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Factors Affecting Vietnamese Young People's Impulsive Purchasing Intention on Live-Streaming Commerce

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Abstract

This paper examines the factors affecting Vietnamese young people's impulsive purchasing intention in the live-streaming commerce environment. Adopting the S-O-R research model with influencing factors is the Streamer's Attractiveness (AT), Streamer's Trustworthiness (TR), Streamer's Expertise (EP), Perceived Price (PP), Product Usefulness (PU), and Facility Condition (FC). The mediating variables, or the O elements, are Perceived Enjoyment (PCE) and Perceived Usefulness (PCU). Lastly, the response that buyers deliver is Impulsive Purchasing Intention (IPI). The research focused on young Vietnamese people, particularly Millennials and Generation Z, born from 1980 to 2006 (18 to 44 years old). The quantitative research used a snowball sampling technique with a total of 291 qualified surveys. The data was processed and analyzed with the assistance of SPSS version 22 and SmartPLS 4. After thorough analysis, it is proven that perceived enjoyment and perceived usefulness have a positive influence on impulsive purchasing intention; streamer's attractiveness and trustworthiness, as well as perceived price, have a positive impact on perceived enjoyment and indirectly impact impulsive purchasing intention; product usefulness and facility condition have a positive influence on perceived usefulness and indirectly impact impulsive purchasing intention. However, the streamer's expertise and perceived price do not impact perceived enjoyment and usefulness, respectively. The

study found that impulsive buying intention is often triggered by emotional arousal, yet consumers still care about product quality and usefulness. The proposed model has been verified in the Vietnamese context and delivers practical insights for companies and marketers.

Keywords: Live-Streaming, Impulse Purchasing Intention, Perceived Enjoyment, Product Usefulness, Streamers, Perceived Price, Young Vietnamese.

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1.0 Introduction

1.1 Research Background

With the vast development speed of internet technology, online shopping has evolved from the base of text and pictures to immersive and interactive multimedia. This has led to the emergence of a new model in online shopping and e-commerce, which is live-streaming commerce. Vietnamese e-commerce platforms started to pick up the live-streaming trend in 2016 due to the launching of Taobao Live, which proved a tremendous success with nearly \$14 million in sales through live-streaming in 2018, with an impressive number of 34% of viewers making purchasing decisions (Viet & May, 2024). On average, there are 2.5 million live-streaming sessions organized per month with a high number of sellers and vendors – over 50,000 users (Tuan, 2024). Vietnam's live-streaming commerce sector is expected to reach \$11 billion by 2026, with an annual growth of 28% (Asia Circles, 2024).

Live-streaming commerce can reach such tremendous numbers due to its real-time broadcasting features and para-social interactivity with consumers. In a live-streaming session, streamers show off the appearance, design, and function and introduce the product with their personal styles. Customers can directly ask for further product information such as price, shipping time and policy, and other topics. Streamers and customers can interact with each other based on the live content, which can affect consumer attitudes and reactions. Afterward, viewers may make purchases through an embedded link provided by vendors (Liu et al., 2021).

In this study, the scope will focus on the consumer behavior of Gen Z and young Millennials, who are considered young adults in Vietnamese society. In Vietnam, Generation Z accounts for around 15% of the total population and 25% of users on the Internet (Ngo et al., 2023). On the other hand, this generation also stands out to become *digital citizens* who are tech-savvy, individualistic, and socially interconnected people. Having grown up in the digital era with the Internet, smartphones, and particularly social media, Generation Z integrates online platforms into their daily lives, especially when it

comes to shopping demands. This generation has a substantial influence in the live-streaming commerce market. It can also be a potential loyal consumer base for online enterprises because of their strong preference for online shopping due to its convenience and interactivity.

Meanwhile, Millennials also have a strong preference for digital shopping experiences. As most young Millennials now have to lead busy lives, they want shopping to be convenient and fast, which perfectly fits online shopping experiences. Though being born earlier than Gen Z, Millennials are used to online interaction through smartphones and social media platforms as well. Notably, after the COVID-19 pandemic significantly changed their digital usage habits and the growing prevalence of digital payments such as BNPL (Buy Now, Pay Later) and cryptocurrency, Millennials' shopping habits have shifted toward digital, in which live-streaming commerce is becoming the leader (Brunker, 2022). Hence, the research scope is intentionally limited to Vietnam as it allows the study to be more specific to the local market situations, influencing the purchase decisions of young adult consumers towards brands on Vietnamese e-commerce platforms. By investigating this scope, there can be more contextual and focused findings for the Vietnamese market in general.

1.2 Research Motivations

In the research field of live-streaming commerce, most studies concentrate on China, the country considered to be the first and fastest innovator in this industry. Studies of this sector in Vietnam are available yet in small numbers. Especially in Vietnam, consumer behavior is largely influenced by various aspects, such as culture and psychological triggers, which are not frequently addressed by professional researchers (Decision Lab, 2022). Although these aspects have a significant influence on buyers, psychology and emotional factors are still not deeply investigated.

Furthermore, impulsive purchasing intentions are known to be predicted by the perceived enjoyment and usefulness of consumers. The border between selling products and entertaining viewers is blurred by the delightful atmosphere and captivating buying experience these live-streaming sessions offer. The emotional trigger mostly comes from the host or streamers, either their appearance, their knowledge, or streaming skills, along with the utilitarian trigger like the product usefulness, the facility or the perceived price, fosters an atmosphere that sets off the purchasing intention in an impulsive manner, breaking the buying pattern (Dang et al., 2024). Nevertheless, studying the factors that trigger the buying intentions of young people is practically investigating the consumers' opinion of businesses. With the arm of this knowledge and insights, businesses may improve user experiences, optimize streaming content, and develop campaigns to trigger the intention and spur their expansion in this promising market. When businesses know their target consumers' needs, not only about the products and the price but also about entertainment and emotional aspects, they can increase sales and customer happiness all at once. With these motivations, the study has three main objectives:

1. Identifying the primary factors influencing impulsive purchasing intention among young Vietnamese people during live-streaming commerce.
2. Determining the significant effect of these factors in influencing impulsive purchasing intention.
3. Providing insights and advice to companies and marketers in the Vietnamese live-streaming commerce environment.

2.0 Literature Review and Hypothesis Development

2.1 Live-Streaming Commerce

Online shopping and e-commerce have changed consumer behavior drastically over the last decade, especially during the pandemic. There are several ways customers can benefit

from e-commerce platforms, including but not limited to convenience, higher access to products, cross-border shopping, and relatively lower prices compared to traditional shopping (Ngo, 2023). However, there are also drawbacks, namely, lack of interaction with buyers and lack of product observation. On the other hand, live-stream is a type of user-generated content. It allows streamers to perform whatever kind of entertainment, from singing and dancing to playing video games, while interacting with their viewer at the same time. That said, streamers can also sell products in their live-streaming sessions. It started with individual streamers using this new platform to help their business; now, it's a whole live-streaming commerce industry.

Live-streaming commerce has a strong potential to increase demand for things purchased impulsively, which is influenced by a variety of underlying variables. These characteristics can be generally divided into two categories: perceived enjoyment and perceived usefulness. Perceived enjoyment is essential in live-streaming commerce. Streamers or the hosts of these live-streaming sessions play an important role in boosting the enthusiasm of viewers with the session. Their appearance and demand may capture the attention, while their understanding of the product makes them more trustworthy and legitimate. Moreover, the personal brand, such as their style, reputation, knowledge, or a significant number of followers, can boost viewer engagement and enjoyment. Another factor that triggers enjoyment is perceived price. Buyers enjoy the fact that they can buy a product at a lower price with gifts or vouchers (Haws et al., 2017). This factor is also the only one that is considered in the research for both hedonic and utilitarian aspects. Perceived usefulness, on the other hand, is determined by a number of elements, including product, pricing, and platform features. Unlike traditional e-commerce markets, where customers can only see the pictures or videos of the product, live-streaming allows the product's features and utility to be carefully shown to viewers, including direct testing. Lastly, the platform itself contributes significantly as a smooth consumer journey and user-friendly experience also make it easier for buyers to make their purchase impulsively.

