

THE INFLUENCE OF ANCHOR CHARACTERISTICS ON CONSUMER PURCHASE INTENTION IN E-COMMERCE LIVE BROADCAST

¹Zimei Sun and ²Guowei Hua

¹Panyapiwat Institute of Management, Thailand

²Beijing Institute of Technology, China

¹736554824@qq.com

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Abstract

In recent years, with the development of internet technology and the widespread use of mobile devices, live streaming has become popular worldwide and gradually integrated into people's daily lives. Existing research in the academic field has found that the study on host characteristics is not comprehensive enough and lacks systematic quantification of host characteristics. Therefore, this study aims to delve into the mechanisms by which host characteristics in e-commerce live streaming influence consumers' purchase intention, which has both theoretical and practical significance. Drawing on the S-O-R model, this paper explores the mediating role of perceived value between e-commerce host characteristics and consumers' purchase intention, as well as the moderating effect of innovation adoption tendency. To achieve this goal, a survey questionnaire was designed using established scales from previous studies and distributed to the target population in the form of an online survey. Subsequently, the collected data was statistically analyzed using SPSS software, and the research model and hypotheses were tested and validated based on the analysis results. The research findings indicate that perceived value mediates the relationship between host interactivity, professionalism, and popularity, and consumers' purchase intention, with innovation adoption tendency playing a moderating role. Therefore, hosts should shape their own unique style of live streaming that aligns with their own characteristics, consumer demands, and product features.

Keywords: Live Streaming, Anchor Characteristics, Perceived Value, Innovation Adoption Tendency, Purchase Intention

Introduction

In recent years, with the development of internet technology and the widespread use of mobile devices, live streaming has become popular worldwide and gradually integrated into people's daily lives. The e-commerce model has evolved from traditional online shopping to live streaming shopping, profoundly influencing consumers' shopping behavior and experience. In 2022, the total transaction volume of live streaming e-commerce in China reached

¹Chinese Graduate School, Panyapiwat Institute of Management, Thailand

²Beijing Institute of Technology, China

approximately 3.5 trillion yuan, accounting for around 23% of the total e-commerce retail sales. In e-commerce live streaming marketing, hosts engage with the audience through diverse interactive methods and share their daily lives in a contextualized manner, showcasing product information and generating strong purchase intentions among consumers. Due to its significant commercial value and development potential, live streaming shopping has become a focus of research in the academic field. Existing research in the field of live streaming mainly focuses on the development of the live streaming industry, and some scholars have conducted empirical studies on host characteristics in live streaming. However, these studies are still limited in depth and lack systematic research. Therefore, this study aims to delve into the mechanisms by which host characteristics in e-commerce live streaming influence consumers' purchase intention, which holds theoretical and practical significance.

The purpose of this study is to uncover the characteristics of hosts (expertise, fame, value-added content) and examine the mediating role of perceived value and the moderating effect of innovation adoption tendency on consumers' purchase intention in the context of e-commerce live streaming. Host characteristics, perceived value, innovation adoption tendency, and purchase intention are explained using the Stimulus-Organism-Response (S-O-R) theory, aiming to explore the stimuli consumers experience in the live streaming e-commerce context and reveal the mediating role of perceived value and the moderating effect of innovation adoption tendency. This study will establish a theoretical model of how host characteristics influence consumers' purchase intention in the e-commerce live streaming context, investigate the relationships between various variables, and validate the data using relevant techniques. Based on the verification results, this paper will provide strategic recommendations to help e-commerce businesses conduct targeted marketing, increase sales, and enhance consumers' purchase intention in the context of live streaming e-commerce.

Literature Review

1. A Review of Research on the Relationship between Host Characteristics and Consumers' Purchase Intention in Live Streaming E-commerce

During the live streaming shopping process, there is a physical separation between consumers and the products, making it impossible for consumers to directly experience the intrinsic quality of the goods. They can only rely on the images and videos displayed in the live streaming room to learn about the products. Therefore, effective communication and interaction between the host and consumers play a crucial role in conveying the intrinsic quality of the products (Han Xiaoyi, 2020). Consumer trust in the host stems from their expertise, which subsequently leads to trust in the products. Therefore, hosts can use their professional knowledge to enable consumers to have a deeper understanding of product quality and other factors. As opinion leaders with a certain level of fame, the endorsement or recommendation of products by live streaming hosts can influence consumers' purchasing behavior. By answering consumers' questions through bullet comments and expressing their own opinions while interacting with consumers, hosts not only provide information about the products but also create a sense of pleasure for consumers, thereby influencing their purchase intention (Liu Yang, 2020). If hosts have a certain level of influence and appeal, the products they recommend will attract more attention, thereby enhancing consumers' perception of social value (Yu Wei, 2009). Currently, the academic community mainly focuses on studying the traits of hosts from the perspective of internet celebrities and opinion leaders. This paper analyzes existing research and the characteristics of e-commerce hosts, who possess both fame and professionalism, as well as interactivity. These characteristics exist independently but jointly influence the inner feelings of consumers. The interactivity of hosts can enhance consumers' sense of participation and experience, while professionalism and fame enable consumers to perceive the credibility and reliability of information, establishing a favorable impression of the host and promoting and strengthening consumers' attention and purchase intention towards the products.

