A STUDY ON FACTORS CONTRIBUTING TO IMPULSIVE BUYING BEHAVIOUR AMONG CONSUMERS IN SOCIAL COMMERCE

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BY

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DECLARATION

I hereby declare that:

(1) This undergraduate FYP is the end result of my own work, and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this FYP has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Sole contribution has been made by me in completing the FYP.

(4) The word count of this research report is 10954 .

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DEDICATION

This research project is dedicated to my supervisor, Dr. Farah Waheeda Jalaludin, and examiner, Pn. Fitriya Binti Abdul Rahim who have generously supported and assisted me throughout the entire research process. I would also like to dedicate this research project to my family, friends, as well as respondents for their encouragement and support that help me to complete the research project.

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LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
CR	Composite Reliability
DV	Dependent Variable
EWM	Electronic Word of Mouth
HTMT	Heterotrait-Monotrait Ratio
IBB	Impulsive Buying Behaviour
IV	Independent Variable
MCO	Movement Control Order
PLS-SEM	Partial Least Squares Structural Equation Modeling
SC	Scarcity
SEM	Structural Equation Modeling
SI	Serendipitous Information
SOR	Stimulus-Organism-Response
UBI	Urge to Buy Impulsively
VIF	Variance Inflation Factor

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PREFACE

The rapid development of Web 2.0 has greatly improved social media tools and concepts, resulting in unique strategies that impact e-commerce operations. It has revolutionized the field of e-commerce, leading to the emergence of a new phenomenon known as "Social Commerce". One of the most significant impacts of social commerce is the rise of impulsive buying behaviour. This kind of behaviour has created a huge impact on businesses and consumers. Thereby, this research study is to investigate the factors contributing to impulsive buying behaviour in social commerce.

ABSTRACT

With the rising of online shopping and the emergence of social commerce, consumers' buying behaviour changed from rational buying to impulsive buying. This research aims to identify the factors that contribute to impulsive buying behaviours among consumers in social commerce. Hence, the Stimulus-Organism-Response Model (SOR) was applied to investigate consumer emotion in response to stimuli and the subsequent positive or negative behaviours. Using the SOR model as a reference, scarcity, serendipitous information, and electronic word of mouth will be the stimulus, the urge to buy impulsively will be the organism, and impulsive buying behaviour will be the response. Four hypotheses were developed to identify the relationship between the variables. Questionnaires were prepared using Google Form and distributed to 250 respondents who had purchased a product from social media sites. The data collected from respondents were decoded and analysed by using SmartPLS software. Not only that, theoretical and managerial implications were proposed with the hope that future researchers and practitioners can serve as a reference for the experimental method to further understand consumer's buying behaviour in social commerce.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

The current study is to investigate consumer buying behaviour in social commerce. Meanwhile, the present research aims to explain what factors contribute to impulsive buying behaviour among consumers in social commerce.

1.1 Research Background

The use of social media applications and websites such as Facebook and Twitter is becoming increasingly popular worldwide. With the rapid development of Web 2.0, it has substantially improved social media tools and concepts, resulting in unique strategies that influence E-commerce operations (Zhao & Benyoucef, 2015). Social media has offered great potential for transforming e-commerce from a product-oriented environment to a social and customer-centric environment (Akram et al., 2018). In addition, the field of E-commerce has undergone a significant transformation, leading to the emergence of a new phenomenon called social commerce (Zhao & Benyoucef, 2015). Social commerce is an emerging boom among online consumers. Furthermore, it is a crucial and frequently discussed topic in e-commerce. Social commerce is a type of e-commerce that promotes the online purchase of products and services by utilizing social media, social networks, and consumer engagement. It uses social media to enable consumers to share their product knowledge and online shopping experiences to assist them in making better buying decisions (Lin et al., 2017). As a result, it meets the needs and requirements of today's consumers.

The recent integration of e-commerce functions into social media platforms such as Facebook and Instagram has given traditional social media marketing an additional dimension by making it even easier for people to buy products through social media, which is inspired by its lifestyle imagery used and convenience (Chrimes, 2019). Indeed, shopping has become increasingly social and continually innovates new

ways to entertain and engage consumers. Since millennials are increasingly concerned with experiences and spending time with friends and family, this is especially crucial for businesses in the current environment (Chrimes, 2019). In order to keep customers interested and active on their websites, businesses are being forced to adjust and become more sociable environments (both online and offline). Ted Baker's spring 2017 marketing campaign is a great example of social interaction with s-commerce: it includes a 360-degree shoppable movie, interactive windows, and a virtual reality experience, all of which are displayed on their Instagram Stories to promote the series (Mcgregor, 2017).

According to Chen et al. (2020), more than half of the online consumers use social media for product recommendations and purchase decisions. As people become increasingly satisfied with social media and social commerce, this tendency is likely to continue. Consumers prefer online shopping because of its convenience motive (Chen et al., 2020). Online shopping provides consumers with a great deal of choice and complete access to information. Consumers not only can access the online anytime and anywhere, but they can also make a comparison of the products offered by the international supplier. While the Covid-19 outbreak is underway, business owners and individuals utilize their social media accounts more than ever to conduct their business operations, particularly when affected by the Movement Control Order (MCO). They need to keep operating and reassuring their customers that contingency plans are in place during this period to ensure that the pandemic does not knock them off their feet altogether. In addition, due to the social distance emphasized in MCO, users or consumers were compelled to wait for a long time before purchasing any goods in the physical store. Consumers are also conscious about their safety to prevent getting the virus during this period. These led to online purchasing has been the most popular business trend among buyers and sellers (Isa et al., 2020). Consumers and business owners started to move their attention to online transactions. Consumers purchase products and services from social media and e-commerce platforms, while business owners sell their products and services on social media sites and e-commerce platforms. One of the most significant effects of social commerce is the rise of significant user behaviour, consumers' impulse buying behaviour (Busalim & Hussin, 2016). Because of social interactions, consumers on these platforms are more likely to engage in impulsive buying

behaviour; most users' buying behaviour on social media sites is classified as impulse buying behaviour (Xiang et al., 2016; Chung et al., 2015).

1.2 Problem Statement

The researchers have widely investigated studies on consumers' impulsive buying behaviour in social commerce. However, specific marketing stimuli or marketing-related factors influencing consumer impulsive buying behaviour in social commerce were not adequately covered by the past studies. Previous research studies on marketing stimuli influencing impulsive buying behaviour were more concentrated on marketing mixes such as merchandise and price discount (Iyer et al., 2019), price discount (Chan & Razak, 2018), sales promotion (Ayub & Zafar, 2018), price reduction and sales promotion (Karim et al., 2021), promotion, premises, packaging, personnel, product-display, and payment-facility (Siddiqui et al., 2019), which limit the generalization of results in the term of marketing strategy.

In addition, social media platform, unlike e-commerce platform, is dedicated to allowing users to create and share content and participate in social networking. Therefore, most social media users use it not for purchasing purposes but for amusement, connecting with individuals worldwide who share similar interests, and sharing their thoughts, feelings, and insights online (Aichner et al., 2021). This makes it much more difficult for people to conduct business on social media than on e-commerce platforms and fails in social commerce (Walker, 2018; Meola, 2016; Silberstein, 2021). The major reason is that they do not know the difference between consumers' buying behaviour in offline shopping context and online buying context (especially in social commerce) and use the same strategies in social commerce as how they conduct their business in offline stores (Song et al., 2015). The shopping purpose of consumers has changed over the years. Unlike the rational shopping behaviour in the past, consumers now appreciate an experimental and hedonic style of impulsive buying behaviour through online shopping (Chung et al., 2015). And this buying behaviour can be easily observed, especially in social commerce. In addition, impulsive buying behaviour negatively impacts consumers, including feelings of guilt, regret, and unnecessary expenditures (Chang & Tseng, 2014;

Risqiani, 2015). In order to solve these problems, the factors that contribute to consumers' impulsive buying behaviour in social commerce should be investigated.

1.3 Research Objectives

The objective of conducting this research is to resolve the problem statement mentioned above. The research objectives have been divided into general and specific objectives.

1.3.1 General Objectives

The main objective of conducting this research is to investigate the factors that contribute to consumer impulsive buying behaviour in social commerce. It attempts to observe and study whether factors (scarcity, serendipitous information, electronic word of mouth) can affect consumers' impulsive buying behaviour in social commerce.

1.3.2 Specific Objectives

1. To examine the relationship between scarcity and urge to buy impulsively.
2. To examine the relationship between serendipitous information and urge to buy impulsively.
3. To examine the relationship between electronic word of mouth and urge to buy impulsively.
4. To examine the relationship between urge to buy impulsively and impulsive buying behaviour.

1.4 Research Questions

Based on the problems identified, several questions have been developed. These questions are used to explain the goal to investigate the factors that contribute to consumers' impulsive buying behaviour in social commerce. The research questions had drawn out as below:

1. Is there a relationship between scarcity and urge to buy impulsively?
2. Is there a relationship between serendipitous information and urge to buy impulsively?
3. Is there a relationship between electronic word of mouth and urge to buy impulsively?
4. Does urge to buy impulsively affect impulsive buying behaviour?

1.5 Hypothesis of the Study

1.5.1 General Hypothesis

All of the factors illustrated significantly affect the impulsive buying behaviour of consumers.

1.5.2 Specific Hypothesis

The hypotheses that are going to be inspected are shown below:

Hypothesis 1: There is a relationship between scarcity and urge to buy impulsively.
Hypothesis 2: There is a relationship between serendipitous information and urge to buy impulsively.
Hypothesis 3: There is a relationship between electronic word of mouth and urge to buy impulsively.

Hypothesis 4: There is a relationship between urge to buy impulsively and impulsive buying behaviour.

1.6 Significant of the Study

By accomplishing these objectives, this study will be able to assist academics in better understanding the framework of the factors that encourage impulsive buying behaviour in the social commerce context, as well as the theoretical basis and methodological approach to studying impulsive buying behaviour in social commerce. In addition, the findings are valuable and can be served as a basis for future research aimed at enhancing a better understanding of consumer buying behaviour in the social commerce context. Other than that, this study can help practitioners better understand the factors that contribute to consumers' impulsive buying behaviour before starting their social commerce. With a better understanding of impulsive buying behaviour concepts, businesses and marketers will be able to develop better strategies to enhance competitiveness and boost profits. Furthermore, it provides the designers and developers of social commerce with insights into how to incorporate social media features into their social commerce sites to grow or improve their businesses.

1.7 Conclusion

The chapter has clarified the major objective of this research and provided a clear guidance for the further development of this research.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

In this chapter, the literature review is applied to identify the factors that contribute to impulsive buying behaviour among consumers in social commerce. All the literature is sourced from the journal and past research or studies conducted by other researchers. The literature review is to clarify the relationship between Independent Variables (IVs) and Dependent Variable (DV). The theoretical framework will also be developed to investigate the research hypotheses.

2.1 Review of Stimulus-Organism-Response (S-O-R) Theory

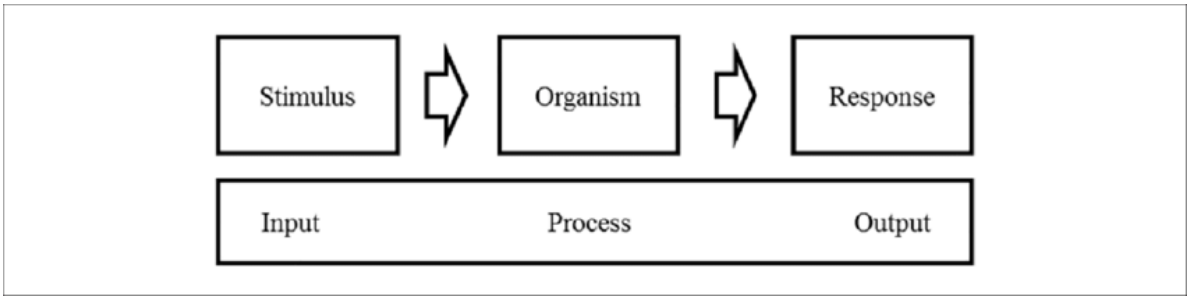

Figure 2.1: Stimulus-Organism-Response Theory Framework. Adapted from Kim, M. J., Lee, C. K., & Jung, T. (2020). Exploring consumer behavior in virtual reality tourism using an extended Stimulus-Organism-Response Model. Journal of Travel Research. 59. 69-89. 10.1177/0047287518818915.

