LIVESTREAMING, SALES PROMOTIONS, AND IMPULSIVE BUYING: A COMPARATIVE LITERATURE REVIEW OF GEN Y AND GEN Z IN VIETNAM

The 13th International Conference on Emerging Challenges: Business Dynamics in Disruptive Economy

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Abstract

This literature review seeks to consolidate current research regarding the connections among livestreaming, sales promotions, and impulsive purchasing behavior in e-commerce, while pinpointing research deficiencies and examining generational disparities between Gen Y and Gen Z within the Vietnamese market. Although there is an increasing focus on livestreaming and impulsive buying, the Vietnamese landscape is still insufficiently studied, especially regarding generational differences. Recognizing these distinctions is essential for devising effective marketing strategies in Vietnam's swiftly evolving e-commerce industry. A methodical literature review was executed utilizing Scopus and Web of Science databases, with research selected through a systematic search approach and a multi-step filtering process. The review employs the Stimulus–Organism–Response (S-O-R) model to integrate and analyze the findings. It reveals that livestream attributes such as real-time engagement, social presence, and cues of scarcity have a considerable impact on impulsive buying behavior, while promotional techniques like flash sales and time-limited offers enhance the sense of urgency. Gen Z consumers show a greater responsiveness to hedonic and social incentives, whereas Gen Y is more swayed by practical value and trust. The results indicate that e-commerce platforms need to implement tailored marketing strategies for both Gen Z and Gen Y. For Gen Z, the focus should be on creating interactive and engaging livestream experiences, while for Gen Y, the marketing should prioritize value, trust, and product dependability. These approaches will enable businesses to effectively cater to each generation in Vietnam's competitive e-commerce landscape.

Research purpose:
This literature review synthesizes studies on livestreaming, sales promotions, and impulsive buying behavior, with a focus on generational differences between Gen Y and Gen Z in Vietnam.

Research motivation:
While livestreaming and impulsive buying have been widely studied, there is limited research on these topics in Vietnam, especially regarding the generational comparison between Gen Y and Gen Z.

Research design, approach, and method:
The review systematically analyzed studies from Scopus and Web of Science, applying the Stimulus–Organism–Response (S-O-R) model to interpret findings.

Main findings:
Livestream features like real-time interaction and scarcity cues strongly influence impulsive buying. Gen Z responds more to hedonic and social factors, while Gen Y is more influenced by value and trust.

Practical/managerial implications:
E-commerce platforms should tailor strategies for Gen Z by focusing on interactive livestreams, while for Gen Y, emphasizing trust, reliability, and product value will be more effective.

Keywords: livestreaming, sales promotion, online impulsive buying behavior, Generation Y, Generation Z, e-commerce

1. INTRODUCTION

Impulse buying, defined as unplanned and spontaneous purchasing behavior, has been a central topic in consumer behavior research since the mid-20th century. Hawkins Stern (1962) categorized this behavior into four types—pure impulse buying, reminder impulse buying, suggestion impulse buying, and planned impulse buying—while Rook (1987) and later scholars emphasized the emotional and cognitive triggers of such behavior. More recent studies confirm that impulse buying is influenced by both situational stimuli and consumers' internal psychological states (Đukić and Stanković 2021). As shopping has shifted from traditional environments to online platforms, impulse buying has evolved into the digital realm, where real-time interaction and personalized experiences have become powerful drivers. Unlike traditional online shopping, livestreaming e-commerce leverages real-time interaction and personalized engagement to replicate the immediacy and social dynamics of in-person shopping, making it a unique driver of impulsive buying behavior.

In this context, livestreaming e-commerce has emerged as a major force shaping impulsive buying behavior. By integrating live broadcasting, social presence, and scarcity cues, livestreaming creates immersive shopping environments that stimulate immediate purchase decisions (Cai and Yvette Wohn 2019; Huo et al. 2023). Practical evidence highlights its growing impact in Vietnam: according to the 2023 Cốc Cốc Market Report, 77% of Vietnamese internet users have watched livestreams, and 71% of them have purchased products through livestreaming, with an average of more than 2.5 million livestream sessions taking place every month (Cốc Cốc 2024). Similarly, the 2024 Online Retail Market Overview reported that livestreaming and promotional strategies were among the most effective drivers of Vietnam's e-commerce revenue, which reached nearly VND 598.6 trillion in 2024 (Metric 2025). These statistics underscore the increasing significance of livestreaming commerce in the Vietnamese market.

Despite its global popularity, research on livestreaming-induced impulse buying in Vietnam remains limited, particularly regarding generational comparisons. Existing studies have predominantly examined Generation Z, who, as digital natives, respond strongly to livestreaming features such as gamification, interactive polls, and influencer endorsements that enhance hedonic value and entertainment (Ngo et al. 2025). In contrast, Generation Y—who experienced the early stages of e-commerce—tend to prioritize trust, product reliability, and promotional offers, making them more responsive to utilitarian aspects of livestreaming (Lina, Hou, and Ali 2022). However, most Vietnamese studies have focused primarily on Gen Z university students (Hong-Ngoc 2025; Pham et al. 2023), leaving Gen Y's online impulsive buying behavior underexplored.

To address these gaps, this study adopts a systematic literature review approach. This method synthesizes prior research to provide a comprehensive analysis of the relationship between livestreaming, promotional factors, and impulse buying behavior. By focusing on prominent studies in Vietnam, the research aims to bridge the gap in understanding generational differences and offer actionable insights for e-commerce exchanges. The systematic approach not only identifies key trends and research gaps but also lays the groundwork for future empirical studies tailored to the Vietnamese market.

2. METHODOLOGY

To conduct this research, the research team applied a systematic literature review method. This method is used to synthesize and observe the status of previous academic research on a specific topic, in order to provide a comprehensive view of related aspects.

The implementation process began with a search for review articles using single keywords related to the research topic, including "online impulse buying behavior," "livestreaming," and "sales promotion." These keywords were searched through the Google Scholar database, a popular and reliable source of academic literature. Initially, a preliminary search was conducted via Google Scholar, followed by a formal systematic search on Scopus Scopus and Web of Science databases, focusing on articles in English.

To optimize the search process, keyword strings were constructed with the help of Boolean operators ("and," "or"). The search strings used included: *("impulse buying" OR "impulse purchasing" OR "impulse shopping" OR "impulsive buying" OR "impulse" OR "impulse purchase" OR "urge to buy impulsively") AND ("livestream" OR "live-stream" OR "live stream*" OR "social commerce" OR "e-commerce" OR "social media" OR "e-commerce exchange*" OR "sales promotion" OR "Gen Z" OR "Gen Y" OR "Gen Millennials").*

The results from this step yielded 595 articles from the Scopus database and 774 articles from the Web of Science. After collecting relevant articles, the research team conducted content analysis and synthesized the results to clarify the relationship between livestreaming, promotions, and impulse buying behavior. This method not only helps to systematize previous research results but also identifies research gaps, thereby suggesting new research directions in the future.

The collected studies were refined through a structured multi-step process based on specific selection criteria:

- Criterion 1 – Source and Language: Only English-language articles from Scopus and Web of Science were included.
- Criterion 2 – Preliminary Screening: Titles and keywords were reviewed to retain studies relevant to impulse

buying, livestreaming, and promotions.