2. A Review of Research on the Relationship between Perceived Value and Consumers' Purchase Intention

Perceived value refers to the cognitive evaluation of the comprehensive benefits and the value of the product or service that consumers perceive in the process of purchasing goods or receiving corresponding services (Zeithaml, 1988). In the context of live streaming e-commerce marketing, the advantages of hosts and diversified content dissemination are fully utilized to enhance customers' multi-faceted perceived value of products or services. Perceived value can be understood as consumers' perception of the value of the goods, that is, the intrinsic value of the products themselves (Baker et al., 2002). Compared to consumer satisfaction, consumers' perceived value of a product or service plays a significant role in their final purchase behavior. Research has shown that consumers' purchase intention is significantly influenced by perceived value (Chen & Dubinsky, 2003). Therefore, this study considers perceived value as a preceding factor influencing consumers' purchase intention.

3. Purchase Intention

According to Dodds et al. (1991), purchase intention refers to the subjective likelihood of consumers making a purchase choice after gaining knowledge about a product. In general, the stronger the desire to purchase, the easier the actual purchase process becomes. Typically, the stronger the purchase intention of consumers, the higher the likelihood of actual purchase. Purchase intention of consumers is influenced by external stimuli, reflecting their attitudes towards the product and indicating their inclination to choose to purchase the product. It can also be used to predict whether they will make a purchase decision. Some scholars argue that purchase intention of consumers reflects this possibility and indicates a high likelihood of future purchase of a particular product or service (Meng and Liu, 2020).

4. A Review of Consumer Innovation and its Influence on Consumer Behavior

Consumer innovation is of significant importance in understanding consumer decision-making and market behavior. Numerous studies have shown a significant relationship between consumer innovation and the purchase behavior of new products. Midgley and Dowling (1993) found that consumer innovation has a significant impact on the purchase behavior of new products in the fashion industry. Zou Bo (2011) discovered that the purchase intention of post-80s consumers for smartphones is positively influenced by their consumer innovation. These studies indicate that consumer innovation can drive consumers to be more proactive in purchasing new products. Liu Jianxin (2020) found that consumer innovation has a positive impact on purchase behavior. Apart from its influence on the purchase behavior of new products, consumer innovation also affects other consumer behaviors. Chang Yaping's (2011) study revealed that consumer innovation significantly influences consumers' online shopping behavior. This suggests that consumer innovation can affect consumers' shopping habits and behavior patterns. Therefore, when studying consumer behavior, it is necessary to consider the influence of consumer innovation on different consumer behaviors. Additionally, consumer behavior is influenced by a range of other factors, such as income level, cultural background, and social environment. Gatignon and Robertson (1985) found that consumers with higher income levels are more inclined to adopt new products. This indicates that an individual's income level can influence their acceptance of new products. Thus, it is evident that there is a complex relationship between consumer innovation and consumer behavior. Although many studies have shown a positive impact of consumer innovation on the purchase behavior of new products, further research is still needed to validate the relationship between the two.

5. Theoretical Framework

The S-O-R (Stimulus-Organism-Response) theory originated in the field of psychology. Liu Qiuting (2023) applied the S-O-R model in the analysis of marketing activities and proposed the "Belk S-O-R" model. Based on the S-O-R model and the theory of perceived value, the study explores the influence mechanism of anchor characteristics on consumers' purchase intention in live-streaming e-commerce, with perceived value as the mediating variable and purchase intention as the response. Based on this, the theoretical

framework shown in Figure 1 is proposed.

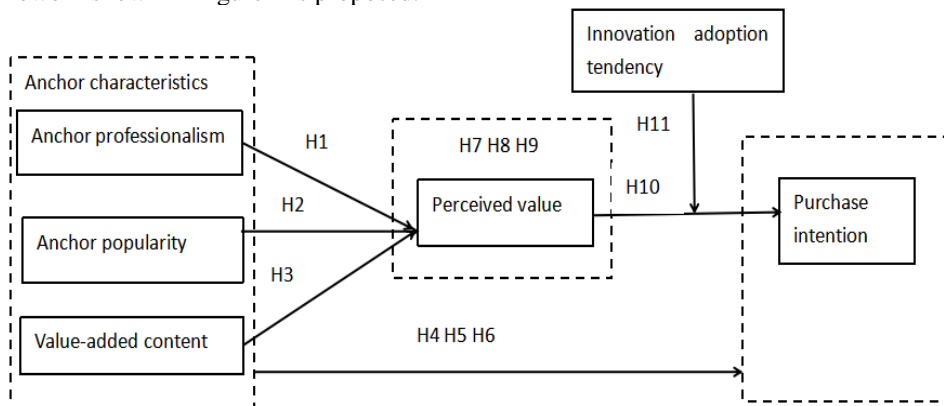


Figure 1: Theoretical model of the influence of anchor characteristics on consumers' purchase intention in e-commerce livestreaming