In order to investigate consumers' impulsive buying behaviour, Stimulus-Organism-Response (SOR) Theory will be applied as a theoretical framework to study the factors that contribute to consumers' impulsive buying behaviour in social commerce. According to Chen et al. (2017), the SOR Theory was the most widely used theoretical framework in studying impulsive buying behaviour over the last decade. SOR Theory was first proposed by Mehrabian and Russell in 1974 in the early days of the study of environmental psychology. This theory consists of three aspects which are Stimulus (S), Organism (O), and Response (R). "Stimulus" represents the external and internal stimulus that motivates consumers to buy a

product or service (Mehrabian & Russell, 1974). The external stimulus refers to marketing, website, and situational factors (Lee & Gan, 2020), while the internal refers to the consumer's characteristics (Amarnath & Jaidev, 2020). "Organism" refers to the internal evaluation of consumers and can be characterized as emotional and cognitive responses. At the same time, "Response" refers to the outcome that decides consumer behaviour or avoidance (Laato, 2020). This theory aims to integrate individual responses to explain people's perceptions and emotions in response to external stimuli and the subsequent positive or negative behaviours. In this study, the stimulus aspect refers to scarcity, serendipitous information, and electronic word of mouth. Urge to buy impulsively will be represented as the organism aspect, and impulsive buying behaviour will be represented as the response aspect.

2.2 Review of the Literature

2.2.1 Social Commerce

Social commerce is a form of electronic commerce involving social media and online media that facilitates social interaction and user contributions to help with online goods and service buying and selling (Moon et al., 2019). For example, Facebook, Instagram, WeChat, and others are the social media commonly used by businesses to conduct social commerce. Interactivity, collaboration, community, and social aspects are the four distinct characteristics of social commerce that set it apart from other business contexts (Abdelsalam et al., 2020). In terms of interactivity, social commerce allows for social connection between businesses and consumers, enabling consumers to access the information provided and allowing businesses to collect feedback for product development (Busalim & Hussin, 2016). Regarding collaboration, Social commerce creates a collaborative environment that allows users to generate material and share it with others by utilizing social media as a tool for cooperation, which helps to expand co-creation activities (Busalim & Hussin, 2016). Social commerce, in terms of the community, provides users a platform for interaction, participation in

online social networking activities, and information exchange, which assists them in purchasing decisions (Abdelsalam et al., 2020). For social aspects, social commerce is built on different types of social media, focusing on business activities supported by social media. In a networked user environment, social media facilitates the creation of social support, which leads to improved purchasing decisions (Chen & Shen, 2015).

2.2.2 Marketing Stimulus

According to Iyer et al. (2019), marketing stimuli are external stimuli created by marketers to attract consumers' senses. Consumers are attracted by marketing stimuli such as price, promotion, and bonuses. Marketing stimuli will manipulate consumers' five senses, pushing and pulling them toward certain products or services. Therefore, marketers efficiently utilize marketing strategies to create stimuli, increasing their sales opportunities (Ezeife, 2017). Marketing stimuli will affect consumers' buying behaviours. Iyer et al. (2019) and Chan and Razak (2018) stated that the marketing stimuli would positively impact impulse buying behaviour. Also, based on the study conducted by Karim et al. (2021), the result findings show that marketing stimulus is one of the factors influencing impulse buying behaviour towards e-Tailing sites.

2.2.3 Impulsive Buying Behaviour

The propagation of online platforms or channels and information technology (IT) has encouraged customers to engage in impulsive behaviour by increasing their access to services and products and making the payment and purchasing processes considerably simpler (Akram et al. 2018). According to Moon et al. (2019), impulsive buying is defined as "unplanned buying," it refers to any purchase that a consumer makes without first making a plan to purchase it. It can also be described as "spur-of-the-moment" due to consumers purchasing a product online without rationally

examining the need for the product before making a purchase (Chan et al., 2017). There is a difference between the normal and impulse buying processes. In the case of the normal buying process, the consumer identifies the need, searches for information to find the product that he or she desires, examines available alternatives and other consumers' post-purchase experiences (Iftikhar & Iqbal, 2020). In contrast, in the case of the impulsive buying process in social commerce, the consumer does not seek information or consider the available alternatives before making a purchase. Online consumers start by searching the products online and getting the awareness of certain products or services. At that moment, consumers are triggered by external stimuli that arouse their desires to buy impulsively, which leads to an actual impulse purchase (Awolaja, 2020). Impulse buying behaviour is an unplanned buying decision that is affected by a variety of factors, including information fit-to-task, utilitarian and hedonic motivation, perceived usefulness, perceived enjoyment, adventure shopping, hedonic motivation, visual attraction, and desire to buy impulsively (Xiang et al., 2016; Akram et al., 2018; Dwita & Retsi, 2019).

2.2.4 Scarcity

According to Chung et al. (2017), scarcity can be defined as an actual or perceived threat to a consumer's capacity to meet their requirements and desires as a result of the shortage of access to products, services, or resources. Scarcity is an effective marketing strategy used by marketers to improve the buying process by informing consumers that there are limited opportunities to purchase a particular product (Jang et al., 2015; Cremer, 2018). Some theories, such as Uniqueness Theory (Fromkin, 1968), Psychological Reactance Theory (Brehm & Brehm, 1981), and Naïve Economic Theory (Lynn, 1992), can be used to explain the effects of scarcity. Those theories explain that scarcity will increase the psychological pressure on consumers, thereby inspiring and promoting buying behaviour (Song et al., 2015). Many researchers have researched scarcity, and they have concluded that the scarcity message could be divided into two distinct concepts: limited supply

and limited time (Wu et al., 2021). Moon et al. (2019) stated that limiting the quantity and time of a product or service would increase the value and attractiveness of that product or service. There has been much evidence to suggest that scarcity signals have a beneficial impact on the evaluation of and attitude toward the object of the message. Scarcity will create an emotional pressure on consumers and appears to instill a sense of urgency among them, leading to an increase in sales, shorter searches, and higher levels of satisfaction with the products purchased (Wu et al., 2019).

2.2.5 Serendipitous Information

According to Ricardo (2018), serendipity is the phenomenon of discovering valuable or pleasurable things while they are not specifically sought after. It is a part of the web browsing experience. Serendipity occurs when people unintentionally discover resources such as information, objects, or people of interest (Bjorneborn, 2017). According to Kim et al. (2021), serendipity is an element or stimulus consumers will encounter in the marketplace, enhancing their satisfaction. It plays an important role in marketing which helps businesses grow faster (Kim et al., 2021). Using serendipity information to enhance the consumer's experience has been proven in a subsequent study, which shows that serendipity gives consumers contentment and enjoyment by allowing them to discover new items (Akram et al., 2018). In other words, people can benefit from serendipity information discovery because it can help them make connections between seemingly unrelated pieces of knowledge; it can also spark fresh discoveries, move them ahead in unexpected directions, and surprise and thrill them on the way. According to Prawira and Sihombing (2021), shocking information discovered accidentally will impact consumers' emotions, resulting in changes in consumer buying behaviour. The "Aha!" moment that occurs due to inadvertent information will improve the user experience, leading to impulsive buying behaviour.

2.2.6 Electronic Word of Mouth

Electronic word of mouth is the dynamic and continuous process of exchanging information about products, services, brands, or companies between potential, actual, or past consumers, accessible to many persons and organizations over the Internet (Ismajilova, 2020). At the same time, Abdullah and Artanti (2021) defined electronic word-of-mouth as a positive or negative comment on a product or company that is accessible to many people over the internet. Commercial companies employ electronic word-of-mouth strategies to create new opportunities and strong responses for their brands or products, driving their return on investment (Rani & Shivaprasad, 2019; Chu & Kim, 2015). It is a free advertisement that customers trigger and usually spreads more than expected. According to Moon et al. (2019), based on comparative research between electronic word of mouth and traditional marketing activities, electronic word of mouth is a vital factor for businesses to gain new customers because it can easily and quickly reach a large scale of people with the help of internet technologies. The impact of electronic word of mouth has been extensively discussed in the literature on consumer behaviour, marketing, and information systems. Due to the potential risks associated with online purchasing (e.g., product performance risks, financial risks, and scamming issues), many consumers rely on online reviews from other consumers to infer product quality and reduce ambiguity when making a purchase decision (Zhang et al., 2018). Previous research suggests that electronic word of mouth will affect consumer behaviour (Gvili & Levy, 2016; Lin & Xu, 2017). They explained that online reviews affect consumers' perceived credibility and usefulness of reviews, which in turn affect their online review adoption behaviour.

2.2.7 Urge to Buy Impulsively

The urge to buy impulsively is reflected as irrational want and the state of desire experienced when encountering an object in the environment (Chung et al., 2017). The urge to buy impulsively can also be defined as a feeling of

a strong and immediate desire to purchase a certain product or service (Kazempour & Lotfizadeh, 2017). The urge to buy is seen as a necessary precursor to impulse buying behaviour, and this concept has been supported by several empirical findings such as Lee and Chen (2021) and Chen et al. (2020). The probability of consumers making impulsive purchases increases as their urge to buy impulsively grows (Utama et al., 2021). Song et al. (2015) also stated that consumers do not consider whether they require it when consumers purchase a product. Instead, it will result in an instant purchase to fulfill the purchasing obligation, which will result in impulsive purchasing behaviour. Also, the urge to buy impulsively prevents people from looking for, resulting in customers exhibiting impulse buying behaviour (Xiang et al., 2016).

2.3 Proposed Theoretical / Concept Framework

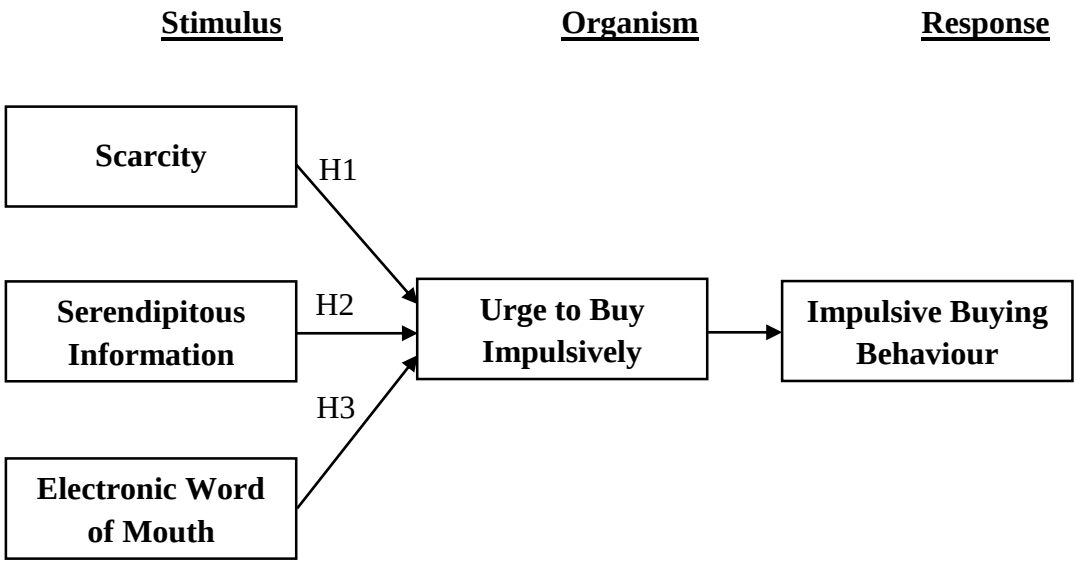

Figure 2.2. Theoretical Framework.

Figure 2.2 illustrates the proposed research theoretical framework of this study. In this research, scarcity, serendipitous information, and electronic word of mouth will be represented as the stimulus aspect; the urge to buy impulsively will be represented as the organism aspect, while impulsive buying behaviour will be represented as the response aspect. Based on the findings from a variety of journals

and past studies, it indicates that stimulus will have an impact on the organism and eventually leads to response.

2.4 Hypothesis Development

2.4.1 The Relationship between Scarcity and Urge to Buy Impulsively

Scarcity can be defined as a marketing strategy that constrains the time, product availability, or any other buying condition related to the product, which conveys to consumers that they have a limited chance of obtaining the desired commodity (Chung et al., 2017). According to Iftikhar and Iqbal (2020), the promotional information about the availability of products on the internet indicates that the product supply is limited or that the product is only available for a limited period, which has a strong positive impact on consumers' emotion. This is because they will be pressured by the scarcity message, which increases their desire to buy impulsively. Consumers will have a stronger sentiment toward purchasing a thing when it becomes scarce, and the quantity available for purchase is limited (Farivar & Yuan, 2017). Scarcity promotion increased consumers' impulsive emotions toward a certain product or service and eventually led to impulsive buying behaviour (Wu et al., 2021). In addition, Choi and Qu (2017) stated that consumers in social commerce do not have enough time to explore alternatives due to the pressure they are under due to time and quantity restrictions. The pressure of the scarcity message will then trigger consumers' impulse to buy. They also proposed that it is natural that a product value increases when the product has a limited supply or is no longer available for purchase. With the growth of product value, consumers are more encouraged to purchase the product. Therefore, the previous findings demonstrated a positive relationship between scarcity and the urge to buy impulsively. Hence, the hypothesis is developed:

H1: There is a relationship between scarcity and urge to buy impulsively.

