

Exploring the Nexus of Attitude and Perceived Information: Unraveling the Mediating Role of Intention in Predicting Adoption of Islamic Cooperative Finance by SME Customers in Southern Thailand - A Theory of Planned Behavior Perspective

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Abstract

The Islamic cooperative industry, addressing global financial inclusion challenges, encounters low adoption among SME customers in southern Thailand. This study, rooted in the Theory of Planned Behavior (TPB), explores the influence of attitude and perceived information on the intention to adopt Islamic cooperative financing. Analysis of 381 survey responses highlights the significant impact of attitude and perceived information on adoption intention. The study reveals that intention serves as a crucial mediator between attitude, perceived information, and actual adoption behavior. These findings contribute to enhancing the TPB model, providing valuable insights for stakeholders seeking to boost the adoption of Islamic cooperative financing in Southern Thailand.

Keywords: Islamic Cooperative, SME Customers, Southern Thailand, Theory of Planned Behavior (TPB), Attitude, Perceived Information, Intention, Adoption Behavior.

Introduction

Brief background on the Islamic cooperative industry in Southern Thailand

Islamic Cooperatives in Thailand

Thailand's multiculturalism and commitment to religious freedom creates a unique environment for the development of Muslim unity in a largely Buddhist-dominated society. In this multicultural landscape, it is important to build mutual understanding and emphasis on policy compatibility, especially Islamic economic practices (Cheumar & Fisol, 2021). Muslims in Thailand follow Islamic economic principles, which may differ significantly from the international economic system. These cultural and religious diversities require collaboration

and understanding among different sectors, including public, private and cooperative organizations.

The cooperative sector in Thailand, as of January 2015, had a significant number of cooperatives, totaling 7,043, with individual membership reaching 11,470,013. This impressive figure represents about 18% of the total Thai population (Cheumar & Fisol, 2021). In contrast, the Muslim labor movement was surprisingly small, with only 31 unions with fewer than 200,000 members. These Muslim cooperatives operated mainly in the southern provinces of Thailand (Cheumar & Fisol, 2021)

In Thailand, cooperatives coexist with other well-established financial intermediaries, including commercial banks, Islamic banks and credit unions. Together, these institutions form an integral part of Thailand's broader economic system. The entry of the Islamic sector in Thailand is relatively recent, beginning in 1987. This growth began with the introduction of the Islamic banking sector of Pattani Ltd., which began in 1987 (Ahmed et al., 2016; Cheumar & Fisol, 2021). In Thailand, former prime minister and Minister of Health and Home Affairs Den Tokmena was instrumental in planning up this collaboration

In Islamic business, it is very important to understand the core values underpinning these institutions of corporate finance. The Co-operative Promotion Department (2008) emphasizes that cooperatives including Islam are firmly rooted in the principles of self-reliance, personal responsibility, democracy, equality, fairness and solidarity. All these values together they form the bedrock upon which these institutions are built.

The operation of an Islamic cooperative differs from that of a typical cooperative. In Thailand, most cooperatives operate based on an interest-based system, which is contrary to the principles of Islam and the way of life of Thai Muslims. As a result, Islamic cooperatives are typically established in areas with Muslim populations.

According to the Department of Cooperative Promotion, the cooperative approach involves conducting business based on cooperative principles (Azizah & Raya, 2021; Zin et al., 2019). It brings together a group of individuals who share common ideals and collaborate in business activities guided by these principles. The primary objective is to address the economic and social issues of cooperative members. To achieve this, the individuals who come together must contribute to their own betterment through diligence and personal development while avoiding negative behaviors. Additionally, they must work together and support one another. Collaborative efforts are a fundamental behavior that empowers individuals with the collective energy needed to help themselves and succeed in their business endeavors.

Importance of the Theory of Planned Behavior (TPB) in understanding customer behavior

The Theory of Planned Behavior (TPB) provides a robust framework for comprehending customer intentions, making it a suitable choice for our research. TPB has been extensively employed in diverse fields to explore behavioral intentions (Yu, Khalid & Ahmed, 2021), offering a well-established and comprehensive model. In our study, we focus on two key independent variables: perceived information and attitude; intention as a mediator and adoption as dependent variable. TPB's adaptability allows us to incorporate these variables effectively.