2.2 Theoretical Framework

S-O-R is an extended paradigm of the Input-Output (I-O) model, consisting of three parts: Stimuli (S), Organism (O), and Response (R). S-O-R has been successfully used in investigating the urge to buy impulsively in the context of online retail and live-streaming commerce. Originally developed by Mehrabian and Russell (1974) to investigate environmental psychology, in which the environment and personality affect behavioral responses via the motivation of primary emotional responses (pleasure, dominance, arousal). Later on, the model was used in the context of online shopping by Park and Lennon (2009). This framework demonstrated that the simulation cues can affect one's emotional organism, which transfers into the response (Lim et al., 2024). Existing studies, mostly in the Chinese market, have consistently shown that there are correlations between external stimuli, consumers' emotions, and consequential behavior (Xu et al., 2020). It offers a practical and rationally supported method of incorporating various environmental cues in an e-commerce setting, such as social and website content stimuli (Animesh et al., 2011).

Wang et al. (2022) implemented the S-O-R model to investigate the effect of live-streaming platforms on purchase intention, using product promotion, anchor qualities, and situational characteristics as stimuli. In a more religious context, influencer and convenience were used as stimuli, while religiosity was a mediate variable to explore the impulsive buying behaviors of Muslim consumers through live-stream sessions (Nisa, 2023). Similarly, social presence and sales promotion are used as stimuli, exploring Chinese consumers' impulsive purchasing intention in live-streaming sessions (Huo et al., 2023). According to the S-O-R theory, an individual's emotional and cognitive processes (organism) can be triggered by stimulating cues or stimuli, and this can lead to approaching behaviors (response). Consequently, this paradigm facilitates the investigation of which contextual signals impact a customer's emotional and cognitive decision-making processes, as well as the ways in which these processes and contextual cues impact consumer behavior. It helps us to assess the viewer's psychological and cognitive status in relation to the external stimuli and how those may influence the behavior that follows.

Many contextual factors (such as streamer attractiveness, para-social interaction, and information quality) stimulate the viewer in the setting of live-streaming commerce, leading to a stimulated customer engaging in the ensuing purchase activity.

2.3 Impulse Purchasing Intention (IPI)

Impulse purchasing intention is described as an unplanned, sudden and spontaneous buying intention that is triggered by the stimulus during the shopping process (Parboteeah et al., 2009). According to Stern (1962), there are four different mixes of impulsive buying: pure impulsive purchasing, reminder impulse purchasing, suggestion impulsive purchasing and planned impulse purchasing. Most studies about online impulsive purchasing intention refer to the first mix - pure impulsive as when participating in a live-streaming session, the stimulus that can affect purchasing intention are from different aspects. Previous studies focus on investigating factors that affect impulsive purchasing intention in the live-streaming commerce environment in technical aspects, such as website interface design, platform features, and policies related to promotions and pricing (Rodrigues et al., 2021). In this paper, the author focuses on finding the factors that trigger impulse buying intention, both hedonic and utilitarian by using the S-O-R framework. The chosen stimulus is the streamer's attractiveness, expertise, and trustworthiness - which trigger the organism of perceived enjoyment (Wang et al., 2022); the second set of stimuli is product usefulness, perceived price, and facility condition - which provoke the organism of perceived usefulness (Lee & Chen, 2021). Lastly, perceived enjoyment and perceived usefulness will be the variables that have a direct effect on impulsive purchasing intention.

2.4 Perceived Enjoyment (PCE)

In an online shopping environment, perceived enjoyment and perceived usefulness are two factors used to describe a customer's affective and cognitive reactions. Perceived

enjoyment is defined by the degree to which customers find the site enjoyable. Previous studies have shown a positive relationship between positive affective reactions (perceived enjoyment) and impulse purchase intention in live-streaming shopping (Cai et al., 2018). Due to the hedonic nature of live-streaming commerce, customers' enjoyment can be extensively aroused, encouraging them to engage in impulsive consumption (Nguyen et al., 2024). Indeed, live-streaming on e-commerce platforms has created a hedonic shopping environment, including multiple stimuli to enhance customers' perceived enjoyment during the shopping process, which motivates them to indulge in consumption behaviors (Purnomo & Riani, 2018; Xu et al., 2020). As a result, a higher level of enjoyment plays a role as an important motivation in impulsive buying behavior.

H1: Perceived enjoyment has a positive influence on impulse purchasing intention.

2.5 Perceived Usefulness (PCU)

Perceived usefulness refers to the degree to which a customer believes that using a certain system would allow his or her work performance to be enhanced (Van der Heijden et al., 2003). Therefore, a platform, product, or service with high perceived usefulness indicates that it can enhance convenience or value (Lee & Chen, 2021). Perceived usefulness is also a key factor, contributing to users' acceptance of product information that is communicated on e-commerce platforms, including live-streaming. Cui et al. (2022) described perceived usefulness as a cognitive reaction that plays a significant role in forming the urge to purchase impulsively. In a similar stance, prior research by Wu et al. (2016) also argued that perceived usefulness is highly relative to impulse purchasing intention in consumer psychology. Therefore, this study proposes perceived usefulness as a variable that affects impulse purchase decisions.

H2: Perceived usefulness has a positive influence on impulse purchasing intention.

2.6 Streamer's Attractiveness (AT)

As live-streaming is real-time video interaction, live-streamers' attractiveness could directly affect their performances, thus influencing purchase decisions and consumption behavior. The definition of streamer attractiveness includes personality, appearance, and talent perceived by viewers during live-streaming (Liu, 2022). The mechanism under the close relationship between streamer attractiveness and impulse buying decisions is the interaction immersion process. Via an eye-tracking experiment, it is proved that the seller's attractiveness prolongs the attention allocation of consumers, encouraging them to stay longer in the live-streaming sessions (Tang et al., 2024). Streamer attractiveness is able to prolong viewers' interaction immersion state by increasing their enjoyment; thus, consumers are more likely to notice unwanted products at first, be persuaded to trust the usefulness of products, and make extra purchase decisions impulsively (Xu et al., 2020). Previous research has shown that streamer attractiveness has a close relationship with impulse purchase behaviour through enjoyment during the immersion process (Li et al., 2023). Therefore, this study proposes streamer's attractiveness as a variable that affects perceived enjoyment.

H3: Streamer's attractiveness has a positive influence on perceived enjoyment.

2.7 Streamer's Trustworthiness (TR)

In the context of live-stream e-commerce, streamer trustworthiness can be extracted from various information signals, mainly indirect indications – the objectivity of content or consistency in arguments made by streamers, their personal skills and experiences (Rusman et al., 2010; Sekhon et al., 2014). As low-quality information in online purchases can lead to harmful consequences for consumers, the credibility of the information source, which is streamer trustworthiness, plays an essential role in investigating consumers' purchase decisions on e-commerce platforms (Chew et al., 2024). Without the trustworthiness of information sources, consumers' attitudes can change towards other

selling platforms such as direct selling, especially since online shopping sites raised several concerns regarding products' quality consistency, security, and privacy of customer information as well as others. Thus, in the context of live-stream e-commerce, where streamers are also the primary source of information, their trustworthiness can be an attribute to customers' enjoyment and experiences (Jiang et al., 2024).

H4: Streamer's trustworthiness has a positive influence on perceived enjoyment.

2.8 Streamer's Expertise (EP)

Perceived expertise is the reliability level at which communicators are viewed as a source of information. To increase their expertise, communicators need to consider various aspects, including knowledge, experience, and skills. In live-streaming commerce services, streamers are not necessarily to be experts but rather, how their audience perceives them plays a more crucial role (Liu, 2022). Indeed, streamer expertise is a major factor in persuading customers to make purchase decisions, as expertise is essential to any communicator's credibility (Hwang & Kim, 2017). Previous studies have shown that there is a significant, positive correlation between streamer expertise and the level of trust they are able to inspire their audiences (Jiang et al., 2024). When consumers have a higher level of trust in streamers, they are more likely to perceive enjoyment and have an impulse purchase intention.

H5: Streamer's expertise has a positive influence on perceived enjoyment.

2.9 Perceived Price (PP)

In marketing, price is considered a kind of sacrifice that must be given up to gain goods or services (Anderson et al., 1994; Zeithaml et al., 2002). The price that consumers attach to products or services through their own personal judgment in their mind is referred to as

perceived price. To them, perceived price is more crucial than objective monetary price, which influences consumers' purchase behavior or intentions (Jacoby & Olson, 1976). As consumers tend to gain the maximization in total utility for any buying decision, any increase in price is equal to an increase in sacrifice, which makes consumers perceive that they have sacrificed more to earn the same utility. This can lead to a decrease in customer satisfaction, impacting their purchase intention, as perceived pricing is subjective (Nabila et al., 2021).

