The Role of Live Streamer's Credibility on Customer Engagement and Impulsive Buying Decisions in Social Commerce in Greater Jakarta: TikTok Live Streaming Shopping

THESIS

By:
Carrisa Soetiono Sanjaya
20111025

Thesis Supervisor:
Liza Agustina Maureen Nelloh, S.E., M.M., CDM
Ir. Sasotya Pratama, M.T.E

BACHELOR OF BUSINESS ADMINISTRATION
INSTITUT IPMI
JAKARTA
YEAR
2024

The Role of Live Streamer's Credibility on Customer Engagement and Impulsive Buying Decisions in Social Commerce in Greater Jakarta: TikTok Live Streaming Shopping

Prepared by:

Carrisa Soetiono Sanjaya (20111025)

A THESIS

Submitted in a partial fulfillment of the requirements for the degree of Bachelor of Business Administration

CERTIFICATE OF APPROVAL

Name & Student ID: Carrisa Soetiono Sanjaya (20111025)

Topic: The Role of Live Streamer's Credibility on Customer Engagement and Impulsive Buying Decisions in Social Commerce in Greater Jakarta: TikTok Live Streaming Shopping

We hereby declare that this Thesis is from the student's own work, has been read and presented to Sekolah Tinggi Manajemen IPMI Board of Examiners, and has been accepted as part of the requirements needed to obtain a Bachelor of Business Administration Degree and has been found to be satisfactory.

Jakarta, 19 June 2024

Examined by,

Liza Agustina Maureen Nelloh, S.E., M.M., CDM
Supervisor I

Ir. Sasotya Pratama, MTE
Supervisor II

Yulita Fatrina Sukanti, M.Sc., Ph.D.
Chair of Examiner

Cut Sjahrifa Zahirsjah, M.Si
Examiner

Acknowledged by,

Prof.Dr. Ir. M.Syamsul Maarif, M.Eng, Dipl.Ing,DEA

Vice Rector of Academic and Student Affairs

NON-PLAGIARISM DECLARATION FORM

This Thesis is a presentation of our original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgment of collaborative research and discussions.

Also, this work is being submitted in partial fulfillment of the requirements for the Bachelor of Business Administration degree and has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Jakarta, 19 June 2024

Carrisa Soetiono Sanjaya

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACKNOWLEDGEMENT

First and foremost, I'd like to express my deepest gratitude to the Almighty God for His endless love and grace. His blessings and guidance have been my constant companions throughout the journey of my thesis with the title of "The Role of Live Streamer's Credibility on Customer Engagement and Impulsive Buying Decisions in Social Commerce in Greater Jakarta: TikTok Live Streaming Shopping." as a partial fulfillment of the requirements for the degree of Bachelor of Business Administration (BBA) at IPMI International Business School. I would also like to extend my heartfelt thanks to the following parties who have supported me during the creation of this thesis:

1. **Papi, Mami, Ce Carren, Carrin, Kent, Chris, Cinga, Ku Ali, Ie Yus, Akung, Ama, and all my beloved family members**, for their endless trust and encouragement that have been my constant source of strength. I am deeply grateful for their unwavering support and love that have been my foundation and motivation throughout my whole life journey.

2. **Ms. Liza Agustina Maureen Nelloh, SE, MM, CDM, and Mr. Sasotya Pratama, MTE**, my supervisors and supportive lecturers, whose guidance and encouragement have been invaluable during the completion process of this thesis. Thank you both for always being there to guide me through this challenging yet rewarding academic journey.

3. **Jasmine Salsabila Balqis and Alessandro Febrianus**, my Nocturnal fams who have been my pillars of support and companion throughout my journey at IPMI. Their presence and support have brought joy and positivity to my college life. I am thankful for their constant encouragement, understanding, and unwavering support.

4. **Gracelynn Lovena Tanoto, Kelvin William, Cornelita Hana Sanjaya, and Muhammad Luthfi Hawari**, who played important roles and made my college life more colorful. Their companionship, laughter, and support have made my college experience more memorable and enjoyable.

5. **Gabriela Fortuna**, my best friend who has been staying with me since high school and supporting me endlessly. I am grateful for her presence and support, which have been a significant part of my life journey.

6. **Ci Felice, Ci Stella, Om Stefanus, Ko Kenneth and other NLAK family members**, their love, support, and guidance have been invaluable in my personal and spiritual growth. I am thankful for their presence in my life and their constant encouragement as well as prayers have been a source of strength and motivation for me.

7. **Participants of this research**, your contribution has been invaluable in shaping the research and providing a deeper understanding during the completion of this study.

8. **Faculty members and friends at IPMI International Business School**, thank you for sharing knowledge and creating memorable experiences during our time in IPMI.

9. **All other parties who cannot be mentioned individually**, who have helped in providing guidance, feedback, and knowledge throughout the completion of this thesis.

ABSTRACT

The rise of live streaming shopping has prompted questions regarding the impact of streamer's credibility on customer engagement and impulsive buying decisions. This inquiry is underscored by the success of *Douyin* live streamer, *Zheng Xiang Xiang* who achieved significant sales by showcasing products swiftly through a minimalist approach. This phenomenon raises the question of whether a streamer's credibility significantly impacts customer engagement and impulsive buying decisions, and whether such an approach could be effective in Indonesia. Moreover, there is a notable gap in comparative research on the roles of streamers' attractiveness, expertise, and trustworthiness, with disparate findings from previous studies regarding their impact on customer engagement and impulsive buying decisions. This study is focusing on TikTok Live Streaming Shopping in Greater Jakarta, assessing the impact of streamer's attractiveness, expertise, and trustworthiness on impulsive buying decisions, with customer engagement serving as an intervening variable, guided by the SOR (Stimulus-Organism-Response) model theory. The data was gathered by employing purposive sampling with 100 respondents filling out the questionnaires and analyzed using the SEM-PLS technique with SmartPLS4 software. The findings revealed that streamer's attractiveness, trustworthiness, and expertise each positively and significantly impact customer engagement. Furthermore, the study underscores the importance of customer engagement in driving impulsive buying decisions in the live streaming shopping. It is revealed that streamer's attractiveness plays the most important role among the other credibility in impacting customer engagement. Therefore, live streamers, especially MSME owners, should prioritize credibility by maintaining professionalism. Crafting interactive and engaging content, emphasizing authenticity and relatability, and fostering a sense of community are also essential. Businesses seeking live streamers should prioritize those who excel in these areas, while digital marketing experts should emphasize these strategies to maximize campaign effectiveness.

Keywords: Streamer's Attractiveness, Trustworthiness, Expertise, Customer Engagement, Impulsive Buying Decisions, Live Streaming Shopping

CHAPTER 1
INTRODUCTION

1.1 Study Background

In these recent years, a new trend of online shopping known as social commerce has emerged as a result of a significant growth in social media and e-commerce (Xiang et al., 2015). This kind of emergence has increasingly gained popularity for leveraging businesses and providing a more interactive shopping experience. Besides that, social commerce has also been giving a lot of new opportunities to the MSMEs to market their products at lower costs. According to DataReportal (2024), the growth of internet users in Indonesia has reached 185.3 million while according to We Are Social (2024), internet users who shop online at least once a week has reached 59.3% of internet users in Indonesia, which indicates a favorable environment for social commerce activities. Indonesia's social commerce shoppers contribute around 3.6% of online shopping income and it is expected to jump into 5% in 2028 along with the development of digitalization in the next few years (GoodStats, 2024).

The recent trends that have been arising in social commerce is the use of live streaming which enables the business to connect with customers in real-time while promoting their products or services and responding to the customer inquiries (Xu et al., 2020). Live streaming not only affects consumer buying decisions by providing entertainment and information but also transforms the way businesses market their products or services and maintain relationships with existing and potential customers. As live streaming involves a direct communication between the streamers and the viewers, it also serves as a unique platform for engagement and interaction (Wongkitrungrueng et al., 2020; Cai & Wohn, 2019). A survey was conducted in the third quartile of 2023 which mentioned the reasons of sellers who choose live streaming features to promote their products and services (IPSOS, 2023). There are several different reasons that resulted in 73% of them felt the increasing of turnover rate, 68% of them felt the expansion of market reach, 64% of them enjoyed savings

in promotional costs, 68% of them felt the ease of interacting with their customers in real time, 59% of them obtained increasing customer trust, 49% of them felt the transactions are safer and 37% of them felt more superior in the competition.

Live streaming in social commerce first emerged in China in 2016 with the launch of *Taobao Live* and since then live streaming shopping has been growing rapidly across the nation reaching an estimated Gross Merchandise Volume (GMV) of US$520.5 billion in 2022 (ECDB, 2024). In China, *Taobao* is the most popular live streaming shopping platform among the consumers, while in terms of Gross Merchandise Volume (GMV) *Douyin* is surpassing *Taobao* as well as most used live streaming commerce after *Taobao* with a usage rate of 51% in 2022 . While *Douyin* is only available in China, in terms of international counterpart it is known as TikTok which has become a prominent platform for live streaming shopping and has experienced substantial success in terms of transaction value and orders.

Indonesia boasts the second-largest user base on TikTok, with a total of 126.8 million users as of January 2024 (DataReportal, 2024). As previously, TikTok faced a ban in October 2023 due to the Indonesian government's prohibition of transactions through social commerce. However, TikTok managed to make a comeback by strategically acquiring Tokopedia for its transactions operations in December 2023. ByteDance, TikTok's Chinese parent company, spent US$781 million for a 75.01% stake in Indonesian marketplace Tokopedia (ECDB, 2024). Furthermore, as part of the agreement, Tokopedia agreed to acquire TikTok Shop's Indonesian operations for US$340 million, thereby expanding its presence in the Indonesian e-commerce landscape. Consolidating their operations, the two entities will operate under the existing PT Tokopedia entity, with TikTok assuming a majority ownership. Despite this restructuring, TikTok remains firmly under the realm of social commerce with live streaming shopping continuing to be facilitated through its platform, while transactional operations will be channeled through Tokopedia.

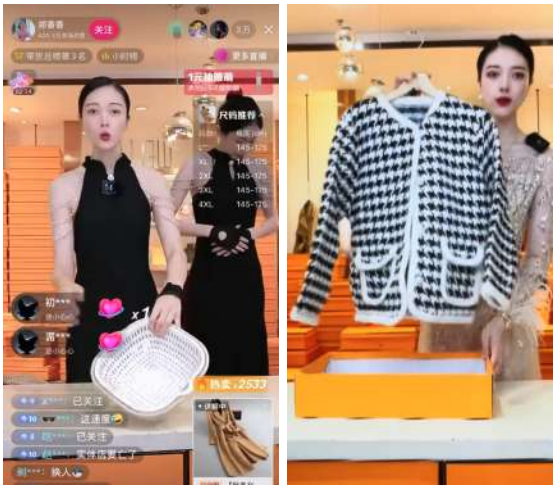
TikTok live streaming not only bridging the gap between businesses and customers by providing detailed product descriptions but also serves as a significant

promotion tool that facilitates customers to make buying decisions as well as fostering immersive experiences that strengthen customer engagement. According to Wongkitrungrueng & Assarut (2020), creative and engaging live streaming has the potential to evoke spontaneous and impulsive actions among buyers. Based on research, more than 60% of customers engage in impulsive buying following product recommendations from the live streamers (CEIBS, 2020). Therefore, live streamers play a big role in engaging with the customer and influencing their buying decisions, particularly in stimulating impulsive buying decisions. Streamers can offer information about the product's features, use, shape, color, and advantages, which enhance viewers' understanding and appeal. Additionally, the engaging and interesting personalities of the streamers can capture the attention of viewers, motivating them to make additional purchases, even if they are not necessarily needed. As reported by Parapuan (2022) during the TikTok Shopping Hoki Sale program, there was a remarkable increase in transaction value (GMV) by 411% and a surge in orders at the TikTok by 564.1% compared to the previous period. This data also highlights the effectiveness of live streaming features in driving impulsive buying decisions.

However, a new question has been arising regarding the impact of streamer's credibility on customer engagement and subsequent impulsive buying decisions. This concern is underscored by a notable case involving *Douyin* live streamer, *Zheng Xiang Xiang* that has attracted a lot of attention from the viewers by redefining live streaming in social commerce with a minimalistic approach since last October 2023. Utilizing a minimalist presentation style, *Zheng* swiftly showcases each product within three seconds, maintaining a neutral facial expression while displaying the item and mentioning its price before swiftly transitioning to the next product. Enhancing the visual appeal of her broadcasts, she incorporates Hermès boxes as properties to highlight the promoted products, which predominantly fall within the price range of under 10 yuan or approximately US$1.4. Surprisingly, despite the low-cost nature of the items and using a minimalistic approach, her method has proven remarkably successful, resulting in total sales reaching approximately 100

million yuan or US$14 million within a week (ECDB, 2024). As a result, there has been a growing question regarding whether a streamer's credibility truly holds a substantial impact on customer engagement, potentially driving impulsive buying decisions. Additionally, there is a debate on whether this minimalist approach could be effectively applied in Indonesia, or if it would be more effective to adhere to the original approach.

Figure 1.1 *Douyin* Live Streamer - *Zheng Xiang Xiang*



According to Ohanian (1990), streamer's credibility dimensions involved the streamer's attractiveness, trustworthiness and expertise that was perceived by the audience which was also mentioned in Liu's research that explored the factors that affect consumers' purchasing intention and behavior in live streaming e-commerce (Liu, 2022). Streamer's attractiveness encompasses their personality, appearance, talent, and enjoyable streaming style as perceived by the viewers during live streaming sessions (Ha & Lam, 2016). Streamer's trustworthiness refers to the level of confidence consumers place in the streamer's honesty, credibility, and integrity, as perceived by the viewers (Park & Lin, 2020). While, streamer's expertise pertains to the extent to which viewers regard the streamer as knowledgeable and proficient in providing comprehensive information about the product (Homer & Kahle, 1990). In terms of customer engagement, it refers to the emotional or psychological involvement of consumers with a central object, prompting recurrent interactions that extend beyond transactional motivations (Rather et al., 2019). Extensive research by

Hollebeek and Macky (2019), and Jessen et al. (2020) underscores that customer engagement plays a pivotal role in influencing how consumers process informational cues and subsequent decision-making in online purchase scenarios, thereby potentially influencing the customers' inclination on impulsive buying decisions.

Several studies regarding streamer's credibility have been conducted outside of Indonesia with different focusing variables. Previous research in China and Malaysia has discussed the role of streamer's credibility on affective reaction in customers specifically, perceived enjoyment (Leong et al., 2022; Lee & Chen, 2021). While others discussed its impacts towards purchase intention (Hossain et al., 2023; Lin & Nuangjamnong, 2022; AlFarraj et al., 2021). Hossain et al. (2023) investigated the consumer live streaming purchasing behavior by using SOR Model (Stimulus - Organism - Response) theory in Bangladesh, which resulted in source credibility significantly affects the customer engagement. Luo et al. (2024) explored how live-streaming influences customer engagement and impulsive buying tendency as moderated by deal proneness in China, which resulted in one of the central route variables such as streamer's credibility has a positive effects on customer engagement as well as customer engagement on impulsive buying tendency.

Therefore, in accordance to the previous empirical evidence from *Zheng Xiang Xiang* as live streamer on *Douyin* and based on previous studies regarding streamer's credibility, this research will further analyze the impact of streamer attractiveness, trustworthiness, and expertise on customer engagement and impulsive buying decisions by focusing on TikTok live streaming shopping. SOR Model theory will be applied in this research as it is used in investigating several previous studies in live-streaming shopping with different environmental stimuli that trigger the cognitive change and behavioral response. For instance, Hu & Chaudhry (2020) who investigate relational bonds and Xu et al. (2020) who explore parasocial interactions as the stimuli that affect the customers' engagement and impulse buying mediated by their cognitive and affective reactions by using SOR Model theory in the context of live streaming.

1.2 Problem Statement

As previously mentioned, this research was conducted due to the viral case of *Zheng Xiang Xiang*, *Douyin* live streamer that managed to engage with a lot of viewers that led to their impulsive buying decisions, despite her minimalistic approach. Therefore, there is an urgency to investigate the dimensions related to streamer's credibility on customer engagement that leads to impulsive buying decisions in live streaming shopping. Previous studies regarding streamers' credibility primarily highlights the positive impact of their attractiveness (Xu et al., 2020) and expertise (Lee & Chen, 2021) on buying decisions within the context of live-streaming shopping. However, a limited number of studies have also explored the significance of streamers' trustworthiness as a determinant of their credibility (Luo et al., 2024; Park & Lin, 2020).

Based on the study background, the researcher found an empirical-theoretical gap concerning *Zheng Xiang Xiang*, a live streamer on *Douyin*, who employs a minimalistic approach to generate impulsive buying behavior among customers. This approach contrasts with previous studies that emphasize the significant impact of streamer credibility on customer engagement and, consequently, impulsive buying decisions. The researcher also found a population gap as the variable dimensions of streamer's credibility, such as streamer's attractiveness, trustworthiness and expertise are still rarely studied in Indonesia, specifically in the Greater Jakarta area. Most recent studies were conducted outside of Indonesia, such as Hossain et al. (2023) explored on the consumer live streaming purchasing behavior in Bangladesh, by including the dimensions of source credibility, specifically, streamer's attractiveness, trustworthiness and expertise. Luo et al. (2024) conducted their study in China regarding live streamer's credibility that influences customer engagement and impulse buying tendency. Moreover, this research will investigate using SOR Model (Stimulus - Organism - Response) theory as the theoretical framework, whereas the most recent study conducted by Luo et al. (2024) has not conducted SOR Model.

1.3 Research Questions

There are several research questions that the author will investigate, such as:

1. How Does the Streamer's Attractiveness has a positive and significant impact on Customer Engagement in TikTok Live Streaming Shopping in Greater Jakarta?
2. How Does the Streamer's Trustworthiness has a positive and significant impact on Customer Engagement in TikTok Live Streaming Shopping in Greater Jakarta?
3. How Does the Streamer's Expertise has a positive and significant impact on Customer Engagement in TikTok Live StreamingShopping in Greater Jakarta?
4. How Does Customer Engagement has a positive and significant impact on Impulsive Buying Decisions in TikTok Live Streaming Shopping in Greater Jakarta?

1.4 Research Objectives

This research aims to explore and understand the factors that influence streamer's credibility on customer engagement in TikTok live streaming, specifically focusing on the streamer's attractiveness, trustworthiness and expertise. Additionally, the research aims to examine the relationship between customer engagement and impulsive buying decisions in the context of TikTok live streaming. There are several research objectives that this research will identify, such as:

1. To investigate whether the Streamer's Attractiveness has a positive and significant impact on Customer Engagement in TikTok Live Streaming Shopping in Greater Jakarta.
2. To investigate whether the Streamer's Trustworthiness has a positive and significant impact on Customer Engagement in TikTok Live Streaming Shopping in Greater Jakarta.

3. To investigate whether the Streamer's Expertise has a positive and significant impact on Customer Engagement in TikTok Live Streaming Shopping in Greater Jakarta.
4. To investigate whether Customer Engagement has a positive and significant impact on Impulsive Buying Decisions in TikTok Live Streaming Shopping in Greater Jakarta.

1.5 Research Benefits

1.5.1 Theoretical Benefits

Theoretically, the findings of this study will provide insights into the future studies that can be used as a reference to further investigate the role of streamer's credibility on customer engagement and impulsive buying decisions in Indonesia, especially within the context of live streaming shopping. Moreover, this study will specifically focus on the dimensions of the streamer's credibility, such as streamer's attractiveness, trustworthiness and expertise; customer engagement; and impulsive buying decisions that adopt a more extensive theory of SOR Model, specifically in TikTok live streaming shopping in Greater Jakarta.

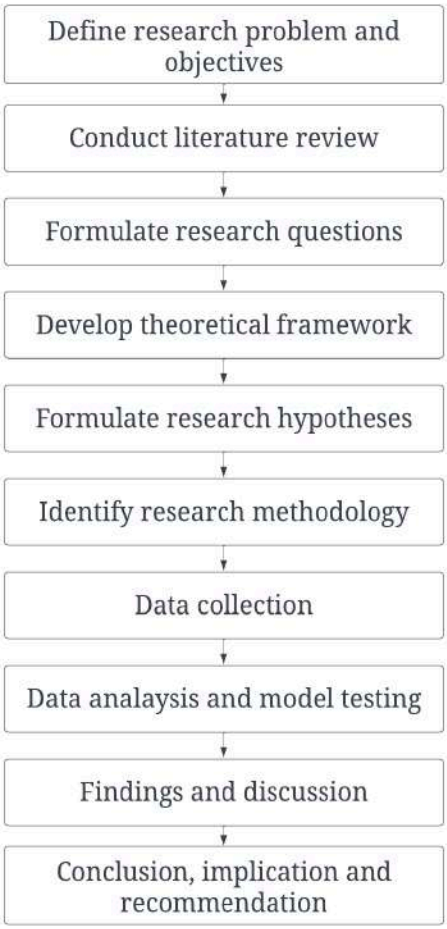
1.5.2 Practical Benefits

This study offers practical benefits for practitioners, especially for live streamers in the Greater Jakarta area, by providing insights into the dimensions of streamer credibility that significantly impact customer engagement. This understanding enables practitioners to set a better approach and marketing strategies, enhancing specific dimensions to increase impulsive buying decisions and ultimately generate sales. MSMEs (Micro, Small Medium Enterprise) owners who are also live streamers can benefit by improving their live streaming approaches based on these insights, potentially expanding their customer base and revenue. Businesses who are seeking live streamers for marketing can make informed decisions, focusing on streamers with effective credibility dimensions.