- Criterion 3 – Detailed Filtering: Full-text reviews were conducted to exclude studies lacking relevance or empirical data.

After this process, 265 articles from Scopus and 263 from Web of Science were retained, resulting in a total of 528 articles. The entire data collection and filtering process is summarized in Table 1:

Table 1. Data Collection Process and Results

	Scopus	Web of Science	Total
Step 1: Data Collection: Articles and English Language	595 articles	774 articles	1,369 articles
Step 2: Data Filtering Based on Title, Keywords, and Abstract	335 articles	385 articles	720 articles
Step 3: Data Filtering Based on Full Text	265 articles	263 articles	528 articles

This is a vast body of research; however, in our research, we will focus on high-quality research from Vietnam to use as primary citations.

The distribution of research publications from 1996 to 2025 shows two distinct trends (Fig 1). In the first period (1996–2015), the number of publications remained low, ranging from 1 to 6 articles per year. However, since 2016, the topic has gained significant attention, with annual publications increasing sharply from 10 in 2016 to 114 in 2024. In the first nine months of 2025, 94 articles were already published, indicating continued growth in this research area.

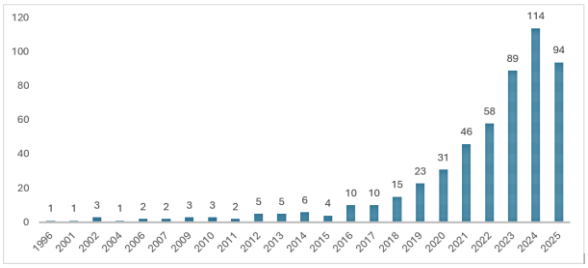


Fig 1. Distribution of reviewed papers by year 1996–2025

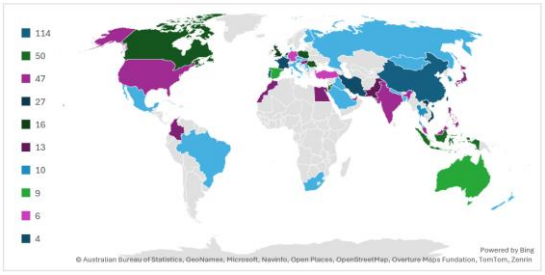


Fig 2. Distribution of most relevant countries by corresponding author

The analysis of publications by country (Fig 2) reveals an uneven global distribution. China leads with 113 publications, followed by Indonesia (51), India (48), Malaysia (47), and the United States (47). Vietnam has contributed 26 studies, placing it in the upper-middle range within Asia. Other countries, such as Taiwan (27) and the United Kingdom (16), demonstrate moderate interest. This distribution highlights Asia as the primary hub for research, with Europe and North America contributing at lower levels.

3. ONLINE IMPULSIVE BUYING BEHAVIOR AND THE S-O-R MODEL

3.1 Online impulsive buying behavior

Customer impulsive buying behavior is a prominent aspect of consumer behavior research and has been studied since the mid-20th century (Dennis W. Rock 1987; Hawkins Stern 1962). Impulsive buying is defined as unplanned and spontaneous purchasing behavior (Dennis W. Rock 1987; Hawkins Stern 1962). This behavior represents transactions in which consumers do not plan their purchases before entering the store and are triggered by sudden needs, moods, recommendations, and in-store incentives such as atmosphere, discounts, and gifts (Đukić and Stanković 2021). Unlike planned purchases, which involve longer decision-making times, comprehensive evaluation, and a focus on satisfaction, impulsive purchases are made instantaneously, often without risk assessment, and many consumers experience post-purchase regret (Dennis W. Rock 1987).

According to Hawkins Stern, impulsive buying can be categorized into four types: pure impulse buying, reminder impulse buying, suggestion impulse buying, and planned impulse buying (Hawkins Stern 1962; Wu Yanzhou and Thoo Ai Chin 2021). Content presented in table 2.

In recent years, thanks to the rapid development of science, technology, the internet, and supply chains, consumers have gradually shifted from prioritizing traditional shopping to engaging in e-commerce (Metric.vn, 2025). When shopping through e-commerce, consumers' impulsive buying behavior has also evolved, forming online impulsive buying behavior. Online impulsive buying refers to the unplanned and spontaneous purchase of goods or services, accompanied by immediate gratification experienced during online shopping (Bashar and Singh 2022; Lin and Chuan 2013). Consumers' online impulsive buying behavior is influenced by two main groups of factors: external factors and internal factors inherent to customer (Abdelsalam et al., 2020sa; Chan et al., 2017). Content presented in table 3.

Table 2. A synthesis of the characteristics of different types of impulsive buying behavior

Type of Impulsive Buying	Definition	Characteristics	Shopping trip	Shopping list	Product knowledge	Traditional Example	Digital Environment Example
Pure impulse buying	The most basic form of impulsive buying occurs when consumers purchase a product that is entirely unplanned, usually driven by the unexpected attractiveness of the product, promotional activities, or the shopping environment. (Hawkins Stern 1962)	It is highly hedonic in nature, driven more by emotions and curiosity than by practical needs. (Chauhan, Banerjee, and Dagar 2023; Dennis W. Rock 1987; Paul 2021; Rook and Fisher 1995)	No plan	No plan	Weak	Buying candy or snacks at the checkout counter; purchasing jewelry because of attractive display lighting.	Flash sales, countdown timers, notifications such as "only a few items left" (Zhang, Zhang, and Wang 2022).
Reminder impulse buying	It occurs when consumers see a product and are reminded of a previously forgotten need or a planned purchase that has not yet been made. (Hawkins Stern 1962; Paul 2021)	The decision arises through a memory recall mechanism and is often associated with essential products. (Morozova and Vlaev 2024)	Plan	No plan	Strong	Seeing shower gel in a supermarket and remembering it has run out at home; batteries or lighters placed near the checkout counter.	Display ads on e-commerce exchanges or social media that remind customers of missing necessities.
Suggestion impulse buying	Consumers purchase products based on advice or suggestions from external sources that they had not previously considered. (Fu and Hsu 2023; Hawkins Stern 1962; Paul 2021)	It is influenced by reference sources such as sales personnel, friends, family, influencers, or prior customer reviews. (Hausman 2000; Herzallah, Muñoz Leiva, and Liébana-Cabanillas 2022; Sweeney, Soutar, and Mazzarol 2008)	Plan	No plan	Weak	Buying a product based on the recommendation of a salesperson or friends.	Purchasing a product recommended by a KOL/influencer, or selecting products with many positive reviews.
Planned impulse buying	Consumers have an initial intention to make a purchase, but their final decision is influenced by promotions, discounts, or product displays. (Hawkins Stern 1962)	It represents a combination of planned spending and impulsive behavior in response to promotions, often associated with major sales events. (Jie et al. 2022; T. H. N. Nguyen et al. 2024)	Plan	Plan	Strong	Shopping at a supermarket/mall during Black Friday or holiday promotions with the intention to buy.	Hunting for deals on 11.11, Black Friday, adding multiple unplanned items to the shopping cart.

