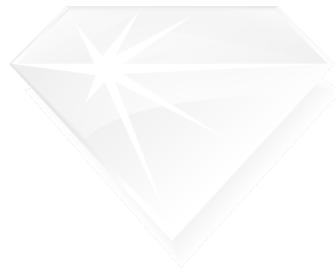THE INFLUENCE OF COVID-19 ON E-COMMERCE IN PERCEIVED
RISK, PERCEIVED VALUE, AND SOCIAL COMMERCE CONSTRUCT,
FACTORS TOWARDS THE CHANGES IN CONSUMERS' ONLINE
PURCHASE INTENTIONS IN BANGKOK

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This Independent Study Manuscript Presented to

The Graduate School of Bangkok University

in Partial Fulfillment

of the Requirements for the Degree

Master of Business Administration

Academic Year 2021

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This manuscript has been approved by

the Graduate School

Bangkok University

Title   :   The Influence of Covid-19 on E-commerce in Perceived Risk, Perceived

Value, and Social Commerce Construct, Factors Towards the Changes

in Consumers' Online Purchase Intentions in Bangkok

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ABSTRACT

The recent COVID-19 epidemic has caused consumers' behavior to change drastically. Fear of the epidemic made consumers start shopping online rather than brick-and-mortar shopping. To understand this transition, this study explores the impact factors influencing the changes in consumers' online purchase intentions in Bangkok. Quantitative research was used for the collection of the data. A total of 200 responses were collected through Snowball sampling, which included Bangkok employees. Online questionnaires were sent out to the respondents, comprising multiple-choice questions for demographic data and a five-point Likert scale for questions regarding dependent and independent variables. This study's analysis tools were descriptive statistics and multiple linear regression analysis. The results indicate changes in the relationship between the independent variables (perceived risk, perceived value, and social commerce construct factor) and the dependent variable (the changes in consumers' purchase intention in Bangkok).

Keywords: perceived risk, perceived value, social commerce construct, consumers' purchase intension

ACKNOWLEDGEMENT

Completing this independent study research would not have been possible without the kind support of many people. I would like to take this opportunity to express my sincere appreciation and thanks to all of them.

I would like to express my sincere gratitude to my advisor, Assoc. Prof. Dr. Suthinan Pomsuwan, who always guided me, led to this study's completion. Through his online lessons, he provided me with all the information, guides, and assistance that helped me conduct this research. Even though I had a hard time with the pandemic (COVID-19), his continuous support enabled me to undertake this research and complete it successfully.

I would also like to thank my family and friends. They have helped me to overcome challenging situations and provided me with their wholehearted support and encouragement throughout my research study. In addition, I would like to express my sincere gratitude to all the participants who helped me with the data collection process by participating in my independent study research.

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CHAPTER 1

INTRODUCTION

1.1 The Importance and Problem of the Study

Coronavirus Disease (COVID-19) pandemic is an ongoing crisis and has taken a heavy toll globally, especially in industrial and business economics. The world economy is still on a long road to recovery due to the permanent loss of supply potential (Macroeconomic Team, 2020). During this pandemic, many businesses were devastated, while some had exponential growth. For instance, electronic commerce (e-commerce) companies kept growing, whereas in-person shopping decreased. A survey entitled "COVID-19 and E-commerce" found that COVID-19 has shifted consumers to shop online more than ever and will continue to be so in the future (Sirimanne, 2020).

The term e-commerce refers to businesses that sell or buy goods or services online. E-commerce is categorized into six types:

- Business-to-Business (B2B): These businesses refer to trade between two or more businesses, such as a manufacturer and wholesaler or a wholesaler and a retailer. This model is common in supply chain companies that require raw materials or companies that provide services, such as commercial finance brokers (Vaidya, 2022).

- Business-to-Consumer (B2C): This model deals with the sales from businesses to consumers who are the end-users of products and services. B2C is the most common type, e.g., Apple, Samsung, et cetera (Rachmat, 2022).

- Consumer-to-Consumer (C2C): C2C model deals with selling and buying between consumers. Common online transaction between consumers includes eBay, Facebook, Craigslist, et cetera (Rachmat, 2022).

- Consumer-to-Business (C2B): C2B model is the opposite of the B2C model. Consumers sell their products/services to businesses such as influencer marketing, freelancers, or contractor (Rachmat, 2022). YouTube is one of the most known companies with the C2B model, which works by consumers selling their video content to YouTube.

- Business-to-Administration (B2A): A B2A model refers to dealing between business and administration, such as government. Road construction is one of the

most known businesses that provide materials and services to the administration or the government (Rachmat, 2022).

- Consumer-to-Administration (C2A): C2A model refers to online dealing between consumers and administration, such as the government. Services include public administration costs such as health services, social security, or taxes (Rachmat, 2022).

This research focuses exclusively on B2C and C2C models, which will mainly be consumers' online shopping changes before and since the outbreak of COVID-19.

Due to the outbreak of COVID-19, the government's restrictions (i.e., social distancing, wearing masks, avoiding crowded areas, and not going out when not necessary) have greatly influenced consumers' behavior. Many consumers started shopping online to minimize physical interaction (Fihartini, Helmi, Hassan, & Oesman, 2021). Data collected during the COVID-19 pandemic from May 2020 reported that 17,332 respondents from Thailand, 61 percent shopped more online while 10 percent shopped less online (Coppola, 2022). However, there are potential risks that come with online shopping—for instance, delivery date and safety concerns. The actual delivery date depends on the buyer and seller's location. For safety concerns, packages could encounter COVID-19 and spread to the buyers without knowing (Shetty & Pai, 2021). Due to the COVID-19 pandemic, many consumers have changed from brick-and-mortar shopping styles to online shopping.

Understanding factors contributing to the potential changes in consumer behavior may help identify the factors influencing consumers to shop online before and during the COVID-19 pandemic. Three independent variables were determined to study the components that impact the changes in consumers' online purchase intentions in Bangkok: 1) Perceived Risk, 2) Perceived Value, and 3) Social Commerce Construct. The independent variables were further sub-divided as follows:

- Perceived risk: product risk, financial risk, and convenience risk
- Perceived value: price value, emotional value, and quality value
- Social commerce construct: ratings and reviews; forums and communities; recommendations and referrals.

Perceived risk includes payment security, data privacy, e-contract validity, insufficient information disclosure, product quality, and rights enforcement (Rachmat,

2022), (Popli & Mishra, 2015) and (Ismail, Abdullah, & Francis, 2009). This problem arose because many online retailers failed to recognize the primary component contributing to consumers' perceived risk. Consumers' attitudes toward online shopping and purchasing behavior are influenced by their perception of risks (Marza, Idris, & Abror (2019). Ariffin, Mohan, & Goh (2018). This study aims to contribute to the research gap by providing helpful information regarding consumers' online purchase intentions. This study intends to discover how perceived risk influences the attitudes of Bangkok employees toward online shopping before and during COVID-19. Perceived risk in this study is analyzed by product, financial, and convenience risk.

Perceived value is another factor in determining consumers' buying intentions. Kokemuller (2019) states that "consumer-perceived value" is commonly used in marketing and branding. According to this concept, the success of a product or service is primarily determined by whether consumers believe the product or service will meet their wants and requirements. Perceived value substantially impacts user satisfaction in their study of 255 users of mobile commerce systems in Taiwan (Lin & Wang, 2006). Moreover, user satisfaction is significantly influenced by the perceived value of an online channel (Carlson, O'Cass, & Ahrholdt, 2015). This research categorized the characteristics of consumer perceived value in social e-commerce settings based on consumer expectations, including price value, emotional value, and quality value.

Lastly, the social commerce construct is an essential factor that reinforces consumers' buying intention. Social commerce construct includes ratings and reviews, forums and communities, and recommendations and referrals (Seno & Lukas, 2007), (Lo & Yao, 2019) and (Chen et al., 2017). Since online shopping has become more common, many people have started to use the information or reviews on social media as a guide when they plan to buy things in the future. Thus, the role of social commerce has become more critical for people who shop online. Because consumers need assurances that "we get what we paid for," reviews and ratings from other consumers become a critical factor. (Kimeldorf, Meyer, Prasad, & Robinson, 2006). Moreover, Coppola (2022) found that online consumers have increased more than ever. Therefore, studying the social commerce construct could provide another critical

insight into consumers' buying intentions before and during COVID-19.

1.2 Research Problems

 1.2.1 Do the perceived risk factors (product risk, financial risk & convenience risk) have an influence on the changes in consumers' online purchase intentions in Bangkok?

 1.2.2 Do the perceived value factors (price value, emotional value & quality value) have an influence on the changes in consumers' online purchase intentions in Bangkok?

 1.2.3 Do the social commerce construct factors (ratings and reviews, forums and communities & recommendations and referrals) have an influence on the changes in consumers' online purchase intentions in Bangkok?

1.3 Objectives of the Study

 1.3.1 To study the impact of the perceived risk factor (product risk, financial risk & convenience risk) on the changes in consumers' online purchase intentions in Bangkok.

 1.3.2 To study the impact of the perceived value factor (price value, emotional value & quality value) on the changes in consumers' online purchase intentions in Bangkok.

 1.3.3 To study the impact of the social commerce construct factor (ratings and reviews, forums and communities & recommendations and referrals) on the changes in consumers' online purchase intentions in Bangkok.

1.4 The Conceptual Framework

Figure 1.1: Conceptual Framework
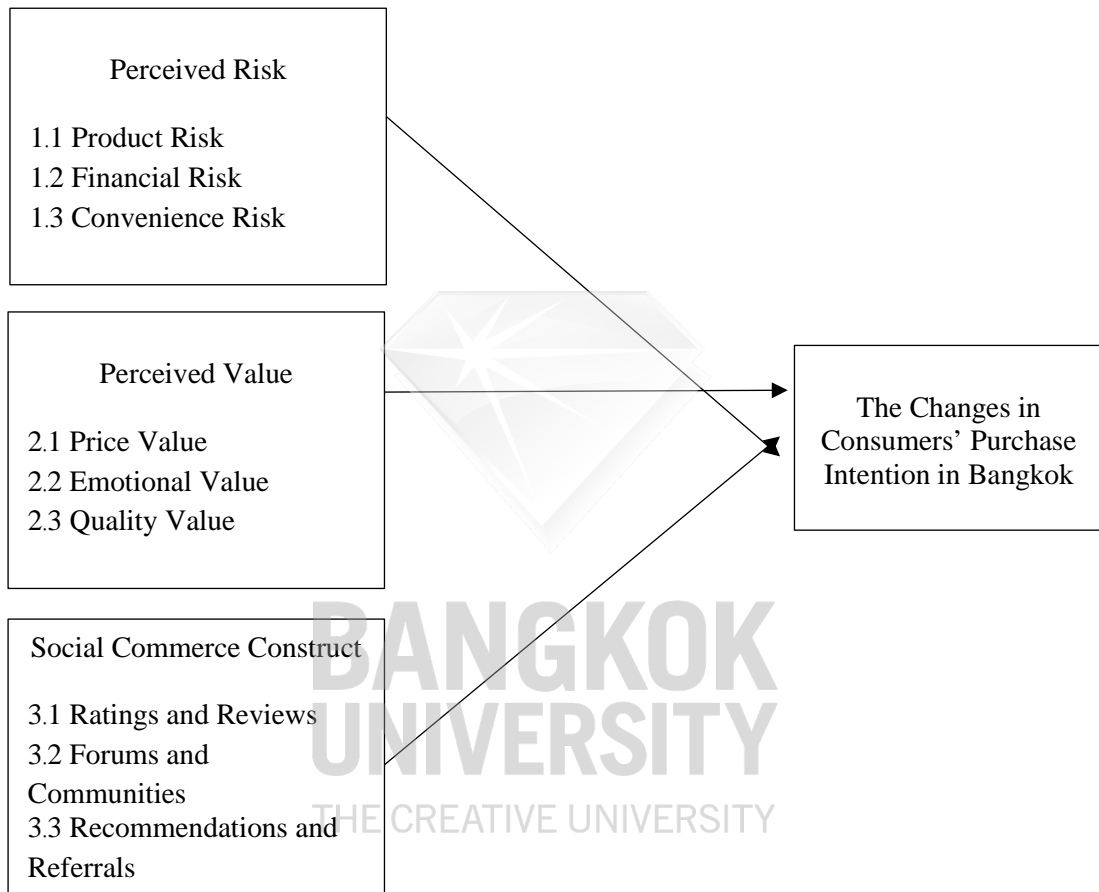
1.5 Method of Study

  The primary research method for this study is a quantitative method of surveys. An online survey is best suited for this study as there are various expenses and health issues like COVID-19. Thus, an electronic survey is more suitable than any other method. The online survey was distributed to the participants through "Google Forms" online survey. Participants were also recommended to distribute the survey to their friends and families. The data collected from Google Forms were then entered into statistical software for analysis and results. Samples were collected from the population by Snowball non-probability sampling. The population of this study is Bangkok employees.