Additionally, digital marketing experts could gain a deeper understanding of live streamer importance, integrating this knowledge to enhance campaigns and leverage credible streamers for increased customer engagement and boost sales.

1.6 Research Flow

Figure 1.2 Research Flow



1.7 Thesis Structure

This research will consist of five chapters such as following:

In the first chapter, it will explore the background which includes the urgency as well as the motivation of this study. This will also delve into TikTok's increasing popularity and its capacity for live streaming as well. Additionally, the researcher will

shed more insights on the research topic, objectives of the study and emphasizing the understanding of live streamers' credibility.

In the second chapter, it will look into the existing body of knowledge surrounding several variables that are included in this research, including the dependent and independent variables. It will examine their definitions, theories, and past research studies related to these concepts. The variables included in this chapter are Streamer's Attractiveness, Trustworthiness, Expertise, Customer Engagement and Impulsive Buying Decisions. This chapter will also provide a theoretical framework in order to ease hypothesis development.

In the third chapter, the research methodology will be presented in detail. The research design, including data collection methods and sources, will be discussed. The sampling procedures employed to target Titkok Live Streaming Shopping users in Greater Jakarta will also be outlined. Moreover, this chapter will focus on measurement of variables covering dependent, independent and intervening variable identification including indicators used during measurement, as well as discuss data analysis techniques.

In the fourth chapter, it will focus on data collected being analyzed using SEM-PLS (Structural Equation Modeling with Partial Least Squares) method. Details of the results obtained from this analysis are presented alongside reporting styles and respondent profiles. The hypotheses are also assessed in this chapter to determine their acceptance or rejection based on findings reached by analyzing them.

In the final chapter, it will conclude with a detailed analysis and comprehensive summary of the entire study. The theoretical and practical implications arising from this research will be discussed with main focus on how this study is important to academics and practitioners in the live streaming industry. Furthermore, this chapter will highlight present limitations as well as suggest areas for future investigation to enrich and build upon the existing knowledge base about it.

CHAPTER 2
LITERATURE REVIEW

2.1 Literature Review

In this study, the overarching theoretical framework that will serve as the guiding principle and foundation for the research endeavors is the Stimulus - Organism - Response (SOR) Model which also acts as the grand theory.

2.1.1 SOR Model

The theoretical framework of the SOR model which consists of three elements, such as stimulus (S), organism (O), and response (R) was proposed by Mehrabian and Russel (1974) in the field of environmental psychology, mentioning that environmental cues lead to changes in an individual's cognitive and emotional states that could trigger behavioral responses. Stimuli include factors beyond an individual's influence, impacting the internal state of organisms that are caused by the external stimuli. While acting as a mediator between stimulus and response, organism refers to an individual's internal state and regulates the final behavioral response to stimulus. The response is the final action and serves as a comprehensive outcome reflecting on the regulatory processes (Fiore & Kim, 2007). This theoretical framework has been used in several studies regarding online shopping in order to understand consumer's behavior (Eroglu et al., 2003; Chan et al., 2017). Researchers have proposed a research model based on the SOR framework to explore the reaction and behavior of consumers after certain stimuli in live streaming commerce (Hu & Chaudhry, 2020; Xu et al., 2020; Zhang et al., 2022).

In this study, we will be narrowing the theoretical framework that focuses on the role of live streamer's credibility in live streaming shopping of social commerce. The stimuli in this study are identified as streamer's attractiveness, trustworthiness and expertise. According to research by Chan et al. (2017), consumer emotional state greatly influences the buying decision process.

Therefore, the stimuli shown during a live stream can affect viewers' affective and cognitive states, moreover affecting their impulsive purchases. Customer engagement is one of the outcomes or impacts of viewers' affective and cognitive states during live streams that also act as the intermediary between the stimuli and the response (Hossain et al., 2023). dimensions of streamer's credibility, such as attractiveness, trustworthiness and expertise serve as stimuli that contribute to the customer's internal state, encouraging them to continue engaging with the live stream that could lead to impulsive buying decisions.

2.1.2 Social Commerce

Social commerce is the practice of engaging in social media and networking sites for the activities of e-commerce and online shopping. Consequently, social commerce can be regarded as a subset or an evolved form of electronic commerce (Liang & Turban, 2011; Curty & Zhang, 2011) and encompasses a fusion of social and commercial activities (Liang & Turban, 2011). It leverages the social interactions, connections and networks for e-commerce activities like sharing shopping experience, product evaluations, suggestions and discussions (Liang & Turban, 2011). Social experience regarding shopping is created by the provided features like friends lists or followers, comments, likes, shares and messaging. It helps to promote the creation and sharing of content about the products, brands, purchases, and experiences that includes the reviews, images, videos, blog, articles, hashtags and many more (Ahmed & Siddiqui, 2020).

In the context of marketing, social commerce pertains to businesses establishing a significant online presence in the marketplace, utilizing Web 2.0 or social media as a direct marketing approach to support customers' decision-making processes and behaviors (Lee, et al., 2008). Moreover, social commerce is described as an online application that combines Web 2.0 technologies with interactive platforms like social media websites and virtual content communities within a commercial environment (Lee et al., 2008).

2.1.3 Live Streaming

Live streaming refers to the buying and selling activities that take place within the e-commerce realm under the live streaming platform (Lee & Chen, 2021). This concept involves the integration of live streaming platforms, which encompass the technological and infrastructural components necessary to create a virtual environment facilitating real-time interactions, entertainment, content creation, and commerce. Within such an environment, live streaming spaces provide virtual arenas for streamers to broadcast their content while allowing users to watch and engage with the streamers directly. The act of making purchases through live streaming, often referred to as live streaming commerce, is a relatively new phenomenon. Live streaming commerce is characterized as a subset of e-commerce that combines real-time social interactions, a unique characteristic of live broadcasts (Cai et al., 2018).

Social commerce has included a live streaming feature which enables immersive and more engaging shopping experiences. With the advent of live streaming into social commerce, businesses and customers have gone through a great revolution. Live stream refers to broadcasting of video content in real time via social commerce where the viewers are able to communicate with the person who created it at that moment (Cai & Wohn, 2019). Through live streaming, consumers can obtain more detailed information about products they want to buy and this affects how they shop as well (Wongkitrungrueng & Assarut, 2020). It is a dynamic and interactive platform where streamers can show and advertise their own commodities or services immediately. On the contrary, viewers may be involved by inquiring queries from them, giving opinions or even purchasing products during the course of its broadcast. This high level of engagement and interactivity sets apart social commerce's live streaming from conventional e-commerce models.

2.1.4 Streamer's Attractiveness

The attractiveness of streamers is the combination of the streamer's personality, appearance, talent and enjoyable streaming style that the viewers notice when watching a live stream (Ha & Lam, 2016). The role of physical attractiveness among streamers serves as a significant role in captivating viewers and cultivating popularity (Xu et al., 2020; Wang et al., 2018). Moreover, Xu et al. (2020) observed that the irresistible pull of streamers extends beyond their physicality as consumers are often drawn by their appealing personality traits, such as humour and sincerity. This inherent connection between streamers and their viewers' preferences is further evidenced in the research of Cai and Wohn (2019), highlighting a relationship where viewers are drawn to livestreams featuring streamers who possess the characteristics they hold in high regard. Therefore, the multifaceted appeal of streamers, encompassing their inner qualities and outer appearance, creates a mesmerizing viewing experience that not only captures attention but also fosters engagement.

The streamer's attractiveness to viewers can have a significant impact on their engagement which in turn impacts their buying decisions. For instance, the viewers might find the personality of the streamer as more reliable, competent, or credible based on their appearance. Moreover, the viewers might find the streamer attractive with a particular reason of their ability to influence them to purchase the products or to believe that the product information is valuable. Therefore, streamer's attractiveness plays a significant role as a content stimulus that also helps to build and maintain engagement with the viewers that lead to deeper emotional connections and increase the probability that the viewers will make a purchase.

2.1.5 Streamer's Trustworthiness

Trustworthiness refers to the level of customers confidence in encompassing perceptions of streamer's dependability, honesty, sincerity and reliability (Luo et

al., 2024; Lin, 2022; Park & Lin, 2020), while previous study by Ohanian (1990) defined trustworthiness as “the degree of confidence customers have in an influencer delivering their point of view". In the context of live streaming, trustworthiness plays a crucial role in influencing viewers' attitudes and behaviors. Previous studies mentioned that trustworthiness significantly influences viewers' perceptions, attitudes, and behaviors, ultimately shaping brand credibility, purchase intentions, and interactions within the live streaming environment (Hua et al., 2023, Lin, 2022; Lyu, 2021).

The trustworthiness of streamers which is included as one of the streamer’s credibility is essential fostering favorable interactions with the customers, shaping their perceptions, and influencing their attitudes towards the products and services featured in live streaming sessions (Lee & Chen, 2021). Park and Lin (2020) mentioned that streamer’s trustworthiness could drive the consumer’s purchase decisions. Therefore when the customer trusts the streamer, they will tend to feel the promoted products are worth buying.

2.1.6 Streamer’s Expertise

Expertise refers to the streamer's level of experience, proficiency, achievements, status within a specific subject that they demonstrate, as well as their ability to effectively convey knowledge and insights to viewers (Jiang, 2024; Heo et al., 2020). According to Heo et al. (2020), streamer expertise has a pivotal role in fostering credibility, building relationships with viewers, and cultivating positive consumer experiences within the live streaming shopping environment. Streamers who exhibit expertise not only attract viewers but also contribute in building positive brand attitudes and influencing buying decisions (Jiang, 2024). Their ability to provide valuable insights and recommendations related to the showcased products or services signifies their proficiency and enhances the overall consumer experience.

During live streaming sessions, streamers usually present and showcase products to viewers, allowing them to delve deeper into product details and features. The customers will then make informed decisions regarding potential purchases based on the information provided (Chen et al., 2020). Therefore, the extent to which streamers demonstrate knowledge and accuracy in their presentations may significantly impact consumer buying behavior. Hu and Chaudhry (2020) proposed the concept of structural bonds to represent streamers' professional knowledge, which has been found to not only enhance consumers' emotional commitment to streamers and the online marketplace but also directly generate customer engagement in live streaming shopping activities.

2.1.7 Customer Engagement

There has been considerable focus on the concept of customer engagement in both business practice and academic research, which involves customers actively participating in interactions with a company, resulting in the collaborative generation of value and experiences (Brodie et al., 2011). Customer engagement represents the emotional and psychological connection consumers develop with a focal object, prompting interactions that surpass mere transactional motivations (Rather et al., 2019; Thakur, 2018). The emergence of customer experiences within live streaming platforms necessitates a reevaluation of how we define and measure customer engagement.

Live streaming fosters a social-based online community that supports multifaceted relationships between customers and streamers (Dessart et al., 2015; Ming et al., 2021). Several studies propose an understanding of various aspects of customer engagement, encompassing cognitive, affective, and behavioral aspects (Brodie et al., 2011; Dessart et al., 2015; Hollebeek, 2019). While cognitive engagement encompasses the enduring and active mental states experienced by a consumer, affective engagement refers to the overall and enduring level of emotions experienced that a consumer experiences. Meanwhile, behavioral engagement represents behavioral manifestations directed towards an engagement

partner, extending beyond purchase and driven by motivational factors (Dessart et al., 2015).

2.1.8 Impulsive Buying Decisions

Impulsive buying, as described by Beatty and Ferrel (1998) (also cited in Luo et al., 2024), involves the spontaneous and immediate purchase of items without prior shopping intentions for a specific product or shopping goal. Chen and Yao (2018) refers impulsive buying decisions with a psychological inclination toward immediate responses.

According to Lee and Chen (2021), impulsive buying is a situation whereby customers feel an urge to purchase items that they had not initially planned for without considering the potential consequences. Jiang and Cai (2021) highlight that consumers frequently engage in impulsive buying behavior while watching influencer livestreams. Such behavior involves unplanned purchases that are made spontaneously due to external stimuli and internal psychological factors (Iyer et al., 2019). Additionally, Jiang and Cai (2021) suggest that the enthusiasm shown by the livestreamers influence the consumers' impulsive buying decisions positively. The lively atmosphere and high interaction levels during livestream shopping draw consumers in, leading to impulsive buying (Ku et al., 2019; Xu et al., 2020).

Different scholars have varied points of views regarding impulse buying which sometimes relate it with unplanned purchases. This research defines impulsive buying as "After being exposed to external stimuli while shopping, consumers experience intense strong emotional responses, which urge them into making unscrupulous, irrational, willingful, or immediate purchases of products they had no intentions of purchasing." As a result, live stream impulse buying refers to a sudden purchase made without any intention before or even after participating in a live streaming session.

2.2 Findings on Previous Research

This study collected the literature and journal by using the Publish or Perish application that focused on the keywords of “live streaming”, “streamer credibility”, “customer engagement” and “impulsive buying”. This research came up with several previous research that related to the topic that this research will conduct. The relevant previous studies such as following:

Table 2.1 List of Previous Research

Title	Author	Variable	Location	Methodology	Findings
Boosting customers’ impulsive buying tendency in live-streaming commerce: The role of customer engagement and deal proneness	Luo, X., Cheah, J., Hollebeek, L., & Lim, X. (2024)	Product Information Quality, Streamer Interaction Quality, Streamer Credibility, Review Consistency, Resonant Contagion, Customer Engagement, Deal Proneness, Impulsive Buying Decisions	China	SEM-PLS	Streamer credibility including expertise and trustworthiness has a significant impact on customer engagement; Customer engagement also has a significant impact on impulsive buying decisions
The Power of Live-Streaming in Consumers’ Purchasing Decision	Hossain, Md. A., Kalam, A., Nuruzzaman, Md., & Kim, M. (2023)	Source Credibility, Response Capability, Platform Interactivity, Customer Engagement, Swift Guanxi, Purchase Intention, Actual Purchase	Bangladesh (SOR Model Theory)	AMOS	Source credibility including expertise, attractiveness, and trustworthiness has a significant impact on customer engagement; Customer engagement also has a significant impact on purchase intention and actual purchasing behaviour
Impulse Buying in Live Stream Based on the Stimulus -	Leong, T. K., Meng, T. P., &	Attractiveness, Expertise, Promotion, Scarcity, Perceived Enjoyment, Arousal,	Malaysia (SOR Model Theory)	SEM-PLS	Attractiveness and expertise significantly influence consumers' perceived enjoyment, and impacting impulse

Organism - Response Framework	Alex, T. Y. (2022)	Impulse Buying			buying behavior.
Impulse Buying Behaviors in Live Streaming Commerce Based on the Stimulus - Organism - Response Framework	Lee, C., & Chen, C. (2021)	Attractiveness, Trustworthiness, Expertise, Product Usefulness, Purchase Convenience, Product Price, Perceived Enjoyment, Perceived Usefulness, Urge to Buy Impulsively	China (SOR Model Theory)	SEM-PLS	Attractiveness and expertise is a significant factor of perceived enjoyment, and consequently on impulsive buying
Exploring the Role of Influencers and Customer Engagement on Purchase Intention in TikTok Live Streaming Shopping	Lin, Q., Nuangjamnong, C. (2022)	Customer Trust, Influencer's Credibility, Customer Engagement, Purchase Intention	Thailand	SPSS	Streamer's attractiveness, trustworthiness, and expertise plays a vital role in shaping customer engagement and customer's purchasing intention
Examining the impact of influencers' credibility dimensions: attractiveness, trustworthiness and expertise on the purchase intention in the aesthetic dermatology industry	AlFarraj, O., Alalwan, A. A., Obeidat, Z. M., Baabdullah, A., Aldmour, R., & Al-Haddad, S. (2021)	Influencer's credibility, Online Engagement, Purchase Intention	Jordan	SPSS	Customer engagement emphasize its significance in enhancing purchase intention and mediating the relationship between influencers' credibility dimensions and purchase intention.

2.3 Hypothesis Development

2.3.1 The Positive and Significant Impact of Streamer's Attractiveness on Customer Engagement

According to Song & Liu (2021), the attractiveness of a streamer holds a significant role in consumer engagement in live streaming shopping. Within this context, the attractiveness and impact of streaming media deeply influence the engagement of customers who are addicted to the live streaming shopping environment (Cai et al., 2018). There were also several previous studies observed that the streamer's attractiveness has a significant impact on customer engagement in the context of live streaming commerce, fostering a sense of community among viewers and cultivating positive intentions (AlFarraj et al., 2022; Chen & Liao, 2022; Hossain et al., 2023).

Streamers leverage their personal traits to captivate viewers on live streaming platforms, aiding viewers in interpreting symbolic values such as social codes, relationships, and personal identity, included as factors with substantial impact on customer engagement (Wongkitrungrueng & Assarut, 2020). Furthermore, the source of attractiveness can enhance the levels of customer trust (Wongkitrungrueng and Assarut, 2020), which consequently increase customer engagement as well.

Based on this understanding, the author proposes the following hypothesis:

H1: Streamer's Attractiveness Has a Positive and Significant Impact on Customer Engagement

2.3.2 The Positive and Significant Impact of Streamer's Trustworthiness on Customer Engagement

Luo et al. (2024) explores various aspects of streamer's trustworthiness impact on customer engagement including their dependability, honesty, sincerity, and reliability. The impact of highly trustworthy influencers extends far beyond mere brand credibility as it also significantly shapes consumer attitudes and

purchase decisions (Chung & Cho, 2017). According to Berne & Marzo (2020), this perceived trustworthiness of streamers plays a pivotal role in consumer engagement dynamics. Furthermore, Hossain et al. (2023) also mentioned that the influence of streamer's trustworthiness on the relationship of customer trust and engagement highlights the fundamental role of trust in fostering engagement. Within the realm of live streaming shopping, trustworthiness emerges as a fundamental element, exerting influence not only on customer engagement but also on the overall relationship dynamics between streamers and customers (Zhao et al., 2023; Liu, 2022).

Based on this understanding, the author proposes the following hypothesis:

H2: Streamer's Trustworthiness Has a Positive and Significant Impact on Customer Engagement

2.3.3 The Positive and Significant Impact of Streamer's Expertise on Customer Engagement

According to Heo et al. (2020), streamer's expertise has been identified as a key factor influencing consumer engagement on their content during live streaming. This makes information they present more authentic and therefore consumers are encouraged to interact with the contents more actively. Several previous studies constantly discussed streamer's expertise impact on customer engagement (AlFarraj et al., 2022; Hossain et al., 2023; Luo et al., 2024). Hu and Chaudhry (2020) also proposed that structural bonds which indicate product knowledge for a live streamer directly encourage shoppers to engage in buying items through live streaming.

Streamers perceived as experts in their respective field are likely to be more persuasive and increase engagement based on research by Erdogan (1999) and Ohanian (1990). Streamers who appear highly knowledgeable are likely to have a greater influence over consumers, leading them into becoming more persuasive than before when it comes down to efforts inclination towards customer

engagement. Therefore, streamer's expertise would strongly determine the level of customer engagement.

Based on this understanding, the author proposes the following hypothesis:

H3: Streamer's Expertise Has a Positive and Significant Impact on Customer Engagement

2.3.4 The Positive and Significant Impact of Customer Engagement on Impulsive Buying Decisions

Customer engagement is defined as the level of investment that customers put into their brand interactions (Hollebeek et al., 2019). Linked to emotions or social dynamics, customer engagement is responsible for impulsive buying behavior (Ou et al., 2020; Zuo et al., 2021). It has been suggested by Hollebeek et al. (2022) that different intentionality levels can be seen during engagement, from the conscious and purposeful to the more subconscious and unintentional. Thus, customers may find themselves interacting with content in ways that they are not necessarily conscious of or actively intending.

In live streaming, streamers' credibility can serve as stimulation for customers' excitement, leading to increased emotional engagement and a tendency for impulsive buying (Luo et al., 2024). As customer engagement rises, individuals are more likely to invest cognitive, affective, and behavioral resources (Hollebeek et al, 2019). This heightened level of engagement, in turn, enhances their sense of immersion within the streamer's live streaming, thereby influencing their inclination towards impulsive buying decisions (Gulfraz et al., 2022; Yi et al., 2023). Moreover, the customer's experience with both the streamers and the other viewers can potentially trigger a flow state, where they become drawn in the content and forget everything else around them (Hollebeek et al., 2022). In this state of flow, engaged customers are more susceptible to feelings of immersion, which further facilitates their inclination towards unplanned purchases (Zuo et al., 2021; Lin et al., 2022).

