

A Study of Consumers' Trust in E-Marketplaces among Generations X, Y, and Z in Thailand

Suteera Detnakarin

Faculty of Management Sciences, Songkhla Rajabhat University, Thailand

Suteera.de@skru.ac.th

Thananya Yincharoen

Faculty of Management Sciences, Songkhla Rajabhat University, Thailand

Thananya.yi@skru.ac.th

Abstract

This study seeks to investigate buyer's trust in e-marketplaces among Generations X, Y, and Z and compare their respective level of trust. The research sample consisted of 330 Generation-X, -Y, and -Z consumers who had purchased or intended to buy goods and services in e-marketplaces. The sample was selected using quota and accidental sampling. Data were collected from questionnaires and analyzed using frequency, percentage, mean, standard deviation, one-way ANOVA, and pairwise comparison by Fisher's Least Significant Difference (LSD) or Dunnett's T3. The findings indicate that the overall level of trust of the three generations in e-marketplace factors is high ($\bar{x} = 4.01$) as they value the perceived accuracy and reliability of the information offered by sellers and previous buyer reviews of the e-marketplace. Generation Z had the highest mean ($\bar{x} = 4.16$), followed by Generation Y ($\bar{x} = 4.10$) and Generation X ($\bar{x} = 3.77$). However, there is a significant difference in the level of trust in the e-marketplace among the three generations at the 0.001 level of statistical significance, with Generations Y and Z placing more trust in online marketplaces than Generation X, since they were born and raised with technology, unlike Generation X. The results of this study have both theoretical and practical implications.

Keywords: E-Marketplace, Generations X, Y, and Z, Online Purchases, Buyer Review.

1. Introduction

In today's digital age, consumers can easily and conveniently purchase virtually any products they want online. In Thailand, consumers' widespread use of mobile phones and/or tablets has caused electronic commerce (e-commerce) to rise exponentially over the past few years. Another key factor in the recent dramatic growth of e-commerce has been the coronavirus pandemic (COVID-19), which for sanitary reasons has been causing consumers to purchase more products via social media. Indeed, the pandemic has been acting as an accelerator (Gu et al., 2021). As a result, Thailand's e-commerce reached 220 billion baht in 2020; a 35 percent increase over the previous year (Bangkok Bank SME, 2021). The significant growth of e-commerce in Thailand has brought a boom in the popularity of electronic marketplace (e-marketplace) businesses as entrepreneurs have been quick to identify opportunities to expand their ventures into a new business model on social media, particularly in the e-marketplace (Hirankasi & Klungjaturavet, 2021). Clearly, the e-marketplace has the potential to generate new revenue for entrepreneurs (Loro & Mangiaracina, 2021).

Broadly speaking, an e-marketplace is a platform for automating online transaction management. It serves as an intermediary between buyers and sellers and facilitates the exchange of information and the trade of goods and services. Market-makers in e-marketplaces have also established service and payment policies to create more convenience for buyers (Supol,

Pavorawat, & Fumongkol, 2019). However, since an e-marketplace is a virtual community where buyers and sellers cannot meet face to face, buyers are unable to touch and feel the products. This brings to the fore the issue of trust as buyers may be concerned that sellers will not keep their commitments (Kim & Ahn, 2007), which may cause buyers to lose trust in the e-marketplace. Therefore, trust is a key factor in building a positive consumer attitude, which in turn will lead to a willingness to buy goods and services through an e-marketplace. Academics and entrepreneurs are increasingly recognizing the role of consumers' trust as a critical facilitator of e-marketplaces (Oliveira et al., 2017; Hassan, Iqbal, & Khanum, 2018; Dang, Wang, & Vu, 2020).

Trust in the e-marketplace is at the core of this study. The focus is on customers' perspectives and insights on the e-marketplace and its potential. The trend in modern marketing market segmentation is to prioritize generations rather than age groups since consumers of the same generation tend to have similar attitudes, beliefs, and behaviors (Noah & Sethumadhavan, 2019). It is important for marketers to be aware of this novel approach in order to provide appropriate products and services to different target groups (Lissitsa & Kol, 2016). At the same time, marketers are also wondering whether generational differences have any impact on trust in the e-marketplace.