2.4.2 The Relationship between Serendipitous Information and Urge to Buy Impulsively

According to Chung et al. (2017), since serendipity knowledge is obtained through unanticipated and unexpected discoveries, the impulsive urge is more likely to occur than planned explorations. This is because serendipity is an unpredictable scenario; it might cause unintentional and unexpected consumers to interpret the worth of a purchase in a way that differs from that of rational consumers. Consumers who discover serendipity information find it interesting and surprising, and this kind of information obtained unintentionally will affect the consumers' emotions. It will increase the urge of consumers to seek more particular information (Prawira & Sihombing, 2021). In other words, when it comes to buying context, consumers unintentionally discover information regarding a product or service and find it attractive and surprising, which will increase the urge of consumers to buy that product or service impulsively (Bao & Yang, 2022). The study by Song et al. (2015) indicated that serendipity raises the desire to buy impulsively in an e-commerce environment. This is because serendipity is unpredictable; it may cause consumers to suddenly perceive the value of hedonic shopping contrary to the way rational consumers do. Not only that, research done by Akram et al. (2018); Chung et al. (2017); John et al. (2019), and Thuong (2020) have proven that serendipitous information will raise the urge to buy impulsively. Therefore, the previous findings indicated a positive relationship between serendipitous information and the urge to buy impulsively. Hence, the hypothesis is developed:

H2: There is a relationship between serendipitous information and urge to buy impulsively.

2.4.3 The Relationship between Electronic Word of Mouth and Urge to Buy Impulsively

Online consumers' views and behaviours are significantly influenced by electronic word of mouth. Previous research has indicated that electronic word of mouth positively impacts the desire to buy impulsively (Adila et al., 2020). Also, Zhang et al. (2018) stated that consumers' urge to buy impulsively was affected by positive online reviews and eventually led to impulsive buying behaviour. When close people or friends share good feedback about a product or service through electronic word of mouth, the recipient of such information will show signs of early trust in that product or service, thereby arousing the desire to buy it (Martin et al., 2015). According to Husnain et al. (2016), it has a greater impact on consumers' urge to buy impulsively when it comes to electronic word-of-mouth. With the help of word-of-mouth, consumers' doubt about the products or services offered to them reduces, and their level of happiness increases, increasing impulsive emotion toward those products or services. Also, they believe that online reviews will have an impact on the consumer's cognition, beliefs, attitudes, emotions, and actual decision-making processes. Not only that, based on the research done by Liu and Hsu (2017), electronic word of mouth triggers the urge to buy impulsively in both online and physical shopping contexts. Many consumers rely on electronic word of mouth for entertainment purposes or to seek support for a purchase decision that has been made through the use of the Internet word of mouth. They would be curious about the product or service being discussed, leading to increased impulsive emotion toward that product or service Liu and Hsu (2017). Thus, the previous research findings indicated a positive relationship between electronic word of mouth and the urge to buy impulsively. Hence, the hypothesis is developed:

H3: There is a relationship between electronic word of mouth and urge to buy impulsively.

2.4.4 The Relationship between Urge to Buy Impulsively and Consumer Impulsive Buying Behaviour

The urge to purchase impulsively could be considered as the stage preceding and leading up to actual impulsive purchasing (Bao & Yang, 2022). According to Kazempour & Lotfizadeh (2017), consumers who have a larger possibility of an urge to buy impulsively lack self-control compared to consumers who have a significantly lower likelihood of urge to buy impulsively. And this will eventually cause those consumers to make a sudden purchase of a certain product or service without thinking about whether they need that product or service. The research findings made by Nawaz (2018) indicated that the urge to buy impulsively and impulsive buying behaviour are positively related to each other. Nawaz also stated that consumers' tendency to buy impulsively would guide them to make an impulse purchase. According to Utama (2021), impulse buying behaviour comes from the desire to buy impulsively. Every urge to buy impulsively does not turn into impulsive buying behaviour; however, the more urges consumers experience, the more likely they are to acquire the item they want. Individuals will satisfy their desires by purchasing the objects of their interests. In addition, Zhang et al. (2018) concluded that the urge to buy impulsively would lead to an actual impulsive buying behaviour, which means consumers purchase a product impulsively due to their strong desire to purchase that product. Therefore, the previous research findings indicated a positive relationship between the urge to buy impulsively and impulsive buying behaviour. Hence, the hypothesis is developed:

H4: There is a relationship between urge to buy impulsively and impulsive buying behaviour.

2.5 Conclusion

This chapter has discussed the reviews of each variable as well as the relevant theory and framework applied in this research. The following chapter will be discussed the research methodology.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

This chapter will discuss the research methodology that was used in this research. It will explain how research is conducted, including sampling design, data collection method, analytical techniques as well as scale of measurement used for this research. Furthermore, it was also practice the questionnaire as research instruments to collect the primary and secondary data to investigate the factors of affecting consumer impulsive buying behaviour in social commerce.

3.1 Research Design

A research strategy, also known as a research design, is an approach for answering a series of questions. It is a framework that incorporates data collection, analysis, and interpretation methods and procedures. Research design, in other words, is an element of the research proposal that explains how the researcher would investigate the research's central problem (Bouchrika, 2021). Therefore, survey research was adopted in this study to investigate the factors of consumer impulsive buying behaviour in social commerce.

3.1.1 Quantitative Research

Quantitative research is a systematic analysis of phenomena by collecting measurable data and applying statistical or mathematical procedures that can be quantified or compared to numerical data. According to Bhandari (2021a), quantitative research studies can identify patterns and averages, predict causal relationships testing, and generate findings for wider populations. Therefore, quantitative research will be used to conduct this research in order to test the research hypothesis with the data collected from surveys.

3.1.2 Descriptive Research

Descriptive research is a kind of quantitative research to describe the population, situation, or phenomenon of the study accurately and systematically. It gathers data to answer a variety of what, when, and how questions about a certain population (McCombes, 2020). McCombes also mentioned that descriptive research is a good choice for research aimed at identifying characteristics, frequencies, trends, and categories. Thus, it is undeniable that conducting a descriptive research study in this research can help to better understand the population's profile regarding the research topic.

3.2 Data Collection Methods

Data collection is defined as a systematic method of collecting reliable data from a variety of sources in order to provide insights or answers for hypothesis testing, research problem, and outcome evaluation (Bhandari, 2021b). Primary and secondary data will be gathered from various sources for this research.

3.2.1 Primary Data

Raw data is the first-hand data that the researchers themselves collect from various sources such as surveys, observations, experiments, and interviews in order to conduct research (Bhandari, 2021b). In this research, primary data were collected from the respondents in the form of an online survey using Google Form. The questionnaires were distributed to social media platforms (Facebook, WhatsApp, Instagram) and Microsoft Teams. Through this method, the cost can be saved, and many respondents can be reached.

3.2.2 Secondary Data

Secondary data refers to the previously gathered data from primary sources and is made accessible to academics for their research. The purpose of using secondary data collecting is to identify research flaws and increase subject cognition to determine what information needs to be added to the study (Bhandari, 2021b). The majority of secondary data in this research comes from journals, articles, and news that other researchers and authors have published. All these data are gathered from credible sources such as Google Scholar and Universiti Tunku Abdul Rahman Library E-database.

3.3 Sampling Design

Sampling design is defined as a framework that guides the selection of a survey sample while also influencing many other critical parts of the survey. It is a mathematical function that provides the probability of any given sample being drawn to represent the population of interest (Stephanie, 2021).

3.3.1 Target Population

The target population is a group of people that intend to study and draw a conclusion (Stephanie, 2019). In this research, the target population is those people who have purchased a product from social media sites. This research has no restrictions on demographics and geographies as long as the respondents have done online shopping on social media sites before. This is because all of them are the most appropriate respondents to contribute their viewpoints to this study.

3.3.2 Sampling Technique

There are two types of sampling techniques: probability sampling and non-probability sampling. Probability sampling is a sampling approach in which the researcher uses a method based on probability theory to select samples from a larger population. Every sample in the population has an equal probability of being chosen. This sampling method gives the probability that the sample represents the population (Showkat & Parveen, 2017). Non-probability sampling is a sampling approach in which the researcher uses a non-randomized method to draw the samples from a larger population. Not every sample in the population has a chance of being chosen. It helps the researcher get the data quickly, easily, and inexpensive. In this research, non-probability sampling will be applied using the convenience sampling method (Showkat & Parveen, 2017). Convenience sampling is the easiest and most inexpensive sampling technique that helps the researcher obtain the data. For convenience sampling, subjects that are easily accessible or available to the researcher will be chosen (Showkat & Parveen, 2017). Therefore, data will be collected from family, friends, and students through WhatsApp, Microsoft Team, and social media sites in this research.

3.3.3 Sampling Size

A high sample size should be used across a broad population for research to obtain more reliable, meaningful, and accurate results. According to Tabachnick & Fidell (2007), a sample size of 200 to 500 respondents was sufficient for the research. Roscue (1975) stated that a sample size of greater than 30 but less than 500 was appropriate for most behavioural research (Memon et al., 2020). Schreiber et al. (2006) claimed that the minimum sample size needed for the structural equation model could be as low as 10 respondents for each estimated parameter. In order to meet all the criteria mentioned above, a sample size of 250 will be taken for this research.

3.4 Research Instrument

In this research, closed-ended questionnaires will be implemented for data collection. This type of research instrument can ease the respondents by providing the options to choose a response from and don't have to type so much. Therefore, the implementation of closed-ended questionnaires as a research instrument can increase the response rates and get a large number of respondents.

3.4.1 Questionnaire Design

For this research, the questionnaire survey is conducted through online social media by using Google Form design, making it easy for the researcher to obtain data from any respondent and for the respondent to fill up the survey form. The closed-ended questionnaire survey consists of 3 sections: Section A, Section B, and Section C. Section A consists of a screening question to determine whether respondents meet the criteria for participation in this research study. In addition, Section B consists of questions regarding the demographic profile such as age, gender, education level, occupation status, etc. Lastly, Section C consists of the Likert scale questions related to respondents' perspectives on the factors that contribute to impulsive buying behaviour in social commerce. In this section, respondents are required to express how strongly they agree or disagree with the questionnaire statement with 5 levels of agreement on a scale of "Strongly Disagree" (1) to "Strongly Agree" (5).

Table 3.1
Origin of Constructs Measurement

Latent Variable	**Measurement Statements**	**Items in Questionnaire**	**Sources**
Scarcity	When I do shopping in social commerce, I thought of a deadline.	SC1	Akram et al. (2018)

	When I do shopping in social commerce, I was worried about limited time.	SC2	
	When I do shopping in social commerce, I was concerned about limited quantity.	SC3	
	When I do shopping in social commerce, I was anxious about sold out signs.	SC4	
Serendipitous Information	I obtained unexpected insights when doing shopping in social commerce.	SI1	Akram et al. (2018)
	I unexpectedly discovered by chance what I wanted to buy before when doing shopping in social commerce.	SI2	
	I found things that surprised me when doing shopping in social commerce.	SI3	
	I was able to see the ordinary in new ways when doing shopping in social commerce.	SI4	
Electronic Word of Mouth	When I read a positive review about a product, I also think positively.	EWM1	Moon et al. (2019)
	I have a more positive image of recommended products than others.	EWM2	
	I want to buy popular products.	EWM3	
	When I choose a product, sometimes I refer to others' opinions.	EWM4	

	When I choose a product, sometimes I refer to others' behaviour.	EWM5	
Urge to Buy Impulsively	I experienced several sudden urges to buy things when doing shopping in social commerce.	UBI1	Akram et al. (2018)
	I saw several things I wanted to buy even though they were not on my shopping list when shopping in social commerce.	UBI2	
	I experienced strong urges to make unplanned purchases when doing shopping in social commerce.	UBI3	
	When I do shopping in social commerce, I felt a sudden urge to buy something.	UBI4	
Impulsive Buying Behaviour	My purchase was spontaneous.	IBB1	Akram et al. (2018)
	My purchase was unplanned.	IBB2	
	I did not intend to make this purchase before this shopping trip.	IBB3	
	I could not resist making this purchase at social commerce.	IBB4	

3.4.2 Scale Measurement

A nominal scale is a measurement scale in that numbers are solely used as "tags" or "labels" to identify or categorize an object. This measurement is usually reserved for non-numeric variables or situations where numbers have no meaning (Lee, 2016). Nominal scales like gender, education level,

and occupation status are included in this research. The ordinal scale is a measurement scale that reports the data's ranking and ordering without determining the degree of variation between them (Lee, 2016). This research includes ordinal scales such as age range and income level. Lastly, an interval scale is also used in this research. An interval scale is a quantitative measuring scale in which variables have an order, the distinction between the two variables is significant and equal, and has an arbitrary zero point. It measures variables that exist at equal intervals on a common scale (Lee, 2016). The interval scale, like the 5-point Likert scale, is included in this research for data collection.