1.6 Tools and Statistics Used

  The research for this study is conducted by an online survey to study the respondents' attitudes and behavior toward the variables. The online survey is best suited for this study due to the ongoing pandemic of COVID-19. The survey consists of close-ended questions, as these types of questions are applicable for quantitative data collection. The primary data collected from the respondents are introduction, demographics, information about perceived risk factors, perceived value factors, and social commerce construct factors that influence the changes in consumers' purchase intention in Bangkok. Statistical analysis was conducted using two common statistics for quantitative methods: descriptive and inferential statistics and regression analysis.

1.7 Scope of the Study

  1.7.1 Independent Variables:

   1.7.1.1 Perceived Risk

    - Product Risk

    - Financial Risk

    - Convenience Risk

   1.7.1.2 Perceived Value

    - Price Value

    - Emotional Value

    - Quality Value

     1.7.1.3 Social Commerce Construct

        - Ratings and Reviews

        - Forums and Communities

        - Recommendations and Referrals

   1.7.2 Dependent Variables: The Changes in Consumers' Purchase
Intention in Bangkok

   1.7.3 Population and Sample:

    The purpose of this study is to study the impact of the perceived risk,
perceived value, and social commerce construct factors towards the changes in
consumers' online purchase intentions in Bangkok. In addition, the study also aimed
to understand the factors that influenced the changes of these people to make
decisions to buy online pre-and-during COVID-19. The targeted group is the general
Bangkok employees. The study collected the data through the quantitative method.
Besides, to do the survey, a Snowball non-probability sampling method was chosen
to select questionnaire respondents. A total of 200 questionnaires were sent out to the
respondents via an online survey on Google forms. In the total of 200 responses, 200
responses were usable, which were then analyzed by using statistical software.

    According to the data reported in Bangkok Population by World Population
Review (2022), the total population of Bangkok is 10,899,698. According to the
table, with a population size of over 100,000, 400 samples will be collected with a
precision level of $\pm5\%$. Due to the ongoing pandemic (COVID-19), it was accepted
by advisor Assoc. Prof. Dr. Suthinan Pomsuwan to collect 50 percent of the sample
size, as it was challenging to collect 400 samples. According to this, 200 samples
(50% of 400) were collected for this study.

    The 200 samples for this study were selected from Bangkok, Thailand, by
using the Snowball sampling method to participate in this study.

Figure 1.2: Yamane's Table for Sample Size

Size of Population (N)	Sample Size (n) for Precision (E) of:			
	±3%	±5%	±7%	±10%
500	A	222	145	83
600	A	240	152	86
700	A	255	158	88
800	A	267	163	89
900	A	277	166	90
1,000	A	286	169	91
2,000	714	333	185	95
3,000	811	353	191	97
4,000	870	364	194	98
5,000	909	370	196	98
6,000	938	375	197	98
7,000	959	378	198	99
8,000	976	381	199	99
9,000	989	383	200	99
10,000	1,000	385	200	99
15,000	1,034	390	201	99
20,000	1,053	392	204	100
25,000	1,064	394	204	100
50,000	1,087	397	204	100
100,000	1,099	398	204	100
>100,000	1,111	400	204	100

A = Assumption of normal population is poor (Yamane, 1967). The en

Source: Yamane, T. (1967). *Statistics: An introductory analysis*. New York: Harper

and Row.

1.8 Benefits of the Research

This research aims to find the changes in consumers' online purchase intention in Bangkok. This research could significantly contribute to businesses' understanding of consumers' behavior. Understanding consumers' intention changes during a difficult time like COVID-19 could give businesses hints of business types that might perform well and businesses that deteriorate during the pandemic. Potentially, this research could increase the understanding of consumers from Bangkok.

This paper aims to understand further changes in consumers' online purchase intention and the influencing factors. In this research, the author explored the widely

known concept of Maslow's hierarchy of needs and the Theory of Planned Behavior. Conducting this research in Bangkok brings awareness of changes in online business category trends.

1.9 Limitations of the Research

Inadequate information and resources could be the cause of limitations in the study. Due to the ongoing situation regarding COVID-19, there were constraints in selecting a specific company or industry as to population size. As a result, the population size for this study may not be enough. For further studies, a particular population area could be included for more representative results.

Another limitation of this study was the research method. This study used a quantitative research method conducted through online surveys. Online surveys' common drawbacks include dishonest or inaccurate answers and quick responses without awareness. In addition, the respondents might be uncomfortable answering.

1.10 Definition of Terms

Listed below are the definitions of the key terms used in this research. The key terms are defined using the operational definitions method, which states that the definition of the variables and the key terms are determined according to the limits of the researcher. For a clear understanding of the concepts, the terms are defined by the author, combined from various sources, including Lexico by Oxford, Cambridge Dictionary, Merriam-Webster, and Collins.

Community: A group of individuals who share similar interests or aim to accomplish something together.

Consumer: A person who purchases products or services for their consumption.

Emotional Value: The value gained from consumers' feelings or emotional states when they adopt and use a service.

Financial Risk: The chance of incurring a financial loss through an investment or business venture.

Forums: A place on the internet where people can simultaneously leave comments or discuss specific topics with other people.

Perceived: Someone who becomes conscious of (something) using one of the senses,

particularly sight.

Perceived Value: A product's worth depends on how much consumers want or need rather than its actual price.

Price Value: Consumers' willingness to pay for a product or service based on their perception of the product value

Product Risk: The degree to which individuals fear they will incur losses if they purchase goods or services via the Internet or if the products fail to meet their expectations.

Purchase Intention: A measurement of the strength of a person's intention to engage in a particular behavior or make a purchase choice.

Quality Value: The worth or usefulness of a product or service to consumers.

Ratings: A number that tells how good something is, how successful it is, or how well certain parts are, especially when compared to other things of the same type.

Recommendation: The suggestions on the greatest thing to have or to do.

Referral: The act of directing someone needing professional help to a person or location that can provide it.

Reviews: Criticism about the quality or condition of something

Risk: The possibility that something terrible will occur in the future, a scenario that could be dangerous or have a negative outcome.

Social Commerce: The use of social networking sites to sell products and services to consumers. It integrates the entirety of the buying experience with interactive features accessible via various social media sites.

Convenience Risk: The possible obstacles preventing consumers from acquiring their product.

Value: The significance or worth of something to a particular individual.

CHAPTER 2
LITERATURE REVIEW

This chapter will summarize the literature relevant to the research project, bringing out where the gaps in the literature are and how the research helps to fill in one or more of these gaps. The research project, entitled "The Influence of COVID-19 on E-commerce in Perceived Risk, Perceived Value, and Social Commerce Construct Factors towards the Changes in Consumers' Online Purchase Intentions in Bangkok," can be divided into six elements. They are as follows:

2.1 The Background of the Online Shopping

2.2 Theories/Academic Concepts and Other Relevant Research Articles on The Changes in Consumers' Purchase Intention in Bangkok

2.3 Theories/ Academic Concepts and Other Relevant Research Articles of Perceived Risk

2.4 Theories, Academic Concepts, and Other Relevant Research Articles of Perceived Value

2.5 Theories Academic Concepts and Other Relevant Research Articles of Social Commerce Construct

2.6 Conclusion

2.1 The Background of Online Shopping

Online shopping has experienced exponential growth globally compared to traditional shopping like brick-and-mortar (Vasic, Kilibarda, & Kaurin, 2019). There are many advantages to online shopping. For example, there are many selections of products just by browsing on a website; price comparison becomes much more straightforward; rather than asking for an opinion from a seller, hundreds of reviews of a product can be found online (Wood, 2022). Today, companies that provide online shopping services, like Amazon and Alibaba, are considered one of the most valuable companies in the world (Companiesmarketcap, 2022). In addition to online shopping services, convenience and speed are arguably what online shopping consumers seek, which traditional shopping cannot provide (Vasic et al., 2019). However, with the rising of COVID-19 since December 2019, some customers started to shop online because of health safety and government policy reasons rather than speed or convenience (Fihartini et al., 2021). Despite the growing online businesses, consumers' behavior continues to change according to the world's events (Koch, Frommeyer, & Schewe, 2020).

COVID-19 has significantly impacted employment and jobs (OECD, 2020). Aside from the health crisis, the global economy was tremendously affected (Ngotngamwong, 2022). Many workers have been laid off and have started working at home instead of at an office (OECD, 2020). This means that workers who were once required but not essential were laid off, and the vital workers were kept. One of the examples is the aviation industry. Charernnit (2021) stated that the national airline of Thailand, "Thai airways," had been losing money for many years before COVID-19 because of their financial and political situation, and they had to reduce the workforce to reduce the losses. However, a major laid-off of the workforce can be seen during the COVID-19 pandemic. In 2021, Thai Airways laid-off almost 2,600 employees. Because air traveling was restricted, the aviation industry was greatly affected. Jobs like pilots or flight attendants depend on customers. Since there were no customers, they could no longer work. In addition to the affected industry, the hospitality industry was also greatly influenced by COVID-19. Similar to the aviation industry, hospitality also had to lay off its employees because there were no customers (Ngotngamwong, 2022). Since a significant number of employees had been laid off

during or after COVID-19, they are suitable to answer the research question.

Factors toward consumers' online purchase intentions can vary according to the current situation worldwide. The COVID-19 pandemic caused fundamental economic and societal changes which could be permanent (Koch et al., 2020). Shamim, Ahmad, & Alam (2021) found that during the COVID-19 outbreak, consumers prefer online grocery shopping to reduce the risk of contracting COVID-19 physically. Furthermore, although the online shopping industry has been growing, consumers have become more mindful of how their money is being spent (Ahmad, Jonsson, & Tsuchida, 2021). Understanding the consumers' intention changes is expected to benefit various online businesses to understand consumers significantly. Thus, this study aims to investigate the changes in consumers' online purchase intentions in Bangkok, focusing on three factors: perceived risk, perceived value, and social commerce construct.

2.2 Theories/ Academic Concepts and Other Relevant Research Articles of the Changes in Consumers' Purchase Intention in Bangkok

This part will describe two elements**:** theories/academic concepts and other relevant research articles**.**

2.2.1 Theories/Academic Concepts

<u>**Maslow's Hierarchy of Needs**</u>

Abraham Maslow was a psychologist best known for his Hierarchy of Needs Theory (Cherry, 2022). To understand what motivates humans, Maslow proposed that human needs can be categorized from the most basic needs to the most abstract concepts. Maslow's theory divides the hierarchy of needs into five categories: Physiological, Safety, Love, Esteem, and Self-actualization.

- Physiological needs: refers to physical needs such as food and water. It is the most essential for a human to survive.

- Safety needs: After the physiological needs are fulfilled, safety is the following requirement. Examples include buying insurance, staying in a predictable environment, et cetera.

- Love: A feeling of acceptance and belonging. It needs to be accepted or a sense of belonging in a social setting that includes friends and family.

- Esteem: A feeling to feel good about ourselves.

- Self-actualization: Refers to a feeling of being fulfilled or a feeling that one is living up to one's potential.

Maslow's theory does not explicitly state that each 'need' must be met entirely but could instead be partly satisfied (Virginia & Satria, 2022). For example, a meal does not need to make one's full to meet the requirement. Furthermore, meeting hierarchical requirements does not need to be done step-by-step. Namely, having a meal with a loved one could fulfill physiological and love needs.