Studies Utilizing TPB in Similar Research

Several studies have employed the Theory of Planned Behavior in contexts relevant to our research. For instance:

Al-Karaghoul, W., & Sarea, A. M. (2018). "Islamic Microfinance and Financial Inclusion: A Review." This study used TPB to investigate the intention of clients to adopt Islamic microfinance services.

Hairul, N. I. Z., & Rashid, M. M. (2016). "Intention to Use Islamic Microfinance Services: A Case Study in Malaysia." TPB was applied to assess customers' intentions toward adopting Islamic microfinance services.

Hasan, M., & Ditsa, G. (2014). "Factors Influencing Farmers' Adoption of Modern Rice Technologies and Good Management Practices in the Philippines." This study adapted TPB to understand farmers' intentions in adopting modern agricultural practices, demonstrating the theory's versatility.

Taylor, S., & Todd, P. A. (1995). Understanding information technology usage: A test of competing models. *Information Systems Research*, 6(2), 144-176. This study applies TPB to examine the intention to use information technology, specifically personal computers.

Armitage, C. J., & Christian, J. (2003, September). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471-499. This meta-analysis assesses the effectiveness of TPB in predicting intentions and behaviors across a wide range of domains.

Key Components of the Theory of Planned Behavior

1. Attitude: This part of the Theory of Planned Behavior (TPB) focuses on how you perceive a specific behavior. It's not just about feeling good or bad; it's also about your thoughts on the outcomes of that behavior. For example, if you believe that adopting Islamic microfinance will lead to better financial stability for your small business, your attitude toward it may be positive. On the other hand, if you think it's too complex or risky, your attitude could be negative.

2. Subjective Norms: Subjective norms deal with the influence of people around you. It's not just about what they expect or approve of; it's also about how motivated you are to comply with their opinions. For instance, if your family, friends, and colleagues all support the idea of using Islamic microfinance for your SME, you might feel a stronger inclination to follow their advice.

3. Perceived Behavioral Control: This component considers your confidence in your ability to carry out the behavior successfully. It takes into account factors like self-efficacy (how confident you are in your skills), perceived obstacles (what challenges you might face), and facilitators (what could make the process easier). If you believe that you have the skills and resources to effectively adopt Islamic microfinance, your perceived behavioral control will be high.

4. Behavioral Intention: Behavioral intention is a central aspect of TPB and indicates your readiness and willingness to engage in a specific behavior. It's like the bridge between your thoughts and your actions. If you have a strong intention to use Islamic microfinance in your SME because you believe it will lead to financial growth, you're more likely to take the steps needed to make it happen.

This chapter critically examines the relevant literature pertaining to customer intentions regarding the adoption of Islamic microfinance, a central focus of our research in the context of SME customers in Southern Thailand. It aims to establish the theoretical foundation for understanding and predicting customer intentions in the context of the title of this study.

Statement of Problem

The global landscape of Islamic finance, a significant and evolving component of the economy, encounters challenges in both theoretical conceptualization and practical implementation, impeding its seamless integration into the worldwide financial system. Persistent disagreements within the scholarly community further complicate the assessment of how financial institutions and instruments align with religious acceptability in Islamic finance.

The Islamic cooperative system, established in Southern Thailand since 1987 with the inception of the Patani saving cooperative, has experienced substantial growth, emerging as a pivotal player in the economic and social development of the region. This system, comprising over 54 Islamic cooperatives with more than 300,000 members, has amassed considerable assets, totaling in the tens of billions of baht by the end of 2001 (National Bureau). Despite this growth, challenges persist for Muslim SME customers, particularly concerning complex decisions related to product and service selection, such as financial products, loans, and investments (mudarabah). The complexity arises from the comparative analysis required between conventional and Islamic financial concepts.

The predicament confronting Muslim SME customers in Southern Thailand stems from the intricate nature of decisions related to product and service selection within the Islamic financial framework. This includes navigating complex conditions and protracted processing times associated with financial products, loans, and investments (mudarabah). The complexity of these decisions arises from the comparative analysis required between conventional and Islamic financial concepts, with customers needing to align their choices with Shariah principles.

While Islamic cooperatives in Southern Thailand have successfully established themselves as key financial institutions, a significant portion of the Muslim population, approximately 4.1 percent or 1,091,180 individuals across four provinces, remains relatively uninvolved (Smuseneto, 2018). Despite the substantial growth in assets and the establishment of Islamic cooperatives, concerns persist about the limited participation of the Muslim population in these financial institutions.