Table 3. Key external and internal factors influencing online impulse buying behavior

Factor Group	Main Component	Detailed Description & Mechanism	Example	Cite
External Factors	E-commerce Platform Design & Features	Interface, color, layout, image quality, page loading speed, AI search tools, etc., evoke emotional and cognitive responses, enhancing hedonic value.	Attractive website, fast loading, one-click checkout.	Eroglu et al., 2003; Y. Liu et al., 2013a; Ngo et al., 2024
	Pricing & Promotion Strategies	Flash sales, scarcity, time/quantity limits, free shipping, etc., create urgency and stimulate impulse buying.	11.11 flash sale, bundle discounts.	Cuong, 2024; Nguyen-Van et al., 2024; Zheng et al., 2023
	Type of E-commerce Exchange	Marketplace → comparison signals; brand websites → curated atmosphere; social commerce → strong social cues.	Shopee (price comparison) and Apple.com (brand).	Azad Moghddam et al., 2024; Doan & Lee, 2023; Febriandika et al., 2023
	Support Tools & Technologies	Livestream, short videos, AR, chatbots, AI recommendation increase interaction & personalized suggestions.	Watching a KOL livestream and purchasing immediately.	Amin, 2025; Goel et al., 2024; Y. F. Huang & Kuo, 2012; Y. Zhang et al., 2024
	Trust & Security	Trust in the exchange and payment security reduces perceived risk, thereby increasing willingness for impulsive decisions.	Customers are more willing to buy on ShopeeMall (authentic guarantee).	Lee & Chen, 2021; Luo, Kebangsaan Malaysia, et al., 2024
Internal Factors	Shopping Needs & Motivation	Strong hedonic value (pleasure, enjoyment) outweighs utilitarian value but can shift when triggered by stimuli.	Browsing for information but buying because the product is attractive & discounted.	Chauhan et al., 2023; Fu & Hsu, 2023; Kholis et al., 2023
	Personality Traits	Impulsive, low self-control, risk-taking, novelty-seeking individuals are more prone to impulsive purchases.	Buying a new product "just to try it now."	Ek Styvén et al., 2017; Gao et al., 2022; Miranda et al., 2024
	Demographic Factors	Gender, age, income, education affect behavior; women are generally more prone to impulse buying.	Gen Z, female, middle-income more likely to buy impulsively.	Fu & Hsu, 2023; Q. Huang et al. , 2024; Jabutay & Limpachote , 2024
	Mood & Cognition	Positive or negative mood can increase impulsivity; time pressure and distractions also stimulate impulse.	Online shopping when feeling bored.	Y. F. Huang & Kuo, 2012
	Social Influence	Influence from friends, family, online community, and social reviews increases confidence & impulsive motivation.	Buying because friends on Facebook/TikTok are also purchasing.	Fu & Hsu, 2023; Hausman, n.d.; Herzallah et al., 2022
	Situational Factors	Contexts such as free time, device used (mobile), or emergency situations affect impulsive buying likelihood.	Quick purchase via app during lunch break.	Beatty & Ferrell, 1998; Chan et al., 2017

3.2 Stimulus-Organism-Response (S-O-R) Model

The Stimulus-Organism-Response (S-O-R) model was originally developed by Mehrabian and Russell (1974) as an environmental psychology framework to explain how environmental stimuli influence human behavior through internal cognitive and emotional states. The model posits that environmental stimuli (S) lead to internal organismic responses (O), which in turn determine behavioral responses (R) (Albert Mehrabian và James A. Russell 1974). This model has been widely applied in consumer behavior research, especially in the context of e-commerce. In the context of this article, the S-O-R model is used to analyze consumers' impulsive buying behavior through livestreaming and sales promotion elements.

In this research context, the S-O-R model is used to analyze how factors in livestreaming and saless promotion (stimulus) affect consumers' psychological state (organism) and lead to impulse buying behavior (response). Applying this model helps to clarify the relationship between stimuli in the livestreaming environment and consumer behavior, and also explains the differences between Gen Y and Gen Z in how they respond to these factors.

Applying the S-O-R model helps us to systematize the variables from the synthesized studies into three main groups, clarifying how these studies leverage and measure each factor:

Table 4. Characteristics of the S-O-R model

Component	Definition	Characteristic	Adaptation
Stimulus (S)	Stimulus factors (S) include external environmental factors that trigger a response. In the context of e-commerce livestreaming, S includes stimuli related to livestream and sales promotion	Physical environment factors	Livestreaming features includes characteristics of the livestream, platform, content, and streamer. Aggregated variables include real-time interaction, social presence, streamer characteristics, and local presence; sales promotion includes strategies that create appeal and drive immediate purchase action. Variables included are sales promotions, flash sales, scarcity cues, time-limited offers, and gamification features, such as badge upgrades and random rewards. (LI et al. 2024; Makmor et al. 2024; Ngo et al. 2023; T. H. N. Nguyen et al. 2024)
Organism (O)	Stimuli from livestreaming directly affect the psychological state of consumers. In the S-O-R model, this psychological state plays an intermediary role between stimuli and behavior.	Pleasure, arousal, dominance dimensions	Elements of Organism include emotions (excitement, trust), perceived value (product value, experiential value), flow state (intense concentration, instant gratification), and other psychological states such as sense of urgency, community connection, and consumer motivation. (Fu and Hsu 2023; Huo et al. 2023; LI et al. 2024)
Response (R)	Impulse buying behavior is the ultimate consumer response when experiencing psychological states stimulated by livestreaming	Approach/ avoidance behaviors	Immediate Purchase Decision: Consumers make a purchase decision without any prior planning. This behavior often occurs when they are stimulated by a sense of urgency or excitement. The feeling of satisfaction from owning a product immediately, although it can sometimes lead to post-purchase regret. (LI et al. 2024; Miranda et al. 2024; Shao 2024)

The S-O-R model provides a clear mechanism to explain how livestreaming and sales promotion elements influence impulse buying behavior:

- Mechanism 1: Livestreaming (S) → Organism factors (O) →Impulsive Behavior (R)

  Livestreaming attributes act as powerful stimuli, changing consumers' internal states, thereby promoting impulse buying behavior. Interactivity and Flow: The real-time interactivity and social presence features in livestreaming are considered the main stimuli (S). They enhance perceived enjoyment and create a flow experience (O). When consumers reach a state of flow, they spend less time on rational decision making, which directly increases impulse purchase intention (R). Trust and Social: Social presence (S) and social interaction with the streamer (parasocial relationship) strengthen trust (O) and reduce perceived risk (O), thereby promoting impulse buying behavior (R).

- Mechanism 2: Sales promotion (S) → Organism factors (O) →Impulsive Behavior (R)

  Promotional strategies are designed to create pressure and increase perceived value, which directly impacts the Organism component (O). Scarcity and Time Pressure (S): Techniques such as flash sales and scarcity cues are

used to create time pressure (S). This stimulus increases physiological arousal (O) and a sense of urgency (O), leading to an immediate purchase decision (R). Hedonic Value (O): Promotions, especially limited-time offers, create higher hedonic value for consumers. This hedonic value (O) is then a powerful driver of impulse buying (R). Studies show that the emotional reactions (O) generated by promotions have a strong predictive relationship with online impulse buying behavior (R).

