

## Research Article

### ONLINE BANKING AND CUSTOMER SATISFACTION IN MUAK LEK DISTRICT, SARABURI PROVINCE

Priyanjana Wickramarachchi\* and Noah Balraj  
Asia Pacific International University

\*E-mail: priyanjanaw@gmail.com

*Received: 2024-08-05*

*Revised: 2025-04-01*

*Accepted: 2025-04-04*

#### ABSTRACT

This research study examined relationships between six aspects of online banking services and customer satisfaction among clients in Muak Lek District, Saraburi Province, Thailand. A survey questionnaire with 49 items was used to collect data from 402 online customers of three local banks in order to better understand their user experiences. Key factors that were explored included Reliability, Transaction Efficiency, Ease of Use, Safety and Security, Customer Support, and Performance. Descriptive analysis revealed a generally positive perception of online banking services, with mean satisfaction scores ranging from a low of 3.81 (Safety and Security) to a high of 4.12 (Transaction Efficiency) on a 5-point scale across the various dimensions. Pearson's correlation test and multiple regression revealed statistically significant correlations at the .01 level among customer satisfaction and all factors, with Performance, Customer Support, and Transaction Efficiency emerging as the key predictors of satisfaction. However, concerns about Safety and Security, along with areas for improvement in Reliability and Ease of Use, were identified. The findings emphasize how these factors influence client perceptions of online banking services, and the importance of ongoing user interface design changes to improve overall customer satisfaction. Recommendations for future research include studying how demographic variables may affect customer satisfaction, longitudinal studies

to explore how the determinants of customer satisfaction may change over time, and assessing the impact of specific interventions on customer satisfaction.

**Keywords:** Online banking services, customer satisfaction, Thailand

## INTRODUCTION

In only a few short years, technological advances have transformed the way that we monitor and manage our personal finances. The widespread use of smartphones, better Internet connectivity, and Fintech software applications have contributed to an explosion in online banking services. Not long ago, banking meant waiting in lines and filling out forms before depositing or withdrawing money. Today, customers have the luxury of accessing their financial records without leaving home, and can make purchases or pay bills by clicking a few buttons on their phones.

The widespread adoption of online banking has also presented financial banks with many opportunities to improve customer satisfaction and loyalty (Amoah-Mensah, 2010). However, amidst these benefits lie challenges such as cybersecurity concerns and the need to balance digital convenience with personalized service (Musaev & Yousoof, 2015).

These changes have revolutionized how banking services are provided and used;

thus, this study sought to examine the links between specific aspects of online banking, and how they shape customer experiences and impact satisfaction. The study also looked at some challenges associated with online banking to provide suggestions and strategies that would help improve user experiences. By analysing such factors, valuable insights may emerge on how to create more reliable, safer, and customer-focused online banking experiences (Goh et al., 2016).

By gaining a better understanding of Muak Lek customers' online banking experiences, the researchers endeavoured to identify and measure key factors that influence their satisfaction levels. Gaining such insights may be helpful in establishing effective strategies to enhance customer relations, improve services, and maintain a competitive edge in a constantly changing landscape (Banu et al., 2019), (Deraz & Iddris, 2019). Thus, valuable insights about online banking services may emerge that could contribute to development of the banking industry in Thailand.

Using a quantitative survey-based approach (Baquero, 2022), data about client online banking services experiences and preferences were gathered from residents of the rural community of Muak Lek, Saraburi Province. This information may help financial service providers to better understand their customers' needs, which is the first step in creating strategies to address these needs and build lasting loyalty in the rapidly evolving digital banking sector.

## RESEARCH OBJECTIVES

Objective 1: To explore factors influencing customer satisfaction in online banking in Muak Lek, Saraburi, Thailand.

Objective 2: To identify challenges and benefits associated with online banking in relation to customer satisfaction.

Objective 3: To propose ways that customer satisfaction may be enhanced and the online banking experience improved.

## RESEARCH SCOPE

The research focused on online banking services provided by three Thai banks with local branches in Muak Lek, Saraburi, Thailand. Its aims were to explore factors influencing customer satisfaction,

challenges and benefits associated with online banking services, and propose strategies to enhance clients' online banking experiences.

## LITERATURE REVIEW

Customer satisfaction, a critical performance indicator, has been extensively studied since the 1980s. In online banking, user satisfaction encompasses overall feelings and attitudes toward factors impacting their experience (Bailey & Pearson, 1983). Meeting or exceeding customer expectations regarding ease of use, quality, aesthetics, appeal, and value for money is crucial (Ankit, 2011).