This research endeavors to investigate and elucidate the factors influencing the adoption of Islamic cooperative financing among SME customers in Southern Thailand. By addressing the challenges faced by Muslim SME customers in navigating complex decisions within the Islamic financial framework, the study aims to contribute to a deeper understanding of the practical implementation of Islamic finance. Furthermore, the research seeks to shed light on how Islamic finance can be more effectively integrated into the global financial landscape.

Research Objective

The overarching aim of this research is to comprehensively understand the factors shaping the adoption of Islamic cooperative financing among SME customers in Southern Thailand. Specifically, the study seeks to achieve the following research objectives:

Examine the Influence of Customers' Attitudes and Perceived Information

Investigate the extent to which customers' attitudes impact their intention to adopt Islamic cooperative financing in Southern Thailand. This involves assessing the role of positive or negative attitudes towards Islamic cooperatives in shaping the willingness of SME customers to engage with these financial institutions. This study also investigates the influence of perceived information on customers' intention to adopt Islamic cooperative financing in the region. This objective involves understanding how perceived social expectations, opinions,

and influences from significant others shape the decision-making process of SME customers regarding the adoption of Islamic cooperative services.

These research objectives aim to provide valuable insights into the specific factors, namely attitudes and perceived information, influencing the adoption of Islamic cooperative financing among SME customers in Southern Thailand. By addressing these objectives, the study contributes to the understanding of the dynamics at play in the decision-making process of SME customers in the context of Islamic finance adoption.

These objectives align with the broader research questions:

Research Question 1

To what extent do customers' attitudes influence their intention to adopt Islamic cooperatives in Southern Thailand?

Research Question 2

How do customers' perceived information impact customers' intention to adopt Islamic cooperatives in Southern Thailand?

The research objective and questions collectively form the foundation for a comprehensive investigation into the factors shaping the adoption of Islamic cooperative financing, contributing to both theoretical understanding and practical implications for stakeholders in the Southern Thailand financial landscape.

The Influence of Attitude on Intention

Attitudes serve as a critical determinant in the Theory of Planned Behavior (TBP) when examining the adoption of various behaviors, including the acceptance of financial services like Islamic cooperative financing. According to TBP, attitudes are shaped by individuals' beliefs, opinions, and perceptions toward a specific behavior or action. In the context of adopting Islamic cooperative financing among SME customers, attitude reflects their favorable or unfavorable inclinations towards embracing this financial approach. Attitudes are considered as influential precursors to behavioral intentions, playing a pivotal role in predicting an individual's intention to engage in a particular behavior, such as adopting Islamic cooperative financing. The TBP asserts that positive attitudes towards a behavior enhance the likelihood of an individual intending to adopt that behavior.

Marimuthu et al (2010); Erol et al (1989) emphasized the pivotal role of attitude, service quality, reputation, and adherence to ethical principles in financial service adoption. These findings underscore how attitudes, shaped by economic factors and perceived information, significantly impact individuals' intention regarding the acceptance of financial services. In the context of SME customers in Southern Thailand, understanding how attitudes are formed and their impact on the adoption of Islamic cooperative financing is crucial for devising effective marketing strategies and fostering the utilization of Islamic financial services among SME customers.

In the context of small and medium-sized enterprises (SMEs) in Southern Thailand, understanding what drives the adoption of Islamic cooperative financing stands crucial. This thesis delves into exploring these driving factors, with a particular focus on the role of attitude as an independent variable influencing the adoption of Islamic cooperative financing. Drawing on the Theory of Planned Behavior (TBP), this study scrutinizes how attitudes among SME customers impact their decisions regarding the adoption of Islamic cooperative financing. Attitude, in this context, encompasses the beliefs, opinions, and perceptions that SME owners

or decision-makers hold about Islamic cooperative financing. Through TBP, this research aims to decipher how these attitudes shape the inclination of SME customers in Southern Thailand towards embracing Islamic cooperative financing methods. Therefore, it is hypothesized that

H1: Attitude would significantly influence customers' intention to adopt Islamic cooperative services in Southern Thailand

Influence of Perceived Information on Adoption

Perceived information refers to the way individuals perceive and interpret information about a new product, technology, or innovation, which can significantly impact their decision to adopt or reject it. Several recent studies have examined the relationship between perceived information and adoption, shedding light on the various dimensions of this interaction.