In addition, this study includes key variables that may influence the anchor characteristics in the context of e-commerce livestreaming, such as consumer's purchase intention, age, gender, education level, occupation, income, and frequency of watching livestreams per month.

Research Methods

To provide a comprehensive explanation of the research questions, this study employs a combination of multiple research methods.

1. Literature Review

A thorough review of relevant literature is conducted, particularly focusing on high-quality journals in both Chinese and English languages. The literature review covers topics such as e-commerce livestreaming, anchor characteristics, consumers' purchase intention, perceived value theory, and the S-O-R model framework. This review serves as a theoretical foundation for the subsequent research.

2. Survey Method

A survey questionnaire is designed based on the proposed theoretical model and previous research. The questionnaire is distributed to participants to collect data. The survey method allows for the collection of empirical data from consumers, enabling the testing of hypotheses proposed in this study.

3. Statistical Analysis

The collected data is analyzed and processed using statistical software such as SPSS. Statistical analysis is conducted to explore the relationships among variables and to evaluate the support for the proposed hypotheses. This analysis helps validate the rationality of the theoretical framework.

By employing these research methods, this study aims to provide a comprehensive and robust understanding of the influence of anchor characteristics on consumers' purchase intention in e-commerce livestreaming.

Research Findings

1. Research Hypothesis

1.1 Hypotheses about the relationship between anchor expertise, perceived value, and purchase intention.

Anchor expertise refers to the perception of consumers regarding the anchor's provision of professional guidance and information about the products or services during the livestream. When an anchor demonstrates expertise during a livestream, consumers are more likely to perceive them as authoritative in the specific domain, which increases their liking for the anchor and stimulates their purchase intention. Based on previous literature, it is suggested that the anchor's demonstrated expertise in the product or service during the livestream enhances consumers' trust in the anchor and affects their purchasing behavior. Based on these analyses, the following research hypotheses are proposed:

Hypothesis H1: Anchor expertise positively influences perceived value.

Hypothesis H4: Anchor expertise positively influences purchase intention.

1.2 Hypotheses about the relationship between anchor popularity, perceived value, and purchase intention.

The popularity of an anchor is mainly reflected in factors such as the number of fans and the achievements of the anchor. The prerequisite for attracting viewers' attention is the anchor's high popularity. In the process of livestream shopping, consumers are unable to physically experience and evaluate the products. Therefore, the anchor's popularity becomes an important influencing factor in the decision-making process of whether to make a purchase. Anchors with higher popularity can enhance the perceived value for consumers to a certain extent, thereby promoting the formation of purchase intention for the products or services. Based on these analyses, the following hypotheses are proposed:

Hypothesis H2: Anchor popularity has a positive influence on perceived value.

Hypothesis H5: Anchor popularity has a positive influence on purchase intention.

1.3 Hypotheses about the relationship between value-added content, perceived value, and purchase intention.

The impact of value-added content on purchase intention can be achieved by increasing audience engagement and enhancing the quality of their experience. The perceived value of the value-added content directly influences their purchasing decisions. Through perceived value, the audience is more likely to appreciate the value-added content provided during the livestream, leading to a positive perception of the anchor or brand, and translating this positive perception into substantial purchase behavior. The mediating role of perceived value allows the audience to approach the value-added content more rationally and make more informed purchasing decisions. Research by Xie Ying (2019) suggests that the presence of others during livestream marketing induces emotional arousal in viewers, influencing their behavior and promoting consumption. Research by Qin Xuebing (2018) indicates that in virtual software platforms like WeChat, the sense of social presence plays a crucial role in users' acceptance of advertising content. The stronger the sense of social presence, the more receptive users are to things. The majority of research findings suggest that value-added content in livestreaming services significantly influences consumer purchasing behavior. Based on these analyses, the following hypotheses are proposed:

Hypothesis H3: Value-added content has a positive influence on perceived value.

Hypothesis H6: Value-added content has a positive influence on purchase intention.

