

Examining the Key Factors that Drives Live Stream Shopping Behavior

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Abstract

The purpose of this research was to examine the key factors that drive live-stream shopping behavior in Thailand. The specific objective was to determine the live stream shopping factors that influence purchase intention. The study was driven by the increasing role of e-commerce and live streaming shopping trends through social media marketing. For marketers, live-stream shopping is considered a valuable marketing strategy for commercial businesses to enhance sales, save expenses, and create unique marketing impacts. The study adopted the Uses and Gratification Theory and the Source Credibility Theory. Through these theories, the variables of the study were considered to be entertainment, informativeness, attractiveness, expertise, trustworthiness, culture, and purchase intention. A quantitative research methodology was adopted, with primary data collected from 370 respondents. The model was evaluated using reliability, validity, and CFA. SEM was used to analyse the hypotheses using AMOS and SPSS software. The results of the study indicated that four factors (entertainment, informativeness, expertise, and trustworthiness) have a significant and positive effect on purchase intention. Trustworthiness and entertainment had the highest effect. Attractiveness was found not to influence purchase intention, while culture did not moderate the effect of any variable on purchase intention. The research recommended that live streaming should be trustworthy in terms of sincerity, non-exaggeration, correct information, correct thoughts, and opinions. They should also be entertaining to establish positive interconnectivity between the user and the product or service, and also informative to contribute towards awareness of a product/service and offer insights that influence perceptions and behavioral intentions.

Keywords:

Live Stream Shopping;
Shopping Behavior;
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1- Introduction

A new era in sales began in May 2016 with the launch of Alibaba's Taobao Live. The e-commerce giant invented a new sales strategy: combining an internet live stream broadcast with an online store to allow viewers to watch and shop simultaneously. Live commerce became more popular with its sales efforts for Singles' Day, a significant shopping occasion in China, and is typically a reliable digital tool for increasing client engagement and purchases. Taobao Live's Singles' Day presale event in 2020 produced an amazing \$7.5 billion in trade value in less than 30 minutes [1]. This heralded a new dawn for the e-commerce experience. Live streaming shopping in e-commerce is a type of shopping that blends e-commerce with live broadcasting to sell items and bring consumers together quickly [2]. Live stream shopping generates a situation in which sellers and buyers link up often, live, and profoundly to conduct business. Online shopping involves the exchange of products and services on the internet. Because of the group effect of communication, live streaming encourages consumers to spend more than they could in a traditional format [2]. Xiao et al. (2019) [3] state that acknowledging live streaming videos can help people and organizations improve their social media marketing. Chandruangphen et al. (2021) [4] further assert that the combination of e-commerce and online shopping is a well-

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defined approach with spontaneous initiatives, resulting in entertaining and relevant material. Hence, organizations have found it critical to examine the rising trend of social media and the significance of live-streaming video and video systems concepts.

Live stream shopping is a real-time online connection and transmission that simultaneously involves gathering, publishing, and consuming video content. A live stream webpage or application is a system that allows a live broadcaster and viewers to communicate in real-time [5]. Music lovers, for instance, watch the actual streaming show on internet platforms. Live-stream shopping is a valuable marketing strategy for commercial businesses to enhance retail sales, save expenses, and create unique marketing impacts. Understanding social commerce qualities that blend real-time social engagement with e-commerce is crucial in online shopping. Consumers benefit from live stream buying since it provides a rich visual experience and real-time engagement. Cai et al. (2018) [6] state that when consumers get vivid information and understanding through high-quality representation in live stream buying, they demonstrate faith in the product. Engaging in real-time is a valuable aspect of a live broadcast. Consumers' comprehensive, interpersonal connection, strengthened by the live streamers' quick response, might minimize their uneasiness, and boost their perceived power over the live streamer. Live streaming has received some attention lately as a new media format that motivates viewers to watch continuously. The live-streaming shopping platform, in contrast to other live streaming platforms, is built on an e-commerce foundation and fundamentally focused on results; specifically, the greater the number of viewers, the greater the transactions for the brand [6].

Acquiring customer insights, increasing brand awareness and recognition, running relevant advertising with actual outcomes, generating more excellent converting prospects, delivering rich user experiences, rising website traffic and scouring ranking, acquiring knowledge about rivals, content aggregation faster and easier, constructing geotargeted content, and structuring relationships are just a few of the advantages of using social media [7]. Linking genuinely with the viewing public, generating a social media marketing approach, organizing organic traffic, continuously high content, disseminating material to a large audience, inspiring sharing, continuing to endorse intellect with information, providing excellent visuals, setting priorities, and choosing the proper framework are all barriers to overcome. It is difficult for marketers to decide where to focus their attention since numerous social media sites exist [8]. Customers have difficulty distinguishing between the many communications they regularly get through social media. People increasingly utilize messaging applications rather than social networks due to more inexpensive handsets [9]. As a result, it is critical to concentrate on the most popular platforms while also providing the most customer-friendly material.

These figures show substantial growth across chat apps, but it is impossible to follow their success country by country since they do not routinely reveal their user counts for local regions. This is why this study is important, to understand the reach and intricacies of live stream shopping specific to a country like Thailand. Live-streaming video is a cost-effective and convenient option. Although the live streaming video is less refined than recorded video, it is more prone to generating more engagement and lower production expenses. According to Ming et al. (2021) [10], the increment is linked to marketers' enhanced utilization of artificial intelligence and bots in messenger applications; there are presently over 100,000 bots on Facebook themselves that perform tasks such as brand awareness, customer support, content distribution, online ordering, transport, and public transit details, and much more. Smartphones are mimicking (and in several respects, accelerating) the expansion of social media. Guo et al. [11] state that there are more than 5 billion mobile phone users worldwide (67 percent penetration), with approximately 2.8 billion using their phones to browse social media.