1. Perceived Utility: One of the primary factors influencing adoption is the perceived utility or usefulness of the innovation. Studies have shown that when individuals perceive a technology or product as more useful, they are more likely to adopt it (Venkatesh et al., 2012). For example, the adoption of mobile banking apps can be linked to the perception of convenience and efficiency in managing financial transactions.

2. Perceived Ease of Use: The perceived ease of use refers to how easy individuals think it is to learn and use a new technology. Research by Davis (1989) in the Technology Acceptance Model (TAM) highlighted that perceived ease of use significantly influences technology adoption. For instance, the adoption of social media platforms can be attributed to the perception that they are user-friendly and accessible.

3. Perceived Trustworthiness: Trust in the information source or the innovation provider is another critical factor. Recent studies by Gefen et al. (2003) have emphasized the importance of perceived trust in e-commerce adoption. When individuals perceive the information and the provider as trustworthy, they are more likely to adopt online shopping or digital payment systems.

4. Social Influence: Perceived information is not limited to individual perceptions but also includes social influence. Recent research by Charness and Gneezy (2012) on the role of social norms and peer pressure in adoption decisions has shown that individuals are influenced by the perceptions and behaviors of their social networks. For example, the perceived popularity of a new app among one's peers can strongly influence its adoption.

5. Perceived Risks: Perceived risks, such as financial, security, or privacy concerns, can hinder adoption. Studies by Pavlou (2003) have explored the role of perceived risks in online transactions. High perceived risks can deter individuals from adopting online services, emphasizing the importance of addressing and mitigating such concerns. In the light of the above discussion, it is hypothesized that

H2: Perceived information would significantly influence customers' intention to adopt Islamic cooperatives in Thailand

Intention as a Mediator

The Theory of Planned Behavior (TBP) provides a robust framework to understand the interconnection between perceived information, intention, and adoption behavior. According to TBP, attitudes contribute to the development of behavioral intentions, which, in turn, guide actual behavior. The mediating role of intention becomes apparent, as highlighted by Marimuthu et al. (2022), in their exploration of financial service adoption. This study

underscores that intention acts as a crucial mediator between attitudes formed based on perceived information and the actual adoption behavior.

Recent studies specific to Southern Thailand further enrich our understanding. Erol et al. (2023) conducted a comprehensive analysis focusing on SME customers in the region. Their findings emphasize the multifaceted influence of perceived information on attitudes and the pivotal role intention plays in translating these attitudes into concrete adoption decisions.

The mediating role of intention between perceived information, attitude and the adoption of Islamic cooperative finance among SMEs in Southern Thailand unravels a nuanced decision-making process. Recent studies underscore the importance of considering intention as a key factor in shaping adoption behavior. As businesses navigate the landscape of Islamic finance, understanding these dynamics becomes crucial for formulating effective strategies and promoting the accessibility and utilization of Islamic financial services in Southern Thailand. In line with these findings, these hypotheses are structured

H3a: Intention will significantly mediate the relationship between attitude and adoption behavior.

H3b: Intention will significantly mediate the relationship between perceived information and adoption behavior

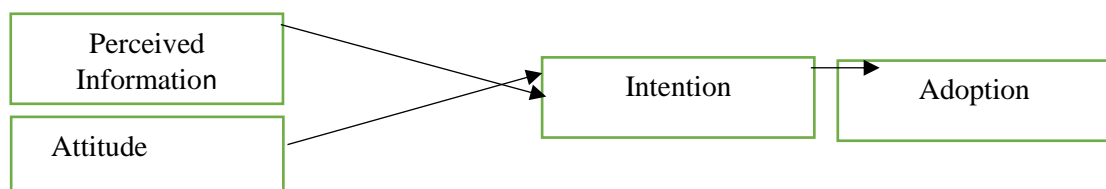
Research Framework

The study is guided by a conceptual framework centered around the Theory of Planned Behavior (TPB), focusing on key variables related to the adoption of Islamic cooperative financing among SME customers in Southern Thailand.

The TPB suggests that individuals' intentions to adopt a certain behavior are determined by their attitudes towards the behavior, perceived information, and subjective norms (Ajzen, 1991). Attitudes represent SME customers' positive or negative evaluations of adopting Islamic cooperative financing, while perceived information refers to their beliefs about the extent and quality of available information regarding this behavior.