3.5 Data Processing

Data processing is the process of transforming raw data into valuable and usable information. All the raw data collected will be converted into a more readable format such as a graph and chart. Data processing involves four important steps. The first step is editing of data. Editing is the process of examining the data obtained from a questionnaire survey, identifying errors or omissions, and ensuring that they have been amended before being tabulated. The second step is the coding of data. Data coding is the process of translating edited data or observation into a collection of meaningful and cohesive categories. It can convert data into numerical information and align it with certain systems. The third step is the classification of data. Classification of data refers to the process of categorizing data into comprehensible homogeneous groups for easy finding, retrieval, and use. The fourth step is the tabulation of data. Tabulation is the process of presenting numeric data in tabular form logically and systematically. It allows for easier comparison by bringing relevant data closer together and aids in statistical analysis and interpretation.

3.6 Data Analysis

Data analysis can be defined as the systematic application of statistical and logical techniques to describe, display, summarise, and assess data. It aids in reducing a huge chunk of data into smaller bits to discover useful information for the research. In this research, SmartPLS software will be used to analyze the data collected. SmartPLS 3.0 is software with an easy-to-use graphical interface for all PLS-SEM analyses. It can handle more complex structures with multiple independent and dependent variables. With the flexibility and less restrictive rules of SmartPLS 3.0, researchers can use a small sample size and undistributed data to investigate causal mechanisms (Sander & Teh, 2014).

3.6.1 Descriptive Analysis

Due to the implementation of descriptive research in conducting this research, descriptive statistics are needed to make a variety of different assumptions and numerical data. Descriptive statistics help to summarize the numerical data through using measures of central tendency (mean, median, mode) and discrete measures (standard deviation, variance). Therefore, through descriptive analysis, numerical data can be summarized and display it in a readable form.

3.6.2 Inferential Analysis

Inferential analysis is a method that uses data collected from sample size to infer the overall target population (estimating parameters) and answer specific research questions (Hypothesis tests) (Calvello, 2020). Inferential statistics are used to identify a relationship between an intervention and an outcome and the strength of the relationship between them (Trochim, 2002). Types of statistical analysis methods that can be used for inferential analysis include ANOVA, Multiple Linear Regression Analysis, Pearson Correlation

Coefficient Analysis, Structural Equation Modeling (SEM), etc. In this research, SEM will be used.

3.6.2.1 Structural Equation Modeling

The Partial Least Squares Structural Equation Model (PLS-SEM) analysis was used in this section. The PLS-SEM is a set of statistical tools that allow researchers to investigate relationships between several independent and dependent variables, whether discrete or continuous (Ullman & Bentler, 2012). Both the DVs and IVs can be either measured or factors variables. The PLS-SEM can also be known as casual analysis, analysis of covariance structures, causal modeling, etc. It is divided into two different models: the measurement and the structural models.

The first stage would be the measurement model, where the reliability and validity of the latent variables are assessed. The reliability test refers to the measurement of the variables' internal consistency. The reliability test will be assessed using Cronbach's Alpha and Composite Reliability. The value of Cronbach's Alpha and Composite Reliability of more than 0.7 is considered acceptable to show the reliability of the variables (Cortina, 1993). At the same time, Mahlangu and Kruger (2015) stated that a Cronbach's Alpha range above 0.6 is acceptable (refer to Table 3.1). The validity test refers to the measurement of the accuracy of the variables. Convergent and discriminant validity is used to determine to construct validity. Convergent validity is established when the Average Variance Extracted (AVE) is greater than 0.50, indicating items converge well to represent the underlying variable. Heterotrait-Monotrait (HTMT) Ratio is the most common method used to assess the discriminant validity, where an HTMT value below 0.85 indicates a discriminant validity between two reflective constructs (Kline, 2015).

The second stage would be the structural model measurement, assessing the significance and relevance between the variables. Before identifying the path coefficient, collinearity assessments will be conducted by assessing the

Variance Inflation Factor (VIF). A VIF value equal to or below 5 is an acceptable range, while above 5 indicates a multicollinearity issue occurs (Frost, 2021). For the path analysis, beta value, t-statistics, and p-value will be assessed to identify the significance between the variables. Path coefficient (beta value) should be between 0 to 1 to show significance between variables. To statistically show a significant relationship between independent and dependent variables, the p-value should be lower than 0.05, while the t-value should be higher than 1.96 (Ramayah et al., 2018). R2 and F2 will also be assessed. R2 describes the variance in the dependent variable influenced by the independent variable(s). Chin (1998) stated that the R2 value of 0.67 is substantial, 0.33 is moderate, and 0.19 is weak. F2 explains the impact of an independent variable on a dependent variable. Cohen (1998) stated that there is a small effect when (F2>=0.02), a medium effect when (F2>=0.15), and a large effect when (F2>=0.35) (Selya et al., 2012).

Cronbach's Alpha coefficient range	Strength of association
<0.6	Poor
0.6 to <0.7	Moderate
0.7 to <0.8	Good
0.8 to <0.9	Very good
>0.9	Excellent

Figure 3.1: Rule of Thumb about Cronbach's Alpha Coefficient Sizes. Adapted from Mahlangu, B. & Krüger, L. (2015). The impact of the maintenance management system: A case study of the PetroSA GTL refinery. The South African Journal of Industrial Engineering. 26. 10.7166/26-3-1197.

3.7 Conclusion

This chapter has clearly stated the research methodology and rule of thumb will be applied for data collection and analysis. Chapter 4 will be emphasized on the research result.

CHAPTER 4: RESEARCH ANALYSIS AND RESULTS

4.0 Introduction

This chapter will analyse and discuss the respondents' demographic profile and general information on buying behaviour, the central tendencies measurement of constructs, the measurement and structural model. The response rate of the questionnaires is less than 10% which means questionnaires were distributed to more than 2,500 people, but only 250 responses were collected.

4.1 Descriptive Analysis

4.1.1 Respondent Demographic Profile

Table 4.1
Demographic Profile of Respondents

Attributes	Classification	Number	Percentage (%)
Age	18-25 years old	161	64.4%
	26-30 years old	45	18.0%
	31-35 years old	24	9.6%
	36-40 years old	14	5.6%
	Above 40 years old	6	2.4%
Gender	Male	108	43.2%
	Female	142	56.8%
Education Level	Intermediate/High School	36	14.4%
	Diploma	51	20.4%
	Bachelors	145	58.0%
	Masters	15	6.0%
	Doctoral/PhD	3	1.2%
Occupation Status	Students	132	52.8%
	Unemployed	0	0.0%
	Employed	118	47.2%
	Retirement	0	0.0%
Monthly Income level	Below RM 1,000	132	52.8%
	RM 1,001 – RM 3,000	58	23.2%
	RM 3,001 – RM 5,000	42	16.8%
	More than RM 5,001	18	7.2%

Source: Developed for the research

The largest proportion of respondents came from the age group between 18 to 25 years old, which comprised 161 (64.4%) out of the total respondents. The second-largest respondents' age group is between 26 to 30 years old. The followings were the age groups of 31 to 35 years old, 36 to 40 years old, and above 40 years old, which comprised 24 (9.6%), 14 (5.6%), and 6 (2.4%) respectively. Out of the respondents, female respondents were more than male respondents, with 142 (56.8%) females and 108 (43.2%) males. Therefore, it can be assumed that females are more likely to make impulsive purchases through social media than males. 145 (58%) of the total respondents have Bachelor's education level. The followings of education levels that respondents had were Diploma, Intermediate or High School, and Master's, which comprised 51(20.4%), 36 (14.4%), and 15 (6%), respectively. There was the least number of respondents having Doctoral or Ph.D. education level, which consisted of only 3 (1.2%) of the total respondents. All of the responses were collected from students and employed people, which consisted of 132 (52.8%) and 118 (47.2%) respectively. There are 132 (52.8%) of the total respondents having a monthly salary income of below RM 1,000 because all of them are students. And 100 (40%) of them earn between RM 1,001 to RM 5,000 per month. In comparison, only 18 (7.2%) of the respondents earned a salary above RM 5,000.

4.1.2 Respondent General Information on Buying Behaviour

Table 4.2
Social Media Sites that Respondents Prefer to Buy a Product

Preferences	Frequency	Percentage
Facebook	203	81.2%
Instagram	201	80.4%
WeChat	121	48.4%
Twitter	41	16.4%

Source: Developed for the research

More than 80% prefer purchasing products from Instagram and Facebook among the total respondents. The second preferred social media site is

WeChat, where 48.8% of the total respondents wanted to buy a product from. Out of the choices, Twitter is the least recommended social media site for the respondents, where only 16.4% of the total respondents prefer to buy a product.

4.1.3 Central Tendencies Measurement of Constructs

Table 4.3
Descriptive Statistics for Scarcity

Items	Mean ($\bar{x}$)	Standard Deviation (σ)
SC1	3.888	0.927
SC2	3.980	0.953
SC3	3.996	0.994
SC4	3.844	0.965

Source: Developed for the research

Table 4.3 shows the mean and standard deviation of each item for scarcity. Among the items, SC3 has the largest mean of 3.996 with a standard deviation of 0.994. The followings are SC2 ($\bar{x}$=3.980, σ =0.953) and SC1 ($\bar{x}$=3.888, σ =0.927). While SC4 has the lowest mean of 3.844 with a standard deviation of 0.965. All the means are between 3 to 4, assuming all the respondents tend to be neutral or agree on each item.

Table 4.4
Descriptive Statistics for Serendipitous Information

Items	Mean	Standard Deviation
SI1	3.840	0.987
SI2	3.980	0.961
SI3	3.956	0.969
SI4	3.848	0.960

Source: Developed for the research

Table 4.4 shows each item's mean and standard deviation for serendipitous information. Among the items, SI2 has the largest mean of 3.980 with a standard deviation of 0.961. The followings are SI3 ($\bar{x}$=3.956, σ =0.969) and SI4 ($\bar{x}$=3.848, σ =0.960). While SI1 has the lowest mean of 3.840 with a standard deviation of 0.987. It can be assumed that all the respondents tend

to be neutral or agreed on each item due to all the means being between the score of 3 to 4.

Table 4.5
Descriptive Statistics for Electronic Word of Mouth

Items	Mean	Standard Deviation
EWM1	3.904	0.946
EWM2	3.912	0.917
EWM3	3.868	0.977
EWM4	3.964	0.891
EWM5	3.892	0.964

Source: Developed for the research

Table 4.5 shows each item's mean and standard deviation for electronic word of mouth. Among the items, EWM4 has the largest mean of 3.964 with a standard deviation of 0.891. The followings are EWM2 ($\bar{x}$=3.912, σ =0.917), EWM1 ($\bar{x}$=3.904, σ =0.946) and EWM5 ($\bar{x}$=3.892, σ =0.964). While EWM3 has the lowest mean of 3.868 with a standard deviation of 0.977. Since all the means are in between the score of 3 to 4, it can be assumed that all the respondents tend to be neutral or agree on each item.

Table 4.6
Descriptive Statistics for Urge to Buy Impulsively

Items	Mean	Standard Deviation
UBI1	3.948	0.980
UBI2	3.964	0.989
UBI3	3.912	0.938
UBI4	3.892	0.959

Source: Developed for the research

Table 4.6 shows each item's mean and standard deviation for the urge to buy impulsively. Among the items, UBI2 has the largest mean of 3.964 with a standard deviation of 0.989. The followings are UBI1 ($\bar{x}$=3.948, σ =0.980) and UBI3 ($\bar{x}$=3.912, σ =0.938). While UBI4 has the lowest mean of 3.892 with a standard deviation of 0.959. It can be concluded that all the respondents tend to choose "Neutral" or "Agree" for each item due to all the means being between the score of 3 to 4.

Table 4.7
Descriptive Statistics for Impulsive Buying Behaviour

Items	Mean	Standard Deviation
IBB1	3.964	0.891
IBB2	3.864	0.949
IBB3	4.044	0.918
IBB4	3.972	0.901

Source: Developed for the research

Table 4.7 shows each item's mean and standard deviation for impulsive buying behaviour. Among the items, IBB3 has the largest mean of 4.044 with a standard deviation of 0.918. The followings are IBB4 ($\bar{x}$=3.972, σ =0.901) and IBB1 ($\bar{x}$=3.964, σ =0.891). While IBB2 has the lowest mean of 3.864 with a standard deviation of 0.949. It can be concluded that the respondents tend to choose "Neutral" or "Agree" for IBB1, IBB2, and IBB4 due the means are between the score of 3 to 4; however, the respondents tend to choose "Agree" for IBB3 due to mean greater than 4.

4.2 Inferential Analysis

4.2.1 Measurement Model

Table 4.8
Reliability Test Result

Construct	Cronbach's Alpha (α)	Composite Reliability (CR)	Reliability Level
SC	0.767	0.835	Good
SI	0.759	0.831	Good
EWM	0.768	0.836	Good
UBI	0.849	0.898	Very Good
IBB	0.802	0.869	Very Good

Source: Developed for the research

The results for reliability for each variable are presented in Table 4.8. All the variables' Cronbach's Alpha and composite reliability (CR) were higher than the recommended value of 0.700, which indicated all the constructs do not have any reliability issues and were sufficiently reliable. Among the variables, UBI and IBB have a very good level of reliability with (α=0.849,

CR=0.898) and (α=0.802, CR=0.869) respectively. The following are EWM (α=0.768, CR=0.836), SC (α=0.767, CR=0.835), and SI (α=0.759, CR=0.831), indicating a good level of reliability.