On the other hand, price also impacts enjoyment over the course of consumption. According to the research (Wreksa, 2017), the perceived price affects perceived value, which eventually has a positive effect on perceived enjoyment. Especially in Vietnam – a developing economy, the lower perceived price, particularly obtained through promotion schemes, significantly increases perceived enjoyment because Vietnamese consumers prefer to save as much money on their purchases as possible due to their tendency to find receiving a bargain enjoyable (Huynh, 2023).

H6a: Perceived price has a positive influence on perceived enjoyment.

H6b: Perceived price has a positive influence on perceived usefulness.

2.10 Product Usefulness (PU)

The definition of product usefulness depends on consumers' perception that a product or service is able to provide a certain benefit that fulfills their needs (Moldovan et al., 2011). Relating to consumer behavior, the usage of products works as a hook for purchase intention and encourages the decision more swiftly by boosting the utilitarian value received by the user. When consumers are satisfied with their purchase decisions and consider it good spending, there are higher chances that they are satisfied with the e-commerce site or in this study, the live-streaming commerce service (Zhang & Zhang, 2024). Cho and Sagynov (2015) proved in their paper that product usefulness, standing

alone as a stimulus, has a significant effect on perceived usefulness. Therefore, product usefulness is among the variables that impact consumers' impulsive purchase intention through perceived usefulness, based on the S-O-R approach.

H7: Product usefulness has a positive influence on perceived usefulness.

2.11 Facility Condition (PC)

In an online shopping environment, website attributes such as adequate and appropriate information, visual appeal and site ease of use contribute to facility conditions. Previous research has shown that these factors could influence customers' affective and cognitive reactions, which trigger their impulse buying decisions (Parboteeah et al., 2009; Liu et al., 2013). A website with high ease of use and visual appeal allows users to navigate as well as search for information more easily. It is also hard for customers to consider a website as visually appealing if that site is challenging to navigate (Lavie & Tractinsky, 2004). By increasing the site usability, the facility condition of an e-commerce website/ application can increase customers' shopping efficiency in the system (perceived usefulness), which can potentially increase a user's urge to buy impulsively.

H8: Facility condition has a positive influence on perceived usefulness.

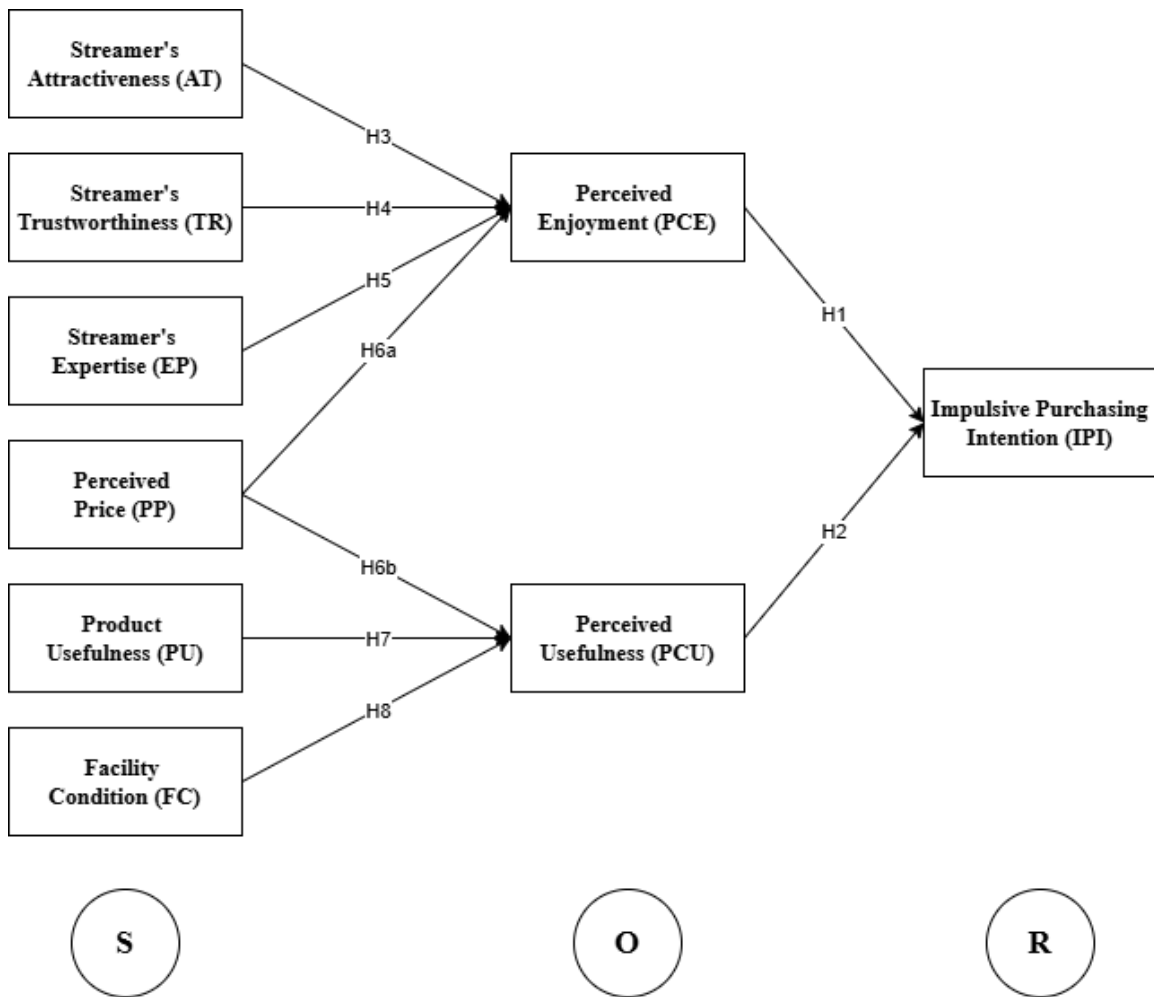


Figure 1: Research Model

3.0 Methodology

3.1 Sample Selection

This research uses quantitative research approaches in order to establish an extensive analysis of all variables and relevant demographic information. The quantitative research approach provides measurable and statistically valid data to evaluate hypotheses and identify relationships among variables. By using surveys and statistical modeling with large sample sizes, this method ensures that findings are generalizable across the target

population. It also examines relationships, such as the mediating roles of perceived enjoyment and perceived usefulness in decision-making or the impact of streamer-related attributes on impulsive purchase intentions. For this study, survey research was used, with two formulas determining the minimum sample size: $N1 = 5 \times m$ ($m = 40$ questions, $N1 = 200$) for diversity and representativeness, and $N2 = 50 + 8 \times k$ ($k = 9$ variables, $N2 = 122$) for reliability. Combining results, at least 210 valid responses are required, with an intended sample size of 250 to enhance validity and reliability.

Table 1: Demographic of Respondents (n = 291)

Variables	Valid	Frequency	Percent (%)
Age	Millennials (born from 1980 - 1989)	34	11.6
	Generation Z (born from 1998 - 2004)	84	28.9
	Generation Z (born from 2004 - 2006)	173	59.5
Education	High School	11	3.8
	University / College	249	85.6
	Postgraduate	31	10.7
Marital status	Single	272	93.5
	Married	19	6.5
Monthly income (Million VND)	Under 10	215	73.9
	10 - 20	41	14.1
	20 - 30	22	7.6
	Over 30	13	4.5
Living Area	Big cities	238	81.8
	Small cities	34	11.7
	Rural areas	19	6.5

After the data acquisition process, a sample of 291 valid responses will be used in the research. Demographically, 88.4% of them are Generation Z, primarily young students or recent graduates, with Millennials comprising 11.6%. A significant majority (85.6%) are university or college students/graduates, 93.5% are single, and 6.5% are married, reflecting their age group. Most earn under 10 million VND (73.9%), followed by 10–20 million VND (14.1%), while higher income brackets (20–30 million VND and above) account for 12.1%. Lastly, most of them live in major cities (81.8%), with smaller cities and rural areas making up 11.7% and 6.5%, respectively.

3.2 Measurements

Measurement variables used for each research question are shown in Table 2. The statements in the measurement utilized in this study were designed following literature reviews and self-developed opinions. After the question set was fully developed, a pilot test was carried out with participants who have plenty of experience in using e-commerce platforms and making purchase decisions via live-streaming. The wordings of the surveys were modified to ensure the information transparency of the survey, ensuring content validity. A total of 9 constructs were developed with specific measurements to measure the variables accordingly. In total, there are 34 questions, which do not include demographic information. The paper used a 4-point Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree).