At a glance, Maslow's theory makes perfect sense intuitively. Despite being one of the most famous theories, there are considerable disadvantages. First, one of the most critical problems is that it cannot be empirically verified (Fallatah & Syed, 2018). In other words, the theory is not measurable. For instance, how does one identify once a need is fulfilled? Basic needs, such as physiological and safety needs, may be easier to identify, but at a higher level, a method to identify them becomes too abstract (Fallatah & Syed, 2018). Another limitation is that the model is too simplistic. One of the areas that the model is lacking is cultural differences. The model might be based on western culture; thus, the assumption may be applied to other cultures.

Figure 2.1: Maslow's Hierarchy of Needs Adapted from Ajzen (Mcleod, 2020).
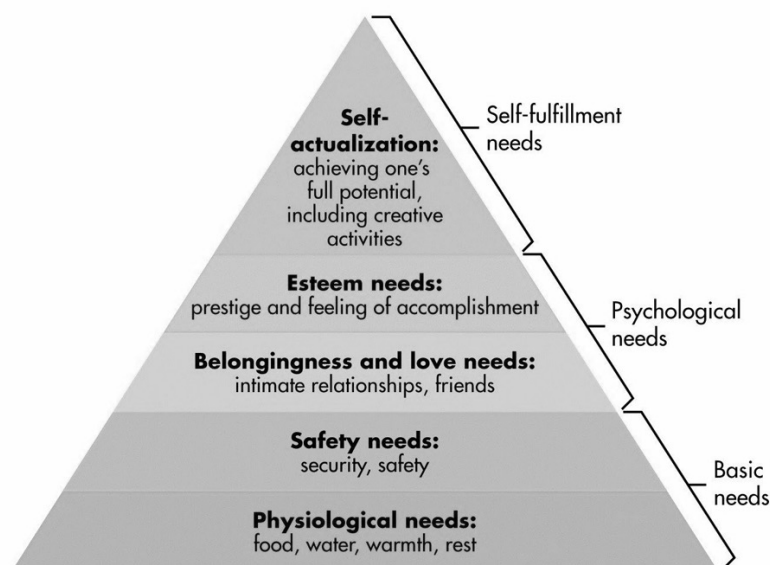
Source: Mcleod, S. (2022). *Maslow's Hierarchy of Needs*. Simply Psychology.

Theory of Planned Behavior

The Theory of Planned Behavior (TPB) was developed by Icek Ajzen (2020) to understand human intentions. TPB is the improved version of the theory of reasoned action (TRA). The perceived behavioral control was added to the model, and the model was renamed to TPB, as shown in figure 2.2 (LaMorte, 2019). The theory states that human behavior is governed by three core components: behavior beliefs, normative beliefs, and control beliefs.

- Behavioral beliefs & Attitude Toward the Behavior: Behavior belief refers to the motivations that influence; the stronger the intention, the more likely the behavior will be performed. Attitude toward the behavior refers to the consideration of the outcome of the performing behavior (LaMorte, 2019).

- Normative belief & subjective norm: Normative belief is one's belief whether a behavior is approved or disapproved by the majority. Subjective norm refers to the cultural code of behavioral (LaMorte, 2019).

- Control belief & perceived behavioral control: Ajzen (2020) defined control belief as "people's perception of their ability to perform a given behavior," and perceived behavior refers to the degree of control over a given behavioral.

Figure 2.2: Theory of Planned Behavior (LaMorte, 2019)
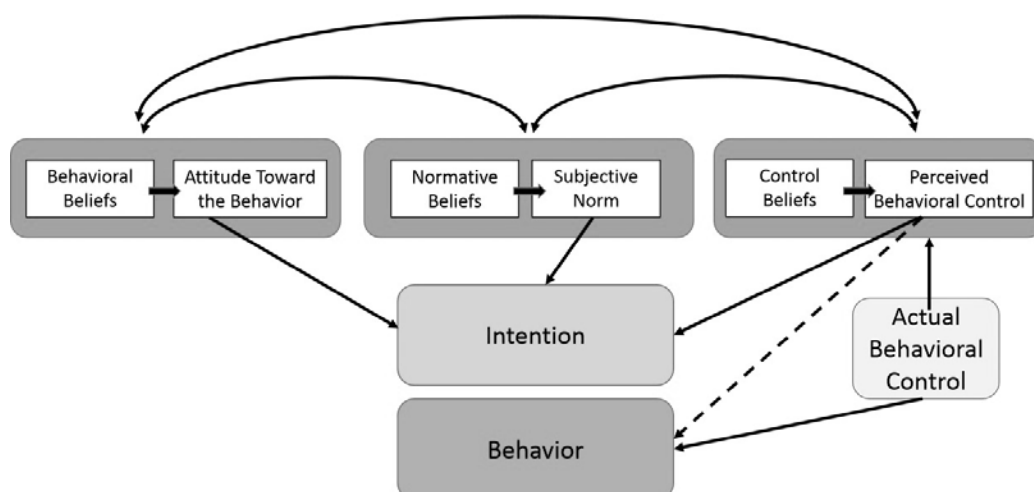
Source: Lamote, W. (2019). *The Theory of Planned Behavior.* Behavior Change
   Models. Boston University School of Public Heath.

TBP has been used to explain many behaviors such as health behaviors, including smoking, drinking, breastfeeding, substance use, et cetera (LaMorte, 2019). Moreover, TPB has also been used to successfully predict consumers behavior (Arifani & Haryanto, 2018). Arifani & Haryanto (2018) conducted research to attract people to reduce the use of plastic bags and were able to predict the consumers' behavior using the TPB model.

Although TPB has been used to predict consumers' behavior successfully, the model has two drawbacks. First, the model does not include the current motivation, intention, or experience. For example, the reasons stated may significantly influence the behavior or attitude over normative belief and control belief (LaMorte, 2019). Second, external factors such as environment or economic influences were excluded from the model. Some researchers have responded that TPB limitations are the exclusion of external factors (LaMorte, 2019).

2.2.2 Other Relevant Research Articles

COVID-19 has affected consumers' purchase intentions greatly and globally. A survey on how COVID-19 has affected consumers' online shopping found that 61 percent of 100 participants started online shopping after the outbreak (Gokila, 2021). Moreover, offline stores have started to rely on e-commerce rather than walk-ins (Cunningham, 2015). To explain an increase in the online shopping behavior of consumers, two models will be used: The theory of planned behavior (TBP) and Maslow's hierarchy of needs.

According to the TBP model by Lim, Salahuddin, Romle, & Abdullah, 2016, it was found that Thai consumers' purchasing intentions were affected by perceived behavioral control and subjective norms. Although purchase intention does not necessarily translate into actual action, it was found that if consumers have a favorable attitude and subjective norm, they will act (Lim et al., 2016).

Maslow's hierarchy of needs could also explain an increase in online shopping during COVID-19 despite health safety and economic concerns. Since COVID-19 falls into the safety concerns category, it is only reasonable that consumers need to fulfill physiological needs & safety needs. A study found that online grocery shopping significantly increased during the COVID-19 pandemic (Shamim et al., 2021). Out of 212 respondents, 137 respondents (64.6%) plan to do online grocery shopping more,

while only 21 respondents (6.6%) plan not to do online grocery shopping (Shamim et al., 2021). This study reflects customers' needs, similar to Maslow's hierarchy of needs.

2.3 Theories /Academic Concepts and Other Relevant Research Articles of Perceived Risk

This part will describe three elements**:** Product Risk 1**.**1, Financial Risk 1**.**2, and Convenience Risk 1**.**3**.** They are as follows**:**

2.3.1 Product Risk 1.1

Product risk refers to the accuracy of the information of a product provided by a website (Popli & Mishra, 2015). Since the only available information about a product is on a website, consumers will have to rely on limited information. Thus, when the product arrives at the doorstep, there is a possibility that the product might not meet the consumers' expectations. This expectation occurred when the displayed online product on the website was compared. The comparison could be colors, shapes, defects, et cetera. Moreover, product risk may refer to whether the fundamental work will perform up to expectations Arora & Rahul (2018). For instance, the product may not perform as well as advertised in the video and the description. Moreover, many studies also used product risk as a dependent variable to study consumers' intention to buy. A study by Bhatti, Rehman, Kamal, & Akram (2018) also included product risk as the dependent variable to study consumers' online shopping behavior. Another study by Ismail, Abdullah, & Francis (2009) also included product risk as a perceived risk factor to study consumers' online shopping behavior. Tran (2020) found that product risk is one of the perceived risks affecting consumer satisfaction and behavior intention for online shopping. Product risk is also crucial to the performance of businesses against competitors (Castaneda, Ostrosi, Majić, Stjepandić, & Sagot, 2020). Thus, when the product arrives, there is very little the consumer can do except rely on the return policy, which may cost extra money.

2.3.2 Financial Risk 1.2

Any risks involving money loss are defined as financial risks (Arora & Rahul, 2018). Popli & Mishra (2015) defined financial risk as the possibility of product repair, damaged product, hidden maintenance, et cetera. Financial risk could also refer

to online transaction risk when using credit cards, e.g., credit card information (Popli & Mishra, 2015). Consumers' experience in either credit card fraud or defective products greatly deters consumers' online shopping intentions (Masoud, 2013). Moreover, some types of products have greater risk than others. For example, buying sensory products has more risks than purchasing computer software or books (Shim, Eastlick, Lotz, & Warrington, 2001). This is because consumers cannot test the product virtually. Research conducted by the Georgia Institute of Technology's Graphic Visualization found that financial risk applies to all online shopping categories (Bhatnagar, Misra, & Rao, 2000). Many types of research use financial risk as a dependent variable that affects consumers' purchase intention. Ariffin, Mohan, & Goh (2018) included financial risk as a perceived risk to understand consumers' online purchase intention and found that financial risk is one of the crucial components of perceived risks in determining consumers' online purchase intention. Another study on the effect of the perceived risk on the adoption of the sharing economy in the tourism industry also included financial risk in their survey method (Yi, Yuan, & Yoo, 2020). In a study on consumers' purchase intention based on the TPB, the theory of perceived risk found that financial risk was one of the important risks to affect the outcome of a purchase (Pillai, Kim, Haldorai, & Kim, 2022). In addition to the hospitality industry, a study was done to understand the impact of COVID-19 on returning hotel guests and included financial risk as perceived risk. Therefore, financial risk poses a crucial factor in consumers' perceived risk.

2.3.3 Convenience Risk 1.3

Convenience risk refers to possible obstacles that prevent consumers from acquiring their purchased product (Popli & Mishra, 2015). This risk includes delivery services' trustworthiness or lack of trust in online websites. Tham, Dastane, Johari, & Ismail (2019) described convenience risk as disappointment from online shopping. The frustration may include the inconvenience of returning a product because the description does not match, the wrong size, et cetera. Likewise, Chen, Lu, & Wang (2017) described ` risk as consumers' perception that purchasing products through the internet will take more time. It is undeniable that one of the greatest obstacles is the time the delivery takes to get to the doorstep as compared to in-store purchases. Moreover, if consumers receive the wrong product, returning the product for a

replacement may take even longer than buying a new one. A study on the attitude of consumers toward online shopping found convenience to be a significant factor in affecting consumers' online shopping enjoyment (Marza, Idris, & Abror (2019). Ariffin, Mohan, & Goh (2018) found that convenience risk greatly reduces consumers' online buying intention. In addition, convenience risk has been used in literature to study consumers' purchase intentions. Bhatti et al. (2018) included convenience risk as a "Subjective Norm" in determining online shopping behavior. A study on online impulse buying tendency found convenience risk to be one-factor influencing consumers' impulse buying tendency. Because many literary works have found convenience risk to be a crucial factor in determining consumers' buying intention, convenience risk is one of the sub-factors of perceived risk in determining consumers' online purchase intention.