Factors influencing consumer attitudes towards online banking include demographics, motivation, behaviour towards banking technologies, and acceptance of modern technology. Prior experience with computers significantly affects attitudes (Ankit, 2011). Key concerns from consumers include security, trust, and privacy (Benamati & Serva, 2007). To encourage adoption, banks must offer attributes like perceived usefulness, ease of use, reliability, security, and continuous improvement (Liao & Cheung, 2008; Guo et al., 2023). Attributes such as accuracy, security, user involvement, and convenience

are critical in e-retail banking (Liao & Cheung, 2002; Guo et al., 2023; Islam et al., 2023).

Previous studies of online banking features have discovered many essential aspects of electronic service quality and customer satisfaction. Ibrahim et al. (2006) identified six critical dimensions, which included convenient and accurate operations, reliability and accessibility, efficient management of service queues, personalized service, cordial and helpful customer support, and tailor-made solutions that target customer needs. Similarly (Qureshi et al., 2008) found that perceived usefulness, coupled with robust security and privacy, were key factors in promoting consumer acceptance of online banking services.

Modern businesses greatly benefit from the convenience of online banking services. With round-the-clock access to financial services, trips to physical branches are no longer necessary. Digital deposits and secure transfers have simplified cash flow management, and bill payments can be automated, or made anytime from anywhere (DBS Bank, 2022). Moreover, the lower fees and charges associated with online banking make it an attractive option for businesses, helping them to lower

operating costs while providing goods and services to customers at more competitive rates (American Express, 2022; DBS Bank, 2022).

Though online banking offers many benefits, yet it poses some challenges as well. Limited face-to-face interaction with employees makes it more difficult for banks to build relationships based on trust with customers; safeguarding the security of online transactions is also a recurring concern. Technological disruptions such as the loss of Internet access or temporary maintenance outages can leave consumers frustrated. The lack of personal relationships poses a disadvantage in some situations, such as when loan applications are processed or personalized solutions are needed. Despite ongoing efforts to improve the safety of online services through use of secure websites and strong passwords, customer concerns about privacy and security still exist. Thus, in person visits may still be necessary to access some services such as large cash withdrawals or submission of loan applications (DBS Bank, 2022).

Trust has always played a critical role in financial matters. Traditionally trust was established through personal interactions, a hand shake, eye contact,

or a personal relationship with a bank employee. Today the dynamics of personal interactions in the banking sector have changed. With the rise of digital banking, banks are faced with a new set of challenges in building trust in this modern era (Benamati & Serva, 2007).

With the rise of online banking, a great deal of responsibility in regard to protecting accounts has devolved to the customers; traditionally such duties were handled by the banks. Customers are now burdened with the obligation to maintain password integrity and safeguard personal information. Online transactions lack direct human confirmation, leaving customers to rely on onscreen notifications to confirm their completion, which feels impersonal to some users (Benamati & Serva, 2007).

Cybersecurity is crucial in the financial sector, as data breaches can significantly impact trust in financial institutions. Weak cybersecurity systems can expose banks to breaches, leading customers to seek more secure alternatives (Sirawongphatsara et al., 2023). The implications of private data breaches are significant, causing inconvenience and financial losses (HDFC Bank, n.d.). In a scam targeting Siam Commercial Bank

(SCB) customers, 29 victims received SMS messages prompting them to provide their ID number and one-time passwords which scammers used to register a mobile banking app and transfer funds. SCB denied any data breach, and the Police Cyber Taskforce investigated, eventually making several arrests. The investigation uncovered links between various groups involved in the fraud (Ngamkham et al., 2020).

Thai law enforcement officials have become frequently involved in large-scale operations to uncover online banking fraud schemes. One such conspiracy affected over 40,000 individuals, investigators estimated that losses amounted to about THB 130 million (USD 3.9 million). The Thai Bankers' Association, the Bank of Thailand, and the Thai Cyber Crime Investigation Bureau have held extensive discussions in an effort to stem such problems, showing how serious they have become (Li, 2021). As scams and call centres have proliferated, the need for strong cybersecurity measures within the industry has become increasingly urgent (Ngamkham et al., 2020; Li, 2021).

Customer expectations are evolving with advanced new technologies, and they demand more personalised experiences from online platforms. In 2023, the banking sector underwent a major shift toward

digitalization. Mobile banking apps have played a vital role in collecting personal data, providing information for banks to enhance products and services to better suit customers' needs (Dudovicz, 2021). Physical branches are undergoing a makeover process as well to suit these changing needs. More self-serve technologies are being combined with a mix of in-house consultations to provide customers with the best user experience. The layout resembles a modern tech store, where users can receive personalised advice while becoming more skilled in the use of self-serve technologies. This creates a more efficient streamlined banking experience (Dudovicz, 2021).

