THE IMPACT OF LIVE STREAMING COMMERCE TO MSMES' PERFORMANCE: A COMPARISION BETWEEN TIKTOK AND FACEBOOK

BY

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PREFACE

Covid-19 has accelerated digital transformation. With the development of internet technology, a new approach to shopping has emerged: live streaming commerce, creates a virtual shopping experience for online customers, it is an existing digital marketing trend that gained significant traction. Therefore, most micro-small and medium-sized enterprises (MSMEs) transform into online businesses to expand their businesses. They try to promote their products through lots of platforms such as Facebook, YouTube, Instagram and so on. However, Facebook is the most popular social media platform in the world according to the study by Shewale (2023) and TikTok has become the fastest-growing platform in the social media industry.

In a nutshell, this study will investigate the impact of live streaming commerce for MSMEs' performance by comparing two platforms which are Facebook and TikTok.

ABSTRACT

With the development of technology, live streaming has covered various industries, such as the education industry, the entertainment industry and so on. Thus, this study focused on the new emerging technology for shopping, which is live streaming commerce. This is because there is an empirical gap in the live streaming industry and MSMEs in other countries show low participation in using live streaming commerce, except China. To fill up this gap, this study aimed to investigate the impact of live streaming commerce to MSMEs' performance and determine the difference between live streaming commerce on TikTok and Facebook. Moreover, the variables including performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, trust, using of live streaming and firm performance have been tested in this study based on the UTAUT2 theory. Qualitative analysis has been conducted in this study to collect 385 sample size. In addition, the SMARTPLS has been used to analyse the reliability, correlation and Structural Equation Modeling of the variables and SPSS has been used to determine the difference between live streaming commerce on TikTok and Facebook. After analysing the data, this research has identified that the firm performance has been influenced by performance expectancy, effort expectancy and trust when using live streaming commerce and the result has been shown in the study as well. Besides, the study has stated the reasons why social influence, facilitating conditions and hedonic motivation have not a significant impact on using live streaming. This study may contribute to future academics who will conduct in this field and gain a deeper insight into the impact of live streaming commerce to MSMEs' performance.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Research Title

The impact of using live streaming commerce to MSMEs' performance: A comparison between TikTok and Facebook.

1.1 Introduction

This research will investigate the impacts affecting firm performance when using live streaming commerce by identifying factors such as performance expectancy, effort expectancy, social influence, facilitating condition, hedonic motivation, and trust and contribute to the comparison between TikTok and Facebook. The evolution of business modes, global trend of live streaming commerce and characteristics of live streaming commerce will be carried out in this study. Besides, this chapter will provide the research problem, research objective and research question to show the aim of this study. The last part of this chapter will discuss the significance of this study.

1.2 Background of Research

The spread of covid-19 pandemic accelerated the development of technology. Live streaming has gained immense popularity across various fields and platforms, contributing to its rapid growth. Live streaming is known as an interactive multimedia platform that provides entertainment, and social and commercial activities (Hilvert-Bruce et al, 2018). For example, organizers or individuals turn on live streaming to host events, seminars, workshops, and concerts. In the educational industry, universities and schools use live streaming to conduct virtual classes, workshops, and webinars, making education easier for students. According to the Interactive Advertising Bureau, 67% of responders have viewed live video and 47% of live streaming viewers worldwide spend more time watching live streaming compared with a year ago (IAB, 2018). In China, the live streaming users reached 703 million in 2021, registering a growth of 14% from 2020 (616 million), and accounting for 68.2% of the total Internet users in the country (CNNIC,2022).

In the business world, the booming of live streaming on e-commerce platforms has come up as a novel and highly favoured online marketing strategy, gaining widespread popularity across the globe. Unlike traditional e-commerce, products can only be introduced in word form and displayed by image. Live streaming commerce involves merchants or managers engaging in online activities where they showcase products and offer purchasing services by sharing product trials and experiences with consumers within a live streaming room setting (Wang et al., 2022). Consumers are offered a virtual shopping environment that provides a diverse range of innovative shopping options and contextual cues, significantly enhancing conventional commerce in multiple aspects (Sun et al.2019).

Recently, the world implementation of various international e-commerce live streaming platforms, including Amazon Live, Facebook Live, TikTok Live, Instagram Live, YouTube Live, and Twitter Live, signals a promising future for the expansion of e-commerce live-streaming worldwide. These marketplaces would provide marketing opportunities for streamers. Companies such as Burberry and Starbucks have utilized Facebook Live to showcase their marketing events, which consist of fashion shows (Wongkitrungrueng & Assarut, 2020). Moreover, several independent sellers across different countries have taken live streaming to the next level by using it as a real-time platform to directly sell their products (Wongkitrungrueng & Assarut, 2020).

1.2.1 Live Streaming Commerce

B. Lu & Chen (2021) defined live streaming as a type of user-generated content and interactive online broadcasting method that allows individuals or businesses to transmit live video and audio content over the internet in real time. In recent years, live streaming has gained immense popularity as a powerful tool for sharing events, experiences, knowledge, entertainment, and more with a global audience, especially during the COVID-19 pandemic (Cai, 2019). For instance, Twitch gained a 98% increase in gaming viewers from 2018 to 2020 (Piñeiro-Chousa et al., 2023).

In this study, we focus on the new way of shopping through live streaming which was identified by B. Lu and Chen (2021). In the journal article, the

popularity and rise of live streaming resulted in its integration with marketing strategies. Namely, the incorporation of e-commerce activities directly within live streaming platforms, which is known as live streaming commerce. Platforms like Facebook Live, YouTube Live, and TikTok Live have seamlessly integrated e-commerce operations into their live streaming services. Another similar study by Cai (2019) determined live streaming commerce is an innovative way that encompasses lots of social commerce attributes and social media attributes and is known as a subset of e-commerce.

The distinct advantage of live streaming commerce lies in the engagement between steamers and potential customers through real-time, face-to-face virtual communication facilitated by live broadcasts (Xue et al., 2020). Streamers can offer some interesting activities, such as prize draws and cash voucher grabbing, to increase the tension and excitement during the live stream. (Xue et al., 2020)). The role of streamers is exactly like that of a salesperson in a physical store when they provide a professional introduction of the products to their consumers. (Xu et al., 2020). Questions and bargaining would appear if customers were confused or unsatisfied with the price. Streamers instantly take advantage of this interaction and engagement with their consumers and enjoy free streaming platforms.

1.2.2 Micro, Small & Medium Enterprises (MSMEs)

The 2021 edition of the MSME Insights Report was released in November 2022 by SME and has developed in two aspects: the Main Report and the Economic Report. The characteristics of MSMEs have kindly been described in the Main Report. The report defined MSMEs as firms with sales turnover not exceeding RM 300,000 and the number of full-time employees not exceeding 5 in the manufacturing sector and service or other sectors. Table 1.1 below shows the characteristics of MSMEs.

Table 1.1 The Characteristics of MSMEs

MSM

Detailed definition by category namely micro, small and medium is as follows:

	Micro		Small		Medium	
Size	Sales Turnover	Employees	Sales Turnover	Employees	Sales Turnover	Employees
Manufacturing		< 5	RM300,000 to < RM15 million	5 to < 75 employees	RM15 million to ≤ RM50 million	75 to ≤ 200 employees
Services & other sectors	< RM 300,000	employees	RM300,000 to < RM3 million	5 to < 30 employees	RM3 million to ≤ RM20 million	30 to ≤ 75 employees

Note: < is less than ≤ is not exceeding

<u>Source</u>: MSME Insights 2021 (New Release). (n.d.). <a href="https://www.smecorp.gov.my/index.php/en/component/content/article/191-laporan-tahunan/4743-msme-insights-2021-new-release?layout="https://www.smecorp.gov.my/index.php/en/component/content/article/191-laporan-tahunan/4743-msme-insights-2021-new-release?layout="https://www.smecorp.gov.my/index.php/en/component/content/article/191-laporan-tahunan/4743-msme-insights-2021-new-release?layout="https://www.smecorp.gov.my/index.php/en/component/content/article/191-laporan-tahunan/4743-msme-insights-2021-new-release?layout="https://www.smecorp.gov.my/index.php/en/component/content/article/191-laporan-tahunan/4743-msme-insights-2021-new-release?layout="https://www.smecorp.gov.my/index.php/en/component/content/article/191-laporan-tahunan/4743-msme-insights-2021-new-release?layout="https://www.smecorp.gov.my/index.php/en/component/content/article/191-laporan-tahunan/4743-msme-insights-2021-new-release?layout="https://www.smecorp.gov.my/index.php/en/component/content/article/191-laporan-tahunan/4743-msme-insights-2021-new-release?layout="https://www.smecorp.gov.my/index.php/en/component/content/article/191-laporan-tahunan/4743-msme-insights-2021-new-release?layout="https://www.smecorp.gov.my/index.php/en/content/article/191-layout="https://www.smecorp.gov.my/index.php/en/content/article/191-layout="https://www.smecorp.gov.my/index.php/en/content/article/191-layout="https://www.smecorp.gov.my/index.php/en/content/article/191-layout="https://www.smecorp.gov.my/index.php/en/content/article/191-layout="https://www.smecorp.gov.my/index.php/en/content/article/191-layout="https://www.smecorp.gov.my/index.php/en/content/article/191-layout="https://www.smecorp.gov.my/index.php/en/content/article/191-layout="https://www.smecorp.gov.my/index.php/en/content/article/191-layout="https://www.smecorp.gov.my/index.php/en/content/article/191-layout="https://www.smecorp.gov.my/index.php/en/content/article/191-layout="https://www.smecorp.gov.my/index.php/en/content/article/191-layout=

1.2.3 TikTok and Facebook

According to the study by Smith & Short (2022), TikTok revolves around users entertaining people through choreographed skits, challenges, lip-syncing and other concise videos. Besides, TikTok boosts collaborative content creation through features like "duets" and allows users to build on each other's media by incorporating shared music or effects. Conversely, Facebook focuses on static content, such as pictures, video posts, quizzes and copywriting, considering the archetypal social media platform. Facebook has a lack of dynamic encouragement for self-presentation and social entertainment promotion like TikTok. Even though Facebook is the biggest social media platform in the world as of 2023 with 3.03 billion monthly active users, TikTok has gained ground, competing with its predecessors in terms of user numbers, downloads, and usage intensity (Shewale, 2023).

1.3 Problem Definition

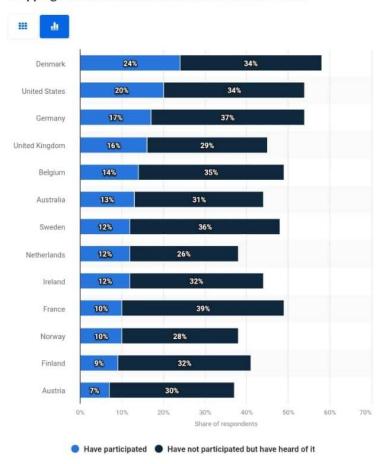
With a rising number of using live streaming commerce, live streaming commerce is gaining popularity and becoming a significant force in the digital marketing landscape. However, the research that investigates the live streaming phenomenon is limited,

having an empirical gap in this field (Wongkitrungrueng, A., & Assarut, N., 2020). Based on the study by Luo et al. titled "A Bibliometric Review of User Behaviors Research in Live Streaming Commerce", illustrated the productivity of the relevant topic is low in the current years, although the number of publications is increasing. Moreover, previous studies have only recently been attentive to the motivation and experiences of live streaming users concerning entertainment, knowledge, or experience-sharing purposes (Wongkitrungrueng & Assarut, 2020). The lack of comprehensive research presents a significant challenge for MSMEs looking to utilize live streaming commerce as a marketing tool.

Even though some of the studies have examined live streaming commerce on social media platforms, the studies were often associated with consumers and their perceptions, which the researchers focused on "consumer motivations for live streaming shopping" (Cai et al., 2018), "watching and purchase intention on live streaming platforms" (Ho et al., 2022), "role of live streaming in building customer trust and engagement" (Wongkitrungrueng, A., & Assarut, N., 2020).

Although live streaming commerce brings an increasing number of new digital marketing, some people might still find this concept relatively unfamiliar or even too recent to fully embrace.

Figure 1.1: The people involve in live streaming commerce from different countries



Share of people who had participated in or heard of a live streaming shopping event in selected countries worldwide in 2022

Source: Live commerce awareness and participation 2022 | Statista. (2023, July 11).