In this framework, intention serves as a mediator, influencing the relationship between attitudes, perceived information, and the ultimate adoption of Islamic cooperative financing. The framework identifies perceived information as a key independent variable, reflecting SME customers' beliefs about the extent and quality of information available regarding the adoption of Islamic cooperative financing.

The unique research approach combines these constructs - perceived information, intention, and adoption - within the TPB framework. This approach aims to provide a comprehensive understanding of the drivers influencing the adoption of Islamic cooperative financing among SME customers in Southern Thailand.



Conceptual Research Framework

Research Population and Sample Size Determination

A population is the whole group about whom someone wishes to draw conclusions (Grummel, 2005). The group from which the data will be taken is known as a sample. The sample size is never more than the size of the total population. As a consequence, all the factors that the researcher wants to look at are referred to as the "research population" (Denscombe, 2017). Therefore, the target population of this study is everyone who uses Islamic cooperative services and products (SME customers) in Southern Thailand. Therefore, the researcher believes that information from above mentioned cooperatives may be utilized as a representative sample of the study. A tiny percentage of the population was selected as a sample of the population due to time and resource constraints.

A quantitative method was used for this study, for which a descriptive study and hypothesis testing were needed. A well-structured questionnaire was used to collect data from Islamic cooperative members in Southern Thailand for hypothesis testing. The respondents' opinions, feelings, and behaviors collected were used as primary data for this study as a sample of the population. The current study employed two statistical software packages to analyze the data: SPSS (v. 23) for the screening of primary data and preliminary analysis, and SmartPLS (v. 3.1.2) for the assessment of the measurement model. The demographic profile of the respondents was examined after the descriptive analysis of the latent variables. Following that, the primary analytical results of the current inquiry employing the PLS route modeling approach were given.

Response Rate

Table 1.1

Response Rate

Details	No: Instruments	Response Rate
Questionnaires distributed	500	100%
Questionnaires not returned	108	
Returned Questionnaires	392	78.4%
Discarded questionnaires	11	
Usable questionnaires	381	76.2%
Questionnaires deleted due to outliers	09	2.3%

The current study sent 500 questionnaires to SME customers who are using Islamic cooperative services in Southern Thailand. First of all, a questionnaire form was produced using Google Surveys, which included all the questionnaire items used in this research on a five-point Likert scale. Then the form was emailed to 500 individuals who were using SME members in Southern Thailand. The email addresses of SME members were acquired through personal acquaintances. By the end of the survey period, 392 questionnaires had been received, with a response rate of 78.4%. 11 surveys were eliminated from the 392 returned questionnaires because the majority of them were incomplete. The remaining 381 questionnaires were deemed suitable for data analysis in the current study, with a valid response rate of 76.2%. A minimum response rate of 30% is sufficient for the survey approach (Livingston, 2012). Furthermore, Kimball & Loya (2017) proposed that a 35% response rate is enough for organizational research projects. Sekaran (2003) asserts that a sample size larger than 30 and smaller than 500 would be appropriate for the majority of non-probability techniques.

As a result, the current study's legitimate response rate of 76.2% is deemed appropriate for data analysis, which is 381. Table 1.1 above provides a full summary of the questionnaire responses for the current study.

Table 1.2
Assessment of Structural Model (Direct Relationships)

Relationship Decision	Beta	STDEV	T value	P Value	
ATT→INT	0.176	0.046	3.865	0.000	significant
INT→ADP	0.602	0.030	19.917	0.000	significant
PI→INT	0.257	0.066	3.889	0.000	significant

The influence of Perceived Information and Attitude on Intention

The structural model evaluation revealed the structural model path coefficients for the current study's hypothesized relationships. Hypothesis (h2) Perceived information would significantly influence customers' intention to adopt Islamic cooperatives in Thailand. The result of the path coefficient shows that there is a significant positive relationship between Perceived Information (PI) and intention (INT) with ($\beta=0.257$, $t=3.889$, $p<0.000$). As a result, hypothesis (h1) is supported. According to (Andrade, 2019), the p-value < 0.05 is considered a cut-off that indicates statistically significant.

Similarly, the results of the path coefficient reveal a significant positive relationship between Attitude (ATT) and Intention (INT) with ($\beta=0.176$, $t=3.865$, $p<0.0000$). As a result, hypothesis (h1) is also validated.