With the advancement of Customer Relationship Management technologies and data analytics, banks can provide better advice and make informed decisions that are tailored to customer needs. AI chatbots can interact with customers in real time, providing immediate feedback. This reduces the need for traditional call centres, thus significantly reducing wait times.

The process of opening a new bank account has also been modernized and simplified to create a positive first impression for new clients. The COVID-19

pandemic emphasized the importance of digital channels and remote services, with banks investing in educational content to help customers transition to online banking (Dudovicz, 2021).

Loyalty programs in banking offer opportunities to grow and strengthen business. Effective programs attract new customers and foster lasting relationships with existing ones, creating brand advocates (Smith, 2021). Addressing customer requirements through personalized options is crucial for engagement. Banks can integrate rewards into regular transactions and offer personalized value to strengthen connections (Indiani et al., 2022). To attract and retain younger demographics, banks must provide exclusive programs and tailored offerings for students. Leveraging digital tools and advanced analytics enhances loyalty programs, allowing banks to gather customer data and provide personalized offers, building long-term relationships and retaining customers in a competitive landscape (Luu Thi Thuy et al., 2024).

## RESEARCH HYPOTHESES

$H_1$ : Reliability has a significant impact on customer satisfaction.

$H_2$ : Transaction efficiency has a significant impact on customer satisfaction.

$H_3$ : Customer support has a significant impact on customer satisfaction.

$H_4$ : Safety and security has a significant impact on customer satisfaction.

$H_5$ : Ease of use has a significant impact on customer satisfaction.

$H_6$ : Performance has a significant impact on customer satisfaction.

### RESEARCH CONCEPTUAL FRAMEWORK

The conceptual framework adopted for this study is based on an earlier investigation by Nochai (2019); the main variables are shown in Figure 1 below.

**Reliability:** An organization's ability to supply high quality services on the first attempt. This includes accurate bills, up-to-date records, and on-time services.

**Transactions Efficiency:** When bills must be paid or funds transferred, this factor reflects how quickly and smoothly such financial transactions can be made, and its ensuing influence on customer satisfaction.

**Customer Support:** Exceptional customer support involves knowledgeable and responsive representatives available through various channels to assist customers,

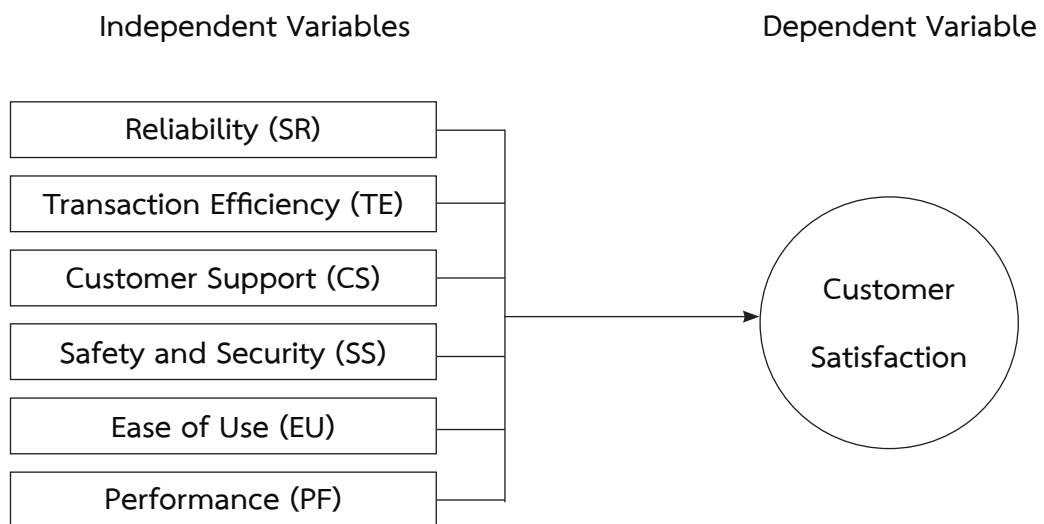


Figure 1 Conceptual Framework for the Study

resolve issues, and build confidence in the platform, enhancing satisfaction and loyalty.

**Safety and Security:** Creating a safe environment for transaction processes that protects customer safety, while providing financial security and data privacy. Competent and courteous staff inspire customer confidence and trust.

**Ease of Use:** Creation of a simple-to-use and easy-to-understand interface with features that customers can navigate without confusion or making mistakes, which adds to their feelings of satisfaction.