S-O-R analysis demonstrates that impulse buying behavior (R) in a livestreaming environment is not a direct response to external stimuli (S), but rather the result of these stimuli being processed through the consumer's internal cognitive and emotional states (O). Applied to this study, the Stimulus (S) corresponds to livestream factors such as the streamer, atmosphere, platform, content, products, and promotions. The Organism (O) includes flow experience, trust, perceived value (both utilitarian and hedonic), social presence, positive and negative emotions, and self-control within consumers. The Response (R) – the dependent variable – is online impulse buying behavior. Furthermore, control variables such as age, gender, education level, and shopping experience are incorporated into the model to ensure robust analysis.

Table 5. Examples of studies employing the S-O-R model

Study	Stimuli Examined	Organism Variables	Response Variables	Key Finding
(Fu and Hsu 2023)	PSI with Streamer, PSI with Coviewers, Local Presence	Hedonic Value, Utilitarian Value	Urge to buy Impulsively	Utilitarian value significantly increases the urge to buy impulsively ($\beta = 0.408$, $p < 0.001$). Hedonic value also positively influences impulse buying intention ($\beta = 0.312$, $p < 0.001$)
(Pham et al. 2023)	Real-time interaction, social presence	Flow experience, trust	Impulse buying behavior	Flow experience significantly mediates relationship ($\beta = 0.42$, $p < 0.001$)
(Huo et al. 2023)	Social presence, Sales promotion	Flow experience	Impulse buying behavior	Sales promotion significantly increases flow experience ($\beta = 0.365$, $p < 0.001$). Flow experience positively affects impulse buying behavior ($\beta = 0.512$, $p < 0.001$)
(Tai and Tu 2023)	Badges Upgrade, random rewards, Points	Affective reactions, Cognitive reactions	Online Impulse Buying	Affective reaction strongly predicts online impulse buying ($\beta = 0.545$, $p < 0.001$). Cognitive reaction also positively predicts online impulse buying ($\beta = 0.284$, $p < 0.001$).

4. LIVE STREAMING COMMERCE

Livestream is the combination of real-time video and text-based chat, which emerged in the 1990 (Luo et al. 2023). Initially, livestreaming was used for concerts, entertainment events, and live esports matches. By the 2010s, with the development of social media, livestreaming began to be utilized as a tool for selling, promoting, and engaging customers on social platforms. In recent years, driven by the growth of e-commerce exchanges and the significant impact of COVID-19, consumers have increasingly purchased products through livestream sessions on e-commerce exchanges such as Shopee Live, TikTok Shop Live, Lazada Live, and others.

Livestreaming commerce (or live shopping) represents the integration of e-commerce and synchronous interaction. Livestreaming commerce is a form of e-commerce that combines live broadcasting, social interaction, and transactional activities within a unified platform, allowing consumers to watch, interact with, and purchase products in real time (Cai and Yvette Wohn 2019). This business model enables direct interaction between streamers and consumers during live demonstrations and sales. Accordingly, live streaming commerce exhibits characteristics of both e-commerce and livestreaming, defined by three core elements: (1) real-time interactivity, (2) social presence and parasocial relationships, and (3) time pressure and scarcity cues.

The difference between livestreaming commerce and regular livestreaming lies in the commercial purpose: livestreaming commerce not only focuses on live broadcasting but also integrates transactional activities, while regular livestreaming does not generate sales transactions. In the context of Vietnam, platforms such as Shopee Live and TikTok Shop are typical examples, where consumers can interact directly with streamers and make purchases right during the broadcast.

Real-time interactivity plays a critical role in driving impulse purchases during livestreaming sessions. Research consistently demonstrates that interactive features such as live chats, Q&A sessions, and real-time responses from streamers enhance perceived enjoyment and flow experiences, which directly mediate impulse buying intentions (Indriastuti et al. 2024; Khoi and Le 2024). This enhanced interactivity increases viewer engagement and emotional investment in the shopping experience, reducing the time available for rational decision-making. Moreover, social validation through direct comments and reactions from other viewers offers social proof and further influences purchase decisions.

Social presence, defined as the feeling of being "with others" in a mediated environment, also plays a crucial role in

shaping consumer behavior in online commerce. Studies in Vietnam show that social presence enhances trust and reduces perceived risk, thereby promoting impulsive buying behavior (Fu and Hsu 2023; Huo et al. 2023). Additionally, parasocial relationships with streamers significantly predict purchase intention (Makmor et al. 2024), and the effect of social presence is particularly strong among Generation Z consumers compared to Generation Y (Fu and Hsu 2023). Cultural factors in Vietnam further amplify the importance of social connections in shaping purchase decisions (Ngo et al. 2023).

Temporal factors in livestreaming create psychological pressure that drives impulsive behavior. Flash sales, limited-time offers, and countdown timers are particularly effective in e-commerce contexts (Dong, Wang, and Qin 2023; Zhang et al. 2024). Time pressure heightens physiological arousal, leading to more impulsive decisions (Dong et al. 2023). The fear of missing out (FOMO) on limited-time deals drives immediate action (Doan & Lee, 2023), while time constraints reduce cognitive processing capacity, prioritizing emotion-based decisions over rational ones (Dong et al. 2023; Zhang et al. 2024).

By synthesizing studies on the impact of livestreaming on consumers' impulse buying behavior, Xi Luo and colleagues identified four main factors of livestreaming: the customer, the streamer, the platform, and social presence (Luo et al. 2023). Livestreaming is highly interactive and real-time, allowing customers to participate directly through comments, emojis, and questions, which fosters a connection between the streamer and the audience (Fu and Hsu 2023; LI et al. 2024). Additionally, viewers can read previous buyers' comments or interact with other viewers through the comment section (Fu and Hsu 2023). Streamers are often well-known influencers whose credibility and closeness can stimulate quick purchase decisions (LI et al. 2024; Luo et al. 2024). Moreover, factors such as content, livestream atmosphere, platform design, promotional activities, exclusivity, and scarcity can elicit excitement, thereby encouraging "in-the-moment" purchasing behavior and prompting consumers to finalize purchases without prior planning or consideration of the necessity of the product (Dong et al. 2023; Huo et al. 2023; Kong, Zhan, and Zhu 2023).

Table 6. Synthesis of livestream factors influencing impulse buying

Factor	Cite	Variable	Finding
Customer-related	Bismo & Halim, 2023	Utilitarian value, Hedonic value	Utilitarian value, Hedonic value: Hedonic value in livestreaming strongly affects consumers' impulse buying behavior
	D. Liu & Huang, 2024	Hedonic value	Hedonic value: Hedonic value (emotion- and enjoyment-oriented) significantly influences consumers' attitudes and purchase intentions in livestream contexts
	Q. Huang et al., 2024	Hedonic motivation + gender moderation	Hedonic motivation + gender moderation: Hedonic value in livestreaming directly affects female consumers' impulse buying behavior
	Lo et al., 2022	Price perception	Price perception: Price perception is a critical factor in shaping impulse buying in live-stream commerce
	X. Zhang et al., 2023	Perceived risk/uncertainty	Perceived risk/uncertainty: Social presence reduces perceived risk; affective state (not perceived risk) drives impulse buying
	M. Yan et al., 2023	Trust	Trust: Celebrity livestream advertising increases impulse buying through credibility and entertainment
Platform-related	Pham et al., 2023	Social presence of live-streaming platform	Social presence of live-streaming platform: Social presence and community interaction in livestreaming directly influence Vietnamese youth's impulse buying behavior
	Xue et al., 2020	Machine - consumer interaction	Machine-consumer interaction: Platform control affects impulse buying via livestream
Social-related	Feng et al., 2024	Susceptibility to Social Influence	Susceptibility to social influence: Scarcity and price perception strongly moderate impulse buying behavior in livestreaming
	Makmor et al., 2024	Social presence, Social attraction	Social presence, Social attraction: Parasocial interaction mediates social factors and consumers' impulse buying in livestream commerce
	Q. Huang et al., 2024	Social Interaction	Social interaction: Social presence and hedonic value directly influence female consumers' impulse buying
	Huo et al., 2023	Social presence	Social presence: Social presence and sales promotions enhance flow experience, which promotes consumers' impulse buying
	Deng et al., 2023	Real-life social avoidance	Real-life social avoidance: Consumer traits like empathy and social avoidance influence parasocial interaction and social presence, thereby increasing impulse buying