1.4 Hypotheses about the mediating role of perceived value.

The purpose of this study is to explore in-depth the factors that influence consumers' purchase intention and their underlying mechanisms. The aim is to elucidate the pathways through which these influencing factors impact purchase intention. Within this framework, the concept of perceived value is introduced as a mediating variable that facilitates the impact of these influencing factors on purchase intention. Specifically, this study focuses on various influencing factors such as anchor interactivity, anchor expertise, and anchor popularity, which may directly or indirectly influence consumers' purchase intention. Furthermore, this study posits that perceived value plays a crucial role as a mediator between these influencing factors and purchase intention. Through the perception of value, consumers experience the differential value that anchors bring during the livestream, which in turn influences their purchase intention. Based on these analyses, the following hypotheses are proposed:

Hypothesis H7: Perceived value mediates the relationship between anchor interactivity and consumers' purchase intention.

Hypothesis H8: Perceived value mediates the relationship between anchor expertise and consumers' purchase intention.

Hypothesis H9: Perceived value mediates the relationship between anchor popularity and consumers' purchase intention.

1.5 Hypothesis about the relationship between perceived value and purchase intention.

While watching livestreams online, consumers acquire information about products or services through anchor introductions, product demonstrations, and other interactive means. If consumers perceive high value in the product or service, believing that it meets their needs and will provide a positive user experience, they are more likely to lean towards purchasing that product or service. The perceived value obtained by consumers through the anchor is found to influence their purchase intention, as evidenced by research in livestream marketing. This suggests that after perceiving the value offered by the anchor, consumers are more likely to make purchase decisions within a relatively short period of time and under limited rational considerations. Based on these analyses, the following hypothesis is proposed:

H10: Perceived value has a positive impact on purchase intention.

1.6 Research Hypotheses on Innovation Adoption Tendency and Consumer Purchase Intention

There is a significant amount of research indicating that consumer innovativeness has a significant impact on the purchase behavior of new products. Adjei and Clark (2010) found that consumer innovativeness greatly influences purchasing behavior. Midgley and Dowling (1993) demonstrated the impact of consumer innovativeness on purchase behavior in the fashion industry. Midgley and Dowling (1978) proposed that consumer innovativeness is a key variable influencing consumer adoption of innovation. Gatignon & Robertson (1985) explored the influence of demographic factors, such as income, on the adoption of new products and found that consumers with higher income exhibit higher levels of adoption behavior. Wang Zhengpei (2018) conducted research from the perspective of expectancy theory to investigate the relationship between consumer innovativeness and willingness to participate, and the results indicated that consumers with strong innovativeness are more likely to desire and accept new products compared to others. Based on the above analysis, the following hypothesis is proposed:

H11: The tendency to adopt innovation has a moderating effect on consumer purchase intention.

2. Research Design

2.1 Measurement of Variables

In this study, mature scales with good reliability and validity were selected based on a review of relevant literature in the field. Likert's five-point measurement scale was employed for measurement, where "1" represents strongly disagree and "5" represents strongly agree. This scoring method helps consumers choose the items on the scale according to their own situations, thereby accurately reflecting their attitudes and opinions. The specific scales are presented in Table 1 below.

Table 1 Scales for Each Variable

Variable	Code	Measurement Dimensions	Measurement Basis
Host Professionalism	HP1	During the live broadcast, the host possesses professional knowledge in their respective field.	Li, Q., et al. (2020)
	P2	During the live broadcast, the host has skills or expertise in the relevant field.	
	P3	During the live broadcast, the host has authority in the relevant product domain.	
	P4	During the live broadcast, the host has extensive experience with using the recommended products in the relevant field.	

Variable	Code	Measurement Dimensions	Measurement Basis
Host Recognition	R1	The host of the livestream has a large number of loyal followers who trust and believe in them.	Yan, X., et al. (2021)
	R2	The host of the livestream has a good reputation and is considered reliable by the viewers.	
	R3	The host of the livestream has achieved certain accomplishments within their own industry.	
Value-Added Content	AC1	During the process of watching the livestream, I feel relaxed and joyful.	Han, Z., et al. (2023)
	AC2	During the livestream, I can learn some new knowledge and information.	
	AC3	The interactive process of watching a livestream gives me a sense of breakthrough and companionship beyond physical space.	
Perceived Value	V1	Shopping through live streaming on e-commerce platforms, I feel that the money spent is well worth it.	Zeithaml(1988) 、 Dodds(1991)
	V2	I find shopping through live streaming on e-commerce platforms to be enticing.	
	V3	I feel that shopping through live streaming on e-commerce platforms is cost-effective.	
Purchase Intention	I1	After watching the live stream, I would consider purchasing the product.	Park& Lin(2020)
	I2	After watching the live stream, I would recommend the product to my family and friends.	
	I3	When I have a need, I am willing to make a direct purchase in the live streaming room.	
	I4	For the same product, I prefer to make the purchase in the live streaming room.	
	I5	In the future, I will rely more on watching e-commerce live broadcasts to make product purchases.	
Innovation Adoption Tendency	AT1	I am willing to gather more information about new products.	E. M. Rogers、 F. F. Shoemaker (1971)
	AT2	If there is a new product on the market, I am very interested in purchasing it.	
	AT3	When it comes to purchasing a product, there is a higher likelihood that I would choose to buy a new product.	
	AT4	If someone asks for my opinion on a new product, I would recommend it to them.	

