

PAYMENT GATEWAY SELECTION FOR ONLINE PURCHASES: EVIDENCE OF AN EMERGING MARKET

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Abstract

The objectives of this research are to study attitudes that affect payment gateway selection for online purchases in Thailand and to study various variables that affect payment gateway selection for online purchases in Thailand, especially payments through banks.

The research adopts a quantitative data collection and analysis. Quantitative data was gathered from 1,635 respondents with closed-ended questionnaires through social media, statistical analysis software, and binary regression to explore the relationship between independent and dependent variables.

This study provides a brief overview of how consumers decide on payment gateway selection for online purchases in Thailand, focusing on banks and non-banks. The selection of payment methods is a new and interesting issue that has made people interested in and has become more and more popular until now. Therefore, this is the reason to raise this issue and from researching information, there is no research topic regarding the selection of payment gateway selection for online purchases in Thailand. Nowadays, the use of the Internet is growing rapidly. As a result, the rate of access to mobile and internet banking services through PromptPay has increased, which is considered the most convenient payment method. Therefore, mobile banking reduces consumers' cash holdings, reduces transaction costs for each payment,

stimulates consumption, and creates opportunities for startups and small and medium-sized enterprises (SMEs). It also promotes access to financial services and stimulates economic growth (Suwanragsa et al., 2020).

1. INTRODUCTION

Since 2019, the world has faced and been affected by the COVID-19 pandemic. The world economy is recovering rather slowly and various countries around the world need to urgently find new economic growth points. This has resulted in major changes in many business industries. One of the changes is modern businesses have transformed their operations from cash-based to cashless and digital by promoting online and electronic payment transactions to play an increasingly important role in today's business (Chaveesuk et al., 2022). Thailand is one of the countries that are entering the digital economy. This online payment gateway is considered the best solution to stimulate the economy. Every business in the country must enter a payment channel that integrates with their business or lifestyle to support the future (Izhar et al., 2011).

A payment gateway is a national connection point and bank network in which all online transactions must pass through a payment gateway to be processed. As such, payment gateways act as a bridge between the merchant's website and the financial institution processing the transaction with a safer and faster online transaction experience (Gulati & Srivastava, 2007). Therefore, payment gateways are an inevitable part of helping businesses succeed and undoubtedly become a necessity when doing business online in Thailand (Zheng, 2022).

2. METHODOLOGY

The participants in this study were people who use payment gateway selection for online purchases in Thailand. The sampling method was a closed-ended questionnaire. Data were collected from 1,635 people who responded to the survey via social media such as Email, Facebook, and Line application. The duration for data collection was between November 2023 and March 2024 (4 months). The online questionnaire was designed with a Google Form, which could be accessed by sharing through social media to disseminate the questionnaire widely and obtain a wider range of statistical information (Mohamed et al., 2021).

3. RESULTS AND DISCUSSION

3.1. Results

From this research study, the dependent variable is set to be a binary variable with values of 1 and 0. Those who decide on online payments that are directly connected to the bank have a value equal to 1 and those

who decide to pay through non-bank financial service providers have a value equal to 0. Therefore, the statistics used is binary logistics regression. The experimental results from using the significant independent variables are as follows.

Table 1. Classification for back-testing

<i>Observed</i>			<i>Predicted</i>		
			<i>Payment gateway</i>		<i>Percentage correct</i>
			<i>Bank (0)</i>	<i>PromptPay-mobile banking (1)</i>	
Step 1	Payment gateway	Bank (0)	358	151	70.3
		PromptPay-mobile banking (1)	75	1051	93.3
Overall percentage					86.2

As shown in Table 2, the classification results showed that the significant model in payment gateway selection in Thailand is 86.2%.

Table 2. Variables in the model using independent variables in payment gateway selection for online purchases in Thailand

	<i>Variables</i>	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>df</i>	<i>Sig.</i>	<i>Exp(B)</i>
Step 1	Gender	-1.887	0.177	112.977	1	0.000	0.152
	Age	0.890	0.097	84.846	1	0.000	2.436
	Income	-0.550	0.095	33.612	1	0.000	0.577
	Monthly savings	0.208	0.088	5.604	1	0.018	1.231
	Social presence	1.247	0.131	90.448	1	0.000	3.481
	Trust	0.918	0.157	34.082	1	0.000	2.505
	Perceived Risk	-0.713	0.155	21.304	1	0.000	0.490
	Perceived ease of use (using a platform is easy and convenient)	0.708	0.226	9.791	1	0.002	2.029
	Attitudes toward using (feel time-saving and convenient)	1.029	0.199	26.820	1	0.000	0.357
	Consumption (consider using the platform service)	0.431	0.161	7.166	1	0.007	0.650
	Constant	0.973	0.639	2.314	1	0.128	2.645

3.2. Discussion

It can be seen that the selection of payment gateway selection for online purchases in Thailand has two main variables: the dependent variable (including payment gateway with non-bank and bank) and the independent variable (including gender, age, income, monthly savings, social presence, trust, perceived risk, perceived ease of use,

attitudes toward using and consumption). These variables are important to these findings. It emphasizes the importance of accessibility in choosing payment gateway selections. This is a new and interesting issue that makes people pay attention and is becoming more popular nowadays.