2.4 Theories / Academic Concepts and Other Relevant Research Articles of Perceived Value

Perceived value is divided into three elements: Price Value 2.1, Emotional Value 2.2, and Quality Value 2.3. They are as follows:

2.4.1 Price Value 2.1

Another important factor relating to money is similar to financial risk but deals exclusively with products. The price value is defined as the utility of a product owing to the reduction of its perceived shorter and longer cost (Peng, Zhang, Wang & Liang, 2019). Consumers see a product's price promotion daily in all products—for example, clothing summer sales, electronic products sales, advertising on food, et cetera. Consumers are often faced with the dilemma of whether a product is worth the money. Priced value is also related to perceived price fairness. Perceived price fairness refers to a judgment of whether an outcome is reasonable, acceptable, or just toward a buyer (Bolton, Warlop, & Alba, 2003). Perceived price fairness of consumers also refers to actual price variation, different market arrangements, and end-user socioeconomic characteristics (Mori, 2021). Often, products from other places are at different prices. Thus, when consumers perceive the price to be fair, they would often seek products or services from the same provider assuming the other products would be fair (Chen et al., 2017). For example, products from different

countries. There are taxes, delivery fees, middle-man fees, et cetera to consider when perceiving the value of a product. Even products in the country from different websites could vary greatly. Price value has also greatly affected consumers' satisfaction (Yuniasih, Winarno, Zuniarti, & Marwansyah 2021). A study by Peng et al. (2019) found price value affects consumers' purchase intention in social E-commerce sales promotions. Thus, to understand the perceived value, price value is one of the essential components to consider.

2.4.2 Emotional Value 2.2

Peng et al. (2019) defined emotional value as the utility derived from feelings or affection while buying a product. One of the common emotions is visual attractiveness. Studies on IT products have found that products' visual attributes enhance users' emotional attachment (Yang, Yu, Zo & Choi, 2016). Although functional value (performance and durability) is important, a study by Kato (2021) has found that emotional value is just as important. Emotional value, in this case, refers to an aesthetic value such as design and user experience. Yu & Lee (2019) described emotional value as "the degree of customer perception of the functional, utilitarian, and physical performance of upcycled products." The emotional value by Yu & Lee (2019) includes functional value as part of emotional value. In addition, Yu & Lee (2019) also refer to the upcycling of a product as part of the emotional value to consumers' purchase intention. Many studies indicate that emotional value is an essential component of perceived value in understanding consumers' purchasing intentions. Arslanagic-Kalajdzic, Kadic-Maglajlic, & Miocevic (2020) found that emotional value can reduce perceived uncertainty and supplier selection risk. Another study by Arslanagic-Kalajdzic & Zabkar (2017) found that although emotional value did not directly affect consumers' satisfaction, it affected brand loyalty. Therefore, emotional value is an essential component of perceived value.

2.4.3 Quality Value 2.3

Perceived quality is the customers' judgment about a product's superiority (Zeithaml, 1998). The quality of a product is also often referred to it's the length of its functional longevity which also comes with different price tags (Jensen, Laursen & Haase, 2021). High-end products are assumed to be made from premium materials and are expected to last longer than low-end products. It is also important to note that

brand quality and reputation are also important to consumers' perceptions (Jensen et al., 2021). The quality value is suggested to affect consumers' perception of purchasing a brand name or high-end products (Khan, Memon, & Kumar, 2019). Many studies also used quality value as a dependent variable to study consumer behavior. A study by Samudro, Sumarwan, Simanjuntak, & Yusuf (2020) found quality value to influence consumers' satisfaction. Another study by Khan et al. (2019) suggested that quality value influences brand loyalty, and brand loyalty influences purchase intention. Moreover, not only does product quality matter but also do services. A study by Crespo-Hervás, Calabuig-Moreno, Prado-Gascó, Añó-Sanz & Núñez-Pomar (2019) found services' quality value to affect the passion of sports fans. Thus, quality value indirectly influences purchase intention. Aakko & Niinimäki (2021) suggested that quality comprises three processes: quality production, quality experience, and quality evaluation. The three processes line within the defined perceived quality by Zeithaml (1998) and Khan et al. (2019).

      1.   Quality production: Design and production focusing on performance and reliability (Aakko & Niinimäki, 2021).

      2.   Quality experience: Process by which customers perceive and experience the attributes of products (Aakko & Niinimäki, 2021).

      3.   Quality evaluation: Representation of the perceived quality attributes into the total assessment of quality (Aakko & Niinimäki 2021).

      Although the framework of quality value can be represented, quality cannot be empirically measured since quality is an objective perception of consumers. Nevertheless, quality value is an essential factor in consumers' perceived value.

2.5 Theories / Academic Concepts and Other Relevant Research Articles of Social Commerce Constructs

      This part will describe three elements: Ratings and Reviews 3.1, Forums and Communities 3.2, and Recommendations and Referrals 3.3. They are as follows:

2.5.1 Ratings and Reviews 3.1

      Ratings and reviews are tools that consumers can use to exchange products feedbacks and inform each other's choices from different perceptions (Chen et al., 2017). Other than the limited description of products or services, reviews and ratings

and be a great source to research a product to see other consumers' opinions. Rating and reviews often come in the form of numerical ratings followed by a short review from customers about the experience of the products. Not only do ratings and reviews help consumers, but also businesses benefit them. Rating and reviews assist retailers in integrating customers feedbacks and creating a type of community dedicated to a brand (Kim & Park, 2013). Reviews are also great for consumers and business managers to connect (Saumya, Singh, Baabdullah, Rana, & Dwivedi, 2018). To increase customers' confidence in purchasing businesses' products, allowing ratings and reviews can be a great way. Since consumers can read and learn more from other consumers' views, this can give them the confidence they need to buy a product. Many studies have ratings and reviews in the research to study consumers' behaviors. Chen et al. (2017) found rating and reviews to influence consumers' cognitive and affective appraisals significantly. Some brands hire an influencer to make a video or write a review for their products (Vrontis, Makrides, Christofi & Thrassou, 2021). Although the accuracy of reviews from an influencer is questionable since they are paid to do the review, it is still effective marketing. In addition, to review the accuracy, a study by Lo & Yao (2019) found that negative reviews are perceived to be more credible than positive reviews. A study by Helversen, Abramczuk, Kopeć, & Nielek (2018) found that reviews and ratings affect people of all ages though they were affected differently. Nevertheless, ratings and reviews are great sources of information that consumers can use to learn about a product. Thus, it is an essential sub-factor in the social commerce constructs.

2.5.2 Forums and Communities 3.2

Similar to ratings and reviews, forums and communities provide information about products from users in a much richer environment regarding information (Chen et al., 2017). While ratings and reviews are often found directly on a brand website, forums and communities can be found entirely on a different website from the product. Reddit or Pantip.com is an excellent example that provides consumers to create a forum dedicated to certain products or services. Because forums and communities also benefit brands the same as rating and reviews, some brands go as far as creating forums and communities for their customers. This could include lists, discussion forums, product reviews, videos, blogs, podcasts, social networks, ranking

tools, and recommendation systems (Li, 2019). A brand can learn what consumers need or expect from a product from these social constructs. A brand can also answer customers directly from a forum or community website rather than email customers one at a time. Although forums are a great way to communicate, consumers' problems cannot be verified (Kamiński, Jakubczyk & Szufel, 2017). Some forums have user verification to fix whether consumers' problems are legitimate. Thus, certain forums are more credible than others (Chiou, Hsiao, & Chiu, 2018). In addition to answering questions, common questions from other customers could also be found in forums and communities. A study also found that consumers who use forums perceive greater transaction security and better delivery condition (Maia, Lunardi, Longaray, & Munhoz, 2018).

2.5.3 Recommendations and Referrals 3.3

Recommendations and referrals are defined as online activities that enable customers to exchange information for online purchases (Li, 2019). Other than online interaction, such as ratings and reviews online or forums and communities, there is another online activity to exchange information. Good recommendations and referrals allow consumers to quickly and accurately judge the products they plan to purchase (Tang, Hu & Liu, 2013). Recommendations and referrals can also be compelling when customers are unsure of their needs. For example, when a consumer wants to buy a refrigerator, they need to find the refrigerator speculation they need. One way to find the information is to search online, and many websites recommend various products. These websites often come from the top 10 refrigerators of 2022, for instance. Another often-used method is to recommend another product with the product one is interested in. Many industries use this method, especially the beauty industry (Paço & Oliveira, 2017). For example, the Ordinary products they sell are often recommended with one or more of their own products. Recommendation or referrals by the expert is also used to influence consumers' purchase intention (Seno & Lukas, 2007). A study found that recommendation systems build brands' reputations and reduce consumers' purchase uncertainty (Maia et al., 2018). For example, celebrities, experts, or well-known people often starred in advertisements for a specific topic. In addition, many studies use recommendations and referrals to study consumers' behavior. Chen et al. (2017) included recommendations and

referrals as one of the social commerce components to study customers' attitudes. Lo & Yao (2019) also used recommendation as one component to study a hotel's credibility. Therefore, recommendations and referrals are essential components of social commerce constructs.

2.6 Conclusion

To determine the changes in consumers' online purchase intentions, three main factors are needed; 1) Perceived risk is what could happen if consumers make an online purchase. It includes product risk, financial risk, and convenience risk. These risks are factoring consumers to keep in mind before buying and what could happen after buying. 2) Perceived value is the value of a product or service from the consumers' perspective. Perceived value is fundamentally similar for each person (Ismail et al., 2009). Everyone wants something worthy of the value of what is paid. However, different people will perceive their value differently in various categories. This research categorizes three perceived values: price, emotion, and quality. Lastly, 3) social commerce constructs are online stimuli that consumers can use to reinforce their product evaluation. Social commerce constructs include three main sub-factors: recommendations and referrals, ratings and reviews, and forums and communities. Perceived risk, perceived value, and social commerce construct are important factors towards consumers' purchase intention.

CHAPTER 3
METHODOLOGY

The primary components of this chapter will include descriptions of the research design, the rationale for the research, and the methodology used in the study.

Additionally, threats to content validity and reliability tests will be considered for the study.

Therefore, this part will describe eight elements. They are as follows:

3.1 The Type of Research and Tool

3.2 The Research Design

3.3 The Quality of the Research Tool

3.4 The Data Collection

3.5 The Population and Sample

3.6 The Sampling Technique

3.7 The Research Procedure and Timeline

3.8 The Hypotheses Test and Data Analysis

3.1 The Type of Research and Tool

This study used the quantitative method as a means to investigate the objectives. An online survey method is chosen to collect the data from the respondents in a closed-ended questionnaire. The questionnaire is divided into six categories: the screening question (1 question), the demographic data question (10 questions), the factors of perceived risk (12 questions), the factors of perceived value (12 questions), the factors of social commerce construct (12 questions), and the changes in consumers' purchase intention in Bangkok (8 questions). The survey consists of 55 questions in total.

Part 1: Screening   (1 question)

Part one consists of one question about whether the respondents have ever shopped online. This purpose is to screen the respondents who only have experience in online shopping.

Part 2: Demographic Data   (10 questions)

Part two consists of questions about the respondents' general information such as age, gender, and marital status. The questionnaire also contains questions that

require personal details about their education and job.

Part 3: Factors of Perceived Risk   (12 questions)

Part three consists of questions about the agreement level of the respondents regarding the perceived risk factors. There are three sub-variables in this part: product risk, financial risk, and convenience risk. Each sub-variable consists of 4 questions.

Part 4: Factors of Perceived Value   (12 questions)

Part four consists of questions about the agreement level of the respondents regarding the perceived value factors. There are three sub-variables in this part: price value, emotional value, and quality value. Each sub-variable consists of 4 questions.

Part 5: Factors of Social Commerce Construct   (12 questions)

Part five consists of questions about the agreement level of the respondents regarding social commerce construct factors. There are three sub-variables in this part: ratings and reviews, forums and communities, and recommendations and referrals. Each sub-variable consists of 4 questions.

Part 6: The Changes in Consumers' Purchase Intention in Bangkok
(8 questions)

Part six consists of respondents' agreement level before the outbreak of COVID-19 (4 questions) and since the outbreak of COVID-19 (4 questions) with the changes in consumers' purchase intention in Bangkok.