Factor	Cite	Variable	Finding
Streamer-related	LI et al., 2024	Streamer Characteristics, Streamer Performance	Streamer characteristics & performance: Streamers' traits and performance affect consumers' impulse buying through trust and flow experience
	Luo, Kebangsaan, et al., 2024	Streamer's interaction quality and credibility	Streamer interaction & trust: Signal quality and interaction with consumers affect product information quality, influencing impulse buying tendency
	Xia et al., 2024	Streamer interaction	Streamer interaction: Social presence and viewer-streamer interaction reduce uncertainty and stimulate enjoyment, thereby promoting impulse buying

5. SALES PROMOTION

Sales promotions are a traditional marketing tool employed by businesses and sellers to stimulate and attract customers. Promotions encompass marketing activities designed to encourage immediate purchase behavior through temporary incentives (Ali and Muhammad 2021; T. H. N. Nguyen et al. 2024). In a 2009 study, Corinna Hawkes summarized commonly used promotion types, including price discounts, extra-product price promotions, premium promotions, collector promotions, prize promotions, feature and display promotions, and sampling promotions (Hawkes 2009). Meanwhile, to highlight the relationship between promotions and consumers' perceived value (both utilitarian and hedonic), Santini et al. classified promotions into two main categories: monetary promotions (discounts, cashbacks, and vouchers) and non-monetary promotions (free samples, bundled offers, buy-one-get-one deals, contests, and lotteries) (Santini et al., 2015).

Sales promotions play a crucial role in stimulating impulse buying behavior by generating strong marketing stimuli, flash promotions, scarcity, and urgency. Price incentives, discounts, and promotional tactics consistently show a positive association with impulsive purchases (Kursan Milaković and Ahmad 2023; T. H. N. Nguyen et al. 2024). Particularly, scarcity- and time-based promotional strategies, such as "only X items left" or countdown timers, are common marketing stimuli within the S-O-R framework, enhancing hedonic value and perceived urgency, thereby prompting immediate purchase decisions (Lee and Chen 2021). In the context of e-commerce, Yan et al. demonstrated that factors influencing unplanned consumption during large online promotions include both psychological and situational aspects, with offer attractiveness and limited-time availability serving as strong motivators for impulse buying behavior (Yan et al. 2016). For Gen Z consumers, Haryanto's research confirms that online sales promotions significantly impact impulse buying, particularly when combined with trust on platforms such as TikTok Shop (Diarosiani and Haryanto 2025).

Flash sales are among the most effective advertising strategies for driving impulse purchases in the Vietnamese livestreaming context. Research has shown that flash promotions significantly increase purchase intention through various psychological pathways (Huo et al. 2023; Miranda et al. 2024; Nguyen-Van et al. 2024). These limited-time offers create urgency by generating a sense of artificial scarcity, while discounted prices act as convenient reference points for consumers, encouraging quicker purchasing decisions.

Scarcity cues, including limited quantity and exclusive access, are particularly effective in motivating Gen Z consumers in Vietnam. Studies indicate that scarcity marketing influences both cognitive and emotional pathways (Tai and Tu 2023). The perceived exclusivity of limited quantities enhances the product's value, while exclusive access elevates social identity and status. Furthermore, scarcity triggers competitive shopping behaviors, as consumers rush to secure what they believe is a limited opportunity.

Gamification features, such as reward points, badges, and interactive games, also play a significant role in increasing engagement and impulsive buying tendencies. Research conducted on platforms like Shopee in Vietnam highlights the strong effect of gamification on Gen Z consumers, further fueling their tendency to make spontaneous purchases (Tai and Tu 2023).

6. RESEARCHES IN VIETNAM

Among the more than 500 studies retrieved from two databases, Scopus and WoS, 27 studies originated from Vietnam. This is a relatively modest figure for a broad topic that is receiving significant global attention. Our team conducted a thorough review and analysis of these studies to identify their achievements and limitations, thereby uncovering research gaps for future exploration. After examining these materials, we obtained findings summarized in Table 7, which highlight several research trends on impulse buying from the perspective of tools such as livestreaming and promotions, as follows:

Firstly, the authors often adopt traditional and widely-used models in studying consumer behavior, specifically impulse buying behavior and the S-O-R (Stimulus-Organism-Response) model (17 studies). Some studies employ the basic S-O-R framework (Duc et al. 2024; Pham et al. 2024), while others extend it by incorporating traditional moderating variables

such as age, gender, or income (Ho 2022; Thi Phan, Ngo, and Lien Phuoc 2020); as well as psychological and personal characteristics in consumer behavior (Chen, Ha, and Vu 2023; Le et al. 2025). Additionally, the integration of the S-O-R model with the TAM (Technology Acceptance Model) has been utilized, though not extensively (Nguyen, Hoang, and Vu 2023).

Secondly, these articles focus on promotional tools such as livestreaming, sales promotions, short videos, VR, and others. However, they tend to examine these tools independently rather than combining two or more tools within a single study.

Thirdly, researchs in Vietnam on impulse buying behavior have identified various independent variables, including factors related to the livestreaming environment (e.g., streamer, interaction), technology, shopping platforms, social influences, advertising, promotions, and consumer experiences (Dang and Hoang 2025; Hoang and Khoa 2022; T. H. N. Nguyen et al. 2024). Psychological drivers such as hedonic value, intrinsic motivation, impulsivity, and the desire for belonging, as well as environmental stimuli like real-time interaction, web atmosphere, and product display, have been highlighted ((Cuong 2023; Ho 2022). Technological attributes such as ease of use, vividness, and information richness; social influences like online presence, interpersonal interaction, and eWOM; and advertising factors such as promotions, price discounts, and scarcity have all been found to stimulate impulsive behavior (Nguyet, Dung, and Hieu 2024; Phan, Huang, and Do 2023). Moreover, experiential factors such as entertainment, escapism, and aesthetics further underscore the multifaceted nature of this behavior within Vietnam's e-commerce landscape (Dinh Huan Phan 2024; Ngo et al. 2025).

