A Study on Consumer Buying Behavior Toward Digital Payment Methods in Thailand

Kongchai Suphanavong
MBA (Marketing), Faculty of Management Studies
Parul University, Vadodara, India

***Abstract*—The rapid expansion of digital payment systems has significantly transformed consumer buying behavior in Thailand. With the support of government initiatives such as the National e-Payment Master Plan and the growing penetration of smartphones, Thai consumers are increasingly shifting from cash-based transactions to mobile wallets, QR code payments, and internet banking systems. Despite technological advancements, variations in consumer trust, perceived usefulness, security concerns, and promotional influence continue to shape adoption patterns. This study examines the factors influencing consumer buying behavior toward digital payment methods in Thailand using a quantitative research approach. Primary data were collected from 137 respondents through a structured questionnaire measured on a five-point Likert scale. Statistical tools including descriptive analysis and Chi-square tests were used to analyze the relationship between perceived usefulness and adoption frequency. The findings indicate that convenience, time-saving benefits, and trust significantly influence digital payment usage. The study contributes to understanding behavioral drivers of digital payment adoption and provides insights for policymakers and fintech providers aiming to enhance consumer trust and long-term usage.**

***Index Terms*—Digital Payment, Consumer Buying Behavior, Trust, Perceived Usefulness, Thailand, Adoption**

I. INTRODUCTION

Over the past decade, digital transformation has reshaped global financial systems, fundamentally altering how consumers conduct transactions. Digital payment technologies, including mobile wallets, QR code systems, internet banking, and contactless cards, have become integral components of modern commerce. Countries across Asia have experienced rapid growth in cashless transactions, and Thailand stands out as one of the leading digital economies in Southeast Asia.

Thailand's transition toward a cashless society has been strongly supported by government policies under the Thailand 4.0 vision. The National e-Payment Master Plan, launched by the Bank of Thailand, introduced platforms such as PromptPay, which allow instant money transfers using phone numbers or national ID numbers. These initiatives have reduced transaction costs, enhanced financial inclusion, and increased accessibility for both urban and rural consumers. According to recent financial reports, digital transactions in Thailand have grown steadily over the last five years, reflecting a structural shift in consumer payment preferences.

The COVID-19 pandemic further accelerated this transformation by encouraging contactless payments and reducing physical cash handling. Mobile payment applications such as TrueMoney, Rabbit LINE Pay, ShopeePay, and various mobile banking platforms have become part of everyday life for Thai consumers. However, while technological infrastructure continues to improve, consumer adoption is influenced by psychological and behavioral factors such as perceived usefulness, trust, perceived risk, security concerns, and promotional incentives.

Understanding consumer buying behavior in the context of digital payments is essential for ensuring sustainable adoption and long-term loyalty. Although many consumers appreciate the convenience and speed of digital transactions, concerns related to cybersecurity, fraud, and data privacy remain significant barriers. Additionally, demographic variables such as age, income level, and occupation

may influence usage intensity and perception toward digital payment platforms.

Therefore, this study aims to analyze the key factors influencing consumer buying behavior toward digital payment methods in Thailand. By examining behavioral drivers such as perceived usefulness, trust, and promotional influence, the research seeks to provide empirical evidence that can assist financial institutions, fintech companies, and policymakers in strengthening Thailand's digital payment ecosystem.

II. LITERATURE REVIEW

The adoption of digital payment systems has been widely examined in academic research over the past two decades. Various theoretical and empirical studies have identified technological, psychological, and social determinants influencing consumer behavior toward digital financial platforms.

2.1 Technology Acceptance and Digital Payment Adoption

Davis (1989) introduced the Technology Acceptance Model (TAM), proposing that perceived usefulness and perceived ease of use significantly determine technology adoption. According to Davis, when individuals believe that a system enhances their performance and is easy to operate, their intention to use the technology increases.