There are few studies on the differences in attitudes among generations in virtual communities (Herrando, Jimenez-Martinez, & Martin-De Hoyos, 2019). As Dang et al. (2020) have noted, while the generational cohort concept has been commonly used in studies in the fields of organizational behavior and human resource management, it lacks widespread application in the field of marketing management. This is precisely why this research aims to study and compare consumers' trust among generations in the e-marketplace. The researchers focus on three aspects of consumers' trust in the e-marketplace: (i) trust in the seller, (ii) trust in the intermediary, and (iii) trust in the transaction. Generations X, Y, and Z were chosen as the sampling because they are the majority target groups of e-marketplaces. The findings of this study will benefit both entrepreneurs and application developers in targeting audiences on social media.

2. Literature Review

- E-marketplace

As noted above, an e-marketplace is a platform that facilitates online transactions between buyers and sellers. It is a collection of various products and shops. The e-marketplace is organized by a market-maker who is neither a buyer nor a seller but only an intermediary (Dang et al., 2020). The primary function of an e-marketplace is to provide the infrastructure for online shopping. The e-marketplace is widely recognized as an online shopping experience that provides convenience, time-saving, and low transaction costs for customers and entrepreneurs (Dang et al., 2020). Shopee, Lazada, and JD Central have been the three most popular e-commerce platforms in Thailand (Klungjaturavet, 2020).

- Trust in E-marketplace

Consumers' trust is a key factor in the success of electronic shopping (Oliveira et al., 2017). In this context, trust can be defined as the willingness of buyers to risk a transaction through virtual shopping, their expectations being that sellers will fulfill their promises (Isa et al., 2020). As noted above, three types of trust in the e-marketplace have been identified: (i) trust in the seller, (ii) trust in the intermediary, and (iii) trust in the transaction. Each will be briefly discussed.

(i) Trust in the Seller – This type of trust refers to the buyer's belief in the seller's ability to complete online transactions by being accountable for product quality and the delivery of goods under the virtual marketplace's conditions. It means trusting sellers who have professionalism,

knowledge, and experience in online selling products. Therefore, if the seller performs his/her side of the contract, it will lead to more trust in the seller (Lee, Ahn, Song, & Ahn, 2018; Oliveira et al., 2017).

(ii) *Trust in the Intermediary* – This kind of trust implies user's confidence in the intermediary or market-maker to maintain the online shopping system. The intermediary can help the user by serving as a facilitator, matching buyers with sellers, providing information to buyers for decision-making, and solving problems for both buyers and sellers (Kim & Ahn, 2007). A robust intermediary management system that strictly enforces policies can therefore reduce the problems caused by the exploitation of the user in the e-marketplace. It will build up trust in the intermediary (Hassan et al., 2018).

(iii) *Trust in the transaction* – This third form of trust refers to the confidence of the buyer when sending personal and financial information to an unknown seller. This buyer's information is supposed to remain secret and not be passed to third parties (Lee et al., 2018). A smooth transaction shows that the e-marketplace is a credible source and can make consumers more likely to trust transactions conducted through a virtual marketplace. The more successful the online transactions between the buyer and seller, the more trust is formed in online business transactions (Guo, Le-Nguyen, Jia, & Li, 2015).

- Generation Concept

Generational cohorts can be divided into cohorts or groups based on their years of birth as people born at the same time tend to share similar beliefs, values, and experiences. This gives each generation a unique perspective in various social contexts (Bilgihan, 2016). Marketers are now focusing on generational market segmentation as each generation has different interests, attitudes, and behaviors. Therefore, segmenting the targets by generational cohort will increase the competitiveness of entrepreneurs (Herrando et al., 2019; Lissitsa & Kol, 2016). This study chose generations X, Y, and Z because they are the largest groups of online consumers. The characteristics of each generation can be summarized as follows:

- *Generation X (Gen X)* refers to people who were born between 1964 and 1979 and grew up before the internet. Gen X individuals tend to have a risk-averse attitude, so they prefer to gather information about a product before purchasing it through, for example, reading reviews or opinions from other consumers who have used it (Petra, 2016). Typically, when confronted with problems on the e-marketplace, this generation will require the assistance of people in an online community (Lissitsa & Kol, 2016).