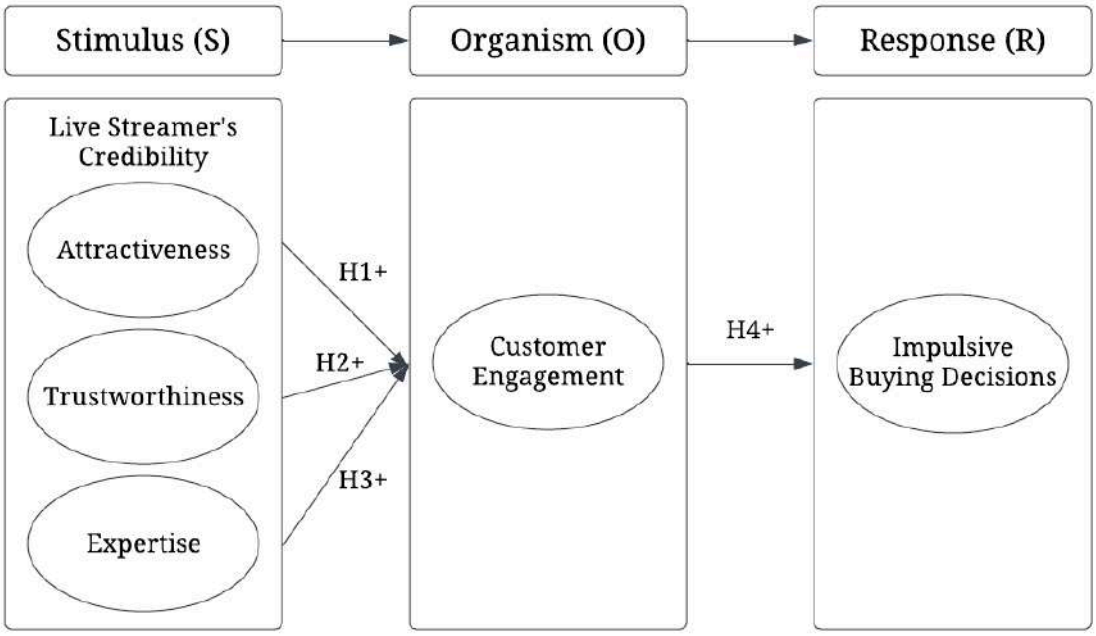
Based on this understanding, the author proposes the following hypothesis:

H4 : Customer Engagement Has a Positive and Significant Impact on Impulsive Buying Decisions

2.4 Theoretical Framework

In this study, the theoretical framework depicted in Figure 2.1 utilizes the SOR (Stimulus-Organism-Response) framework, where streamer's attractiveness, trustworthiness and expertise which act as stimuli, affecting customer engagement as the organism, which, in turn, lead to impulsive buying decisions as the response. Therefore based on the explanation of the hypotheses development, the theoretical framework of this research is constructed as following:

Figure 2.1 Theoretical Framework



Source: Hossain et al., (2023) ; Luo et al., (2024)

CHAPTER 3
METHODOLOGY

3.1 Research Design

The study will explore the relationship between the independent variables, namely streamer's attractiveness, trustworthiness and expertise, the intervening variable such as customer engagement, and the dependent variable, which is the impulsive buying decisions in TikTok Live Streaming. As explained by Sekaran and Bougie (2016), a causal study is typically conducted through a cross-sectional design, collecting responses from respondents at a specific point in time. The research will focus on the TikTok Live streaming shopping customers in Greater Jakarta, Indonesia, as the target audience. The purpose of this study is to examine the problem statement which is investigating the impact of live streamer's credibility dimensions on impulsive buying decisions with the intervening role of customer engagement in TikTok live streaming shopping. To maximize the effectiveness of data collection and analysis, an explanatory quantitative approach will be employed. By using a quantitative approach, an initial empirical research survey was conducted to test the proposed structural model and hypotheses. The chosen approach also involves the use of questionnaires, employing Likert-scale analysis as the measurement instrument. The questionnaires will be distributed to the target respondents through an online platform, such as Google Forms, ensuring convenient access and efficient data collection.

3.2 Population and Sampling

In this study, the target population consists of customers residing in the Greater Jakarta area who actively engage in the TikTok live streaming shopping. However, due to the impracticality of including the entire population as respondents, a sample will be selected to represent the target population (Jajoo and Malu, 2014). The sampling method employed in this research is non-probability sampling, specifically

purposive sampling, which involves selecting individuals who meet specific criteria (Etikan, 2017).

The criteria for selecting the sample are as follows:

1. Minimum age of 18 years old: The respondents should be at least 18 years old, as TikTok shop has age restrictions with a minimum age of 18 years old. This criterion ensures that respondents are legally eligible to engage in online shopping activities on TikTok and have the necessary maturity to provide valuable insights into their purchasing decisions.
2. Greater Jakarta Area Residents: The sample will consist of customers who reside in the Greater Jakarta area, encompassing Jakarta, Bogor, Depok, Tangerang, and Bekasi. This area represents a diverse urban population and provides a suitable context for studying the influence of live streaming on impulsive buying decisions.
3. Make Purchasement From TikTok Shop Live Streaming: The sample will comprise customers who have made a purchasement at least once specifically through TikTok live streaming shopping. This criterion ensures that respondents have firsthand experience with the decision process influenced by live streaming content.

To ensure a normal distribution and facilitate meaningful statistical analysis, the recommended sample size falls within the range of 30-100 respondents (Kwak et al., 2017). Additionally, Hair et al. (2014) suggest determining the sample size for structural equation modeling-partial least squares (SEM-PLS) based on the number of formative indicators or the sum of structural routes in the model.

Applying the above considerations, the minimum sample size will be ten times the number of queries addressed towards the dependent variables. This rule ensures an adequate sample size to detect meaningful relationships in the structural model and draw reliable conclusions (Etikan, 2017; Hair et al., 2014; Jajoo and Malu, 2014; Kwak et al., 2017).

3.3 Data Collection

For the data collection method, this study employed a quantitative approach to investigate the role of streamer's credibility dimensions in influencing impulsive buying decisions in TikTok live streaming shopping. This study collected the data from primary data and secondary data. Primary data refers to information collected from respondents directly (Black & Rabianski, 2003), while the secondary data is collected from books, websites, journals, and articles, and other sources (Douglas, 2015). This study also utilizes Publish or Perish application to collect secondary data from journals and books.

The survey method was utilized to gather data from respondents, and Google Forms, an online questionnaire platform, was chosen as the primary data collection tool. The use of online surveys has become increasingly popular due to its convenience and efficiency (Rabianski, 2003). The questionnaire consists of three main sections. The first section is the screening section to ensure that the respondent suits the criteria of the sample. While, the second section will include respondent profiles, which aims to gather information about the demographic of the respondents. This section includes questions regarding gender, age, occupation, domicile, and monthly expenses. Understanding these demographic variables is crucial as they can provide insights into the target audience and allow for further analysis based on different demographic segments.

The third section of the questionnaire focuses on the variables of interest, such as the independent, intervening, and dependent variables. The Likert scale is utilized as the measurement method for this section. The Likert scale allows respondents to express their agreement or disagreement with statements related to the variables on a scale ranging from one to five, where one represents "Strongly Disagree" and five represents "Strongly Agree." This scale provides a structured approach to capture respondents' perceptions and attitudes towards the variables under investigation (Ogura et al., 1995).

The data collection process involves distributing the questionnaire to the target respondents through Google Forms. The online platform allows for easy dissemination of the questionnaire and provides a user-friendly interface for respondents to complete the survey at their convenience. The collected data will be stored securely and analyzed using the SMART-PLS 4 software, a widely used tool for structural equation modeling analysis.

To enhance the reach and participation in the survey, the researcher employed the "Snowball Effect" as a questionnaire deployment method. This method relies on the respondents themselves to share the survey with their acquaintances or social networks, thus expanding the sample size through word-of-mouth referrals. By leveraging the social connections of the initial set of respondents, the "Snowball Effect" can help increase the diversity and representativeness of the sample (Ogura et al., 1995). The researcher initiated the data collection process by sharing the questionnaire with approximately 100 respondents. These respondents were selected based on their relevance to the research topic and their active engagement with live streaming on TikTok Shop. Subsequently, the "Snowball Effect" was expected to take effect as respondents were encouraged to share the survey with others in their networks who met the research criteria.

3.4 Operational Variables

There are five variables in total that the research want to identify by using the likert scale measurement with following details:

Table 3.1 Operational of Variables

Variables	Operational Definition	Code	Items	Research	Scale
Streamer's Attractiveness	Questions about influence of streamer attractiveness regarding to	ATT 1	When watching TikTok Live Streaming Shopping, I think that the live streamer is talented	Ha and Lam, (2016)	Likert Scale
		ATT 2	When watching TikTok Live Streaming		

	customer engagement in TikTok live streaming shopping		Shopping, I think the live streamer has an appealing appearance		
		ATT 3	When watching TikTok Live Streaming Shopping, I think that the live streamer has an enjoyable live streaming style		
		ATT 4	When watching TikTok Live Streaming Shopping, I think that the streamer has an interesting personality		
Streamer's Trustworthiness	Question about influence of streamer attractiveness regarding to customer engagement in TikTok live streaming shopping	TRU 1	When watching TikTok Live Streaming Shopping, I think the live streamer looks dependable	Ohanian (1990); Park & Lin (2020); Luo et al., (2024)	Likert Scale
		TRU 2	When watching TikTok Live Streaming Shopping, I think the live streamer looks honest		
		TRU 3	When watching TikTok Live Streaming Shopping, I think the live streamer looks sincere		
		TRU 4	When watching TikTok Live Streaming Shopping, I think the live streamer looks reliable		
		TRU 5	When watching TikTok Live Streaming Shopping, I think the live streamer looks dependable		
Streamer's Experise	Questions about influence of streamer attractiveness regarding to customer	EXP 1	When watching TikTok Live Streaming Shopping, the streamer gives viewers a clear information about the products/ service	Choi & Lee, (2019); Luo et al., (2024)	Likert Scale
		EXP 2	When watching TikTok Live Streaming Shopping, I think the live streamer knows a lot about the products/service		

	engagement in TikTok live streaming shopping	EXP 3	When watching TikTok Live Streaming Shopping, I think the live streamer has a lot of experience with the products/ service		
		EXP 4	When watching TikTok Live Streaming Shopping, I think the live streamer is likely to read a lot of reference sources/ materials related to the products/ service		
Customer Engagement	Questions about customer engagement regarding to customer engagement in TikTok live streaming shopping	CE 1	I feel happy when interacting with the live streamer when watching TikTok Live Streaming Shopping	Dessart et al., (2015); Luo et al., (2024)	Likert Scale
		CE 2	I spend more time on the TikTok Live Streaming Shopping		
		CE 3	I am likely to recommend live streamers that use TikTok Live Streaming Shopping to my friends		
		CE 4	I am likely to keep on track of the activities of the live streamers I like that uses TikTok Live Streaming Shopping		
Impulsive Buying Decisions	Questions about impulsive buying decisions in TikTok live streaming shopping	IB 1	When watching TikTok Live Streaming Shopping, I often buy things that I had not intended to purchase	Beatty & Ferrel, 1998; Chen & Yao, 2018; Luo et al., 2024	Likert Scale
		IB 2	I experienced several sudden urges to buy things when doing shopping on TikTok Live Streaming Shopping		
		IB 3	While watching TikTok Live Streaming Shopping, I often buy things without thinking		
		IB 4	When watching TikTok Live Streaming Shopping, I feel like buying more things than I need		

3.5 Data Analysis Techniques

To perform this SEM-PLS analysis the research will look at relationships between independent variables such as streamer attractiveness, trustworthiness and expertise; customer engagement as a mediating variable; and impulsive buying decision variable. The extent to which the variables are connected, including whether they have direct or indirect consequences on each other will be described by the study. In addition, the overall fit of the structural model will be estimated in terms of its validity relative to proposed hypotheses using different sets of criteria. This includes various factors like significance level of path coefficients and assessment of model fit indices, such as the descriptive analysis, validity, reliability, coefficient determination, predictive relevance**,** and hypothesis testing.

3.5.1 Descriptive Analysis

Several processes are contained within the data analysis process, starting with a descriptive analysis. Usually, the descriptive analysis is used to give an overview of the data by examining key statistics such as maximum and minimum values, means and standard deviations (Sekaran & Bougie, 2016). In this study, descriptive analysis will be employed to describe who the respondents are in terms of their demographic details. This provides information about the sample profile and gives insights on the background of the respondents. Furthermore, descriptive analysis helps to examine data variability and uncertainty which may reveal some unusual patterns that need to be considered during formal analysis (Best et al., 2003). Researchers can thus interpret results better as well as identify any possible outliers or indirect influences that might affect variable relationships by understanding the data's variability.

3.5.2 Structural Equation Modeling (SEM) - Partial Least Square (PLS)

Structural Equation Modeling (SEM) - Partial Least Square (PLS) is a statistical approach that combines principles from factor analysis and path analysis to identify and estimate complex relationships involving multiple dependent and independent variables within a unified analytical framework. PLS-SEM has become a standard approach for analyzing complex inter-relationships between observed and latent variables, and researchers appreciate the many advantages of PLS-SEM such as the possibility to estimate very complex models and the method's flexibility in terms of data requirements and measurement specification. Additionally, it is a non-parametric technique that makes no distributional assumptions and can be estimated with small sample sizes, making it more accessible to researchers with limited data. This flexibility and accessibility have made PLS-SEM the model of choice for many researchers. SMART PLS will be used as it is a software tool that is widely used for Partial Least Squares (PLS) path modeling and Structural Equation Modeling (SEM) (Magno et al., 2022)

3.5.2.1 Outer Model - Structural Equation Modeling - Partial Least Square

3.5.2.1.1 Convergent Validity

In research studies, the validity of the gathered data in research is important in ensuring that the findings are accurate and reliable as it indicates the level to which the review was done accordingly. Validity analysis is a quantitative approach used to evaluate whether the questionnaire or measuring instrument utilized in a study is eligible and accomplishes its purpose. It moves beyond just listing what has been reviewed by including decisions about sources selected, search terms applied, period of time covered, articles chosen during search, and use of backward and forward searches. This highlights all the key factors that

would ensure that a systematic and rigorous review takes place where results can be trusted (Paré & Kitsiou, 2017). Two kinds of validity tests are commonly used by researchers to establish reliability that include convergent and discriminant validity.

Convergent validity assesses whether various items within a questionnaire effectively measure a single underlying construct. There are two types of validity measurement which include calculating for loading factor and average variance extracted. The minimum requirement of loading factor value should be at least 0.5, while above 0.7 indicates an optimal value. The AVE analysis measures the extent to which each indicator correlates with its corresponding latent construct and the amount of variance the construct explains compared to measurement error. AVE value below 0.5 suggests inadequate convergent validity, whereas value above 0.5 indicates satisfactory convergent validity (Hair et al., 2021).

3.5.2.1.2 Discriminant Validity

Discriminant validity entails distinguishing one concept or construct from another. It ensures whether different constructs measured by the questionnaire are indeed different from each other. Assessing discriminant validity involves comparing correlations between different constructs and determining if they are significantly different from one another. Good discriminant validity can be indicated if correlations between constructs are substantially higher than the correlations within each construct (Hair et al., 2021).

According to Fornell and Larcker (1981), higher Average Variance Extracted (AVE) values improve discriminant validity by reducing correlations among model constructs. On the other hand, Henseler et al. (2015) propose the HTMT ratio as an effective alternative for testing discriminant validity within the multitrait-multimethod matrix

framework by adjusting confidence interval bounds in the heterotrait-monotrait (HTMT) ratio test to maintain a predefined familywise error rate. This adjustment enhances the precision of discriminant validity assessments using the HTMT method. In the context of reflective measurement models, HTMT values of below 0.85 indicate acceptable discriminant validity, ensuring the constructs are reliably measured and distinct from one another.

3.5.2.1.3 Reliability

In research studies, ensuring the reliability of measurements is crucial for establishing the consistency as well as dependability of the data collected, and it is linked to the reproducibility of the review process and steps. This reliability can be achieved through comprehensive documentation of the research process, extraction, coding, and analysis performed in the review. There should be explicit documentation of steps and approach used, whether or not the search is exhaustive, methodical approach for data extraction and synthesis (Paré & Kitsiou, 2017). In Partial Least Squares Structural Equation Modeling (PLS-SEM), there are two common reliability indicators: composite reliability and Cronbach's alpha. The composite reliability indicator accounts for different loadings of an indicator and is determined by multiplying the outer loading with the indicator's value, which must ideally be no less than 0.70 (Hair et al., 2019). This indicator helps to assess the reliability of individual measurement items and their contribution towards a given construct. On the other hand, internal consistency reliability sums up all items in one construct. Typically, it involves using Cronbach's alpha that does not consider correlations among variables within a scale. However, as Cronbach's alpha tends to underestimate reliability, a value greater than 0.70 is generally considered acceptable (Hair et al., 2017).

Multicollinearity test is essential to ensure that the indicators within the regression model are not excessively correlated with each other. A good regression model should be free from multicollinearity problems. The presence of multicollinearity is typically assessed using the Variance Inflation Factor (VIF). According to Ghozali (2018), VIF values exceeding 10 indicate significant multicollinearity problems.

3.5.2.2 Inner Model - Structural Equation Modeling - Partial Least Square

3.5.2.2.1 Coefficient Determination (R^2)

The coefficient of determination (R^2) is a statistical tool that helps to show what part of the dependent variable's variance can be forecasted from independent variables in a regression model. It is an important measure for assessing the goodness of fit of the model, and how accurate its forecasting is. The coefficient of determination is expressed in percentages and ranges from 0 to 1 (Henseler et al., 2009; Hair et al., 2019). Thus, R^2 value above 0.75 or higher indicates strong relationship between the dependent variable with the independent variables while R^2 value equal to 0.5 signifies moderate level of predictability. Furthermore, R^2 value of 0.25 indicates weak predictive power of the independent variables over the dependent one (Hair et al., 2019).

3.5.2.2.2 Predictive Relevance (Q^2)

Predictive relevance (Q^2) refers to a measurement parameter regarding whether there is enough information available for those who want to predict something about future events whether it be through models or other ways that might tell us what will happen next given certain past developments like inputs used so far have been established by

some authors who specified when their work was done. In Q^2 values context, a strong predictive model normally refers to Q^2 values greater than 0.35 which implies high levels of predictiveness. A moderate predictive model is often associated with Q^2 values ranging from 0.15 to 0.35, indicating a moderate level of predictive relevance. On the other hand, Q^2 values of 0.02 indicate a weak predictive model, suggesting a limited degree of predictive relevance (Omoga, 2019). Furthermore, Alyoubi & Yamin (2021) suggested that Q^2 values should be greater than 0 to reflect adequate predictive relevance of the model.

3.5.2.2.3 Hypothesis Testing

The evaluation of the structural model and testing the hypotheses are important steps in hypothesis testing that determine how variables are related. The PLS output uses path coefficients to assess the strength and significance of these relationships. For evaluating the structural model, researchers examine t-values associated with path coefficients. Al-kassab (2022) suggests that a t-value greater than 1.64 (a significance level of 5%) for one-tailed hypothesis implies that there is a positive relationship between the two variables being studied thus making it statistically significant for corresponding research hypothesis validation. By implication, this signifies a significant statistical association between variables thereby supporting its accompanying research hypothesis. Similarly, each path coefficient's p-value will be used to indicate if this is an important result to accept or deny as null hypothesis test statistic, where a p value less than 0.05 implies statistical significance (Al-kassab, 2022). Accordingly, when the p-value falls under the selected cut-off point there is evidence at hand supporting the research hypothesis which means that there was not just random chance responsible for observed association between variables as hypothesized.

CHAPTER 4
FINDINGS, ANALYSIS, AND DISCUSSIONS

4.1 Descriptive Analysis

4.1.1 Data Collection

The data collection for this research was conducted from May 13, 2024, to May 21, 2024, with a total period of nine days. During this timeframe, the questionnaire was distributed through Google Forms. The target audience was carefully chosen to represent a demographic or characteristic group that is relevant to the research objectives. There are a total of 100 respondents that fill out the questionnaire in this study.

4.1.2 Screening Questionnaire

To ensure the inclusion of qualified respondents, a series of screening questions were employed in this section. These questions were designed to verify that respondents met the necessary criteria relevant to the study's objectives. This approach enhances the quality and relevance of the data collected. As a result of this screening process, the valid data gathered from respondents is 100 respondents, with following details:

Table 4.1 Respondents Criteria

Respondents Criteria	Yes		No	
	Number	Percentage	Number	Percentage
Minimum age of 18 years old	105	100%	0	0%
Greater Jakarta Area Residents	105	100%	0	0%
Make Purchasement From TikTok Shop Live Streaming at least once within a year	100	95.2%	5	4.8%

Source: Data Processing (2024)

4.1.3 Respondent Profiles

The research participants were required to meet specific criteria, including being at least 18 years old, residing in the Greater Jakarta area, and having made purchasement through TikTok Live Streaming Shopping at least once within one year. To ensure these criteria were met, the initial section of the questionnaire included questions designed to filter respondents accordingly. While, in this section details the respondents' profiles, encompassing variables such as gender, age, residence, occupation, monthly expenses, average spending per transaction, purchased products, and the usually watched TikTok Live Streamers or accounts username. The following is the detailed explanation of the respondents' profile results.