Statista. https://www.statista.com/statistics/1272759/livestream-online-platforms-awareness-worldwide/

Based on the Live Commerce Awareness and Participation (2022), most people from different countries had heard of live streaming commerce but participation in these events was lower.

Moreover, Andiana et al. (2021) suggested that 35 MSMEs are involved in their research about adopting digital marketing. Unfortunately, only 14 MSMEs have utilized digital marketing to broadcast their products and expand their business while others continued to adopt traditional marketing that used offline marketing methods, such as TV, radio, magazines, billboards and flyers.

1.4 Research Questions

With a detailed explanation of the problem statement, this study focuses on addressing the following research questions:

- i. What is the impact of live streaming commerce to MSMEs' performance?
- ii. What is the difference between live streaming commerce on TikTok and Facebook?

1.5 Research Objectives

Based on the raised questions, this study aims to achieve the developed objectives:

- i. Determine the impact of live streaming commerce to MSMEs' performance.
- ii. Distinguish the difference between live streaming commerce on TikTok and Facebook

1.6 Significance of the study

Most of the countries have been placed under lockdown to prevent the spread of covid-19 pandemic, which, in turn, has caused a significant development in the digital age. This change has a notable effect on consumer behaviour towards online shopping and increased digital interactions. In this case, MSMEs have been forced to suspend their business physically and continue the business online. The great news is that the emergence of live streaming commerce would be one of the ways to help their business. However, the process of transferring their business into the live streaming commerce realm is rife with challenges and unexplored terrain. By examining the impact, this research would offer a comprehensive understanding of how live streaming commerce influences MSME operations.

Moreover, this research draws a comparative analysis between two platforms, TikTok and Facebook within the context of MSMEs. Both platforms may significantly differ in their performance in using live streaming, even though they have become useful tools in this domain. Examining the differences between both platforms would provide

invaluable insights into which platform might be more conducive for MSMEs while using live streaming commerce. It would help MSMEs that are struggling with the choice of the most suitable platform.

With the improvement in the digital landscape, the implications of live streaming commerce on MSMEs are likely to become increasingly profound. In this case, this research would address a current gap in the literature and serve as a foundational reference point for future investigations when others study any issues related to live streaming commerce and firm performance. Besides, it offers a framework for being well aware of live streaming commerce and its effects on firm performance within the MSME sectors, encouraging MSME businesses to use live streaming commerce features on their digital commerce platform.

1.7 Conclusion

In summary, Chapter 1 stated the overview of the research. In this chapter, the keywords of the research title have been described in detail, such as live streaming commerce and MSMEs. Moreover, it pointed out the question and objective to examine this study by providing the specific question and specific objective.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

Chapter 2 will discuss a review of the literature, including dependent variable (firm performance), mediator (using of live streaming commerce), and independent variables which consist of performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, and trust. Furthermore, the relevant theoretical models are discussed, and the proposed conceptual framework will be conducted according to the research objectives followed by the hypothesis development.

2.1 Underlying Theory

2.1.1 Unified Theory of Acceptance and Use of Technology (UTAUT)

Venkatesh et al. introduced the UTAUT model in 2003, which has been widely adopted in recent years (Barrane et al., 2018). This model examined behaviour towards new technology adoption by their intention to use various technologies in different cultural contexts and examining insights from previous research (Attuquayefio & Addo, 2014). According to Attuquayefio & Addo (2014), this theory serves as a unifying framework that embraces multiple theories related to the acceptance and use of technology from eight main theories, including Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975), Theory of Acceptance Model (TAM) by Davis (1989), Motivational and Model (MM) by Davis et al. (1992), Theory of Planned Behaviour (TPB) by Ajzen (1991), Combined TAM and TPB (C-TAM-TPB) by Taylor and Todd (1995), Model of Personal Computer Utilization (MPCU) by Thompson et al. (1991), Innovation Diffusion Theory (IDT) by Rogers (1995) and, lastly, Social Cognitive Theory (SCT) by Compeau and Higgins.

Research by Venkatesh et al. (2003) determined that the UTAUT model holds four main constructs (performance expectancy, effort expectancy, social

influence and facilitating conditions) that impact behavioural intention to use technology. In this theory, performance expectancy, effort expectancy and social influence contribute to the intention to use technology, whereas the behavioural intention and facilitating conditions directly influence the use of technology.

Furthermore, the intention to use would be moderated by age, gender, experience and voluntariness of use in the UTAUT model (Marchewka & Kostiwa, 2014). Figure 2.1 below will show the relationship between every construct and the framework of the UTAUT model proposed by Venkatesh et al. (2003).

Performance Expectancy Effort Expectancy Behavioral Use Intention **Behavior** Social Influence Facilitating Conditions Voluntariness Gender Experience Age of Use

Figure 2.1 Conceptual Framework of UTAUT

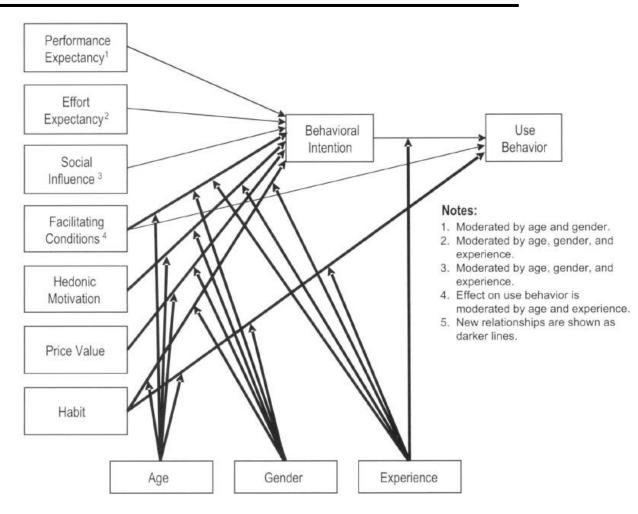
Source: Venkatesh, Morris, Davis, & Davis. (2003). User Acceptance of Information Technology: Toward a Unified View. MIS Quarterly, 27(3), 425. https://doi.org/10.2307/30036540

2.1.2 Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)

Venkatesh et al. (2012) found that most of the research referenced the initial UTAUT article as a general reference for research on adoption, without applying or expanding the UTAUT model. Venkatesh et al. (2012) believed that the UTAUT model is not completed and could be advanced.

Moreover, Venkatesh et al. increased some modifications to the UTAUT model based on their research conducted in 2012. They incorporated three new constructs into the model. Hedonic motivation is the first construct which relates to intrinsic motivation. The second construct involves the consideration of cost price, within the purchase of devices and services. The last construct is habit, which can be viewed as having a direct and indirect impact on behavioural intention (Raman & Don, 2013) and known as experience and habit, two related distinct constructs. (Chang, 2012). Figure 2.2 below will display the relationship between every construct and the framework of the UTAUT2 model proposed by Venkatesh et al. (2012). However, all of the constructs will be moderated by age, gender and experience accordingly.

Figure 2.2 Conceptual Framework of UTAUT2



Source: Venkatesh, Thong, & Xu. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. MIS Quarterly, 36(1), 157. https://doi.org/10.2307/41410412

UTAUT2 will be adopted in this study to examine the impact of live streaming commerce for MSMEs as Zhao & Bacao (2021) adopted UTAUT2 to examine the customer intention of Shopping via Live-Streaming Apps, which is similar to the current research. To investigate this study, the construct of price value will be removed in this model due to the consumers typically having to cover the financial expenses associated with usage, whereas employees do not incur these costs proposed by Venkatesh et al. (2012). Another removed construct is habit which reflects the use of technology by an individual; however, the target of this study is MSMEs (Venkatesh et al., 2012). The moderating variable will be withdrawn due to the focus of this study.

As a study done by Musa et al. (2019), UTAUT2 has been extended by many additional variables or mediators, like perceived risk, perceived credibility and trust that would be used in other technology adoption theories. Thus, the trust construct will be utilized as an additional independent variable. According to Zhou et al. (2021), the previous research is more focused on external factors such as functions and perceived value, which customers will consider when adopting live streaming commerce. However, live streaming commerce is an emerging retail technology and has the potential to introduce additional risks for customers, the internal factors will be ignored, nevertheless.

2.2 Review of Variables

2.2.1 Dependent Variable

2.2.1.1 Firm Performance

Firm performance is known as the MSME business performance, which explains the prediction in this study. The definitions and measurements to evaluate the firm performance are abstract due to the lack of an operational definition of firm performance upon which most scholars consent (Taouab & Issor, 2019). Therefore, several researchers have conducted research regarding firm performance in different definitions and standards (Ali et al., 2020). A study done by Ratnawati (2020) defined that firm performance is determined by the effectiveness of corporate governance processes and how well managers make decisions or design strategies within the limitations of available resources. The study also mentioned that firm performance will be affected by internal and external factors, and it can result from the achievement of goal setting, profitability of firm operations, market share of profit growths, stakeholders' acceptability of organizational activities and executive satisfaction with the business results.

Researchers have studied the firm performance in two major indicators, consisting of financial performance and non-financial performance (Jia & Wang, 2018). The former refers to return on investment (ROI) and the

increasing rate of business revenue while the latter refers to social reputation and customer loyalty. Another research done by A. Khatib & Nour (2021) examined the firm performance on financial performance including return on assets (ROA), return on equity (ROE), earnings before interest and tax (EBIT) and profit margin (PM). The sample data of 188 listed firms in the Malaysia stock market will be used to evaluate the study.

Moreover, measuring firm performance is important for seeking effective and efficient results (Taouab & Issor, 2019). Thus, the overall finances of the company and the perspective of customers will be evaluated in this study to evaluate the efficiency and effectiveness of the firm when using live streaming commerce which is known as a mediating variable in this study.

2.2.1.2 Using of Live Streaming Commerce

The use of live-streaming commerce is employed as a mediator to investigate the factors influencing its adoption by MSMEs (Shahzad et al., 2020). According to Elia et al. (2021), the research has pointed out that integrating live streaming commerce can impact a company's value and profitability positively. By implementing live streaming commerce effectively, the company is allowed to develop and execute strategies that enhance its efficiency and overall effectiveness.

In addition, Shahzad et al. (2020) have explored the determinants of e-commerce adoption by SMEs. The researchers have claimed that having a significant positive correlation between the use of e-commerce and firm performance, based on responses from 205 participants. The e-commerce adopters in their study also concurred that their performance would see improvement through its adoption. It is worth noting that live streaming commerce is considered a subset of e-commerce thus, justifying its use as a mediator in this study.

2.2.2 Independent Variables

2.2.2.1 Performance Expectancy

Venkatesh et al. (2003) who is the developer of UTAUT2, identified that performance expectancy is based on the measurement of the degree to which individuals' perspective towards the adoption of new technologies and whether it is beneficial to their work. Cao & Niu (2019) have determined that performance expectancy has the most effective impact on user adoption.

Moreover, Venkatesh (2003) introduced the construct of performance expectancy using the constructs of technology acceptance models, modelling by perceived usefulness from TAM, TAM2, and Combined-TAM-TPB, extrinsic motivation from the Motivational Model (MM), job-fit from the Model of Personal Computer Utilization (MPCU), relative advantage from Diffusion Theory (DT) and outcome expectations from Social Cognitive Theory (SCT).

As mentioned above, one of the objectives of this study is to conduct a comparative analysis of social media platforms, which are TikTok and Facebook, with regard to their utilization by MSMEs for live streaming commerce. Abdat (2020) surveyed the behaviour intention among 162 Indonesian SMEs and found that performance expectancy had a positive impact on the intention to use social media. The researcher also mentioned that UTAUT is considered the most reliable and up-to-date framework for understanding technology adoption when assessing intention to use technology.

Another study by Sombultawee, K. (2020) stated there was a positive relationship between adoption and performance expectancy. The result also confirmed that performance expectancy would positively affect the financial performance of the firm. Hence, the construct of performance expectancy will be used to investigate the impact of live streaming for MSMEs.

2.2.2.2 Effort Expectancy

Based on the effort expectance introduced by Venkatesh (2003), effort expectancy is the degree of easiness towards the utility of the system. The construct emerged out of the previous three constructs (PEOU from

TAM/TAM2, complexity from MPCU, and EOU from IDT). EE indicates the users' expectations that the use of technology will help reduce their efforts and bring ease to their activities or jobs.

Min & Tan (2022) who assessed the impact of continued use of live streaming services, proved that performance expectancy and effort expectancy are significant factors in numerous research studies in assessing the utility and ease of use of technology. The live streaming commerce will be considered as a new technology for MSMEs in this study.