- *Generation Y (Gen Y)* refers to people who were born between 1980 and 1997. Also known as millennial, they grew up emerged in the social media movement, which is why Gen Y has a more positive attitude about the impact of technology on their lives than any other generation (Ayuni, 2019). Gen Y people regard online shopping as more convenient and faster, so they have no problem with the shopping system in virtual markets (Petra, 2016).

- *Generation Z (Gen Z)* refers to people who were born between 1990 and the early 2010s. Gen Z was born in a time of rising innovation; hence their high expectations for technology and the products they purchase. They form a group who uses social media to share information and comment on their experiences buying goods and services (Ayuni, 2019; Vieira et al., 2020).

- Related Research on Generational Differences

Jiang et al. (2016) investigated differences in perceptions and behaviors among three generations as part of their effort to understand online safety issues. Their study indicates that millennial are less concerned about online security than other generations and exhibit more defensive behavior than previous generations. Herrando et al. (2019) found that generation X gains trust in social commerce websites mainly through trust in information generated by companies, while generation Z gains trust primarily through trust in information generated by users. In addition, Noah and Sethumadhavan (2019) found that generation Z was more trusting

of digital assistants than generation X, thereby confirming that a different set of trust exists between different generations. Finally, Thoumrungroje (2021), who research trust effects on e-commerce continuance intention in Thailand, concluded that whereas trust is a driving factor of retention intention among baby boomers and Generation Z, this is not so among Generations X and Y. Based on the above prior studies, the following hypothesis and research framework were proposed:

H: *There is a significant difference in trust in the e-marketplace among different generations.*

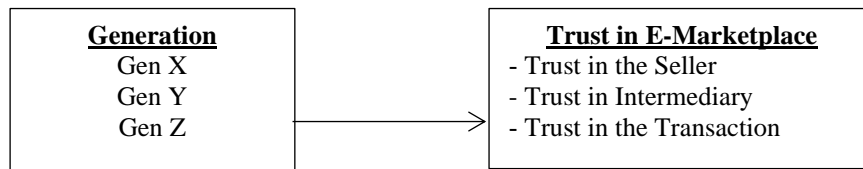


Figure 1: Research Framework (created by the authors for this study)

3. Research Methodology

- Sampling and Data Collection

The population for this study consisted of generation X, Y, and Z consumers in Thailand, who have purchased or intend to purchase goods and services on e-marketplaces such as, for example, Shoppe, Lazada, or JD Central. The exact size of the population is unknown, so the sample size was determined based on the G*Power program developed from power analysis and related to testing statistics (Vorapongsathorn & Vorapongsathorn, 2018). This study employed one-way ANOVA with error probabilities of 0.01, power of the test at 0.99, and an effect size of 0.30.

As a result of the program’s calculation, a sample of 312 people was obtained. To prevent data loss during the research, the researchers collected 18 additional data sets, which brought the total number of respondents to 330 with generations X, Y, and Z totaling 110 each. A survey questionnaire with an online platform was used to collect the data, which was gathered by employing a two-stage sampling procedure in order to select a non-probability sample. At the first stage, the quota sampling method was used, with 110 people per generation. It was then followed by accidental sampling, using an online questionnaire.

- Measurements

The questionnaire was developed based on perceptual constructs that were measured based on a review of the relevant literature on trust in online markets (e.g. Kim & Ahn, 2007; Sfenrianto, Wijaya, & Wang, 2018). The questionnaire was composed of two parts: Part 1 includes general information about respondents’ gender, age, average monthly income, and type and experience shopping via e-marketplaces. Data was collecting using check one-choice questions and open-ended questions; Part 2 assesses the three aspects of trust in the e-marketplace at the core of this study and contains 11 items, measured on a five-point-scale rating from 1 (strongly disagree) to 5 (strongly agree). The Cronbach’s alpha reliability of the items was 0.926.

