Boosting Organic Vegetable Sales Through Live Streaming: Insights from the SOR Model

Xin Hao[1] Chaiyot Sumritsakun[2*] Arunee Yodbutr[2] Satha Waroonkun[2]

Received: March 30, 2025
Revised: September 25, 2025
Accepted: September 26, 2025

Abstract

This study investigates how live stream interactivity shapes consumers' purchase intentions for organic vegetables by integrating the stimulus-organism-response (SOR) model and the technology acceptance model (TAM). It examines both the direct influence of interactivity and the indirect effects mediated by consumer attitude and perceived value. Data were collected through an online survey of 405 consumers in Guangxi, China, who had previously purchased organic vegetables via live streaming platforms. The data were analyzed using structural equation modeling (SEM) via AMOS. The findings reveal that live stream interactivity not only directly boosts purchase intentions but also indirectly strengthens them by enhancing consumers' attitudes and perceived value. This research expands the application of the SOR and TAM models within the context of interactive e-commerce. It also offers practical recommendations for businesses looking to optimize live streaming strategies to drive organic vegetable sales and enhance consumer engagement.

Keywords: Consumer Attitude, Live Stream Interactivity, Perceived Value, Purchase Intention, Organic Vegetables

[1] International College, Maejo University

[2] Faculty of Business Administration, Maejo University

* Corresponding author E-mail: Chaiyot_s@mju.ac.th

Boosting Organic Vegetable Sales Through Live Streaming: Insights from the SOR Model

Xin Hao[1] ชัยยศ สัมฤทธิ์สกุล[2*] อรุณี ยศบุตร[2] ศฐา วรุณกูล[2]

บทคัดย่อ

งานวิจัยครั้งนี้เป็นการวิจัยอาศัยแบบหลักการกระตุ้น-สิ่งมีชีวิต-การตอบสนองและแบบจำลองการยอมรับเทคโนโลยี เพื่อศึกษาผลกระทบของปฏิสัมพันธ์ในการสตรีมสด ต่อความตั้งใจซื้อผักออร์แกนิกของผู้บริโภค นอกจากนี้ยังวิเคราะห์ผลกระทบโดยตรงของปฏิสัมพันธ์ในการสตรีมสด และบทบาทตัวกลางของทัศนคติของผู้บริโภค และมูลค่ารับรู้ งานวิจัยนี้เก็บรวบรวมข้อมูลผ่านแบบสอบถามออนไลน์จากผู้บริโภคในเขตปกครองตนเองกว่างซีจ้วง ประเทศจีน และดำเนินการวิเคราะห์ข้อมูลโดยใช้แบบจำลองสมการโครงสร้าง ผลการวิจัยพบว่าปฏิสัมพันธ์ในการสตรีมสดมีอิทธิพลเชิงบวกโดยตรงต่อความตั้งใจซื้อของผู้บริโภค นอกจากนี้ ทัศนคติและมูลค่ารับรู้ยังมีบทบาทเป็นตัวกลางบางส่วนในกระบวนการนี้ กล่าวคือ ปฏิสัมพันธ์ในการสตรีมสดไม่เพียงแต่สามารถกระตุ้นความตั้งใจซื้อผักออร์แกนิกโดยตรงแต่ยังสามารถเพิ่มความตั้งใจซื้อโดยอ้อมผ่านการเสริมสร้างทัศนคติเชิงบวกและการเพิ่มมูลค่ารับรู้ของผู้บริโภค การใช้ทฤษฎีของงานวิจัยนี้อยู่ที่การผสานแบบจำลอง SOR และแบบจำลองเพื่อเสริมสร้างความเข้าใจเกี่ยวกับกลไกบทบาทของปฏิสัมพันธ์ในการสตรีมสดต่อพฤติกรรมผู้บริโภคในบริบทของอีคอมเมิร์ซผ่านการถ่ายทอดสด นอกจากนี้ งานวิจัยยังให้แนวทางเชิงปฏิบัติแก่แพลตฟอร์มถ่ายทอดสด นักการตลาดอาหารออร์แกนิกและธุรกิจอีคอมเมิร์ซในการยกระดับปฏิสัมพันธ์ในการสตรีมสดเพื่อกระตุ้นความตั้งใจซื้อผักออร์แกนิกของผู้บริโภคให้สูงขึ้น

คำสำคัญ: การรับรู้คุณค่า ความตั้งใจซื้อของผู้บริโภค ทัศนคติ ปฏิสัมพันธ์ในการสตรีมสด ผักออร์แกนิก

[1] วิทยาลัยนานาชาติ มหาวิทยาลัยแม่โจ้

[2] คณะบริหารธุรกิจ มหาวิทยาลัยแม่โจ้

Introduction

In China, the organic food market has experienced significant growth, positioning the country as the fourth-largest organic market globally and the seventh in terms of organic agricultural land area, according to the Research Institute of Organic Agriculture (FiBL) and the International Federation of Organic Agriculture Movements (IFOAM). The "Annual Report on Organic Product Certification and Industry Development for 2023," previously released by the State Administration for Market Regulation of China, shows that by the end of 2022, there were 16,000 enterprises in China that had obtained over 26,000 organic product certification certificates, marking a 99.8% increase compared to the number of certificates issued in 2015. In 2022, the sales of organic products in China reached as high as 87.76 billion yuan.

The unique geographical and climatic conditions in Guangxi, the base for transporting vegetables from the south to the north, make it an important agricultural production area. According to the Department of Agriculture and Rural Affairs of the Guangxi Zhuang Autonomous Region, as of September 2022, the total number of green, organic, and geographically indicated agricultural products in the region is approximately 1,300. Among these factors, the average annual growth rates of green food businesses and products in Guangxi are 33% and 31%, respectively, for the past three years, both ranking first nationwide. Geographically, there are 165 registered geographical indication (GI) farms, also leading this category nationally. About 250 billion yuan of the total output value of green, organic, and GI products is created each year in the territory under consideration.

Live streaming has emerged as a compelling marketing strategy for organic vegetables in Guangxi, delivering a high level of transparency and interaction that ultimately makes consumers more likely to trust the brand (Wang et al., 2023). The live streaming option gives consumers a chance to see organic vegetables starting from the cultivation to the harvesting stage in real-time, and therefore, a feeling of confidence and familiarity is created with the product (Jakobsen, 2021). Besides the fact that the promotion of these sales methods in Guangxi will increase the market of organic vegetables, such a system will also create a convenient and personalized shopping process (Tan, 2024).

Live commerce environments involve interaction between consumers and sellers, and as such, it is interactive live streams that significantly shape consumer responses in this environment. The emergence of live streaming sales as a concept has turned Chinese

e-commerce marketing inside out, presenting new channels for processing orders and advertising various products, including organic food (Liu et al., 2022). Through live streaming, farmers present produce and get fresh experience of sale, which is quite different from traditional marketing (Li et al., 2023). The environment for e-commerce today challenges business leaders to apply many new ways of involving buyers; among them, live streaming will be useful because it creates an opportunity for instant feedback and interaction (Clement et al., 2021). Live streaming is a powerful thing when it comes to the buying mindset of buyers as it is a real activity that cannot be simulated appropriately through normal buying websites (Lo et al., 2022).

Live streaming's interactivity, in aspects such as real-time feedback and audience participation, strengthens social presence and deepens consumer engagement.

Despite the widespread application of live streaming in marketing a range of goods, most studies in virtual environment consumer behavior have focused almost exclusively on general e-commerce platforms (Lu et al., 2022), with hardly any examination of its specific application and its sophisticated interactivity (Li et al., 2023). There remains a dearth of comprehensive research focusing on its influence on the purchase intention of organic vegetables (Oktaviani et al., 2024).

This gap motivates the current research to investigate the impact of live stream interactivity on consumers' perceived value, their attitude toward purchasing organic vegetables, and their final purchase intention in the context of organic vegetable live selling. However, the effectiveness of live streaming in promoting organic vegetable sales depends on multiple psychological and behavioral mechanisms, such as consumers' perceived value, their attitude toward purchasing organic vegetables, and their final purchase intention. This study focuses on Guangxi consumers as the target population and explores how the interactivity of live streaming affects their intention to purchase organic vegetables, mediated by perceived value and attitude.