Table 4.9
Convergent Analysis Result

Construct	Average Variance Extracted (AVE)
SC	0.562
SI	0.565
EWM	0.510
UBI	0.688
IBB	0.625

Source: Developed for the research

Table 4.9 shows the result of the convergent validity test. UBI has the highest AVE of 0.688 among the variables. The following variables are IBB, SI, and SC, with an AVE of 0.625, 0.565, and 0.562 respectively. In contrast, EWM has the lowest AVE, which is 0.510. Since all variables' average variance extracted (AVE) was higher than 0.5, there was no convergent validity issue. It can conclude that all the items are well representing their underlying variables.

Table 4.10
Discriminant Validity: Heterotrait-Monotrait Ratio (HTMT)

	SC	SI	EWM	UBI	IBB
SC					
SI	0.325				
EWM	0.453	0.271			
UBI	0.309	0.373	0.299		
IBB	0.525	0.245	0.570	0.519	

Source: Developed for the research

Table 4.10 shows the results for assessing the discriminant validity by using the Heterotrait-Monotrait Ratio (HTMT). Since all the values are below the recommended threshold of 0.85, there was no discriminant validity issue, indicating that every variable is distinct from other variables.

4.2.1 Structural Model

Table 4.11
Lateral Collinearity Result

	VIF
SC -> UBI	1.173
SI -> UBI	1.036
EWM -> UBI	1.136
UBI -> IBB	1.000

Source: Developed for the research

Table 4.12
Structural Model's Construct Assessment Result

	Path Coefficient (*B*)	**T-Statistics (*t*)**	**P-Value (*p*)**	**f^2 Effect Size**
SC -> UBI	0.145	2.435	0.015*	0.022
SI -> UBI	0.289	4.091	0.000***	0.098
EWM -> UBI	0.180	2.693	0.007**	0.035
UBI -> IBB	0.440	6.284	0.000***	0.239

* p <0.05, ** p <0.01, *** p <0.001

Source: Developed for the research

Table 4.13
R^2 of Endogenous Variables Result

	R Square	**R Square Adjusted**
UBI	0.171	0.161
IBB	0.193	0.190

Source: Developed for the research

Collinearity assessment should be conducted before evaluating the structural model. According to Table 4.11, every path of VIF value is between 1.000 and 1.173 which is lower than the threshold of 5, showing no sign of collinearity issues.

The procedure of bootstrapping with 250 cases and 5000 subsamples was run to examine the significance level of the path. The results of the assessment are presented in Table 4.12. The results show that every path of path coefficient value is between 0.145 to 0.440 which is in the recommended range between -1.0 to 1.0. By analysing the value of T-Statistics and P-Value, the significance of the relationship between variables

can be identified. The result shows the relationship between SC and UBI (t=2.435, p=0.015), the relationship between SI and UBI (t=4.091, p=0.000), the relationship between EWM and UBI (t=2.693, p=0.007), the relationship between UBI and IBB (t=6.284, p=0.000) are significant due to all value of T-Statistics are greater than 1.96 and P-Value are lower than 0.05.

Table 4.13 shows the result of the R-Square of this model. UBI has an R-square of 0.171 which indicates that 17.1% of changes in UBI can be explained by SC, SI, and EWM, while other unidentified variables occupy the remaining 82.9%. IBB has an R-square of 0.193 which indicates 19.3% of changes in IBB are contributed by UBI, and other unidentified variables occupy the remaining 80.7%. Even though the model shows a low R-square, a low p-value shows a significant relationship between predictor variables and response variables. This model has a low r-squared because the predictor variables used in this model are a small subset of marketing stimuli and are less common and less explored predictor variables.

Also, the effect size was assessed. Based on Table 4.12, SC, SI, and EWM have an f2 value of 0.022, 0.098, and 0.035 respectively, indicating a small effect in influencing the R2 of UBI. While the urge to buy impulsively has an f2 value of 0.239, which indicates a medium effect on influencing the R2 of impulsive buying behaviour.

4.3 Conclusion

In short, the majority of respondents came from female, age group of 18-25 years old, bachelor education level, students and income level of below RM 1,000. In addition, there are no collinearity, reliability and validity issues detected in the model. Lastly, there are four hypotheses are supported.

CHAPTER 5: DISCUSSION, CONCLUSION, AND IMPLICATION

5.0 Introduction

The key findings of this research will be discussed in this chapter. Furthermore, the discussion of theoretical and managerial implications, as well as limitations and recommendations of the research will also be covered to facilitate future research.

5.1 Discussion of Major Findings

Table 5.1
Summary of Hypotheses Testing Results

Hypothesis	*P*	Result
H1: Scarcity has a positive relationship with urge to buy impulsively in social commerce.	0.015	Supported
H2: Serendipitous information has a positive relationship with urge to buy impulsively in social commerce.	0.000	Supported
H3: Electronic word of mouth has a positive relationship with urge to buy impulsively in social commerce.	0.007	Supported
H4:Urge to buy impulsively has a positive relationship with consumer's impulsive buying behaviour in social commerce.	0.000	Supported

Source: Developed for the research

5.1.1 Scarcity

H1: Scarcity has a positive relationship with urge to buy impulsively.

Based on Table 5.1, it indicates that scarcity has a positive relationship with the urge to buy impulsively in social commerce. The finding is supported by the past studies of Wu et al. (2021) as well as Farivar and Yuan (2017). When consumers are regularly exposed to scarce information on social commerce sites, they are more likely to experience an unexpected and

spontaneous desire to buy a product or service. For example, limited time or availability of a product will stimulate positive emotions for consumers to immediately acquire that product. This is because consumers will have a perception that limited products are valuable.

5.1.2 Serendipitous Information

H2: Serendipitous information has a positive relationship with urge to buy impulsively.

According to Table 5.1, serendipitous information will have an impact on consumers' urge to buy impulsively. The finding is similar to the past research conducted by John et al. (2019) and Thuong (2020). Consumers that come upon serendipity information about a product or service and find it intriguing and surprising will increase their urges to buy impulsively. In other words, when consumers discover an unexpected product benefit that is useful for them, they will experience impulse emotion towards that product and buy that product immediately.

5.1.3 Electronic Word of Mouth

H3: Electronic word of mouth has a positive relationship with urge to buy impulsively.

Referring to Table 5.1, it shows that electronic word of mouth has a positive relationship with the urge to buy impulsively in social commerce. The finding is supported by several past studies such as (Adila et al., 2020) and Husnain et al. (2016). Consumers' doubts about a product will be reduced by word-of-mouth, and their enjoyment is boosted, resulting in an increase in spontaneous emotion toward that product. Also, they will be interested in the product or service that is popular or being mentioned by everyone, which will lead to a rise in impulsive emotion toward it. It can also be concluded

that the more favourable online review about a product, the greater the consumer's impulse purchase desire for that product.

5.1.4 Urge to Buy Impulsively

H4: Urge to buy impulsively has a positive relationship with consumer's impulsive buying behaviour.

Table 5.1 indicates a positive relationship between the urge to buy impulsively and impulsive buying behaviour. Hence, the hypothesis is accepted. The findings are also supported by Kazempour and Lotfizadeh (2017) and Zhang et al. (2018). Once consumers' desires to make an impulse purchase are triggered by their thoughts, the urge can become so powerful and persistent that it demands them to take immediate action. Also, consumers find it difficult to resist impulse buying when faced with attractive products. Those people with a high desire to make impulse purchases have low self-control, which leads them to make impulse purchases without examining the needs for those products or services.

5.2 Implications of the Study

5.2.1 Theoretical Implication

This study applied the SOR Theory framework to examine the factors that influence the consumer's impulsive buying behaviour in social commerce. This theory is appropriate for examining the reason behind a consumer's behaviour and solving human behaviour related issues. The results show that there is a significant relationship between stimulus, organism, and response, which stimulus (Scarcity, Serendipitous Information, Electronic Word of Mouth) will affect the organism (Urge to Buy Impulsively), then generate a response (Impulsive Buying Behaviour). The majority of our behaviours result from external stimuli influencing our internal feelings. Therefore, it

helps to better understand how different stimuli influence someone's mental state when studying their behaviour. The theoretical framework in this study can be used as a reference and provide better insights for those researchers who want to investigate related research. Also, this theory serves as a guide for those researchers who want to know the process of change of behaviour.

5.2.2 Managerial Implication

Based on the research findings, businesses who want to conduct online business on social media sites are recommended to conduct their business on Facebook and Instagram. This is because both are the most popular social media sites from which consumers prefer to buy their products.

Also, based on the findings above, scarcity has a positive relationship with the urge to buy impulsively. Scarcity will increase the psychological pressure on consumers and make them afraid of missing out on a purchase which creates their desire to make a purchase. They will attach more to limited products because they think limited products are more valuable, which can satisfy their vanity. Therefore, marketers should adopt scarcity marketing tactics such as early access discounts and special edition products to evoke their desires to buy the products or services.

Not only that, research findings show that serendipitous information is one of the factors influencing the urge to buy impulsively. Serendipity is an unusual circumstance, and it may lead unintended and unexpected customers to evaluate the value of a purchase differently than rational customers. When consumers unintentionally discover information about a product or service that is useful and interesting for them, they will feel more compelled to seek out more specific information. Therefore, marketers are suggested to focus on their content marketing, such as generating new leads and warming up old leads of a product or fact to impress the potential consumers, arousing their desire for that product.

Moreover, the research findings indicate that electronic word of mouth has an impact on the urge to buy impulsively. When consumers receive good feedback about a product or service from others, they will show signs of early trust in that product or service, thereby arousing the desire to buy it. Also, consumers are more likely to buy those products that are popular. Hence, marketers can impact consumers' decision-making processes by generating, supporting, and amplifying word of mouth.

Lastly, the research findings show that the urge to buy impulsively will lead to impulsive buying behaviour. The desire to make an impulse purchase is triggered by consumers' way of thinking. Once triggered, the desire will grow strong and persistent that it demands immediate action from consumers. Consumers will respond positively to a thing or an environment that makes them comfortable and vice versa. Therefore, marketers should put themselves in consumers' shoes and think carefully about what they like or dislike, then make a marketing strategy to turn their desires into actual responses.

5.3 Limitations and Recommendations

There is no specified target respondent for this study. The study ends up being overly general because of the vague target respondents. This is because respondents from various demographic backgrounds in terms of gender, age, education level, and income level may have varied buying behaviour. The study conducted by Aan and Abbas (2015) indicates that income will positively impact buying behaviour. Respondents with low-income levels tend to engage in national buying behaviour, while respondents with high-income levels tend to engage in impulsive buying behaviour. In this research, more than half of the respondents are students, leading to a limitation on accessing respondents with various profiles. It is recommended that future researchers identify the demographic profile of respondents such as income level, and include them in the analysis to examine whether demographic factors have an impact on the results, making the research findings more specific.

As a result, other researchers will be given a better reference on the demographic implications on impulsive buying behaviour.

The second limitation is the accuracy of responses is questioned. The researchers could not verify that the responses they received were accurate because the surveys were collected online and the implementation of convenience sampling in this research for safety and time-saving purposes during the Covid-19 pandemic. However, this leads to the emergence of voluntary bias in the research. Also, respondents may simply go through the questions and fill in agree or neutral all the way through, or even fill the answers without screening the questions to complete their survey quickly. Since the survey was conducted online, the researcher could not explain the meaning of each question to respondents face to face, leading to a high possibility that respondents have misinterpretation the questions and filled in the wrong answer. Those respondents' actions mentioned above are at a level of subjectivity that is not recognized and, therefore, will have an impact on the accuracy of the overall results. A physical mode is recommended for the researcher to collect data from respondents in the future. This method is relatively effective in obtaining quality data while allowing researchers to communicate more effectively with respondents and assist them in answering the questionnaire. Also, researchers should adopt probability sampling techniques in research to produce results that are highly representative of the entire population.

Lastly, unfamiliar operation with the application of SmartPLS in the research. It is a completely new system for me who was inexperienced in it. Due to the lack of understanding of SmartPLS software, some issues may be encountered when applying software to conduct the research. The procedures involved in running the data have become a focus for obtaining accurate data. Future researchers should understand and practice with the SmartPLS and other statistical software before starting their research to improve the efficiency of the data processing.

5.4 Conclusion

In short, this study proves that stimulus (Scarcity, Serendipitous Information, Electronic Word of Mouth) will have an impact on an organism (Urge to buy Impulsively), followed by response (Impulsive Buying Behaviour).