2.2 Sample and Data Collection

The survey was conducted using the platform QuestionStar for questionnaire creation and distribution. A pilot test was carried out before the formal research, with a total of 60 completed questionnaires collected. The test results showed good reliability and validity of the questionnaire design, leading to the final version of the survey. A total of 305 questionnaires were collected in this survey, and after sorting and screening, 247 valid questionnaires remained, resulting in a questionnaire validity rate of 80.98%. The collected data was analyzed using statistical software such as SPSS 26.0 and Excel to test the theoretical hypotheses proposed earlier.

The distribution of the sample is shown in Table 2. It is evident that there were more female consumers than male consumers. This aligns with the fact that the majority of online live shopping consumers are female. In terms of age distribution, consumers aged 18-40 accounted for the largest proportion, which is consistent with the statistical report by CNNIN indicating that the highest proportion of internet users falls between the ages of 20 and 39. Regarding education level, the survey covered consumer groups with different levels of education, showing a reasonable distribution. This is in line with the characteristics of live e-commerce consumers and the high proportion of working professionals among them. The reasons for this may be that, on one hand, students generally have lower income but higher consumption frequency in live e-commerce compared to consumers with an income range of

1001-2000. On the other hand, in the case of working professionals, higher income corresponds to higher consumption capacity in the live e-commerce market, and the proportion of monthly viewership by consumers during live broadcast hours is approximately the same. In summary, the respondents who had a higher frequency of viewing, better educational background, and certain income foundation fit the specific categories of this survey, ensuring the authenticity and reliability of the data.

Table 2 Descriptive Statistics of Sample Characteristics

Population Demographic Characteristics	Category	Frequency	Percentage (%)	Cumulative percentage (%)
Gender	Male	105	42.51	42.51
	Female	142	57.49	100
Age	18-25	58	23.48	23.48
	26-30	108	43.72	67.21
	31-40	63	25.51	92.71
	41-50	17	6.88	99.6
	51 or above	1	0.4	100
Education level	High school/vocational school and below	7	2.83	2.83
	Associate degree	11	4.45	7.29
	Undergraduate degree	201	81.38	88.66
	Graduate degree and above	28	11.34	100
Occupation	Student	54	21.86	21.86
	Employees of state-owned enterprises and public institutions	150	60.73	82.59
	Employees of private enterprises	29	11.74	94.33
	Freelancers or self-employed individuals	10	4.05	98.38
	Others	4	1.62	100
Income	1000 yuan or below	25	10.12	10.12
	1001-2000 yuan	3	1.21	11.34
	2001-4000 yuan	32	12.96	24.29
	4001-5000 yuan	74	29.96	54.25
	5001 yuan or above	113	45.75	100
Frequency	1-4 times	37	14.98	14.98
	5-8 times	70	28.34	43.32
	9-12 times	84	34.01	77.33
	13 times or above	56	22.67	100
Total		247	100	100

Empirical analysis

1. Reliability and Validity Testing of Scales

The collected data in this study were analyzed for reliability using the SPSS statistical analysis software, and the results are shown in Table 3. The overall reliability of the questionnaire in this survey, as indicated by Cronbach's Alpha coefficient, is 0.967. The Cronbach's Alpha coefficients for each variable are all above 0.7, indicating good reliability and internal consistency of the variables in the questionnaire. Additionally, confirmatory factor analysis was performed for each variable, as shown in Table 3. The factor loading for the variable "Value-Added Content" is 0.539, slightly lower than the other variables, but still within a reasonable range and effectively explains the latent variable. Overall, the composite reliability (CR) for all variables exceeds 0.7, and the average variance extracted (AVE) is also above 0.5, indicating better aggregation effects of the questionnaire.