By examining the relationships among these key variables, this study contributes to a better understanding of how interactive technologies influence green consumption behavior in emerging markets like China.

Objective

This paper seeks to explore how live stream interactivity impacts purchase intention for organic vegetables among the audience. Even with the growing significance of live streaming as a strategic tool for e-commerce, there remains a lack of comprehensive knowledge on how particular interactive features affect consumer behavior. Specifically, within the distinct case of the Chinese market, there remains a void within existing literature on how live stream interactivity impacts consumer attitudes and perceived value, as well as how these help to inform purchase intentions. This paper has the following objectives:

RO1: To explore the impact of live stream interactivity on the audience's intention to purchase organic vegetables.

RO2: To explore the impact of live stream interactivity on the audience's attitude toward purchasing organic vegetables.

RO3: To explore the impact of live stream interactivity on the perceived value of organic vegetables.

RO4: To explore the impact of audience's attitude towards organic vegetables on their purchase intention.

RO5: To explore the impact of audience's perceived value towards organic vegetables on their purchase intention.

Literature review

1. Theoretical Foundation: SOR and TAM

The Stimulus-Organism-Response (SOR) model serves as a foundational framework for analyzing how individuals react to external influences (Gao & Bai, 2014). Developed as an extension of the traditional Stimulus-Response (SR) theory, this model integrates the internal cognitive and emotional processes of an organism (O) between a given stimulus (S) and the subsequent response (R), providing a more nuanced perspective on behavioral outcomes (Laato et al., 2020). The SOR model has evolved from a simple stimulus-response framework into a cognitively and emotionally enriched paradigm (Jacoby, 2002).

There are studies about how live streaming can influence one's intention to purchase (Ming et al., 2021). Researchers studied the stimulus through SOR models to learn about the internal psychological states created, along with the outcomes based on their

findings in purchasing behavior. Studies show that the credibility of a streamer boosts trust in consumers, thereby elevating their intention to buy (Lv et al., 2022). Moreover, it has been proven that engaging streamers who are entertaining also invoke a positive effect in generating enjoyment, which then drives the consumer to be more inclined towards making a purchase (Li et al., 2024). Certain constructs of digital platforms are another key area that has been reviewed very extensively: those focused on user engagement and interactivity enhancement (Kang et al., 2021).

Internet celebrity promotion also has a significant role to play in live streaming retailing. High-quality information and fun content increase emotional engagement (Xu et al., 2020). Influencer-provided high-quality information is assumed to build a utility perception, motivating the audience to take up the influencer's advice (Zhang & Choi, 2022). Community formation and personal communication build emotional engagement along with positive Word-of-Mouth (Lee et al., 2021). Emotional engagement and behavioral response could be built on a sense of intimacy by personal communication occurring between viewers and influencers, with a positive influence (Yu, 2023).

The SOR model has also been used to test platform features and designs, considering the extent to which these features define internal states and direct behavior. Real-time features for engagement create social interaction and emotional engagement (Kang et al., 2021). Live chat features for social interaction increase perceived social presence (organism) to build trust, making the purchase more likely (Anisah et al., 2023).

For this instance, live streaming interactivity becomes the stimulus (S) to determine consumer attitudes and perceived value (O) that ultimately define purchase intention (R) for the purchase of organic vegetables. In order to augment this stimulus-response relationship, the approach to TAM proceeds to delve further into how technological characteristics of interactivity determine behavioral intentions with the aid of system-based assessment.

Technology Acceptance Model (TAM), originally proposed by Davis (1989), has served as a starting point for technology adoption research, with the primary determinants being perceived usefulness (PU) and perceived ease of use (PEOU). Traditionally, these constructs moderate the associations between external variables and behavioral intentions. However, it has been demonstrated lately that certain technological features, particularly interactivity, may affect purchase intentions directly, without these moderators

(Summerlin & Powell, 2022). The phenomenon is observed mostly for information-overloaded digital environments, where users seek heuristic short-cuts (example, interactive elements) to preserve cognitive resources. For example, AR try-on functionality allows users to experience products sensorially, without intentional evaluations of PU (Flavián et al., 2019).

TAM2 proposed as an extension to the groundbreaking foundational TAM, takes into account further external variables such as social influence (example, subjective norms) and cognitive instrumental processes (example, job relevance) to accurately predict technology acceptance by users (Venkatesh & Bala, 2008; Williams et.al., 2015). Such extensions take account of the potential for the behavioral intention to be both indirectly determined by PU and PEOU, but to be additionally influenced by external conditions directly.

Empirical findings from previous e-commerce research back this broad perspective. For example, perceived interactivity within live-stream commerce has been shown to substantially increase purchasing intentions even while controlling for utilitarian and hedonic gratifications (Joo & Yang, 2023). Upon the basis of this theoretical progression, the current study considers the live stream interactivity as an external variable under the TAM approach. Compared to conventional e-commerce contexts, live-stream settings possess real-time, immersive, and socially dense interactions often evoking emotion-driven purchasing decisions. This may lead to a lowering of consumers' cognitive load as well as reduced reliance on rational assessments about usefulness and ease of use. Recent findings state that real-time interactivity during the live-streaming environment can directly affect purchase decisions through user engagement and decision immediacy, skipping traditional cognitive evaluation altogether (Indriastuti et al., 2024). Hence, the findings suggest that interactivity during live streaming does affect the behavioral intention, thereby establishing itself as a crucial external factor for technology adoption.

This paper builds a dual-theoretical framing through a combination of the SOR and TAM models where by way of SOR, live stream interactivity could be understood as an external stimulus giving rise to emotional and cognitive states that should lead to behavioral outcomes. In contrast, TAM treats interactivity as a system feature under which behavioral intention will be influenced directly in highly fast-moving, immersive digital spaces. The dual combination of these frameworks guarantees a more holistic

understanding of how both psychological and technological aspects coordinate together to shape consumer choices within live-streaming commerce.

2. Live Stream Interactivity

Live stream interactivity is the live, real-time communication between the streamer and the viewers, characteristically realized through comments, reactions, and customized reply-throughs. Increasingly, it is described as a multi-faceted and complex phenomenon, impacting users' engagement with, but also through, media (Kiousis, 2002), commonly involving real-time feedback, audience engagement, customization of content, and community formation. In live broadcast settings, real-time feedback is critical, allowing for immediate communication impacting viewer engagement and action (Giertz et al., 2022). Audience engagement is the depth, richness, or extent of relationships between content providers and users, involving aspects of interest, curiosity, attention, optimism, and passion (Broersma, 2019). Engagement behavior takes on diverse forms within live broadcast rooms, where customer interactions are embedded within the service system, leading to further participation and engagement (Zheng et al., 2022). Content customization has developed to extend beyond mere personalization: the latest live broadcast systems widely incorporate AI-based adaptive content systems, adapting product features, camera angles, action, and recommendations to viewer behavior in near-real time (Indriastuti et al., 2024). These further enhance the user experience and engagement by accommodating individual preference. Community formation similarly no longer solely relies on mere follower numbers; the latest literature emphasizes how dual identification with both the streamer, as well as the audience group, strengthens viewer identification with, and engagement with, the broadcast community (Hu et al., 2017). Each of the four dimensions is, together, the interactive features behind live broadcast settings, converting passive content viewing to an active, participative experience.

3. Attitude Toward Organic Vegetables

Attitude, within the field of consumer psychology, is defined as the evaluation tendency of an individual resulting from latent beliefs, emotions, and intentions (Ajzen et al., 2018). For consumer behavior, it is the general belief an individual holds towards a product or behavior, and it is fundamentally central to forming decision-making processes as well as consumption patterns (Zaremohzzabieh et al., 2021).

For the case of organic food, attitudes among consumers prove to be complex, usually being guided by perceptions of safety, concerns for health, environmental accountability, and encouragement for local producers (Ueasangkomsate & Santiteerakul, 2016; Tandon et al., 2020).

Among the many things that drive consumers into a positive attitude toward organic vegetables is safety concern. This is because organic products are perceived to contain lesser amounts of pesticide residues and harmful additives compared to conventionally grown ones (Crinnion, 2010; Wee et al., 2014). Health consciousness also contributes significantly; for most of the consumers, organic vegetables also mean better nutrition and wellness (Vindigni et al., 2002; Tandon et al, 2020).