4.1.3.1 Gender

According to the data in Table 4.2, the respondent profiles based on gender reveals that a significant majority of the participants are female, comprising 78% of the total respondents, with a total of 78 individuals. Followed by the male respondents account for the remaining 22%, with a total of 22 individuals. This demographic distribution suggests that women are more actively engaged in the TikTok Live Streaming Shopping.

Table 4.2 Respondents Profile - Gender

Gender	Number of Respondents	Percentage (%)
Female	78	78%
Male	22	22%
Total	100	100%

Source: Data Processing (2024)

4.1.3.2 Age

According to the data in Table 4.3, it is shown that the majority of the respondents falls within the age group of 18-25 years old, comprising 61% of the total respondents. The second most represented age group is 26-34 years

old with 29% of the total respondents. Then followed by the age group of 35-49 years old, accounting for 9% of the total respondents. Lastly, there is a single respondent in the oldest age group, over 50 years old, representing 1% of the total sample. These findings indicate that the primary demographic engaging in TikTok Live Streaming Shopping is predominantly Generation Y and Generation Z.

Table 4.3 Respondents Profile - Age

Age	Number of Respondents	Percentage (%)
18 - 25 years old	61	61%
26 - 34 years old	29	29%
35 - 49 years old	9	9%
> 50 years old	1	1%
Total	100	100%

Source: Data Processing (2024)

4.1.3.3 Domicile

According to the data in Table 4.4, it reveals that a substantial portion of the participants are based in Jakarta, comprising 48% of the total respondents. This is followed by those residing in Tangerang, who represent 24% of the total respondents. Respondents from Bekasi account for 12%, while 10% are from Bogor, and the remaining 6% are from Depok. These findings indicate that the majority of individuals who engage in live streaming shopping are residents of the capital city.

Table 4.4 Respondents Profile - Domicile

Domicile	Number of Respondents	Percentage (%)
Jakarta	48	48%
Bogor	10	10%
Depok	6	6%
Tangerang	24	24%
Bekasi	12	12%
Total	100	100%

Source: Data Processing (2024)

4.1.3.4 Occupation

According to the data in Table 4.5, it is evident that the majority of respondents are students, comprising 35% of the total respondents. This is followed by private employees, who make up 28% of the respondents. Entrepreneurs represent 18%, while freelancers account for 9%. Additionally, housewives constitute 8% of the respondents, and other professions, including content creators and event organizers, collectively representing the remaining 2% of the total respondents.

Table 4.5 Respondents Profile - Occupation

Occupation	Number of Respondents	Percentage (%)
Student	35	35%
Private employees	28	28%
Entrepreneur	18	18%
Freelancers	9	9%
Housewife	8	8%
Others	2	2%
Total	100	100%

Source: Data Processing (2024)

4.1.3.5 Monthly Expenses

According to the data in Table 4.6, it is shown that the monthly expenses of the majority of the respondents are less than Rp3,000,000 with 34% of total respondents. This is followed by respondents with monthly expenses ranging from Rp3,000,000 - Rp5,999,000 as much as 30%, respondents with monthly expenses of Rp6,000,000 - Rp8,999,000 as much as 24%, respondents with monthly expenses of Rp9.000.000 - Rp11,999,000 as much as 7%, respondents with monthly expenses of Rp12,000,000 - Rp14,999,000 as much as 3% and the least one is more than Rp15.000.000 as much as 2%.

Table 4.6 Respondents Profile - Monthly Expenses

Monthly Expenses	Number of Respondents	Percentage (%)
< Rp3,000,000	34	34%
Rp3,000,000-Rp5,999,000	30	30%
Rp6,000,000-Rp8,999,000	24	24%
Rp9,000,000-Rp11,999,000	7	7%
Rp12,000,000-Rp14,999,000	3	3%
> Rp15,000,000	2	2%
Total	100	100%

Source: Data Processing (2024)

4.1.3.6 Average Spending per Transaction

According to the data in Table 4.7, it is presented that the average spending per transaction of Rp100,000 - Rp399,000, accounting for 64%. This is followed by 21% of respondents whose average spending is under Rp100,000, 12% of respondents indicate that their average spending is Rp400,000 - Rp699,000, 2% of respondents with average spending of Rp700,000 - Rp999,000, while only 1% of respondents that spend more than Rp1,000,000 per transaction. These findings might be able to help understanding the varying spending capacities of customers who might engage in impulsive buying decisions through TikTok Live Streaming Shopping.

Table 4.7 Respondents Profile - Average Spending per Transaction

Average Spending	Number of Respondents	Percentage (%)
< Rp100,000	21	21%
Rp100,000 - Rp399,000	64	64%
Rp400,000 - Rp699,000	12	12%
Rp700,000 - Rp999,000	2	2%
> Rp1,000,000	1	1%
Total	100	100%

Source: Data Processing (2024)

4.1.3.7 Purchased Products

According to the data in Table 4.8, it can be seen that the majority of respondents predominantly purchase beauty products as much as 43%. This is followed by 35% of respondents who primarily buy apparel & fashion products, food & beverage products account for 11%. Additionally, 5% of respondents purchase items from other segments, including toys, accessories, collections, and supplements which showcase a diverse range of interests. Lastly, consumer electronics and furniture & appliances each constitute 3% of the respondents.

Table 4.8 Respondents Profile - Purchased Products

Purchased Products	Number of Respondents	Percentage (%)
Apparel & Fashion	35	35%
Beauty Products	43	43%
Food & Beverages	11	11%
Consumer Electronics	3	3%
Furniture & Appliances	3	3%
Others	5	5%
Total	100	100%

Source: Data Processing (2024)

4.1.3.8 TikTok Live Streamers / Account Username

According to the data in Table 4.9, it is shown that the majority of respondents only mention the account username or brand name that they typically view during live streaming sessions, comprising 88% of the total respondents. On the other hand, a smaller proportion representing only 12% of the total respondents are familiar with the names of the live streamers themselves, likely because these streamers broadcast through their personal accounts and their names may already be well-known among customers.

Table 4.9 Respondents Profile - TikTok Live Streamers / Account Username

Username	Number of Respondents	Percentage (%)
Live Streamers Name	12	12%
Account Username	88	88%
Total	100	100%

Source: Data Processing (2024)

4.1.4 Descriptive Statistics

This section aims to provide a comprehensive overview of the collected data. In this research, the data is examined using the Likert scale to understand the measurement indicators for each variable in this study. The interval scale used is adapted from Durianto et al. (2004) which facilitates a detailed analysis of participant responses and is structured accordingly:

$$Mean\ of\ Interval = \frac{Highest\ point - Lowest\ point}{Total\ Class} = \frac{5-1}{5} = 0.8$$

Therefore, in accordance to the previous formula, the Likert scale interval and their corresponding classification is shown in Table 4.10 as following:

Table 4.10 Likert Scale Classification

Likert Scale	Interval	Classification
1	1.00 – 1.79	Strongly Disagree
2	1.80 – 2.59	Disagree
3	2.60 – 3.29	Neutral
4	3.40 – 4.19	Agree
5	4.20 – 5.00	Strongly Agree

Source: Data Processing (2024)

The results of the survey respondents were gathered through Google Form and subsequently imported into SmartPLS 4 software for analysis using the SEM-PLS method. The detailed analysis performed by SmartPLS 4 will be elaborated upon in the following section.

4.1.4.1 Indicators of Streamer's Attractiveness

According to Table 4.11, the first indicator of streamer's attractiveness (ATT1) "*When watching TikTok Live Streaming Shopping, I think that the live streamer is talented*" has a high mean value of 4.180 indicates that most respondents agree with the statement. The second indicator (ATT2) "*When watching TikTok Live Streaming Shopping, I think the live streamer has an appealing appearance*" scores a mean of 4.220 indicating that most respondents agree with the statement. The third indicator (ATT3) "*When watching TikTok Live Streaming Shopping, I think that the live streamer has an enjoyable live streaming style"* has a mean value of 4.350 which indicates that most respondents strongly agree with the statement. Lastly, the fourth indicator of streamer's attractiveness (ATT4) "*When watching TikTok Live Streaming Shopping, I think that the streamer has an interesting personality*" also indicates that most respondents agree with the statement, with a mean value of 4.190.

Table 4.11 Descriptive Statistics - Streamer's Attractiveness

No.	Code	Indicator	Mean	Standard Deviation
1	ATT 1	When watching TikTok Live Streaming Shopping, I think that the live streamer is talented	4.180	0.669
2	ATT 2	When watching TikTok Live Streaming Shopping, I think the live streamer has an appealing appearance	4.220	0.795
3	ATT 3	When watching TikTok Live Streaming Shopping, I think that the live streamer has an enjoyable live streaming style	4.350	0.726
4	ATT 4	When watching TikTok Live Streaming Shopping, I think that the streamer has an interesting personality	4.190	0.758
Variable Average Score			4.235	0.737

Source: Data Processing (2024)

4.1.4.2 Indicators of Streamer's Trustworthiness

According to Table 4.12, the first indicator of streamer's trustworthiness (TRU1) "*When watching TikTok Live Streaming Shopping, I think the live streamer looks dependable*" has a high mean value of 3.990 indicates that most respondents agree with the statement. The second indicator (TRU2) "*When watching TikTok Live Streaming Shopping, I think the live streamer looks honest*" scores a mean of 3.870 indicating that most respondents agree with the statement. The third indicator (TRU3) "*When watching TikTok Live Streaming Shopping, I think the live streamer looks sincere"* has a mean value of 3.780 which also indicates that most respondents agree with the statement. Lastly, the fourth indicator of streamer's trustworthiness (TRU4) "*When watching TikTok Live Streaming Shopping, I think the live streamer looks reliable*" also indicates that most respondents agree with the statement, with a mean value of 3.930.

Table 4.12 Descriptive Statistics - Streamer's Trustworthiness

No.	Code	Indicator	Mean	Standard Deviation
1	TRU 1	When watching TikTok Live Streaming Shopping, I think the live streamer looks dependable	3.990	0.714
2	TRU 2	When watching TikTok Live Streaming Shopping, I think the live streamer looks honest	3.870	0.833
3	TRU 3	When watching TikTok Live Streaming Shopping, I think the live streamer looks sincere	3.780	0.820
4	TRU 4	When watching TikTok Live Streaming Shopping, I think the live streamer looks reliable	3.930	0.863
Variable Average Score			3.892	0.807

Source: Data Processing (2024)

4.1.4.3 Indicators of Streamer's Expertise

According to Table 4.13, the first indicator of streamer's expertise (EXP1) "*When watching TikTok Live Streaming Shopping, the streamer gives viewers clear information about the products/ service*" has a high mean value of 4.580 indicates that most respondents strongly agree with the statement. The second indicator (EXP2) "*When watching TikTok Live Streaming Shopping, I think the live streamer knows a lot about the products/service*" scores a mean of 4.670 indicating that most respondents strongly agree with the statement. The third indicator (EXP3) "When watching TikTok Live Streaming Shopping, I think the live streamer has a lot of experience with the products/ service*"* has a mean value of 4.340 which also indicates that most respondents strongly agree with the statement. Lastly, the fourth indicator of streamer's expertise (EXP4) "*When watching TikTok Live Streaming Shopping, I think the live streamer is likely to read a lot of reference sources/ materials related to the products/ service*" also indicates that most respondents strongly agree with the statement, with a mean value of 4.220.

Table 4.13 Descriptive Statistics - Streamer's Expertise

No.	Code	Indicator	Mean	Standard Deviation
1	EXP 1	When watching TikTok Live Streaming Shopping, the streamer gives viewers clear information about the products/ service	4.580	0.603
2	EXP 2	When watching TikTok Live Streaming Shopping, I think the live streamer knows a lot about the products/service	4.670	0.511
3	EXP 3	When watching TikTok Live Streaming Shopping, I think the live streamer has a lot of experience with the products/ service	4.340	0.724
4	EXP 4	When watching TikTok Live Streaming Shopping, I think the live streamer is likely to read a lot of reference sources/ materials related to the products/ service	4.220	0.729
Variable Average Score			4.452	0.642

Source: Data Processing (2024)

4.1.4.4 Indicators of Customer Engagement

According to Table 4.14, the first indicator of customer engagement (CE1) "*I feel happy when interacting with the live streamer when watching TikTok Live Streaming Shopping*" has a high mean value of 4.260 indicates that most respondents strongly agree with the statement. The second indicator (CE2) "*I spend more time on the TikTok Live Streaming Shopping*" scores a mean of 3.790 indicating that most respondents agree with the statement. The third indicator (CE3) "*I am likely to recommend live streamers that use TikTok Live Streaming Shopping to my friends"* has a mean value of 3.790 which also indicates that most respondents agree with the statement. Lastly, the fourth indicator of customer engagement (CE4) "*I am likely to keep on track of the activities of the live streamers I like that uses TikTok Live Streaming Shopping*" also indicates that most respondents agree with the statement, with a mean value of 3.930.

Table 4.14 Descriptive Statistics - Customer Engagement

No.	Code	Indicator	Mean	Standard Deviation
1	CE 1	I feel happy when interacting with the live streamer when watching TikTok Live Streaming Shopping	4.260	0.808
2	CE 2	I spend more time on the TikTok Live Streaming Shopping	3.790	1.151
3	CE 3	I am likely to recommend live streamers that use TikTok Live Streaming Shopping to my friends	3.790	0.993
4	CE 4	I am likely to keep on track of the activities of the live streamers I like that uses TikTok Live Streaming Shopping	3.930	1.079
Variable Average Score			3.942	1.008

Source: Data Processing (2024)

4.1.4.5 Indicators of Impulsive Buying Decisions

According to Table 4.15, the first indicator of impulsive buying decisions (IB1) "*When watching TikTok Live Streaming Shopping, I often buy things that I had not intended to purchase*" has a high mean value of 4.080 indicates that most respondents agree with the statement. The second indicator (IB2) "*I experienced several sudden urges to buy things when doing shopping on TikTok Live Streaming Shopping*" scores a mean of 4.430 indicating that most respondents strongly agree with the statement. The third indicator (IB3) "*While watching TikTok Live Streaming Shopping, I often buy things without thinking"* has a mean value of 3.810 which also indicates that most respondents agree with the statement. Lastly, the fourth indicator of impulsive buying decisions (IB4) "*When watching TikTok Live Streaming Shopping, I feel like buying more things than I need*" also indicates that most respondents agree with the statement, with a mean value of 4.000.

Table 4.15 Descriptive Statistics - Impulsive Buying Decisions

No.	Code	Indicator	Mean	Standard Deviation
1	IB 1	When watching TikTok Live Streaming Shopping, I often buy things that I had not intended to purchase	4.080	0.945
2	IB 2	I experienced several sudden urges to buy things when doing shopping on TikTok Live Streaming Shopping	4.430	0.840
3	IB 3	While watching TikTok Live Streaming Shopping, I often buy things without thinking	3.810	1.007
4	IB 4	When watching TikTok Live Streaming Shopping, I feel like buying more things than I need	4.000	0.970
Variable Average Score			4.080	0.940

Source: Data Processing (2024)

4.2 Outer Model SEM-PLS Results

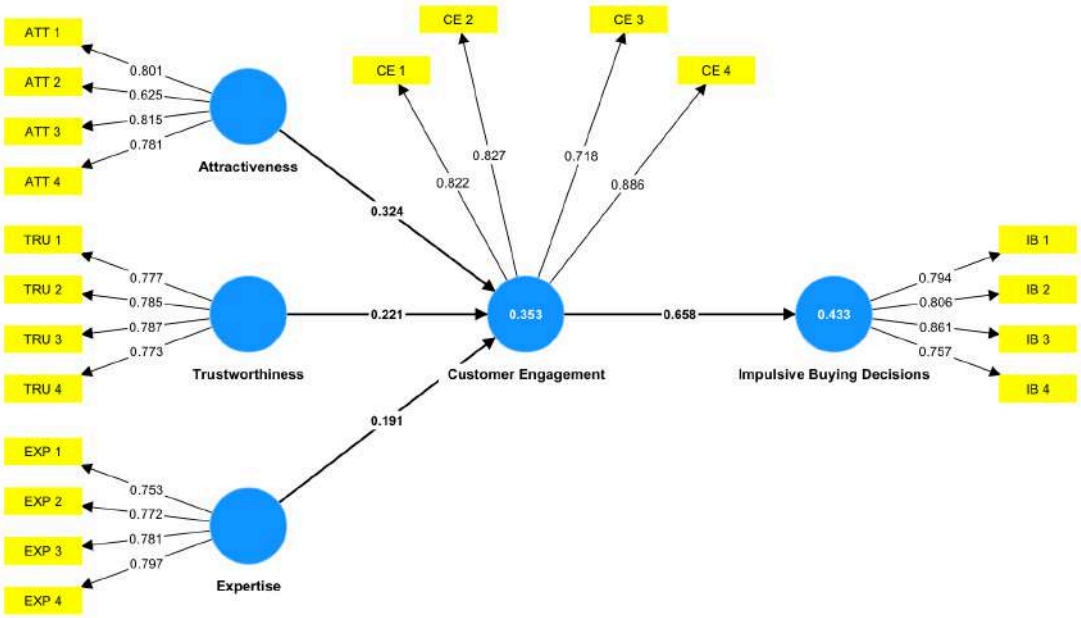
Outer Model SEM-PLS involves the assessment of convergent validity, discriminant validity, and reliability. To thoroughly evaluate these measures, this study collected data from 100 respondents in Greater Jakarta using a Google Form survey.

4.2.1 Convergent Validity Test

Assessing the model's functionality and performance at this stage is crucial, particularly the convergent validity of the measurement model with reflective indicators. This evaluation relies on the correlation between the component scores determined using SmartPLS software, as reflected in the outer model table (weights or loadings). According to Hair et al. (2021), a loading factor value of 0.5 to 0.6 is considered acceptable for an indicator to be valid. Additionally, to ensure proper assessment of convergent validity, it is essential that the Average Variance Extracted (AVE) meets the recommended threshold of 0.5 or higher

.

Figure 4.1 Loading Factor Analysis



Source: Data Processing (2024)

4.2.1.1 Loading Factor Analysis on Streamer's Attractiveness (ATT)

According to Table 4.16, the first indicator of streamer's attractiveness (ATT1) "*When watching TikTok Live Streaming Shopping, I think that the live streamer is talented*" has a loading factor of 0.801. The second indicator (ATT2) "*When watching TikTok Live Streaming Shopping, I think the live streamer has an appealing appearance*" scores a loading factor of 0.625. The third indicator (ATT3) "*When watching TikTok Live Streaming Shopping, I think that the live streamer has an enjoyable live streaming style"* has a loading factor of 0.815. Lastly, the fourth indicator of streamer's attractiveness (ATT4) "*When watching TikTok Live Streaming Shopping, I think that the streamer has an interesting personality*" has a loading factor of 0.781. The indicator with the highest loading factor is the third indicator (ATT3), "*When watching TikTok Live Streaming Shopping, I think that the live streamer has an enjoyable live streaming style*", while the lowest loading factor is the second indicator (ATT2), "*When watching TikTok Live Streaming Shopping, I think the live streamer has an appealing appearance*". It is shown that the loading factor of all items under streamer's attractiveness is acceptable and measure the latent variable validly.

Table 4.16 Loading Factor Analysis - Streamer's Attractiveness

No.	Variable	Indicator	Loading Factor
1	Streamer's Attractiveness (ATT)	ATT 1: When watching TikTok Live Streaming Shopping, I think that the live streamer is talented	0.801
2		ATT 2: When watching TikTok Live Streaming Shopping, I think the live streamer has an appealing appearance	0.625
3		ATT 3: When watching TikTok Live Streaming Shopping, I think that the live streamer has an enjoyable live streaming style	0.815
4		ATT 4: When watching TikTok Live Streaming Shopping, I think that the streamer has an interesting personality	0.781

Source: Data Processing (2024)

4.2.1.2 Loading Factor Analysis on Streamer's Trustworthiness (TRU)

According to Table 4.17, the first indicator of streamer's trustworthiness (TRU1) "*When watching TikTok Live Streaming Shopping, I think the live streamer looks dependable*" has a loading factor of 0.777. The second indicator (TRU2) "*When watching TikTok Live Streaming Shopping, I think the live streamer looks honest*" scores a loading factor of 0.785. The third indicator (TRU3) "*When watching TikTok Live Streaming Shopping, I think the live streamer looks sincere"* has a loading factor of 0.787. Lastly, the fourth indicator of streamer's trustworthiness (TRU4) "*When watching TikTok Live Streaming Shopping, I think the live streamer looks reliable*" has a loading factor of 0.773. The indicator with the highest loading factor is the third indicator (TRU3), "*When watching TikTok Live Streaming Shopping, I think the live streamer looks sincere"*, while the lowest loading factor is the fourth indicator (TRU4), "*When watching TikTok Live Streaming Shopping, I think the live streamer looks reliable*". It is shown that the loading factor of all items under streamer's trustworthiness is acceptable and measures the latent variable validly.