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APPENDICES

Appendix A: Survey Questionnaire Design

Faculty of Accountancy and Management

Questionnaire Survey

BACHELOR OF INTERNATIONAL BUSINESS (HONS)

Dear respondents,

I am an undergraduate student pursuing a Bachelor's degree of International Business (Hons) at Universiti Tunku Abdul Rahman (UTAR). I am conducting research as a part of the requirement to complete my degree. My research topic is "A Study on Factors Contributing to Impulsive Buying Behaviour among Consumers in Social Commerce during Covid-19". The objective of this survey is to investigate the factors that affect consumer impulsive buying behavior in social commerce during Covid-19. Therefore, a market survey is conducted.

This questionnaire consists of (2) sections, and it will take approximately 10-15 minutes to complete. Please be informed that all information collected from this survey is solely for the final year research report writing.

The survey is fully confidential and only for academic purposes, and your participation in this survey is highly appreciated and important to me.

Thank you for your time and your effort in this research.

Student Name: Sze Boon Chin

Student ID: 18UKB03952

Student Email Address: szeboonchin@1utar.my

Student Contact Number: +6013-3590530

I hereby consent on my voluntary participation in this survey which will be conducted anonymously. (As proposed accordingly by Personal Data Protection Statement - UTAR)

( ) Yes - proceed to the questionnaire.

( ) No - thank you for your valuably time.

Section A: Screening Question

Q1. Have you ever purchased a product from a social media site? ( ) Yes ( ) No

Section B: Demographic Question

Please choose only one answer for each of the questions below.

Q1. Age ( ) 18-25 years old ( ) 26-30 years old ( ) 31-35 years old ( ) 36-40 years old ( ) Above 40 years old
Q2. Gender ( ) Male ( ) Female
Q3. Education Level ( ) Intermediate/High School ( ) Diploma ( ) Bachelors ( ) Masters ( ) Doctoral/PhD
Q4. Occupation Status ( ) Students ( ) Unemployed ( ) Employed ( ) Retirement
Q5. Monthly Income level ( ) Below RM 1,000 ( ) RM 1,001 – RM3,000 ( ) RM 3,001 – RM5,000 ( ) More than RM 5,001
Q6. Which social media sites do you prefer to buy a product? ( ) Facebook ( ) Instagram ( ) WeChat ( ) Twitter

Section C: 5-Point Likert Scale Question

The statement below is related to the component of factors contributing consumer impulsive buying behaviour in social commerce. Based on your experience as a consumer/user, please indicate how strongly you agree or disagree to the statement below.

Strongly Disagree (SD)	Disagree (D)	Neutral (N)	Agree (A)	Strongly Agree (SA)
1	2	3	4	5

DV: Impulsive Buying Behavior						
No.	Question	SD	D	N	A	SA
		1	2	3	4	5
1.	My purchase was spontaneous.					
2.	My purchase was unplanned.					
3.	I did not intend to make this purchase before this shopping trip.					
4.	I could not resist making this purchase at social commerce.					

IV: Scarcity						
No.	Question	SD	D	N	A	SA
		1	2	3	4	5
1.	When I do shopping in social commerce, I thought of a deadline.					
2.	When I do shopping in social commerce, I was worried about limited time.					
3.	When I do shopping in social commerce, I was concerned about limited quantity.					
4.	When I do shopping in social commerce, I was anxious about sold out signs.					

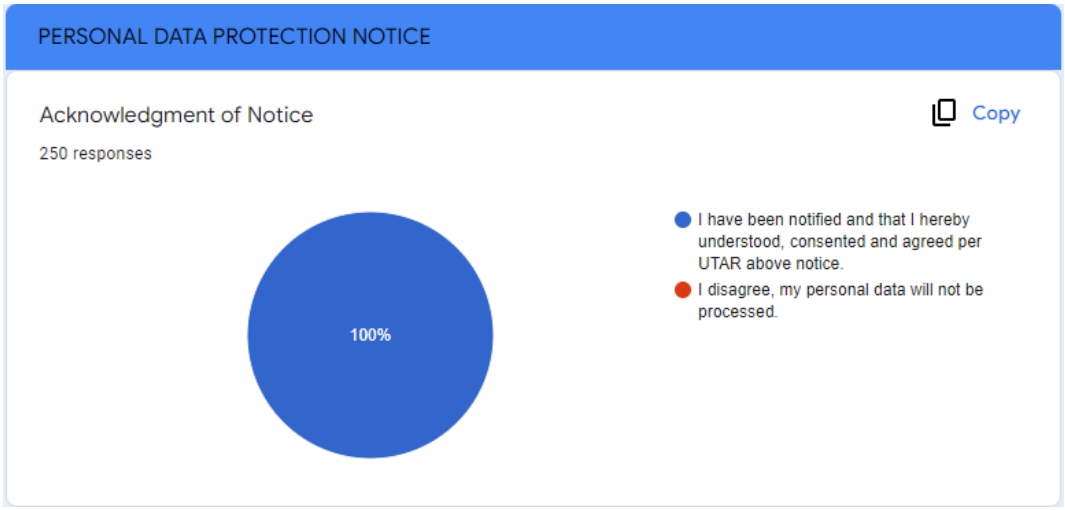
IV: Serendipitous Information						
No.	Question	SD	D	N	A	SA
		1	2	3	4	5
1.	I obtained unexpected insights when doing shopping in social commerce.					
2.	I unexpectedly discovered by chance what I wanted to buy before when doing shopping in social commerce.					
3.	I found things that surprised me when doing shopping in social commerce.					
4.	I was able to see the ordinary in new ways when doing shopping in social commerce.					

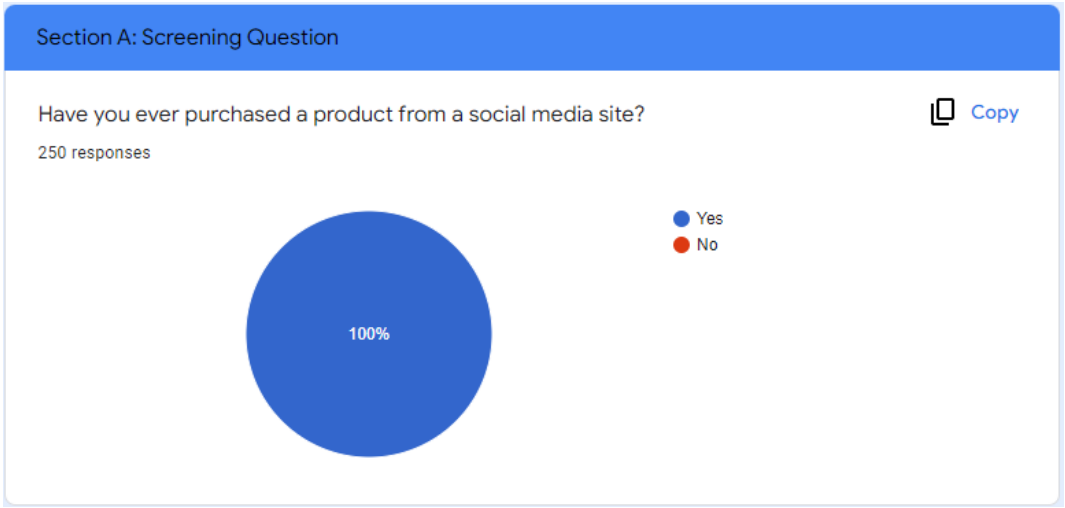
IV: Electronic Word of Mouth (EWOM)						
No.	Question	SD	D	N	A	SA
		1	2	3	4	5
1.	When I read a positive review about a product, I also think positively.					
2.	I have a more positive image of recommended products than others.					
3.	I want to buy popular products.					
4.	When I choose a product, sometimes I refer to others' opinions.					
5.	When I choose a product, sometimes I refer to others' behaviour.					

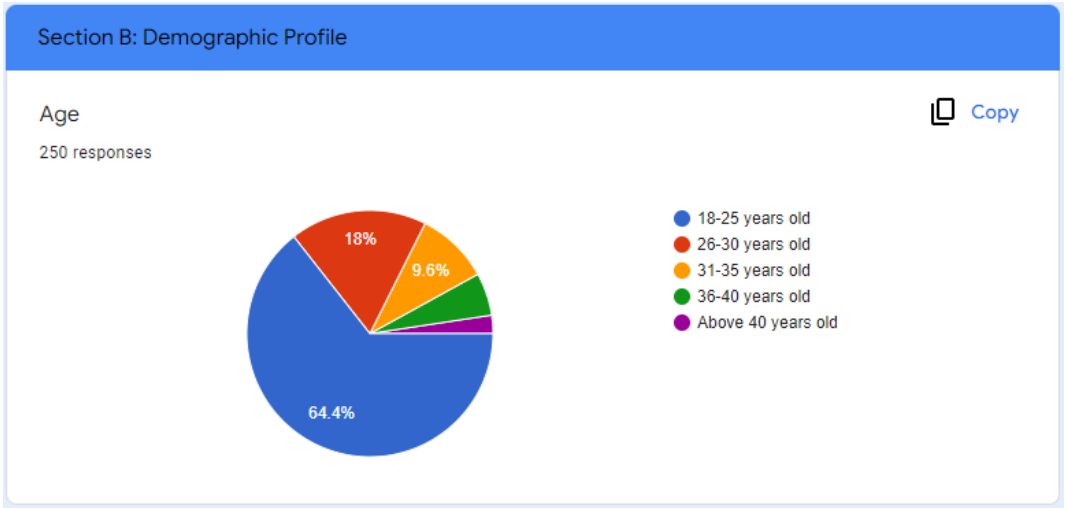
IV: Urge to Buy Impulsively						
No.	Question	SD	D	N	A	SA
		1	2	3	4	5
1.	I experienced several sudden urges to buy things when doing shopping in social commerce.					
2.	I saw several things I wanted to buy even though they were not on my shopping list when shopping in social commerce.					
3.	I experienced strong urges to make unplanned purchases when doing shopping in social commerce.					
4.	When I do shopping in social commerce, I felt a sudden urge to buy something.					

Appendix B: Google Form Survey Result

Link: https://forms.gle/HkiobubSUcDQXofN8



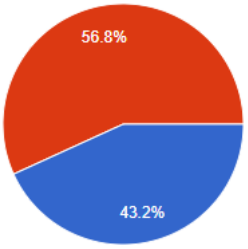




Gender

Copy

250 responses

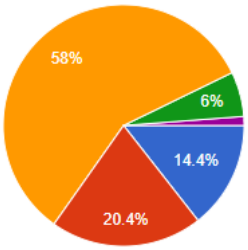


Male
Female

Education Level

Copy

250 responses

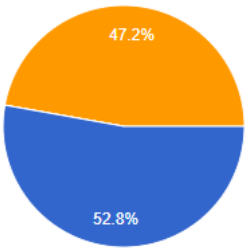


Intermediate/High School
Diploma
Bachelors
Masters
Doctoral/PhD

Occupation Status

Copy

250 responses

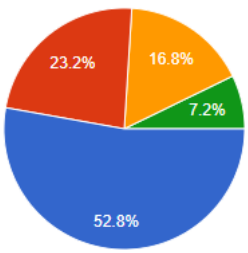


Students
Unemployed
Employed
Retirement

Monthly Income level

Copy

250 responses

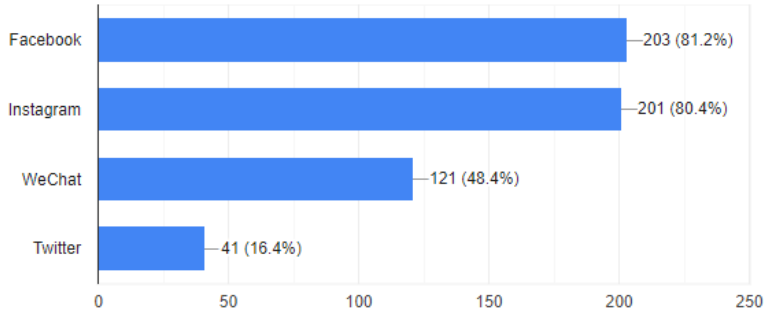


Below RM 1,000
RM 1,001 – RM 3,000
RM 3,001 – RM 5,000
More than RM 5,001

Which social media sites do you prefer to buy a product? (Multiple answer are possible)

Copy

250 responses



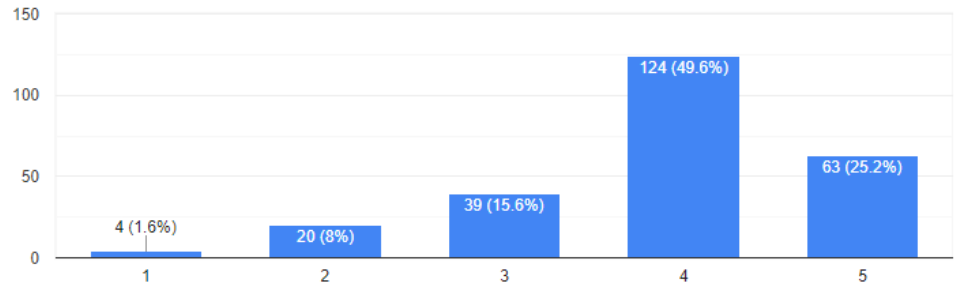
Section C: 5-Point Likert Scale Question

Scarcity

When I do shopping in social commerce, I thought of a deadline.