Another similar research by Zhou et al. (2021) defined effort expectancy as the user's anticipation of how user-friendly live streaming commerce is. The concepts of "perceived ease of use" in the Technology Acceptance Model (TAM) and "ease of use" in the Diffusion of Innovation Theory are similar to the concepts of effort expectancy used in the study proposed by Zhou et al. In short, to evaluate the impact of live-streaming commerce for MSMEs, effort expectancy will be one of the key variables.

2.2.2.3 Social Influence

The construct of social influence was developed by Venkatesh et al. (2003) and described as the degree to which a person believes that significant individuals expect them to adopt the new system. Venkatesh et al. (2003) also stated that the three concepts from various models that relate to social influence are subject norm from TRA2, TAM2, TPB/DTPB and C-TAM-TPB, social factors from MPCU and image from IDT.

According to Zhao & Bacao (2021), social influence is determined as an environmental factor that signifies users recognizing an impact from individuals who hold particular significance to them. They would offer recommendations and encouragement for the adoption of specific technology. Since the target of the study is MSMEs, the important individuals would be relevant to the firm, such as shareholders, employees, customers, suppliers and more. In addition, Zhao and Bacao (2021) confirmed the role of social influence in shaping user

attitudes and behaviours They also suggested that social influence significantly contributes to shaping users' cognitive perceptions of engagement while utilizing live streaming commerce.

Social influence sometimes is known as a social factor and peer pressure (Kit et al., 2021). In the study of Kit et al. (2021), social influence arose when individuals received recommendations from either superiors or peers about the potential usefulness of a system or new technology. Although the recommendations lead them to believe in the utility of new technology, it depends on the individual's perception of using it. Kit et al. (2021) also stated that social influence is seen as the acknowledgement and endorsement by peers, which gradually breaks down barriers as users become aware of the system's value in their business expansion. Thus, social influence will be one of the constructs to evaluate the impact of live streaming commerce to MSMEs' performance.

2.2.2.4 Facilitating Conditions

Venkatesh et al. (2003) introduced that facilitating conditions refer to an individual's perception of the suitable organizational and technical infrastructure that can assist and enable the utilization of the system. The three different constructs which are perceived behavioural control (TPB/DTPB, C-TAM0TPB), facilitating conditions (MPCU) and compatibility (IDT) will be captured to define facilitating conditions.

A study by Khan et al. (2021) commented that facilitating conditions refer to the resources and infrastructure that users require to effectively manage their tasks when engaging with a system or environment. Besides, Khan et al. (2021) found that previous studies have determined that facilitating conditions are positively correlated with usage behaviour across various situations. Namely, the users will be able to successfully operate any system with the necessary knowledge and sufficient infrastructure, which is supported by facilitating conditions.

Sombultawee, K. (2020) further elaborated on the facilitating conditions within organizations, which is an extent to which the support of technological and organisational infrastructure is necessary for supporting the system based on technology. The researcher confirmed that facilitating conditions have a positive impact on employee behaviour and hold significant importance in comprehending the acceptance and integration of new technologies within small and medium-sized enterprises (SMEs). The research also found that facilitating conditions act as the most important factors while considering the serve constraints on resources that certain small businesses face. Thus, facilitating conditions would be used to investigate this study.

2.2.2.5 Hedonic Motivation

In 2012, Venkatesh et al. incorporated hedonic motivation into the UTAUT framework, enhancing it and subsequently naming the revised model UTAUT2. They described the detail of hedonic motivation as the enjoyment or satisfaction gained from utilizing technology, and research has demonstrated its significant role in influencing the acceptance and utilization of technology.

Hedonic motivations mainly revolve around intrinsic motivations such as enjoyment, self-efficacy, and simulation proposed by Kahil (2021). Research by Nugraha et al. (2022) determined that intrinsic motivation is a factor that can enhance individuals' intention to use technology because they are driven by the desire to engage in activities that inherently bring them pleasure, comfort and task accomplishment. Kahil (2021) further described that even though hedonic motivation has previously been associated with online consumption and impulsive buying, it has been explored in the workplace to boost and encourage employees to actively participate in current research. Hence, hedonic motivations will be used in this study as one of the independent variables to investigate the intrinsic motivations of the members of MSMEs while using live streaming commerce to broadcast their products or services.

2.2.2.6 Trust

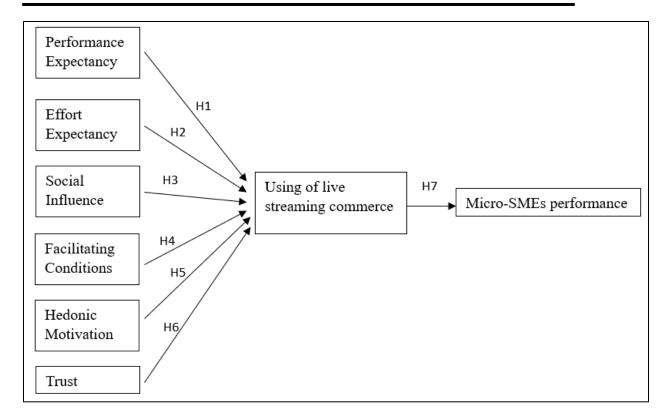
As mentioned above, many additional variables or mediators will be used in other technology adoption theories, as stated by Musa et al. (2019). In the study of Leong et al. (2021), trust has always emerged as a significant element shaping users' inclination to engage with information systems, as research in this domain has consistently shown. The prevailing apprehensions and uncertainties users often encounter will be diminished due to the critical trust plays. The study also asserted that trust holds particular significance during the initial phases of introducing novel technologies.

Another study by Yan et al. (2022) claimed that trust is the key element in the realm of online shopping since it serves to mitigate the perceived risk of potentially encountering actions. Therefore, consumer-perceived trust is known as an important role that can influence decision-making while purchasing online. In addition, Wongkitrungrueng & Assarut (2020) exhibited that trust would strongly affect customer engagement in live streaming commerce and demonstrated that trust is important in the online commerce context because of the lack of in-person interaction between buyers and sellers.

2.3 Proposed Conceptual Framework

The conceptual framework consists of the independent variables, mediator and dependent variable which are designed to be investigated for this study. Figure 2.3 below displays the six independent variables, including performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation and trust. The designed independent variables will influence the dependent variable (using the live streaming commerce). However, the dependent variable (firm performance) is the variable that influenced by the using live streaming commerce.

Figure 2.3 Conceptual Framework



Sources: Developed for the research

2.4 Hypothesis Development

2.4.1 The relationship between performance expectancy and the use of live streaming commerce

Performance expectancy always has a positive relationship with many variables, such as Alipay user adoption (Cao & Niu, 2019), compulsive purchase behaviours (Min & Tan, 2022), behaviour intention to use POS (Abubakar & Ahmad, 2013) and more. For this study, MSME operators anticipate that integrating live streaming commerce into their operations will enhance their business efficiency. As a result, live streaming commerce is viewed as a valuable asset for enhancing both the financial and non-financial aspects of a company's performance.

H1: There is a significant relationship between performance expectancy and using live streaming commerce.

2.4.2 The relationship between effort expectancy and the use of live streaming commerce

Effort expectancy has a positive relationship with behaviour intention in the UTAUT2 model. According to Singh et al. (2021), effort expectancy pertains to how easy it is to use a new technology. In this study, MSMEs expect that live streaming commerce would ease their business processing and the firm's interaction with live streaming commerce is clear and understandable.

H2: There is a significant relationship between effort expectancy and the use of live streaming commerce.

2.4.3 The relationship between social influence and the use of live streaming commerce

Based on Kit et al. (2021), social influence represents the effect of supervisors, peers, and subordinates on a user's perception and decision to utilize live streaming commerce. Namely, it reflects the expectations of these individuals in the workplace which will impact the user's attitude towards using live streaming commerce. Hence, social influence plays an important role in shaping the user's perception and adoption of live streaming commerce.

H3: There is a significant relationship between social influence and using live streaming commerce.

2.4.4 The relationship between facilitating conditions and the use of live streaming commerce

The research done by Sombultawee, K. (2020) claimed that facilitating conditions refer to the supported technological framework or infrastructure while the company is using new technology. In this study, facilitating conditions are expected to support the firm in using live streaming commerce. By applying the supported system, facilitating conditions will improve the efficiency and effectiveness of the business.

H4: There is a significant relationship between facilitating conditions and using live streaming commerce.

2.4.5 The relationship between hedonic motivation and the use of live streaming commerce

In the study by Nugraha et al. (2022), the researchers explored how the emotional and experiential aspects of motivation, known as hedonic motivation, influence the perceptions and interests of MSME members in using live streaming commerce. Hedonic motivation is to measure whether the pleasure and enjoyment derived from this technology can positively affect its adoption within MSMEs. Therefore, the construct of hedonic motivation would evaluate the potential success and acceptance of live streaming commerce in this particular business context.

H5: There is a significant relationship between hedonic motivation and the use of live streaming commerce.

2.4.6 The relationship between trust and the use of live streaming commerce

Trust embraces users' confidence and faith in the reliability and dependability of a particular technological tool or system. To shape users' confidence to engage with the technology and utilize it for various purposes, the technology is required to have stability, consistency, security and credibility (Al-Azawei & Alowayr, 2020). In short, trust in technology is a critical factor that influences users' willingness to use and continue using a particular technological solution. Hence, the trustworthiness of live streaming commerce will affect the company's interest in processing their business.

H6: There is a significant relationship between trust and the use of live streaming commerce.

2.4.7 The relationship between use of live streaming commerce and firm performance

Shahzad et al. (2020) conducted research to understand the factors influencing e-commerce adoption by SMEs. In the result of the research, they found that adopting e-commerce was positively correlated with improved firm performance and that the SMEs themselves believed in the potential performance-enhancing benefits of e-commerce adoption. In this study, live streaming commerce is a part of the e-commerce landscape. Therefore, the use of live streaming commerce will be applied to investigate the MSMEs' performance.

H7: There is a significant relationship between the use of live streaming commerce and firm performance.

2.5 Conclusion

In conclusion, Chapter 2 elaborates on the independent variables (performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation and trust), mediator (using of live streaming commerce) and dependent variable (firm performance) of this study. The conceptual framework of this study has been displayed in this chapter.

CHAPTER 3: METHODOLOGY

3.0 Introduction

In this chapter, the research design and the sampling design are employed to select the study's sample. Furthermore, Chapter 3 will delve into the data collection method and the research tool utilized to assess the study's variables. The various methodologies and techniques for data analysis in this study will be presented in the last part of this chapter.

3.1 Research Design

Research design is a blueprint that aims to address the research question and manage potential variations (Dulock, 1993). It describes the methods that researchers conduct their research to achieve the research objectives and to answer the research question.

3.1.1 Quantitative Research

Quantitative research involves the process of quantifying and analyzing variables to generate outcomes. To better understand the research question or phenomenon, researchers collect data in numerical form and apply specific statistical techniques to analyze the gathered data (Apuke, 2017). Thus, quantitative research was applied in this study to enhance the understanding of the independent variables impacting MSMEs while using live streaming commerce. The independent variables consist of performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation and trust.

3.1.2 Descriptive Research

Research done by Dulock (1993) proved that descriptive research is highly valuable when identifying phenomena or occurrences. Besides, the results of descriptive research often serve as the foundation for subsequent research. It is important to ensure that descriptive studies are well-planned and executed. As a result, the survey method was exerted to collect information from the target population and describe their preferences, characteristics and differences.

3.2 Sampling Design

Sampling design refers to the methods that researchers should adhere to when choosing a subset from the larger population, to calculate sample statistics. The following process is carried out to gain insights and make factors about the overall attributes of the entire population.

3.2.1 Target Population

According to Hidiroglou & Lavallée (2009), the target population refers to the group of entities for which specific data are needed in the context of a particular business survey. Namely, the target population might consist of all the sites engaged in industrial activities within the sectors relevant to the survey in question. The population of this study will be targeted as the members of the MSMEs in Malysia, such as employees and owners.

3.2.2 Sampling Frame and Sampling Location

The sampling frame is a selected sample of units stated by Hidiroglou & Lavallee (2009). Namely, the sampling frame is a list of potential groups that serve to delineate the specific population and the researchers are allowed to choose a sample from the list which represents the desired target population. A non-probability sampling approach was employed and thus, there is not a designated sampling frame applicable to this study. In this study, the survey was developed by using Google Forms and was distributed to the target respondents which are around 385 respondents. However, the required respondents in this research should be individuals who are associated with MSMEs that have utilized live streaming commerce as a platform for broadcasting and selling their products or services. Besides, there is no designated particular location for conducting the survey.