Environmental responsibility is thus impacting consumers far more than a mere concern for their own health. Consumers are increasingly appreciating organic farming methods because of their sustainability and lesser impact on the environment. It has been found that such concern for the environment significantly encourages favorable consumer attitudes. Furthermore, giving preference to local producers reflects a desire to help regional economies and foster trust through short supply chains and community-based production (Ueasangkomsate & Santiteerakul, 2016).

Despite cost and availability barriers, rising awareness of the health and environmental benefits of organic food strengthens consumer attitudes and fuels market demand (Kottala & Singh, 2015). Together, these findings emphasize that attitudes toward organic vegetables are complex, shaped by both individual values and broader social and environmental concerns.

4. Perceived Value

Perceived value is loosely defined for consumers as the evaluation of the overall gain obtained from the good compared to the costs paid for obtaining the good (Sweeney & Soutar, 2001). The evaluation is fundamentally subjective, based on the expectation, experience, and circumstances of the consumer (Servera-Francés & Piqueras-Tomás, 2019). For online settings like live-streaming retail, perceived value becomes particularly prominent, for the interaction happens in near-real time, the product is demonstrated visually, and interpersonal communication enables the direct evaluation of the good for the consumer (Pham et al., 2023).

The concept of perceived value is multidimensional, encompassing emotional, social, and economic aspects, each of which contributes uniquely to consumer decision-making (Sharma & Klein, 2020). Emotional value refers to the positive feelings and psychological satisfaction evoked by the shopping experience or product itself, such as joy, excitement, and enjoyment (Lo et al., 2022). Social value reflects the extent to which a purchase enhances one's social self-concept, reinforces personal identity, and signals alignment with community or societal values (Rohman et al., 2023). Economic value, in contrast, captures perceptions of price fairness, cost-benefit balance, and long-term utility (Sweeney & Soutar, 2001; Papista & Krystallis, 2013).

With regard to purchasing organic vegetables via live-streaming, these three dimensions prove particularly crucial. Live streams typically appeal to emotional value by developing immersive, participative settings, to social value by highlighting ethical behavior and community engagement, and to economic value by providing competitive prices and simultaneous descriptions of the benefits of the product (Del Soldato & Massari, 2024). Research also points to the fact that perceived value for live-streaming business is not fixed but fluid, being formed by direct communication, the requirement of the culture, as well as the clarity with which information is communicated (Wee et al., 2014; Servera-Francés & Piqueras-Tomás, 2019).

According to these results, this paper considers emotional value, social value, and economic value as key dimensions of perceived value to explore how they influence the purchase intention of organic vegetables during live-streaming conditions. Such dimensions, collectively, provide an all-round view to explore consumer benefit perceptions along with value-based purchasing behavior within electronic marketplaces.

5. Purchase Intention

Purchase intention is the final variable for this examination, suggesting the intentions of the consumers to buy organic vegetables via live streaming media. It is essentially shaped by internal beliefs of cognition and affect, for example, consumer attitude and perceived value, evoked by environmental stimuli like live stream interactivity (Nguyen et al., 2021).

Existing research has repeatedly emphasized attitude as the primary factor in forming purchase intentions for organic food. Consumers are likely to buy organic vegetables that are considered healthy, safe, and environmentally sustainable (Mohd et

al., 2022). Positive evaluations usually result from increased awareness of food safety and environmental concerns. Norms and social influences further promote the intention of buying organic products as individual behavior is aligned with perceived community expectations (Han & Stoel, 2016).

Perceived value, including emotional satisfaction, social identity, and economic benefits, also has a significant influence on purchase intention. In live streams, interactive features value consumer perceptions through real-time engagement, trust, and transparency (Pham et al., 2023). The resulting experiences make consumers more confident about their purchase choices and tend to make them more likely to purchase something.

Furthermore, Live stream interactivity influences the purchase intention because it reduces uncertainty and allows for a more immersive shopping experience. Consumers in interactive environments tend to respond more positively to vivid product displays and streamer communication (Curvelo et al., 2019).

Overall, purchase intention for live streaming commerce of organic vegetables is significantly shaped by both attitude and perceived value, with live stream interactivity having an essential direct and indirect influence. Determining purchase intention determinants allows for more specific intervention for sustainable food promotion.

6. Summary of Literature Review

This literature review has synthesized the theoretical foundations and empirical findings relevant to the current study. The SOR model explains how environmental stimuli, such as live stream interactivity, affect internal evaluations (attitude and perceived value), which subsequently drive behavioral outcomes (purchase intention). The TAM model complements this perspective by supporting the notion that interactivity-as an external technological feature-can directly influence behavioral intentions, bypassing traditional mediators like perceived usefulness.

Based on this dual-theoretical lens, four key constructs-live stream interactivity, consumer attitude toward organic vegetables, perceived value, and purchase intention-have been identified and thoroughly reviewed. The literature confirms that interactivity enhances both cognitive (example, perceived value) and affective (example, attitude) responses through real-time engagement and social connection. These internal organismic states are strong predictors of consumers' intention to purchase organic vegetables in

interactive e-commerce environments. This integrated framework provides theoretical justification for the proposed conceptual model and guides the development of hypotheses in the next section. This integrated approach also addresses a current gap in the literature regarding consumer decision-making in live-streamed organic food marketing."

7. Research Conceptual Framework

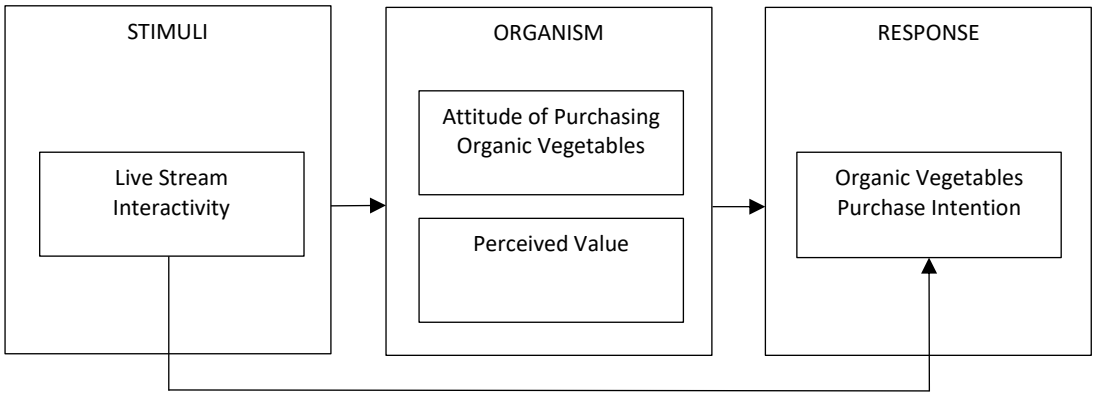

Figure 1 Conceptual Framework

Hypothesis Development

Research on live streaming commerce suggests that interactivity plays a crucial role in shaping purchase intentions. Research has found that instant interactive responses within live streams encourage impulse buying, positioning interactivity as a key driver of increased purchase intentions (Yawised & Apasrawirote, 2022). In the context of live streaming commerce, interactivity enables consumers to ask questions, receive immediate feedback, and observe product demonstrations, thereby reducing perceived risks and uncertainties (Lu & Chen, 2021).

According to the SOR model, environmental stimulus such as real-time interaction can stimulate internal states that translate into behavioral responses. Past studies employing the SOR framework in a live commerce setting have indicated that interactivity is a crucial stimulus in steering consumers toward favorable behavioral intentions (Kang et al., 2021; Ming et al., 2021).

Also, in Technology Acceptance Model (TAM) studies, interactivity is considered an external variable that can directly affect behavioral intentions without the mediation of established variables like perceived usefulness (Pavlou & Fygenson, 2006; Ha & Stoel,

2009). High interactivity is therefore instrumental in helping shape consumer decision-making in a shorter time frame through reduced cognitive load and enhanced feelings of social presence. Further, the findings show that interactive features such as Q&A and comment sections have a considerable impact on viewers' affective engagement by establishing stronger purchase intentions (Xu et al., 2020). Likewise, there are studies proving that the nature of real-time response in live streaming facilitates impulse buying behavior, establishing interactivity as an element effectively persuading consumers to make immediate decisions (Yawised & Apasrawirote, 2022).