Table 2: Variables and Items Included in the Questionnaire

Variables	Items	Measurements	Sources
Streamer's Attractiveness (AT)	AT1	The live streamer catches my attention.	(Lee & Chen, 2021) (Xu et al., 2020)
	AT2	The live streamer is friendly and attractive.	
	AT3	The live streamer has an enjoyable live-streaming style.	
	AT4	The live streamer has an interesting personality.	
Streamer's Trustworthiness (TR)	TR1	The live streamer is dependable.	(Lee & Chen, 2021) (Xu et al., 2020) (Ming et al., 2021)
	TR2	The live streamer is honest.	
	TR3	The content provided by the streamer is reliable (such as product, brand, and use experience).	
	TR4	I trust that the products I receive will be the same as those shown on live-streaming.	
Streamer's Expertise (EP)	EP1	The live streamer has experience in live-streaming.	(Li & Peng, 2021)
	EP2	The live streamer is knowledgeable in the field of live-streaming.	
	EP3	The live streamer is qualified to broadcast live-streams.	

	EP4	The live streamer has the skills to broadcast live-streams.	
Product Usefulness (PU)	PU1	The product in live-streaming commerce is necessary.	(Lee & Chen, 2021)
	PU2	The product in live-streaming commerce is beneficial.	
	PU3	The product in live-streaming commerce fulfills a need.	
	PU4	The product in live-streaming commerce is up to expectations.	
Perceived Price (PP)	PP1	Live-streaming commerce offers products at reasonable prices.	(Lee & Chen, 2021)
	PP2	Discounted prices are cheaper on live-streaming commerce.	
	PP3	Live-streaming commerce offers deals, vouchers or combo prices that make the perceived price cheaper.	
Facility Condition (FC)	FC1	The live-streaming platform is compatible with my equipment.	(Doan, 2020)
	FC2	The live-streaming platform is easy to use.	
	FC3	I can pay for my products directly on the live-streaming platform.	

	FC4	I can easily choose products to buy during live-streaming sessions.	
Perceived Enjoyment (PCE)	PCE1	I enjoy shopping via live-streaming services.	(Lee & Chen, 2021)
	PCE2	I enjoy watching live-streaming sessions.	
	PCE3	Shopping with live-streaming commerce was more interesting than shopping on normal e-commerce platforms.	
Perceived Usefulness (PCU)	PCU1	Using live-streaming commerce can save shopping time in searching and buying products.	(Lee & Chen, 2021)
	PCU2	Using live-streaming commerce can enable me to have a better search and purchase of products than using other online ways.	
	PCU3	Using live-streaming commerce can increase my shopping effectiveness.	
	PCU4	Live-streaming commerce helps me buy what I want online.	
Impulse Purchasing Intention (IPI)	IPI1	While watching live-streaming commerce, I was inclined to purchase items outside my original shopping goal.	(Xu et al., 2020), (Lee & Chen, 2021)
	IPI2	When I was shopping on live-streaming	

		commerce, I felt a sudden urge to buy something.	
	IPI3	While watching the live stream, I often buy things spontaneously.	
	IPI4	I ended up spending more money than I originally set out to spend.	

4.0 Results and Discussion

4.1 Reliability Analysis

Table 3: Reliabilities among the Variables

Variables	Items	Cronbach's α	Lowest Item-Total Correlation Value	Highest Cronbach's α if Item Deleted
Streamer's Attractiveness (AT)	4	0.793	0.548	0.768
Streamer's Trustworthiness (TR)	4	0.859	0.635	0.848
Streamer's Expertise (EP)	4	0.814	0.583	0.791
Perceived Price (PP)	3	0.833	0.654	0.808
Product Usefulness (PU)	4	0.860	0.653	0.843
Facility Condition (FC)	4	0.833	0.642	0.798

Perceived Enjoyment (PCE)	3	0.871	0.709	0.859
Perceived Usefulness (PCU)	4	0.857	0.687	0.824
Impulse Purchasing Intention (IPI)	4	0.887	0.703	0.873

Cronbach's α coefficient measures the internal reliability of a set of survey items within a variable in the quantitative analysis. According to Hair, if Cronbach's α is higher than 0.7, the survey items are highly reliable (Hair et al., 2013). Overall, all of the variables are reliable, with the α higher than 0.7. AT, TR, EP, PP, PU, and FC demonstrate high internal reliability with Cronbach's α values of 0.793, 0.859, 0.814, 0.833, 0.860, and 0.833, respectively. PCE and PCU also show strong reliability with α values of 0.871 and 0.857, while IPI has the highest reliability at 0.887. Additionally, all "Cronbach's α if item deleted" values exceed 0.3, confirming the consistency and reliability of the internal items.

Table 4: Subsidized Factor Loading, CR & AVE of the Model

Construct	Item	Standardized Factor loading	Composite Reliability (CR)	Average variance extracted (AVE)
Streamer's Attractiveness (AT)	AT1	0.803	0.812	0.619
	AT2	0.838		
	AT3	0.789		
	AT4	0.711		

Streamer's Trustworthiness (TR)	TR1	0.817	0.860	0.703
	TR2	0.855		
	TR3	0.870		
	TR4	0.809		
Streamer's Expertise (EP)	EP1	0.794	0.819	0.644
	EP2	0.766		
	EP3	0.797		
	EP4	0.851		
Perceived Price (PP)	PP1	0.855	0.835	0.750
	PP2	0.886		
	PP3	0.858		
Product Usefulness (PU)	PU1	0.850	0.865	0.705
	PU2	0.866		
	PU3	0.821		
	PU4	0.822		
Facility Condition (FC)	FC1	0.787	0.839	0.668
	FC2	0.844		
	FC3	0.813		
	FC4	0.823		
Perceived Enjoyment (PCE)	PCE1	0.895	0.873	0.796
	PCE2	0.917		
	PCE3	0.863		
Perceived Usefulness (PCU)	PCU1	0.822	0.858	0.700
	PCU2	0.847		
	PCU3	0.846		
	PCU4	0.832		
Impulse Purchasing Intention (IPI)	IPI1	0.889	0.888	0.748
	IPI2	0.834		
	IPI3	0.883		

	IPI4	0.852		
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In SmartPLS, the outer loading is calculated as the square root of the absolute R-squared regression value, representing the weighting from the latent parent variable to the observed child variable. Hair et al. (2013) recommend an outer loading coefficient of ≥ 0.708 for acceptable quality. In this dataset, all observed variables meet this standard. Composite Reliability (CR), similar to Cronbach's alpha, also requires a threshold of 0.7, which all variables exceed, confirming reliability. Convergent validity is assessed using average variance extracted (AVE), where a value of ≥ 0.5 indicates that the latent parent variable accounts for at least 50% of the variance in each child variable (Hair et al., 2013).

**Table 5: The latent variable correlation matrix: discriminant validity
(Fornell-Larcker criterion)**

	AT	EP	FC	IPI	PCE	PCU	PP	PU	TR
AT	0.787								
EP	0.498	0.803							
FC	0.418	0.538	0.817						
IPI	0.394	0.347	0.393	0.865					
PCE	0.460	0.439	0.411	0.670	0.892				
PCU	0.436	0.423	0.441	0.583	0.750	0.837			
PP	0.319	0.483	0.562	0.419	0.459	0.402	0.866		
PU	0.393	0.512	0.450	0.470	0.495	0.473	0.622	0.840	
TR	0.576	0.604	0.387	0.511	0.623	0.586	0.410	0.546	0.838

Note: The square root of AVE is on the diagonal line

In terms of the discriminant validity evaluation, there are two common approaches, namely the Fornell-Larcker criterion and the Heterotrait-Monotrait ratio. According to Fornell and Larcker (1981), a latent variable shall share its variance with other observed variables and influence its indicators at the same time. Moreover, other latent variables also have interrelationships with this one latent variable to a certain level. If the level of variance of this latent variable sharing with other latent variables is lower than the variance sharing with itself (square root of AVE), the discriminant validity is confirmed. The diagonal line in the matrix of Fornell and Larcker criterion is the square root of AVE. The values featured in this line must be higher than other values underneath them to confirm the discriminant validity. The dataset in this study satisfies the qualifications at all levels.