Copy

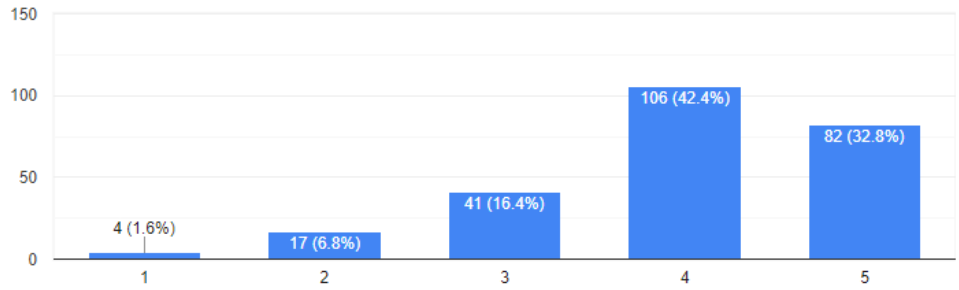
250 responses



When I do shopping in social commerce, I was worried about limited time.

Copy

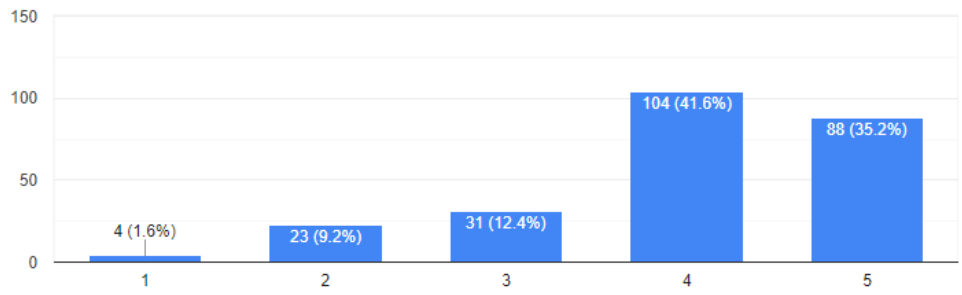
250 responses



When I do shopping in social commerce, I was concerned about limited quantity.

Copy

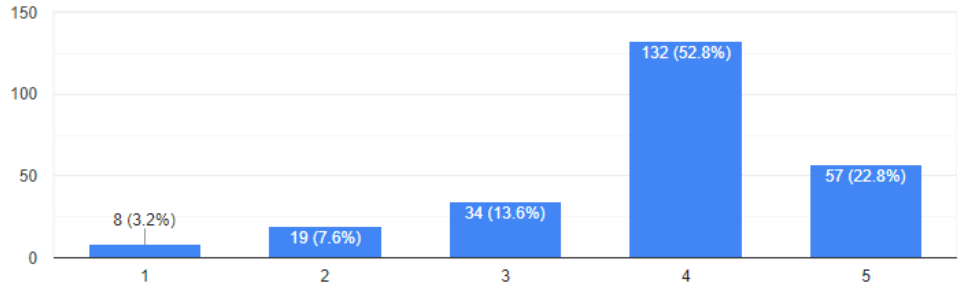
250 responses



When I do shopping in social commerce, I was anxious about sold out signs.

Copy

250 responses

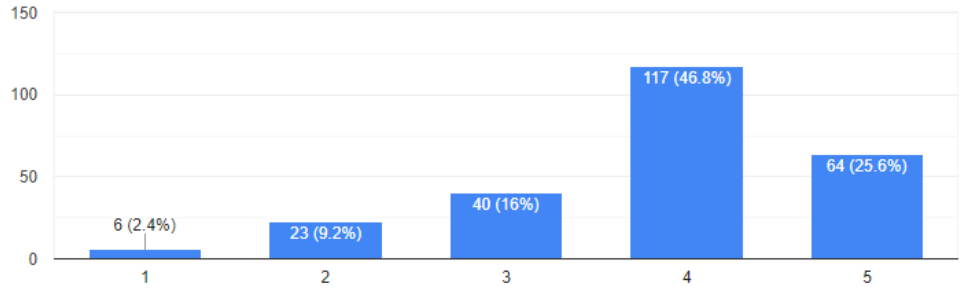


Serendipitous Information

I obtained unexpected insights when doing shopping in social commerce.

Copy

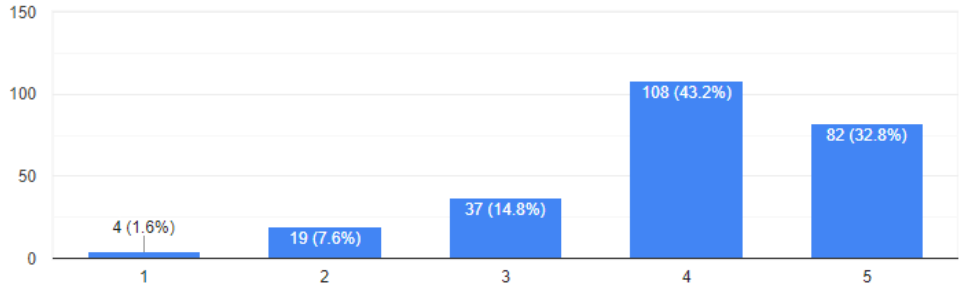
250 responses



I unexpectedly discovered by chance what I wanted to buy before when doing shopping in social commerce.

Copy

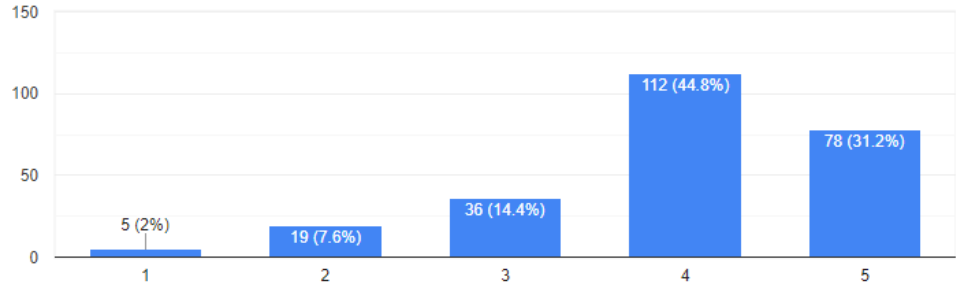
250 responses



I found things that surprised me when doing shopping in social commerce.

Copy

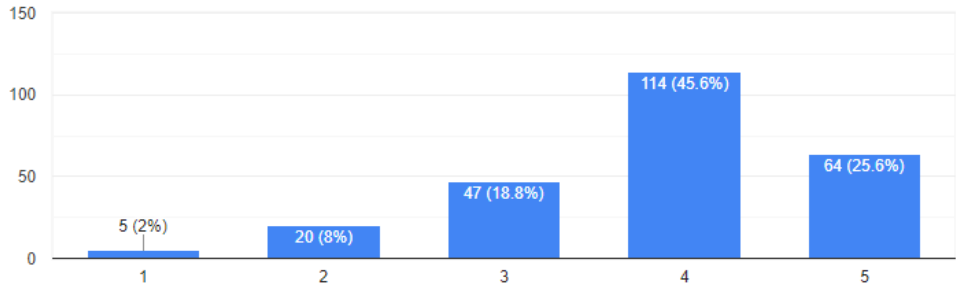
250 responses



I was able to see the ordinary in new ways when doing shopping in social commerce.

Copy

250 responses

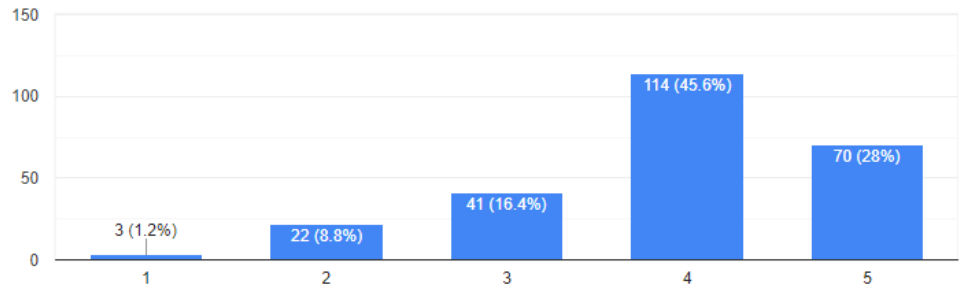


Electronic Word of Mouth (EWOM)

When I read a positive review about a product, I also think positively.

Copy

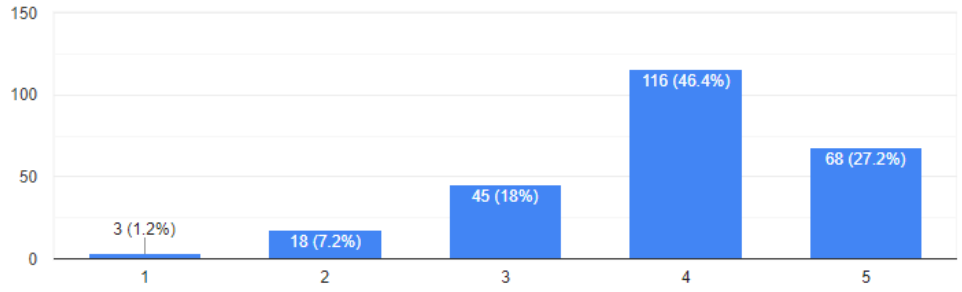
250 responses



I have a more positive image of recommended products than others.

Copy

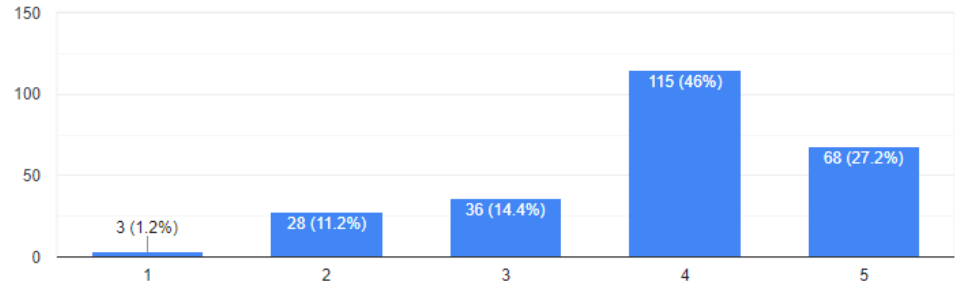
250 responses



I want to buy popular products.

Copy

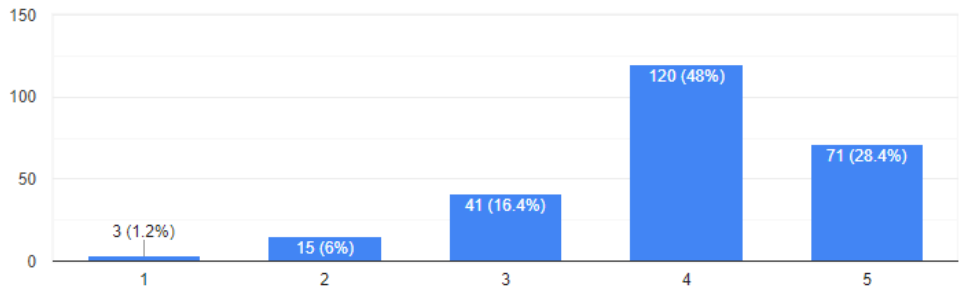
250 responses



When I choose a product, sometimes I refer to others' opinions.

Copy

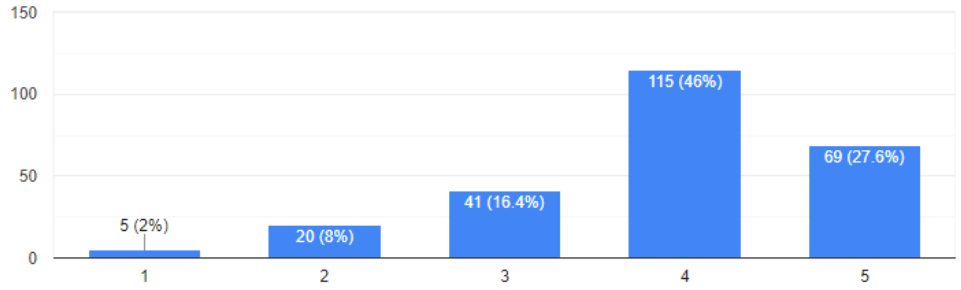
250 responses



When I choose a product, sometimes I refer to others' behaviour.

