21(1), 5-15.
11. Narayanaswamy, R., & Usha, G. (2017). A study on factors influencing consumer adoption of digital payment systems in India. International Journal of Research in Finance and Marketing, 7(9), 11-19.
12. Ozturk, A. B., Yılmaz, R., & Bilgihan, A. (2016). Understanding the factors affecting mobile wallet adoption: A social cognitive theory perspective. Computers in Human Behaviour, 60, 173-185.
13. Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. International Journal of Electronic Commerce, 7(3), 101-134.
14. Suk, S. J., & Lee, E. J. (2018). A study on the effect of trust on the intention to use mobile payment. Journal of Digital Convergence, 16(7), 285-294.
15. Tang, Q., Zhang, Y., & Qiu, J. (2017). Understanding the intention of mobile payment acceptance: An empirical study. International Journal of Mobile Communications, 15(5), 443-460.
16. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425-478.
17. Yousaf, Z., Saif, A., Abbas, J., Iqbal, S., & Akram, T. (2019). Investigating the role of social influence, trust and perceived usefulness on consumers' purchase intention towards organic food. *Journal of Consumer Behaviour, 18*(4), 335-348.