3.2.3 Sampling Elements

The targeted respondents in this research are only qualified respondents who are working as members of MSMEs, such as owners and employees. This is because most of the people in this group have a better understanding of the

operation and performance of their MSME businesses. In this research, the members of MSMEs who are qualified in this study would receive the questionnaire in softcopies through e-mail or other social media platforms. The face-to-face distribution method was also used to send out the questionnaires in hardcopies to MSME members.

3.2.4 Sampling Technique

As mentioned, a non-probability sampling approach was employed in this study. In non-probability sampling, a selection of respondents doesn't necessarily have to be representative or chosen at random but there should be a well-defined reason (Taherdoost, 2016). The non-probability sampling methods utilize lots of recruitment techniques for attracting respondents to a survey proposed by Schillewaert et al. (1998).

Convenience sampling and snowball sampling were applied in this study. According to Taherdoost (2016), convenience sampling involves the selection of respondents with effortlessness and accessibility. This sampling method is cost-effective and uncomplicated when compared to other sampling approaches. Moreover, this sampling method often overcomes lots of obstacles by inviting friends or family members to the sample which is simpler than reaching out to unfamiliar individuals.

Regarding snowball sampling, Goodman (1961) defined snowball sampling as a random sample of individuals from a finite population. Parker et al. (2019) showed the process of snowball sampling in their research. Firstly, researchers would invite participants by identifying a limited number of initial contacts, often referred to as "seeds". The participants who agree to participate may be required to suggest additional contacts who meet the research criteria.

3.2.5 Sampling Size

Lakens (2022) asserted that the sample size is to collect a particular size of data which offers valuable insights in alignment with the researcher's inferential objectives. Cochran's equation together with a population correction are used

to calculate an appropriate sample size for this study. The precision level in this calculation is $\pm 5\%$, which means the margin of error could be tolerated within 5 percentage points of the true population value. Choosing 95% as the confidence level represents a result that is within 5% of the real population value 95% of the time. The estimated proportion is the degree of variability and select 0.5 as the maximum variability. The size of the population is applied with 1226494 which is the number of MSMEs in Malaysia according to the Economic Report of the 2021 edition of the MSME Insights Report. Consequently, the appropriate sampling size was 385. Figure 3.1 below displays the formula of calculation.

Figure 3.1: The formula of calculation

$$x=rac{Z^2pq}{e^2}$$

Source: Sample Size Calculator. (n.d.). Social Science Statistics.

https://www.socscistatistics.com/tests/samplesize/default.aspx

3.3 Data Collection Methods

The collection of data plays an important role in the research. To receive the accuracy and validity of the data, this research will design the data collection ways, ensuring useful data that are accurate for decision-making and reference purposes. Primary data is used in this study.

3.3.1 Primary Data

In a study by Mazhar (2021), primary data is defined as information gathered for the first time, representing original and current insights. A wide range of approaches are available for the collection of primary data, including methods such as observation, interviews, questionnaires, and others, which are listed by Mazhar (2021). The questionnaire method was applied to receive responses from a sample size of 385 respondents in Malaysia. In the designed

questionnaire, there are three sections in which the participants are required to provide the answers to the questions by themselves, including demographic information (Section A), general information (Section B) and the impact of live streaming commerce for MSMEs (Section C).

3.4 Research Instrument

3.4.1 Questionnaire Design

A Questionnaire is designed for this study to collect data easily and inexpensively within a short period of time (Pershing, 2006). The designed questionnaire could be divided into three sections. In Section A, the respondents are required to provide their demographic information, including their gender, the location of the company and the information about their company. In Section B, general information was requisite consisting of the online marketplace and year of selling online. Section C's questions refer to the impact of live streaming commerce for MSMEs which is associated with the six independent variables, mediator and dependent variable.

3.4.2 Pilot Test

According to Hassan et al. (2006), a pilot test is a preliminary investigation conducted on a small scale to analyze the effectiveness of data collection tools and research procedures. The purpose of the pilot test is to identify potential problems and address them proactively to avoid complications during the full-scale study. Hence, the pilot test was claimed in this study. The 10% of required responders were collected for the following test and 38 sets of responses were received from MSMEs in Malaysia.

3.4 Constructs Measurement

3.4.1 Origin of Constructs

Table 3.1-3.2 shows the measurement items based on different constructs in the study.

Table 3.1: Dependent Variables

	DV	Question	Citation
1.	Micro-SMEs	The company has improved growth	(Chin, Hon Keong,
	performance	in sales revenue	2018)
		The company has improved	
		profitability	
		The company has improved the level	
		of customer satisfaction	
		The company has improved on	
		overall financial performance	
		The company has improved on	
		level of customer loyalty	
	Using of live	Using live streaming commerce is a	(Chin, Hon Keong,
	streaming	good idea.	2018)
	commerce	My company finds that, using live	
		streaming commerce is enjoyable.	
		Live streaming commerce makes the	
		business appear interesting	
		Doing business with live streaming	
		commerce is fun.	
		My company enjoys using live	
		streaming commerce for business.	

Table 3.2 Independent Variables

No.	IV	Question	Citation
			(Reference)
1.	Performance	Live streaming commerce saves	(Min et al., 2021)
	Expentancy	time in terms of marketing, sales,	
		and promotion	

Using live e-commerce would	
enhance my business	
effectiveness	
Using live e-commerce would be	
useful for my business	
2. Effort It is easy for me to use live (Min e	et al., 2021)
Expectancy streaming commerce.	
My company's interaction with live	
streaming commerce is clear and	
understandable.	
It is easier to secure business	
transactions when using live	
streaming commerce.	
It is easy for my company to	
become skillful at using live	
streaming commerce	
3. Social Influence People around my company (Min e	et al., 2021)
suggested that the company should	
choose live streaming commerce.	
People who are important to the	
company think that the company	
should use live streaming	
commerce.	
The company which chooses live	
streaming commerce will be	
considered prestige.	
4. Facilitating My company has the facilities to (Min e	et al., 2021)
Conditions conduct business in live streaming	
commerce.	

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1

Source (Table 3.2-3.4): Developed for the research

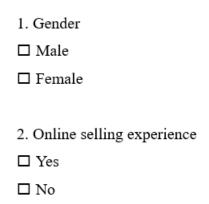
3.5 Scale of Measurement

3.5.1 Nominal Scale

According to Stevens (1946), there is less restrictive utilization of numerical values for nominal scale. The researchers solely employed numerals, words or letters as designations or identifiers. Two categories of nominal assignments are exemplified by (a) the assignment of numbers to football players for individual

identification and (b) the assignment of numbers to divide groups, where each member within a specific category is given the same numerical label. The difference lies in how labels are used either for individual identification or for categorizing groups within the same class. However, the same numeral to different classes or different numerals to the same classes are not allowed based on the nominal scale rules. The nominal scale has been used to determine the demographics of target respondents such as gender, identity, location of company and others. Figure 3.2 below also shows one of the examples of using the nominal scale in the questionnaire for this study.

Figure 3.2: The question of nominal scale



Source: Developed for the research

3.5.2 Ordinal Scale

On the ordinal scale, most researchers apply to gather data that cannot be received through conventional methods, as stated by Tastle & Wierman (2006). The collected data is typically associated with individuals' feelings, perceptions, sensations, emotions, impressions, sentiments, opinions, passions, or similar subjective experiences, which show the relative rank of variables. In this study, an ordinal scale is applied in Section C of the questionnaire by using 5-point Likert scale. The identification of each of the 5 levels is listed below. Table 3.3 below also shows one of the examples of using the ordinal scale in the questionnaire for this study.

(1) = Strongly disagree (2) = Disagree (3) = Neutral (4) = Agree (5) = Strongly agree

Table 3.3: The Question of Ordinal Scale

No.	Firm Performance	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	The company has increased on	1	2	3	4	5
	growth in sales revenue					

Source: Developed for the research

3.5.3 Interval Scale

There is a misunderstanding that some of the research utilizes the Likert scale as an interval scale. According to Tastle & Wierman (2006), researchers mistakenly assumed the spacing between each category was uniform. It is because there is no concrete empirical evidence to support the notion that the gap between "neutral" and "agree" is the same as the gap between "strongly agree" and "agree". Thus, the interval scale in this study possesses a definite and fixed interval between consecutive values. The interval scale is conducted to receive the information of the company, including sales per year, number of employees and year of selling online. Figure 3.3 below shows one of the examples of using the interval scale in the questionnaire for this study.

Figure 3.3 The Question of Interval Scale

3. Sales per year

□ Sales < RM300,000

□ RM300,000 < Sales < RM15 mil

□ RM15 mil < Sales < RM50 mil

□ Sales > RM50 mil

4. Number of employees

□ Employees < 5

□ 5 < Employees < 75

□ 75 < Employees < 200

□ Employees > 200

Source: Developed for the research

3.6 Proposed Data Analysis Tool

3.6.1 Descriptive Analysis

According to Zikmund et al. (2012), descriptive analysis involves the fundamental process of shaping data to provide essential insight into its fundamental features, such as measuring central tendency, distribution and variability. Converting raw data, assists the researchers to be well aware of the whole information of their research. Sloman (2010) found that descriptive analysis would help with complex data analysis. The result of descriptive analysis will come out with charts, graphs, tables and other illustrations to provide a clear data summary.

3.6.2 Inferential Analysis

Sutanapong et al. (2015) utilize data gathered from a sample to draw conclusions or make inferences about a broader population from which that sample is derived in inferential analysis. They also state that the objective of inferential analysis is to extrapolate findings from a sample and apply them to the entire population. The common techniques involved in this process consist

of hypothesis testing and analysis of variance. Moreover, LoBiondo-Wood & Haber (2014) propose that inferential analysis combines mathematical processes and logical reasoning to enable researchers to examine hypotheses related to a population by using data collected from probabilistic samples.

3.7 Conclusion

In summary, Chapter 4 stated the research design and sampling design for the study. The data collection method, construct measurement, scale of measurement and data analysis tool are elaborated in detail in the relevant chapter.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

Descriptive analysis, reliability analysis, inferential analysis and digital platforms comparison will be engaged in this chapter. The demographic of respondents will be explored by Excel and shown in tables and pie charts in the part of descriptive analysis. The part of inferential analysis will conduct the reliability analysis, correlation analysis, and structural equation modelling by using Smart partial least squares 4 (SMARTPLS4). Lastly, the T-test is used in Statistical Package for Social Science (SPSS) to analyse the variables and differentiate both digital platforms, which are TikTok and Facebook.

4.1 Descriptive Analysis

A set of survey questionnaires has been developed for the targeted and 401 responses have been received. After cleaning the data, only 353 data are available and meet the requirements, which are MSMEs and have online selling experience. In this section, the collected demographic profile of respondents will be explored. The frequency and percentage analysis will be displayed below.

4.1.1 Demographic Profile of Respondents

4.1.1.1 Gender

Table 4.1: Gender of Respondents

Gender	Frequency	Percentage (%)
Female	187	52.97
Male	166	47.03
Total	353	100

Source: Developed for the research

Gender

47%

53%

Figure 4.1: Gender of Respondents

Source: Developed for the research

The gender of respondents has been performed in Table 4.1 and Figure 4.1. There are 195 female respondents (52%) and 178 male respondents (48%) who responded to the surveys according to their performance.