- Data analysis

Data were analyzed using frequency, percentage, mean, standard deviation, one-way ANOVA, and pairwise comparison by Fisher’s Least Significant Difference (LSD) or Dunnett’s T3.

4. Results

- Respondents' Demographic Characteristics

330 respondents completed the questionnaire, with more women (n = 243, 73.6%) than men responding (n = 87, 26.4%). The largest group of consumers (55.8%) had an average monthly income of more than 10,000 baht (US\$290). The majority of them had experience shopping through the e-marketplace of more than five years (67.6%). Shopee and Lazada were the most popular e-marketplace platforms used.

- Descriptive Analysis on Trust in e-Marketplaces

The analysis of the data collected in this section answers the first objective. As shown in Table 1, descriptive statistics were performed to determine the mean (\bar{x}) and standard deviation (SD).

Table 1: Mean and Standard Deviation of Trust in E-Marketplace by Generation

Trust in e-marketplace	All Gen		Gen X		Gen Y		Gen Z	
	\bar{x}	S.D.	\bar{x}	S.D.	\bar{x}	S.D.	\bar{x}	S.D.
Trust in the seller	3.93	0.56	3.72	0.57	3.99	0.52	4.08	0.53
Trust in the intermediary	4.06	0.56	3.82	0.58	4.15	0.51	4.21	0.51
Trust in the transaction	4.02	0.61	3.76	0.65	4.14	0.57	4.17	0.54
Total of trust in e-marketplace	4.01	0.52	3.77	0.52	4.10	0.49	4.16	0.46

From Table 1 it can be seen that the overall trust in e-marketplaces was at a high level ($\bar{x} = 4.01$); ($\bar{x} = 4.16$) for Gen Z, ($\bar{x} = 4.10$) for Gen Y, and ($\bar{x} = 3.77$) for Gen X, respectively. When considering each component, the component that gained the most trust was trust in the intermediary ($\bar{x} = 4.06$), followed by trust in the transaction ($\bar{x} = 4.02$), and trust in the seller ($\bar{x} = 3.93$), respectively.

- Hypothesis Testing

In this section, a hypothesis test was used to answer the second objective and analyzed using one-way ANOVA. Its purpose was to test the differences among generations towards trust in the e-marketplace. If the test results were statistically different, the researchers tested pairs to determine which pairs differed by applying Fisher's Least Significant Difference (LSD) if the groups' variances were equal and applying Dunnett's T3 if the groups' variances were not equal. Table 2 displays the results of the data analysis.

Table 2: Results of One-Way ANOVA of Trust in the E-Marketplace by Generation

Factor	Source of variations	df	Mean Square	F-test	p-value	Result of hypothesis test	Details of the differences
Generation	9.942	2	4.971	20.613***	0.000	Accepted	Gen Y and Gen Z > Gen X
	78.861	327	0.241				
	88.803	329					

Note: *** p-value < 0.001

Table 2 shows the one-way ANOVA results on the differences between each generation in terms of trust in the e-marketplace. The results revealed that the research hypothesis was accepted due to a p-value of 0.000, which is less than 0.05. This means that there is a significant difference in terms of trust in the e-marketplace among generations. A post-hoc analysis was then conducted for group comparison. The results are shown in Table 3. Post-hoc comparisons using Fisher's Least Significant Difference (LSD) were employed because the variances of the groups were not equal. The results revealed that Gen X's mean score of trust in the e-marketplace differed significantly from Gen Y and Gen Z because the p-value of group

comparison was less than 0.001 or ($p < 0.05$). The results in Table 3 implies that Generations Y and Z have more trust in online marketplaces than Generation X.