Therefore, this study proposes the following hypothesis:

H1: Live stream interactivity positively influences the intention to purchase organic vegetables.

Consumer attitude is considered an important predictor of behavioral intention and also plays an important part in marketing and consumer psychology. It can be defined as a general evaluation made by an individual toward a product or a behavior. The interactive features in live streams have been found to make the online shopping experience even more engaging and responsive to the consumers, which in turn enhances their attitudes toward purchase (Clement et al., 2020). Interactivity within live streaming not only allows for information exchange but also for an enhanced, more immersive environment, increasing perceived credibility and trustworthiness of the seller as well as the product (Clement et al., 2021). Interactivity enables the asking of questions with immediate feedback, building trust, as well as lowering uncertainty towards product quality, thus directly reinforcing positive attitudes (Chen & Lin, 2018). Such real-time communication decreases uncertainty and enables the development of favorable evaluations.

Additionally, from the SOR perspective, stimuli such as interactivity affect the state of the consumer on both cognitive and affective levels, on the basis of which attitude construction takes place (Laato et al., 2020). For live streaming, interactivity serves as a stimulus to create excitement, entertainment, and emotional attachment, all of which translate into a better attitude (Gao & Bai, 2014; Kang et al., 2021).

Empirical evidence also supports this theoretical argument. Specifically, research founded that the features of interactivity enhance the level of customers' engagement, with an effect on attitudes (Xu et al., 2020; Yawised & Apasrawirote, 2022). From this, it is

reasonable to assume high interactivity rates on live streams will positively affect consumer attitudes towards purchasing organic vegetables.

Therefore, this study proposes the following hypothesis:

H2: Live stream interactivity positively impacts attitude toward purchasing organic vegetables.

Perceived value, a construct that can be defined as a consumer's overall judgment of product utility as a function of what one gets relative to what one gives, is the center of purchase behavior forecasting. For e-commerce and live streaming platforms, interactivity has been shown to aid consumers' value perception through emotional attachment, social binding, and information richness (Sweeney & Soutar, 2001; Xu et al., 2020).

Interactivity gives a maximum perceived emotional value via enjoyable and immersive experiences. For example, characteristics like evident presentation, accurate answers, aesthetics, and live response can increase viewers' satisfaction and cognitive absorption, and hence provide emotional value (Ng et al., 2023). Live chat, emoji reaction, and live Q&A create a live environment where the consumers get engaged, and hence emotionally and psychologically attached to the product (Anisah et al., 2023).

From a social value standpoint, live streaming facilitates parasocial relationships and community formation, which allow consumers to feel associated with influencers or fellow viewers, and therefore create feelings of belonging and perceived social value (Lee & Watkins, 2016). When consumers believe themselves to be members of a like-minded community or fan base, the social payoff from being recognized and included becomes a component of the social value extracted from the experience.

Interactivity also enhances economic value by improving information clarity and reducing perceived risk. For instance, when streamers address viewer questions directly or provide close-up product views, consumers gain confidence in product quality and functionality (Liu et al., 2021). This transparency reduces uncertainty, which strengthens the perception that the product is worth its price.

Therefore, this study proposes the following hypothesis:

H3: Live stream interactivity positively impacts perceived value toward purchasing organic vegetables.

Attitude has always shown significant influence on purchase decision for consumers, especially when health, environmental, and ethical factors are concerned, example, organic food purchase behavior (Smith & Paladino, 2010; Paul & Rana, 2012).

In the organic food sector, favorable attitudes are commonly established through health, environmental, and safety beliefs (Hughner et al., 2007; Aertsens et al., 2009). Empirical work has also validated that consumers' attitudes towards organic products become increasingly positive, and consequently, purchase intentions become greater. To give an example, a study has shown how a positive attitude can greatly enhance consumers' willingness to pay more for organic vegetables (Teng & Lu, 2016).

Attitude becomes even more pertinent in the specific context of the live streaming commerce because of the affective and experiential nature of the medium. Here, live streaming operates in real time with some interaction in the form of actual product showing, impacting the evaluation and trust of the audiences (Xu et al., 2020). Positive emotions, social presence, and interactive engagements during the live streaming sessions would indeed strengthen positive attitudes and subsequently increase the purchasing intentions (Chen & Lin, 2018). In addition, the immersion felt by consumers in live commerce builds trust and emotional engagement, two vital attitudinal factors in online settings. Thus, consumers who develop favorable attitudes from viewing an online live stream are more inclined to act upon those feelings with actual purchase intention.

Therefore, this study proposes the following hypothesis:

H4: Attitude toward purchasing organic vegetables positively impacts purchase intention in the context of live streaming commerce.

The influence of consumer-perceived value on purchase intention is well documented across several studies. In all such cases, perceived value has been established as a significant determinant in consumers' decision-making processes. It incorporates not only economic aspects but also other benefits like emotional and social ones (Sweeney & Soutar, 2001). Thus, consumers perceiving more emotional, social, or economic value in organic vegetables tend to purchase more organic vegetables (Thøgersen, 2011).

Emotional value, such as feeling good about eating healthily or contributing to sustainability, enhances the affective motivation to purchase (Sweeney & Soutar, 2001).

Social value, through factors like recognition received from others, and economic value, such as good-quality relative to price, are also thought to be major determinants in the decision-making process (Hughner et al., 2007). The economic value gives the consumers the consciousness of quality concerning prices; it increases purchase intention when consumers think that organic vegetables give health benefits in the long run and good nutritional value (Chen, 2007; Rana & Paul, 2017).

These perceived benefits are accentuated by the processes of interaction, immersion into content, and enabling consumers in the live-streaming environment. When interactive experiences meet or exceed expectations, consumers tend to finalize purchases (Liu et al., 2022).

Therefore, this study proposes the following hypothesis:

H5: Perceived value toward purchasing organic vegetables positively impacts purchase intention in the context of live streaming commerce.

Methodology

The current study is based on a descriptive research cross-sectional design using an online survey to collect data from consumers. The reason for choosing the quantitative approach is to allow a large sample size and thus enhance external validity of results and a more precise representation of specific consumer behaviors, attitudes, and opinions (Cooper & Schindler, 2014). Structural Equation Modeling (SEM) adopted as the primary analytical technique for exploring relationships among variables and testing mediation effects in the proposed research framework and AMOS 24 with maximum likelihood estimation were applied in this (Hair et al., 2019).

Data was collected from residents in Guangxi, China, who have previously purchased organic vegetables through live streaming platforms. The collection of data started in May 2024, and the total duration was two months. Convenience sampling was used since there is no official database providing information about this specific population and for the practical limitation to reach a broader audience (Golzar et al., 2022). This non-probability sampling technique facilitated the effective collection of data from consumers engaged in live streaming commerce. The sample size was based on the conventional requirement of using a minimum of 10 observations per estimated parameter in SEM, according to which this study estimated 35 parameters, which makes a minimum of 350

responses requirement for the investigation (Hair et al., 2019). Following data screening and cleaning, 405 valid responses were retained for further analysis. This sample size thus exceeds the recommended threshold and is adequate for testing the model with sufficient statistical power.

To measure key variables, this study adapted well-established scales to the live streaming context. Live stream interactivity is treated as a multidimensional construct consisting of real-time feedback, audience engagement, content customization, and community-building. Measurement items of these dimensions were adapted from previous studies (Liu et al., 2021; Li et al., 2022; Ma, 2023). Items for attitude and purchase intention were adopted from the existing scales, while perceived value was measured using a scale customized for the context of this study (Ueasangkomsate & Santiteerakul, 2016; Rohman et al., 2023). All constructs were measured using five-point Likert scales ranging from 1 (strongly disagree) to 5 (strongly agree).