3.2 The Research Design

The online questionnaire will be measured as the following:

3.2.1   Part 1: the experience: Yes / No question

      3.2.1.1   Online shopping experience

3.2.2   Part 2: the fact: nominal and ordinal scales

      3.2.2.1   Gender

      3.2.2.2   Age range

      3.2.2.3   Marital status

      3.2.2.4   Education level

      3.2.2.5   Current employment status

      3.2.2.6   Monthly income

      3.2.2.7   Internet usage per day

3.2.2.8   Level of online shopping experience

3.2.2.9   Frequency of online shopping per month

3.2.2.10   Most online shopping categories interests

3.2.3 Part 3-5: the attitude of <u>independent variables</u>: interval scale (the least (1) to the most (5))

3.2.4 Part 6: the attitude of <u>dependent variable</u>: interval scale (the least (1) to the most (5)

Scale 5 – Strongly Agree

Scale 4 - Agree

Scale 3 - Neutral

Scale 2 - Disagree

Scale 1 - Strongly Disagree

For part 3-6 of the questionnaire, which consists of Likert's 5-point scale, the statistical mean range for the interpretation of the mean are calculated below:

Range = (Maximum - Minimum) / Scale Level

Range = (5 - 1) / 5 = 0.8

Table 3.1: The Range of Mean Interpretation

Range	Interpretation
1.00 - 1.80	Strongly Disagree
1.81 - 2.60	Disagree
2.61 - 3.40	Neutral
3.41 - 4.20	Agree
4.21 - 5.00	Strongly Agree

The statistics used will be two types:

1. Descriptive statistics are composed of frequency, percentage, mean, and standard deviation.

2. Inferential statistics, which is composed of the Multiple Regression Analysis Test.

3.3 The Quality of the Research Tool

The online questionnaire was checked for validity and approved by Advisor Assoc. Prof. Dr. Suthinan Pomsuwan and Field Specialist Dr. Papob Puttimanoradeekul. The reliability test was conducted with a volunteer sample group of 30 respondents. The data from the questionnaires were analyzed using Cronbach's Alpha in the statistical software, with a total reliability of 0.968. The required value to be accepted is 0.7-1.00.

Table 3.2: The Total Reliability Test Results

Cronbach's Alpha	N (number) of Items
0.973	44

Table 3.3: The Reliability Test Results for Perceived Risk

Cronbach's Alpha	N (number) of Items
0.891	12

Table 3.4: The Reliability Test Results for Perceived Value

Cronbach's Alpha	N (number) of Items
0.928	12

Table 3.5: The Reliability Test Results for Social Commerce Construct

Cronbach's Alpha	N (number) of Items
0.954	12

Table 3.6: The Reliability Test Results of the Changes in Consumers' Online
Purchase Intentions in Bangkok

Cronbach's Alpha	N (number) of Items
0.953	8

3.4 The Data Collection

The questionnaires were created electronically through Google Forms in both English and Thai to avoid the language barrier and receive the most effective result. The participants received the questionnaires via a link that directed them to a Google form. In addition, the purpose of the study and the types of questions were also explained to the participants before allowing them to take the surveys.

Using a quantitative method through an online survey is economical & convenient. An online survey is economical because it does not require paper and can be done electronically. On the other hand, the paper format may require traveling and using a physical document, which may require thousands of sheets of paper. Thus, there would be traveling costs, material costs, time, et cetera, whereas an online survey would only require time and internet access. Moreover, an online survey is more convenient for the administrator and the responders. For example, the administrator does not need to meet the participants in person or send them physical copies. Instead, sending a link to a participant and having them fill in the survey would be all the requirements for the survey to be completed. For the reasons mentioned, an online survey was selected as the method for data collection.

3.5 The Population and Sample

General Bangkok employees were selected to be the sample for this study. According to the data reported in Bangkok Population by World Population Review (2022), the total population of Bangkok is 10,899,698. According to the table, with a population size of over 100,000, 400 samples are to be collected with a precision level of +-5%. Due to the ongoing pandemic (COVID-19), it was accepted by advisor Assoc. Prof. Dr. Suthinan Pomsuwan to collect 50 percent of the sample size, as it

was challenging to collect 400 samples. According to this, 200 (50% of 400) samples were collected for this study.

$$400 * 50\% = 200 \; samples$$

Snowball non-probability sampling collected two-hundred samples from different districts in Bangkok.

3.6 The Sampling Technique

Snowball's non-probability sampling purpose is to obtain a sample of convenient initial elements. There are three main advantages to the Snowball sampling technique: efficient, simple implementation, and valuable for hypothesis generation (Etikan, 2016). Thus, collecting data using this method can be more efficient and takes less effort. This technique relies on participants with high social profiles to distribute the surveys. Because this technique relies on the initial group of participants, the latter group will be non-probability. However, this can be favorable if the study requires a similar group of participants. Snowball non-probability is a simple method that gathers samples of similar groups. Therefore, it is the best method for this study.

3.7 The Research Procedure and Timeline

1. The topic of this study was first researched thoroughly in terms of literature, theories, methods, and results. Information was gathered, written into the outline, and eventually developed into this study. The study began on August 21st, 2022.

2. The questionnaire development process was from September 1st, 2022, to September 14th, 2022. The dependent and independent variables were analyzed from multiple types of research and were finally chosen to be in this research. The selected questions focused on the consumers' purchasing intention. Some questions have also been modified accordingly.

3. Cronbach's alpha tested the questionnaire reliability by conducting a pilot test on September 14th, 2022

4. The questionnaires were sent to participants from September 15th, 2022, until October 31st, 2022.

5. The collected data were analyzed until October 31st, 2022.

3.8 The Hypotheses Test and Data Analysis Hypotheses:

H1: Perceived risk factors (consisting of product risk, financial risk, and convenience risk) have a significance on the changes in consumers' purchase intention in Bangkok

H2: Perceived value factors (consisting of price value, emotional value, and quality value) have a significance on the changes in consumers' purchase intention in Bangkok

H3: Social commerce construct factors (consisting of ratings and reviews, forums and communities, and recommendations and referrals) have a significance on the changes in consumers' purchase intention in Bangkok

The followings are the statistical tools used for data analysis:

1. Descriptive Statistics: These statistics were used to analyze the respondents' demographic data. The information included is age, gender, education, and more. A descriptive statistic is used to analyze and summarize the characteristics and observations of the data and present them in the form of percentages.

2. Inferential Statistics: These statistics are used to interpret the meaning of the data and the relationship between the variables. Multiple Regression Analysis was used to test the hypotheses and to study the relationship between the independent variables.

CHAPTER 4

ANALYSIS AND FINDINGS

This chapter presents the research findings from the data analyzed by the statistics software. Two-hundreds responses were collected and analyzed to test the hypotheses. The data analysis is divided into six categories as follows:

4.1: Analysis of demographic data

4.2: Analysis of perceived risk factors

4.3: Analysis of perceived value factors

4.4: Analysis of social commerce construct factors

4.5: Analysis of the changes in consumers' purchase intention in Bangkok

4.6: Analysis of the relationship among perceived risk, perceived value, social commerce construct, and the changes in consumers' purchase intention in Bangkok

4.1 Analysis of demographic data

The demographic data were collected from 200 respondents. This data includes gender, age, marital status, education, employment status, monthly income, internet usage per day, level of the online shopping experience, frequency of online shopping per month, and most interested online shopping categories. The values in Table 4.1 represented each type is in frequency and percentage (%).

Table 4.1: Demographics Data of 200 respondents

Demographic Data	Frequency	Percentage (%)
1. Gender		
Male	68	34.0
Female	117	58.5
LGBTQ+	15	7.5
Total	200	100.0
2. Age		
Lower than 25 years old	5	2.5
25-32 years old	73	36.5
33-40 years old	111	55.5
41-48 years old	7	3.5
Above 48 years old	4	2.0
Total	200	100.0
3. Marital Status		
Single	76	38.0
Married	124	62.0
Total	200	100.0
4. Education		
Below high school	1	0.5
High school	2	1.0
Associate degree	2	1.0
Bachelor's degree	186	93.0
Master's degree or above	9	4.5

(continued)

Table 4.1 (continued): Demographics data of 200 respondents

Demographic Data	Frequency	Percentage (%)
Total	200	100.0
5. Employment Status		
Employed full-time	184	92.0
Employed part-time	6	3.0
Business owner	5	2.5
Freelance	5	2.5
Total	200	100.0
6. Monthly Income		
Below 15,000 baht	1	0.5
15,000 - 25,000 baht	36	18.0
25,001 - 35,000 baht	114	57.0
35,001 - 55,000 baht	40	20.0
Above 55,000 baht	9	4.5
Total	200	100.0
7. Internet Usage per Day		
Less than 1 hour	1	0.5
1-2 hours	1	0.5
2-3 hours	18	9.0
3-4 hours	7	3.5
More than 4 hours	173	86.5
Total	200	100.0

(continued)

Table 4.1 (continued): Demographics data of 200 respondents.

Demographic Data	Frequency	Percentage (%)
8. Level of Online Shopping Experience		
Beginner	30	15.0
Intermediate	146	73.0
Expert	24	12.0
Total	200	100.0
9. Frequency of Online Shopping per Month		
1 time	31	15.5
2-3 times	138	69.0
4-5 times	24	12.0
Over 5 times	7	3.5
Total	200	100.0
10. Most Interested Online Shopping Categories		
Electronics	17	8.5
Fashion/Beauty/Personal care	119	59.5
Home improvement	49	24.5
Pet supplies	14	7.0
Others	1	0.5
Total	200	100.0

The majority of the respondents are female (58.5%), followed by male (34%) and LGBTQ+ (7.5%). Most respondents are 33-40 years old (55.5%) and 25-32 years old (36.5%), while the other age range makes up only 8%. Most of the respondents are married (62.0%). For education degrees, 93% of the respondents have a bachelor's

degree. Most respondents are full-time employees, with 92.0% of the total respondents. The income with the highest percentages is 25,001 – 35,000 baht (57.0%), followed by 35,001 – 55,000 baht (20.0%). The majority of the respondents' internet usage per day was more than 4 hours (86.5%). Most respondents considered themselves to have an intermediate online shopping experience (73.0%). Moreover, most respondents reported shopping online 2-3 times per month (69.0%). Fashion/Beauty/Personal care turned out to be the most interested online shopping categories, with a percentage as high as 59.5%.

4.2 Analysis of Perceived Risk Factors

The following table presents the analysis of perceived risk factors. Table 4.2 displays each sub-variable mean, standard deviation, and mean interpretation. The sub-variables of perceived risk factors are:

4.2.1   Product Risk

4.2.2   Financial Risk

4.2.3   Convenience Risk

Table 4.2: Mean and Standard Deviation of Perceived Risk Factors

Sub-variables	Mean	Std. Deviation	Interpretation
1.1. Product Risk	3.40	0.552	Neutral
1.2. Financial Risk	2.20	0.906	Disagree
1.3. Convenience Risk	2.16	0.791	Disagree
Total	2.59	0.628	Disagree

Most respondents feel neutral toward product risk ($\bar{x} = 3.40$, SD = 0.552). For financial risk ($x^- = 2.20$, SD = 0.906) and convenience risk ($\bar{x} = 2.16$, SD = 0.791), respondents disagreed that the two risks affect their purchase intention. The overall mean for perceived risk factors is 2.59 (disagreed), and the standard deviation is 0.628.

4.3 Analysis of Perceived Value Factors

The following table presents the analysis of perceived value factors. Table 4.3 displays each sub-variable's mean, standard deviation, and mean interpretation. The sub-variables of perceived value factors are:

4.3.1   Price Value

4.3.2   Emotional Value

4.3.3   Quality Value

Table 4.3: Mean and Standard Deviation of Perceived Value Factors

Sub-variables	Mean	Std. Deviation	Interpretation
2.1. Price Value	4.06	0.524	Agree
2.2. Emotional Value	3.98	0.563	Agree
2.3. Quality Value	3.99	0.473	Agree
Total	4.01	0.432	Agree

Most respondents agreed that all sub-variables of perceived value factors affect their purchase intention. Many respondents in this study agree that price value affects their purchase intention ($\bar{x}$ = 4.06, SD = 0.524). The interpretation of the sub-variable emotional value ($\bar{x}$ = 3.98, SD = 0.563) indicates that the respondents look for a product that displays emotional value toward the respondents. Lastly, the quality value result also suggests that the respondents agreed that the quality value of the online products is also important toward their purchase intention ($\bar{x}$ = 3.99, SD = 0.473). Overall, the mean for the perceived value factors score is 4.01 (agreed), and the standard deviation is 0.432.