4.1.1.2 Location of Company

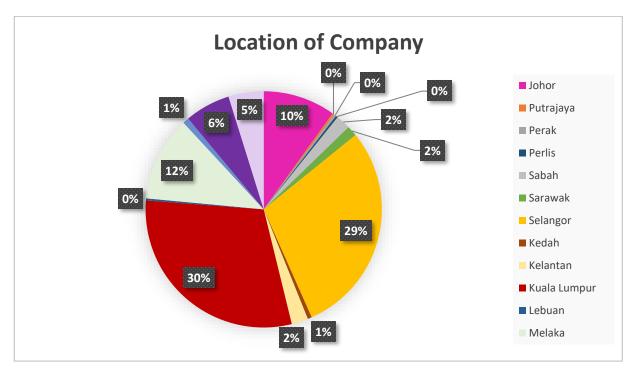
Table 4.2: Location of Company of Respondents

Location of Company	Frequency	Percentage (%)
Johor	35	9.92
Putrajaya	1	0.28
Perak	1	0.28
Perlis	1	0.28
Sabah	7	1.98
Sarawak	5	1.42
Selangor	103	29.18
Kedah	2	0.57

Kelantan	8	2.27
Kuala Lumpur	106	30.03
Lebuan	1	0.28
Melaka	41	11.61
Negeri Sembilan	3	0.85
Pahang	22	6.23
Pulau Pinang	17	4.82
Total	353	100

Source: Developed for the research

Figure 4.2: Location of Company of Respondents



Source: Developed for the research

The location of the company developed by the respondents has been presented in Table 4.2 and Figure 4.2. Most of the companies come from Kuala Lumpur with 106 respondents (30.03%). The following location will be Selangor having 103 respondents with 29.18%. Melaka, Johor, Pahang, Pulau Pinang, Kelantan, Sabah, Sarawak, Negeri Sembilan and Kedah will be other locations. Having

41 respondents (11.61%), 35 respondents (9.92%), 22 respondents (6.23%), 17 respondents (4.82%), 8 respondents (2.27%), 7 respondents (1.98%), 5 respondents (1.42%), 3 respondents (0.85%) and 2 respondents (0.57%) respectively. Besides, Putrajaya, Perak, Perlis and Lebuan only have 1 respondent with 0.28% from the table and graph.

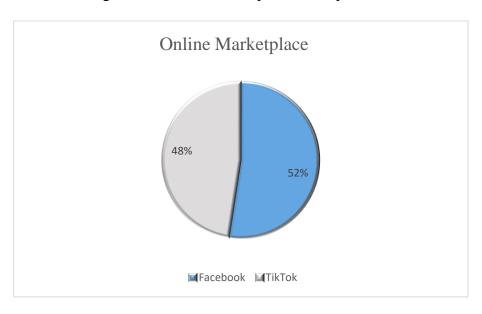
4.1.1.3 Online Marketplace

Table 4.3: Online Marketplace of Respondents

Online Marketplace	Frequency	Percentage (%)
Facebook	185	52
TikTok	168	48
Total	353	100

Source: Developed for the research

Figure 4.3: Online Marketplace of Respondents



Source: Developed for the research

52% of the participants with 185 people, prefer to promote their products by utilizing live streaming on Facebook from Table 4.3 and Figure 4.3. 48% of participants (168) would like to sell on TikTok live streaming.

4.1.1.4 Year of Selling Online

Table 4.4: Year of Selling Online of Respondents

Year of Selling Online	Frequency	Percentage (%)
< 1 Year	115	32.58%
1-3 Years	106	30.03%
3-5 Years	113	32.01%
> 5 Years	19	5.38%
Total	353	100

Source: Developed for the research

Figure 4.4: Year of Selling Online of Respondents



Source: Developed for the research

The year of selling online of the participants will be categorized into four catergories. Based on Table 4.4 and Figure 4.4, there are 115 respondents

(33.58%) selling by using live streaming commerce within 1 year. 106 respondents (30.03%) have 1-3 years of experience in promoting their business online. In the group who have 3-5 years of experience in utilizing live streaming commerce are 113 respondents with 32.01%. There are only 19 respondents (5.38%) who have more than 5 years of experience in boosting their business online.

4.2 Reliability Test

To measure the internal consistency of the dataset, a pilot test has been conducted with 38 sample sizes. The reliability analysis by using Cronbach's alpha has been deployed. For the value of which more than 0.7 presents that the constructs are consistent within the variables.

The dependent variable, which is Firm Performance has a value of 0.8 and the mediator (Using of Live Streaming Commerce) offers a good value of 0.832. Of all the independent variables, Effort Expectancy has a value of 0.887, Facilitating Conditions is 0.718, Hedonic Motivation is 0.709, Performance Expectancy is 0.820, Social Influence is 0.707 and Trust is 0.861. The following table portrays the output generated from the SMARTPLS.

Table 4.5: Cronbach's Alpha

Variable	Cronbach's alpha	N of Items
Effort Expectancy	0.887	4
Facilitating Conditions	0.718	3
Hedonic Motivation	0.709	3
Performance Expectancy	0.820	3
Social Influence	0.707	3
Trust	0.861	3
Using of Live Streaming	0.832	5
Commerce		
Firm Performance	0.800	5

Source: Table 4.5 shows the resulting output generated by SMARTPLS 4

4.3 Inferential Analysis

In this part, the collected data will be investigated by using correlation analysis and structural equation analysis.

4.3.1 Correlation Analysis

<u>Table 4.6 Correlations Analysis</u>

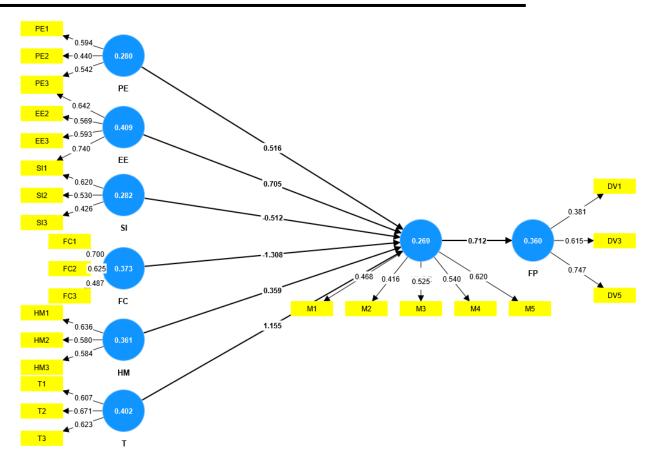
Variables	EE	FC	FP	HM	PE	SI	T	ULSC
EE	1.000	0.857	0.705	0.839	0.905	1.031	0.856	0.813
FC	0.857	1.000	0.598	1.104	0.832	1.122	0.997	0.698
FP	0.705	0.598	1.000	0.563	0.744	0.731	0.589	0.712
HM	0.839	1.104	0.563	1.000	0.958	1.076	1.092	0.712
PE	0.905	0.832	0.744	0.958	1.000	1.074	0.863	0.857
SI	1.031	1.122	0.731	1.076	1.074	1.000	0.970	0.808
T	0.856	0.997	0.589	1.092	0.863	0.970	1.000	0.796
ULSC	0.813	0.698	0.712	0.712	0.857	0.808	0.796	1.000

Source: Table 4.6 shows the resulting output generated by SMARTPLS 4

In order to examine the strength of the relationship between two variables, correlation analysis has been executed. A coefficient of correlation below 0.5 is considered weak, whereas a coefficient of more than 0.5 is considered a strong correlation (Sekaran & Bougie, 2016). Table 4.6 displays the correlation matrix between Effort Expectancy, Facilitating Conditions, Firm Performance, Hedonic Motivation, Performance Expectancy, Social Influence, Trust and Using of Live Streaming Commerce. However, there are not any coefficients of correlation below 0.5 in the following table, in which all variables are positively correlated.

4.3.2 Structural Equation Modeling

Figure 4.5 R-square



Source: Figure 4.5 shows the resulting output generated by SMARTPLS 4

According to Figure 4.5, 26.9% of the variation in the Using of Live Streaming Commerce is explained by Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation and Trust. The other variation (73.1%) is affected by external factors which not within the study. R-square = 0.36 denotes that 36% of the variation in the Firm Performance is described by the Using of Live Streaming Commerce, and 64% is influenced by the external factor which is not within the study.

Table 4.7: Path Coefficients

	Path coefficients
EE -> ULSC	0.705
FC -> ULSC	-1.308
HM -> ULSC	0.359

PE -> ULSC	0.516
SI -> ULSC	-0.512
T -> ULSC	1.155
ULSC -> FP	0.712

Source: Table 4.7 shows the resulting output generated by SMARTPLS 4

By the path coefficients value, a model of Using of Live Streaming Commerce has been developed as follows:

Using of Live Streaming Commerce = 0.705 Effort Expectancy + 0.359 Hedonic Motivation + 0.516 Performance Expectancy + 1.155 Trust + -1.308 Facilitating Conditions + -0.512 Social Influence

0.705 tells us that for every one unit increase in the Effort Expectancy will increase the Using of Live Streaming Commerce by 0.705 where the other variables remain unchanged. 0.359 of the Using of Live Streaming Commerce will increase as the Hedonic Motivation is increased by one unit. The Performance Expectancy will give us a 0.516 increment in the Using of Live Streaming Commerce if one unit increases. 1.155 coefficient provides us with the information of which one unit increase in the Trust it will increase the Using of Live Streaming Commerce by 1.155. However, -1.308 tells us that for every one unit increase in the Facilitating Conditions, the Using of Live Streaming Commerce will increase by -1.308. Besides, increasing every unit of Using of Live Streaming Commerce will decrease 0.512 Social Influence.

Furthermore, the value of Using of Live Streaming Commerce (0.712) tells us that every one unit increase in the counter will increase the Firm Performance by 0.712 and the model of Firm Performance has been developed as follows:

Firm Performance=0.712 Using of Live Streaming Commerce

Table 4.8: Model Estimates

	Original	Sample mean	Standard	T statistics	P values
	sample (O)	(M)	deviation	(O/STDEV)	
			(STDEV)		
EE -> ULSC	0.282	0.280	0.066	4.300	0.000
FC -> ULSC	0.028	0.026	0.079	0.351	0.725
HM -> ULSC	-0.027	-0.024	0.082	0.335	0.738
PE -> ULSC	0.209	0.211	0.066	3.167	0.002
SI -> ULSC	0.043	0.051	0.078	0.555	0.579
T -> ULSC	0.224	0.221	0.081	2.751	0.006
ULSC -> FP	0.467	0.474	0.060	7.813	0.000

Source: Table 4.8 shows the resulting output generated by SMARTPLS 4

From the above table, it is found that Effort Expectancy, Performance Expectancy, Trust and Using of Live Streaming Commerce are only significant at 0.00, 0.002 and 0.006 respectively where the p-value < 0.05. Hence, the null hypothesis is rejected, and the alternative hypothesis is accepted. However, the alternative hypotheses of Facilitating Conditions, Hedonic Motivation and Social Influence are rejected due to the significant values at 0.725, 0.738 and 0.579 (p-value > 0.05).

4.4 Digital Platforms Comparison

SPSS is used to compare the suspected digital platforms; TikTok and Facebook by using the T-test. The relevant results will be indicated in the following table.

<u>Table 4.9: Independent Samples Test</u>

Levene's Test	t for Equality									
of Variances		t-test	for Eq	uality of Means						
					Mean			95%	Confid	lence
					Differe	Std.	Error	Interval	of	the
F	Sig.	t	df	Significance	nce	Differe	nce	Difference		

THE IMPACT OF LIVE STREAMING COMMERCE TO MSMES' PERFORMANCE: A COMPARISON BETWEEN TIKTOK AND FACEBOOK

							One-Sided p	Two-Sided p			Lower	Upper
ULSC	Equal	variances	.321	.572	1.5	351	.056	.112	.06625	.04161	01557	.14808
	assumed				92							
	E 1	. ,			1.5	2442	056	112	06625	0.41.60	01575	14026
	Equal vari	iances not			1.5	344.2	.056	.113	.06625	.04169	01575	.14826
	assumed				89	81						

Source: Table 4.9 shows the resulting output generated by SPSS

Since p-value = 0.572 > 0.05, there is no difference in the digital platform used which is TikTok and Facebook. Suspect that both digital platforms of the using of live streaming commerce to achieve the same performance. In short, we know that preference toward going on live streaming commerce on Facebook and TikTok may depend on the targeted audience, products offered or others.

4.5 Test of Significant

Hypothesis 1

H1: There is a significant relationship between performance expectancy and using of live streaming commerce.

The value indicates p = 0.002 in Table 4.9, which is lower than the significant level of 0.05. Since the p-value is lower than 0.05, Ho is rejected and H1 is accepted. Thus, there is a positive relationship between performance expectancy and using of live streaming commerce.

Hypothesis 2

H2: There is a significant relationship between effort expectancy and using of live streaming commerce.

The value indicates p = 0.00 in Table 4.9, which is lower than the significant level of 0.05. Since the p-value is lower than 0.05, Ho is rejected and H2 is accepted. Thus, there is a positive relationship between effort expectancy and using of live streaming commerce.

Hypothesis 3

H3: There is a significant relationship between social influence and using of live streaming commerce.

The value indicates p = 0.579 in Table 4.9, which is higher than the significant level of 0.05. Since the p-value is higher than 0.05, Ho is accepted and H3 is rejected. Thus, there is no relationship between social influence and using of live streaming commerce.