This study employed the Item Objective Congruence index to ensure content validity for 20 items which is a standard method in validating multidimensional measurement instruments (Turner & Carlson, 2003). The questionnaire items were evaluated by a panel of experts in consumer behavior and digital marketing using a rating scale of -1 (not aligned) to +1 (perfectly aligned) with research objectives. The average IOC score was 0.94 (high content validity). Minor modifications based on experts' advice were done for clarity.

Reliability was tested by conducting a pilot study among 30 respondents. Internal consistency was quantified with Cronbach's alpha in conjunction with the implications for statistical power (Heo et al., 2015). The overall value of Cronbach's Alpha was 0.943 that ensures excellent reliability.

Results and Discussion

Table 1 Descriptive Statistics

Variables	Mean Statistic	Std. Deviation Statistic	Skewness Statistic	Kurtosis Statistic
RTF	3.182	1.016	-0.195	-0.941
AE	3.201	0.971	-0.156	-0.933
CC	3.250	1.018	-0.153	-1.09

Table 1 Descriptive Statistics (continued)

Variables	Mean Statistic	Std. Deviation Statistic	Skewness Statistic	Kurtosis Statistic
CB	3.246	0.986	-0.094	-0.995
SAF	3.625	1.138	-0.464	-0.997
HLTH	3.623	1.110	-0.411	-1.05
ENV	3.659	1.084	-0.433	-1.175
LO	3.623	1.063	-0.37	-1.138
EV	3.389	1.216	-0.301	-1.185
EMV	3.362	1.082	-0.165	-1.196
SV	3.319	1.166	-0.238	-1.138
PI	3.139	1.133	-0.067	-1.081

Descriptive statistics were computed in order to provide key characteristic summaries of each construct in the research model. The results indicated that the variables had mean values ranging from 3.139 to 3.659, with standard deviations falling in the range of 0.971 to 1.166. The skewness values were in the range of -0.464 to -0.067, while the kurtosis was between -1.196 and -0.933, indicating a slight non-normality in data but still within the range of acceptance for SEM application (Hair et al., 2019).

Table 2 Reliability Analysis Results

Latent Variables	Dimensions	Cronbach's Alpha	N of Items
Live Streaming Interactivity	Real-time Feedback	0.834	3
	Audience Engagement	0.775	3
	Content Customization	0.806	3
	Community Building	0.786	3
Attitude Towards Organic Vegetables	Safety	0.856	3
	Health	0.779	3
	Environment	0.835	4
	Local Origin	0.821	4

Table 2 Reliability Analysis Results (continued)

Latent Variables	Dimensions	Cronbach's Alpha	N of Items
Perceived Value	Economic Value	0.872	3
	Emotional Value	0.843	4
	Social Values	0.814	3
Organic Vegetables Purchase Intention	Purchase Intention	0.882	3

The Cronbach's Alpha coefficients for all variables ranged from 0.775 to 0.882, exceeding the suggested cut-off point of 0.7 (Hair et al., 2019). All constructs refer to the four dimensions of live stream interactivity (real-time feedback, audience engagement, content customization and community building). It also includes the four dimensions of attitude towards organic vegetables (safety, health, environment, and local origin), three dimensions of perceived value-economical value, emotional value, and social value-, and purchase intention. Thus, all of these constructs warrant a satisfactory internal consistency in measurement. Hence, the measurement model is reliable and valid for the use of these constructs for further data analysis.

Table 3 Model Fit Indices

Indicator	Value	Criteria	Results
CMIN/DF	1.762	< 3	Acceptable
RMSEA	0.043	< 0.06	Acceptable
GFI	0.960	> 0.9	Acceptable
CFI	0.989	> 0.9	Acceptable

The model fit indices demonstrate a good model fit. CMIN/DF is 1.762 (<3), RMSEA is 0.043 (<0.06), GFI is 0.960 (>0.9), and CFI is 0.989 (>0.9), all indicating acceptable model fit.

Table 4 Measurement Model for Each Latent Construct: Standardized Loadings, AVE, and CR

Path Relationships			Estimate	AVE	CR
RTF	<---	Interactivity	0.922	0.796	0.940
AE	<---	Interactivity	0.869		
CC	<---	Interactivity	0.881		
CB	<---	Interactivity	0.895		
SAF	<---	Attitude	0.929	0.829	0.951
HLTH	<---	Attitude	0.892		
ENV	<---	Attitude	0.896		
LO	<---	Attitude	0.924		
EV	<---	Perceived Value	0.952	0.842	0.941
EMV	<---	Perceived Value	0.922		
SV	<---	Perceived Value	0.878		
PI1	<---	Purchase Intention	0.952	0.713	0.881
PI2	<---	Purchase Intention	0.785		
PI3	<---	Purchase Intention	0.786		

Convergent validity was assessed using Average Variance Extracted (AVE) and Composite Reliability (CR). In Table 4, for each latent construct, the measurement model with standardized factor loadings, AVE, and CR values is presented. The AVE value for each construct exceeded the minimum threshold of 0.5, indicating that the latent variables could explain more than 50% of the variance in their observed indicators, cited from Hair et al. (2019). In addition, all CR values exceeded 0.7, indicating strong internal consistency of the constructs cited in Hair et al. (2019). This means there is good convergent validity and reliability for the measurement model.

Table 5 Discriminant Validity Analysis Results

Variables	AVE	Interactivity	Perceived Value	Attitude	Purchase Intention
Interactivity	0.796	**0.892**			
Perceived Value	0.842	0.334	**0.918**		
Attitude	0.829	0.275	0.092	**0.910**	
Purchase Intention	0.713	0.440	0.363	0.286	**0.845**

Discriminant validity was examined using the Fornell-Larcker criterion, which holds that the square root of the average variance extracted (AVE) for a particular construct must be greater than its correlations with other constructs (Hair et al., 2019). Results affirming these results can be found in Table 5, which shows the greater square root of the AVE when compared to correlation coefficients. Hence, satisfactory discriminant validity is confirmed.

Table 6 SEM Results

Path Relationships			Estimate	S.E.	C.R.	P
Attitude	<---	Interactivity	0.275	0.061	5.359	***
Perceived Value	<---	Interactivity	0.334	0.066	6.582	***
Purchase Intention	<---	Attitude	0.179	0.055	3.715	***
Purchase Intention	<---	Perceived Value	0.244	0.051	4.938	***
Purchase Intention	<---	Interactivity	0.31	0.071	5.968	***

Note: ***$p < 0.001$

The findings of the structural equation modeling analysis based on structural path analysis as well as AMOS 24 are reported in Table 6. The standardized path coefficients indicate that interactivity has a significant positive effect on attitude ($\beta = 0.275$, $p < 0.001$), perceived value ($\beta = 0.334$, $p < 0.001$), and purchase intention ($\beta = 0.310$, $p < 0.001$). Furthermore, attitude ($\beta = 0.179$, $p < 0.001$) and perceived value ($\beta = 0.244$, $p < 0.001$)

both significantly and positively predict purchase intention. All hypothesized relationships are supported.