The study of the factors influencing live stream shopping, according to McGoldrick (2002) [12], is a field of study that helps managers and retail company organizations develop market segmentation and marketing strategies. In several deconstructions, buying characteristics that influence consumers' preferences for live streaming shopping were established [5, 13-16]. These characteristics include pricing (relatively low cost and affordable product), promotion, and seller characteristics such as appearance, engagement, customer service, reputation, physical attributes, and entertainment. Product characteristics include variety, reliability, fashionability, and a strong brand. It is unknown, though, if this list of qualities is entirely appropriate or comprehensive in the context of live streaming purchasing. Consumer behavior in environments for live streaming commerce has been the subject of other studies. In their study, Wongkitrungrueng and Assarut (2020) [13] explored how perceived purchasing values in live streaming might boost customer engagement by increasing trust. Hou et al. (2019) [17] have looked at elements like seller interaction, comedy, and sex appeal. Sun et al. (2019) [16] investigation focused on characteristics including a seller's presenting abilities, interactivity, and shopping advice, while Chandruangphen et al. (2021) [3] used consumer interviews to investigate several live streaming characteristics in fashion apparel shopping. The earlier research, particularly in the context of live streaming shopping, falls short in its analysis of the drivers of the live streaming shopping narrative. Considering the above perspectives, there is a need to investigate the factors that drive live stream shopping in Thailand. The Uses and Gratification Theory and the Source Credibility Theory are used as frameworks in the research to identify insights into the variables that influence live stream shopping in Thailand. The results of this study will assist live streaming vendors in better planning and meeting client demands based on pertinent live streaming qualities. Additionally, it will serve as a reference for data-gathering instruments for future statistical analysis. Future research should use the knowledge gained

from this study to create a platform that aids consumers in assessing live streams and receiving live stream suggestions. Before building a conceptual model based on theories that characterize the effects of live streaming attributes on the drivers of live streaming shopping, we first explore the background of live streaming shopping characteristics in the subsequent section.

1-1- Live Streaming Shopping in Thailand

Although customers are progressively buying things online, many merchants still ignore social media advertising and live video sales. Some B2B companies believe that social media offers no actual marketing prospects, yet this is far from reality. Online sales have increased in practically every industry for more than a decade [18]. With people all across the globe compelled to stay inside due to the epidemic, internet sales have exploded. While Thailand is progressively catching on to the notion that social media marketing is a must-have, many businesses aren't using it to its full potential. Thailand's live social sales were up by more than 200 percent, with global e-commerce sales hitting USD 4.9 trillion in 2021 [19]. Customers are not simply interested in healthcare and food when they shop online. Retailers in Thailand are beginning to employ live social selling to promote clothing and even gold.

Due to the apparent simplicity of live-streaming, Chinese customers have adopted it. Customers may instantaneously engage and buy the things they view on the feeds. However, the efficacy of live-streaming rests, maybe more crucially, with the prominent hosts. Ming et al. (2021) [10] are of the view that consumers in China seek greater openness and genuineness from their buying encounters as the market becomes crowded. Many people buy things primarily on referrals from friends and relatives, and an owner's live-streaming channel creates a similar sense of confidence and recognition, which helps companies gain traction. The live-streaming sector came to Southeast Asia in 2015, with major companies like Kitty Live and BIGO Live [4]. The Lazada and Shopee online platforms have also added to the live shopping features. With Thailand already dominating the area of social commerce and Thai buyers eager to explore and share, there are many opportunities for companies to exploit this high-speed cloud-based service in Thailand. As consumers grow more knowledgeable and discriminating, prominent hosts' ability to stay personable, interesting, honest, and trustworthy will determine merchants' ability to engage with customers.

1-2- How Live Stream Is Transforming Shopping Behavior?

Live shopping is revolutionizing the way people shop, bringing a new level of personalization to e-commerce that was earlier unavailable. According to Li et al. (2020) [2], live commerce may present timely information and unique offers to assist consumers through their buying path quicker, similar to how a discussion between a customer and a staff person in a retail shop can help influence a final purchase decision. Live event firms recorded conversion rates of up to 30%, up to ten times greater than typical e-commerce [3]. Brands may use live shopping events to increase their allure with consumers and build even more significant and long-lasting connections with them. Live shopping events may help you raise sales, enhance engagement on sites and applications, and appeal to new customers. Ma (2021) [5] points out that some businesses have even enhanced engagement among younger consumers by 20%. As a result, the study's goals are to discover the determinants of buy intent in the setting of live stream purchasing and the validity of combining the Social Credibility Theory and Uses with the Gratifications Theory in Thailand.

2- Literature Review

2-1- Theoretical Background

2-1-1- Uses and Gratification Theory

The Uses and Gratification Theory is a user-oriented framework to comprehend why individuals deliberately pursue specific media for enjoyment [20]. Its methodology is positivistic, and it has an intuitive touch. This concept has already been used to look at individual motives for accessing traditional media like radio, newspapers, and television. However, it has lately been common to explore alternative media and communication channels, such as social media platforms. Camilleri and Falzon (2020) [21] opine that while the internet's value as a formidable telecommunications channel is undeniable, it is considerably more than a collection of websites designed to sell products. Significantly, the internet is a rich content channel, making it an excellent tool for attracting and retaining site users' attention. Huang and Zhou (2018) [22] stress that because consumers now have the option of buying from a rising variety of online shopping sites, appealing to the heart of these customers will become increasingly crucial for online shopping site owners, marketers, and web designers. Kamboj (2020) [23] infers that considering the underlying requirement and increasing challenge of enticing people to support and buy online market offers, why consumers shop on the internet is critical to the online business model. This concept suggests that individuals use technology for various reasons, notably entertainment and access to information. The theory was incorporated into the study strategy because of its applicability to the problem area. It's a tried-and-true theoretical paradigm for discovering why individuals connect with certain media or mediums. It's also been employed successfully in various platforms and digital retail industries similar to live-stream purchases.