Copy

250 responses

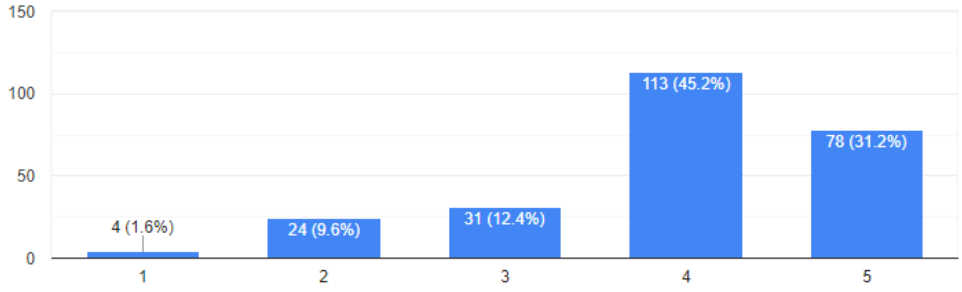


Urge to Buy Impulsively

I experienced several sudden urges to buy things when doing shopping in social commerce.

Copy

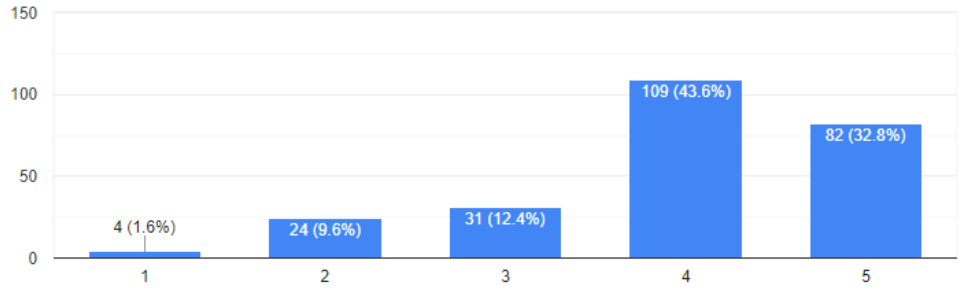
250 responses



I saw several things I wanted to buy even though they were not on my shopping list when shopping in social commerce.

Copy

250 responses



I experienced strong urges to make unplanned purchases when doing shopping in social commerce.

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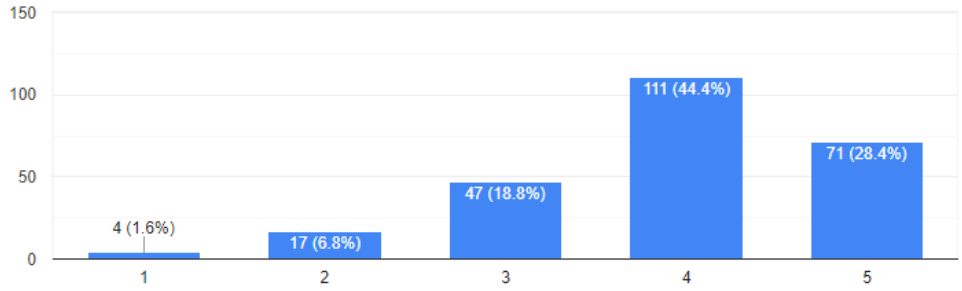
250 responses



When I do shopping in social commerce, I felt a sudden urge to buy something.

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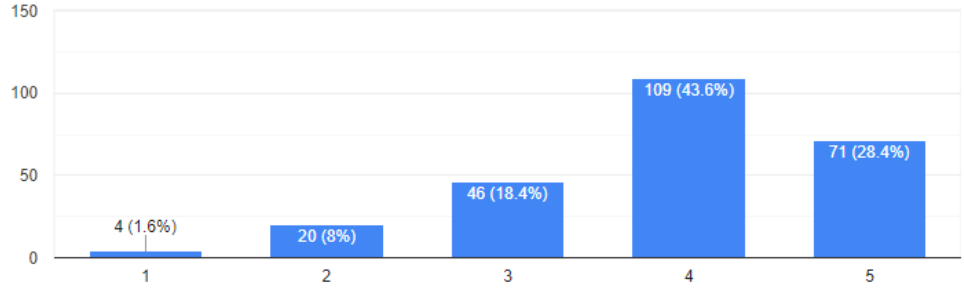
250 responses

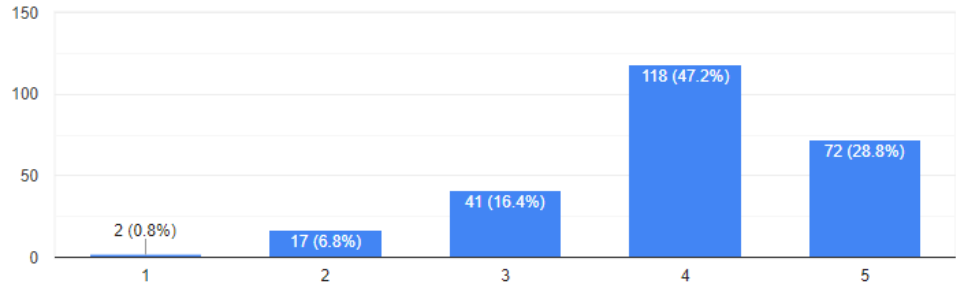


Impulsive Buying Behavior

My purchase was spontaneous.

Copy

250 responses



My purchase was unplanned.

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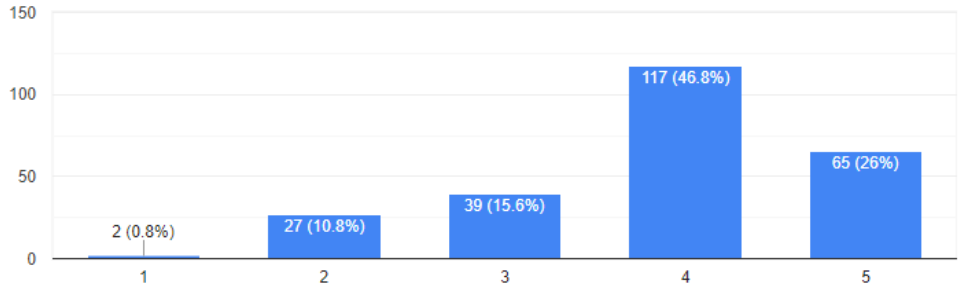
250 responses



I did not intend to make this purchase before this shopping trip.

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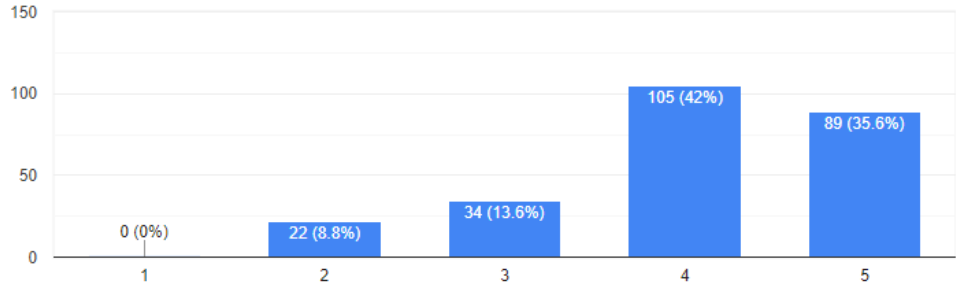
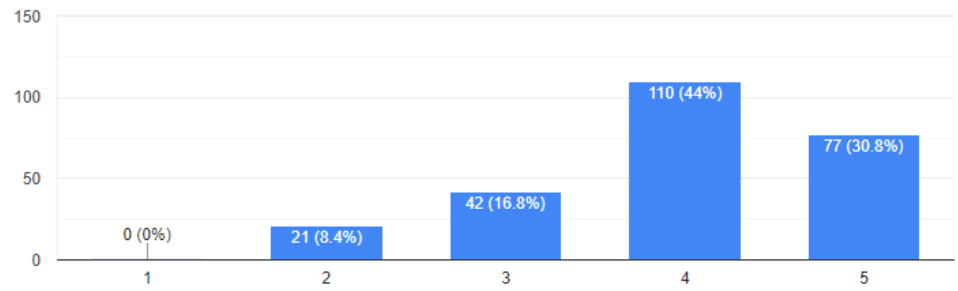
250 responses



I could not resist making this purchase at social commerce.

Copy

250 responses



The End

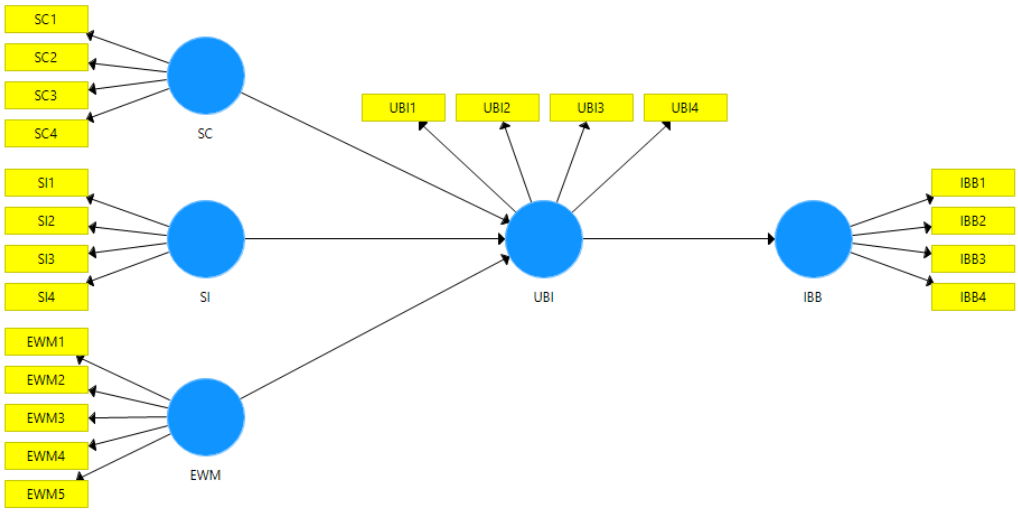
Thank you for your time to fill up this questionnaire. Have a nice day.

Appendix C: SmartPLS Output

Descriptive Analysis: Central Tendencies Measurement of Constructs

Indicators:	Indicator Correlations	Raw File	
	Mean	Standard Deviation	
SC1	3.888	0.927	
SC2	3.980	0.953	
SC3	3.996	0.994	
SC4	3.844	0.965	
SI1	3.840	0.987	
SI2	3.980	0.961	
SI3	3.956	0.969	
SI4	3.848	0.960	
EWM1	3.904	0.946	
EWM2	3.912	0.917	
EWM3	3.868	0.977	
EWM4	3.964	0.891	
EWM5	3.892	0.964	
UBI1	3.948	0.980	
UBI2	3.964	0.989	
UBI3	3.912	0.938	
UBI4	3.892	0.959	
IBB1	3.964	0.891	
IBB2	3.864	0.949	
IBB3	4.044	0.918	
IBB4	3.972	0.901	

Path Model



Inferential Analysis： Measurement and Structural Model

1. Reliability Test

Construct Reliability and Validity

Matrix | Cronbach's Alpha | rho_A | Composite Reliability

	Cronbach's Alpha	Composite Reliability
EWM	0.768	0.836
IBB	0.802	0.869
SC	0.767	0.835
SI	0.759	0.831
UBI	0.849	0.898

2. Convergent Validity Test

Construct Reliability and Validity

Matrix | Cronbach's Alpha | rho_A | Compos

	Average Variance Extracted (AVE)
EWM	0.510
IBB	0.625
SC	0.562
SI	0.565
UBI	0.688

3. Discriminant Validity Test - HTMT Ratio

Discriminant Validity

Fornell-Larcker Criterion | Cross Loadings | Heterotrait-Monotrait Ratio (HTMT) | Heterotrait-M

	EWM	IBB	SC	SI	UBI
EWM					
IBB	0.570				
SC	0.453	0.525			
SI	0.271	0.245	0.325		
UBI	0.299	0.519	0.309	0.373	

4. Lateral Collinearity (VIF)

Collinearity Statistics (VIF)

Outer VIF Values | Inner VIF Values

	EWM	IBB	SC	SI	UBI
EWM					1.136
IBB					
SC					1.173
SI					1.036
UBI		1.000			

5. Path Coefficients: B Value, T Value, P Value

Path Coefficients

Mean, STDEV, T-Values, P-Values | Confidence Intervals | Confidence Interv

	Original Sample (O)	T Statistics (|O/STDEV|)	P Values
EWM -> UBI	0.180	2.693	0.007
SC -> UBI	0.145	2.435	0.015
SI -> UBI	0.289	4.091	0.000
UBI -> IBB	0.440	6.284	0.000

6. R^2 of Endogenous Variables Result

R Square

Matrix | R Square | R Square Adjusted

	R Square	R Square Adjus...
IBB	0.193	0.190
UBI	0.171	0.161

7. F^2 Effect Size

f Square

Matrix | f Square

	EWM	IBB	SC	SI	UBI
EWM					0.035
IBB					
SC					0.022
SI					0.098
UBI		0.239			