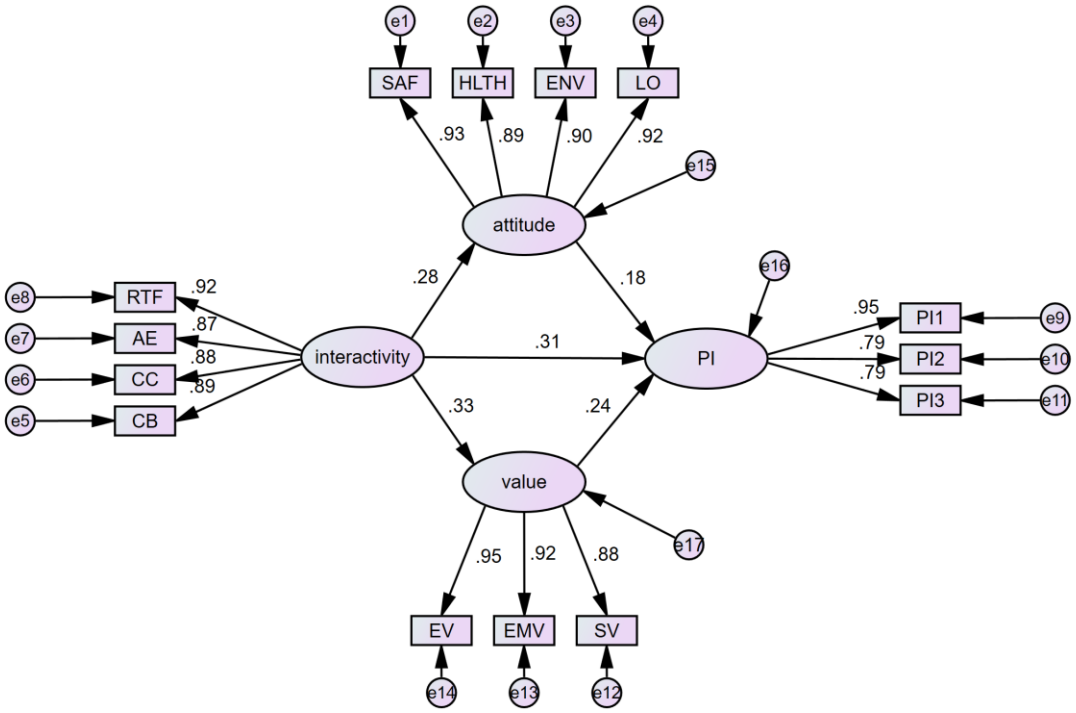

Figure 2 Structural Equation Modeling Results (Standardized Estimates)

These outcomes show that live streaming's interactivity impacts the purchasing intention and significantly leads the attitude and perceived value. The findings affirm the earlier research about interactivity as a key driver accountable for consumer behavior online (Yawised & Apasrawirote, 2022). The first hypothesis stipulating that interactivity has a positive relationship with attitude attests to previous assertions suggesting that consumers in high-interactivity environments often ignore categorical evaluations, such as the perceived usefulness (PU) of and the perceived ease of use (PEOU) in favor of heuristic cues such as real-time feedback, emotional resonance, and sensory experience (Pavlou & Fygenson, 2006; Kim & Forsythe, 2008; Flavián et al., 2019).

In this regard, the results sustain the tenets of the SOR model, showing that interactivity acts as an environmental stimulus that subsequently influences internal consumer states such as attitude and perceived value, which in turn are linked to purchase intention. The positive links found between attitude and purchase intention (H2), and

perceived value and purchase intention (H3), illustrate the significant impact of attitude and perceived value on consumer behavior. Furthermore, the direct impact of interactivity on purchase intention (H5) suggests that highly interactive live streaming environments may enhance purchase decisions through mechanisms like social validation and trust-building (Ha & Stoel, 2009; Yu, 2023).

Taking everything together, the findings provide empirical support to all proposed hypotheses and confirm the dual and multidimensional nature of the live-stream interactive stimuli affecting consumers' attitudes, perceived values, and purchase intentions.

Conclusion

This research's purpose was to select and investigate the different ways in which live stream interactivity influences consumers' purchasing intentions on organic vegetables within the context of live commerce. Using a quantitative, cross-sectional design, survey data were collected from 405 respondents in Guangxi, China, who had previously purchased organic vegetables via live streaming platforms. Structural Equation Modeling (SEM) was adopted as the primary analytical technique to examine the relationships among variables and test the proposed research framework, using AMOS 24.

The results demonstrate that live stream interactivity significantly and positively influences consumers’ attitudes, perceived value, and ultimately their purchase intentions. These findings support and extend the SOR (Stimulus–Organism–Response) model, confirming the role of interactivity as a critical environmental stimulus that shapes internal psychological states and behavioral outcomes. Furthermore, the positive effect of interactivity on attitude also aligns with the TAM (Technology Acceptance Model), suggesting that under high interactivity conditions, consumers may rely more on affective and heuristic cues than on purely rational evaluations.

This study highlights the crucial role of live stream interactivity in influencing consumers’ attitudes, perceived value, and purchase intentions toward organic vegetables. Some actionable recommendations based on the findings are mentioned below:

1. Upgrade interactivity in real-time: Businesses should enhance the live stream functionality with real-time feedback and audience engagement in order to create immersive and trust-based experiences that will drive purchase intentions.

2. Reinforce emotional and value target: Health benefits, sustainability, and food safety messaging will positively impact consumer attitudes and perceived value. Streamers should find ways to emphasize these topics strategically during their streaming shows.

3. Customize content and grow the community: Tailoring content of live streaming to different audience segments and building online communities will create perceptions of interactivity and enhance long-term engagement of consumers.

4. Offer transparency to strengthen trust: As interactivity enhances perceived value, brands should use live-streaming as a platform to show origin tracing, quality certification, and behind-the-scenes footage from farming.

The marketing strategies discussed can very effectively mobilize live streaming toward the cause of sustainable consumption and improvement of the sales of organic vegetables. In a nutshell, this study enhances the theoretical understanding of live stream interactivity in the consumption of organic products and, quite importantly, provides meaningful implications for enhancing consumer engagement and the sustainable practice of agriculture through digital innovation.

Limitation

Firstly, a cross-sectional design does not allow for causality to be inferred, since this design seems to mainly identify relationships between variables at one given time. This is relevant in the case of live stream commerce, wherein user interactions and consumer attitudes can shift due to the changing nature of platform features or through other reasons such as marketing campaigns and external events. Dependency on static data may fall short in capturing these temporal dynamics.

Secondly, the method of sampling used in this study can effectively invite the sample bias. The reliance on participants from Guangxi-an area with distinct socio-cultural and agricultural contexts-may affect the uniformity of results, especially considering that organic food awareness and live-streaming adoption rates can vary greatly across regions in China. This concentration may restrict the diversity of consumer attitudes captured in the analysis.

Thirdly, the product category chosen, organic vegetables, is closely tied to consumers' values regarding health, environmental sustainability, and food safety, making it a relatively high-involvement and utilitarian purchase. This may lead to stronger attitudes

or perceived value effects compared to products that are more impulse-driven or entertainment-oriented. As a result, the findings may not generalize well to other product types where consumer motivations differ significantly.

Suggestion

Future research can enhance the generalizability of findings by expanding the sample beyond Guangxi and including participants from diverse regions with varying levels of exposure to live commerce and organic food consumption. Broader geographic and demographic coverage would allow for comparative analysis across different consumer groups and cultural settings.

In addition, incorporating multiple data sources-such as combining self-reported questionnaire responses with behavioral data like platform transaction records-can improve the robustness and ecological validity of the findings. This approach would enable researchers to validate stated intentions with actual purchase behavior.

Future studies may also adopt a longitudinal research design to capture the evolving impact of interactivity over time, especially in rapidly changing digital commerce environments. Tracking consumer behavior over multiple time points would provide insights into causality and the stability of observed effects.

Moreover, future research should examine whether the effects identified in this study hold true across different product categories. For instance, the role of interactivity in promoting hedonic products (example, fashion, cosmetics) versus utilitarian ones (example, household goods, packaged food) may differ significantly. Investigating product type as a moderating variable would help refine theoretical models and inform more targeted marketing strategies.

Lastly, future researchers may consider exploring additional mediating or moderating variables-such as trust in the streamer, entertainment value, or social presence-to better understand the mechanisms through which interactivity shapes consumer attitudes and behaviors in live streaming contexts.

References

Aertsens, J., Verbeke, W., Mondelaers, K., & Van Huylenbroeck, *G. (2009). Personal* Determinants of Organic Food Consumption: A Review. *British Food Journal, 111*(10), 1140–1167. https://doi.org/10.1108/00070700910992961

Ajzen, I., Fishbein, M., Lohmann, S., & Albarracín, D. (2018). The Influence of Attitudes on Behavior. In *the Handbook of Attitudes*, *volume 1: Basic principles* (PP.197-255)

Anisah, T. N., Najmudin, M., & Sardi, A. E. (2023). From Interaction to Transaction: Analyzing the Influence of Social Presence on Impulsive Purchasing in Live Streaming Commerce. *Jurnal Manajemen Teori Dan Terapan, 16*(3).

Broersma, M. (2019). Audience engagement. *The International Encyclopedia of Journalism Studies,* (PP.1–6).

Chen, C.-C., & Lin, Y.-C. (2018). What Drives Live-Stream Usage Intention? The Perspectives of Flow, Entertainment, Social Interaction, and Endorsement. *Telematics and Informatics, 35*(1), 293–303.