Venkatesh and Davis (2000) extended TAM by incorporating social influence and cognitive instrumental processes. Their study emphasized that external variables such as peer influence and organizational support play a significant role in technology adoption.

Venkatesh et al. (2003) developed the Unified Theory of Acceptance and Use of Technology (UTAUT), identifying performance expectancy, effort expectancy, social influence, and facilitating conditions as key determinants of usage behavior. The model has been widely applied in mobile banking and e-payment studies.

Oliveira et al. (2016) applied an extended UTAUT model to mobile payment systems and found that performance expectancy and effort expectancy significantly influence behavioral intention. Their study also revealed that trust enhances adoption intention in online financial transactions.

2.2 Trust and Security in Digital Payments

Gefen, Karahanna, and Straub (2003) emphasized that trust reduces uncertainty in online environments and directly influences consumers' willingness to transact electronically. Their findings suggest that trust is particularly important in financial services where perceived risk is high.

Zhou (2013) investigated mobile banking adoption and concluded that trust significantly affects continued usage intention. The study highlighted that system security and privacy protection increase user confidence.

Liébana-Cabanillas et al. (2018) analyzed mobile payment adoption in Europe and Asia and found that trust is a stronger predictor of usage than ease of use in financial applications.

Rahi and Ghani (2018) examined mobile banking loyalty and reported that customer trust mediates the relationship between service quality and customer retention.

Sinha and Singh (2021) compared digital wallet usage in India and Thailand and found that perceived security is the most critical factor influencing adoption behavior.

2.3 Perceived Risk and Behavioral Resistance

Featherman and Pavlou (2003) conceptualized perceived risk in e-services as including financial risk, performance risk, privacy risk, and time risk. Their study demonstrated that higher perceived risk reduces adoption intention.

Yang et al. (2012) found that perceived risk negatively influences consumers' intention to adopt mobile payment systems, particularly among older users.

Gupta and Arora (2019) examined digital payment adoption in developing countries and concluded that fear of fraud and data misuse significantly hinder consumer acceptance.

Sharma and Gaur (2021) observed that post-COVID digital adoption increased, but perceived cybersecurity threats remained a key barrier to full adoption.

2.4 Promotional Incentives and Marketing Influence
Singh and Rana (2020) studied digital payment behavior across Asian countries and found that promotional incentives such as cashback and discounts significantly influence repeat usage.

Lim, Cham, and Ting (2020) reported that promotional rewards positively affect perceived value, which subsequently enhances adoption intention.

Chawla and Joshi (2019) found that perceived enjoyment and promotional benefits significantly increase mobile wallet adoption among young consumers.

Yan and Yang (2015) demonstrated that habitual use develops when incentives are combined with convenience and positive user experience.

2.5 Consumer Satisfaction and Loyalty
Thakur (2013) found that service quality and responsiveness significantly influence customer satisfaction in mobile payment systems.

Rahman et al. (2020) reported that satisfied users are more likely to recommend digital payment apps, creating positive word-of-mouth effects.

Koenig-Lewis et al. (2015) found that hedonic motivation and satisfaction significantly impact continued usage intention among younger consumers.

Lin (2011) concluded that system reliability and interface quality enhance consumer trust and satisfaction.

2.6 Demographic and Social Factors
Nguyen and Huynh (2021) identified age and education as moderating variables influencing digital payment adoption.

Kim, Mirusmonov, and Lee (2010) found that younger consumers are more likely to adopt mobile payment technologies due to social influence and perceived enjoyment.

Phonthanukitithaworn et al. (2016) specifically examined digital payment adoption in Thailand and concluded that government initiatives and urban infrastructure significantly accelerate usage among Thai consumers.

Tan, Ooi, and Chong (2019) found that regulatory frameworks and government policies strengthen consumer confidence in Southeast Asian digital payment systems.