2-1-2- Source Credibility Theory

According to Source Credibility Theory, the most important characteristic for customers to judge the usefulness and dependability of information is the provider of the communication. Various properties of a source influence the eloquence and effect of information [24]. Tanrikulu and Erdur-Baker (2021) [24] further claimed that beauty, skill, and credibility determine the reliability of the information. The attractiveness of a source influences its credibility in advertising. Consumers are more inclined to purchase whatever a celebrity is promoting if it is appealing [25]. In other words, the effect of visual appeal on purchasing habits, brand preferences, and attitudinal shifts is influenced by the amount of visual appeal. Wang and Scheinbaum (2018) [26] emphasize that physically appealing endorsers or models elicit more favourable evaluations of advertising and marketed items than less attractive endorsers. A source's honesty and credibility are referred to as trustworthiness. The audience's view of an endorser's advocacy reasons determines his or her credibility. Visentin et al. (2019) [27] point out that if the audience feels an endorser is driven only by self-interest, he or she will be less compelling than if the audience thinks the endorser is fully neutral or has nothing to gain by supporting the product. Because of its relevance to the subject issue of this study, the study methodology included the Source Credibility Theory. The latter is since previous research has proven that this idea holds in situations conceptually comparable to live-stream buying, like social media and buying purposes.

2-2- Empirical Literature

2-2-1- Entertainment and Live-stream

The term "entertainment" refers to the extent to which anything might be considered pleasurable, gratifying, or fun. Consumers intuitively have a sense of happiness when they experience pleasure, which increases their propensity to purchase products or services through an online platform [28]. A considerable positive association between entertainment and purchase intention has been validated in many studies [9, 28-30]. A recent tendency has been to expand and refine ideas about affective motives for media usage. According to Hsu et al. (2020) [9], modern motivational theories have incorporated the strict divide between utilitarian and repetitive behaviours that favoured information-seeking before entertainment-seeking activities. These explain why people must control their emotional states to achieve optimal arousal levels. When it relates to live-buying, "entertainment" refers to the enjoyable experience of interacting with the live-stream vendor. From the postulations of De Oliveira and Huertas (2015) [29], entertainment generates an environment that fosters good interconnection between the user and the product or service. Additionally, as stated by Musa et al. (2015) [30], entertainment increases the user's emotions, resulting in pleasure or satisfaction, which influences the user's behavior. As a result, the underlying hypothesis was formulated:

H1: Entertainment has a significantly positive relationship with purchase intention.

2-2-2- Informativeness and Live-Stream

Consumers' need to acquire relevant, timely, and reliable information from a certain source is informativeness. Previous research has shown the importance of informativeness as a predictor of purchase intent. These are cognitive requirements, including acquiring knowledge and information and comprehending social settings, investigation, and curiosity. Customers prefer particular media since they need information and data, and the media is known for providing facts, according to this necessity [31]. Gogan et al. (2018) [32] infer that informativeness contributes to product or service awareness by providing insights and understanding that influence consumer perceptions and behavioral intentions. The information absorbed by an individual is a subject of the live stream buying decision. The live-stream vendor is referred to as the source in the scope of this research. Customers are more inclined to make a purchasing choice if the live-stream supplier can deliver accurate and thorough information about its goods or trends promptly. As a result, the underlying hypothesis was formulated:

H2: Informativeness has a significantly positive relationship with purchase intention

2-2-3- Attractiveness and Live-Stream

Attractiveness is defined as a person's assessment of another person's physical aspects, temperament, and likeness. Li and Peng (2021) [33] insist that the power of attractiveness is critical because the media gives the user power and motivates them to choose it. Alternatively, if the medium chosen by the consumer did not have outstanding material, let alone enticing material, the consumer would not have chosen it to meet their needs. If an appealing source vets the information, consumers will be more willing to embrace it, and according to Wu and Shaffer (1987) [34], attractiveness plays a significant part in the persuasive process of customers. When it comes to live-stream buying, if appealing live-stream vendors deliver the knowledge or the item, buyers are more likely to embrace it. As a consequence, the corresponding hypothesis was proposed:

H3: Attractiveness has a significantly positive relationship with purchase intention.

2-2-4- Expertise and Live-Stream

The apparent level of the source's comprehension, abilities, and knowledge is referred to as expertise. The information supplied by the experienced live-stream vendor has a greater effect on the customers' choice. It is the quality that makes the speaker who he or she is. The communicators' understanding and grasp of the message and the message user's intellectual legitimacy and claimed compassion are all required elements of such an ideology [35]. Expertise is one of the important aspects that improve the promoter's credibility, according to Hovland et al. (1953) [36]. In support, Senecal and Nantel (2004) [37] claim that live-stream shopping promoters who demonstrate a certain level of expertise in the products and services they sell have a significant and persuasive influence on the consumer's attitude, behavioral intention, and actual behavior toward these products or services. When it comes down to it, perceptions of talent and expertise play a significant role in a communicator's credibility and dependability. Customers' buying intent will be influenced by your ability to influence and convince them. Customers are more likely to trust a live-stream salesperson seen as an expert. Consequently, the following hypothesis was proposed:

H4: Expertise has a significantly positive relationship with purchase intention.

2-2-5- Trustworthiness and Live-Stream

The level of trust that customers have in the information provided by a certain source is referred to as trustworthiness. Trust emerges from knowledge in the market since one cannot claim to be proficient in a field without experience. Hye Park and Stoel (2002) [38] opined that many people worry about the trustworthiness of the products and services sold online, and this can affect their perception of the product or service. Reyson (2005) [39] corroborates the assertion that trustworthiness is a critical aspect before accepting information displayed online. The material must be communicated by someone capable of guiding customers through the treacherous market [40]. This view is supported by Choudhury and Karahanna (2008) [41], who inferred that if the trustworthiness of the people selling these products and services could be verified, then their willingness to purchase them would increase. The present research context is related to the live-stream vendor and the customers' acceptance of the information. Customers will progressively appreciate and embrace information communicated by a reputable vendor when advertising items through a live stream. Furthermore, buyers will have higher confidence in the items, enhancing purchase intent due to better trustworthiness. As a result, the corresponding hypothesis was formulated:

H5: Trustworthiness has a significantly positive relationship with purchase intention.