The notable finding in the table 1.2 of the assessment of structural model as direct relationship is that Intention is prominently significant with Adoption with ($\beta= 0.602$, $t= 19.917$, $p<0.000$).

Assessment of the Significance of Mediating Path Coefficients

Table 1.3
Testing moderating effect (Mediating relationship)

Relationship Decision	Beta	STDEV	T Value	P value	
PI→ INT→ ADP	0.155	0.040	3.893	0.000	Significant
ATT→ INT→ ADP	0.106	0.028	3.809	0.000	Significant

The table 1.3 represents the mediating relationships within the model, specifically detailing how factors (perceived information, and attitude) influence the intermediate variable intention, which in turn affects the final outcome, ADP (adoption behavior).

The above results strongly support the hypotheses: h3b - Intention significantly mediates the relationship between perceived information and adoption behavior ($P = 0.000$), h3a - Intention significantly mediates the relationship between attitude and adoption behavior (P

= 0.000. The high T-value and low p-value indicate a strong and significant mediation effect of Intention in this relationship.

Conclusion

In conclusion, the study investigates into the intricate relationship between attitude (ATT), perceived information (PI), intention (INT), and adoption (ADP) of Islamic Cooperative Finance among SME customers in Southern Thailand, employing the Theory of Planned Behavior as the overarching framework. The structural model analysis reveals significant direct relationships, indicating that both ATT and PI significantly influence INT, and subsequently, INT significantly influences ADP.

The direct relationship between ATT and INT with a path coefficient of 0.176 and a significant p-value of 0.000 highlights the importance of individuals' attitudes in shaping their intentions towards adopting Islamic Cooperative Finance. Similarly, the substantial influence of INT on ADP, reflected in a path coefficient of 0.602 and a highly significant p-value of 0.000, underscores the pivotal role of intention in predicting actual adoption behavior.

Furthermore, the mediating influence of INT in the relationship between PI and ADP is explored. The path coefficients for both PI → INT → ADP and ATT → INT → ADP are significant (0.155 and 0.106, respectively), emphasizing the mediating role of intention in translating perceived information and attitude into actual adoption behavior.

These findings collectively highlight the nuanced interplay between attitude, perceived information, intention, and adoption in the context of Islamic Cooperative Finance adoption by SME customers in Southern Thailand. The Theory of Planned Behavior proves to be a robust framework for understanding and predicting the adoption behavior in this specific context. The implications of this study extend to the development of targeted marketing strategies and interventions to enhance the acceptance and utilization of Islamic Cooperative Finance among SMEs in the region. Additionally, the research contributes to the broader literature on the Theory of Planned Behavior and its application in the domain of financial services adoption.

References

- Ahmed, U., Phulpoto, W., Umrani, W. A., Abbas, I. A. (2016). Diving deep in employee training to understand employee engagement. *The International Journal of Management*, 5(1), 1-5.
- Al-Karaghoul, W., & Sarea, A. M. (2018). *Islamic microfinance and financial inclusion: A review*.
- Al-Karaghoul, W., & Sarea, A. M. (2018). *Islamic microfinance and financial inclusion: A review*.
- Armitage, C. J., & Christian, J. (2003). From attitudes to behaviour: Basic and applied research on the theory of planned behaviour. *Current Psychology*, 22(3), 187–195. <https://doi.org/10.1007/s12144-003-1015-5>
- Armitage, C. J., & Christian, J. (2003). From attitudes to behaviour: Basic and applied research on the theory of planned behaviour. *Current Psychology*, 22(3), 187–195. <https://doi.org/10.1007/s12144-003-1015-5>
- Azizah, L., & Raya, M. K. F. (2021). Islamic education leadership in conflict state: Case study in Southern Thailand. *Jurnal Tatsqif*, 19(1), 1–20. <https://doi.org/10.20414/jtq.v19i1.3540>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. <https://doi.org/10.1007/BF02723327>