III. OBJECTIVES OF THE STUDY

The primary objectives of this research are:
1) To investigate the key determinants influencing consumer buying behavior toward digital payment methods in Thailand.
2) To examine the relationship between perceived usefulness, trust, perceived risk, and digital payment adoption.
3) To provide empirical evidence to support strategic decision-making for fintech providers and policymakers in enhancing digital payment adoption.

IV. HYPOTHESES OF THE STUDY

Based on the objectives and review of literature, the following hypotheses are formulated:
Hypothesis 1:
(H_{01}): There is no significant relationship between perceived usefulness and digital payment adoption among Thai consumers.
(H_{11}): There is a significant relationship between perceived usefulness and digital payment adoption among Thai consumers.

Hypothesis 2:
(H_{02}): There is no significant relationship between trust and digital payment usage behavior among Thai consumers.
(H_{12}): There is a significant relationship between trust and digital payment usage behavior among Thai consumers.

Hypothesis 3:
(H_{03}): Promotional incentives do not significantly influence digital payment usage frequency among Thai consumers.
(H_{13}): Promotional incentives significantly influence digital payment usage frequency among Thai consumers.

V. RESEARCH METHODOLOGY

The present study adopts a quantitative research approach to examine consumer buying behavior toward digital payment methods in Thailand. The research design is descriptive and analytical in nature, aiming to identify the relationship between perceived usefulness, trust, perceived risk, and promotional incentives

5.1 Sample

The sample for the study consists of 137 respondents from Thailand who actively use digital payment systems such as mobile banking applications, QR-code payments, and e-wallet platforms. The respondents were selected using a convenience sampling method due to accessibility and time constraints.
The age of the respondents ranged from 18 to 45 years, including students, working professionals, and self-employed individuals. Both male and female participants were included to ensure diversity in consumer behavior patterns.

5.2 Data Collection

Primary data were collected through a structured questionnaire designed based on established technology adoption theories. The questionnaire consisted of two sections:

- Demographic profile of respondents
- Statements measuring perceived usefulness, trust, perceived risk, promotional influence, and usage behavior

A five-point Likert scale was used (1 = Strongly Disagree to 5 = Strongly Agree).
The survey was conducted online using digital platforms to reach active digital payment users.

5.3 Procedure

Respondents were informed about the purpose of the study before participating. Confidentiality and anonymity were assured to encourage honest responses. Participants completed the questionnaire voluntarily, and responses were recorded for academic research purposes only.

5.4 Data Analysis

The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics including mean and standard deviation were computed to examine the overall trend of the study variables.
To test the formulated hypotheses (H1–H3), inferential statistical techniques were applied. Pearson correlation analysis was used to examine the relationship between perceived usefulness, trust, promotional incentives, and digital payment adoption behavior.
Furthermore, multiple regression analysis was conducted to determine the predictive impact of the independent variables on digital payment adoption. A significance level of 0.05 was considered for hypothesis testing.

Table 1: Correlation Analysis Results

Variable	Mean	SD	Adoption Behavior (r)	Sig.
Perceived Usefulness	4.32	0.61	0.54	0.000
Trust	4.18	0.74	0.49	0.000
Promotional Incentives	4.05	0.69	0.41	0.002

Table 2: Regression Analysis Results

Variable	Beta (β)	t-value	Sig.	Result
Perceived Usefulness	0.38	4.92	0.000	Supported
Trust	0.31	3.87	0.001	Supported
Promotional Incentives	0.24	2.96	0.004	Supported

VI. RESULTS AND DISCUSSION

The results presented in Table 1 indicate that perceived usefulness ($r = 0.54$, $p < 0.05$), trust ($r = 0.49$, $p < 0.05$), and promotional incentives ($r = 0.41$, $p < 0.05$) show significant positive relationships with

digital payment adoption behavior among Thai consumers. This suggests that consumers are more likely to adopt digital payment methods when they perceive them as useful, secure, and financially rewarding.