Table 3 Reliability and Convergent Validity Testing Results

Variable Name	Item Number	Factor Loading	Cronbach Alpha Coefficient α	CR	AVE
Host Professionalism(HP)	HP1	0.77	0.874	0.878	0.646
	HP2	0.82			
	HP3	0.789			
	HP4	0.57			
Host Recognition(HR)	HR1	0.595	0.848	0.785	0.549
	HR2	0.689			
	HR3	0.687			
Value-Added Content(VAC)	VAC1	0.539	0.782	0.863	0.678
	VAC2	0.798			
	VAC3	0.754			
Perceived Value(PV)	PV1	0.675	0.85	0.851	0.655
	PV2	0.698			
	PV3	0.638			
Purchase Intention(PI)	PI1	0.629	0.936	0.938	0.751
	PI2	0.734			
	PI3	0.691			
	PI4	0.648			
	PI5	0.643			
Innovation Adoption Tendency(IAT)	IAT1	0.788	0.892	0.83	0.55
	IAT2	0.791			
	IAT3	0.795			
	IAT4	0.761			

The discriminant validity of this questionnaire is shown in Table 4. In analyzing discriminant validity, the square root of Average Variance Extracted (AVE) for Professionalism is 0.804, for Prominence is 0.823, for Added Value Content is 0.741, for Innovation Adoption Tendency is 0.742, for Perceived Value is 0.809, and for Purchase Intention is 0.867. Each variable's AVE square root is greater than the correlation coefficient between each variable and other variables. Overall, the results of the sample's discriminant validity testing are good.

Table 4 Discriminant validity: Pearson correlations and squared root of AVE

	HP	HR	VAC	IAT	PV	PI
HP	0.804					
HR	0.554	0.823				
AVC	0.487	0.597	0.741			
IAT	0.641	0.585	0.67	0.742		
PV	0.614	0.572	0.671	0.857	0.809	
PI	0.642	0.688	0.678	0.788	0.759	0.867

According to Model 2 in Table 6, it can be concluded that the professionalism of anchors has a significant positive impact on perceived value ($\beta=0.127$, $p=0.010<0.01$), thus supporting hypothesis H1. Anchor popularity also shows a significant positive impact on perceived value ($\beta=0.156$, $p=0.000<0.01$), hence supporting hypothesis H2. The impact of value-added content on perceived value is also significant ($\beta=0.259$, $p=0.000<0.01$), thus supporting hypothesis H3. According to Model 4 in Table 6, it can be seen that the

professionalism of anchors has a significant positive effect on purchase intention ($\beta=0.119$, $p=0.000<0.01$). Therefore, hypothesis H4 is supported. Anchor popularity has a positive impact on purchase intention ($\beta=0.346$, $p=0.000<0.01$). Therefore, hypothesis H5 is supported. Value-added content positively affects purchase intention ($\beta=0.230$, $p=0.000<0.01$). Thus, hypothesis H6 is supported.

2. Mediation Analysis

In this study, the traditional three-step mediation regression analysis method was employed to examine the mediating effect of perceived value. In the first step, a regression model was constructed between the independent variable and the dependent variable, which is purchase intention. Then, in the second step, a regression model was built between the independent variable and the mediator variable, which is perceived value. Finally, in the third step, the independent variable, mediator variable, and dependent variable were all included to construct a regression model. Table 7 presents the results of the analysis.

Table 5 Mediation effect test

Variable	Model 1	Model 2	Model 3
Gender	-0.216**	-0.071	-0.065
Age	0.032	0.047	0.050
Education level	-0.115	-0.064	-0.054
Occupation	0.238	0.103	0.096
Income	0.082	-0.107	-0.015
Frequency	0.341**	0.099*	0.091
HP		0.119*	0.101*
HR		0.346**	0.324**
VAC		0.230**	0.194**
PV			0.141**
R^2	0.254	0.613	0.622
Adjusted R^2	0.236	0.595	0.603
F value	13.631***	33.894***	32.144***
ΔR^2	0.254	0.359	0.009
* $p<0.05$ ** $p<0.01$			

From Table 7, it can be observed that in Model 3, after incorporating perceived value, it shows significance ($\beta=0.141$, $p=0.000<0.01$), indicating that perceived value has a positive impact on purchase intention. Therefore, H10 is supported. Perceived value exhibits a significant association between anchor professionalism and purchase intention ($\beta=0.101$, $p=0.000<0.01$), indicating that perceived value plays a mediating role between anchor professionalism and purchase intention. Thus, H7 is supported. Perceived value shows significance between anchor popularity and purchase intention ($\beta=0.324$, $p=0.000<0.01$), indicating that perceived value acts as a mediator between anchor popularity and purchase intention. Hence, H8 is supported. Perceived value exhibits significance between value-added content and purchase intention ($\beta=0.111$, $p=0.194<0.05$), suggesting that perceived value plays a mediating role between value-added content and purchase intention. Therefore, H9 is supported. In summary, H7, H8, H9, and H10 are all supported.

4. Moderation effect test

The moderation effect on innovation adoption tendency in this study is conducted in two steps. The first step involves the centralization of the independent variable and moderator variable to eliminate collinearity issues between variables. The second step employs hierarchical regression, where the control variables of gender, age, education, occupation,

income, and monthly live streaming viewing frequency are sequentially entered into the model, followed by the independent variable of perceived value and the interaction term of perceived value multiplied by innovation adoption tendency, to test the significance level of the interaction effect. The specific details are presented in Table 8.