From Table 2, the results of the payment gateway selection for online purchases in Thailand can be summarized as follows.

3.2.1. Demographic factors

Demographic factors were found as below:

Gender: The results found that females use payment gateways for online purchases more than males. Female consumers are more likely to use payment gateway linked to banks (Bian et al., 2023). Gender is an important factor that can influence a consumer's buying decision. Females tend to have a desire to send and receive news more than males, while males do not have the desire to send and receive news (Adekoya & Laksitamas, 2024).

Age: The results found that age affects the use of payment gateways for online purchases. According to Foltýnová and Brůha (2024), the age of the population influences the purchase of essential goods and other products online, especially after the COVID-19 outbreak. This shows that age continues to be a factor affecting the strength of online activity (Drummond & Hasnine, 2023).

Income: The results found that the less income of the population, the less use of payment gateway for online purchases. Customer income affects behavior, attitudes, and purchasing decisions. On the other hand, customers with higher salaries will have more affordability and freedom to make environmentally conscious choices (Srisathan et al., 2023).

3.2.2. Data evaluating of payment gateway selection

Among the data evaluating of payment gateway selection are:

Social presence: The results found that the more social presence, the more use of a payment gateway. Leong et al. (2020) stated that social presence with sellers is a hallmark of commerce on social media. Moreover, social media commerce is an important form of promoting social presence. Thus, a social presence provides an opportunity for sellers and buyers to build good relationships with each other (Lu et al., 2016).

Trust: The results found that the more confidence the user has, the more they use payment gateway for online purchases. The findings suggest that consumers in the sample group are receptive to online shopping and technology. They are aware of product quality and value

and consider factors such as convenience, personal lifestyle, and recommendations from trusted sources in their decision-making process (Siwasutham et al., 2023).

Perceived risk: The results found that greater or less perceived risk affects the use of payment gateways for online purchases. According to Siwasutham et al. (2023), there are many aspects of risk associated with online shopping, such as financial risk, which refers to losses that may occur during online payment transactions, and privacy risk, which refers to the potential loss of personal information, such as unauthorized disclosure of customer information (Jain & Kulhar, 2019). Therefore, consumers' risk perception affects online shopping behavior when consumers are aware of the risks that will occur (Siwasutham et al., 2023).

Perceived ease of use: The results found that the more users perceive the ease of use, the more users of payment gateways for online purchases. Customers will be more interested in using mobile banking if the level of usefulness, ease of use, security, and trust provided by the bank is in accordance with what the customer wants (Hartono et al., 2023).

Attitudes toward using: The results found that the more users feel like they save time and are more comfortable, the more they shop online through a payment gateway. According to Ibrahim et al. (2023), the expansion of online purchasing is caused by many factors such as price, saving time, and connection to online payment systems. People started shopping on the Internet because it is cheaper price, easier, and more convenient to search for products and services online before making a purchase.

Consumption: The results found that the use of various platforms has resulted in an increase in payment gateways for online purchases as de Blanes Sebastián et al. (2023) said buying and selling products and services is now more flexible. Exchanges between service providers and customers in a shared platform, where services are agreed between service users. There are many channels for transferring money to purchase products and services, such as through mobile phones, Internet banking, and online social networking platforms.

4. CONCLUSION

From the research objectives, the research results can be summarized as follows. There are 10 independent variables (gender, age, income, monthly savings, social presence, trust, perceived risk, perceived ease of use, attitudes toward using and consumption) and 2 dependent variables (payment gateway with non-bank and bank). These variables influence the decision of payment gateways for online purchases. In this study, it was found that these factors direct variation according to online purchases.