Among the independent variables, perceived usefulness demonstrates the strongest correlation with adoption behavior. This finding supports the Technology Acceptance Model proposed by Davis (1989), which emphasizes perceived usefulness as a primary determinant of technology adoption.

The regression analysis results (Table 2) further confirm that perceived usefulness ($\beta = 0.38$, $p < 0.05$) is the strongest predictor of digital payment adoption, followed by trust ($\beta = 0.31$, $p < 0.05$) and promotional incentives ($\beta = 0.24$, $p < 0.05$). These findings indicate that while marketing incentives play a role in encouraging usage, psychological assurance and perceived functional benefits are more influential in shaping long-term adoption behavior.

The results align with previous studies by Oliveira et al. (2016) and Liébana-Cabanillas et al. (2018), who found that trust and perceived usefulness significantly influence digital payment adoption. The findings also suggest that promotional strategies can enhance short-term usage, but sustainable adoption depends largely on reliability and performance efficiency.

Overall, the study confirms that consumer buying behavior toward digital payment systems in Thailand is significantly influenced by technological perceptions and trust-related factors.

VII. CONCLUSION

This study set out to understand what truly drives Thai consumers to adopt digital payment methods in their daily purchasing behavior. Based on data collected from 137 respondents, the findings clearly demonstrate that consumers are not simply influenced by promotional offers, but rather by deeper perceptions related to usefulness and trust.

The results show that perceived usefulness plays the most important role in shaping digital payment adoption. When consumers believe that digital payment systems make transactions faster, easier, and more efficient, they are more willing to integrate them into their everyday lives. This highlights the importance of functional value in technology adoption.

Trust also emerged as a significant factor. Consumers need to feel confident that their financial information is secure and that digital platforms are reliable. In a financial context, where personal and monetary risks are involved, trust becomes a fundamental requirement rather than an optional benefit.

Although promotional incentives such as cashback and discounts positively influence usage, their effect appears to be secondary compared to technological and psychological factors. This suggests that while promotions may encourage initial trials, long-term adoption depends on reliability, security, and perceived value.

Overall, the findings suggest that sustainable digital payment adoption in Thailand is built not merely on marketing incentives, but on consumer confidence and perceived functional benefits. The study provides meaningful insights for fintech companies, banking institutions, and policymakers seeking to strengthen Thailand's transition toward a cashless society.

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This study contributes to the growing body of literature on digital financial services by empirically examining consumer buying behavior toward digital payment methods in Thailand within an integrated behavioral framework. While prior studies have largely emphasized adoption intention through technology acceptance models, this research advances existing knowledge by analyzing actual usage behavior and purchasing patterns. By incorporating perceived usefulness, trust, perceived risk, and promotional incentives using primary data collected from 137 respondents, the study provides context-specific evidence from an emerging digital economy. The findings offer theoretical enrichment to technology adoption literature and practical implications for fintech providers, banking institutions, and policymakers aiming to enhance consumer confidence and accelerate sustainable cashless transformation in Thailand.

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APPENDIX

A: Definition of the Variables Used in the Study

Variable	Definition
Perceived Usefulness	The degree to which a consumer believes that the use of digital payment systems enhances the efficiency, speed, and overall effectiveness of purchasing activities. It reflects the functional benefits derived from digital payment usage, including convenience, time-saving capability, and improved transaction performance.
Trust	The belief that digital payment platforms are secure, reliable, and capable of safeguarding users' financial and personal information. Trust represents confidence in system integrity, transaction safety, privacy protection, and the credibility of service providers.
Promotional	Financial and marketing-based benefits such as cashback offers, discounts, loyalty rewards, and

Incentives	special promotional campaigns provided by digital payment platforms. These incentives are designed to encourage trial usage, increase transaction frequency, and strengthen consumer engagement.
Digital Payment Adoption Behavior	The actual behavioral use of digital payment methods in consumers' purchasing activities. It reflects the frequency, preference, and continued usage of digital payment systems over traditional cash transactions.