Table 3: Comparative of Trust in the E-Marketplace by Generation

Trust in the e-marketplace	Gen x ($\bar{x} = 3.77$)	Gen Y ($\bar{x} = 4.10$)	Gen Z ($\bar{x} = 4.16$)
Gen X ($\bar{x} = 3.77$)	-	-0.336*** (0.000)	-0.393*** (0.000)
Gen Y ($\bar{x} = 4.10$)		-	-0.057 (0.753)
Gen Z ($\bar{x} = 4.16$)			-

Note: *** p-value < 0.001

5. Discussion, Conclusion, and Implications

This study aimed to compare consumers' trust among generations X, Y, and Z in Thailand in the e-marketplace. According to Lissitsa and Kol (2016), tackling issues of marketing strategies by focusing on generations is a very effective step. Two key findings emerged from this study. One is that each of the three generations of online consumers discussed in this study has a high level of trust in e-marketplaces. This result is in line with Thadhom (2016), who determined that online buyers in Bangkok have a high level of trust in Facebook Live, and with Sawasdinam's (2018), who found a high level of perceived e-marketplace trust among online shoppers. Having a trustworthy intermediary to keep the e-marketplace system operational is viewed as critical and key to their faith in the e-marketplace, a finding consistent with Vieira et al.'s (2020) study. The value online shoppers see in the e-marketplace and the trust they place in the accuracy and reliability of the information offered by sellers and previous buyer reviews essentially account for these findings and explain why the three generations feel secure and confident transacting online (Kim & Ahn, 2007; Lee et al., 2018).

The other key finding is that Generation Z had the highest level of trust in the e-marketplace. It was much higher than that of Generations X and Y, thereby highlighting the importance and significance of online market segmentation by generation. This is consistent with research by Thongmullek and Vichitthamaros (2017) who concluded that Generation Z had the highest percentage of acceptance and use of social networks. Generation Z is a group who likes to discover new things on the internet and on digital platforms. They are also a more technologically advanced and creative generation with a high level of skills and equipment as they were born and raised with technology, which gives them much confidence in technology (Jiang et al., 2016; Vieira et al., 2020). The significant difference in the level of trust in the e-marketplace between generations points to specific generational cohorts' attitudes towards virtual communities and the need not to generalize across generations seemingly similar. While previous studies have found that younger people are more accepting of technology than older people (Noah & Sethumadhavan, 2019; Thongmullek & Vichitthamaros (2017), there are statistically significant differences in terms of perceived reliability of the e-marketplace. Compared to younger generations, older buyers are less trustful of e-marketplaces as they lack the skills to search for information and often initially encounter problems using technology. That said, Generation X's personalities may be different from those of Generations Y and Z. For example, Generation X doesn't like changes and prefers face-to-face conversation and the 'feel-and-touch dimension of real shopping to typing for purchases online. As a result, the Generation X cohort gets nervous when having to shop online because they are not able to see or touch the real products, which comes in addition to their lack of technological skills as noted above.

On the other hand, since Generations Y and Z are insensitive to such changes and professional in their use of technology, they have far more confidence in using e-commerce platforms (Weeraphatrungrach, 2016). Moreover, as Yulianita (2018) aptly noted, Generations Y and Z also perceive social media platforms as helping online buyers' save money and time. But Generation X is still concerned about the perceived benefits and usefulness of e-commerce, resulting in lower confidence in its real convenience and money-saving property. For all these reasons, Generations Y and Z have far more trust in purchasing goods and services on e-marketplaces than Generation X.

- Implications

The results of this study have both theoretical and practical implications. From a theoretical perspective, this study examined the generational differences in trust in the e-marketplace. As its findings show, there is a significant generational difference in trust in the e-marketplace, especially among Generation Z, which has the highest level of trust. These findings therefore contribute to a better generational understanding of the differences in trust, a key aspect in each generation's e-commerce purchase decisions in the online context. Consumers of the same generation have comparable attitudes, beliefs, and actions; hence the importance of market segmentation emphasizing generations rather than age (Lissitsa & Kol, 2016). Clearly, generational variables must necessarily be considered while researching market segmentation in modern marketing.