4.4 Analysis of Social Commerce Construct Factors

The following table presents the analysis of social commerce construct factors. Table 4.4 displays each sub-variable's mean, standard deviation, and mean interpretation. The sub-variables of social commerce construct factors are:

4.3.1   Ratings and Reviews

4.3.2   Forums and Communities

4.3.3   Recommendations and Referrals

Table 4.4: Mean and Standard Deviation of Social Commerce Construct Factors

Sub-variables	Mean	Std. Deviation	Interpretation
3.1. Ratings and Reviews	4.08	0.480	Agree
3.2. Forums and Communities	3.94	0.530	Agree
3.3. Recommendations and Referrals	3.98	0.522	Agree
Total	3.99	0.442	Agree

Most respondents agree that the three sub-variables under the social commerce construct factors affect the purchase intention. A large number of respondents in this study agreed that ratings and reviews affect their purchase intention ($\overline{x}$ = 4.08, SD = 0.480). The respondents agreed that the sub-variable recommendations and referrals affect their purchase intention ($\overline{x}$ = 3.97, SD = 0.521). The respondents also agreed that forums and communities affect their purchase intention ($\overline{x}$ = 3.94, SD = 0.530). Overall, the mean for social commerce construct factors is 3.99 (agreed), and the standard deviation is 0.442.

4.5 Analysis of the Changes in Consumers' Purchase Intention in Bangkok

The following table represents the respondents' attitudes or feelings toward consumer purchase intention changes in Bangkok. Table 4.5 shows the mean and standard deviation of the dependent variable.

Table 4.5: Mean and Standard Deviation of the Changes in Consumers' Purchase

Intention in Bangkok

Dependent variables	Mean	Std. Deviation	Interpretation
The Changes in Consumers' Purchase Intention in Bangkok	4.10	0.456	Agree

The table shows the changes in Consumers' Purchase Intention in Bangkok, which consisted of 10 questions in the online questionnaire given to the respondents. The data revealed that the respondents agreed that dependent variables affect the changes in consumers' purchase intention in Bangkok ($\overline{x} = 4.10$, SD = 0.456).

4.6 Analysis of the relationship among the perceived risk, perceived value, social commerce construct, and the changes in consumers' purchase intention in Bangkok

This part of the study represents the analysis of the relationship among the independent variables, perceived risk, perceived value, and social commerce construct factors. The type of statistics used in this part of inferential statistics and the statistical analysis used to determine the data was multiple Linear Regression.

The data are presented in three sections:

4.6.1   Analysis of the impact of perceived risk factors towards the changes in consumers' purchase intention in Bangkok.

4.6.2   Analysis of the impact of perceived value factors towards the changes in consumers' purchase intention in Bangkok.

4.6.3　Analysis of the impact of social commerce construct factors towards

the changes in consumers' purchase intention in Bangkok.

Table 4.6: Analysis of the Impact of Perceived Risk Factors Towards the Changes in

Consumers' Purchase Intention in Bangkok.

Perceived Risk Sub-variables	b	Beta	t	Sig	Interpretation
1.1 Product risk	0.207	0.251	3.305	0.001*	Supported
1.2 Financial risk	-0.019	-0.037	-0.342	0.733	Not Supported
1.3 Convenience risk	-0.002	-0.004	-0.032	0.974	Not Supported

Adjusted R-square = 0.042, F = 3.940 *P≤0.05

Independent variable = Perceived Risk

Dependent variable = The Changes in Consumers' Purchase Intention in Bangkok

Table 4.6 shows three sub-variable perceived risks in relationship towards the

changes in consumers' purchase intention in Bangkok. Only one out of three perceived

risk variables significantly affect the change in consumers' purchase intention in

Bangkok. Product risk (Sig = 0.001, Beta = 0.251) turned out to be significant on

consumers' purchase intention in Bangkok, while financial risk (Sig = 0.733, Beta = -

0.037) and convenience risk (Sig = 0.974, Beta = -0.004) does not significantly affect

the purchase intention in Bangkok. The value of the adjusted R-square is 0.042,

meaning there are many variances in these sub-variables. P-value is less than 0.05,

meaning the null hypothesis is true. Therefore, H1 is not supported.

Table 4.7: Analysis of the Impact of Perceived Value Factors Towards the Changes in

Consumer' Purchase Intention in Bangkok.

Perceived Value Sub-variables	b	Beta	t	Sig	Interpretation
1.1 Price Value	0.067	0.077	1.217	0.225	Not Supported
1.2 Emotional Value	0.304	0.375	6.280	0.001[*]	Supported
1.3 Quality Value	0.379	0.392	5.914	0.001[*]	Supported

Adjusted R-square = 0.514, F = 71.260 *P≤0.05

Independent variable = Perceived Value

Dependent variable = The Changes in Consumers' Purchase Intention in Bangkok

Table 4.7 shows the statistical analysis of the relationship between perceived value and consumer purchase intention changes in Bangkok. Two of three of the sub-variables turned out to statistically affect consumers' purchase intention in Bangkok. The emotional value (Sig = 0.001, Beta = 0.077) and quality value (Sig = 0.001, Beta = 0.375) hypothesis are supported, while price value turned out not to affect consumers' purchase intention in Bangkok (Sig = 0.225, Beta = 0.392). Therefore, H2 is not supported.

Table 4.8: Analysis of the Impact of Social Commerce Construct Factors Towards the

Changes in Consumers' Purchase Intention in Bangkok.

Social Commerce Construct Sub-variables	b	Beta	t	Sig	Interpretation
1.1 Ratings and Reviews	0.400	0.421	6.898	0.001*	Supported
1.2 Forums and Communities	0.189	0.220	3.587	0.001*	Supported
1.3 Recommendations and Referrals	0.222	0.254	3.956	0.001*	Supported

Adjusted R-square = 0.599, F = 100.283, *P≤0.05

Independent variable = Social Commerce Construct

Dependent variable = The Changes in Consumers' Purchase Intention in Bangkok

Table 4.8 shows the statistical analysis of the relationship between social commerce construct factors and the change in consumers' purchase intention in Bangkok. All of the three variables are supported: rating and reviews (Sig = 0.001, Beta = 0.421), forums and communities (Sig = 0.001, Beta = 0.220), and recommendations and referrals (Sig = 0.001, Beta = 0.254). Therefore, H3 is supported.

Table 4.9: Summary of the Hypotheses Testing

Hypothesis	Result
1. Perceived risk factors have a significance on the changes in consumers' purchase intention in Bangkok	Not Supported
1.1 Product Risk	Supported
1.2 Financial Risk	Not Supported
1.3 Convenience Risk	Not Supported
2. Perceived value factors have a significance on the changes in consumers' purchase intention in Bangkok	Supported
2.1 Price Value	Not Supported
2.2 Emotional Value	Supported
2.3 Quality Value	Supported
3. Social commerce construct factors have a significance on the changes in consumers' purchase intention in Bangkok	Supported
3.1 Ratings and Reviews	Supported
3.2 Forums and Communities	Supported
3.3 Recommendations and Referrals	Supported

Table 4.9 represents a summary of the hypothesis results. As shown in the table, H3 and H2 are supported, while H1 is not supported. Therefore, social commerce construct factors and perceived value significantly change consumers' purchase intention in Bangkok while perceived risk did not have a statistically significant impact.

CHAPTER 5
SUMMARY, CONCLUSION AND DISSCUSION

Chapter 5 will cover four elements: summary and conclusion, discussion, recommendations for Implications, and recommendations for future research. They are as follows:

5.1 Summary and Conclusion

5.2 Discussion

5.3 Recommendations for Implications

5.4 Recommendations for Future Research

5.1 Summary and Conclusion

5.1.1 Demographic Data

Most of the respondents were female, with 58.5% of the 200. Most of the respondents were in the age range between 33-50 years old and married. Although the majority of the respondents are full-time employees (93.0%) and have a bachelor's degree (92.0%), their income ranges between 25,001 – 35,000 baht (57.0%), 35,001 – 55,000 baht (20.0%), 15,000 – 25,000 baht (18.0%), and so forth. Moreover, 86.5% of the respondents answered that they spent more than 4 hours on the internet, and 73.0% considered themselves to have an intermediate online shopping experience. Corresponding to the online shopping experience, the highest percent at which respondents answer is 2-3 times per month (69.0%), while one time (15.5%) and 4-5 times (12.0%) are in the same percentages range as a beginner and expert level of the online shopping experience, respectively. Lastly, the most interest online shopping categories turned out to be fashion/beauty/personal care (59.5%), home improvement (24.5%), and the other categories made up of the leftover percentages.

1.1.2 Attitudes towards variables

The attitude towards the variables is presented in three parts

1) Independent Variable 1: Perceived Risk Factors (consisting of product risk, financial risk, and convenience risk)

Most respondents disagreed that online shopping could

pose a financial or convenience risk, while they have a neutral perception of the product risk. Overall, the respondents disagreed with the perceived risk factors.

2) Independent Variable 2: Perceived Value Factors (consisting of price value, emotional value, and quality value)

Respondents agreed that emotional value and quality value of perceived value factors affect the changes in consumers' online purchase intentions in Bangkok, while they disagreed on the price value. Overall, the respondents agreed with factors of perceived value.

3) Independent Variable 3: Social Commerce Construct Factors (consisting of ratings and reviews, forums and communities, and recommendations and referrals)

Respondents agreed that all three sub-variables of social commerce construct factors affect the changes in consumers' online purchase intentions in Bangkok. Overall, the respondents agreed with the factors of the social commerce construct.

5.1.3 Hypotheses Results

There were three hypotheses proposed in this study:

Hypothesis 1: Perceived risk factors (consisting of product risk, financial risk, and convenience risk) did not have a significance on the changes in consumers' purchase intention in Bangkok.

Hypothesis 2: Perceived value factors (consisting of price value, emotional value, and quality value) have a significance on the changes in consumers' purchase intention in Bangkok.

Hypothesis 3: Social commerce construct factors (consisting of ratings and reviews, forums and communities, and recommendations and referrals)

have a significance on the changes in consumers' purchase intention in
Bangkok.

5.2 Discussion

The data collected showed that only 2 out of 3 hypotheses are supported. The
perceived value factors and social commerce construct factors affected the changes in
consumers' purchase intentions in Bangkok, while perceived risk effects on
respondents remained the same throughout the pandemic.

Two theories were used in the study to understand the data. Maslow's
Hierarchy of Needs explains human needs in a pyramid scheme. The Theory of
Planned Behavior (TPB) links beliefs to behaviors.

Perceived value factors affect respondents' online purchase intentions in
Bangkok before and during COVID-19. In Maslow's Hierarchy of Needs, perceived
value factors are characterized by psychological needs. All humans have basic needs,
psychological needs, and, eventually, self-fulfillments. Perceived value factors are
characterized by psychological needs or self-fulfillment needs where individuals'
sense of belonging, self-esteem, or self-actualization are valued. In this study,
perceived value includes price, emotion, and quality. Many respondents consider an
online item's emotional and quality value to be critical, while price value is not as
important as the other two perceived value factors. To understand why respondents
give more importance to emotional value and quality value after COVID-19 started
while price value remained unchanged, identifying where respondents fit in Maslow's
Hierarchy of Needs. The first and second needs in Maslow's pyramid include basic
needs such as food, warmth, rest, security, safety, etc. (Cherry, 2022). All respondents
can be assumed to have basic needs since all respondents have an occupation. In
addition, 62.0% of the respondents are married; thus, 62.0% of the respondents have
satisfied part of their psychological needs, which are love and belonging. Most of the
respondents are in upper tier of psychological or self-fulfillment needs because they
have satisfied the first two levels of Maslow's Hierarchy of needs. From the data, we
can see that the participants agreed that emotional value and quality value are
essential, while price value is not as important. Therefore, to satisfy their
psychological or self-fulfillment needs, respondents buy products that remind them of

their emotional value or high quality, while the price is not an essential factor. Emotional and quality values became more important during COVID-19, while price value importance remained the same before and during COVID-19. In other words, if the product is of high quality or gives respondents emotional value, they might be more willing to pay for a product with a higher price during COVID-19 than they would before COVID-19.