Table 4.17 Loading Factor Analysis - Streamer's Trustworthiness

No.	Variable	Indicator	Loading Factor
1	Streamer's Trustworthiness (TRU)	TRU 1: When watching TikTok Live Streaming Shopping, I think the live streamer looks dependable	0.777
2		TRU 2: When watching TikTok Live Streaming Shopping, I think the live streamer looks honest	0.785
3		TRU 3: When watching TikTok Live Streaming Shopping, I think the live streamer looks sincere	0.787
4		TRU 4: When watching TikTok Live Streaming Shopping, I think the live streamer looks reliable	0.773

Source: Data Processing (2024)

4.2.1.3 Loading Factor Analysis on Streamer's Expertise (EXP)

According to Table 4.18, the first indicator of streamer's expertise (EXP1) "*When watching TikTok Live Streaming Shopping, the streamer gives viewers clear information about the products/ service*" has a loading factor of 0.753. The second indicator (EXP2) "*When watching TikTok Live Streaming Shopping, I think the live streamer knows a lot about the products/service*" scores a loading factor of 0.772. The third indicator (EXP3) "When watching TikTok Live Streaming Shopping, I think the live streamer has a lot of experience with the products/ service*"* has a loading factor of 0.781. Lastly, the fourth indicator of streamer's expertise (EXP4) "*When watching TikTok Live Streaming Shopping, I think the live streamer is likely to read a lot of reference sources/ materials related to the products/ service*" has a loading factor of 0.797. The indicator with the highest loading factor is the fourth indicator (EXP4), "*When watching TikTok Live Streaming Shopping, I think the live streamer is likely to read a lot of reference sources/ materials related to the products/ service*", while the lowest loading factor is the first indicator (EXP1), "*When watching TikTok Live Streaming Shopping, the streamer gives viewers clear information about the products/ service*". It is shown that the loading factor of all items under streamer's expertise is acceptable and measures the latent variable validly.

Table 4.18 Loading Factor Analysis - Streamer's Expertise

No.	Variable	Indicator	Loading Factor
1	Streamer's Expertise (EXP)	EXP 1: When watching TikTok Live Streaming Shopping, the streamer gives viewers clear information about the products/ service	0.753
2		EXP 2: When watching TikTok Live Streaming Shopping, I think the live streamer knows a lot about the products/service	0.772
3		EXP 3: When watching TikTok Live Streaming Shopping, I think the live streamer has a lot of experience with the products/ service	0.781
4		EXP 4: When watching TikTok Live Streaming Shopping, I think the live streamer is likely to read a lot of reference sources/ materials related to the products/ service	0.797

4.2.1.4 Loading Factor Analysis on Customer Engagement (CE)

According to Table 4.19, the first indicator of customer engagement (CE1) "*I feel happy when interacting with the live streamer when watching TikTok Live Streaming Shopping*" has a loading factor of 0.822. The second indicator (CE2) "*I spend more time on the TikTok Live Streaming Shopping*" scores a loading factor of 0.827. The third indicator (CE3) "*I am likely to recommend live streamers that use TikTok Live Streaming Shopping to my friends"* has a loading factor of 0.718. Lastly, the fourth indicator of customer engagement (CE4) "*I am likely to keep on track of the activities of the live streamers I like that uses TikTok Live Streaming Shopping*" has a loading factor of 0.886. The indicator with the highest loading factor is the fourth indicator (CE4), "*I am likely to keep on track of the activities of the live streamers I like that uses TikTok Live Streaming Shopping*", while the lowest loading factor is the third indicator (CE3), "*I am likely to recommend live streamers that use TikTok Live Streaming Shopping to my friends"*. It is shown that the loading factor of all items under customer engagement is acceptable and measures the latent variable validly.

Table 4.19 Loading Factor Analysis - Customer Engagement

No.	Variable	Indicator	Loading Factor
1	Customer Engagement (CE)	CE 1: I feel happy when interacting with the live streamer when watching TikTok Live Streaming Shopping	0.822
2		CE 2: I spend more time on the TikTok Live Streaming Shopping	0.827
3		CE 3: I am likely to recommend live streamers that use TikTok Live Streaming Shopping to my friends	0.718
4		CE 4: I am likely to keep on track of the activities of the live streamers I like that uses TikTok Live Streaming Shopping	0.886

Source: Data Processing (2024)

4.2.1.5 Loading Factor Analysis on Impulsive Buying Decisions (IB)

According to Table 4.20, the first indicator of impulsive buying decisions (IB1) "*When watching TikTok Live Streaming Shopping, I often buy things that I had not intended to purchase*" has a loading factor of 0.794. The second indicator (IB2) "*I experienced several sudden urges to buy things when doing shopping on TikTok Live Streaming Shopping*" scores a loading factor of 0.806. The third indicator (IB3) "*While watching TikTok Live Streaming Shopping, I often buy things without thinking"* has a loading factor of 0.861. Lastly, the fourth indicator of impulsive buying decisions (IB4) "*When watching TikTok Live Streaming Shopping, I feel like buying more things than I need*" has a loading factor of 0.757. The indicator with the highest loading factor is the third indicator (IB3), "*While watching TikTok Live Streaming Shopping, I often buy things without thinking"*, while the lowest loading factor is the fourth indicator (IB4), "*When watching TikTok Live Streaming Shopping, I feel like buying more things than I need*". It is shown that the loading factor of all items under impulsive buying decisions is acceptable and measures the latent variable validly.

Table 4.20 Loading Factor Analysis - Impulsive Buying Decisions

No.	Variable	Indicator	Loading Factor
1	Impulsive Buying Decisions (IB)	IB 1: When watching TikTok Live Streaming Shopping, I often buy things that I had not intended to purchase	0.794
2		IB 2: I experienced several sudden urges to buy things when doing shopping on TikTok Live Streaming Shopping	0.806
3		IB 3: While watching TikTok Live Streaming Shopping, I often buy things without thinking	0.861
4		IB 4: When watching TikTok Live Streaming Shopping, I feel like buying more things than I need	0.757

Source: Data Processing (2024)

4.2.1.6 Summary of Loading Factor Analysis

According to Table 4.21, the summary of loading factor analysis in this study is shown. Overall, the loading factor of all indicators exceeds the value of 0.5 which is acceptable and measures each latent variable validly. The highest loading factor is the fourth indicator of Customer Engagement (CE4), "*I am likely to keep on track of the activities of the live streamers I like that uses TikTok Live Streaming Shopping*" with a score of 0.886 and the lowest loading factor is the second indicator of Streamer's Attractiveness (ATT2), "*When watching TikTok Live Streaming Shopping, I think the live streamer has an appealing appearance*" with a score of 0.625.

Table 4.21 Outer Loading Test Result

Variable	Indicator	Loading Factor	Result
Streamer's Attractiveness	ATT1	0.801	VALID
	ATT2	0.625	VALID
	ATT3	0.815	VALID
	ATT4	0.781	VALID
Streamer's Trustworthiness	TRU1	0.777	VALID
	TRU2	0.785	VALID
	TRU3	0.787	VALID
	TRU4	0.773	VALID
Streamer's Expertise	EXP1	0.753	VALID
	EXP2	0.772	VALID
	EXP3	0.781	VALID
	EXP4	0.797	VALID
Customer Engagement	CE1	0.822	VALID
	CE2	0.827	VALID
	CE3	0.718	VALID
	CE4	0.886	VALID
Impulsive Buying Decisions	IB1	0.794	VALID
	IB2	0.806	VALID
	IB3	0.861	VALID
	IB4	0.757	VALID

Source: Data Processing (2024)

4.2.1.7 Average Variance Extracted (AVE)

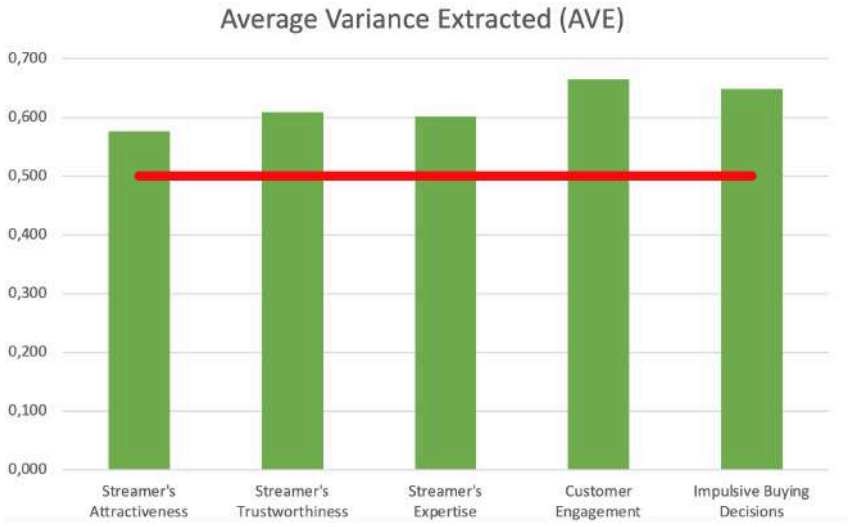
Convergent validity can be evaluated by examining the Average Variance Extracted (AVE) value obtained through partial least squares regression analysis. According to Hair et al. (2021), the AVE value must ideally be no less than 0.5 to be acceptable and considered valid. Based on the data in Table 4.22 and Figure 4.2, all variables have AVE values that exceed the required threshold of 0.5. The variable Streamer's Attractiveness (ATT) has an AVE value of 0.577, Streamer's Trustworthiness (TRU) of 0.609, Streamer's Expertise (EXP) of 0.602, Customer Engagement (CE) of 0.665 and Impulsive Buying Decisions (IB) of 0.649. The analysis results indicate that all the indicators used to measure the construct variables are acceptable.

Table 4.22 Average Variance Extracted Result

Variable	AVE
Streamer's Attractiveness	0.577
Streamer's Trustworthiness	0.609
Streamer's Expertise	0.602
Customer Engagement	0.665
Impulsive Buying Decisions	0.649

Source: Data Processing (2024)

Figure 4.2 Average Variance Extracted Graph



Source: Data Processing (2024)

4.2.2 Discriminant Validity Test

Discriminant validity is to distinguish latent variables in a model from another and to assure that each indicator does not overlap with one another. According to Hair et al. (2021), if each measurement item demonstrates a poor correlation with all other variables except for the one it is intended to measure, this indicates that the measures from different variables are distinct and not affected by other variables.

4.2.2.1 Cross-Loading Factor

Based on the data in Table 4.23, the cross-loading value for each variable is acceptable as they exhibit higher cross-loading values within their respective variables compared to the other variables. The loading factor of Streamer's Attractiveness ATT1 (0.801), ATT2 (0.625), ATT3 (0.815), ATT4 (0.781) are higher compared to its scores of the other latent variables. The loading factor of Streamer's Trustworthiness TRU1 (0.777), TRU2 (0.785), TRU3 (0.787), and TRU4 (0.773) are higher compared to its scores to the other latent variables. The loading factor of Streamer's Expertise EXP1 (0.753), EXP2 (0.772), EXP3 (0.781), and EXP4 (0.797) are higher compared to its scores to the other latent variables. The loading factor of Customer Engagement CE1 (0.822), CE2 (0.827), CE3 (0.718), and CE4 (0.886) are higher compared to its scores to the other latent variables. The loading factor of Impulsive Buying Decisions IB1 (0.794), IB2 (0.806), IB3 (0.861), and IB4 (0.757) are higher compared to its scores to the other latent variables.

Table 4.23 Cross Loading Result

Code	Streamer's Attractiveness	Streamer's Trustworthiness	Streamer's Expertise	Customer Engagement	Impulsive Buying Decisions
ATT1	**0.801**	0.433	0.297	0.441	0.224
ATT2	**0.625**	0.426	0.196	0.264	0.196
ATT3	**0.815**	0.420	0.466	0.480	0.296
ATT4	**0.781**	0.460	0.190	0.361	0.155
TRU1	0.545	**0.777**	0.400	0.456	0.249
TRU2	0.379	**0.785**	0.230	0.373	0.268

TRU3	0.490	**0.787**	0.333	0.316	0.222
TRU4	0.307	**0.773**	0.248	0.313	0.190
EXP1	0.340	0.202	**0.753**	0.218	0.291
EXP2	0.386	0.328	**0.772**	0.261	0.221
EXP3	0.289	0.242	**0.781**	0.339	0.224
EXP4	0.263	0.414	**0.797**	0.392	0.318
CE1	0.536	0.404	0.362	**0.822**	0.522
CE2	0.426	0.355	0.310	**0.827**	0.527
CE3	0.377	0.406	0.311	**0.718**	0.480
CE4	0.365	0.397	0.343	**0.886**	0.611
IB1	0.191	0.147	0.339	0.439	**0.794**
IB2	0.283	0.295	0.370	0.549	**0.806**
IB3	0.278	0.284	0.213	0.630	**0.861**
IB4	0.170	0.221	0.191	0.469	**0.757**

Source: Data Processing (2024)

4.2.2.2 Heterotrait-Monotrait Ratio (HTMT)

Henseler et al. (2015) introduced the HTMT ratio as an effective method for assessing discriminant validity within the multitrait-multimethod framework. By adjusting the confidence interval bounds, the HTMT test maintains a predefined familywise error rate. In reflective measurement models, HTMT values of below 0.85 are considered acceptable, indicating that the constructs are distinct and reliably measured. Based on the data in Table 4.24, the HTMT value of each construct is under 0.85, which means that it is acceptable.

Table 4.24 HTMT Test Result

	Streamer's Attractiveness	**Streamer's Trustworthiness**	**Streamer's Expertise**	**Customer Engagement**	**Impulsive Buying Decisions**
Streamer's Attractiveness					
Streamer's Trustworthiness	0.724				
Streamer's Expertise	0.502	0.471			

Customer Engagement	0.642	0.578	0.479		
Impulsive Buying Decisions	0.357	0.359	0.426	0.785	

Source: Data Processing (2024)

4.2.2.3 Fornell-Larcker Criterion

Fornell-Larcker criterion assesses discriminant validity by comparing the square root of each construct's Average Variance Extracted (AVE) to its correlations with other constructs. Based on the data in Table 4.25, the square root of the AVE for each construct exceeds its correlations with all other constructs. This indicates that each construct shares more variance with its indicators than with other constructs, demonstrating an adequate discriminant validity.

Table 4.25 Fornell-Larcker Test Result

	Streamer's Attractiveness	**Streamer's Trustworthiness**	**Streamer's Expertise**	**Customer Engagement**	**Impulsive Buying Decisions**
Streamer's Attractiveness	**0.759**				
Streamer's Trustworthiness	0.563	**0.781**			
Streamer's Expertise	0.399	0.396	**0.776**		
Customer Engagement	0.524	0.479	0.407	**0.815**	
Impulsive Buying Decisions	0.293	0.302	0.341	0.658	**0.805**

Source: Data Processing (2024)

4.2.3 Reliability Test

In order to evaluate the reliability of this research, the study employs both composite reliability and Cronbach's Alpha as key metrics which measure the stability and consistency of the data. Composite reliability values exceeding 0.7 are considered acceptable, aligning with the standards set by Hair et al. (2019). Similarly, Cronbach's Alpha values above 0.7 meet the acceptable threshold and are considered as satisfactory in accordance to Hair et al. (2017). The results of these reliability assessments are as follows:

4.2.3.1 Composite Reliability

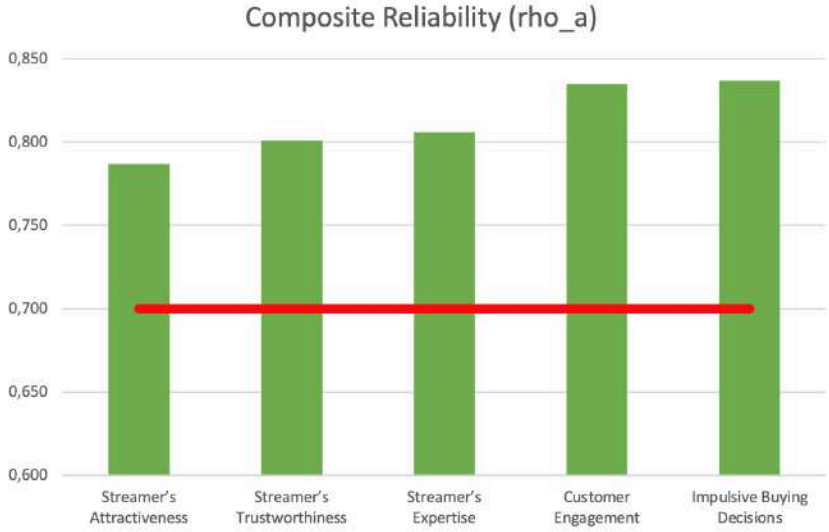
Composite reliability helps to assess the reliability of individual measurement items and their contribution towards a given construct. According to Hair et al. (2019), the value should be greater than 0.7 to be considered acceptable. Based on the data in Table 4.26 and Figure 4.3, each variable's composite reliability value scores above 0.7 that is considered to have passed the reliability test. The latent variables Streamer's Attractiveness (ATT) score of 0.787, Streamer's Trustworthiness (TRU) score of 0.801, Streamer's Expertise (EXP) score of 0.806, and Customer Engagement (CE) score of 0.835, and Impulsive Buying Decisions (IB) score of 0.837 indicate that the variables demonstrate satisfactory reliability.

Table 4.26 Composite Reliability Result

Variable	Composite Reliability (rho_a)
Streamer's Attractiveness	0.787
Streamer's Trustworthiness	0.801
Streamer's Expertise	0.806
Customer Engagement	0.835
Impulsive Buying Decisions	0.837

Source: Data Processing (2024)

Figure 4.3 Composite Reliability Graph



Source: Data Processing (2024)

4.2.3.2 Cronbach's Alpha

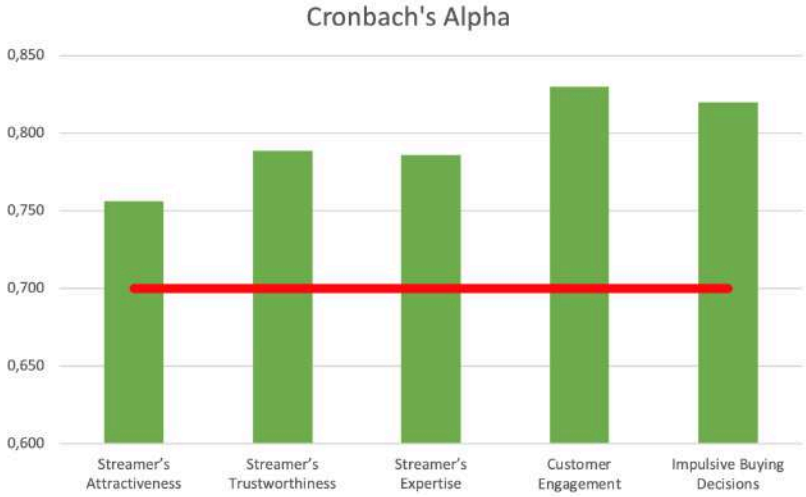
Cronbrach's Alpha is involved to measure the internal consistency that sums up all items in one construct. According to Hair et al. (2017), a value exceeding 0.70 is generally considered acceptable. Based on the data in Table 4.27 and Figure 4.4, it can be observed that the Cronbach's Alpha value of each variable exceeds 0.7. The Cronbach's Alpha value of Streamer's Attractiveness (ATT) variable is 0.756, Streamer's Trustworthiness (TRU) scores 0.789, while the Streamer's Expertise (EXP) scores 0.786. Moreover, the Customer Engagement (CE) scores 0.830 and Impulsive Buying Decisions (IB) scores 0.820. Therefore, it is shown that the Cronbach's Alpha result shows a good consistency in this study.

Table 4.27 Cronbach's Alpha Result

Variable	Cronbach's Alpha
Streamer's Attractiveness	0.756
Streamer's Trustworthiness	0.789
Streamer's Expertise	0.786
Customer Engagement	0.830
Impulsive Buying Decisions	0.820

Source: Data Processing (2024)

Figure 4.4 Cronbach's Alpha Graph



Source: Data Processing (2024)

4.2.3.3 Multicollinearity Test

Multicollinearity problems can be measured by Variance Inflation Factor (VIF). According to Ghozali (2018), VIF value above 10 indicates that there is a problem with multicollinearity. Based on the data in Table 4.28, the VIF value is lower than 10. The result indicates that there is no multicollinearity issue between variables.