2-2-6- Culture and Live-Stream

Concentrating only on new communication technologies' social and cultural effects may be misleading until we better understand how and why people utilize these media platforms. It's only natural that people seek out information in the information era. Similarly, respondents to a web search are more interested in information forms that appeal to individuals in a more individualized voice and a larger interesting context [42]. Culture impacts human wants, not just in their genesis but also in how they are met. As a result, culturally placed social experience promotes fundamental biological and psychological requirements while also directing satisfaction sources. Ma (2021) [5] states that since efficient theories of popular culture require a view of an individual, not as psychologically or sociologically, but as a cultural individual, utility audience-oriented views will not serve to unravel popular culture consumption. Live-streaming studies may explain how culture affects consumption through live-streaming services. As a consequence, the pertinent hypothesis was proposed:

H6: Culture moderates the effects of independent variables on purchase intention.

2-3- Conceptual Framework

From the critical evaluation of the literature review and the applied models, the study research proposed conceptual framework was developed. The framework has five independent variables, which include entertainment, informativeness, attractiveness, expertise, and trustworthiness. The independent variable of the study was purchase intention, while culture was a moderating variable. The conceptual framework is presented in Figure 1. From the relationships discernible in the conceptual framework variables and the evaluation of literature, the study hypotheses were developed as presented in the previous section.

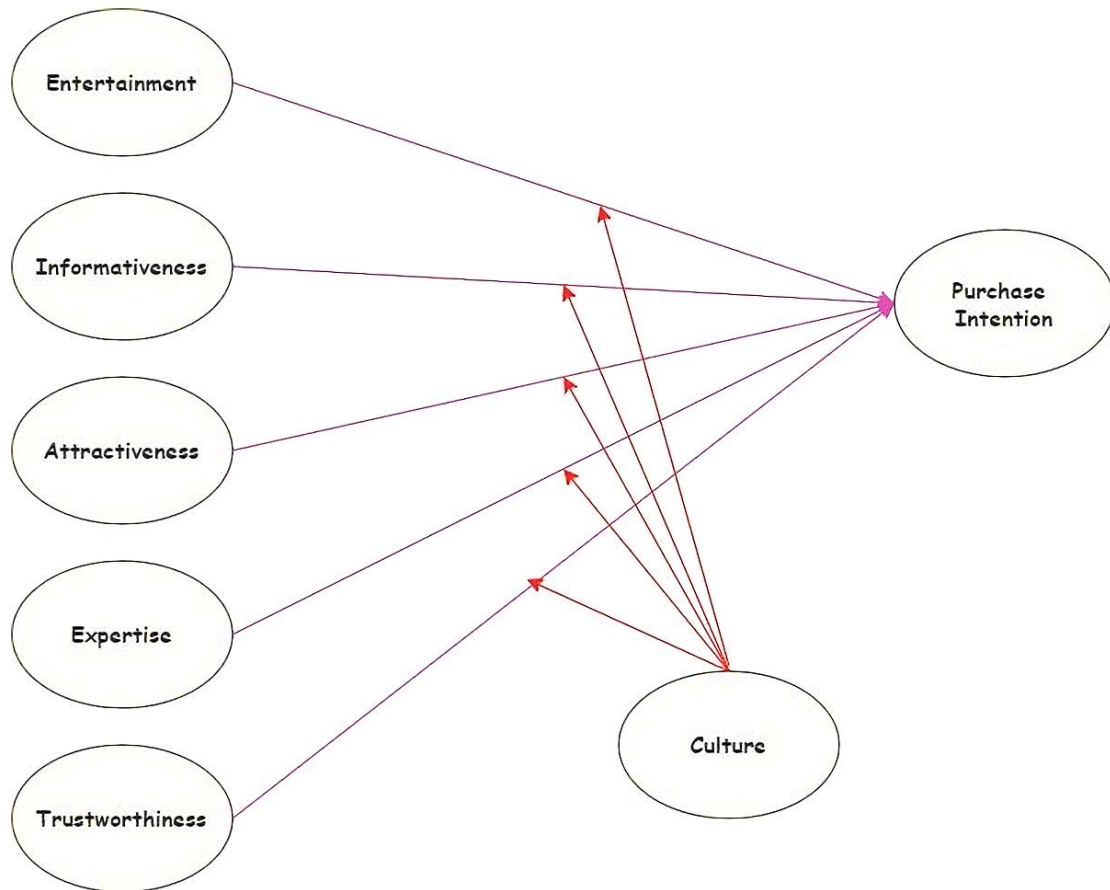


Figure 1. Conceptual Framework of the Study

3- Methodology

To investigate the live stream shopping behavior in Thailand, the population of the study was the people who had watched promotional live stream videos for products and services online. A representative sample was selected from which the data was collected. Since there was no definite sampling frame for this study population, the non-probability sampling design was applied. Additionally, judgmental sampling was applied because there was a requirement that the respondents would have to meet certain inclusion criteria before they could fully participate in the study.

The study used primary data collected from the respondents using a questionnaire. The questionnaire was structured to contain closed-ended questions. The questions adopted a 5-point Likert scale, ranging from 1 = strongly disagree, to 5 = strongly agree. The questionnaire was divided into several sections, where the first section was the demographic section, and the second one was the measurement of items sections. The questions included in the demographic sections collected data on respondents' age, gender, and other personal facts about the respondents. The latent variables of the study were measured using various items as follows: entertainment measured with five items, informativeness measured with (five items), attractiveness measured with four items), expertise measured with five items), trustworthiness measured with five items, and purchase intention measured with four items). The latent variables measurement items were adopted from various sources [31, 43-45]. The items were modified to fit this research. The latent variables, measurement items, and their sources are presented in Table 1.