Fourthly, since the majority of studies utilize the S-O-R model, mediating variables such as emotional responses (e.g., pleasure, arousal), presence in the metaverse (e.g., telepresence, social presence), and perceived values (e.g., perceived usefulness, perceived enjoyment) play a crucial role in explaining impulse buying behavior (Cuong 2023; Duc et al. 2024; Pham et al. 2024). Factors such as flow experience, consumer motives (hedonic and utilitarian), trust, and social influences (e.g., social norms, eWOM, online reviews) help clarify how environmental and psychological stimuli impact purchasing decisions (Le et al. 2025; Pham et al. 2023). Additionally, psychological drivers like FOMO (fear of missing out), instant gratification, and impulsivity further contribute to impulse buying behavior (Hong-Ngoc 2025). These variables emphasize the importance of emotions, experiences, and social interactions in shaping modern consumer behavior (Chen et al. 2023; Nguyet et al. 2024).

Fifthly, the dependent variables primarily focus on impulse buying behavior and the urge to buy impulsively across various contexts such as e-commerce, livestreaming, the metaverse, and mobile applications (Khoi and Le 2024; Ngo et al. 2024b; V. H. Nguyen, Nguyen, and Nguyen 2024). These variables reflect unplanned purchase intentions or behaviors, driven by psychological and environmental factors, while also extending into areas such as green and digital shopping (Ho 2022; Phan et al. 2023).

Sixthly, the research findings generally align with theories on impulse buying behavior and influencing factors. These findings confirm the role of psychological, social, and environmental factors such as eWOM, social presence, telepresence, and FOMO in driving impulsive purchasing behavior(Doan and Lee 2023; V. H. Nguyen et al. 2024). Additionally, factors like time, promotions, entertainment, and interaction are consistent with theories on hedonic shopping motives and emotional value (T. H. N. Nguyen et al. 2024; Nguyen-Viet and Nguyen 2024). However, certain factors, such as the influence of income, age, or social norms, show insignificant impacts, which may reflect shifts in consumer behavior among modern groups, especially Gen Z (Dang and Hoang 2025; Ngo et al. 2024b). Overall, the findings support and extend existing theories while highlighting new factors in the digital context..

Finally, the studies collectively emphasize the diverse shopping contexts and consumer segments in Vietnam, including Gen Z consumers, university students, young shoppers, and VR users (Hoang and Khoa 2022; Thi Phan et al. 2020). Platforms such as TikTok Shop, Shopee, and Facebook Live dominate the research landscape, showcasing their popularity and significant influence in driving impulsive buying behavior (Hoang and Khoa 2022; Kim et al. 2025). These studies offer valuable insights into how technological advancements and promotional strategies shape consumer behavior in Vietnam's dynamic e-commerce ecosystem .

Table 7. Research synthesis from Vietnam

	Years	Theory	Methodology	Main Model	Sample size	Summary of Findings	Context
Pham et al., 2024	2024	S-O-R Theory	Quantitative research methodology	S-O-R	318	eWOM mediates online reviews on IBT; Reviews and eWOM positively affect impulse buying.	Gen Z consumers in Vietnam Binh Duong
Duc et al., 2024	2024	S-O-R Theory, Telepresence	Quantitative research methodology	S-O-R	348	Social presence and telepresence significantly impact impulse buying in the Metaverse.	Metaverse commerce in Vietnam
Yu et al., 2025	2025	Hierarchy of Effects HOE	Quantitative research methodology		291	Self-efficacy moderates relationships between professionalism, social presence, and impulsive buying.	Gen Z consumers in Ho Chi Minh City, Vietnam
Ngo et al., 2024b	2024	S-O-R Theory, Arousal and Pleasure Models	Quantitative research methodology	S-O-R	438	Factors like time pressure, economic benefits, and social influence drive impulse buying.	Gen Z consumers in Vietnam using Shopee
T. H. N. Nguyen et al., 2024	2024	S-O-R Theory, Hedonic Motivation	Quantitative research methodology	S-O-R	362	Sales promotions and visual appeal influence impulse buying via instant gratification.	Online shoppers in Vietnam, with focus on product appeal and promotions.
Chen et al., 2023	2023	S-O-R Theory, Telepresence	Quantitative research methodology	S-O-R	227	VR shopping with high interactivity and vividness enhances impulse buying behavior.	Virtual Reality shopping customers
V. H. Nguyen et al., 2024	2024	Social Influence and S-O-R Theory	Quantitative research methodology		487	eWOM and online reviews positively influence impulse buying, especially for Gen Z consumers.	Social commerce among Gen Z in Binh Duong, Vietnam
T. Q. Le et al., 2022	2022	S-O-R Theory	Meta-analysis method		37	A positive relationship between marketing stimuli and hedonic shopping value, affecting impulsive buying behavior.	Online shopping environment across 37 studies in e-commerce
Khoi & Le, 2024	2024	S-O-R Theory, Inspiration&Delight Models	Quantitative research methodology	S-O-R	376	Inspiration experience and delight bridge real-time interactivity and impulsive buying in livestreaming.	Vietnamese consumers with live commerce purchasing experience
Cuong, 2023	2023	S-O-R Theory	Quantitative research methodology	S-O-R	313	The study confirmed that image and price attributes positively impact perceived satisfaction and usefulness, ultimately driving online impulsive shopping behavior OIBB.	Online shopping customers in Vietnam.
Ho, 2022	2022	TRA, TPB, TAM, UTAUT1, UTAUT2, MM	Quantitative research methodology		220	Extrinsic motivations dominate in influencing online shopping intention, with gender differences observed, but no significant differences based on income or age.	Consumers in Ho Chi Minh City

	Years	Theory	Methodology	Main Model	Sample size	Summary of Findings	Context
N. Le et al., 2025	2025	S-O-R Theory	Quantitative research methodology	S-O-R	501	Positive effect of AVD, SP, VS on IBB; PPR and IBT moderate these effects	Consumers of e-commerce exchanges in Vietnam
Nguyet et al., 2024	2024	Hedonic Consumption and S-O-R Theory	Mixed method	S-O-R	477	Hedonic triggers play a crucial role in driving impulse buying behavior through positive emotions.	Online shoppers in Vietnam
C. C. Hoang & Khoa, 2022	2022	Flow Theory and Cognitive-Emotional Theory	Mixed-method	S-O-R	283	Flow experience Beta = 0.61 drives impulse buying, boosted by app quality, informativeness, enjoyment, ads value, and reduced by perceived risk.	Generation Z consumers who shop on social commerce platforms e.g., Facebook, TikTok, Zalo
Nguyen-Viet & Nguyen, 2024	2024	S-O-R Theory Framework and Self-Determination Theory SDT	Quantitative research methodology	S-O-R, SDT	742	Entertainment, responsiveness, mutuality, social contagion, and gamification boost swift guanxi, trust, and impulse-buying intention, while personalization has no effect.	Vietnamese consumers with prior live commerce purchasing experience
Thi Phan et al., 2020	2020	S-O-R Theory	Quantitative research methodology		240	Personalization and product selection drive both impulsive buying urges and behavior, while socialization and information availability only influence the urge to buy impulsively.	Vietnamese consumers aged 18–35 with prior experience purchasing on Facebook
Pham et al., 2023	2023	S-O-R Theory and Flow Theory	Quantitative research methodology	S-O-R	567	Social presence, app brand equity, and flow state significantly influence impulse buying behavior, mediated by consumer trust, perceived usefulness, and perceived ease of use.	Vietnamese youth from economics universities and high schools in Hanoi
Kim et al., 2025	2025	S-O-R Theory and Trait Activation Theory TAT	Quantitative research methodology	S-O-R-M	458	Product placement factors significantly influence perceived enjoyment, which drives impulse buying behavior, especially among individuals with high sale proneness.	Social media users engaging with short-form video platforms like TikTok, Instagram Reels, and YouTube Shorts
Hong-Ngoc, 2025	2025	S-O-R Theory and Maslow's Hierarchy of Needs	Mixed-method	S-O-R	336	FOMO dimensions significantly drive impulsive buying behavior, amplified by TikTok Shop's interface design e.g., flash sales, real-time metrics, influencer-curated showcases.	University students in Ho Chi Minh City, Vietnam who use TikTok Shop
X. N. Nguyen et al., 2023	2023	S-O-R Theory and Technology Acceptance Model TAM	Mixed-method	S-O-R, TAM	319	Visual appeal, website ease of use, product availability, portability, and social influence significantly influence the urge to buy impulsively, mediated by instant gratification, impulsiveness, and trust.	Online shoppers in Ho Chi Minh City, Vietnam
T. T. Tran, 2019	2019		Quantitative research methodology		271	Sale promotion has the highest influence on impulse buying behavior, while money available and emotion were eliminated due to weak impact.	Supermarket shoppers in Ho Chi Minh City, Vietnam