Table 4.28 Variance Inflation Factor (VIF) Result

	VIF
Streamer's Attractiveness -> Customer Engagement	1.547
Streamer's Trustworthiness -> Customer Engagement	1.544
Streamer's Expertise -> Customer Engagement	1.253
Customer Engagement -> Impulsive Buying Decisions	1.000

Source: Data Processing (2024)

4.3 Inner Model SEM-PLS Results

This section delves into the inner model of SEM-PLS, which illustrates the relationships among latent variables. In SEM-PLS, the inner model evaluates the theoretical connections between these latent variables and estimates key model parameters. These parameters include the coefficient of determination (R^2), predictive relevance (Q^2), and hypothesis testing.

4.3.1 Coefficient of Determination (R^2) Result

To evaluate the coefficient of determination, an R-squared table is utilized. This table presents the test results, focusing on the R-squared value, which indicates the proportion of variance in the dependent variable that can be explained by the independent variables.

Table 4.29 Coefficient of Determination Result

Variable	R -Square
Customer Engagement	0.353
Impulsive Buying Decisions	0.433

Source: Data Processing (2024)

According to Hair et al. (2019), the coefficient of determination (R^2) value scale ranging from 0 to 1, indicates the explanatory power of a model with higher values denoting greater explanatory strength. R^2 values are classified as strong (0.75), moderate (0.50), and weak (0.25). Based on the data in Table 4.29, the R^2 value for Customer Engagement (CE) is 35.3%, categorizing it as moderate that also indicates that 35.3% of the variation in customer engagement can be explained by Streamer's Attractiveness (ATT), Trustworthiness (TRU), and Expertise (EXP), while the remaining 64.7% is influenced by other factors outside the model. Similarly, the R^2 value for Impulsive Buying Decisions (IB) stands at 43.3%, also classified as moderate, indicating that 43.3% of the variance in impulsive buying decisions can be explained by the Customer Engagement (CE). The remaining 56.7% is accounted for by other variables not included in the analysis model.

4.3.2 Predictive Relevance (Q^2) Result

Predictive Relevance (Q^2) is a measurement parameter that assesses a model's ability to predict observed values and parameter estimations. According to Alyoubi and Yamin (2021), a Q^2 score greater than zero indicates that the model has adequate predictive relevance. Conversely, a Q^2 value below zero

signifies that the model lacks or has no predictive relevance, as highlighted by Ghozali (2016). Omoga (2019) further refines this understanding by categorizing Q^2 scores, where values of 0.02, 0.15, and 0.35 correspond to weak, moderate, and strong predictive relevance, respectively. The calculation of predictive relevance is performed by using formula adapted from Hair (2014).

$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2)$

$Q^2 = 1 - (1 - 0.353^2)(1 - 0.433^2)$

$Q^2 = 1 - (0.875391)(0.812511)$

$Q^2 = 0.2887351832$

Based on the calculations above, the model achieved a Q^2 value of 0.2887, or 28.87%, indicating that the model achieves a sufficient level of goodness of fit and can be categorized as having moderate predictive relevance. This classification underscores the model's reliability in predicting outcomes based on the data provided and indicates that the research model is globally accepted as the Q^2 value is significantly above zero which aligns with the standards set by Henseler et al. (2009).

4.3.3 Hypothesis Testing Results

Hypothesis testing in SEM-PLS is the crucial final step in evaluating the validity of the proposed hypotheses. This process involves a detailed examination of the path coefficient values, also referred to as the Original Sample (O), to ascertain the nature of the relationships between variables, whether they are positive or negative. The significance of these relationships is assessed using T-Statistics, while P-Values are employed to determine the degree of support for the hypotheses. A positive correlation is indicated when the Original Sample value falls between 0 and 1, whereas a negative correlation is denoted by values ranging from -1 to 0. For the results to be deemed significant, the T-Statistics should be exceeding 1.64, while values below 1.64 are considered as non-significant. Additionally, a hypothesis is supported if the P-Value is less than 0.05, otherwise, it is regarded as unsupported (Al-kassab, 2022). The outcomes of

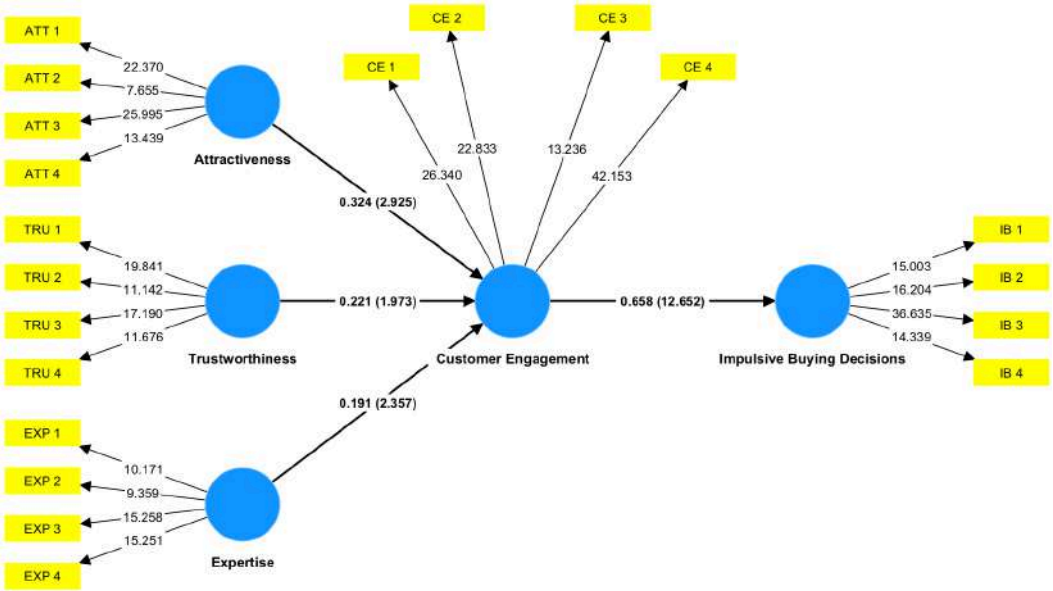
the hypothesis testing for this study are presented in the table below, providing a comprehensive overview of the relationships and their respective significance levels.

Table 4.30 Hypothesis Testing Result

Hypothesis	Original Sample (O)	T Statistics (O/STDEV)	P Values	Notes
Streamer's Attractiveness Has a Positive and Significant Impact on Customer Engagement	0.324	2.925	0.002	Supported
Streamer's Trustworthiness Has a Positive and Significant Impact on Customer Engagement	0.221	1.973	0.026	Supported
Streamer's Expertise Has a Positive and Significant Impact on Customer Engagement	0.191	2.357	0.010	Supported
Customer Engagement Has a Positive and Significant Impact on Impulsive Buying Decisions	0.658	12.652	0.000	Supported

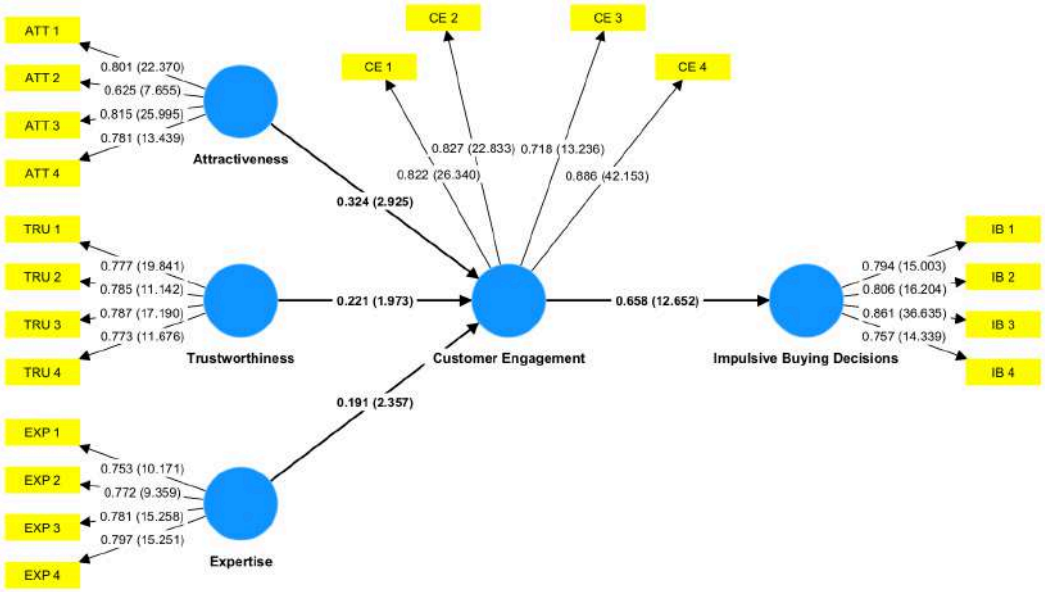
Source: Data Processing (2024)

Figure 4.5 Path Coefficient Result



Source: Data Processing (2024)

Figure 4.6 Hypothesis Test Result (Outer Loading and T Value)



Source: Data Processing (2024)

4.3.4 Results of the Study

Based on the data in Table 4.30, the results of the hypothesis testing for this study can be explained as follows:

1. The first hypothesis states that Streamer's Attractiveness (ATT) has a positive and significant impact on Customer Engagement (CE). According to the SEM analysis, the value of Original Sample is 0.324 (positive), T Statistic is 2.925 (>1.64) and the P-Value is 0.002 (< 0.05). Therefore, hypothesis 1 is supported. Streamer's Attractiveness has a positive and significant effect on Customer Engagement. This indicates that higher attractiveness in streamers contributes significantly to greater customer engagement.

2. The second hypothesis states that Streamer's Trustworthiness (TRU) has a positive and significant impact on Customer Engagement (CE). According to the SEM analysis, the value of Original Sample is 0.221 (positive), T Statistic is 1.973 (>1.64) and the P-Value is 0.026 (< 0.05). Therefore, hypothesis 2 is supported. Streamer's Trustworthiness has a positive and

significant impact on Customer Engagement. This indicates that higher trustworthiness in streamers contributes significantly to greater customer engagement

3. The third hypothesis states that Streamer's Expertise (EXP) has a positive and significant impact on Customer Engagement (CE). According to the SEM analysis, the value of Original Sample is 0.191 (positive), T Statistic is 2.357 (>1.64) and the P-Value is 0.010 (< 0.05). Therefore, hypothesis 3 is supported. Streamer's Expertise has a positive and significant impact on Customer Engagement. This indicates that higher expertise in streamers contributes significantly to greater customer engagement

4. The fourth hypothesis states that Customer Engagement (CE) has a positive and significant impact on Impulsive Buying Decisions (IB). According to the SEM analysis, the value of Original Sample is 0.658 (positive), T Statistic is 12.652 (>1.64) and the P-Value is 0.000 (< 0.05). Therefore, hypothesis 4 is supported. Customer Engagement has a positive and significant impact on Impulsive Buying Decisions. This finding indicates that the higher the customer engagement, the more likely the customers make impulsive buying decisions.

4.4 Analysis and Discussion

4.4.1 Streamer's Attractiveness positively and significantly impacts Customer Engagement in Social Commerce in Greater Jakarta: TikTok Live Streaming Shopping

Based on the result of this study, it is revealed that streamer's attractiveness has a positive and significant impact on customer engagement, thereby supporting the first hypothesis. This finding is consistent with prior research by AlFarraj et al. (2022) and Hossain et al. (2023), which explored the relationship between streamer attractiveness and customer engagement within the realm of live streaming commerce. These studies highlighted that streamer's attractiveness can foster a sense of community among viewers and cultivate positive intentions. The

finding indicates that the path coefficient from streamer's attractiveness to customer engagement is the highest among the other aspects of the streamer's credibility, suggesting that attractiveness has a stronger influence on customer engagement compared to trustworthiness and expertise.

Ha & Lam (2016) further elaborated on various aspects of streamer attractiveness, such as personality, appearance, talent, and an enjoyable streaming style. Among these, having an enjoyable streaming style emerged as the most crucial factor, as evidenced by the highest loading factor value in the analysis. In contrast, the streamer's appealing appearance had the lowest loading factor value, suggesting that it is less impactful in generating customer engagement. A practical example of this can be seen in the TikTok live streamer, Panji Lamakay. Despite not having a particularly appealing appearance, he has garnered a large and favorable viewer base due to his enjoyable streaming style, which includes humor while explaining products. This engaging approach results in higher viewer engagement.

Figure 4.7 TikTok Live Streamer - Panji Lamakay

Nevertheless, besides streamer attractiveness, trustworthiness, and expertise, there are several other factors significantly influencing customer engagement. This is evident from the fact that 35.3% of the variation in customer engagement can be attributed to the factors of streamer's attractiveness, trustworthiness, and

expertise, while the remaining 64.7% of the variation can be explained by other variables that are not examined in this study. This highlights the need for a broader exploration of additional influencing factors of customer engagement.

4.4.2 Streamer's Trustworthiness positively and significantly impacts Customer Engagement in Social Commerce in Greater Jakarta: TikTok Live Streaming Shopping

Based on the results of this study, it is revealed that a streamer's trustworthiness has a positive and significant impact on customer engagement, thereby supporting the second hypothesis. This finding aligns with prior research by Hossain et al. (2023) and Luo et al. (2024), which emphasized the critical role of streamer's trustworthiness in fostering customer engagement. Trustworthiness in a streamer not only influences the relationship between the streamer and the customer but also underscores the fundamental importance of trust in enhancing customer engagement in live streaming shopping environments.

Streamer's trustworthiness significantly impacts customer engagement in live streaming shopping because it fosters a sense of dependability, honesty, sincerity, and reliability, which are crucial for building consumer confidence (Luo et al., 2024). When viewers perceive a streamer as dependable, they trust that the product information and recommendations are accurate. Honesty ensures that the audience believes the streamer is not exaggerating or misrepresenting products, while sincerity helps create an emotional connection, making the shopping experience more personal and relatable. Reliability, demonstrated through consistent and transparent behavior, reassures customers that they can count on the streamer for genuine advice and support. These aspects collectively contribute to higher engagement and conversion rates, as viewers feel more secure and connected with the streamer.

However, it is important to note that beyond streamer's attractiveness, trustworthiness, and expertise, there are several other factors significantly influencing customer engagement. This study shows that 35.3% of the variation in

customer engagement can be attributed to these factors, while a substantial 64.7% of the variation is explained by other variables not examined in this research. This highlights the necessity for broader exploration of additional influencing factors of customer engagement.

4.4.3 Streamer's Expertise positively and significantly impacts Customer Engagement in Social Commerce in Greater Jakarta: TikTok Live Streaming Shopping

Based on the results of this study, it is revealed that streamer's expertise has a positive and significant impact on customer engagement, thereby supporting the third hypothesis. This finding aligns with previous research by Heo et al. (2020), Hossain et al. (2023), and Luo et al. (2024), which identified streamer's expertise as one of the key factors influencing consumer engagement during live streaming. This underscores the importance of expertise in creating a compelling live streaming shopping experience.

Jiang (2024) emphasizes that streamer's expertise plays a pivotal role in customer engagement in live streaming shopping due to their ability to leverage experience, proficiency, achievements, and status within a specific subject, making them a credible source of information. When a streamer possesses extensive experience and demonstrated proficiency, viewers are more likely to perceive them as knowledgeable and reliable sources of information. This engagement is further amplified by the streamer's achievements and status within their field, which serve as tangible proof of their expertise and success. Moreover, streamer's ability to effectively convey knowledge and insights enhances the viewing experience by providing valuable information in an engaging and comprehensible manner. Their adeptness at explaining product features, benefits, and uses in a way that resonates with the audience not only educates viewers but also creates a sense of personal connection and engagement.

However, apart from streamer's attractiveness, trustworthiness, and expertise, there are several other factors significantly influencing customer engagement. This study shows that 35.3% of the variation in customer engagement can be attributed to these factors, while the remaining 64.7% of the variation is explained by other variables not examined in this research. This highlights the necessity for broader exploration of additional influencing factors of customer engagement.

4.4.3 Customer Engagement positively and significantly impacts Impulsive Buying Decisions in Social Commerce in Greater Jakarta: TikTok Live Streaming Shopping

Based on the result of this study, it is revealed that customer engagement has a positive and significant impact on impulsive buying decisions, thereby supporting the fourth hypothesis. This finding is consistent with prior research by Hollebeek et al. (2022) and Luo et al. (2024), which noted that engaged customers tend to be more emotionally involved and are often drawn into the excitement and immediacy of the live streaming environment. Such high levels of engagement suggest that as customers become more deeply involved with live streaming shopping content, they are more likely to get caught up in the immersive experience. This heightened engagement leads to a greater tendency for impulsive buying decisions, as the excitement and immediacy of the experience can make spontaneous purchases more appealing.

The study reveals that in TikTok live streaming shopping, customer engagement plays a pivotal role in generating impulsive buying decisions. Engaged customers frequently make purchases of items they had not initially intended to buy. They experience numerous sudden urges to purchase products and often buy things without thorough consideration. This pattern of behavior is characterized by a tendency to feel compelled to buy more items than they actually need while watching live streaming shopping sessions.

Nonetheless, it is important to acknowledge that while customer engagement is a significant factor, it is not the only one influencing impulsive buying decisions. The study shows that 43.3% of the variation in impulsive buying decisions can be attributed to customer engagement, indicating that a substantial 56.7% of the variation is explained by other factors not examined in this study. This underscores the need for a broader exploration of additional factors that might influence impulsive buying decisions.

CHAPTER 5
CONCLUSION AND RECOMMENDATION

5.1 Conclusion

Based on the research and analysis on the impact of streamer's attractiveness, trustworthiness, and expertise towards impulsive buying decisions, with customer engagement serving as an intervening variable in TikTok Live Streaming Shopping, the conclusions can be drawn as following:

1. Streamer's Attractiveness has a positive and significant impact on Customer Engagement. Therefore, the first hypothesis of this study is acceptable. Various aspects of attractiveness, such as personality, appearance, talent, and an enjoyable streaming style, indicate that the more entertaining a streamer is, the more likely they are to engage viewers. Moreover, the impact of streamer's attractiveness on customer engagement has more influence compared to trustworthiness and expertise.
2. Streamer's Trustworthiness has a positive and significant impact on Customer Engagement. Therefore, the second hypothesis of this study is acceptable. Attributes such as dependability, honesty, sincerity, and reliability indicate that when viewers perceive a streamer as trustworthy, they are more likely to engage with their content.
3. Streamer's Expertise has a positive and significant impact on Customer Engagement. Therefore, the third hypothesis of this study is acceptable. Factors such as leveraging experience, proficiency, achievements, and status within a specific subject, as well as the ability to effectively convey knowledge, indicate that viewers are more engaged when they believe the streamer is knowledgeable and competent.
4. Customer Engagement has a positive and significant impact on Impulsive Buying Decisions. Therefore, the fourth hypothesis of this study is acceptable. Engaged viewers are more likely to make spontaneous purchases, often buying things they had not intended to purchase, experiencing sudden urges to

buy, and feeling compelled to buy more than they need during live-streaming shopping sessions.

Overall, all four proposed hypotheses are validated by the empirical evidence presented. The study's results demonstrate that streamer's attractiveness, trustworthiness, and expertise are crucial factors that enhance customer engagement, which subsequently drives impulsive buying decisions. These findings underscore the importance of enhancing streamer credibility to foster greater customer engagement and stimulate impulsive buying behaviors within the context of TikTok Live Streaming Shopping.

5.2 Implication

5.2.1 Theoretical Implication

In the context of live-streaming shopping, the significance of a streamer's attractiveness, trustworthiness, and expertise in driving customer engagement and impulsive buying decisions cannot be overstated. However, there is a noticeable gap in research specifically focusing on how aspects of streamer's credibility collectively influence customer engagement in this context. Previous studies have primarily explored the role of environmental stimuli such as parasocial interactions in triggering cognitive changes and behavioral responses, highlighting how these stimuli affect customer engagement. Additionally, other research has delved into the role of a streamer's credibility in eliciting affective reactions from customers, particularly perceived enjoyment. Therefore, this research aims to address these gaps by examining the relationships between streamer's attractiveness, trustworthiness, expertise, customer engagement, and impulsive buying decisions.

This study meticulously investigates these relationships by utilizing Structural Equation Modeling with Partial Least Squares (SEM PLS), providing empirical evidence and contributing to the extension of existing research theories. First, the study proves that streamer's attractiveness positively and significantly impacts customer engagement. Various aspects of attractiveness, such as

personality, appearance, talent, and an enjoyable streaming style, indicate that the more entertaining a streamer is, the more likely they are to engage viewers. Secondly, the study demonstrates that streamer's trustworthiness has a positive and significant influence on customer engagement. Attributes such as dependability, honesty, sincerity, and reliability indicate that when viewers perceive a streamer as trustworthy, they are more likely to engage with their content. Third, the study validates the third hypothesis by showing that streamer's expertise positively and significantly impacts customer engagement. Factors such as leveraging experience, proficiency, achievements, and status within a specific subject, as well as the ability to effectively convey knowledge, indicate that viewers are more engaged when they believe the streamer is knowledgeable and competent. Lastly, the study proves that customer engagement has a positive and significant impact on impulsive buying decisions. Engaged viewers are more likely to make spontaneous purchases, often buying things they had not intended to purchase, experiencing sudden urges to buy, and feeling compelled to buy more than they need during live-streaming shopping sessions.