**Table 6: The Latent Variable Correlation Matrix: Discriminant Validity
(Heterotrait-Monotrait Ratio (HTMT))**

	AT	EP	FC	IPI	PCE	PCU	PP	PU	TR
AT									
EP	0.614								
FC	0.495	0.650							
IPI	0.451	0.403	0.450						
PCE	0.544	0.521	0.480	0.760					
PCU	0.526	0.504	0.518	0.667	0.867				
PP	0.380	0.580	0.670	0.487	0.537	0.476			
PU	0.466	0.610	0.529	0.539	0.569	0.545	0.734		
TR	0.684	0.723	0.453	0.581	0.717	0.679	0.480	0.631	

The evaluation of discriminant validity using the Heterotrait-Monotrait ratio (HTMT) compares the average correlation within a scale to the average of cross-correlations. A higher within-scale correlation indicates that the latent variable shares more variance within its scale, while a lower cross-correlation suggests less shared variance with other latent variables. In this study, the HTMT values confirm discriminant validity (Henseler et al., 2015). The criteria are: $HTMT > 0.9$ indicates poor discriminant validity, $HTMT \leq 0.85$ confirms it, and HTMT between 0.85 and 0.9 is acceptable. The highest HTMT value, 0.867 (between PCE and PCU), falls in the acceptable range, while all other values are below 0.85, ensuring discriminant validity.

4.2 Result of Structural Equation Model

Table 7: R-squared and Adjusted R-squared

Variable	R-squared	Adjusted R-squared
Impulse Purchasing Intention (IPI)	0.463	0.459
Perceived Enjoyment (PCE)	0.448	0.440
Perceived Usefulness (PCU)	0.290	0.283

R-squared and adjusted R-squared evaluate the variance that dependent variables depend on the independent variables. In this model, 45.9% (Adjusted R-squared = 0.459) of impulsive purchasing intention can be explained by perceived enjoyment and perceived usefulness; the other half might depend on other factors. Secondly, 44% of perceived enjoyment is determined by its independent variable: elements related to streamers and perceived price. Lastly, 28.3% of perceived usefulness is explained by elements related to price, product, and facility.

Table 8: F-square (Effect Size)

	Impulse Purchasing Intention (IPI)	Perceived Enjoyment (PCE)	Perceived Usefulness (PCU)
Streamer's Attractiveness (AT)		0.018*	
Streamer's Trustworthiness (TR)		0.204	
Streamer's Expertise (EP)		0.000*	
Perceived Price (PP)		0.076	0.002*
Product Usefulness (PU)			0.086
Facility condition (FC)			0.067
Perceived Enjoyment (PCE)	0.230		
Perceived Usefulness (PCU)	0.028		
Impulse Purchasing Intention (IPI)			

**f-square* < 0.02

The f-square index measures the effect size of independent variables on dependent variables, with thresholds: $f\text{-square} \geq 0.35$ (high impact), $0.15 < f\text{-square} < 0.35$ (average impact), $0.02 < f\text{-square} \leq 0.15$ (small impact), and $f\text{-square} < 0.02$ (extremely small or no impact) (Cohen, 2013). In this study, TR ($f\text{-square} = 0.204$) has the highest impact on PCE, indicating an average effect, followed by PP ($f\text{-square} = 0.076$) with a small impact, while AT ($f\text{-square} = 0.018$) and EP ($f\text{-square} = 0.000$) have negligible or no impact. For PCU,

PP (f-square = 0.002) shows an extremely small effect, and PU (f-square = 0.086) and FC (f-square = 0.067) have small impacts. Lastly, PCE (f-square = 0.230) has an average impact on IPI, while PCU (f-square = 0.028) shows a small effect.

Table 9: Result of Structural Equation Model

Path	Coefficients (β)	T-value	P-value	Hypothesis	Hypothesis support
PCE -> IPI	0.532	7.271	0.000	H1	Supported
PCU -> IPI	0.184	2.303	0.021	H2	Supported
AT -> PCE	0.127	2.222	0.026	H3	Supported
TR -> PCE	0.463	7.321	0.000	H4	Supported
EP -> PCE	-0.019	0.279	0.780*	H5	Rejected
PP -> PCE	0.238	4.127	0.000	H6a	Supported
PP -> PCU	0.053	0.650	0.516*	H6b	Rejected
PU -> PCU	0.320	4.308	0.000	H7	Supported
FC -> PCU	0.267	3.729	0.000	H8	Supported

**p-value* > 0.05

To determine whether the hypotheses are supported, the path coefficient results will be evaluated. First of all, the p-value indicates whether the hypothesis is statistically significant. In case the p-value is smaller than the threshold of 0.05, the impact relationship is confirmed to be significant; otherwise, it is insignificant. Secondly, the Original Sample Path Coefficient or Coefficient (β) defines the direction of influence. If the coefficient is

positive, the impact is positive, meaning if the dependent variable and the independent variable move in the same direction, both increase or decrease, depending on the independent variable. If the coefficient is negative, the dependent variable will decrease when the independent variable increases and vice versa. Moreover, the higher the absolute value of the coefficient is, the higher the impact it has.

In this research, the results of the structural equation model show interesting insights into factors that impact the impulsive purchasing intention of young Vietnamese people while engaging in live-streaming shopping sessions. Firstly, regarding the direct impact on IPI, PCE ($\beta = 0.532$, $p\text{-value} = 0.000$) and PCU ($\beta = 0.184$, $p\text{-value} = 0.000$) both have a significant and positive influence on the consumers' reaction, which trigger the impulsive intention to purchase goods during live-streaming sessions. Between the two variables, PCE has a higher influence as the coefficient is higher. Hence, H1 and H2 are supported. In relation to PCE, among four factors: AT, TR, EP, and PP, only EP ($\beta = -0.019$, $p\text{-value} = 0.780$) does not have any significant impact. TR ($\beta = 0.463$, $p\text{-value} = 0.000$) has the largest impact on PCE, followed by PP ($\beta = 0.238$, $p\text{-value} = 0.000$). The one with the smallest impact is AT ($\beta = 0.127$, $p\text{-value} = 0.000$). Hence, H3, H4, and H6a are supported, and H5 is rejected.

Lastly, among three stimuli, PP, PU and FC, PU ($\beta=0.320$, $p\text{-value} = 0.000$) and FC ($\beta=0.267$, $p\text{-value} = 0.000$) have a significant and positive relationship with PCE, with PU being the one with higher influence. Meanwhile, PP ($\beta=0.053$, $p\text{-value} = 0.0516$), while having a significant impact on PCE, has no impact on PCU. Hence, H6b is rejected, H7, H8 is supported. Figure 2 below visually demonstrates the relationship between all variables. The arrow demonstrates the correlation direction, and the coefficient within the line shows the level of the correlation. The sharp line represents significant relationships, while the dashed line describes the insignificant ones.