Chen, M.-F. (2007). Consumer Attitudes and Purchase Intentions in Relation to Organic Foods in Taiwan: Moderating Effects of Food-Related Personality Traits. *Food Quality and Preference, 18*(7), 1008–1021.

Clement, A. P., Bakabbey, K. N., Andy, A. O., & Banafo, A. G. (2021). Live-Streaming Consumer Experience; the Future of E-commerce and Digital Marketing in Africa: Evidence from China. *International Journal of Information & Management Sciences, 32*(2).

Clement, A. P., Jiaming, F., & Li, L. (2020). Green Advertising and Purchase Decisions in Live-Streaming B2C and C2C Interactive Marketing. *International Journal of Information & Management Sciences, 31*(2).

Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods-Donald R. Cooper*. Mcgraw-hill.

Crinnion, W. J. (2010). Organic Foods Contain Higher Levels of Certain Nutrients, Lower Levels of Pesticides, and May Provide Health Benefits for The Consumer. *Alternative Medicine Review, 15*(1).

Curvelo, I. C. G., Watanabe, E. A. D. M., & Alfinito, S. (2019). Purchase Intention of Organic Food Under the Influence of Attributes, Consumer Trust and Perceived Value. *Revista de Gestão, 26*(3), 198-211.

Del Soldato, E., & Massari, S. (2024). Creativity and Digital Strategies to Support Food Cultural Heritage in Mediterranean Rural Areas. *EuroMed Journal of Business, 19*(1), 113-137.

Flavián, C., Ibáñez-Sánchez, S., & Orús, C. (2019). The Impact of Virtual, Augmented and Mixed Reality Technologies on The Customer Experience. *Journal of Business Research, 100*, 547–560.

Gao, L., & Bai, X. (2014). Online Consumer Behaviour and Its Relationship to Website Atmospheric Induced Flow: Insights into Online Travel Agencies in China. *Journal of Retailing and Consumer Services, 21*(4), 653–665.

Giertz, J. N., Weiger, W. H., Törhönen, M., & Hamari, J. (2022). Content Versus Community Focus in Live Streaming Services: How to Drive Engagement in Synchronous Social Media. *Journal of Service Management, 33*(1), 33–58.

Golzar, J., Noor, S., & Tajik, O. (2022). Convenience Sampling. *International Journal of Education & Language Studies, 1*(2), 72-77.

Ha, S., & Stoel, L. (2009). Consumer E-Shopping Acceptance: Antecedents in A Technology Acceptance Model. *Journal of Business Research, 62*(5), 565–571.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to Use and How to Report The Results of PLS-SEM. *European Business Review, 31*(1), 2–24.

Han, T. I., & Stoel, L. (2016). The Effect of Social Norms and Product Knowledge on Purchase of Organic Cotton and Fair-Trade Apparel. *Journal of Global Fashion Marketing, 7*(2), 89-102.

Heo, M., Kim, N., & Faith, M. S. (2015). Statistical Power as A Function of Cronbach Alpha of Instrument Questionnaire Items. *BMC Medical Research Methodology, 15*(1), 86.

Hu, M., Zhang, M., & Wang, Y. (2017). Why do Audiences Choose to Keep Watching on Live Video Streaming Platforms? An Explanation of Dual Identification Framework. *Computers in Human Behavior, 75*, 594-606.

Hughner, R. S., McDonagh, P., Prothero, A., Shultz, C. J., & Stanton, J. (2007). Who are Organic Food Consumers? A Compilation and Review of Why People Purchase Organic Food. *Journal of Consumer Behaviour: An International Research Review, 6*(2-3), 94–110.

Indriastuti, H., Hidayati, T., Martiyanti, D., Ayu, A. R. F., & Putit, L. (2024). How Real-Time Interactivity Influences Impulse Buying Behaviour in Generation Z's During Live Streaming Shopping: The Mediating Role of Perceived Enjoyment. *ECONOMICS-INNOVATIVE AND ECONOMICS RESEARCH JOURNAL, 12(*3), 279-291.

Jacoby, J. (2002). Stimulus-Organism-Response Reconsidered: An Evolutionary Step in Modeling (Consumer) Behavior. *Journal of Consumer Psychology, 12*(1), 51–57.

Jakobsen, M. (2021). *The Next Possible Frontier in E-commerce: Live Streaming*.

Joo, E., & Yang, J. (2023). How Perceived Interactivity Affects Consumers' Shopping Intentions in Live Stream Commerce: Roles of Immersion, User Gratification and Product Involvement. *Journal of Research in Interactive Marketing, 17*(5), 754-772.

Kang, K., Lu, J., Guo, L., & Li, W. (2021). The Dynamic Effect of Interactivity on Customer Engagement Behavior Through Tie Strength: Evidence From Live Streaming Commerce Platforms. *International Journal of Information Management, 56*, 102251. https://doi.org/10.1016/j.ijinfomgt.2020.102251

Kim, J., & Forsythe, S. (2008). Adoption of Virtual Try-on Technology For Online Apparel Shopping. *Journal of Interactive Marketing, 22*(2), 45–59.

Kiousis, S. (2002). Interactivity: A Concept Explication. *New Media & Society, 4*(3), 355–383. https://doi.org/10.1177/146144480200400303

Kottala, S. Y., & Singh, R. (2015). A Review of Sustainability, Deterrents, Personal Values, Attitudes and Purchase Intentions in The Organic Food Supply Chain. *Pacific Science Review B: Humanities and Social Sciences, 1*(3), 114-123.

Laato, S., Islam, A. N., Farooq, A., & Dhir, A. (2020). Unusual Purchasing Behavior During The Early Stages of The COVID-19 Pandemic: The Stimulus-Organism-Response Approach. *Journal of Retailing and Consumer Services, 57*, 102224.

Lee, C.-H., Chen, C.-W., Chen, W.-K., & Lin, K.-H. (2021). Analyzing The Effect of Social Support and Customer Engagement on Stickiness and Repurchase Intention in Social Commerce: A Trust Transfer Perspective. *Journal of Electronic Commerce Research, 22*(4), 363–381.

Lee, J. E., & Watkins, B. (2016). YouTube Vloggers' Influence on Consumer Luxury Brand Perceptions and Intentions. *Journal of business research, 69*(12), 5753-5760.

Li, G., Jiang, Y., & Chang, L. (2022). The Influence Mechanism of Interaction Quality in Live Streaming Shopping on Consumers' Impulsive Purchase Intention. *Frontiers in Psychology, 13*, 918196. https://doi.org/10.3389/fpsyg.2022.918196

Li, X., Guo, M., & Huang, D. (2023). The Role of Scarcity Promotion and Cause-Related Events In Impulse Purchase In The Agricultural Product Live Stream. *Scientific Reports, 13*(1), 3800.

Li, X., Huang, D., Dong, G., & Wang, B. (2024). Why Consumers Have Impulsive Purchase Behavior in Live Streaming: The Role of The Streamer. *BMC Psychology, 12*(1), 129.

Liu, P., Li, M., Dai, D., & Guo, L. (2021). The Effects of Social Commerce Environmental Characteristics on Customers' Purchase Intentions: The Chain Mediating Effect Of Customer-To-Customer Interaction and Customer-Perceived Value. *Electronic Commerce Research and Applications, 48*, 101073. https://doi.org/10.1016/j.elerap.2021.101073

Liu, X., Zhai, L., & Ni, W. (2022). *Development of Fresh Agricultural Products Sales Assisted by E-commerce Under Targeted Poverty Alleviation Strategy*.

Lo, P.-S., Dwivedi, Y. K., Tan, G. W.-H., Ooi, K.-B., Aw, E. C.-X., & Metri, B. (2022). Why Do Consumers Buy Impulsively During Live Streaming? A Deep Learning-Based Dual-Stage SEM-ANN Analysis. *Journal of Business Research, 147*, 325–337.

Lu, B., & Chen, Z. (2021). Live Streaming Commerce and Consumers' Purchase Intention: An Uncertainty Reduction Perspective. *Information & Management, 58*(7), 103509.