5.2.2 Practical Implication

This study has confirmed that various aspects of streamer’s credibility has a positive and significant impact on customer engagement, which consequently results in customer engagement also has a positive and significant impact on impulsive buying decisions. Therefore, this study provides some practical implications to consider for live streamers, MSME owners who are also live streamers, businesses who are seeking live streamers, and digital marketing experts and practitioners, such as following:

1. Enhancing Credibility Through Professionalism: live streamers should focus on maintaining high professionalism during their live streams. This can be achieved by using high-quality equipment, presenting themselves well, and being consistent in their streaming schedules. A professional approach not only builds credibility but also attracts and retains a larger

audience, ultimately increasing impulsive buying decisions. For instance, they can invest in good lighting and sound systems, ensure their background is neat and professional, and dress appropriately for their audience.

2. Interactive and Engaging Content: Effective live streamers should frequently interact with their viewers through Q&A sessions, live demonstrations, and responding to comments in real-time. This interaction builds trust and encourages impulsive buying as viewers feel more connected to the streamer and the products being promoted. For instance, streamers should actively engage their audience by answering questions about the products or services and providing live feedback.
3. Leveraging Authenticity and Relatability: Experts should integrate the knowledge of live streamer importance by focusing on authenticity and relatability. Streamers who share personal stories, experiences, and honest opinions about products tend to build stronger connections with their audience. This authenticity can lead to increased impulsive buying as viewers perceive the recommendations as genuine. Marketing campaigns should highlight these authentic interactions and use them to build a narrative that resonates with potential customers. For example, encouraging streamers to share how a product has personally benefited them can be more compelling than a standard promotional message.
4. Cultivating a Sense of Community: Business owners should aim to create a community feel during their live streams. This involves recognizing repeat viewers, creating exclusive groups for loyal customers, and fostering a sense of belonging among the audience. A strong community can drive repeat sales and encourage impulsive buying as customers feel they are part of an exclusive group. For example, offering special discounts or early access to products for loyal viewers can enhance the sense of community and incentivize impulsive purchases.

5.3 Limitation

This study encompasses several limitations, which include constraints related to the industry scope, residing area of respondents, specific respondent criteria, sample size, and the selection of variables. The research is limited to the live streaming shopping industry, meaning that the findings are inapplicable to other industries that do not share similar characteristics. Then, the sample is restricted to respondents from Greater Jakarta which limits the generalizability of the results to other regions with diverse demographic profiles and population sizes. The respondent criteria is narrowed down to individuals meeting certain criteria, such as being over 18 years old, residing in the Jabodetabek area (Jakarta, Bogor, Depok, Tangerang, and Bekasi), and having previous experience purchasing from TikTok Live Streaming Shopping, which limits the applicability of the findings to a broader audience. Moreover, the study examines only five variables, including Streamer's Attractiveness, Trustworthiness, Expertise, Customer Engagement, and Impulsive Buying Decisions. This limited variable scope does not fully encapsulate the complexity of the live streaming shopping experience. The R^2 analysis also indicates that there are additional unexplored variables which could provide a more comprehensive understanding of the influencing factors in this context.

5.4 Recommendation

In order to obtain more diverse data and richer insights, it is advisable to expand the scope of future research beyond the variables examined in this study, particularly with a broader landscape of live streaming shopping. Future studies should consider additional factors that could have influence from streamer's credibility. Priester & Petty (2003) highlighted the influential role of credible sources in shaping perceptions, beliefs, opinions, and attitudes, thereby reinforcing informational support. Hence, researchers could consider further exploration of the informational support variable. Aside from focusing only on the streamers aspects, future studies could also consider exploring various product-related aspects. These aspects could

include the product information quality, review consistency (Luo et al., 2024), product price, and the purchase convenience (Lee et al., 2021). Investigating how different product categories, such as experience goods, utilitarian goods, and hedonic goods, influence consumer behavior could also provide valuable insights (Park and Lin, 2020). Furthermore, researchers could examine the dynamics of live streaming shopping on different platforms of social commerce or e-commerce. Additionally, increasing the number of respondents can enhance the quality and generalizability of research findings. Expanding the demographic scope to include respondents from diverse cities beyond Greater Jakarta will also provide a more comprehensive understanding of consumer behaviors across different regions in Indonesia.

REFERENCES

Ahmed, M., Siddiqui, M.I., (2020). Impact of social media websites on consumer buying behavior: An empirical study. *Journal of Xidian University*, *14*(7).
https://doi.org/10.37896/jxu14.7/157

AlFarraj, O., Alalwan, A. A., Obeidat, Z. M., Baabdullah, A., Aldmour, R., & Al-Haddad, S. (2021). Examining the impact of influencers' credibility dimensions: Attractiveness, trustworthiness and expertise on the purchase intention in the aesthetic dermatology industry. *Review of International Business and Strategy*, *31*(3), 355-374.
https://doi.org/10.1108/ribs-07-2020-0089

Al-kassab, M. (2022). The use of one sample T-TesT in the real data. *Journal of Advances in Mathematics*, *21*, 134-138.
https://doi.org/10.24297/jam.v21i.9279

Alyoubi, B. A. and Yamin, M. (2021). Extending the role of diffusion of innovation theory (doi) in achieving the strategic goal of the firm with the moderating effect of cost leadership. International Journal of System Dynamics Applications, 10(4), 1-22.
https://doi.org/10.4018/ijsda.20211001.oa15

Beatty, S. E., & Ferrel, M.E (1998). Impulse buying: Modeling its precursors. *Journal of Retailing*, *74*(2), 161-167.
https://doi.org/10.1016/s0022-4359(98)90009-4

Berne-Manero, C., & Marzo-Navarro, M. (2020). Exploring how influencer and relationship marketing serve corporate sustainability. *Sustainability*, *12*(11), 4392.
https://doi.org/10.3390/su12114392

Best, A., Stokols, D., Green, L. W., Leischow, S., Holmes, B., & Buchholz, K. (2003). An integrative framework for community partnering to translate theory into effective health promotion strategy. *American Journal of Health Promotion*, *18*(2), 168-176.
https://doi.org/10.4278/0890-1171-18.2.168

Black, R., & Rabianski, J. (2003). Defining the real estate body of knowledge: A survey approach. *Journal of Real Estate Practice and Education*, *6*(1), 33-54. https://doi.org/10.1080/10835547.2003.12091584

Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, *14*(3), 252-271.
https://doi.org/10.1177/1094670511411703

Cai, J., Wohn, D. Y., Mittal, A., & Sureshbabu, D. (2018). Utilitarian and hedonic motivations for live streaming shopping. *Proceedings of the 2018 ACM International Conference on Interactive Experiences for TV and Online Video*.
https://doi.org/10.1145/3210825.3210837

Cai, J., & Wohn, D. Y. (2019). Live streaming commerce: Uses and gratifications approach to understanding consumers' motivations. *Proceedings of the Annual Hawaii International Conference on System Sciences*.
https://doi.org/10.24251/hicss.2019.307

Chan, T.K.H., Cheung, C.M.K., Lee, Z.W.Y., (2017). The state of online impulse-buying research: A literature analysis. *Information and Management*. 54, 204–217. https://doi.org/10.1016/j.im.2016.06.001

Chen, C., & Yao, J. (2018). What drives impulse buying behaviors in a mobile auction? The perspective of the stimulus-organism-Response model. *Telematics and Informatics*, *35*(5), 1249-1262.
https://doi.org/10.1016/j.tele.2018.02.007

Chen, J., & Liao, J. (2022). Antecedents of viewers' live streaming watching: A perspective of social presence theory. *Frontiers in Psychology*, *13*.
https://doi.org/10.3389/fpsyg.2022.839629

Chen, L. (2020). *Livestreaming e-Commerce: Lasting buzz or will it go bust?* CEIBS. https://www.ceibs.edu/new-papers-columns/livestreaming-e-commerce-lasting-buzz-or-will-it-go-bust

Chin, W.W. (1998) Commentary: Issues and Opinion on Structural Equation Modeling. *MIS Quarterly*, 22, 7-16.
http://www.jstor.org/stable/249674.

Chung, S., & Cho, H. (2017). Fostering Parasocial relationships with celebrities on social media: Implications for celebrity endorsement. *Psychology & Marketing*, *34*(4), 481-495. https://doi.org/10.1002/mar.21001

Curty, R. G., & Zhang, P. (2011). Social commerce: looking back and forward. *American Society for Information Science and Technology*, 48(1), 1–10. https://doi.org/10.1002/meet.2011.14504801096

Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: A social media perspective. *Journal of Product & Brand Management*, *24*(1), 28-42.
https://doi.org/10.1108/jpbm-06-2014-0635

Erdogan, B. Z. (1999). Celebrity endorsement: A literature review. *Journal of Marketing Management*, *15*(4), 291-314.
https://doi.org/10.1362/026725799784870379

Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2003). Empirical testing of a model of online store atmospherics and shopper responses. *Psychology & Marketing*, *20*(2), 139-150. https://doi.org/10.1002/mar.10064

Etikan, I. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, *5*(6).
https://doi.org/10.15406/bbij.2017.05.00149

Fiore, A. M., & Kim, J. (2007). An integrative framework capturing experiential and utilitarian shopping experience. *International Journal of Retail & Distribution Management*, *35*(6), 421-442. https://doi.org/10.1108/09590550710750313

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39. https://doi.org/10.2307/3151312

Gulfraz, M. B., Sufyan, M., Mustak, M., Salminen, J., & Srivastava, D. K. (2022). Understanding the impact of online customers' shopping experience on online impulsive buying: A study on two leading e-Commerce platforms. *Journal of Retailing and Consumer Services*, *68*, 103000. https://doi.org/10.1016/j.jretconser.2022.103000

Görlitz, L. (2024). *TikTok's Growth in eCommerce: TikTok Shop, Asian Market & Expectations*. ECDB. https://ecommercedb.com/insights/tiktoks-growth-in-ecommerce/4719

Ha, N. M., & Lam, N. H. (2016). The effects of celebrity endorsement on customer's attitude toward brand and purchase intention. *International Journal of Economics and Finance*, *9*(1), 64. https://doi.org/10.5539/ijef.v9n1p64

Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, *26*(2), 106-121. https://doi.org/10.1108/ebr-10-2013-0128

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/ebr-11-2018-0203

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2021). Partial least squares structural equation modeling. *Handbook of Market Research*, 587-632. https://doi.org/10.1007/978-3-319-57413-4_15

Harjadi, C. N. (2024). *Tren social commerce Makin Populer, Masyarakat Kini Hobi Belanja Di media Sosial*. GoodStats. https://goodstats.id/article/tren-social-commerce-semakin-populer-masyarakat-kini-hobi-belanja-di-media-sosial-YlbSA

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 277-319. https://doi.org/10.1108/s1474-7979(2009)0000020014

Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115-135. https://doi.org/10.1007/s11747-014-0403-8

Heo, J., Kim, Y., & Yan, J. (2020). Sustainability of live video streamer's strategies: Live streaming video platform and audience's social capital in South Korea. *Sustainability*, *12*(5), 1–13. https://doi.org/10.3390/su12051969

Hollebeek, L. (2011). Exploring customer brand engagement: Definition and themes. *Journal of Strategic Marketing*, *19*(7), 555-573. https://doi.org/10.1080/0965254x.2011.599493

Hollebeek, L. D., & Macky, K. (2019). Digital content marketing's role in fostering consumer engagement, trust, and value: Framework, fundamental propositions, and implications. *Journal of Interactive Marketing*, *45*, 27-41. https://doi.org/10.1016/j.intmar.2018.07.003

Hollebeek, L. D., Sprott, D. E., Sigurdsson, V., & Clark, M. K. (2022). Social influence and stakeholder engagement behavior conformity, compliance, and reactance. *Psychology & Marketing*, *39*(1), 90-100. https://doi.org/10.1002/mar.21577

Homer, P. M., & Kahle, L. R. (1990). Source expertise, time of source identification, and involvement in persuasion: An elaborative processing perspective. *Journal of Advertising*, *19*(1), 30-39. https://doi.org/10.1080/00913367.1990.10673178

Hossain, M. A., Kalam, A., Nuruzzaman, M., & Kim, M. (2023). The power of live-streaming in consumers' purchasing decision. *SAGE Open*, *13*(4). https://doi.org/10.1177/21582440231197903

Hu, M., & Chaudhry, S. S. (2020). Enhancing consumer engagement in e-Commerce live streaming via relational bonds. *Internet Research*, *30*(3), 1019-1041. https://doi.org/10.1108/intr-03-2019-0082

Hua, N., Li, B., & Zhang, T. (2023). Live streaming: Pushing limits of hospitality and tourism online experiences. *International Journal of Contemporary Hospitality Management*, *35*(10), 3703-3717. https://doi.org/10.1108/ijchm-07-2022-0810

Iyer, G. R., Blut, M., Xiao, S. H., & Grewal, D. (2019). Impulse buying: A meta-analytic review. *Journal of the Academy of Marketing Science*, *48*(3), 384-404. https://doi.org/10.1007/s11747-019-00670-w

Jajoo, D., & Malu, S. K. (2014). Research Methodology. In A Study of Buying Decisions Process in Malls.

http://shodhganga.inflibnet.ac.in/bitstream/10603/97412/5/chapter 3.pdf

Jessen, A., Hilken, T., Chylinski, M., Mahr, D., Heller, J., Keeling, D. I., & De Ruyter, K. (2020). The playground effect: How augmented reality drives creative customer engagement. *Journal of Business Research*, *116*, 85-98. https://doi.org/10.1016/j.jbusres.2020.05.002

Jiang, Y., & Cai, H. (2021). The impact of impulsive consumption on supply chain in the live-streaming economy. *IEEE Access*, *9*, 48923-48930. https://doi.org/10.1109/access.2021.3068827

Jiang, Y., Lee, H., & Li, W. (2024). The effects of live streamer's expertise and entertainment on the viewers' purchase and follow intentions. *Frontiers in Psychology*, *15*. https://doi.org/10.3389/fpsyg.2024.1383736

Kemp, S. (2024). *Digital 2024: Indonesia*. DataReportal. https://datareportal.com/reports/digital-2024-indonesia#:~:text=There%20were%20185.3%20million%20internet,percent%20of%20the%20total%20population

Ku, Y. C., Kao, Y. F., & Qin, M. (2019). The effect of internet celebrity's endorsement on consumer purchase intention. *HCI in Business, Government and Organizations. eCommerce and Consumer Behavior*, 274-287. https://doi.org/10.1007/978-3-030-22335-9_18

Laurer, L. (2024). *Live commerce in China: Market size, key players & trends*. ECDB. https://ecommercedb.com/insights/livestream-commerce-in-china-taobao-leads-but-its-dominance-fades/4598

Lee, S., DeWester, D., & Park, S. R. (2008). Web 2.0 and opportunities for small businesses. *Service Business*, *2*(4), 335-345. https://doi.org/10.1007/s11628-008-0043-5

Lee, C., & Chen, C. (2021). Impulse buying behaviors in live streaming commerce based on the stimulus-organism-Response framework. *Information*, *12*(6), 241. https://doi.org/10.3390/info12060241

Leong, T. K., Meng, T. P., & Alex, T. Y. (2022). Impulse buying in live stream based on the stimulus-organism-Response framework. *Jurnal Pengurusan*, *66*. https://doi.org/10.17576/pengurusan-2022-66-06

Liang, T. and Turban, E. (2011) Introduction to the Special Issue Social Commerce: A Research Framework for Social Commerce. *International Journal of Electronic Commerce*, 16, 5-14. https://doi.org/10.2753/JEC1086-4415160201

Lin, Q., & Nuangjamnong, C. (2022). Exploring the role of influencers and customer engagement on purchase intention in TikTok live streaming shopping. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4295862

Liu, L. (2022). Factors affecting consumers' purchasing behaviours in live streaming e-Commerce: A review. *Proceedings of the 2022 2nd International Conference on Economic Development and Business Culture (ICEDBC 2022)*, 508-515. https://doi.org/10.2991/978-94-6463-036-7_75

Luo, X., Cheah, J., Hollebeek, L. D., & Lim, X. (2024). Boosting customers' impulsive buying tendency in live-streaming commerce: The role of customer engagement and deal proneness. *Journal of Retailing and Consumer Services*, *77*, 103644. https://doi.org/10.1016/j.jretconser.2023.103644

Lyu, B. (2021). How is the purchase intention of consumers affected in the environment of e-Commerce live streaming? *Proceedings of the 2021 International Conference on Financial Management and Economic Transition (FMET 2021)*. https://doi.org/10.2991/aebmr.k.210917.009

Magno, F., Cassia, F., & Ringle, C. M. (2022). A brief review of partial least squares structural equation modeling (PLS-SEM) use in quality management studies. *The TQM Journal*. https://doi.org/10.1108/tqm-06-2022-0197

Marcom Team. (2024). *Livestream Selling in Indonesia Market is Growing*. IPSOS. https://www.ipsos.com/en-id/livestream-selling-indonesia-market-growing

Maulia, Y. (2022). *Live streaming sales Di TikTok, Tren Berjualan Yang Kini Digemari brand Lokal*. Parapuan. https://www.parapuan.co/read/533135594/live-streaming-sales-di-tiktok-tren-berjualan-yang-kini-digemari-brand-lokal?page=all

Mehrabian, A., & Russell, J. A. (1974). An approach to environmental psychology. The MIT Press.

Ming, J., Jianqiu, Z., Bilal, M., Akram, U., & Fan, M. (2021). How social presence influences impulse buying behavior in live streaming commerce? The role of S-O-R theory. *International Journal of Web Information Systems*, *17*(4), 300-320. https://doi.org/10.1108/ijwis-02-2021-0012

Ogura, M., & Wang, W. S. (1995). Snowball effect in lexical diffusion. In English historical linguistics 1994: papers from the 8th Int. Conf. on English Historical Linguistics (8. ICEHL), Edinburgh, 19–23 September (p. 119).

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, *19*(3), 39-52. https://doi.org/10.1080/00913367.1990.10673191

Omoga, C. O. (2019). Integrated e-marketing adoption model for small businesses. Ijarcce, 8(5), 241-248.
https://doi.org/10.17148/ijarcce.2019.8544

Ou, C. X., Pavlou, P. A., & Davison, R. M. (2014). Swift Guanxi in online marketplaces: The role of computer-mediated communication technologies. *MIS Quarterly*, *38*(1), 209-230. https://doi.org/10.25300/misq/2014/38.1.10

Paré, G., & Kitsiou S. (2017). Chapter 9 Methods for Literature Reviews. In: Lau F, Kuziemsky C, editors. Handbook of eHealth Evaluation: An Evidence-based Approach [Internet]. Victoria (BC): University of Victoria.
https://www.ncbi.nlm.nih.gov/books/NBK481583/

Park, H. J., & Lin, L. M. (2020). The effects of match-UPS on the consumer attitudes toward internet celebrities and their live streaming contents in the context of product endorsement. *Journal of Retailing and Consumer Services*, *52*, 101934. https://doi.org/10.1016/j.jretconser.2019.101934

Rabianski, J.S. (2003) Primary and secondary data: concepts, concerns, errors, and issues. (Features). The Free Library
https://www.thefreelibrary.com/Primary and secondary data: concepts, concerns, errors, and issues....-a096694281

Rather, R. A., Hollebeek, L. D., & Islam, J. U. (2019). Tourism-based customer engagement: The construct, antecedents, and consequences. *The Service Industries Journal*, *39*(7-8), 519-540. https://doi.org/10.1080/02642069.2019.1570154

Sekaran, U. & Bougie, R. (2016). Research Methods for Business: A Skill-Building Approach. 7th Edition, Wiley & Sons, West Sussex. ISBN: 978-1-119-26684-6

Setiawan, W. (2024). *Ipsos Rilis Survei Terbaru "Tren Live Streaming E-commerce bagi Penjual"*. MIXMarcomm. https://mix.co.id/marcomm/news-trend/ipsos-rilis-survei-terbaru-tren-live-streaming-e-commerce-bagi-penjual/?page=2

Song, C., & Liu, Y. L. (2021). The effect of live-streaming shopping on the consumer's perceived risk and purchase intention in China. *Paper presented at The 23rd Biennial Conference of the International Telecommunications Society*. https://hdl.handle.net/10419/238054

Thakur, R. (2018). Customer engagement and online reviews. *Journal of Retailing and Consumer Services*, *41*, 48-59. https://doi.org/10.1016/j.jretconser.2017.11.002

Thompson, A. (2024). *Digital 2024: 5 billion social media users*. We Are Social. https://wearesocial.com/id/blog/2024/01/digital-2024-5-billion-social-media-users/

Wang, Z. X., Lee, S. J. & Lee, K. R. (2018). Factors Influencing Product Purchase Intention in Taobao Live Streaming Shopping. Journal of Digital Contents Society, 19(4), 649-659. https://doi.org/10.9728/dcs.2018.19.4.649

Wongkitrungrueng, A., & Assarut, N. (2020). The role of live streaming in building consumer trust and engagement with social commerce sellers. *Journal of Business Research*, *117*, 543-556. https://doi.org/10.1016/j.jbusres.2018.08.032

Xiang, L., Zheng, X., Lee, M. K., & Zhao, D. (2015). Exploring consumers' impulse buying behavior on social commerce platform: The role of parasocial interaction. *International Journal of Information Management*, *36*(3), 333-347. https://doi.org/10.1016/j.ijinfomgt.2015.11.002

Xu, X., Wu, J., Li, Q., (2020). What drives consumers' shopping behavior in live streaming commerce?. *Journal of Electronic Commerce Research*. Res. 21 (3), 144–167. http://www.jecr.org/node/609

Yi, Q., Khan, J., Su, Y., Tong, J., & Zhao, S. (2023). Impulse buying tendency in live-stream commerce: The role of viewing frequency and anticipated emotions influencing scarcity-induced purchase decision. *Journal of Retailing and Consumer Services*, *75*, 103534. https://doi.org/10.1016/j.jretconser.2023.103534

Zhang, M., Liu, Y., Wang, Y., & Zhao, L. (2022). How to retain customers: Understanding the role of trust in live streaming commerce with a socio-technical perspective. *Computers in Human Behavior*, *127*, 107052. https://doi.org/10.1016/j.chb.2021.107052

APPENDIXES

Appendix A : Questionnaire (English version)

QUESTIONNAIRE

Hello everyone,

Thank you for taking the time to participate in this questionnaire!