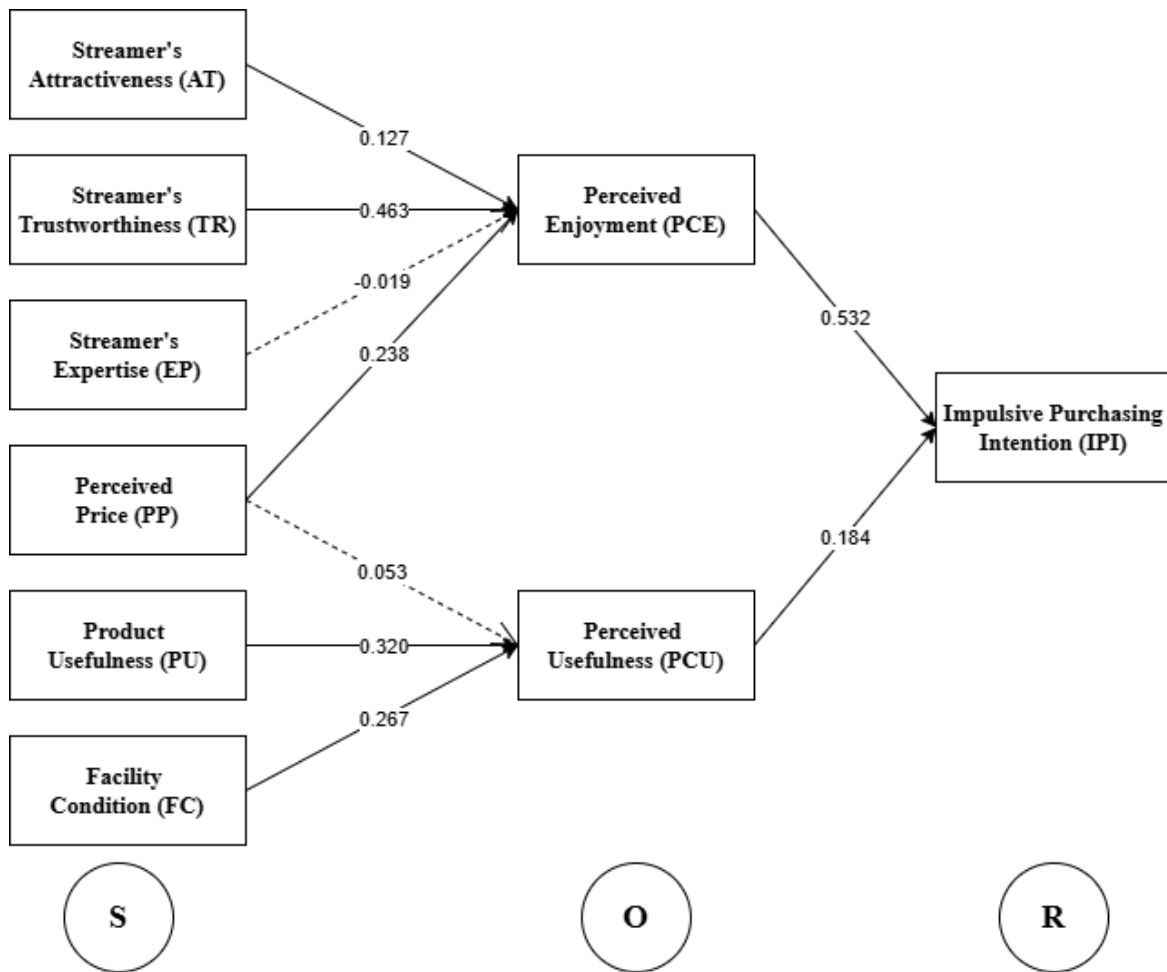


Figure 2: Research Model Results

In terms of demographic elements, the monthly income sets an essential foundation for impulsive purchase decision-making. The survey results show that respondents with income that stays within the range between 20 and 30 million VND per month have a higher tendency to make purchases than respondents having an income of lower than 10 million VND or from 10 to 20 million VND per month. Meanwhile, there is no notable difference between the respondents with lower than 10 million VND of income and those with 10 to 20 million. Such results show that participants who earn more money have a higher tendency to make impulsive buying decisions while engaging in a live-streaming

session. It can be the result of lifestyle inflation, in which people with a higher income wish to raise their living standards and give themselves satisfactory treatment as they are aware that they have put much effort into their work (Verbeck, 2024; Houston, 2024).

In the context of the S-O-R model, the research further confirms the significant role of PCE and PCU as internal organism factors, processing the external stimuli that affect one's emotions and rational responses. It is confirmed that the stimuli AT, TR, PP, PU and FC indeed have their impact on the impulsive purchasing intention, yet not in a direct way. AT, TR and PP make their influence via PCE, while EP does not. On the other hand, PU and FC made an impact on IPI via PCU, while PP did not. The research findings stay aligned with some of the previous studies that delve into consumer behaviors on the live-streaming commerce platform. According to Lee and Chen (2021), AT affects PCE, PU affects PCE, and PCE affects IPI. Meanwhile, PP does not have any relationship with PCU. On the other hand, according to a study by Li and Peng (2021), AT and TR affect emotional attachment, which is the PCE variable in this research, but EP does not. This research resembles Peng's study. According to Parboteeah et al. (2009), though her definition of task-relevant cues is similar to FC, it has a positive and significant impact on PCU. According to research by Suryatenggara and Dahlan (2022), PP does not have any relationship with PCU but Customer satisfaction, which is equal to Perceived Enjoyment in this research. Indeed, price as an important part of the marketing mix in marketing strategy influences consumers' enjoyment by creating a sense of gaining profits. In addition, PCU has a significant influence on IPI because a helpful and positive experience is more likely to lead to impulsive purchases (Hegawan et al., 2023). In the light of these previous research results, the study follows a similar pattern.

In the research, most of the responses stay focused on perceived price with the following repeated keywords: sale, attached gifts, vouchers and deals. This implies that young Vietnamese consumers prefer low-priced products, and they feel satisfied most when purchasing desired products at lower prices. Therefore, Perceived Price influences perceived enjoyment instead of perceived usefulness because PP directly makes consumers' online shopping experiences more satisfactory. The second important element

is Perceived Usefulness, with a dominant number of responses. In short, the two most influential factors are the PP on PCE and the PU on PCU.

5.0 Conclusion and Recommendations

5.1 Findings Summary

This research addresses the demand for scholarly studies on Vietnamese live-streaming commerce, focusing on the psychological, emotional, and technical triggers of young consumers' impulsive buying intentions. Using the S-O-R framework, the study evaluates six stimuli: Streamer's Attractiveness (AT), Trustworthiness (TR), Expertise (EP), Perceived Price (PP), Product Usefulness (PU), and Facility Condition (FC). The mediating variables are Perceived Enjoyment (PCE) and Perceived Usefulness (PCU), while the response variable is Impulsive Purchasing Intention (IPI). The findings support the proposed model, providing valuable insights for Vietnamese marketers and businesses. The results highlight demographic influences on impulsive buying intentions. Millennials and married participants show a higher tendency for impulsive purchases than Generation Z and single individuals. Those earning 20–30 million VND/month are more prone to impulsive buying than lower-income groups, while education and living areas show no significant differences.

Statistically, PCE and PCU explain 45.9% of IPI, with PCE having a greater impact ($f\text{-square} = 0.230$, $\beta = 0.532$) than PCU ($f\text{-square} = 0.028$, $\beta = 0.184$). TR ($f\text{-square} = 0.104$, $\beta = 0.463$) significantly influences PCE, followed by PP ($f\text{-square} = 0.076$, $\beta = 0.236$) and AT ($f\text{-square} = 0.018$, $\beta = 0.127$). Although 70% of participants value EP, it has no statistical impact on PCE ($f\text{-square} = 0.000$, $\beta = -0.019$). PU ($f\text{-square} = 0.086$, $\beta = 0.320$) and FC ($f\text{-square} = 0.067$, $\beta = 0.267$) positively influence PCU, explaining 28.3% of its variance, while PP has no significant impact on PCU ($f\text{-square} = 0.002$, $\beta = 0.053$). Overall, H1, H2, H3, H4, H6a, H7, and H8 are supported, confirming the direct and indirect effects of key variables on impulsive buying intentions, while H6b and H5 were

rejected. These findings provide practical insights for leveraging live-streaming commerce in Vietnam.

5.2 Implications

5.2.1 Theoretical Implications

This research highlights key demographic differences in impulsive buying tendencies during live-streaming sessions, particularly between Millennials and Generation Z, married and single individuals, and across income levels. Statistically, Perceived Enjoyment (PCE) and Perceived Usefulness (PCU) directly and positively influence Impulsive Purchasing Intention (IPI), while Streamer's Attractiveness (AT), Trustworthiness (TR), and Perceived Price (PP) impact IPI indirectly through PCE, and Product Usefulness (PU) and Facility Condition (FC) through PCU. Among the stimuli, a notable finding is the novel relationship between PP and the mediators PCE and PCU. While Lee and Chen (2021) concluded that PP does not significantly affect PCU and omitted its relationship with PCE, this study establishes that PP positively and significantly influences PCE, offering fresh insights into how promotional perceptions shape consumer behavior. Additionally, while AT, TR, and PP significantly influence PCE, TR has the strongest impact, suggesting that young Vietnamese derive joy and satisfaction from having their trust in the host. Between PU and FC, PU has a greater impact on PCU, indicating that even impulsive buyers prioritize product quality. Lastly, among the two organisms, PCE demonstrates a stronger influence on IPI than PCU, underscoring the pivotal role of emotions in driving impulsive purchases. These findings deepen the understanding of both hedonic and utilitarian factors influencing impulsive buying behaviors.

5.2.2 Practical Implications

Practically, by understanding the emotional spectrum of consumer behavior, businesses and marketers can effectively boost impulsive buying intention. This is proven in this project as the enjoyment while watching and when buying products are what trigger buyers' impulsive purchasing intention (PCE with f -square = 0.230), greater than the actual usefulness of that product or the technical side of the platform. As mentioned, among the stimuli that built up consumers' enjoyment, perceived price (f -square = 0.076, β = 0.236, p -value = 0.000) plays a significant role. Therefore, designing promotions and offers that generate a strong sense of perceived value or savings will be a promising strategy. Even if the actual financial benefit is non-definable, the feeling of occupying a great deal can arouse positive emotions and create a higher intention of impulsive buying. This approach utilizes psychological triggers that are crucial in leading consumer behavior.