Table 1. Latent Variables and Measurement Items

Latent Variables	Measurement Item	Sources
Entertainment		
ET1	It is entertaining to watch videos which promotes or sells a product or a service	[31, 43-45]
ET2	I find it fun to watch videos that are selling or promoting a product or a service	
ET3	I find it exciting to watch videos that are selling or promoting a product or a service	
ET4	I have a lot of enjoyment when I watch videos that are selling or promoting a product or a service	
ET5	I find it enjoyable to interact with people promoting products or services using live videos	

Informativeness		
IF1	I am attracted to the live-stream video where the seller of a product or services provides interesting information	
IF2	I prefer live-stream video where the seller of a product or services provides accurate information	
IF3	Product/service information from the live-stream seller that is useful in aiding my shopping decisions is appreciated.	[31, 43-45]
IF4	Timely information is important in live-stream videos that are selling or promoting a product or a service	
IF5	Live-stream sellers should provide products or service information which is useful for decision making	
Attractiveness		
AT1	I might by a product or services promoted by good looking and pretty seller	
AT2	The live-stream sellers that are stylish might lead to purchase	
AT3	I find live stream selling to be attractive	[31, 43-45]
AT4	It is tempting to imitate the look of a live-stream seller	
AT5	Products and services sold by an attractive live-stream seller are appealing	
Expertise		
EX1	The live-stream seller is aware and informed about their products and services well	
EX2	The live-stream sellers are experts in their products and services they sell	
EX3	It is evident that the live-stream seller has mastered the art of live-stream selling	[31, 43-45]
EX4	The live-stream seller seems to have great experience with products and services they sell	
EX5	The live-stream seller must have researched extensively regarding their products or services	
Trustworthiness		
TS1	I believe that the live-stream sellers are sincere about their products and services	
TS2	I believe that the live-stream seller does not lie or exaggerate about the product or service	
TS3	I trust that the live-stream seller will not give information that he/she does not know well	[31, 43-45]
TS4	I trust the live-stream seller will talk reasonable and vividly about his/her products	
TS5	I believe the live stream seller will present his/her thoughts and opinions regarding her products	
Purchase Intention		
PI1	I would buy a products or service promoted by live-stream seller	
PI2	I am probably going to recommend the products or service promoted by live-stream seller	
PI3	I would not hesitate to provide information for products or service promoted by live-stream seller	[31, 43-45]
PI4	I have a high probability of purchasing a product or service being advertised by live-stream seller	
PI5	I am willing to buy a product or service from a live-stream seller	
Culture		
CL1	I prefer live-stream sellers that are from my cultural background	
CL2	Cultural affiliation would influence my live-stream shopping behavior	
CL3	Cultural related live stream is usually attractive to me	[5, 42]
CL4	Live-stream promotions sometimes seems attractive when shopping	
CL5	I prefer live-stream videos which are displayed in my culture while doing online shopping	

4- Results

4-1- Descriptive Statistics

The first analysis of the research was the descriptive statistics, which evaluated the demographic characteristics of the respondents. Considering the age variable, the majority of respondents were those between 31 and 40 years of age (34.59%), followed by those between 41 and 50 years of age (21.08%). Then they were followed by those who were 18–20 years old (13.51%), and those over 60 years old were the least (8.38%). Considering the education of the respondents, the majority were those with a bachelor's degree or professional qualifications (50.3%), followed by those with a diploma or advanced diploma (33%). The other descriptive statistics is the occupation of the respondents, where the self-employed were the highest (35.1%), the second-largest occupational category was 28.6%, followed by those who were employed (21.9%), and lastly, the unemployed (14.3%). These results are summarized in Table 2.

Table 2. Descriptive Statistics

Variables	Frequency (n)	Percent (%)
Age		
18-20 Years	50	13.51
21-30 Years	37	10
31-40 Years	128	34.59
41-50 Years	78	21.08
51 – 60 Years	46	12.43
Above 50 Year	31	8.38
Education		
Primary / Secondary school	19	5.1
Diploma / Advanced diploma	122	33
Bachelor's degree / Professional qualification	186	50.3
Master / PhD degree	43	11.6
Occupation		
Employed	81	21.9
Self employed	130	35.1
Students	106	28.6
Unemployed	53	14.3

4-2- CFA Analysis and Model Evaluation

The reliability of the model was evaluated using Cronbach's alpha and factor and convergent reliability (CR). The Cronbach's alpha was used to measure internal consistency, which is, how closely related a set of items are as a group (Table 3). The results ranged from 0.718 to 0.927, which ranged from acceptable to excellent. The CR also evaluated the internal consistency of the variables, which ranged from 0.83 (high) to 0.886 (high). The required threshold for Cronbach's alpha and CR should be above 0.70 [39, 40]. The construct validity of the model was evaluated using average variance extracted (AVE) and factor loadings. According to Hair et al. (2003, 2010) [47, 48], the required threshold for the two measurements is 0.50. The construct validity was evaluated to determine the ability of the measurement items to reflect the latent constructs [46]. The AVE results ranged from 0.512 to 0.608 while the factor loadings ranged from 0.633 to 0.807. These thresholds have been satisfied, which confirms the validity and reliability of the model.

Table 3. CFA analysis and Model Evaluation

Paths	Factor loadings	CR	AVE	Cronbach's alpha
Informativeness		0.839	0.512	0.892
IF1 → IF	0.633			
IF2 → IF	0.716			
IF3 → IF	0.78			
IF4 → IF	0.733			
IF5 → IF	0.707			
Entertainment		0.886	0.608	0.718
ET1 → ET	0.79			
ET2 → ET	0.807			
ET3 → ET	0.784			
ET4 → ET	0.782			
ET5 → ET	0.734			
Expertise		0.857	0.547	0.892
EX1 → EX	0.729			
EX2 → EX	0.755			
EX3 → EX	0.806			
EX4 → EX	0.765			
EX5 → EX	0.633			

Attractiveness				0.858	0.547	0.927
AT1	→	AT	0.742			
AT2	→	AT	0.803			
AT3	→	AT	0.715			
AT4	→	AT	0.733			
AT5	→	AT	0.701			
Trustworthiness				0.861	0.553	0.891
TS1	→	TS	0.728			
TS2	→	TS	0.73			
TS3	→	TS	0.804			
TS4	→	TS	0.747			
TS5	→	TS	0.707			
Performance Intention				0.879	0.592	0.859
PI1	→	PI	0.771			
PI2	→	PI	0.745			
PI3	→	PI	0.807			
PI4	→	PI	0.802			
PI5	→	PI	0.719			

The Confirmatory Factor Analysis (CFA) was carried out to determine the fitness of the proposed conceptual framework. The fitness indices evaluated using CFA were the goodness of fit index, adjusted goodness of fit index, comparative fitness index, normed fit index, and root mean square of approximation. Table 4 shows these fit indices and their threshold, as proposed by scholars [49-51].