REFERENCES

- Adekoya, D. O., & Laksitamas, P. (2024). The impact of gender on consumer buying decision process towards online shopping: A study of Thai consumers. *International Journal of Business Performance Management*, 25(1), 128–146. <https://doi.org/10.1504/IJBPM.2024.135156>
- Bian, W., Cong, L. W., & Ji, Y. (2023). *The rise of e-wallets and buy-now-pay-later: Payment competition, credit expansion, and consumer behaviour* (NBER Working Paper 31202). National Bureau of Economic Research. <https://doi.org/10.3386/w31202>
- Chaveesuk, S., Khalid, B., & Chaiyasoonthorn, W. (2022). Continuance intention to use digital payments in mitigating the spread of COVID-19 virus. *International Journal of Data and Network Science*, 6(2), 527–536. <https://doi.org/10.5267/j.ijdns.2021.12.001>
- de Blanes Sebastián, M. G., Antonovica, A., & Sarmiento Guede, J. R. (2023). What are the leading factors for using Spanish peer-to-peer mobile payment platform Bizum? The applied analysis of the UTAUT2 model. *Technological Forecasting and Social Change*, 187, Article 122235. <https://doi.org/10.1016/j.techfore.2022.122235>
- Drummond, J., & Hasnine, M. S. (2023). Online and in-store shopping behavior during COVID-19 pandemic: Lesson learned from a panel survey in New York City. *Transportation Research Record: Journal of the Transportation Research Board*. Advance online publication. <https://doi.org/10.1177/03611981231158647>
- Foltýnová, H. B., & Brůha, J. (2024). Expected long-term impacts of the COVID-19 pandemic on travel behaviour and online activities: Evidence from a Czech panel survey. *Travel Behaviour and Society*, 34, Article 100685. <https://doi.org/10.1016/j.tbs.2023.100685>
- Gulati, V. P., & Srivastava, S. (2007). The empowered internet payment gateway. In *The Proceedings of the International Conference on E-Governance “Towards Next Generation E-Government”* (pp. 98–107). https://csi-sigegov.org.in/2/10_342_2.pdf
- Hartono, P., Tulung, J., & Tumewu, F. (2023). The impact of perceived usefulness, perceived ease-of-use and perceived value on user’s intention to continue using ShopeePay. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 11(3), 1473–1486. <https://doi.org/10.35794/emba.v11i3.51150>
- Ibrahim, N. A. N., Husseini, F., Aisyah, N., Camelia, N., Khazlyn, N., Faiz, W., & Kahar, N. (2023). Online shopping behaviour in youth: A systematic review of the factors influencing online shopping in young adults. *International Journal of Academic Research in Business and Social Sciences*, 13(2), 168–178. <https://doi.org/10.6007/IJARBS/v13-i2/16257>
- Izhar, A., Khan, A., Khiyal, M., Javed, W., & Baig, S. (2011). Designing and implementation of electronic payment gateway for developing countries. *Journal of Theoretical and Applied Information Technology*, 26(2), 84–90. <https://www.jatit.org/volumes/Vol26No2/3Vol26No2.pdf>
- Jain, R., & Kulhar, M. (2019). Barriers to online shopping. *International Journal of Business Information Systems*, 30(1). <https://doi.org/10.1504/IJBIS.2019.097043>
- Leong, L.-Y., Hew, T.-S., Ooi, K.-B., & Chong, A. Y.-L. (2020). Predicting the antecedents of trust in social commerce — A hybrid structural equation modeling with neural network approach. *Journal of Business Research*, 110, 24–40. <https://doi.org/10.1016/j.jbusres.2019.11.056>

- Lu, B., Fan, W., & Zhou, M. (2016). Social presence, trust, and social commerce purchase intention: An empirical research. *Computers in Human Behavior*, *56*, 225–237. <https://doi.org/10.1016/j.chb.2015.11.057>
- Mohamed, A. A. O., Elhassan, E. A. M., Mohamed, A. O., Mohammed, A. A., Edris, H. A., Mahgoop, M. A., Sharif, M. E., Bashir, M. I., Abdelrahim, R. B., Idriss, W. I., & Malik, M. E. (2021). Knowledge, attitude and practice of the Sudanese people towards COVID-19: An online survey. *BMC Public Health*, *21*, Article 274. <https://doi.org/10.1186/s12889-021-10319-5>
- Siwasutham, N., Ru-Zhue, J., & Aujirapongpan, S. (2023). Consumer purchase behavior on brand-name products through online channels: A study of consumers in Muang District, Nakhon Si Thammarat Province, Thailand. *GSC Advanced Research and Reviews*, *15*(3), 231–241. <https://doi.org/10.30574/gscarr.2023.15.3.0270>
- Srisathan, W. A., Wongsachia, S., Gebsoombut, N., Naruetharadhol, P., & Ketkaew, C. (2023). The green-awakening customer attitudes towards buying green products on an online platform in Thailand: The multigroup moderation effects of age, gender, and income. *Sustainability*, *15*(3), Article 2497. <https://doi.org/10.3390/su15032497>
- Suwanragasa, I., Sinliamthong, P., Srivalosakul, P., Tangjitprom, N., & Srinutshasad, C. (2020). Electronic payment system: Types, trends, and its impacts on Thai economy. *Journal of Social Sciences and Humanities*, *9*(1), 92–107. <https://doi.org/10.14456/rjsh.2022.8>