Moreover, even in e-commerce, ensuring product quality remains crucial for companies. Among factors that create the feeling of receiving the usefulness of buying products online, product usefulness (f -square = 0.086, β = 0.320, p -value = 0.000) is the most significant one. Statistics proved that even when buying goods randomly, consumers still take into account the quality before making the final decision. That said, businesses should focus on improving and maintaining quality, as well as using the best means of information delivery so customers can clearly understand it, even via a live-streaming session. As a selling channel, live-streaming platforms, along with the streamers, can play a vital role in showcasing the product, explaining the benefits and interacting with buyers in real-time. Furthermore, a high-reputation host with high trust gained from consumers is an approach to guarantee the product's quality as their credibility is also a screen that reflects it. It is also proven in this research that a host's trustworthiness has the highest effect on the hedonic value perceived by consumers. So, a trusted host will generate sales by boosting the enjoyment as well as showcasing the product's usefulness. By utilizing such platforms, enterprises can enhance customers' confidence and understanding through product clarification, which tightens the connection between shareholders. In short, not only can spontaneous purchase behavior be enhanced, but long-term customer loyalty will

be created through a well-rounded strategy, emerging emotional connection and transparent communication, which will offer both emotional and rational satisfaction. This dual approach will assist businesses sustainably in the new, growing, and competitive market.

5.3 Limitations and Recommendations

Although providing crucial findings and insights, this study still contains several limitations. First of all, the dominant age range of survey participants is Generation Z. This domination created a bias related to age and later influenced education and monthly income levels. Subsequently, the results could not fully reflect other age groups in the target consumer of live-streaming commerce, such as Millennials or Generation X, who may have different and interesting buying behaviors and preferences. Secondly, the study did not divide participants based on gender identity. Without this section, it is impossible to perform gender-specific analysis and comparison, which is an extensive limitation as gender-based insights are crucial to tailoring demographic-targeted marketing strategies. Lastly, the research was conducted during an early period of live-streaming commerce; it is witnessing a significant uphill but has not yet become a common purchasing practice and still has plenty of space for development, innovation and advancement. That said, there are limitations in the findings influenced by the shortcomings of the period.

By addressing the denoted limitations, there are some recommendations for future research. Firstly, sampling participants should be approached more diverse in terms of generations and genders. Ensuring the balance representative of generations between Millennials and Generation Z, even including Generation X or Generation Alpha, would assist researchers in having a broader understanding of the differences in consuming behaviour across age groups. Additionally, future studies should attempt to segment participants by gender to delve into the potential differences in spontaneous buying intention and improve the marketing strategies. Secondly, revisiting this topic when live-

streaming commerce becomes a more widely accepted means of retail will benefit the studies. It is predicted that this medium will continue to evolve and attract popularity; the factors that impact consumers might change from time to time, in different periods in its revolution. A longitudinal procedure that follows the development of live-streaming commerce and its influence over time might discover new insights that mirror the changing dynamics of e-commerce.

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References

- Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing*, 58(3), 53. <https://doi.org/10.2307/1252310>
- Animesh, Pinsonneault, Yang, & Oh. (2011). An Odyssey into virtual worlds: Exploring the impacts of technological and spatial environments on intention to purchase virtual products. *MIS Quarterly*, 35(3), 789. <https://doi.org/10.2307/23042809>
- Asia Circles. (2024, April 17). *Live streaming and KOLs in Vietnam*. asiacircles.co. <https://asiacircles.co/social-commerce-vietnam/>
- Brunker. (2022, June 29). Adobe Commerce study highlights the importance of personalized experiences. *Adobe Experience Cloud*. <https://business.adobe.com/blog/the-latest/adobe-commerce-study-highlights-the-importance-of-personalized-experiences>
- Cai, J., Wohn, D. Y., Mittal, A., & Sureshababu, D. (2018). *Utilitarian and Hedonic Motivations for Live Streaming Shopping*. In *2018 ACM International Conference on Interactive Experiences for TV and Online Video* (pp. 81-88). ACM Digital Library. <https://doi.org/10.1145/3210825.3210837>
- Chew, X., Alnoor, A., Khaw, K. W., Sadaa, A. M., Al Halbusi, H., & Muhsen, Y. R. (2024). Symmetric and asymmetric modeling to boost customers' trustworthiness in livestreaming commerce. *Current Psychology*, 43(31), 25874-25892. <https://doi.org/10.1007/s12144-024-06200-4>
- Cho, Y. C., & Sagynov, E. (2015). Exploring factors that affect usefulness, ease of use, trust, and purchase intention in the online environment. *International Journal of Management & Information Systems (IJMIS)*, 19(1), 21. <https://doi.org/10.19030/ijmis.v19i1.9086>
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Routledge.
- Cui, Y., Zhu, J., & Liu, Y. (2022). Exploring the social and systemic influencing factors of mobile short video applications on the consumer urge to buy impulsively. *Journal*

- of Global Information Management*, 30(1), 1-23.
<https://doi.org/10.4018/jgim.301201>
- Dang, T. T., Nguyen, H. T., & Le, L. H. (2024). Research on factors affecting the purchase intention on TikTok live stream of students in Hanoi: A SOR model approach. *VNU University of Economics and Business*, 4(4), 117.
<https://doi.org/10.57110/vnu-jeb.v4i4.234>
- Decision Lab. (2022). *The State of Social Commerce & Live-streaming in Vietnam*. MMA & Decision Lab.
https://www.mmaglobal.com/files/documents/the_state_of_social_commerce_and_live-streaming_in_vietnam.pdf
- Doan, T. T. (2020). Factors affecting online purchase intention: A study of Vietnam online customers. *Management Science Letters*, 20, 2337-2342.
<https://doi.org/10.5267/j.msl.2020.3.001>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2013). *Multivariate data analysis: Pearson new international edition PDF eBook*. Pearson Higher Ed.
- Haws, K. L., McFerran, B., & Redden, J. P. (2017). The satiating effect of pricing: The influence of price on enjoyment over time. *Journal of Consumer Psychology*, 27(3), 341-346. <https://doi.org/10.1016/j.jcps.2017.03.001>
- Hegawan, C. I., Faustine, T. M., Wijayanti, S., & Manaf, P. A. (2023). Exploring the influence of perceived usefulness and value of PayLater/BNPL on satisfaction, impulsive buying, and post-purchase intention. *International Journal of Emerging Trends in Social Sciences*, 15(1), 1-12. <https://doi.org/10.55217/103.v15i1.667>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>

- Houston, M. (2024, June 27). Lifestyle Inflation: The Silent Drain On Your Finances. *Forbes*. <https://www.forbes.com/sites/melissahouston/2024/06/27/lifestyle-inflation-the-silent-drain-on-your-finances/>
- Huo, C., Wang, X., Sadiq, M. W., & Pang, M. (2023). Exploring factors affecting consumer's impulse buying behavior in live-streaming shopping: An interactive research based upon SOR model. *Sage Open*, 13(2). <https://doi.org/10.1177/21582440231172678>
- Huynh, T. D. (2023). *The effects of promotions on the decision of customers to choose a delivery application to purchase food online in Ho Chi Minh City* [Master's thesis]. <https://norma.ncirl.ie/6809/>
- Hwang, Y., & Kim, D. J. (2007). Customer self-service systems: The effects of perceived web quality with service contents on enjoyment, anxiety, and E-trust. *Decision Support Systems*, 43(3), 746-760. <https://doi.org/10.1016/j.dss.2006.12.008>
- Jacoby, J., & Olson, J. C. (1976). *Consumer response to price: Attitudinal, information processing perspective (condensed version)*. College of Business Administration, Pennsylvania State University.
- Jiang, Y., Lee, H., & Li, W. (2024). The effects of live streamer's expertise and entertainment on the viewers' purchase and follow intentions. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1383736>
- Lavie, T., & Tractinsky, N. (2004). Assessing dimensions of perceived visual aesthetics of web sites. *International Journal of Human-Computer Studies*, 60(3), 269-298. <https://doi.org/10.1016/j.ijhcs.2003.09.002>
- Lee, C. H., & Chen, C. W. (2021). Impulse buying behaviors in live streaming commerce based on the stimulus-organism-Response framework. *Information*, 12(6), 241. <https://doi.org/10.3390/info12060241>
- Li, L., Feng, Y., & Zhao, A. (2023). An interaction-immersion model in live streaming commerce: The moderating role of streamer attractiveness. *Journal of Marketing Analytics*, 12(3), 701-716. <https://doi.org/10.1057/s41270-023-00225-7>
- Li, Y., & Peng, Y. (2021). What drives gift-giving intention in live streaming? The perspectives of emotional attachment and flow experience. *International Journal of*