Lu, F., Huang, X., & Wang, X. (2022). Willingness To Pay for Mobile Health Live Streaming During The Covid-19 Pandemic: Integrating TPB with Compatibility. *Sustainability, 14*(23), 15932.

Lv, X., Zhang, R., Su, Y., & Yang, Y. (2022). Exploring How Live Streaming Affects Immediate Buying Behavior and Continuous Watching Intention: A Multigroup Analysis. *Journal of Travel & Tourism Marketing, 39*(1), 109–135. https://doi.org/10.1080/10548408.2022.2052227

Ma, Y. (2023). Effects Of Interactivity Affordance on User Stickiness in Livestream Shop**: Identification and Gratification as Mediators. *Heliyon, 9*(1).

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 SOR Theory. *International Journal of Web Information Systems, 17*(4), 300–320.

Mohd Suki, N., Majeed, A., & Mohd Suki, N. (2022). Impact Of Consumption Values on Consumers' Purchase of Organic Food And Green Environmental Concerns. *Social Responsibility Journal, 18*(6), 1128-1141.

Ng, M., Law, M., Lam, L., & Cui, C. (2023). A Study of The Factors Influencing The Viewers' Satisfaction and Cognitive Assimilation with Livestreaming Commerce Broadcast in Hong Kong. *Electronic Commerce Research, 23*(3), 1565-1590.

Nguyen, T. M., Park, J. H., & Choi, W. L. (2021). Factors Influencing Consumer Purchase Intention toward Organic Food Products: An Empirical Study in Vietnam Market. *Journal of Channel and Retailing, 26*(1), 127–147. https://doi.org/10.17657/jcr.2021.01.31.6

Oktaviani, R. D., Naruetharadhol, P., Padthar, S., & Ketkaew, C. (2024). Green Consumer Profiling and Online Shopping of Imperfect Foods: Extending UTAUT with Web-Based Label Quality for Misshapen Organic Produce. *Foods, 13*(9), 1401.

Papista, E., & Krystallis, A. (2013). Investigating The Types of Value and Cost of Green Brands: Proposition of a Conceptual Framework. *Journal of Business Ethics, 115*(1), 75-92.

Paul, J., & Rana, J. (2012). Consumer Behavior and Purchase Intention for Organic Food. *Journal of Consumer Marketing, 29*(6), 412–422.

Pavlou, P. A., & Fygenson, M. (2006). Understanding and Predicting Electronic Commerce Adoption: An Extension of The Theory of Planned Behavior. *MIS Quarterly*, 115–143.

Pham, A. D., Pham, N. H., Nguyen, M. N., Giap, N. T., Bui, D. L., Bui, T. L., & Dao, T. T. (2023). How Do Live-Stream Channels Shape Impulse Buying Behaviour? Empirical Research on Vietnamese Youth. *Asia Pacific Business Review*, 1-26.

Rana, J., & Paul, J. (2017). Consumer Behavior and Purchase Intention for Organic Food: A Review and Research Agenda. *Journal of Retailing and Consumer Services*, *38*, 157–165. https://doi.org/10.1016/j.jretconser.2017.06.004

Rohman, A., Asmara, R., & Andriani, D. (2023). The Effect of Multidimensional Consumer Perceived Value on Customer Satisfaction and Purchase Intention of Organic Food. *HABITAT, 34*(2), 213–224. https://doi.org/10.21776/ub.habitat.2023.034.2.19

Servera-Francés, D., & Piqueras-Tomás, L. (2019). The Effects of Corporate Social Responsibility on Consumer Loyalty Through Consumer Perceived Value. *Economic Research-Ekonomska Istraživanja, 32*(1), 66-84.

Sharma, V. M., & Klein, A. (2020). Consumer Perceived Value, Involvement, Trust, Susceptibility to Interpersonal Influence, and Intention to Participate in Online Group Buying. *Journal of Retailing and Consumer Services, 52*, 101946.

Smith, S., & Paladino, A. (2010). Eating Clean and Green? Investigating Consumer Motivations Towards The Purchase of Organic Food. *Australasian Marketing Journal, 18*(2), 93–104.

Summerlin, R., & Powell, W. (2022). Effect of Interactivity Level and Price on Online Purchase Intention. *Journal of Theoretical and Applied Electronic Commerce Research, 17*(2), 652-668.

Sweeney, J. C., & Soutar, G. N. (2001). Consumer Perceived Value: The Development of A Multiple Item Scale. *Journal of Retailing, 77*(2), 203–220. https://doi.org/10.1016/S0022-4359(01)00041-0

Tan, S. (2024). How To Interact with Consumers to Enhance Their Purchase Intention? Evidence From China's Agricultural Products Live Streaming Commerce. *British Food Journal*.

Tandon, A., Dhir, A., Kaur, P., Kushwah, S., & Salo, J. (2020). Why Do People Buy Organic Food? The Moderating Role of Environmental Concerns and Trust. *Journal of Retailing and Consumer Services, 57*, 102247.

Teng, C. C., & Lu, C. H. (2016). Organic Food Consumption in Taiwan: Motives, Involvement, and Purchase Intention Under The Moderating Role of Uncertainty. *Appetite, 105*, 95-105.

Thøgersen, J. (2011). Green Shopping: For Selfish Reasons or The Common Good? *American Behavioral Scientist, 55*(8), 1052–1076.

Turner, R. C., & Carlson, L. (2003). Indexes of Item-Objective Congruence For Multidimensional Items. *International Journal of Testing, 3*(2), 163-171.

Ueasangkomsate, P., & Santiteerakul, S. (2016). A Study of Consumers' Attitudes and Intention to Buy Organic Foods for Sustainability. *Procedia Environmental Sciences, 34,* 423–430. https://doi.org/10.1016/j.proenv.2016.04.037

Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and A Research Agenda on Interventions. *Decision Sciences, 39*(2), 273-315.

Vindigni, G., Janssen, M. A., & Jager, W. (2002). Organic Food Consumption: A Multi-Theoretical Framework of Consumer Decision Making. *British Food Journal, 104*(8), 624-642.

Wang, G., Zhang, Z., Li, S., & Shin, C. (2023). Research on the Influencing Factors of Sustainable Supply Chain Development of Agri-Food Products Based on Cross-Border Live-Streaming E-Commerce in China. *Foods, 12*(17), 3323. https://doi.org/10.3390/foods12173323

Wee, C. S., Ariff, M. S. B. M., Zakuan, N., Tajudin, M. N. M., Ismail, K., & Ishak, N. (2014). Consumers Perception, Purchase Intention and Actual Purchase Behavior of Organic Food Products. *Review of Integrative Business and Economics Research, 3*(2), 378.

Williams, M. D., Rana, N. P., & Dwivedi, Y. K. (2015). The Unified Theory of Acceptance and Use of Technology (UTAUT): *A Literature Review. Journal Of Enterprise Information Management, 28*(3), 443-488.

Xu, X., Wu, J.-H., & Li, Q. (2020). What Drives Consumer Shopping Behavior in Live Streaming Commerce? *Journal of Electronic Commerce Research, 21*(3), 144–167.

Yawised, K., & Apasrawirote, D. (2022). Factors Influencing Actual Use of e-Payment Adoption by SMEs in Phitsanulok. *Journal of Business, Innovation and Sustainability (JBIS), 17*(4).

Yu, W. (2023). Research on the Problems and Strategies of Live-Streaming E-commerce on the Douyin Platform in China. *Highlights in Business, Economics and Management, 23*, 762–769.

Zaremohzzabieh, Z., Ismail, N., Ahrari, S., & Samah, A. A. (2021). The Effects of Consumer Attitude on Green Purchase Intention: A Meta-Analytic Path Analysis. *Journal of Business Research, 132*, 732-743.

Zhang, X., & Choi, J. (2022). The Importance of Social Influencer-Generated Contents for User Cognition and Emotional Attachment: An Information Relevance Perspective. *Sustainability, 14*(11), 6676.

Zheng, R., Li, Z., & Na, S. (2022). How Customer Engagement in The Live-Streaming Affects Purchase Intention and Customer Acquisition, E-Tailer's Perspective. *Journal of Retailing and Consumer Services, 68*, 103015. https://doi.org/10.1016/j.jretconser.2022.103015