Table 4. Confirmatory factor analysis (CFA)

	PCMIN/DF	GFI	AGFI	NFI	CFI	TLI	RMSEA
	2.293	0.902	0.867	0.918	0.920	0.928	0.059
Required Threshold	<3.0	>0.9	>0.80	>0.9	>0.9	>0.9	<0.08
Decision on threshold satisfaction	Satisfied	Satisfied	Satisfied	Satisfied	Satisfied	satisfied	satisfied

Note: df=degrees of freedom; GFI=goodness of fit index; AGFI adjusted goodness of fit index; CFI=comparative fitness index; NFI=normed fit index; RMSEA=root mean square of approximation.

4-3- Hypothesis Evaluation and SEM Analysis

The hypotheses of the study were evaluated by conducting structural equation modelling, to determine the relationship between the study's constructs (Table 5 and Figure 2). The findings of the study indicated that the coefficient of the path between entertainment and purchase intention was positive and significant ($\beta = 0.376$, $p < 0.01$), which confirmed hypothesis 1 (H1) that entertainment has a significantly positive relationship with purchase intention for products and services sold using live stream. Numerous empirical studies have established a positive correlation between entertainment and the intention to purchase. Expanding and refining theories about affective media consumption motives have become a recent trend. These align with the findings by Hsu et al. (2020) [9].

The path coefficient between informativeness and purchase intention was also positive and significant ($\beta = 0.095$, $p < 0.05$), which confirmed hypothesis 2 (H2) that informativeness has a significantly positive effect on the purchase intention of products and services sold through live streaming. Chan et al (2021) [31] codify this in their finding that consumers choose certain media because they require data and information, and the media is renowned for supplying facts in response to this requirement. However, the path coefficient between attractiveness and purchase intention was negative and insignificant ($\beta = -0.041$, $p < 0.05$) which led to the rejection of hypothesis 3 (H3). This negates Wu and Shaffer's (1987) [34] stance that consumers will be more likely to accept information if it comes from an attractive source since appearance plays a big part in convincing customers to make a purchase choice.

The results also indicated that the path coefficients between expertise and purchase intention were positive and significant ($\beta = 0.165$, $p < 0.05$) which confirmed hypothesis 4 (H4) that expertise has a significantly positive relationship with purchase intention. The results support Ren's (2020) [35] assertion that clients are more influenced by the information provided by established live-stream vendors. It serves as a gauge of the communicator's skill during the live stream. Such an ideology must have the cognitive legitimacy and stated compassion of the message users as well as the comprehension and understanding of the communicators.

The path coefficient between trustworthiness and purchase intention is positive and significant ($\beta = 0.623$, $p < 0.05$) confirming hypothesis 5 (H5) that trustworthiness has a significantly positive relationship with purchase intention. The findings corroborate Wongkitrungrueng and Assarut's (2020) [13] view that consumer trust in vendors increases as a result of consumer trust in offerings, which ultimately positively influences the customers' purchase intentions. The last analysis was to evaluate the moderating effect of culture on the effect of independent variables (entertainment, informativeness, attractiveness, expertise, and trustworthiness) on purchase intention. The results showed that all the path coefficients of the interaction between independent variables and culture on purchase intention are not significant. This indicated that culture did moderate the effects of independent variables on purchase intention. As a result, hypothesis 6 (H6) was not supported.

Table 5. Hypothesis Evaluation and SEM Analysis

	Paths			Estimate	S.E.	C.R.	P
Direct Effects							
H1	ET	→	PI	0.376	0.036	10.310	***
H2	IF	→	PI	0.095	0.037	2.581	**
H3	AT	→	PI	-0.041	0.029	-1.398	.162
H4	EX	→	PI	0.165	0.039	4.193	***
H5	TS	→	PI	0.623	0.058	10.762	***
Moderating effects							
	AT*CL	→	PI	0.008	0.02	0.407	0.684
	IF*CL	→	PI	0.029	0.024	1.209	0.226
H6	EX*CL	→	PI	-0.045	0.026	-1.72	0.085
	TS*CL	→	PI	-0.038	0.026	-1.486	0.137
	ET*CL	→	PI	0.035	0.031	1.126	0.26