- Human–Computer Interaction*, 37(14), 1317-1329.
<https://doi.org/10.1080/10447318.2021.1885224>
- Lim, Z. W., Yong, Y. C., Tan, C. H., & Chan, M. S. (2024). Impact of Social Media Marketing on Gen Z's Cosmetic Brand Awareness. *International Journal of Management, Finance and Accounting*, 5(1), 64-84.
- Liu, G. H., Sun, M., & Lee, N. C. (2021). *How can live streamers enhance viewer engagement in eCommerce streaming?* In *Hawaii International Conference on System Sciences* (pp. 3079-3089).
https://www.researchgate.net/publication/349153132_How_can_live_streamers_enhance_viewer_engagement_in_eCommerce_streaming
- Liu, L. (2022). Factors affecting consumers' purchasing behaviours in live streaming e-Commerce: A review. *Advances in Economics, Business and Management Research*, 508-515. https://doi.org/10.2991/978-94-6463-036-7_75
- Liu, Y., Li, H., & Hu, F. (2013). Website attributes in urging online impulse purchase: An empirical investigation on consumer perceptions. *Decision Support Systems*, 55(3), 829-837. <https://doi.org/10.1016/j.dss.2013.04.001>
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. MIT Press (MA).
- Ming, J., Jianqiu, Z., Bilal, M., Akram, U., & Fan, M. (2021). How social presence influences impulse buying behavior in live streaming commerce? The role of S-O-R theory. *International Journal of Web Information Systems*, 17(4), 300-320.
<https://doi.org/10.1108/ijwis-02-2021-0012>
- Moldovan, S., Goldenberg, J., & Chattopadhyay, A. (2011). The different roles of product originality and usefulness in generating word-of-mouth. *International Journal of Research in Marketing*, 28(2), 109-119.
<https://doi.org/10.1016/j.ijresmar.2010.11.003>
- Nabila, N. I., Sari, A., & Paujiah, S. (2021). *The Effect of Perceived Price, Delivery Quality and Perceive Value on Purchase Intentions Mediated by Consumer Satisfaction (Study on E-commerce In Indonesia During Covid 19 Pandemic)*. In *Proceedings of the 4th International Conference of Economics, Business, and*

- Entrepreneurship, ICEBE 2021, 7 October 2021, Lampung, Indonesia. European Union Digital Library. <https://eudl.eu/doi/10.4108/eai.7-10-2021.2316786>*
- Ngo, T. (2023). *THE IMPACT OF E-COMMERCE ON CONSUMER BEHAVIOR IN VIETNAM* [Master's thesis]. https://www.theseus.fi/bitstream/handle/10024/813649/Ngo_Thao.pdf?sequence=2
- Ngo, T. A., Bui, T. C., Huynh, C. L., & Nguyen, T. N. (2023). The effects of social media live streaming commerce on Vietnamese Generation Z consumers' purchase intention. *Innovative Marketing, 19*(4), 269-283. [https://doi.org/10.21511/im.19\(4\).2023.22](https://doi.org/10.21511/im.19(4).2023.22)
- Nguyen, N. H., Tran, D. V., & Nguyen, H. M. (2024). Leveraging hedonic triggers for digital impulse purchases: Evidence from online shoppers in Vietnam. *Journal of Logistics, Informatics and Service Science, 11*(5), 176-188. <https://doi.org/10.33168/JLISS.2024.0511>
- Nisa, R. C. (2023). S-o-r analysis of product offers through live streaming technology against impulse buying behavior Muslim consumers. *Jurnal Ekonomi dan Bisnis Airlangga, 33*(2), 257-273. <https://doi.org/10.20473/jeba.v33i22023.257-273>
- Parboteeah, D. V., Valacich, J. S., & Wells, J. D. (2009). The influence of website characteristics on a consumer's urge to buy impulsively. *Information Systems Research, 20*(1), 60-78. <https://doi.org/10.1287/isre.1070.0157>
- Park, M., & Lennon, S. J. (2009). Brand name and promotion in online shopping contexts. *Journal of Fashion Marketing and Management: An International Journal, 13*(2), 149-160. <https://doi.org/10.1108/13612020910957680>
- Purnomo, H., & Riani, L. P. (2018). Analisis hedonic shopping motives Terhadap impulse buying toko daring pada Masyarakat Kota Kediri. *Ekspektra : Jurnal Bisnis dan Manajemen, 2*(1), 68-88. <https://doi.org/10.25139/ekt.v2i1.719>
- Rodrigues, R. I., Lopes, P., & Varela, M. (2021). Factors affecting impulse buying behavior of consumers. *Frontiers in Psychology, 12*. <https://doi.org/10.3389/fpsyg.2021.697080>
- Rusman, E., Van Bruggen, J., Sloep, P., & Koper, R. (2010). Fostering trust in virtual project teams: Towards a design framework grounded in a trustworthiness

- antecedents (TWAN) schema. *International Journal of Human-Computer Studies*, 68(11), 834-850. <https://doi.org/10.1016/j.ijhcs.2010.07.003>
- Sekhon, H., Ennew, C., Kharouf, H., & Devlin, J. (2014). Trustworthiness and trust: Influences and implications. *Journal of Marketing Management*, 30(3-4), 409-430. <https://doi.org/10.1080/0267257x.2013.842609>
- Stern, H. (1962). The significance of impulse buying today. *Journal of Marketing*, 26(2), 59. <https://doi.org/10.2307/1248439>
- Suryatenggara, G. M., & Dahlan, K. S. (2022). The effect of perceived usefulness, perceived ease of use and perceived price on customer loyalty in Gojek through customer satisfaction (Study on Gojek apps users in Jabodetabek). *Journal of Business & Applied Management*, 15(2), 171. <https://doi.org/10.30813/jbam.v15i2.3866>
- Tang, X., Hao, Z., & Li, X. (2024). The influence of streamers' physical attractiveness on consumer response behavior: Based on eye-tracking experiments. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1297369>
- Tuan Anh. (2024, April 26). *Vietnam's live-stream market witnesses a sharp increase*. Doanhnghiephoinhap.vn. <https://en.doanhnghiephoinhap.vn/vietnam-s-live-stream-market-witnesses-a-sharp-increase.html>
- Van der Heijden, H., Verhagen, T., & Creemers, M. (2003). Understanding online purchase intentions: Contributions from technology and trust perspectives. *European Journal of Information Systems*, 12(1), 41-48. <https://doi.org/10.1057/palgrave.ejis.3000445>
- Verbeck, T. V. (2024, July 25). Understanding and Avoiding Lifestyle Creep: Tips and Strategies. *Business Insider*. <https://www.businessinsider.com/personal-finance/banking/lifestyle-creep>
- Viet Duc, & May Trinh. (2024, June 21). How livestreaming is taking over Vietnam e-commerce. *VNExpress*. <https://e.vnexpress.net/news/business/economy/how-livestreaming-is-taking-over-vietnam-e-commerce-4760130.html>

- Wang, X., Li, Z., Chen, S., Guo, M., & Huang, D. (2022). *Research on the Influence of E-commerce Live Streaming on Consumers' Purchase Intention—Based on SOR Theory*. In *Wuhan Internation Conference on e-Business*. AIS Electric Library.
- Wreksa, R. P. (2017). The implication of purchase intention: Analysis of perceived usefulness, perceived enjoyment, technicality and perceived price towards perceived value. *Russian Journal of Agricultural and Socio-Economic Sciences*, 71(11), 153-160. <https://doi.org/10.18551/rjoas.2017-11.20>
- Wu, I., Chen, K., & Chiu, M. (2016). Defining key drivers of online impulse purchasing: A perspective of both impulse shoppers and system users. *International Journal of Information Management*, 36(3), 284-296. <https://doi.org/10.1016/j.ijinfomgt.2015.11.015>
- Xu, X., Wu, J. H., & Li, Q. (2020). What drives consumer shopping behavior in the live streaming commerce? *Journal of Electronic Commerce Research*, 21(3), 144-167. http://www.jecr.org/sites/default/files/2020vol21no3_Paper1.pdf
- Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: A critical review of extant knowledge. *Journal of the Academy of Marketing Science*, 30(4), 362-375. <https://doi.org/10.1177/009207002236911>
- Zhang, X., & Zhang, S. (2024). Investigating impulse purchases in live streaming e-Commerce: A perspective of match-UPS. *Technological Forecasting and Social Change*, 205, 123513. <https://doi.org/10.1016/j.techfore.2024.123513>