My name is Carrisa Soetiono Sanjaya, a bachelor student majoring in Business Administration at IPMI International Business School. Currently, I am conducting research on "*The Role of Live Streamer's Credibility on Customer Engagement and Impulsive Buying Decisions in Social Commerce in Greater Jakarta: TikTok Live Streaming Shopping*". Your contribution to this survey is very valuable for the completion of my thesis and obtaining my BBA degree. Your insights and responses will greatly assist in advancing the understanding of this topic. Thank you for your time and valuable insights.

Best regards,

Carrisa Soetiono Sanjaya

Undergraduate Student

IPMI International Business School

A. Screening

Put a checklist (√) on the answer that suits your choice. If the respondent does not meet these criteria, you may exit the survey at this point.

01. Are you 18 years old or older?

- □ Yes If **Yes**, continue to question number 2.
- □ No If **No**, you may stop here.

02. Do you live in Greater Jakarta area (JABODETABEK)?

- □ Yes If **Yes**, continue to question number 3.
- □ No If **No**, you may stop here.

03. Have you ever made a purchase from TikTok Shop Live Streaming at least once within a year?

- □ Yes If **Yes**, you may continue to the next section.
- □ No If **No**, you may stop here.

B. Respondent Profiles

Please read the following descriptions and select appropriate options that match your profile.

01. Your gender:

- □ Male
- □ Female

02. Your age:

- □ 18 - 24 years old
- □ 26 - 34 years old
- □ 35 - 49 years old
- □ > 50 years old

03. Domicile:

- □ Jakarta
- □ Bogor
- □ Depok
- □ Tangerang
- □ Bekasi

04. Occupation:

- Student
- Private Employees
- Entrepreneur
- Freelancer
- Housewife
- Others (please mention): _____

05. Monthly expenses:

- < Rp. 3.000.000
- Rp. 3.000.000 - Rp. 5.999.999
- Rp. 6.000.000 - Rp. 8.999.999
- Rp. 9.000.000 - Rp. 11.999.999
- Rp. 12.000.000 - Rp. 14.999.999
- > Rp. 15.000.000

06. Average spending per transaction through TikTok Live Streaming Shopping:

- < Rp. 100.000
- Rp. 100.000 - Rp. 399.999
- Rp. 400.000 - Rp. 699.999
- Rp. 700.000 - Rp. 999.999
- > Rp. 1.000.000

07. Products that you usually purchase from TikTok Live Streaming Shopping:

- Apparel & fashion
- Beauty products
- Food & beverages
- Consumer electronics
- Furniture & appliances
- Others (please mention): _____

08. Please mention at least one TikTok Live Streamers name / account username that you usually watch through live streaming shopping: _____

C. Questionnaire Content

The following are the questions that describe your assessment on your experience in TikTok Live Streaming Shopping. You can pick from strongly disagree to strongly agree that suits your choice for each question.

No.	Questions	Likert Scale				
		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
Streamer's Attractiveness						
ATT 1	When watching TikTok Live Streaming Shopping, I think that the live streamer is talented					
ATT 2	When watching TikTok Live Streaming Shopping, I think the live streamer has an appealing appearance					
ATT 3	When watching TikTok Live Streaming Shopping, I think that the live streamer has an enjoyable live streaming style					
ATT 4	When watching TikTok Live Streaming Shopping, I think that the streamer has an interesting personality					
Streamer's Trustworthiness						
TRU 1	When watching TikTok Live Streaming Shopping, I think the					

No.	Questions	Likert Scale				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	live streamer looks dependable					
TRU 2	When watching TikTok Live Streaming Shopping, I think the live streamer looks honest					
TRU 3	When watching TikTok Live Streaming Shopping, I think the live streamer looks sincere					
TRU 4	When watching TikTok Live Streaming Shopping, I think the live streamer looks reliable					
Streamer's Expertise						
EXP 1	When watching TikTok Live Streaming Shopping, the streamer gives viewers a clear information about the products/ service					
EXP 2	When watching TikTok Live Streaming Shopping, I think the live streamer knows a lot about the products/service					
EXP 3	When watching TikTok Live Streaming Shopping, I think the live streamer has a lot of experience with the products/ service					

No.	Questions	Likert Scale				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
EXP 4	When watching TikTok Live Streaming Shopping, I think the live streamer is likely to read a lot of reference sources/ materials related to the products/ service					
Customer Engagement						
CE 1	I feel happy when interacting with the live streamer when watching TikTok Live Streaming Shopping					
CE 2	I spend more time on the TikTok Live Streaming Shopping					
CE 3	I am likely to recommend live streamers that use TikTok Live Streaming Shopping to my friends					
CE 4	I am likely to keep on track of the activities of the live streamers I like that uses TikTok Live Streaming Shopping					
Impulsive Buying Decisions						
IB 1	When watching TikTok Live Streaming Shopping, I often buy things that I had not intended to purchase					
IB 2	I experienced several sudden urges to buy things when doing shopping on TikTok Live					

No.	Questions	Likert Scale				
		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
	Streaming Shopping					
IB 3	While watching TikTok Live Streaming Shopping, I often buy things without thinking					
IB 4	When watching TikTok Live Streaming Shopping, I feel like buying more things than I need					

Thank you for taking the time to fill out this questionnaire and participate in this research. Your input is very valuable

Appendix B : Questionnaire (Bahasa Indonesia version)

QUESTIONNAIRE

Halo semuanya,

Terima kasih telah meluangkan waktu untuk berpartisipasi dalam kuesioner ini!

Nama saya Carrisa Soetiono Sanjaya, seorang mahasiswa tingkat sarjana jurusan Administrasi Bisnis di IPMI International Business School. Saat ini, saya sedang melakukan penelitian tentang "*Peran Kredibilitas Live Streamer dalam Keterlibatan Pelanggan dan Keputusan Pembelian Impulsif dalam Komersial Sosial di Jakarta Raya: TikTok Live Streaming Shopping*". Kontribusi Anda terhadap survei ini sangat berharga untuk menyelesaikan tesis saya guna mendapatkan gelar BBA. Masukan dan tanggapan Anda akan sangat membantu dalam memajukan pemahaman tentang topik ini. Terima kasih atas waktu dan masukan berharganya.

Hormat saya,
Carrisa Soetiono Sanjaya
Mahasiswa Tingkat Sarjana
IPMI International Business School

A. Penyaringan

Tambahkan tanda checklist (√) pada jawaban yang sesuai dengan pilihan Anda. Jika responden tidak memenuhi kriteria-kriteria ini, Anda dapat keluar dari survei ini.

01. Apakah Anda berusia 18 tahun atau lebih?

- □ Ya Jika Ya, lanjutkan ke pertanyaan nomor 2.
- □ Tidak Jika Tidak, Anda dapat berhenti disini

02. Apakah Anda tinggal di wilayah Jakarta Raya (JABODETABEK)?

- □ Ya Jika Ya, lanjutkan ke pertanyaan nomor 3.
- □ Tidak Jika Tidak, Anda dapat berhenti disini.

03. Apakah Anda pernah melakukan pembelian dari TikTok Shop Live Streaming setidaknya sekali dalam satu tahun terakhir?

- □ Ya Jika Ya, lanjutkan ke sesi selanjutnya.
- □ Tidak Jika Tidak, Anda dapat berhenti disini.

B. Profile Responden

Silahkan baca deskripsi berikut dan pilih opsi yang sesuai dengan profil Anda.

01. Jenis kelamin:

- □ Pria
- □ Wanita

02. Umur:

- □ 18 - 24 tahun
- □ 26 - 34 tahun
- □ 35 - 49 tahun
- □ > 50 tahun

03. Domisili:

- □ Jakarta
- □ Bogor
- □ Depok
- □ Tangerang
- □ Bekasi

04. Pekerjaan:

- Siswa/Mahasiswa
- Karyawan swasta
- Wirausaha
- Pekerja lepas
- Ibu rumah tangga
- Lainnya (mohon sebutkan): _____

05. Pengeluaran bulanan:

- < Rp. 3.000.000
- Rp. 3.000.000 - Rp. 5.999.999
- Rp. 6.000.000 - Rp. 8.999.999
- Rp. 9.000.000 - Rp. 11.999.999
- Rp. 12.000.000 - Rp. 14.999.999
- > Rp. 15.000.000

06. Pengeluaran rata-rata per transaksi melalui TikTok Live Streaming Shopping:

- < Rp. 100.000
- Rp. 100.000 - Rp. 399.999
- Rp. 400.000 - Rp. 699.999
- Rp. 700.000 - Rp. 999.999
- > Rp. 1.000.000

07. Produk yang biasanya Anda beli melalui TikTok Shop Live Streaming:

- Pakaian & fashion
- Produk kecantikan
- Makanan & minuman
- Produk elektronik
- Furnitur & peralatan
- Lainnya (mohon sebutkan): _____

08. Tolong sebutkan setidaknya satu nama / username akun TikTok Live Streamer yang biasanya Anda tonton melalui live streaming shopping: _____

C. Konten Kuesioner

Berikut adalah pertanyaan yang menggambarkan penilaian Anda terhadap pengalaman Anda dalam belanja melalui TikTok Live Streaming Shopping. Anda dapat memilih dari "sangat tidak setuju" hingga "sangat setuju" sesuai dengan pilihan Anda untuk setiap pertanyaan.

No.	Pertanyaan	Likert Scale				
		Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Daya Tarik Streamer						
ATT 1	Ketika menonton TikTok Live Streaming Shopping, saya merasa live streamer tersebut berbakat					
ATT 2	Ketika menonton TikTok Live Streaming Shopping, saya merasa live streamer tersebut memiliki penampilan yang menarik					
ATT 3	Ketika menonton TikTok Live Streaming Shopping, saya merasa live streamer tersebut memiliki gaya siaran langsung yang menyenangkan					
ATT 4	Ketika menonton TikTok Live Streaming Shopping, saya merasa live streamer tersebut memiliki kepribadian yang menarik					

No.	Pertanyaan	Likert Scale				
		Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Kepercayaan Streamer						
TRU 1	Ketika menonton TikTok Live Streaming Shopping, saya merasa live streamer tersebut terlihat dapat diandalkan					
TRU 2	Ketika menonton TikTok Live Streaming Shopping, saya merasa live streamer tersebut terlihat jujur					
TRU 3	Ketika menonton TikTok Live Streaming Shopping, saya merasa live streamer tersebut terlihat tulus					
TRU 4	Ketika menonton TikTok Live Streaming Shopping, saya merasa live streamer tersebut terlihat dapat dipercaya					
Keahlian Streamer						
EXP 1	Ketika menonton TikTok Live Streaming Shopping, streamer memberikan informasi yang jelas kepada penonton tentang produk / layanan					
EXP 2	Ketika menonton TikTok Live Streaming Shopping, saya merasa live streamer tersebut mengetahui banyak hal tentang produk / layanan yang di jelaskan					

No.	Pertanyaan	Likert Scale				
		Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
EXP 3	Ketika menonton TikTok Live Streaming Shopping, saya merasa live streamer tersebut memiliki banyak pengalaman dengan produk / layanan yang di jelaskan					
EXP 4	Ketika menonton TikTok Live Streaming Shopping, saya merasa live streamer tersebut kemungkinan besar membaca banyak sumber referensi/ materi terkait dengan produk / layanan yang di jelaskan					
Customer Engagement						
CE 1	Saya merasa senang saat berinteraksi dengan live streamer Ketika menonton TikTok Live Streaming Shopping					
CE 2	Saya menghabiskan lebih banyak waktu di TikTok Live Streaming Shopping					
CE 3	Saya cenderung merekomendasikan live streamer yang menggunakan TikTok Live Streaming Shopping kepada teman-teman saya					
CE 4	Saya cenderung untuk terus mengikuti aktivitas live streamer yang saya sukai yang menggunakan TikTok Live Streaming Shopping					
Keputusan Pembelian Impulsif						
IB 1	Ketika menonton TikTok Live					

No.	Pertanyaan	Likert Scale				
		Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
	Streaming Shopping, saya sering kali membeli barang yang sebenarnya tidak saya rencanakan untuk beli					
IB 2	Saya mengalami beberapa dorongan secara tiba-tiba untuk membeli barang saat berbelanja di TikTok Live Streaming Shopping					
IB 3	Saat menonton TikTok Live Streaming Shopping, saya sering membeli barang tanpa berpikir terlebih dahulu					
IB 4	Ketika menonton TikTok Live Streaming Shopping, saya merasa ingin membeli lebih banyak barang dari yang saya butuhkan					

Terima kasih telah meluangkan waktu untuk mengisi kuesioner ini dan berpartisipasi dalam penelitian ini. Masukan anda sangat berharga

Appendix C : Results of SmartPLS 4 data processing

1. PLS-SEM Algorithm

Outer Loadings

	Outer loadings
ATT 1 <- Attractiveness	0.801
ATT 2 <- Attractiveness	0.625
ATT 3 <- Attractiveness	0.815
ATT 4 <- Attractiveness	0.781
CE 1 <- Customer Engagement	0.822
CE 2 <- Customer Engagement	0.827
CE 3 <- Customer Engagement	0.718
CE 4 <- Customer Engagement	0.886
EXP 1 <- Expertise	0.753
EXP 2 <- Expertise	0.772
EXP 3 <- Expertise	0.781
EXP 4 <- Expertise	0.797
IB 1 <- Impulsive Buying Decisions	0.794
IB 2 <- Impulsive Buying Decisions	0.806
IB 3 <- Impulsive Buying Decisions	0.861
IB 4 <- Impulsive Buying Decisions	0.757
TRU 1 <- Trustworthiness	0.777
TRU 2 <- Trustworthiness	0.785
TRU 3 <- Trustworthiness	0.787
TRU 4 <- Trustworthiness	0.773

Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Attractiveness	0.756	0.787	0.844	0.577
Customer Engagement	0.830	0.835	0.888	0.665
Expertise	0.786	0.806	0.858	0.602
Impulsive Buying Decisions	0.820	0.837	0.880	0.649
Trustworthiness	0.789	0.801	0.862	0.609

Discriminant Validity

Heterotrait-Monotrait Ratio (HTMT)

	Attractiveness	Customer Engagement	Expertise	Impulsive Buying Decisions	Trustworthiness
Attractiveness					
Customer Engagement	0.642				
Expertise	0.502	0.479			
Impulsive Buying Decisions	0.357	0.785	0.426		
Trustworthiness	0.724	0.578	0.471	0.359	

Fornell-Larcker Criterion

	Attractiveness	Customer Engagement	Expertise	Impulsive Buying Decisions	Trustworthiness
Attractiveness	0.759				
Customer Engagement	0.524	0.815			
Expertise	0.399	0.407	0.776		
Impulsive Buying Decisions	0.293	0.658	0.341	0.805	
Trustworthiness	0.563	0.479	0.396	0.302	0.781

Cross Loadings

	Attractiveness	Customer Engagement	Expertise	Impulsive Buying Decisions	Trustworthiness
ATT 1	0.801	0.441	0.297	0.224	0.433
ATT 2	0.625	0.264	0.196	0.196	0.426
ATT 3	0.815	0.480	0.466	0.296	0.420
ATT 4	0.781	0.361	0.190	0.155	0.460
CE 1	0.536	0.822	0.362	0.522	0.404
CE 2	0.426	0.827	0.310	0.527	0.355
CE 3	0.377	0.718	0.311	0.480	0.406
CE 4	0.365	0.886	0.343	0.611	0.397
EXP 1	0.340	0.218	0.753	0.291	0.202
EXP 2	0.386	0.261	0.772	0.221	0.328
EXP 3	0.289	0.339	0.781	0.224	0.242
EXP 4	0.263	0.392	0.797	0.318	0.414
IB 1	0.191	0.439	0.339	0.794	0.147
IB 2	0.283	0.549	0.370	0.806	0.295
IB 3	0.278	0.630	0.213	0.861	0.284
IB 4	0.170	0.469	0.191	0.757	0.221
TRU 1	0.545	0.456	0.400	0.249	0.777
TRU 2	0.379	0.373	0.230	0.268	0.785
TRU 3	0.490	0.316	0.333	0.222	0.787
TRU 4	0.307	0.313	0.248	0.190	0.773

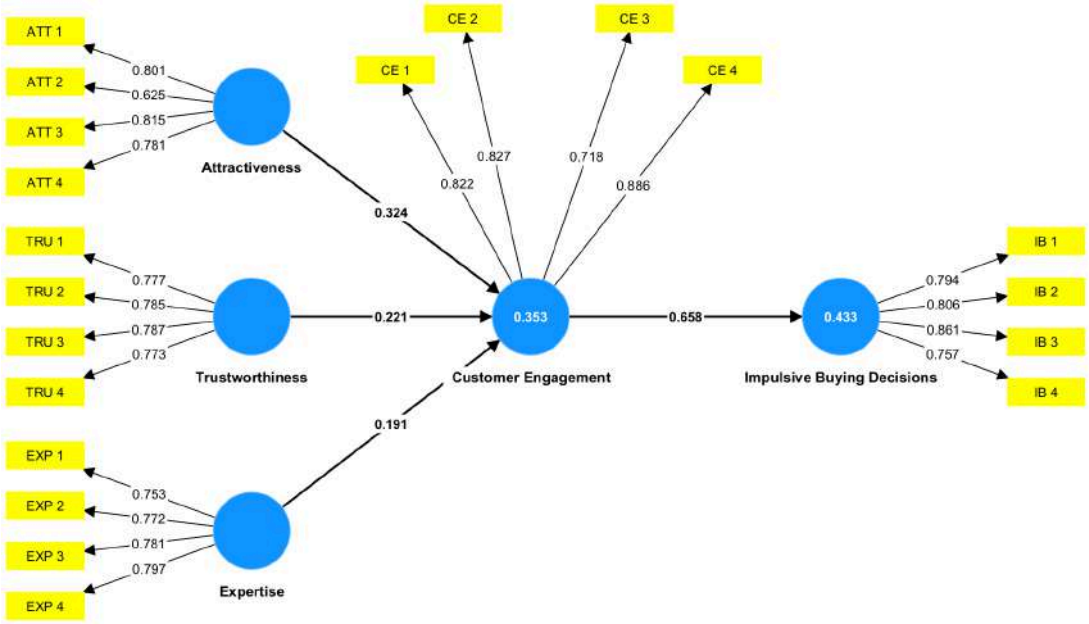
Collinearity Statistics (VIF)

	VIF
Attractiveness -> Customer Engagement	1.547
Customer Engagement -> Impulsive Buying Decisions	1.000
Expertise -> Customer Engagement	1.253
Trustworthiness -> Customer Engagement	1.544

R-Square & R-Square Adjusted

	R-square	R-square adjusted
Customer Engagement	0.353	0.333
Impulsive Buying Decisions	0.433	0.427

Outer Model



2. Bootstrapping

Path Coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Attractiveness -> Customer Engagement	0.324	0.334	0.111	2.925	0.002
Customer Engagement -> Impulsive Buying Decisions	0.658	0.663	0.052	12.652	0.000
Expertise -> Customer Engagement	0.191	0.200	0.081	2.357	0.010
Trustworthiness -> Customer Engagement	0.221	0.231	0.112	1.973	0.026

Inner Model