Respondents' agreement towards Social Commerce Construct follows the TPB. TPB consists of 3 core components: behavior belief, normative belief, and control belief (LaMorte, 2019). Each core component leads to another core component: attitude toward the behavior, subjective norm, and perceived behavioral control, respectively. These core components altogether make up an intention that eventually leads to a behavior. In addition to being a component of intention, perceived behavior control also controls the actual behavior. To understand how TPB explains respondents' reactions to the social commerce construct, each component of the TPB will be dissected. The first components are behavior beliefs and attitudes toward the behavior. Considering everyone wants their money spent on a product to be worth the money, what could one do to ensure? Testing a product could be one way to do it, but why would anyone waste money on testing a product when there are reviews from other customers, a forum for product discussion, or a recommendation by your favorite celebrity. This is where social commerce constructs are involved. If one believes researching will help determine a good product, then an attitude toward researching will guide them to the social commerce constructs. Social commerce constructs are designed for customers to gain more knowledge through social interactions and, significantly, to increase their trust in sellers (Li, Li, & Fan, 2021). The second components are normative beliefs and subjective norms. The normative belief and subjective norm are defined as approved or disapproved behavior by the majority (LaMorte, 2019). This component is seen when a product from a store with a higher number of reviews is viewed as more trustworthy, while the identical product from a different store with fewer reviews is viewed as less reliable. The third components are control beliefs and perceived behavioral control. The third component is people's perception of their ability to perform a given behavior (LaMorte, 2019). Everyone views social commerce constructs differently, like how someone does more

research on a product while others buy a product on a whim without doing any research. In addition, control beliefs and perceived behavioral control also control actual behavior control. Combining the first and last two components could determine how much of the actual work one is willing to perform. For example, if one holds less regard for researching, one may do very little or none before buying a product. On the other hand, if one has high regard for research, one will do the opposite. The data shows that workers in Bangkok hold high regard for social commerce constructs, as seen in that all interpretations of each sub-variable are supported (Table 4.8). Moreover, Bangkok workers become even more motivated for every social commerce construct factor during COVID-19.

Respondents disagree that perceived risks affect their changes in purchase intention in Bangkok before and during COVID-19. This paper's perceived risks include product, financial, and convenience. The initial hypothesis stated that all perceived risk variables would affect the changes in consumers' online purchase intention before and during COVID-19. However, only one out of three sub-variables supported the hypothesis. The data showed respondents viewed product risk as the only sub-variable to support their changes in purchase intention in Bangkok, which also supports initial research from chapter 2. On the other hand, financial risks and convenience risks are not supported. Although financial risks have been found to affect consumers' purchase intention negatively as shown in the literature review section in chapter 2, the data did not support the initial analysis. However, further research on whether financial risk affects online shopping was found to have mixed results (Mamman, Maidawa, & Saleh, 2016). Another study on food purchases in Vietnam via online shopping found that financial risks did not affect consumers. Nguyen, Tran, Nguyen, & Nguyen (2021) stated that their result might be partly due to the cash payment option that allows consumers to pay once the product arrives. Unfortunately, this study did not have payment preference in the questionnaire. There are also two possible reasons. First is that the respondents have never experienced financial fraud. Second is that respondents highly trust the platforms they use for online shopping. Lastly, convenience risks are also not supported. Convenience risks also refer to as time risks, delivery risks, shipping risks, or social risks. Convenience risks are generally a possible obstacle preventing consumers from acquiring their

product. Although information initially found (in the literature review) that convenience risks have a role in consumers' purchase intention, it does not significantly affect consumers in Bangkok before and during COVID-19. From the questionnaire, we can see that convenience risk has effects on respondents. However, the convenience risks effects did not change during COVID-19.

This study explored the influence of COVID-19 on perceived risk, perceived value, and social commerce construct factors toward the changes in consumers' online purchase intentions in Bangkok. The data collected indicated that perceived value and social commerce construct significantly impacted respondents' purchase intention changes before and during COVID-19, while perceived risk did not have significantly on the changes.
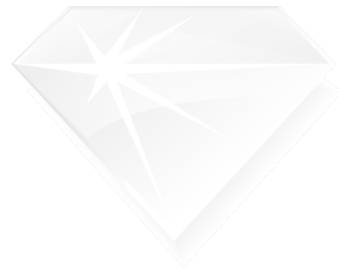
5.3 Recommendations for Implications

This study revealed several factors that have changed during the pandemic that consumers have valued more. The results of this study suggest that Bangkok workers give more importance to perceived value factors and social commerce constructs during the COVID-19 pandemic, while perceived risk remains relatively the same level of significance before and during the pandemic. This study could allow businesses to realize their main focus during a world crisis similar to the current COVID-19 pandemic. This study also highlights the significance of two theories that play a role in consumers' decision on how consumers could be understood and predicted through Maslow's Hierarchy and TPB models.

5.4 Recommendations for Future Research

Although this study has several limitations, such as the number of participants or the area coverage, such as Bangkok, this research could be very beneficial for businesses that look for values that have changed during the pandemic. Overall, two recommendations could be taken to improve this research further. The future study could include more participants or more specific participants. This study focused exclusively on Bangkok workers, which could be further specified, such as their occupation type. The occupations could include artists, designers, freelancers, social workers, etc. Or the other way around, the future could consist of other types of people such as students, unemployed, etc. Expanding the study area could also be

done to understand and compare different regions. More specifically, the expansion of the study could also reach a different area of how the independent variables differ in the different regions. Area expansion of the study could help businesses predict a unique business model specifically for each location.

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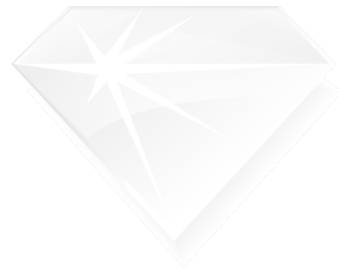
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APPENDIX

ONLINE QUESTIONNAIRE

Title: The Influence of COVID-19 on E-commerce in Perceived Risk, Perceived Value, and Social Commerce Construct, Factors Towards the Changes in Consumers' Online Purchase Intentions in Bangkok

Details: This survey research was aimed to comprehend the influence of COVID-19 on E-commerce in perceived risk, perceived value, and social commerce construct, factors towards the changes in consumers' online purchase intentions in Bangkok. This study is a part of BA715: Independent Study, Graduate School at Bangkok University.

The components of this research will be covered in 6 parts: Introduction, demographic data questions, measurements of perceived risk factors, perceived value factors, social commerce construct factors, and measurements of the changes in consumers' online purchase intentions in Bangkok.

The information provided will be treated as highly confidential and will be used solely for the purpose of academic resources.

Thank you very much for your kind cooperation.

PART 1:

Directions: Please choose (✔) the answer that matches your information.

1. Do you shop online? (คุณซื้อสินค้าออนไลน์หรือไม่)

   ❏ Yes (ใช่)

   ❏ No (ไม่ใช่)

PART 2: Personal Details (ข้อมูลส่วนตัว)

1. What gender do you most identify as? (เพศของคุณ)

   ❏ Male (ชาย)

   ❏ Female (หญิง)

   ❏ LGBTQ+ (เพศทางเลือก)

2. What is your age range? (อายุของคุณ)

   ❏ Lower than 25 years old (ต่ำกว่า 25 ปี)

   ❏ 25-32 years old (25-32 ปี)

   ❏ 33-40 years old (33-40 ปี)

   ❏ 41-48 years old (41-48 ปี)

   ❏ Above 48 years old (สูงกว่า 48 ปี)

3. What is your marital status? (สถานภาพของคุณ)

   ❏ Single (โสด)

   ❏ Married (แต่งงาน)

   ❏ Divorce (หย่าร้าง)

   ❏ Others (อื่นๆ)

4. What is your education level? (ระดับการศึกษาของคุณ)

❏ Below High school (ต่ำกว่ามัธยมปลาย)

❏ High school (มัธยมปลาย)

❏ Associate degree (อนุปริญญา)

❏ Bachelor's degree (ปริญญาตรี)

❏ Master's degree or above (ปริญญาโทหรือสูงกว่า)

5. What is your current employment status? (สถานภาพการทำงานในปัจจุบัน)

❏ Employed full-time (พนักงานประจำ)

❏ Employed part-time (พนักงานพาร์ทไทม์)

❏ Business owner (เจ้าของธุรกิจ)

❏ Freelance (อาชีพอิสระ)

❏ Others (อื่นๆ)

6. What is your monthly income —THB? (เงินเดือนของคุณ—บาท)

❏ Below 15,000 baht (ต่ำกว่า 15,000 บาท)

❏ 15,000 - 25,000 baht (15,000 - 25,000 บาท)

❏ 25,001 - 35,000 baht (25,001 - 35,000 บาท)

❏ 35,001 - 55,000 baht (35,001 - 55,000 บาท)

❏ Above 55,000 baht (มากกว่า 55,000 บาท)

7. Internet usage per day: (ระยะเวลาในการใช้อินเทอร์เน็ต ต่อวัน)

❏ Less than 1 hour (น้อยกว่า 1 ชั่วโมง)

❏ 1-2 hours (1-2 ชั่วโมง)

❏ 2-3 hours (2-3 ชั่วโมง)

❏ 3-4 hours (3-4 ชั่วโมง)

❏ More than 4 hours (มากกว่า 4 ชั่วโมง)

8. Level of online shopping experience: (ประสบการณ์การซื้อสินค้าออนไลน์ของคุณอยู่ในระดับ
ไหน)

❏ Beginner (เริ่มต้น)

❏ Intermediate (ระดับกลาง)

❏ Expert (เชี่ยวชาญ)

9. Frequency of online shopping per month: (ความถี่ในการซื้อสินค้าออนไลน์ของคุณ ต่อ
เดือน)

❏ 1 time (1 ครั้ง)

❏ 2-3 times (2-3 ครั้ง)

❏ 4-5 times (4-5 ครั้ง)

❏ Over 5 times (มากกว่า 5 ครั้ง)

10. Which online shopping categories are you most interests — choose one:
(คุณสนใจหมวดหมู่สินค้าออนไลน์ไหนมากที่สุด— เลือก 1 ข้อ)

❏ Electronics (หมวดอิเล็กทรอนิกส์/เครื่องใช้ไฟฟ้า)

❏ Fashion/Beauty/Personal care (แฟชั่น/ความงาม/ของใช้ส่วนตัว)

❏ Home improvement (ของใช้ในบ้าน)

❏ Pet supplies (ของใช้สัตว์เลี้ยง)

❏ Others (อื่นๆ)

Part 3: Measurements of Perceived Risk Factors (การวัดปัจจัยการรับรู้ความเสี่ยง)

Direction: Please select (✔) the answer that suits best on **whether you agree or disagree with the statement towards the perceived risk**

(คำแนะนำ**:** กรุณาใส่เครื่องหมาย (✔) ในคำตอบที่ตรงกับคุณที่สุดว่าคุณเห็นด้วยหรือไม่เห็นด้วยแค่ไหนต่อปัจจัย

การรับรู้ความเสี่ยง)

Perceived risk factors (ปัจจัยการรับรู้ความเสี่ยง)		Strongly disagree (ไม่เห็นด้วยอย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วยปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วยอย่างยิ่ง) (5)
1.1 Product Risk (ความเสี่ยงด้านสินค้า)	**1.1.1** The size description may not be accurate (คำอธิบายของขนาดสินค้าอาจไม่ตรงกับความจริง)					
	1.1.2 Comparing similar products online is difficult (การเปรียบเทียบสินค้าออนไลน์เป็นเรื่องยากสำหรับคุณ)					
	1.1.3 I cannot try online products (คุณไม่สามารถทดลองสินค้าออนไลน์ก่อนซื้อได้)					
	1.3.4 I might not receive the exact quality of an advertised product					

Perceived risk factors (ปัจจัยการรับรู้ความเสี่ยง)	Strongly disagree (ไม่เห็นด้วยอย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วยปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วยอย่างยิ่ง) (5)
(คุณอาจได้รับสินค้าที่มีคุณภาพไม่เทียบเท่ากับที่โฆษณา)					
1.2.1 I tend to overspend (คุณมักจะใช้จ่ายมากเกินไปเวลาซื้อของออนไลน์)					
1.2.2 Product may not be worth the money I spent (สินค้าที่ได้รับอาจไม่คุ้มค่ากับเงินที่จ่ายไป)					
1.2.3 Shopping online can involve a waste of money (การซื้อสินค้าออนไลน์ทำให้สิ้นเปลืองเงิน)					
1.2.4 I hesitate to give my personal information online e.g., address, credit card, etc.(คุณลังเลที่จะให้ข้อมูลส่วนตัวทางออนไลน์ เช่น ที่อยู่ เครดิตการ์ดและอื่นๆ)					

Note: row labels **1.2 Financial Risk (ความเสี่ยงทางการเงิน)** span rows 1.2.1 – 1.2.4.