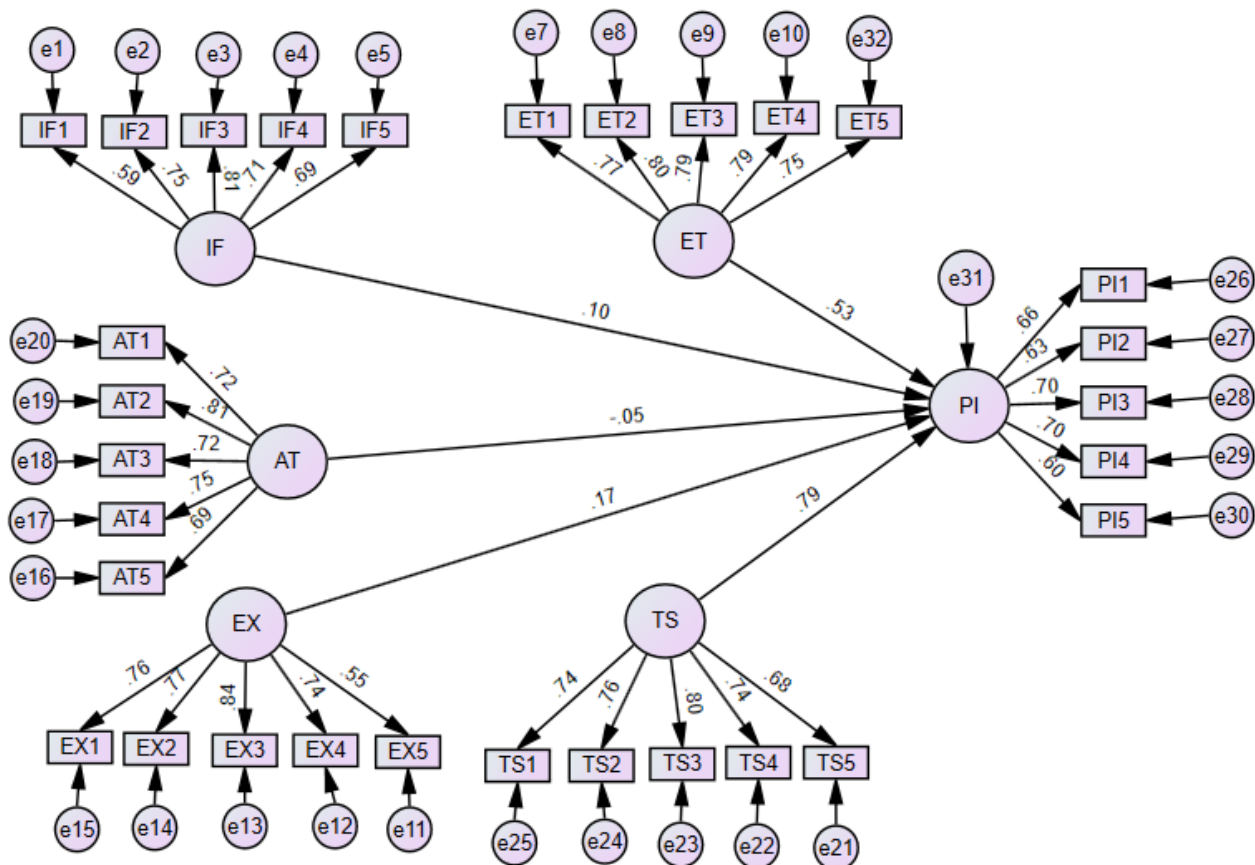


Figure 2. Hypothesis Evaluation and SEM Analysis

5- Discussions

This study examined factors that drive live streaming shopping behavior among shoppers. The researcher showed the relationships between live streaming attributes and the influence they have on trustworthiness and intentions to purchase. The purpose of this research was to investigate the key factors that drive live-stream shopping behavior in Thailand. Among the five factors examined (entertainment, informativeness, attractiveness, expertise, and trustworthiness) on purchase intention, trustworthiness was found to have the highest effect on purchase intention. A positive increase in the trustworthiness of the live stream would result in an increase in purchase intention. The factors of trustworthiness considered included sincerity, non-exaggeration, correct information, reasonable talk, correct thoughts, and opinions. The study findings revealed how live stream shopping behavior is positively associated with entertainment, informativeness, expertise, and trustworthiness, and that they influence purchase intentions. Product attractiveness was, however, found to be negatively associated with live stream shopping behavior. The overall results showed that trustworthiness had the most effect on the intention to purchase. These were in line with previous results from scholars such as Hye Park and Stoel (2002) [38], who indicated that many people worry about the trustworthiness of the products and services sold online. However, if the trustworthiness of the people selling these products and services could be verified, then their willingness to purchase them would increase [41]. Reyson (2005) [39] also indicated that trustworthiness is a critical aspect before accepting information displayed online. Customers most often will be willing to shop from brands that put out live stream content that they trust and relate to their idiosyncrasies.

The second factor that had the highest effect on purchase intention was entertainment. The finding that entertainment and live stream shopping have a significant positive influence on shoppers' intention to purchase is consistent with the reviewed literature [9, 28–30]. The results indicated that if entertainment increases by one unit, purchase intention increases by 0.376. The aspects of entertainment include fun, enjoyment, interaction with people, and excitement in watching live-stream, which implies that the inclusion of these factors could improve purchase intention of the products and services promoted through live-stream shopping. The findings were supported by De Oliveira and Huertas (2015) [29], who indicated that entertainment creates an atmosphere that establishes positive interconnectivity between the user and the product or service. Similarly, Musa et al. (2015) [30] stated that entertainment stimulates the user's emotions, resulting in pleasure or satisfaction, which in turn influences the purchase behavior of the customer. This has been amplified to a great extent by the digital era of social media today; there are a plethora of live streaming platforms depending on the brand and the product they are offering. YouTube is primarily for video content and was the leader in terms of live streaming in the early and mid-2000s. They are rivalled currently by the social media giant Facebook, and also Instagram, and more recently, TikTok, with a younger audience. These platforms together are used by brands to market their products and services.

In addition to the above findings, the informativeness of the information shared on live-stream promotional shopping was found to have a significant and positive influence on the purchase intention of the concerned products and services. The results indicated that a one-unit increase in informativeness would result in a 0.095 increase in the purchase intention of the concerned products and services. These findings were in agreement with those of Chan et al. (2021) [31], and Gogan et al. (2018) [32], who indicated that informativeness makes a practical contribution toward awareness of a product or service and offers insights and understanding that influence the perceptions and behavioral intentions of the targeted consumers. The more information about an offering, the greater the intention to purchase the product or service by the audience of the live stream. Thus, brands running live streams will ensure they put out as much information as possible to build brand trust and assuage any fears that may be entertained by potential customers. Customers are searching continuously for offerings that tick all the boxes in terms of solving a need. Creating and understanding, as inferred by Gogan et al. (2018) [32], entails leaving no room for doubt in the minds of the customers.