For entrepreneurs, this study makes it clear that trust is a critical factor in making purchasing decisions on online channels for each of the three generation of consumers considered as did a number of prior studies (Lee et al., 2018; Thongmuller & Vichitthamaros, 2017). Internet-based business owners should therefore try to improve online trustworthiness. Undoubtedly, requesting the DBD Registered and DBD Verified credibility marks from the Electronic Commerce Division, Department of Business Development, would boost consumers' confidence in buying and selling products through electronic commerce firms (Srisen, 2019). Moreover, application developers or creators should prioritize the trust of each generation of buyers because different generations have different forms of trust. For Generation X, who has purchasing power but less trust than Generations Y and Z, allowing buyers to check information and order details in real-time, such as details about the ordered product as well as the transportation system, would go a long way in building trust. This includes displaying information about products and services that buyers have experienced before in text, still images, and moving images (Soleimani, 2021).

- Limitations and Suggestions for Future Research

Although this study contributes significantly to the comprehension of consumers' trust in e-marketplaces among generations X, Y, and Z, some limitations exist. Firstly, the data in this study was collected over a specific period, so the data analysis and results were limited to this time frame. A longitudinal study would thus be an important method for future research. Secondly, all the items in this study were based on self-reported data, which obviously may be subject to self-reported biases. Future research could therefore use multiple sources or different populations to collect data. Thirdly, the study did not examine the relationship between the attitudes and behaviors of buyers in an online context. Thus, future research should consider a more comprehensive model of consumer behavior to contribute to a robust explanation of the effect of attitudes towards buying behaviors in virtual communities.

References

Ayuni, R. F. (2019). The online shopping habits and e-loyalty of Gen. Z as natives in the digital era. *Journal of Indonesian Economy and Business*, 34(2), 168-184.

- Bangkok Bank SME. (2021). E-commerce Asian Growth. Bangkok Bank. Retrieved December 1, 2021, from <https://www.bangkokbanksme.com/en/covid-e-commerce-asean-growth>
- Bilgihan, A. (2016). Gen. Y customer loyalty in online shopping: An integrated model of trust, user experience and branding. *Computers in Human Behavior*, 61, 103-113.
- Dang, V. T., Wang, J., & Vu, T. T. (2020). An integrated model of the younger generation's online shopping behavior based on empirical evidence gathered from an emerging economy. *PLoS ONE*, 15(5).
- Gu, S., Slusarczyk, B., Hajizada, S., Kovalyova, I., & Sakhibieva, A. (2021). Impact of the COVID-19 pandemic on online consumer purchasing behavior. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(6), 2263-2281.
- Guo, Y., Le-Nguyen, K., Jia, Q., & Li, G. (2015). *Seller-Buyer Trust in Cross-Border E-Commerce: A Conceptual Model*. Twenty-first Americas Conference on Information Systems, Puerto Rico.
- Hassan, M., Iqbal, Z., & Khanum, B. (2018). The role of trust and social presence in social commerce purchase intention. *Pakistan Journal of Commerce and Social Sciences*, 12(1), 111-135.
- Herrando, C., Jimenez-Martinez, J., & Martin-De Hoyos, M. J. (2019). Tell me your age and I tell you what you trust: The moderating effect of generations. *Internet Research*, 29(4), 799-817.
- Hirankasi, P., & Klungjaturavet, C. (2021). Social Commerce: The New Wave of E-Commerce. Krungsri Bank. Retrieved September 29, 2021, from <https://www.krungsri.com/en/research/research-intelligence/social-commerce-21>
- Isa, N. F., Syed Annuar, S. N., Gisip, I. A., & Lajuni, N. (2020). Factors influencing online purchase intention of Millennials and Gen. Z consumers. *Journal of Applied Structural Equation Modeling*, 4(2), 21-43.
- Jiang, M., Tsai, H. S., Cotten, S. R., Rifon, N. J., LaRose, R., & Alhabash, S. (2016). Generational differences in online safety perceptions, knowledge, and practices. *Educational Gerontology*, 42(9), 621-634.
- Kim, M. S., & Ahn, J. H. (2007). Management of trust in the e-marketplace: The role of the buyer's experience in building trust. *Journal of Information Technology*, 22(2) 119-132.
- Klungjaturavet, C. (2020). E-Marketplaces Increase Market Efficiencies by Attracting a Large User-Base and Improving Data Access. Krungsri Bank. Retrieved June 1, 2021, from <https://www.krungsri.com/en/research/research-intelligence/ri-online-marketplace-en>
- Lee, S. J., Ahn, C., Song, K. M., & Ahn, H. (2018). Trust and distrust in e-commerce. *Sustainability*, 10(5), 1-19.
- Lissitsa, S., & Kol, O. (2016). Generation X vs. Generation Y: A decade of online shopping. *Journal of Retailing and Consumer Services*, 31(5), 304-312.
- Loro, C., & Mangiaracina, R. (2021). The impact of e-marketplace on the B2b relationships. *Industrial Management & Data Systems*, 122(1), 37-54.
- Noah, B., & Sethumadhavan, A. (2019). *Generational Differences in Trust in Digital Assistants*. Proceedings of the Human Factors and Ergonomics Society 2019 Annual Meeting, pp. 206-210.
- Oliveira, T., Alinho, M., Rita, P., & Dhillon, G. (2017). Modelling and testing consumer trust dimensions in e-commerce. *Computers in Human Behavior*, 71, 153-164.
- Petra, K. K. (2016). Generation Y attitudes towards shopping: A comparison of the Czech Republic and Slovakia. *Journal of Competitiveness*, 8(1), 38-54.