	Years	Theory	Methodology	Main Model	Sample size	Summary of Findings	Context
Phan et al., 2023	2023	Theory of Planned Behavior TPB	Quantitative research methodology		453	Cognitive factors and e-social interactions significantly influence green purchase intention among young Vietnamese consumers, with attitude playing a mediating role, while social norms did not have a significant impact.	Young Vietnamese consumers engaged in e-commerce
V. T. Hoang & Dang, 2024	2024	S-O-R Theory	Quantitative research methodology	S-O-R	291	Social presence, personalization, and entertainment positively impact impulsive buying behavior through the mediating effects of trust and flow experience.	Viewers of live streaming sessions in Vietnam
M. D. Tran et al., 2025	2025	S-O-R Theory	Quantitative research methodology	S-O-R	360	KOL characteristics and live streaming attributes significantly impact perceived persuasiveness, which drives impulsive buying behavior, while FOMO and deal proneness are not significant moderators.	Gen Z consumers in Vietnam
Dinh Huan Phan, 2024	2024		Quantitative research methodology		361	Various factors such as scarcity, serendipity information, trust, hedonic motivation, shopping lifestyle, and product presentation significantly impact impulse buying behavior among Vietnamese students on TikTok Shop.	Generation Z university and college students in the Mekong Delta, Vietnam, TikTok Shop
V. D. Tran, 2022	2022	Social Comparison Theory	Quantitative research methodology		249	Social comparison significantly impacts materialism, while materialism and negative affect influence impulse buying behavior. Confidence acts as a positive moderator in key relationships.	Young Vietnamese online shoppers
Ngo et al., 2025	2025	Experience Economy Framework	Quantitative research methodology		438	Emotional factors like arousal and pleasure, triggered by various experiences, significantly influence impulse buying behavior among Generation Z on Shopee video platform.	Generation Z consumers engaging with Shopee video platform

7. GENERATION Y AND GENERATION Z: DIFFERENCES IN CONSUMER BEHAVIOR

Generation Y Millennials and Generation Z are defined based on generational cohort theory, which posits that generational groups share common historical and social experiences, shaping characteristic attitudes and decision-making styles for each cohort (Thangavel, Pathak, and Chandra 2021). Generation Y includes individuals born between 1981 and 1996 and represents the first generation to grow up in the digital era. In contrast, Generation Z, born approximately between 1997 and 2012, is characterized by a strong digital and social media orientation, high engagement with online and social commerce, emphasis on both functional and hedonic value in online shopping, and heightened responsiveness to social cues and marketing trends (Archana. K & S. Vennilaa Shree, 2024). While Millennials also participate significantly in online shopping, they are generally less enthusiastic about digital commerce than Gen Z (Thangavel et al. 2021).

Empirical studies indicate clear differences in consumer behavior between the two cohorts. Gen Z exhibits higher enthusiasm and readiness for online purchases than Gen Y within the same study regions (Zirena-Bejarano, Chavez Zirena, and De La Gala Velásquez 2023). Regarding social media usage, Gen Z is more active than Gen Y across domains such as education, entertainment, shopping, and socialization, while information-seeking behavior on social platforms can be similar across both generations (Mude & Undale, 2023). Notably, Gen Z responds more strongly to social media marketing attributes—such as entertainment, trends, interaction, and word-of-mouth—and may be willing to pay higher prices when influenced by these factors compared to older cohorts (Liu et al. 2023).

For online impulse buying behavior, Gen Z demonstrates strong associations with online convenience factors and the influence of social media influencers (Lina et al., 2022). Research in North Macedonia confirms that Gen Z exhibits distinct determinants for online impulsive purchases, including significant influence from digital celebrities and content marketing on platforms like TikTok (Kamkankaew, Thongyoy, and Phonracharnon 2024; Mijoska, Blagoeva, and Trpkova-Nestorovska 2023).

Both generations have been influenced by advances in information technology and pandemic-related changes, which have accelerated online shopping adoption and digital engagement across Gen Y and Gen Z within specific national contexts (Simamora and Islami 2023). However, Gen Z is considered true digital natives, having been born and raised entirely in a digital environment, whereas Millennials experienced a transition from analog to digital during their childhood and adolescence.

8. CHARACTERISTICS OF E-COMMERCE EXCHANGES IN VIETNAM

According to the 2024 Online Retail Market Overview and 2025 Forecast – Metric 2024, e-commerce revenue in 2024 reached VND 598.6 trillion, of which revenue from the five major e-commerce exchanges—Shopee, TikTok Shop, Lazada, Tiki, and Sendo—amounted to VND 318.9 trillion, representing an increase of approximately 37% compared to 2023 (Metric, 2025).

From Metric, the percentage of Vietnam internet using Shopee in 2024 was 81%, 42% Lazada, 34% TikTok Shop, 20% Tiki, and 8% Sendo. Shopee was the highest revenue market share in both 2023 and 2024, accounting for up to 64%, while a newer exchange platform - TikTok Shop increased its share from 18% in 2023 to 29% in 2024, taking market share from Lazada, Tiki, and Sendo. (Metric, 2025).

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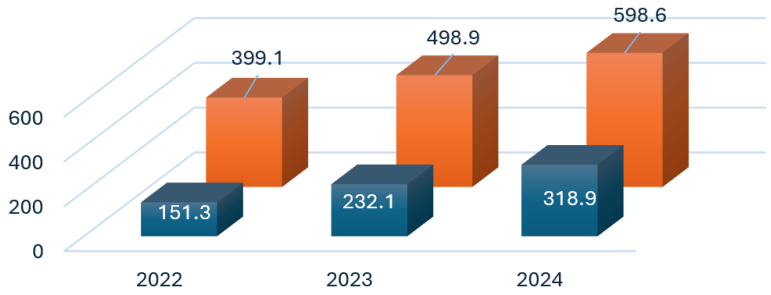


Fig 3. B2C e-commerce market and 5 e-commerce exchangers revenue in VN, 2022–2024 VND trillions (Metric 2025)

Shopee began allowing sellers to livestream their products in 2019, particularly during major promotional events such as 9.9 and 12.12. The combination of livestreaming with various promotional strategies has enabled Shopee to attract and retain customers effectively. Recognizing this potential, Lazada, Tiki, and Sendo also adopted livestreaming as a customer

engagement tool by late 2019 and early 2020. Originating from a short-video social media platform, TikTok launched TikTok Shop in March 2022, implementing sales-support features including livestreaming, allowing sellers to showcase products and interact with customers. Currently, consumers are highly familiar with this shopping format.