**Performance:** A stable and dependable system, with minimal down time and an instantly responsive interface that facilitates smooth and hassle-free banking, ensuring a positive user experience.

## Methodology

A quantitative research approach was adopted in this study to identify factors that affect Muak Lek customers' satisfaction with online banking services. By learning more about the key drivers of their satisfaction, practical recommendations to improve their online banking experiences may be made.

A quantitative research methodology was chosen to allow for systematic exploration

of the variables that were hypothesized to be related to customer satisfaction. These key variables included reliability, transaction efficiency, customer support, safety and security, ease of use, and performance. Survey questions from previous studies by Mouakket (2009), Nochai and Nochai (2013), and Ridleum (2015) related to this topic were reviewed and some were selected; most had been previously validated. Other questions from these studies were modified to fit local conditions. The draft survey was then reviewed by three experienced local researchers using the Item Objective Congruence method to corroborate their validity.

The population for the study was unknown, comprised of customers of three major banks in the Muak Lek District: Bank of Ayudhya Public Company Limited (Krungsri), Krunghthai Bank Public Company Limited (Krunghthai), and Kasikornbank (K bank). However, the adult population (> 15 years of age) of Muak Lek District was about 47,491 persons (City Facts, 2015), of whom a smaller but unknown number were customers of the three banks being studied. To obtain a 95% confidence level for a population of this size, a sample of approximately 397 participants was required per Yamane's (1973) formula.



A quota sampling method was adopted with the aim of recruiting approximately equal numbers of respondents from each of the three banks.

Participants were recruited using a convenience approach by sending a link to the survey on social media platforms and networks to residents in the Muak Lek area. Respondents were invited to share the link with their local friends who were customers of the three banks in a snowball sampling manner. Use of this approach may have resulted in non-response bias.

After reviewing the survey instrument and data collection plan, permission and ethical approval for the study was granted by the Asia-Pacific International University Research Committee (AIU. RO.15 (2)/2023. A secure online platform that protected respondents' anonymity

was used to encourage open and honest responses to the survey questions.

## Results

After the data was collected, it was analysed using a statistical software package. Both descriptive and inferential statistics were used to summarize the data and examine relationships between independent and dependent variables. Hypothesis testing was also conducted to test the significance of each variable's impact on customer satisfaction.

The study focused on investigating the relationships between various service characteristics (independent variables) and online banking customers' satisfaction (dependent variable) at three banks located in the Muak Lek District. The results of Pearson's correlation test among the variables are shown in Table 1.

**Table 1** Pearson's Correlation Test Among Variables (n = 402)

Variables	Satisfaction	Reliability	Transaction Efficiency	Safety and Security	Ease of Use	Customer Support	Performance
Satisfaction	1						
Reliability	.366**	1					
Transaction Efficiency	.425**	.771**	1				
Safety and Security	.339**	.650**	.676**	1			
Ease of Use	.374**	.657**	.770**	.671**	1		
Customer Support	.439**	.687**	.719**	.698**	.759**	1	
Performance	.470**	.738**	.762**	.719**	.795**	.866**	1

Pearson's Correlation Test revealed significant positive correlations between customer satisfaction and all examined variables: reliability, transaction efficiency, safety and security, ease of use, customer support, and performance of online banking platforms. This suggested that as users perceived these aspects more positively, their satisfaction with online banking services increased. Notably, performance,

ease of use, and customer support showed the strongest correlations with customer satisfaction.

Multiple Regression Analysis further supported these findings, demonstrating significant positive relationships between each independent variable and customer satisfaction; the results are shown below in Table 2.

**Table 2** Multiple Regression Analysis Among Variables (n = 402)

Variables	DV: Satisfaction						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Reliability	0.366**	0.425**					-.044
Transaction Efficiency							.216**
Safety and Security			0.339**				-.045
Ease of Use				0.374**			-.099
Customer Support					0.439**		.128
Performance		0.425				0.470**	.337**
R	0.366	0.181	0.339	0.374	0.439	0.470	0.488
R Square	0.134	88.185**	0.115	0.140	0.193	0.221	0.238
F	61.721**		51.768**	64.970**	95.516**	113.195**	20.594**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Specifically, transaction efficiency, and performance emerged as significant predictors of client satisfaction; customer support was also positively associated. These factors collectively accounted for 23.8% of the variance in customer satisfaction.

However, reliability, safety and security, and ease of use were negatively related

to customer satisfaction, and thus were not significant predictors in the overall analysis. This may have been due to multicollinearity, where overlapping of certain variables may affect their individual contributions. Transaction efficiency and performance were highlighted as paramount in determining customer satisfaction.