Table 6 Moderation effect test

Variable	Model 1	Model 2	Model 3
Gender	-0.123*	-0.052	-0.014
Age	0.052	0.116*	0.053
Education level	-0.061	-0.066	-0.044
Occupation	0.177	0.052	0.005
Income	0.007	-0.055	0.100
Frequency	0.166**	0.154**	0.138**
PV	0.495**	0.379*	0.357**
IAT		0.328**	0.310**
PV*IAT			0.281**
R ²	0.447	0.524	0.593
Adjusted R ²	0.431	0.508	0.577
F value	27.640***	32.764***	38.299***
ΔR^2	0.447	0.007	0.068
* $p < 0.05$ ** $p < 0.01$			

From the above table, it can be seen that the moderation effect is divided into three models. Model 1 includes the independent variable (perceived value) and six control variables: gender, age, education level, occupation, income, and monthly frequency of watching live broadcasts. Model 2 adds the moderating variable (innovation adoption tendency) to Model 1, and Model 3 adds the interaction term (product of the independent variable and moderating variable) to Model 2.

For Model 1, the main objective is to study the impact of the independent variable (perceived value) on the dependent variable (purchase intention) without considering the interference of the moderating variable (innovation adoption tendency). From the table, it can be observed that the independent variable (perceived value) shows a significant effect on the dependent variable (purchase intention) ($\beta = 0.495$, $p = 0.000 < 0.05$). This indicates that perceived value has a significant impact on purchase intention, confirming hypothesis H11. Further analyzing from Model 2 to Model 3, the significance of the change in F-value; the interaction term between the independent variable (perceived value) and the moderating variable (innovation adoption tendency) also shows significance ($\beta = 0.281$, $p = 0.009 < 0.05$). This suggests that the moderating variable (innovation adoption tendency) has a significant impact at different levels on the influence of perceived value on purchase intention.

Discussion

With the emergence of live-streaming e-commerce in the public eye, people have started to make purchases in live broadcast rooms. Traditional e-commerce platforms like Taobao and JD have also added live-streaming features, while existing live-streaming platforms like Douyin and Kuaishou are integrating e-commerce resources and adding purchasing functions, further catalyzing the development of live-streaming e-commerce. Although some scholars have begun to study the impact of e-commerce anchors'

characteristics on consumers' purchase intention, there are still certain shortcomings in related research, especially in the systematic analysis of anchor characteristics. Therefore, based on the relevant literature review and synthesis of previous studies, this research constructs a theoretical model with anchor professionalism, anchor popularity, and value-added content as independent variables, perceived value as the mediating variable, purchase intention as the dependent variable, and innovation adoption tendency as the moderating variable. The aim is to further investigate the impact of anchor characteristics on consumers' purchase intention and discuss the relationship and underlying mechanisms among the variables. Subsequently, this research adopts a survey questionnaire and uses SPSS tool to analyze the collected data, in order to validate the relevant hypotheses and draw conclusions based on the analysis.

Summary and Recommendations

1. Research Conclusion

1.1 Discussion on the Impact of Anchor Characteristics on Perceived Value and Purchase Intention

The empirical results indicate that the professionalism of anchors has a positive effect on the hypothesis of perceived value (H1) and purchase intention (H4), both of which have been validated. This suggests that anchors, while demonstrating their professionalism in constantly enhancing perceived value, also influence their own purchase intention and possess professional skills and qualities that enable consumers to perceive the value of the products. Additionally, the popularity of anchors also has a positive effect on the hypotheses of perceived value (H2) and purchase intention (H5), which have been validated. Therefore, it can be concluded that to some extent, anchors with a large number of fans enable consumers to perceive the expected value of the products, thereby generating purchase intention. Furthermore, the hypothesis of value-added content impacting perceived value and purchase intention (H3 and H6) has been validated. This indicates that consumers, in addition to the products themselves, also obtain additional content in live broadcasts, which influences their perceived value and positively affects purchase intention. In summary, the results suggest that anchor characteristics, including professionalism, popularity, and value-added content, have significant impacts on both perceived value and purchase intention. This highlights the importance of anchors in shaping consumers' perceptions and intentions to purchase in live broadcast settings.

1.2 Discussion on the Impact of Perceived Value on Purchase Intention and the Mediating Effect

According to the empirical research data, the hypothesis H10 has been validated. It shows that the change in perceived value during the process of watching live broadcasts of network e-commerce plays a decisive role in consumers' purchase behavior. Moreover, the hypothesis H7, which suggests the mediating effect of perceived value between anchor professionalism and consumer purchase intention, has been validated. This means that consumers' purchase intention is enhanced due to the perceived richness of anchor's professional knowledge. The mediating effect of perceived value between anchor popularity and consumer purchase intention, which verifies the hypothesis H8, is also significant. Additionally, perceived value acts as a mediator between value-added content and consumer purchase intention, validating the hypothesis H9. This implies that for products recommended by well-known anchors, consumers perceive higher value and are more likely to make purchases.