Hypothesis 4

H4: There is a significant relationship between facilitating conditions and using of live streaming commerce.

The value indicates p = 0.725 in Table 4.9, which is higher than the significant level of 0.05. Since the p-value is higher than 0.05, Ho is accepted and H4 is rejected. Thus, there is no relationship between facilitating conditions and using of live streaming commerce.

Hypothesis 5

H5: There is a significant relationship between hedonic motivation and using of live streaming commerce.

The value indicates p = 0.738 in Table 4.9, which is higher than the significant level of 0.05. Since the p-value is higher than 0.05, Ho is accepted and H5 is rejected. Thus, there is no relationship between hedonic motivation and using of live streaming commerce.

Hypothesis 6

H6: There is a significant relationship between trust and using of live streaming commerce.

The value indicates p = 0.006 in Table 4.9, which is lower than the significant level of 0.05. Since the p-value is lower than 0.05, Ho is rejected and H6 is accepted. Thus, there is a positive relationship between trust and using of live streaming commerce.

Hypothesis 7

H7: There is a significant relationship between the use of live streaming commerce and firm performance.

The value indicates p = 0.00 in Table 4.9, which is lower than the significant level of 0.05. Since the p-value is lower than 0.05, Ho is rejected and H7 is accepted. Thus, there is a positive relationship between using of live streaming commerce and firm performance.

4.6 Conclusion

In this chapter, the demographic of respondents will be explained by using Excel. Besides, the relationship between the variables and the hypotheses testing will be revealed in SMARTPLS. Lastly, the distinction of investigated digital platforms: TikTok and Facebook will be inspected by T-test in SPSS. After analysis, there are three hypotheses are rejected in this chapter.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATION

5.0 Introduction

Chapter 5 will indicate the result of statistical analyses and the findings in the previous chapter. Besides, the implications and weaknesses of the study will be conducted in this chapter. At the end of this chapter, the suggestions for future research will be evolved.

5.1 Discussions of Major Findings

The following table summarizes the findings of the significance variables and the decision of the hypothesis.

Table 5.1 Discussions of Major Findings

	Hypothesis	Significant	Result
H1	There is a significant relationship between	$\beta = 0.209$	Supported
	performance expectancy and using of live	p = 0.002 <	
	streaming commerce	0.05	
H2	There is a significant relationship between	$\beta = 0.282$	Supported
	effort expectancy and using of live streaming	p = 0.000 <	
	commerce	0.05	
Н3	There is a significant relationship between	$\beta = 0.043$	Rejected
	social influence and using of live streaming	p = 0.579 >	
	commerce	0.05	
H4	There is a significant relationship between	$\beta = 0.028$	Rejected
	facilitating conditions and using of live	p = 0.725 >	
	streaming commerce	0.05	
Н5	There is a significant relationship between	•	Rejected
	hedonic motivation and using of live streaming	p = 0.738 >	
	commerce	0.05	

H6	There is a significant relationship between trust	$\beta = 0.224$	Supported
	and using of live streaming commerce	p = 0.006 <	
	6	0.05	
H7	There is a significant relationship between		Supported
	using of live streaming commerce and firm	p = 0.000 <	
	performance	0.05	

Source: Developed for the study

5.1.1 Performance Expectancy

Regarding to Table 4.8 in Chapter 4, the significant level of performance expectancy is at 0.002, which is lower than the alpha value of 0.05. This shows the significant relationship between performance expectancy and the use of live streaming commerce. Besides, the β -value is 0.209 which expresses that the relationship between performance expectancy and using of live streaming commerce is positive.

A study by Soong et al. (2020) highlighted that adopting live streaming commerce into an organization's operation is expected to gain more benefits, including economic profitability and social status. Namely, the company has the potential for increased revenue streams and enhanced financial performance by utilizing live streaming commerce to expand its market share. Besides, the company is able to participate in a dynamic market where real-time interaction with customers can lead to greater sales conversions and customer engagement.

5.1.2 Effort Expectancy

Based on Table 4.8 in Chapter 4, the significant level of effort expectancy is at 0.000, which is lower than the alpha value of 0.05. This shows the significant relationship between performance expectancy and using of live streaming commerce. Besides, the β -value is 0.282 which expresses that the relationship between performance expectancy and using of live streaming commerce is positive.

The second-highest beta of 0.282 signifies the significant impact of live streaming commerce on the performance of MSMEs. Effort expectancy serves

as an indicator of the ease with which they can incorporate live streaming commerce into their business. Based on the results, MSMEs are suggested to face minimal challenges or obstacles in leveraging live streaming commerce (Soong et al., 2020). These findings reveal that live streaming commerce is seamlessly integrable into the business model without requiring facilitating conditions (Soong et al., 2020).

Using live streaming commerce effortlessly will not only emphasize the adaptability of MSMEs but also signifies the inherent user-friendly of live streaming commerce platforms. In brief, MSMEs are allowed to leverage the benefits of live streaming commerce with the absence of barriers, capitalizing on this technology to increase their market potential, engage with consumers and contribute to their business performance.

5.1.3 Social Influence

The result of the beta is 0.043 and the p-value is 0.579 (more than 0.05) proving that social influence does not affect using live streaming commerce. Thus, H3 is rejected in this research. This result may be due to several factors that are claimed by other researchers and associations.

Companies rely more on their independent assessments than on external suggestions from superiors or peers who are important to the company, causing insignificance in the relationship path from social influence on the use of live streaming commerce in the current study (Zhou et al., 2021). Based on the findings, companies prioritize their internal evaluations and judgements, unlike scenarios where social influence plays a pivotal role in shaping opinions and behaviors.

Hence, the decisions of companies on live streaming commerce adoption are driven by internal considerations, such as strategies objectives and evaluations of the potential benefits of live streaming commerce. In short, the research indicates that social influence would not be a main impact in shaping the attitudes and decisions of businesses regarding the integration of live streaming commerce into their operations.

5.1.4 Facilitating Conditions

The result of the beta is 0.028 and the p-value is 0.725 (more than 0.05) proving that facilitating conditions do not have any effect on using of live streaming commerce. Thus, H4 is rejected in this research. This result may be due to several factors that are claimed by other researchers and associations.

A study by Soong et al. (2020) found that facilitating conditions did not influence the adoption of live streaming commerce due to the straightforward accessibility of live streaming commerce on digital platforms like TikTok and Facebook, eliminating the need for additional technical infrastructure support. Moreover, the straightforward access to live streaming commerce on established digital platforms may contribute to its widespread adoption among businesses and once again certify that live streaming commerce is easy to use.

5.1.5 Hedonic Motivation

The result of the beta is -0.027 and the p-value is 0.738 (more than 0.05) proving that hedonic motivation does not have any effect on using of live streaming commerce. Thus, H5 is rejected in this research. This result may be due to several factors that are claimed by other researchers and associations.

The results of the variable are associated with the finding drawn by Wongkitrungrueng and Assarut (2020), who found that the perceived enjoyment derived from live streaming commerce does not indicate a correlation with its impact on the companies' performance. To support the result of the relationship between hedonic motivation and using of live streaming commerce, Merhi et al. (2019) stated that adopters view live streaming commerce more as a beneficial service rather than a source of joy and enjoyment, which is supported by the observed perceived enjoyment aspect.

5.1.6 Trust

The significant level of trust is at 0.006, which is presented in Table 4.8 in Chapter 4 is lower than the alpha value of 0.05. This shows the significant relationship between trust and using of live streaming commerce. Besides, the β -value is 0.224 which expresses that the relationship between trust and using of live streaming commerce is positive.

Trust between consumers and sellers is a crucial foundation in the dynamic landscape of live streaming commerce which always evolves as consumers transform into dedicated followers of streamers, engaging in actions including following, sharing, forwarding, and commenting on live content across digital platforms such as Facebook and TikTok (Zhou et al., 2021). Therefore, MSMEs act as streamers on live streaming commerce to effectively promote and market their products and services to a wider audience.

To maintain a positive experience in live streaming commerce, digital platforms are required to strengthen relationships between consumers and sellers by ensuring satisfaction with the live streaming commerce process, implementing effective online recommendation systems, and providing robust after-sales services (Zhou et al., 2021). In addition, the willingness to leverage and the establishment of trust are affected by the adopters' rights protection laws related to live streaming commerce (Zhou et al., 2021).

5.1.7 Using of live streaming commerce

According to Table 4.8 in Chapter 4, the significant level of performance expectancy is at 0.000, which is lower than the alpha value of 0.05. This shows the significant relationship between using of live streaming commerce and firm performance. Besides, the β -value is 0.467 which expresses that the relationship between using of live streaming commerce is positive and firm performance.

Based on the previous study done by Shahzad et al. (2020), the using of live streaming commerce stands out as a significant catalyst impacting firm performance. The company agreed that the adoption of live streaming

commerce and the enhancement in their overall performance have a positive correlation. By embracing live streaming commerce, the company would increase their growth in sales revenue, profit, market share, level of customer satisfaction, overall financial performance and level of customer loyalty (Shahzad et al., 2020).

5.2 Implication of the Study

5.2.1 Theoretical Implications

The Unified Theory of Acceptance and Use of Technology (UTAUT1 & UTAUT2) is adopted in this study as its foundational framework. According to the established conceptual framework, the researcher added some variables that are suitable for this study and introduced a new integrated framework with the variables of performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, trust, using of live streaming commerce and firm performance. This study aims to assess the impact of live streaming commerce on the performance of MSMEs, with a specific focus on comparing the digital platforms of Facebook and TikTok. Moreover, the study explores the scope of UTAUT2 theory and contributes significantly to the existing literature on firm performance within the context of leveraging live streaming commerce due to the empirical gap in the domain of live streaming commerce. Therefore, the study would supply valuable insight and information that can guide future endeavours concerning MSMEs' perceptions in this evolving landscape, thereby enriching the academic discourse on this emerging phenomenon. In brief, the theoretical framework proved to be a solid framework for identifying the firm performance in this newly emerging commerce.

5.2.2 Managerial Implications

The insights gained from this study can directly benefit the live streaming commerce adopters and industry. This study allows MSMEs to better understand live streaming commerce and evaluate the effects that companies

should be concerned about while adopting live streaming commerce. The researcher believes that the findings provided will be important guiding data in formulating business strategy that benefit the MSMEs.

The findings supported that performance expectancy has a significant impact on the adoption of live streaming commerce. This highlights the correlation between the perceived performance benefits and the active engagement of companies in leveraging live streaming commerce as part of their business strategies. The positive impact of this variable suggests the companies expect live streaming commerce to be an effective avenue for driving sales, capitalizing on the interactive and real-time nature of live streams to convert viewer interest into actual transactions. By using live streaming commerce, the companies are allowed to connect with a broader audience and capture a larger share of the market. In short, the benefits of using live streaming commerce that the company expected consist of improved sales revenue, enhanced market share and so on, which are the main drivers motivating companies to embrace this technology.

Moreover, the positive relationship between effort expectancy and using of live streaming commerce has indicated the convenience associated with incorporating this innovative approach into business operations. This suggests that the application of live streaming commerce and the perceived ease of use on the platform play an important role in encouraging MSMEs to embrace live streaming commerce. The digital platforms offer an efficient means of registering accounts, streamlining the onboarding process for companies in the field of live streaming commerce. The detailed data within live streaming commerce also seems like a significant facilitator, by offering comprehensive insight into consumer purchasing behaviour and inventory status, allowing MSMEs to efficiently manage and showcase their available products.

In addition, trust has been shown to have a significant relationship with using of live streaming commerce. This study supported for digital platforms to enhance their live streaming commerce systems due to the pivotal role of trust especially concerning security, safety and reliability. The digital platforms would enable to foster consumer confidence and ensure a secure environment by addressing these problems.

Furthermore, using of live streaming commerce has proved to have a significant relationship with firm performance in this study. Based on the result, the firm performance has been influenced indirectly by the variables, including performance expectancy, effort expectancy and trust while using live streaming commerce. This is because these variables have a positive relationship with use of live streaming commerce.

5.3 Limitations of Study

Although this research provides valuable insights into the impacts of live streaming commerce on the performance of MSMEs; however, it still has some limitations. The first limitation is the limitation of geography coverage which all respondents are from Malaysia. Hence, the application of the study's outcome may be different when expanding to other countries or regions, as variations in cultural, economic, and technological contexts.