Perceived risk factors (ปัจจัยการรับรู้ความเสี่ยง)	Strongly disagree (ไม่เห็นด้วย อย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วย ปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วย อย่างยิ่ง) (5)
1.3.1 Buying a product online involves a waste of time (การซื้อสินค้าออนไลน์ทำให้เสียเวลา)					
1.3.2 Difficult to find appropriate websites (การหาเว็บไซต์ที่เหมาะสมในการซื้อสินค้าออนไลน์เป็นเรื่องที่ยาก)					
1.3.3 I feel anxious to not receive the product immediately after paying (คุณรู้สึกกระวนกระวายใจเมื่อไม่ได้รับสินค้าทันทีหลังจ่ายเงิน)					
1.3.4 I'm afraid to return the product that I purchased online (คุณมีความกังวลที่จะส่งคืนสินค้าที่คุณซื้อทางออนไลน์)					

1.3 Convenience Risk (ความเสี่ยงด้านความสะดวก)

Part 4: Measurements of Perceived Value Factors (การวัดปัจจัยการรับรู้คุณค่า**)**

Direction: Please select (✔) the answer that suits best on **whether you agree or disagree with the statement towards the perceived value**

(คำแนะนำ**:** กรุณาใส่เครื่องหมาย (✔) ในคำตอบที่ตรงกับคุณที่สุดว่าคุณเห็นด้วยหรือไม่เห็นด้วยแค่ไหนต่อปัจจัย

การรับรู้คุณค่า)

Perceived value factors (ปัจจัยการรับรู้คุณค่า)		Strongly disagree (ไม่เห็นด้วยอย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วยปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วยอย่างยิ่ง) (5)
2.1 Price Value (คุณค่าทางราคา)	**2.1.1** I save money when I shop online (คุณประหยัดเงินขึ้นเมื่อซื้อสินค้าออนไลน์)					
	2.1.2 I make an inexpensive purchase (คุณมักซื้อสินค้าออนไลน์ที่มีราคาถูก)					
	2.1.3 Online purchase often has better promotions (การซื้อสินค้าออนไลน์มักจะมีโปรโมชั่นที่ดีกว่า)					

Perceived value factors (ปัจจัยการรับรู้คุณค่า)		Strongly disagree (ไม่เห็นด้วยอย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วยปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วยอย่างยิ่ง) (5)
	2.1.4 Online product price is the same as in-store (คุณคิดว่าราคาสินค้าออนไลน์เหมือนกับราคาสินค้าที่ซื้อตามหน้าร้านทั่วไป)					
2.2 Emotional value (คุณค่าทางอารมณ์)	**2.2.1** I lose track of time when I shop online (คุณมักจะซื้อสินค้าออนไลน์เพลินจนลืมดูเวลา)					
	2.2.2 Online purchase entertains me (คุณรู้สึกเพลิดเพลินกับการซื้อของออนไลน์)					
	2.2.3 Online shopping makes you feel good (การซื้อสินค้าออนไลน์ทำให้คุณรู้สึกดี)					

Perceived value factors (ปัจจัยการรับรู้คุณค่า)		Strongly disagree (ไม่เห็นด้วยอย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วยปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วยอย่างยิ่ง) (5)
	2.2.4 Online shopping experience is better than in-store (คุณมีประสบการณ์การซื้อสินค้าออนไลน์ดีกว่าการซื้อของจากร้านค้า)					
2.3 Quality Value (คุณค่าทางคุณภาพ)	**2.3.1** The product that I receive is authentic (สินค้าที่คุณได้รับเป็นของแท้)					
	2.3.2 The product I purchase online has an acceptable quality standard (สินค้าที่คุณซื้อทางออนไลน์มีมาตรฐาน/คุณภาพที่ยอมรับได้)					
	2.3.3 The product I purchase online is useful (สินค้าที่คุณซื้อออนไลน์มีประโยชน์)					

Perceived value factors (ปัจจัยการรับรู้คุณค่า)	Strongly disagree (ไม่เห็นด้วยอย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วยปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วยอย่างยิ่ง) (5)
2.3.4 The quality of online products is reliable (คุณภาพของสินค้าออนไลน์มีความน่าเชื่อถือ)					

Part 5: Measurements of Social Commerce Construct Factors (การวัดปัจจัย

เครื่องมือการค้าบนสื่อสังคมออนไลน์**)**

Direction: Please select (✔) the answer that suits best on **whether you agree**

or disagree with the statement towards the social commerce construct

(คำแนะนำ**:** กรุณาใส่เครื่องหมาย (✔) ในคำตอบที่ตรงกับคุณที่สุดว่าคุณเห็นด้วยหรือไม่เห็นด้วยแค่ไหนต่อปัจจัย

เครื่องมือการค้าบนสื่อสังคมออนไลน์)

Social commerce construct (เครื่องมือการค้าบนสื่อสังคม ออนไลน์)		Strongly disagree (ไม่เห็นด้วย อย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วย ปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วย อย่างยิ่ง) (5)
3.1 Ratings and reviews (การให้คะแนนและ แสดงความคิดเห็น)	**3.1.1** I am interested in ratings and reviews from other users before purchasing (ก่อนคุณเลือกซื้อสินค้าออนไลน์ คุณ มักจะดูการให้คะแนนและความคิดเห็น จากผู้ซื้อสินค้า)					
	3.1.2 The members who rate and review products online are knowledgeable (ผู้ซื้อสินค้าที่แสดงความคิดเห็นและให้ คะแนนออนไลน์มีความรู้)					

Social commerce construct (เครื่องมือการค้าบนสื่อสังคม ออนไลน์)		Strongly disagree (ไม่เห็นด้วย อย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วย ปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วย อย่างยิ่ง) (5)
	3.1.3 I buy products that have ratings and reviews (คุณซื้อสินค้าออนไลน์ที่มีการให้คะแนนและแสดงความคิดเห็น)					
	3.1.4 The ratings and reviews provide you with the information you need for the product you plan to purchase (คะแนนและความคิดเห็นจากผู้ซื้อสินค้าให้ข้อมูลที่สำคัญต่อการซื้อสินค้าของคุณในอนาคต)					
3.2 Forums and communities (กระดานสนทนาและชุมชนออนไลน์)	**3.2.1** The forums and communities provide you with the information you need to purchase an online product (กระดานสนทนาและชุมชนออนไลน์ให้ข้อมูลในการซื้อสินค้าออนไลน์แก่คุณ)					

Social commerce construct (เครื่องมือการค้าบนสื่อสังคมออนไลน์)	Strongly disagree (ไม่เห็นด้วยอย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วยปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วยอย่างยิ่ง) (5)
3.2.2 The information from forums and communities is reliable (คุณรู้สึกว่าข้อมูลจากกระดานสนทนาและชุมชนออนไลน์เชื่อถือได้)					
3.2.3 Overall, my friends on forums and communities are trustworthy (เพื่อนจากกระดานสนทนาและชุมชนออนไลน์มีความน่าเชื่อถือ)					
3.2.4 I trust my friends on forums and communities and share my status/pictures with them (คุณเชื่อถือเพื่อนจากกระดานสนทนาและชุมชนออนไลน์และแชร์ข้อมูลทั่วไปกับเขา)					

Social commerce construct (เครื่องมือการค้าบนสื่อสังคม ออนไลน์)	Strongly disagree (ไม่เห็นด้วยอย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วยปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วยอย่างยิ่ง) (5)
3.3 Recommen-dations and referrals (การแนะนำและการบอกต่อ) **3.3.1** I am interested in reading recommendations and referrals from other users (คุณสนใจการแนะนำและการบอกต่อจากผู้อื่น)					
3.3.2 The members who recommend and refer products are knowledgeable (สมาชิกที่แนะนำหรือบอกต่อสินค้ามีความรู้)					
3.3.3 The major reason I purchase products is due to recommendations and referrals from other users (สาเหตุหลักที่คุณซื้อสินค้าออนไลน์มาจากการแนะนำและบอกต่อจากผู้ซื้อสินค้าคนอื่น)					
3.3.4 I buy products from website that has good recommendation and referrals					

Social commerce construct (เครื่องมือการค้าบนสื่อสังคม ออนไลน์)	Strongly disagree (ไม่เห็นด้วย อย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วย ปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วย อย่างยิ่ง) (5)
(คุณซื้อสินค้าออนไลน์จากเว็บไซต์ที่มี คำแนะนำและบอกต่อที่ดี)					

Part 6: Measurements of The Changes in Consumers' Purchase Intention in Bangkok

(การวัดปัจจัยการเปลี่ยนแปลงความตั้งใจซื้อของผู้บริโภคในจังหวัดกรุงเทพฯ)

Direction: Please select (✔) the answer that suits best on **whether you agree or disagree with the statement towards consumers' purchase intention**

(คำแนะนำ: กรุณาใส่เครื่องหมาย (✔) ในคำตอบที่ตรงกับคุณที่สุดว่าคุณเห็นด้วยหรือไม่เห็นด้วยแค่ไหนต่อปัจจัย

การเปลี่ยนแปลงความตั้งใจซื้อของผู้บริโภคในจังหวัดกรุงเทพฯ)

The Changes in consumers' purchase intention in Bangkok (การเปลี่ยนแปลงความตั้งใจซื้อของผู้บริโภคในจังหวัดกรุงเทพฯ)		Strongly disagree (ไม่เห็นด้วยอย่างยิ่ง) (1)	Disagree (ไม่เห็นด้วย) (2)	Neutral (เห็นด้วยปานกลาง) (3)	Agree (เห็นด้วย) (4)	Strongly agree (เห็นด้วยอย่างยิ่ง) (5)
Before the outbreak of COVID-19 (ก่อนการระบาดของโควิด 19)	I browse and spend time on social media (คุณใช้เวลากับสื่อสังคมออนไลน์)					
	I spend time researching products online (คุณใช้เวลากับการค้นคว้าข้อมูลสินค้าออนไลน์)					
	I feel comfortable shopping online (คุณรู้สึกสะดวกใจในการซื้อสินค้าออนไลน์)					
	I often shop online (คุณมักจะซื้อสินค้าออนไลน์)					

Since the outbreak of COVID-19 (ตั้งแต่มีการระบาด ของโควิด 19)	I browse and spend more time on social media (คุณใช้เวลาส่วนใหญ่ไปกับสื่อสังคม ออนไลน์)					
	I spend more time researching product online (คุณใช้เวลามากขึ้นไปกับการค้นกว้า ข้อมูลสินค้าออนไลน์)					
	I feel more comfortable shopping online (คุณรู้สึกสะดวก ใจมากขึ้นในการซื้อสินค้าออนไลน์)					
	I shop online more often than before (คุณซื้อสินค้าออนไลน์ บ่อยขึ้นกว่าเดิม)					

End of Questionnaire. Thank you for your time!

BIODATA

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