- Cheumar, M., & Fisol, W. N. M. (2021). The engineering of Islamic cooperative products and services in southern THAILAND. Researchgate.
https://www.researchgate.net/publication/350941498_THE_ENGINEERING_OF_ISLAMIC_COOPERATIVE_PRODUCTS_AND_SERVICES_IN_SOUTHERN_THAILAND.
- Azizah, L., and Azizah, L., & Raya, M. K. F. (2021). Islamic education leadership in conflict state: Case study in Southern Thailand. *Jurnal Tatsqif*, 19(1), 1–20.
<https://doi.org/10.20414/jtq.v19i1.3540>
- Cheumar, S. (2021). The economic role of Islamic cooperatives in Thailand. *Journal of Islamic Economics, Banking and Finance Research*, 17(4), 144–160.
- CPD. (2023). Home. :: กรมส่งเสริมสหกรณ์ - Cooperative Promotion Department. <https://cpd.go.th/cpden/>
- CPD. (2023). Home. :: กรมส่งเสริมสหกรณ์ - Cooperative Promotion Department. <https://cpd.go.th/cpden/>
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982–1003.
<https://doi.org/10.1287/mnsc.35.8.982>
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982–1003.
<https://doi.org/10.1287/mnsc.35.8.982>
- Denscombe, M. (2017). *EBOOK: The good research guide: For small-scale social research projects*. McGraw-Hill Education.
- Fishbein, M., & Ajzen, I. (2010). Predicting and changing behavior: The reasoned action approach. *Taylor & Francis Group*. for new products (2nd ed). Perseus Publishing.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51–90. <https://doi.org/10.2307/30036519>
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51–90. <https://doi.org/10.2307/30036519>
- Grummel, J. A. (2005). Population vs. sample. *Encyclopedia of social. Measurement*, 135–140.
<https://doi.org/10.1016/b0-12-369398-5/00056-6>
- Hairul, N. I. Z., & Rashid, M. M. (2016). *Intention to use Islamic microfinance services: A case study in Malaysia*.
- Hairul, N. I. Z., & Rashid, M. M. (2016). *Intention to use Islamic microfinance services: A case study in Malaysia*.
- Hasan, M., & Ditsa, G. (2014). *Factors influencing farmers' adoption of modern rice technologies and good management practices in the Philippines*.
- Hussain, M., Ashfaq, M., & Rafique, Z. (2015). A critical review of different modes of financing in Islamic banking. *Journal of Islamic Banking and Finance*, 3(1), 43–52.
- Karasik, R., Salam, A., & Atabani, A. (2006). *Islamic finance: Law, economics, and practice*. Graham & Trotman.
- Kimball, E., & Loya, K. I. (2017). *Using qualitative research to promote organizational intelligence: New directions for institutional research*, 174. John Wiley & Sons.
- Livingston, E. H., & Wislar, J. S. (2012). Minimum response rates for survey research. *Archives of Surgery*, 147(2), 110. <https://doi.org/10.1001/archsurg.2011.2169>
- Marimuthu, C. W., Jing, L. P., Gie, L. P. M., & Ping, T. Y. (2010). Islamic Banking: Selection criteria and implications. *Global Journal of Human & Social Science*, 10(4), 52–62.
- Marimuthu, C. W., Jing, L. P., Gie, L. P. M., & Ping, T. Y. (2010). Islamic Banking: Selection criteria and implications. *Global Journal of Human & Social Science*, 10(4), 52–62.

- 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. <https://doi.org/10.1080/10864415.2003.11044275>
- Sekaran, U. (2003). Determining sample size. Sekaran. Uma (4th ed), *Research methods for business: A skill building approach*, 263–298.
- Smuseneto, T. (2018). Islamic cooperatives in Thailand: Achievements, challenges, and prospects. *International Journal of Social Economics*, 45(6), 874–889.
- Taylor, S., & Todd, P. (1995). Decomposition and crossover effects in the theory of planned behavior: A study of consumer adoption intentions. *International Journal of Research in Marketing*, 12(2), 137–155. [https://doi.org/10.1016/0167-8116\(94\)00019-K](https://doi.org/10.1016/0167-8116(94)00019-K)
- Venkatesh, T., Thong, & Xu. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157. <https://doi.org/10.2307/41410412>
- Yu, T., Khalid, N., & Ahmed, U. (2021). Factors influencing entrepreneurial intention among foreigners in Kazakhstan. *Sustainability*, 13(13), 7066.
- Zin, L. M., Ahmad, U., & Ibrahim, H. (2019). An exploration of managerial competency in a public university: A qualitative finding of training needs assessment. *Test Engineering and Management*, 81(11-12).