Secondly, the scope of the study was constrained by the time frame allotted for research completion, approximately 21 weeks. This limitation limits the researcher to conducting a more extensive survey with a broader coverage, potentially restricting the diversity and representativeness of the sample.

Thirdly, several effects including perceived risk, perceived credibility and perceived security which were identified by Musa et al. (2019) were not addressed in this study. These variables would be the potential influencers in the context of live streaming commerce, providing a more nuanced understanding of the factors shaping MSMEs' perceptions and behaviours in this field.

Lastly, the study has a narrow scope in the exploration of various platforms within the live streaming commerce landscape by focusing on comparing Facebook and TikTok only.

5.4 Recommendations for Future Research

Lastly, to address the limitation of this study that is only focused on Malaysia, future researchers are suggested to expand the scope of their studies to other countries or regions. Researchers may be well aware of the cultural, economic and regulatory differences that influence the dynamics of live streaming commerce adoption by MSMEs while undertaking cross-country investigations. Exploring diverse regions or countries would contribute to the development of more applicable insights into the impacts shaping the performance of organizations using live streaming commerce.

Besides, future researchers could consider additional factors that may potentially influence on the firm performance within the live streaming commerce landscape. As mentioned before, the variables, such as perceived risk, perceived credibility, and perceived security stated by Musa et al. (2019) should be investigated. By considering more variables into the research framework would enrich the understanding of the considerations that may drive MSMEs when adopting live streaming commerce for business growth.

Lastly, diversity of digital platforms, such as YouTube and Instagram may be investigated in the future study. The study would provide a more holistic perspective on the variety of ways in which MSMEs engage with live streaming commerce by exploring more digital platforms which have different user bases and features. This investigation would offer more understanding of the strategic choices businesses make in choosing the most suitable platforms for their live streaming commerce endeavors.

5.5 Conclusion

This research managed to explain the impact of live streaming commerce to MSME's performance. The researcher has utilized UTAUT2 as the basic model for this study and added some of the variables. The result indicated that performance expectancy, effort expectancy and trust are directly associated with using of live streaming commerce and a positive relationship between use of live streaming commerce and firm performance. However, social influence, facilitating conditions and hedonic motivation does not have a significant relationship with use of live streaming

commerce. has not a significant relationship with use of live streaming commerce. Furthermore, the study has proved there is no difference in conducting MSMEs in either Facebook or TikTok. Hence, the researchers have achieved and answered the research objectives and questions. In conclusion, for a company to have an impactful company performance as long as they adopt live streaming commerce into the marketing of their product and services, it will increase their firm performance.

REFERENCES

- Abdat, F. A. (2020). Using UTAUT Model to Predict Social Media Adoption among Indonesian SMEs. *Saudi Journal of Economics and Finance*, *4*(10), 498–505. https://doi.org/10.36348/sjef.2020.v04i10.003
- Abubakar, F. M., & Ahmad, H. B. (2013). The moderating effect of technology awareness on the relationship between UTAUT constructs and behavioural intention to use technology: A conceptual paper. Australian journal of business and management research, 3(2), 14-23.
- Ajzen, I. (1991, December). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-t
- Al-Azawei, A., & Alowayr, A. (2020, August). Predicting the intention to use and hedonic motivation for mobile learning: A comparative study in two Middle Eastern countries. *Technology in Society*, *62*, 101325. https://doi.org/10.1016/j.techsoc.2020.101325
- Ali, S., Poulova, P., Yasmin, F., Danish, M., Akhtar, W., & Usama Javed, H. M. (2020, December). How Big Data Analytics Boosts Organizational Performance: The Mediating Role of the Sustainable Product Development. Journal of Open Innovation: Technology, Market, and Complexity, 6(4), 190. https://doi.org/10.3390/joitmc6040190
- Andiana, B. D. L., Hurriati, L., & Fathurrahman, F. (2021, May). Adoption of digital marketing in strengthening micro, small and medium enterprises in Mataram City during The Covid 19 Pandemic. In *2nd Annual Conference on Education and Social Science (ACCESS 2020)* (pp. 554-557). Atlantis Press.
- Apuke, O. D. (2017, September). Quantitative Research Methods: A Synopsis Approach. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 6(11), 40–47. https://doi.org/10.12816/0040336
- Attuquayefio, S. (2014, August 30). *Using the UTAUT model to analyze students'*ICT adoption. Learning & Technology Library (LearnTechLib).

 https://www.learntechlib.org/p/148478/.

- Awaluddin, M., Nugraha, L. H., & Noviaristanti, S. Analysis of E-Commerce

 Adoption for MSMES in the Food and Beverage Sector in Garut Regency.
- Barrane, F. Z., Karuranga, G. E., & Poulin, D. (2018, December). Technology
 Adoption and Diffusion: A New Application of the UTAUT Model.

 International Journal of Innovation and Technology Management, 15(06),
 1950004. https://doi.org/10.1142/s0219877019500044
- Cai, J. (2019, January 8). Live Streaming Commerce: Uses and Gratifications

 Approach to understanding Consumers' Motivations.

 https://hdl.handle.net/10125/59693
- Cai, J., Wohn, D. Y., Mittal, A., & Sureshbabu, D. (2018). Utilitarian and Hedonic Motivations for Live Streaming Shopping. *Utilitarian and Hedonic Motivations for Live Streaming Shopping*. https://doi.org/10.1145/3210825.3210837
- Cao, Q., & Niu, X. (2019, January). Integrating context-awareness and UTAUT to explain Alipay user adoption. *International Journal of Industrial Ergonomics*, 69, 9–13. https://doi.org/10.1016/j.ergon.2018.09.004
- Chang, A. (2012, September 28). UTAUT and UTAUT 2: A Review and Agenda for Future Research. The Winners, 13(2), 10. https://doi.org/10.21512/tw.v13i2.656
- CNNIC (2022). The 49th Statistical Report on China's Internet Development. China Internet Network Information Center.

 https://www.cnnic.com.cn/IDR/ReportDownloads/202204/P02022042433613
 5612575.pdf
- Compeau, D., & Higgins, C. (1995a). Application of social cognitive theory to training for computer skills. Information Systems Research, 6 (2), 118-143.
- Davis, F. D. (1989, September). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*(3), 319. https://doi.org/10.2307/249008

- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1992). Extrinsic and Intrinsic Motivation to Use Computers in the Workplace. Journal of Applied Social Psychology, 22 (14), 1111-1132. doi:10.1111/j.1559-1816.1992.tb00945.x
- Dulock, H. L. (1993, January 1). Research Design: Descriptive Research. *Journal of Pediatric Oncology Nursing*, 10(4), 154–157. https://doi.org/10.1177/104345429301000406
- Elia, S., Giuffrida, M. G., Mariani, M. M., & Bresciani, S. (2021). Resources and digital export: An RBV perspective on the role of digital technologies and capabilities in cross-border e-commerce. *Journal of Business Research*, *132*, 158–169. https://doi.org/10.1016/j.jbusres.2021.04.010
- Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
- Goodman, L. A. (1961). Snowball sampling. *The annals of mathematical statistics*, 148-170.
- Hassan, Z. A., Schattner, P., & Mazza, D. (2006, August 31). Doing A Pilot Study:
 Why Is It Essential? ResearchGate.
 https://www.researchgate.net/publication/26498016_Doing_A_Pilot_Study_
 Why Is It Essential
- Hidiroglou, M. A., & Lavallée, P. (2009). Sampling and Estimation in Business Surveys. *Handbook of Statistics*, 441–470. https://doi.org/10.1016/s0169-7161(08)00017-5
- Hilvert-Bruce, Z., Neill, J. T., Sjöblom, M., & Hamari, J. (2018, July). Social motivations of live-streaming viewer engagement on Twitch. *Computers in Human Behavior*, 84, 58–67. https://doi.org/10.1016/j.chb.2018.02.013
- Ho, C., Liu, Y., & Chen, M. (2022). Factors influencing watching and purchase intentions on live streaming platforms: From a 7Ps Marketing mix perspective. *Information*, *13*(5), 239. https://doi.org/10.3390/info13050239
- IAB. (2020b, October 28). *Interactive Advertising Bureau | Insights*. https://www.iab.com/insights/live-video-streaming-2018/
- Jia, X., & Wang, M. (2018, July 13). The Impact of Green Supply Chain

 Management Practices on Competitive Advantages and Firm Performance.

- The Impact of Green Supply Chain Management Practices on Competitive Advantages and Firm Performance | SpringerLink. https://doi.org/10.1007/978-981-13-0451-4_7
- Kahil, B. (2021, June 1). Motivation and Privacy Role in Knowledge Sharing During Pandemic 2020: A Study of Enterprise Social System Use in Malaysian SMEs. *Journal of Digitovation and Information System*, 1, 28–42. https://doi.org/10.54433/jdiis.2021100003
- Khan, I. U., Hameed, Z., Khan, S. N., Khan, S. U., & Khan, M. a. A. (2021).
 Exploring the effects of culture on acceptance of online banking: A comparative study of Pakistan and Turkey by using the extended UTAUT model. *Journal of Internet Commerce*, 21(2), 183–216.
 https://doi.org/10.1080/15332861.2021.1882749
- Khatib, Saleh F. A. and Nour, Abdulnaser, The Impact of Corporate Governance on Firm Performance During The COVID-19 Pandemic: Evidence from Malaysia (2021). Journal of Asian Finance, Economics and Business, 8(2), 0943–0952, Available at SSRN: https://ssrn.com/abstract=3762393
- Kit, S. K., Ahmed, E. M., & Tan, K. S. (2021, January 1). Social Influences' Effects on Malaysia's SMEs' Public Electronic Procurement Usage. *International Journal of Electronic Government Research*, 17(1), 68–82. https://doi.org/10.4018/ijegr.2021010105
- Lakens, D. (2022, January 1). *Sample Size Justification*. Collabra. https://doi.org/10.1525/collabra.33267
- Leong, T. K., Meng, T. P., Eng, T. K., Hua, P., Hooi, R., & Lim, C. W. (2021). A modified UTAUT model m-payment use intention: A comparative analysis between Malaysians and foreigners in Malaysia.
- Live commerce awareness and participation 2022 | Statista. (2023, July 11). Statista. https://www.statista.com/statistics/1272759/livestream-online-platforms-awareness-worldwide/
- LoBiondo-Wood, G., & Haber, J. (2014, March 12). *Nursing Research E-Book*. Elsevier Health Sciences.

- Lu, B., & Chen, Z. (2021, November). Live streaming commerce and consumers' purchase intention: An uncertainty reduction perspective. Information & Management, 58(7), 103509. https://doi.org/10.1016/j.im.2021.103509
- Luo, X., Cheah, J. H., Lim, X. J., & Ng, S. I. (2022). A bibliometric review of user behaviors research in live streaming commerce. *Journal of Marketing Advances & Practices*, 4(1), 32-49.MSME Insights 2021 (New Release). (n.d.).
 - https://www.smecorp.gov.my/index.php/en/component/content/article/191-laporan-tahunan/4743-msme-insights-2021-new-release?layout=
- Marchewka, J. T., & Kostiwa, K. (2014, May 30). An Application of the UTAUT Model for Understanding Student Perceptions Using Course Management Software. *Communications of the IIMA*, 7(2). https://doi.org/10.58729/1941-6687.1038
- Mazhar, S. A. (2021, June 14). Methods of Data Collection: A Fundamental Tool of Research. *Journal of Integrated Community Health*, 10(01), 6–10. https://doi.org/10.24321/2319.9113.202101
- Merhi, M., Hone, K., & Tarhini, A. (2019, November). A cross-cultural study of the intention to use mobile banking between Lebanese and British consumers: Extending UTAUT2 with security, privacy and trust. *Technology in Society*, 59, 101151. https://doi.org/10.1016/j.techsoc.2019.101151
- Min, Y., & Tan, C. C. (2022). Research and Application of compulsive buying Behaviors of Consumers in E-Commerce Livestreaming on Big Data. *Human-centric Intelligent Systems*, 2(3–4), 113–123. https://doi.org/10.1007/s44230-022-00010-2
- MSME Insights 2021 (n.d.). Economic Report of the 2021 edition of the MSME
 Insights Report
 https://www.smecorp.gov.my/index.php/en/component/content/article/191laporan-tahunan/4743-msme-insights-2021-new-release?layout=
- Musa, Z. K. C., Muhayiddin, M. N., Yusoff, M. N. H., Ismail, M., & Muhamad, M.(2019). Intention to use cloud accounting system among SMEs in Malaysia: AConceptual Framework of a Modified Unified Theory of Acceptance and Use