1.3 The tendency of innovation adoption has a moderating effect on consumer purchase intention

The empirical results indicate that in live streaming e-commerce, the tendency of innovation adoption is a key factor that moderates consumer purchase intention. The degree of acceptance of novel and innovative live streaming services directly influences consumers' purchase decisions. The tendency of innovation adoption manifests as consumers' sensitivity

and enthusiasm towards new technologies, services, or experiences. When consumers have a higher tendency of innovation adoption, they are significantly more willing to try and accept products with novel elements and innovative features in live streaming services.

2. Theoretical Contribution

(1) This study systematically enriches the factors influencing consumers' purchase intention in live streaming e-commerce. By exploring the impact of anchor professionalism, anchor popularity, and value-added content on perceived value, this research provides in-depth insights into the formation mechanism of perceived value in live streaming e-commerce, thus revealing the cognitive process of users in their purchase decisions.

(2) This study deeply explores the relationships between various elements in live streaming e-commerce, expanding the theoretical framework with perceived value as a mediating variable and the tendency of innovation adoption as a moderating variable. This provides strong theoretical support for live streaming platforms to formulate more accurate and targeted strategies and enhance users' purchase intention.

3. Ractical Implications

Firstly, live streaming e-commerce anchors should continuously improve their professionalism and product knowledge to ensure accurate and professional introductions and recommendations during live broadcasts. Secondly, live streaming e-commerce platforms should cultivate celebrity anchors to enhance their popularity. In the process of live streaming sales, products recommended by well-known IP anchors are given priority consideration by viewers, and some even make purchases directly. In some cases, fans may purchase products solely based on the popularity of the anchor in the live stream. Lastly, anchors should share practical life tips and habits related to the products in the live stream, breaking down the distance between themselves and consumers.

4. Limitations and Future Directions

Firstly, the sample of this study is limited. The geographical sources of the sample cover various regions across the country, and cultural beliefs and consumer habits in different areas may influence the survey results. Therefore, the conclusions of the study may be difficult to generalize to different backgrounds and groups in the context of live streaming. Secondly, there are limitations in tracking and analyzing long-term effects in this study. It may only reflect the short-term purchase intention of consumers, while their perception of anchor characteristics may change over the long term. Lastly, the impact of e-commerce anchor characteristics on consumers' purchase intention is not solely determined by perceived value and may be influenced by other factors. This is a complex process that cannot be solely attributed to perceived value. In addition, the study did not thoroughly analyze the interaction effects between innovation adoption tendency and other independent variables. In future research, it would be beneficial to analyze the differences among different groups of innovation adoption tendencies, which may further enrich the research findings.

References

- Baker J, Parasuraman A, Grewal D, et al. The influence of multiple store environment cues on perceived merchandise value and patronage intentions[J]. *Journal of marketing*, 2002, 66(2): 120-141.
- Chen, Z., & Dubinsky, A. J. (2003). A conceptual model of perceived customer value in e-commerce: A preliminary investigation. *Psychology & Marketing*, 20(4), 323-347.
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of marketing research*, 28(3), 307-319.
- Han, X., & Xu, Z. (2020). The impact of e-commerce anchor attributes on consumers' online purchase intention. *Foreign Economics & Management*, 42(10).
- Li, Q., Gao, X., Xu, X., et al. (2021). Research on information processing and purchase intention of e-commerce live streaming viewers. *Journal of Management Sciences*,

- (6), 895-903.
- Liu, Q., (2023). The impact of anchor characteristics and live room features on consumers' purchase intention in e-commerce live streaming. *Modernization of Market*, (04), 63-67.
- Liu, Y., Li, Q., Yin, M. (2020). Research on the influence of characteristics of online live shopping on consumer purchasing behavior. *Soft Science*, 6, 108-114.
- Meng, L., Liu, F. (2020). Can I arouse you? The impact mechanism of different types of live streaming influencers' information source characteristics on consumers' purchase intention. *Nankai Business Review*, (1), 131-143.
- Park, H. J., & Lin, L. M. (2020). The effects of match-ups on the consumer attitudes toward internet celebrities and their livestreaming contents in the context of product endorsement. *Journal of Retailing and Consumer Services*, 52.
- Yan, X., Dong, Y., Zhang, M., et al. (2021). The impact of live stream selling on consumer purchasing behavior: The mediating role of perceived value. *Price Theory and Practice*, (6), 137-140.
- Zeithaml V A. Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence[J]. *Journal of marketing*, 1988, 52(3): 2-22