- Sawasdinam, K. (2018). *Factors Affecting Trust of E-Marketplace in Thailand*. Master of Business Administration: Silpakorn University.
- Sfenrianto, S., Wijaya, T., & Wang, G. (2018). Assessing the buyer trust and satisfaction factors in the E-Marketplace. *Journal of Theoretical and Applied Electronic Commerce Research*, 13(2), 43-57.
- Soleimani, M. (2021). Buyers' trust and mistrust in e-commerce platforms: A synthesizing literature review. *Information Systems and e-Business Management*, 20(1), 57-78.
- Srisen, T. (2019). *Factor Affecting Customer's Decision Making of the Same Product at Higher Price on the Online Channel*. Master of Business Administration: Thai-Nichi Institute of Technology.
- Supol, N., Pavorawat, R., & Fumongkol, R. (2019). Choosing an electronic marketplace to increase business opportunities. *Payap University Journal*, 29(2), 21-33.
- Thadhom, J. (2016). *Social Media Marketing, Trust, and Information System Quality Affecting Products' Purchase Decision through Facebook Live of Online Customers in Bangkok*. Master of Business Administration: Bangkok University.
- Thongmullek, T., & Vichitthamaros, P. (2017). A study of factors affecting acceptance and use of social network in Thailand. *The Journal of Social Communication Innovation*, 5(2), 114-124.
- Thoumrungroje, A. (2021). Drivers of e-commerce continuance intention: A comparison across baby boomers, Generations X, Y, and Z in Thailand. *Chulalongkorn Business Review*, 43(2), 21-46.
- Vieira, J., Frade, R., Ascenso, R., Prates, I., & Martinho, F. (2020). Generation Z and key-factors on e-commerce: A study on the Portuguese tourism sector. *Administrative Sciences*, 10(4), 1-17.
- Vorapongsathorn, T., & Vorapongsathorn, S. (2018). Sample size calculation of research using GPower. *Thailand Journal of Health Promotion and Environmental Health*, 41(2), 11-21.
- Weeraphatrungrach, T. (2016). *Differences in Characteristics among the People who Belong to Generation X, Y and Z Including their Behavior of Online Shopping: Bangkok Metropolis*. Master of Business Administration: Nation University.
- Yulianita, Y. (2018). Comparison of generation X and Y: Perceived usefulness, perceived ease of use, and subjective norms on purchase intention in E-Commerce. *Jurnal Komunikasi Indonesia*, 7(2), 140-152.