The expertise of the people conducting live-stream promotion was also found to have a significant influence on purchase intention. The aspects of expertise considered significant in influencing purchase intention included awareness of the live-stream promoters, their expertise, the extent to which they have mastered the art; their level of experience; and the level of research they have conducted. These results were supported by Hovland et al. (1953) [36], who were of the view that expertise is among the critical factors that improve the credibility of the promoter. Similarly, Senecal and Nantel (2004) [37] supported these findings by indicating that live-stream shopping promoters who exhibit a particular level of expertise on the products and services they sell tend to have a significant and persuasive influence on the consumer's attitudes and behavioral intentions towards these products or services. Expertise aligns with the ability to be informed about an offering; only an expert can authoritatively provide the much-needed information that can convince an undecided customer into making a purchase. Expertise positively correlates with the ability to be assertive and provide information based on experience in the field of operation. Your capacity to persuade and influence customers will affect their intention to purchase. Customers are more likely to believe a live-stream salesperson who is perceived as an expert on the product than a salesperson who lacks expertise and credibility. Many customers can easily identify this after a few minutes into the live stream, and this can negatively impact the purchase intention.

Though this study found that the attractiveness of the seller promoting a product or service does not have a significant influence on purchase intention, it contradicted the findings of Wu and Shaffer (1987) [34], whose research indicated that attractiveness plays an important role in the persuasion process of consumers. In this case, the customers may be more concerned about the function of what is being offered compared to its physical appearance. Attractiveness may, however, affect certain categories of products like fashion, automobiles, or the smartphone market. While these may be beyond the scope of this study, it is a field worth exploring whether the attractiveness of live streaming products in the fashion industry, automobile sector, or smartphone market will influence the purchase intention of consumers in these fields. For brands offering IT solutions, attractiveness will play little or no function because clients may be more interested in the service being offered than in the physical attributes of the service. Also, offerings that are mostly B2B tend to have less emphasis on attractiveness, while products and services that are B2C may tend to be more influenced by attractiveness. The live-stream purchase decision is a subject of the information consumed by an individual [25]. It is also important to mention here that the cultural affiliation of the respondents did not have an effect or interfere with how other aspects of live-stream shopping influenced purchase intention. It has been shown by Ma (2021) [4] that culture may lead to situations where people may promote experiences that align with their beliefs. The findings, however, reveal that this may not be the case as culture has little influence on the purchase intentions of live stream shoppers in Thailand.

5-1- Implications and Contributions

This research has both theoretical and practical implications. The study and understanding of live stream shopping are still developing. This research about live stream shopping behavior adds to the growing body of knowledge in the field of internet social commerce. From the theoretical perspective, the study has contributed to the Gratifications Theory and the Source Credibility Theory. This study developed a model that combined the two theories to understand the influence of live streaming on customers' intention to purchase the offering of the live stream. The extended theory is important in explaining the aspects of live-stream shopping from a broader perspective. Secondly, the culture variable was incorporated into the model as a moderating variable, which brought about the cultural variations in the aspect of live-stream shopping. Considering the practical implications, this study has several contributions and recommendations for the management, stakeholders, and marketers that consider using live-stream marketing as a way to promote their products and services. The first recommendation is that the trustworthiness of the live-stream shopping marketing should be emphasized. An increase in the trustworthiness of the live stream would result in an increase in purchase intention. The factors of trustworthiness considered included sincerity, non-exaggeration, correct information, reasonable talk, correct thoughts, and opinions. Secondly, entertainment aspects should be included in the live stream as it creates an atmosphere that establishes positive interconnectivity between the user and the product or service. Displaying expertise is also important as it leads to a significant and persuasive influence on the consumer's attitude, behavioral intention, as well as their actual behavior towards these products or services. Lastly, the live stream should be as informative as possible because it makes a practical contribution towards awareness of a product or service and offers insights and understanding that influence the perceptions and behavioral intentions of the targeted consumers.

5-2- Conclusions and Limitations

This research investigated the variables that affect consumers' live-streaming shopping behavior in Thailand. The researcher demonstrated the association between live streaming characteristics and their impact on consumer trust and buying inclinations. Trustworthiness was found to have the greatest impact on purchase intention of the five criteria (entertainment, informativeness, attractiveness, expertise, and trustworthiness). The likelihood of making a purchase would rise if the live stream's credibility increased favourably. Sincerity, lack of exaggeration, accurate facts, fair speaking, accurate thoughts, and correct viewpoints were among the trustworthy factors taken into account. The survey's conclusions showed that live streaming shopping behavior is positively correlated with entertainment, information, expertise, and trustworthiness and that these factors affect consumers' purchase intentions. From this study, several conclusions could be drawn regarding the key factors that drive live-stream shopping behavior in Thailand. Firstly, based on the findings of the research, four factors influence live-stream shopping behavior in Thailand. These are entertainment, informativeness, expertise, and trustworthiness. Among these factors, the factor that was found to have the highest influence on the purchase intention behavior as a result of live-stream shopping marketing was trustworthiness. The second was entertainment, then expertise, and lastly informativeness. Therefore, it was recommended that the aspects that should be considered important by live-stream shopping promoters include sincerity, non-exaggeration, correct information, reasonable talk, and correct thoughts and opinions. As well, it is important to consider entertaining the targeted customers in an atmosphere that establishes positive interconnectivity between the user and the product or service. Expertise factors should also be considered, such as how the sellers have mastered the art, their level of experience, and the level of research they have conducted. Future studies should consider testing the influence of attractiveness on specific industries like fashion, automobiles, computers, and smartphone markets, to ascertain if attractiveness will play any role in influencing customers' behavioral purchase intentions in the particular industry. The limitation of this research is that the data used in the analysis were collected from Thailand, and therefore the results may be limited to this country. Future studies could consider generalizing the results to other countries.

6- Declarations

6-1- Data Availability Statement

The data presented in this study are available on request from the corresponding author.

6-2- Funding

The author received no financial support for the research, authorship, and/or publication of this article.

6-3- Institutional Review Board Statement

The study was conducted in accordance with the Declaration of Helsinki and approved by the Ethics Committee of the King Mongkut's Institute of Technology Ladkrabang.

6-4- Informed Consent Statement

Not applicable.

6-5- Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the author.

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