The study showed the role that each factor plays in shaping customer satisfaction with online banking. Improving reliability, transaction efficiency, safety and security, ease of use, customer support, and performance can enhance user experiences and foster greater satisfaction with online banking services. Banks should focus on these areas

in order to develop stronger relationships with customers and increase satisfaction with their online banking services.

Based on the data above, the hypotheses linking each of the study's six independent variables to customer satisfaction were supported; the results are shown in Table 3 below.

**Table 3** Hypotheses Testing

Hypothesis	Description	$\beta$ value	$p$ value	Result
$H_1$	Reliability has a significant impact on customer satisfaction.	0.366	0.01	Supported*
$H_2$	Transaction efficiency has a significant impact on customer satisfaction.	0.425	0.01	Supported*
$H_3$	Customer support has a significant impact on customer satisfaction.	0.439	0.01	Supported*
$H_4$	Safety and security has a significant impact on customer satisfaction.	0.339	0.01	Supported*
$H_5$	Ease of use has a significant impact on customer satisfaction.	0.374	0.01	Supported*
$H_6$	Performance has a significant impact on customer satisfaction.	0.470	0.01	Supported*

## DISCUSSION

The study's findings confirmed the importance of all the independent variables, (reliability, transaction efficiency, customer support, safety and security, ease of use, and performance) in shaping customer satisfaction with online banking. The positive correlations between these factors and customer satisfaction validated previous research (Nochai & Nochai, 2013; Kavitha, 2017; Alkhaibari et al., 2023) and emphasized their critical role in shaping user experiences. For instance, the strong positive correlations found between reliability, transaction efficiency, and customer support with customer satisfaction corroborated earlier studies, highlighting the consistent impact of these factors across different contexts (Nochai & Nochai, 2013; Kavitha, 2017).

Furthermore, the importance of continuous efforts to enhance safety and security features in online banking platforms, as identified by Alkhaibari et al. (2023) were emphasized. This aligns with the broader literature emphasizing the need for robust security measures to build user trust and confidence in online banking services (Kavitha, 2017).

The findings related to ease of use and performance also resonated with previous research, emphasizing

the significance of intuitive interfaces and reliable service delivery in enhancing user satisfaction (Ridleum, 2015; Alkhaibari et al., 2023). By comparing the responses of Muak Lek customers with findings of previous studies, a coherent understanding of the factors driving customer satisfaction in online banking emerges along with some implications for banking institutions.

Overall, the importance of addressing the key factors identified in the study to enhance customer satisfaction and trust in online banking services was underscored. The study's findings confirm insights from previous studies of online banking and customer satisfaction, providing updated and practical implications for banking institutions to improve user experiences and service quality.

## CONCLUSION AND RECOMMENDATIONS

In this study of relationships between various aspects of online banking services and customer satisfaction levels, analysis and interpretation of the data revealed several key findings.

First, online banking customers in Muak Lek expressed high levels of satisfaction with performance, transaction efficiency, and customer service offered by their banks' platforms. This generally

positive feedback indicated that online banking services usually meet users' needs and expectations.

Features such as the variety of services offered, the accuracy of transactions, and availability of clear instructions significantly contributed to users' positive online banking experiences.

Additionally, the study identified areas for improvement, particularly in terms of security measures and customer support options. While respondents generally felt safe using online banking platforms, there were concerns about the frequency of updating security information and the potential risk posed by fraudsters. Similarly, while satisfaction with customer support was generally high, suggestions were made about enhancing the accessibility and responsiveness of support services.

In conclusion, study findings showcased how important online banking services have become in shaping the overall satisfaction levels of contemporary customers. By finding ways to improve platform reliability and ease of use, along with safety and security, banks can continue improving their products and services. Such continuous efforts

to improve and enhance user experiences can build long-term trust and a loyal customer base.

## LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDIES

Several matters related to how this study was conducted may limit the generalizability of its findings. These include possible biases due to self-reported data, data collection from a single geographical area, changes in customer expectations over time, and the influence of variables that were left out of this study.

To compensate for these limitations, several ideas for future studies are suggested. Using qualitative methods to supplement quantitative data may provide a clearer picture of key factors affecting client satisfaction; gathering data from a wider variety of location would also be helpful. Longitudinal studies might explore how customer expectations change over time, and if other factors not examined in this study may influence overall satisfaction. Future research could focus on satisfaction among various customer segments, how technological advances affect customer satisfaction, relationships between

financial literacy levels and satisfaction, and the impact of potential regulatory changes. By exploring such topics, future studies may lead to a better understanding of how to improve customers' online banking experiences in the constantly changing landscape of digital banking.

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