- of Technology (UTAUT) model. *Research in World Economy*, 10(2), 74. https://doi.org/10.5430/rwe.v10n2p74
- Parker, C., Scott, S., & Geddes, A. (2019). Snowball sampling. SAGE research methods foundations. Piñeiro-Chousa, J., López-Cabarcos, M. N., Pérez-Pico, A. M., & Caby, J. (2023, March). The influence of Twitch and sustainability on the stock returns of video game companies: Before and after COVID-19. Journal of Business Research, 157, 113620. https://doi.org/10.1016/j.jbusres.2022.113620
- Pershing, J. L. (2006). A commentary on quantitative and qualitative methods. *Handbook of human performance technology*, 745.
- Raman, A., & Don, Y. (2013, June 24). Preservice Teachers' Acceptance of Learning Management Software: An Application of the UTAUT2 Model. International Education Studies, 6(7). https://doi.org/10.5539/ies.v6n7p157
- Ratnawati, K. (2020). The influence of financial inclusion on MSMEs' performance through financial intermediation and access to capital. *The Journal of Asian Finance, Economics and Business*, 7(11), 205–218. https://doi.org/10.13106/jafeb.2020.vol7.no11.205
- Rogers, E. M. (1995). Diffusion of Innovations (Fourth Edition). New York: Free Press.
- Sample Size Calculator. (n.d.). Social Science Statistics.

 https://www.socscistatistics.com/tests/samplesize/default.aspx
- Schillewaert, N., Langerak, F., & Duharnel, T. (1998, July). Non-Probability
 Sampling for WWW Surveys: A Comparison of Methods. *Market Research*Society. Journal., 40(4), 1–13. https://doi.org/10.1177/147078539804000403
- Sekaran, U., & Bougie, R. (2016, June 27). *Research Methods For Business*. John Wiley & Sons.
- Shahzad, Arfan; Chin, Hon Keong; Altaf, Mohsin; Bajwa, Farooq Anwar(2020): Malaysian SME's performance and the use of e-commerce: A multi-group analysis ofclick-and-mortar and pure-play e-retailers, Pakistan Journal of Commerce and Social Sciences(PJCSS), ISSN 2309-8619, Johar Education Society, Pakistan (JESPK), Lahore, Vol. 14, Iss. 1,pp. 1-33

- Shewale, R. (2023, December 6). *Social Media Users Global Demographics* (2023). https://www.demandsage.com/social-media-users/
- Singh, S., Singh, N., Kalinić, Z., & Liébana-Cabanillas, F. J. (2021, April). Assessing determinants influencing continued use of live streaming services: An extended perceived value theory of streaming addiction. *Expert Systems With Applications*, *168*, 114241. https://doi.org/10.1016/j.eswa.2020.114241
- Sloman, K. N. (2010). Research trends in descriptive analysis. *The Behavior Analyst Today*, 11(1), 20–35. https://doi.org/10.1037/h0100686
- Smith, T., & Short, A. (2022, June). Needs affordance as a key factor in likelihood of problematic social media use: Validation, latent Profile analysis and comparison of TikTok and Facebook problematic use measures. *Addictive Behaviors*, 129, 107259. https://doi.org/10.1016/j.addbeh.2022.107259
- Sombultawee, K. (2020). Antecedents and consequences of e-commerce adoption for SMEs. Kasetsart Journal of Social Sciences, 41(2), 256–261. Retrieved from https://so04.tci-thaijo.org/index.php/kjss/article/view/240437
- Soong, K. K., Ahmed, E. M., & Tan, K. S. (2020, January 2). Factors influencing Malaysian small and medium enterprises adoption of electronic government procurement. *Journal of Public Procurement*, 20(1), 38–61. https://doi.org/10.1108/jopp-09-2019-0066
- Stevens, S. S. (1946, June 7). On the Theory of Scales of Measurement. *Science*, 103(2684), 677–680. https://doi.org/10.1126/science.103.2684.677
- Sun, Y., Shao, X., Li, X., Guo, Y., & Nie, K. (2019). How live streaming influences purchase intentions in social commerce: An IT affordance perspective. *Electronic Commerce Research and Applications*, 37, 100886. https://doi.org/10.1016/j.elerap.2019.100886
- Sutanapong, C. and Louangrath, P.I. (2015). "Descriptive and Inferential Statistics" *Inter. J. Res.*
- Methodol. Soc. Sci., Vol., 1, No. 1: pp. 22-35. (Jan. –Mar. 2015). Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3205035

- Taouab, O., & Issor, Z. (2019, January 31). Firm Performance: Definition and Measurement Models. *European Scientific Journal ESJ*, *15*(1). https://doi.org/10.19044/esj.2019.v15n1p93
- Tastle, W. J., & Wierman, M. J. (2006, August). An information theoretic measure for the evaluation of ordinal scale data. *Behavior Research Methods*, *38*(3), 487–494. https://doi.org/10.3758/bf03192803
- Taylor, S., & Todd, P. A. (1995, June). Understanding Information Technology
 Usage: A Test of Competing Models. *Information Systems Research*, 6(2),
 144–176. https://doi.org/10.1287/isre.6.2.144
- Thompson, R. L., Higgins, C. A., & Howell, J. M. (1991). Personal computing: Toward a conceptual model of utilization. MIS Quarterly: Management Information Systems, 15(1), 125-142.
- Venkatesh, Morris, Davis, & Davis. (2003). User Acceptance of Information Technology: Toward a Unified View. MIS Quarterly, 27(3), 425. https://doi.org/10.2307/30036540
- Venkatesh, Thong, & Xu. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. MIS Quarterly, 36(1), 157. https://doi.org/10.2307/41410412
- Wang, Y., Lu, Z., Cao, P., Chu, J., Wang, H., & Wattenhofer, R. (2022). How live streaming changes shopping decisions in e-commerce: A study of live streaming commerce. *Computer Supported Cooperative Work*, *31*(4), 701–729. https://doi.org/10.1007/s10606-022-09439-2
- 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
- Xue, J., Liang, X., Xie, T., & Wang, H. (2020, September). See now, act now: How to interact with customers to enhance social commerce engagement? Information & Management, 57(6), 103324. https://doi.org/10.1016/j.im.2020.103324
- Yan, M., Kwok, A. P. K., Chan, A. H. S., Zhuang, Y. S., Wen, K., & Zhang, K. C. (2022, December 29). An empirical investigation of the impact of influencer

- live-streaming ads in e-commerce platforms on consumers' buying impulse. *Internet Research*, *33*(4), 1633–1663. https://doi.org/10.1108/intr-11-2020-0625
- Zhao, Y., & Bacao, F. (2021, December 9). How Does Gender Moderate Customer Intention of Shopping via Live-Streaming Apps during the COVID-19 Pandemic Lockdown Period? International Journal of Environmental Research and Public Health, 18(24), 13004. https://doi.org/10.3390/ijerph182413004
- Zhou, M., Huang, J., Wu, K., Huang, X., Kong, N., & Campy, K. S. (2021, November). Characterizing Chinese consumers' intention to use live e-commerce shopping. *Technology in Society*, 67, 101767. https://doi.org/10.1016/j.techsoc.2021.101767
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013, June 25). *Business Research Methods*. Cengage Learning.

Appendix 1.1: Questionnaire



UNIVERSITI TUNKU ABDUL RAHMAN FACULTY OF ACCOUNTANCY AND MANAGEMENT BACHELOR OF INTERNATIONAL BUSINESS (HONOURS)

Title of Research:

The impact of live streaming commerce for micro-SMEs: a comparison between TikTok and Facebook

Dear respondents,

I am Low Pei Yu, currently a final year undergraduate student pursuing degree of Bachelor of International Business (Hons) from Faculty of Accountancy & Management (FAM) at Universiti Tunku Abdul Rahman (UTAR). I am conducting my final year project (FYP) on "The impact of live streaming commerce for business MSMEs: a comparison between TikTok and Facebook".

I would like to invite you to participate in this questionnaire survey. This questionnaire consists of three sections including Section A, Section B and Section C. Kindly answer ALL questions in ALL sections. It only takes 5-10 minutes of your time to complete this questionnaire. The participation of this questionnaire is on a voluntary basis. Your acceptance to participate in this survey is sincerely appreciated. Thank you for your time and effort.

Your responses are important for me to complete the research. Kindly be informed that all of your answers and information will be kept private and confidential, and used solely for academic purposes. If you have any questions about the survey questionnaire, please contact me through email at peggy0205@1utar.my. Thank you for your participation and cooperation in this survey.

Section A: Demographic Information

Please fill in some of your personal information on all the questions below.

1. Gender
□ Male
☐ Female
2. Online selling experience
□ Yes
□ No
3. Sales per year
☐ Sales < RM300,000
☐ RM300,000 < Sales < RM15 mil
□ RM15 mil < Sales < RM50 mil
□ Sales > RM50 mil
4. Number of employees
□ Employees < 5
\Box 5 < Employees < 75
□ 75 < Employees < 200
☐ Employees > 200

Section B: General Information Please answer the questions below. 1. Online marketplace □ TikTok □ Facebook □ Others 2. Year of selling Online □ Experience ≤1 year □ 1 year < Experience ≤3 years

 \square 3 years < Experience \leq 5 years

 \square Experience > 5 years

Section C: The impact of live streaming commerce for micro-SMEs

Listed below are the measurement items regarding impacts of live streaming commerce for micro-SMEs. Kindly select the answer that reflects your opinion for each of the following questions.

No.	Firm Performance	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	The company has increased on growth in sales revenue	1	2	3	4	5
2	The company has increased on profitability	1	2	3	4	5

THE IMPACT OF LIVE STREAMING COMMERCE TO MSMES' PERFORMANCE: A COMPARISON BETWEEN TIKTOK AND FACEBOOK

3	The company has increased on level of customer satisfaction	1	2	3	4	5
4	The company has increased on overall financial performance	1	2	3	4	5
5	The company has increased on level of customer loyalty	1	2	3	4	5

No.	Using of live streaming commerce	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Using live streaming commerce is a good idea.	1	2	3	4	5
2	My company finds that, using live streaming commerce is enjoyable.	1	2	3	4	5
3	Live streaming commerce makes business appear interesting	1	2	3	4	5
4	Doing business with live streaming commerce is fun.	1	2	3	4	5
5	My company enjoys using live streaming commerce for business.	1	2	3	4	5

No.	Performance Expectancy	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Live streaming commerce saves time in terms of marketing, sales	1	2	3	4	5
2	and promotion Using live streaming commerce would enhance my business	1	2	3	4	5
	effectiveness					
3	Using live streaming commerce would be useful for my business	1	2	3	4	5

THE IMPACT OF LIVE STREAMING COMMERCE TO MSMES' PERFORMANCE: A COMPARISON BETWEEN TIKTOK AND FACEBOOK

No.	Effort Expectancy	Strongly	Disagree	Neutral	Agree	Strongly
	Enort Expectancy	Disagree	Disagree	Neutrai	Agree	Agree
1	It is easy for my company to use live streaming commerce.	1	2	3	4	5
2	My company's interaction with live streaming commerce is clear and understandable.	1	2	3	4	5
3	It is easier to secure business transactions when using live streaming commerce.	1	2	3	4	5
4	It is easy for my company to become skillful at using live streaming commerce	1	2	3	4	5

No.	Social Influence	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	People around my company suggested that the company should choose live streaming commerce.	1	2	3	4	5
2	People who are important to the company think that the company should use live streaming commerce.	1	2	3	4	5
3	The company which chooses live streaming commerce will be considered prestige.	1	2	3	4	5

No.	Facilitating Conditions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My company has the facilities to					
	conduct business in live streaming	1	2	3	4	5
	commerce.					

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2	Payment in live streaming					
	commerce is compatible with	1	2	3	4	5
	existing channels.					
3	Internet speed is good for doing					
	business on live streaming	1	2	3	4	5
	commerce platforms					

No.	Hedonic Motivation	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Live streaming commerce is interesting because my company can interact with consumers.	1	2	3	4	5
2	Live streaming commerce is fun because my company enjoy the business process	1	2	3	4	5
3	Live streaming commerce is enjoyable.	1	2	3	4	5

No.	Trust	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Consumers think live streaming commerce is trustworthy	1	2	3	4	5
2	Consumers trust the quality of goods when purchasing on live streaming commerce.	1	2	3	4	5
3	The law can fully protect my company's interest in the business of live streaming commerce	1	2	3	4	5