According to the 2023 Cốc Cốc Market Report, 77% of respondents have watched livestreams, and 71% of them have made purchases via livestreaming, with 67% of buyers belonging to Generation Y and 61% to Generation Z Cốc Cốc, 2024. On average, there are 2.5 million livestream sales sessions per month, involving over 50,000 sellers Cốc Cốc, 2024. The 2023 Cốc Cốc report also provided impressive insights into the factors influencing consumers' clicks on livestream (Cốc Cốc, 2024).

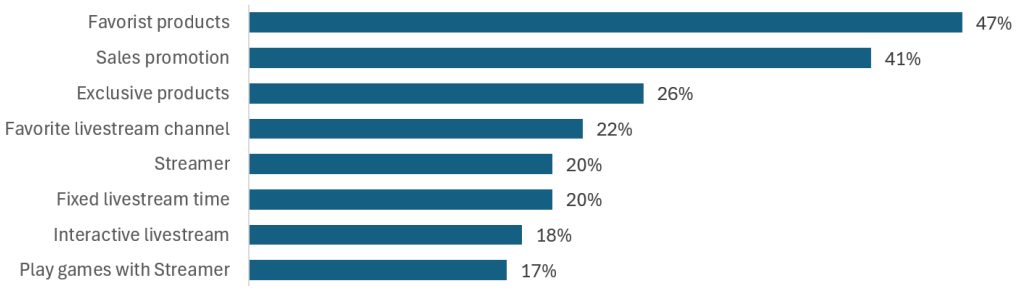


Fig 4. Factors influencing consumers' clicks on livestream (Cốc Cốc, 2024)

Among viewers, 27% make an immediate purchase, 50% add products to their shopping cart, and they also engage through comments, reactions, and donations. Furthermore, 76% of users are willing to extend their viewing time if rewards are offered (Cốc Cốc, 2024).

9. RESEARCH GAP IDENTIFIED

During the process of synthesizing, reviewing, and analyzing the literature, the research team has identified several critical gaps, as outlined below:

Firstly, out of more than 500 collected articles, fewer than 30 articles from Vietnam—a notably limited number given the rapid growth of e-commerce in the country. Following the COVID-19 pandemic, Vietnamese consumers have become increasingly accustomed to online shopping and cashless payment methods. This shift positions Vietnamese consumers as an ideal sample for investigating impulsive buying behavior within e-commerce contexts. Nonetheless, existing studies have yet to fully explore the Vietnamese market, particularly in terms of generational differences in purchasing behavior. Additionally, most of the identified studies in Vietnam focus predominantly on Generation Z, specifically university students, while neglecting the potential of Generation Y—a key demographic for e-commerce. Moreover, sampling efforts have largely concentrated on Ho Chi Minh City, leaving other regions underrepresented.

Secondly, previous studies can be categorized into two approaches concerning age: treating age as a variable for standard descriptive statistical analysis (V. T. Hoang & Dang, 2024; Jabutay & Limpachote, 2024); or focusing on specific age groups, such as young consumers, Generation Y, or Generation Z (Lina et al., 2022; Nguyen-Van et al., 2024; Tai & Tu, 2023). However, few studies have concurrently examined and compared these two generational groups in terms of impulsive purchasing behavior. Understanding the distinctions between Generation Y and Generation Z in impulsive buying not only contributes to theoretical advancements but also provides actionable insights for businesses aiming to optimize strategies tailored to these two consumer segments.

Thirdly, theoretical analyses and prior research on livestreaming and promotional strategies indicate that both tools emphasize scarcity—whether in terms of time or quantity—to stimulate immediate purchasing decisions. Sellers and streamers frequently employ promotional campaigns as mechanisms to attract and retain customers. For instance, streamers may use countdown timers for promotional offers to create urgency or include giveaways alongside primary products to maintain viewer engagement. According to 2023 statistics from Cốc Cốc, many viewers watch livestreams and make purchases due to promotional incentives, while continuing to follow livestreams when additional gifts are offered. Furthermore, the 2023 Vietnam E-Commerce White Paper reveals that 32% of online consumers are drawn to price-related promotions, while 25% are attracted by livestream product showcases and interactive games (Bộ Công Thương, 2024). Consequently, integrating livestreaming and promotional strategies into research within the Vietnamese market is both necessary and valuable.

Fourthly, most prior studies have focused exclusively on impulsive buying behavior in online contexts, often overlooking platform-specific characteristics of e-commerce. While some research has centered on social commerce Abdelsalam et al., 2020b; Nguyen-Van et al., 2024 or specific e-commerce exchanges/websites (Doan & Lee, 2023; Febriandika et al., 2023; Ngo et al., 2024b; Tai & Tu, 2023), there remains a lack of studies defining the broader concept of e-commerce marketplaces. Furthermore, existing research has yet to sufficiently differentiate between e-commerce marketplaces, websites, and social media platforms. Thus, the research team argues that defining the platform context is essential for

distinguishing consumer behavior studies conducted within e-commerce marketplaces.

Finally, beyond age as a moderating variable, future studies could incorporate factors such as gender, income level, or online shopping experience as new moderating variables. This approach would broaden the scope of research and provide a more comprehensive understanding of consumer behavior in e-commerce environments.

10. CONCLUSION

This literature review demonstrates that livestreaming and sales promotions act as powerful stimuli that significantly shape impulsive buying behavior in e-commerce. Livestream features such as real-time interactivity, social presence, and scarcity cues create immersive environments that encourage immediate purchase decisions. Similarly, promotional tactics—including flash discounts, time-limited offers, and scarcity signals—intensify urgency and reinforce spontaneous consumption.

The findings further reveal distinct generational differences: Gen Z, as digital natives, show heightened sensitivity to hedonic value, entertainment, and social interaction, while Gen Y places stronger emphasis on utilitarian value, trust, and product reliability. These insights highlight the need for differentiated marketing strategies tailored to each generational cohort.

Nevertheless, several limitations remain. Research on Vietnam is still relatively scarce, with most studies focusing predominantly on Gen Z—especially university students—while Gen Y remains underexplored. Moreover, these studies largely adopt the S-O-R framework, often examining individual factors (e.g., livestreaming, promotions, consumer traits) in isolation rather than through integrated models. In addition, moderating factors beyond age, such as gender, income, and online shopping experience, have not been sufficiently investigated.

Future research should therefore develop more comprehensive models that capture Vietnam's unique market dynamics, compare generational cohorts more systematically, and incorporate additional moderating variables. Such efforts would not only enrich theoretical understanding but also provide practical implications for designing effective e-commerce strategies in the Vietnamese context.

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