

Abstract

The digital economy's advancement has given rise to the prevalence and efficacy of live streaming in e-commerce, establishing it as a prominent marketing strategy in the realm of online shopping. This marketing method overcomes the shortcomings of traditional offline marketing and is not limited by time, place, and space. It greatly improves consumers' shopping experience and at the same time becomes very important in effectively promoting product sales. Through live broadcasts, consumers can understand products more intuitively and participate in live-streaming interactions. During the interaction process, they will follow the characteristics of the anchor, form positive consumer emotions, generate purchasing intentions, and then promote purchasing journey. This study sets three variables: live streaming interaction, product attributes and purchase intention. Through quantitative analysis and 385 questionnaire survey results, it was found one thing that personalization of live-streaming interaction can allow consumers' problems to be solved in a targeted manner, the responsiveness of live-streaming interaction can improve consumer satisfaction, and the entertainment of live-streaming interaction can solve consumer problems, get targeted solutions. Promote active participation of consumers. The reciprocity of interactive activities and live-streaming interactions can promote the sharing of shopping experiences between anchors and consumers, consumers and other consumers, and is conducive to impulse buying behavior and improve purchase behavior and customer journey.

Keywords: live-streaming interaction, product attributes, purchase intention, customer journey

1. Introduction

The basic characteristic of online shopping is virtuality. Basically, the entire purchasing activity occurs online. Merchants list products based on the shopping platform, display specific pictures and information of the products, and consumers complete the purchase through online inquiries and comparisons. Since there are no physical goods, consumers cannot directly touch the goods on site to feel the quality, so the quality is sometimes not guaranteed. This is also the reason why some consumers do not trust online shopping. Even if they can consult online customer service for product details, it still gives people a sense of distance (Ma, G. D., Li, X., & Hu, M. H. 2024). Providing consumers with accurate, fast and comprehensive information display methods can improve consumer decision-making efficiency is a problem that merchants and shopping platforms have been thinking about and working hard to solve. It was not until the rise and application of online live-streaming technology that the e-commerce information display market was broken deadlock. The year 2016 is the "first year of online live streaming in China".

In this year, online live streaming has emerged with a surge (Dong, F. 2020). Enterprises have begun to delve into various vertical fields of online live streaming. E-commerce, sports, games, education, finance and other industries have tried live-streaming. The commercial live-streaming model has naturally attracted the attention of relevant companies. In January 2016, Mogujie launched first live shopping function, followed closely by e-commerce companies such as Taobao, Suning, JD.com, and Pin duo duo. At the same time, short video platforms represented by Kuai shou and Dou yin, Tencent Video, and AiQiyi the traditional video platform represented by China Mobile has also begun to deploy the live-streaming industry, spawning a group of amateur anchors, which has greatly improved its richness as a content platform (Xi, M. M., & Liu, P. 2023). Since 2017, for e-commerce, the scale of live streaming is expanding rapidly. With the advent of the Infectious Disease (COVID-19) epidemic in 2020, the actual virus outbreak has hit hard. This year has been a year of rapid growth for live e-commerce. Affected by the epidemic, offline consumption has been hindered, and online consumption has become the mainstream of consumption.

According to data from QuestMobile in China, the number of users of e-commerce live-streaming in 2020 has reached 411 million, an increase of 21.8% over the same period last year. Among them, live-streaming sales reached 961.9 billion yuan, Compared with the same period last year, it increased by 129.6% (Li, L. J. 2023). During the first six months of the year, the country witnessed over 10 million e-commerce live broadcasts, with 400,000 active anchors engaging a staggering audience of over 50 billion viewers. Additionally, the inventory of products available on shelves surpassed 20 million items. In the first half of the year, the sales of the top 50 anchors reached 97.2 billion yuan, showing a good development trend of live streaming. Evidently, e-commerce live-streaming has emerged as a significant segment within China's e-commerce landscape. In 2021, the user base and sales of e-commerce live streamings will continue to grow. According to data from Quest Mobile, during the first half of 2021, China's e-commerce live-streaming user base expanded to 445 million, marking an 8.5% increase from the previous year. Simultaneously, live-streaming sales surged to 2.15 trillion yuan, representing a yearly growth of 22.1% (Huang, S., Deng, F., & Xiao, J. (2021). In addition, some new trends have also emerged in 2021, such as short video live-streaming, social e-commerce, etc. These emerging formats have presented fresh opportunities for the further progress and development of live streaming in e-commerce. In 2022, the e-commerce live-streaming market will reach 3,487.9 billion yuan, a year-on-year increase of 48%, nearly 26 times that of 2018.

In 2023, the market size of China's live-streaming e-commerce is expected to hit 4.9 trillion yuan; the growth rate compared to the previous year was 35.2%. Using Taobao Live as an illustrative example, the annual

content consumption users will reach 860 million yuan, the user scale will grow by 44% year-on-year, and the monthly turnover will exceed one million. There are 12,000 live-streaming rooms. This underscores the substantial expansion and evolution the e-commerce live-streaming industry has undergone in recent times(Zhang, Z. H., Xu, H., & Liu, C. 2023). Over the past few years, live streaming in e-commerce has emerged as a pivotal component of China's e-commerce market, exhibiting immense potential for future growth and development. As user consumption habits and technology continue to change, e-commerce live streaming will continue to innovate and bring better experiences and effects to merchants and consumers.

The live streaming platform has fostered a new means of social interaction, centered around the engaging dialogue between anchors and their audience, and it has also become one new way for merchants to promote their products. Live streaming shopping has become a craze in the Chinese market, and major e-commerce platforms have also joined the live streaming shopping army. In live-streaming, well-interactive live-streaming rooms are more attractive to consumers. Whether online or offline, consumers are committed to buying cost-effective products, and consumers who have impulse buying intentions while watching live-streaming are more likely to place orders, which shows that the level of engagement between the anchor and their audience, the attributes of the live-streaming product, and the consumer's purchase intention when watching the live-streaming will all have an impact on customer journey(Ming, M. M. 2021).

In the current market environment, companies need to constantly innovate marketing methods to attract consumers' attention and increase sales. As a new marketing method, live streaming has been adopted by more and more companies (Liu, T. Y. 2023). However, how to improve the effectiveness of live-streaming and attract more consumers to participate has become a problem that companies need to solve. Therefore, this study analyzes the interactivity, the relationship between products and consumers from three aspects: personalization, responsiveness, entertainment and mutual assistance of live-streaming; product price, product quality and product functions; product characteristics, live-streaming platform functions and anchor characteristics. It helps to explore the impact of live streaming interaction, product attributes and purchase intentions on customer journey, and provides companies with suggestions for improving interactive marketing is a new type of marketing method, which is characterized by attracting consumers' attention and increasing sales through interaction (Yang, Y., Sun, G., & Tao, X. 2020). However, the current research on interactive marketing is still relatively weak, and more research is needed to explore its influencing factors and effects. Therefore, this study is anticipated to make valuable contributions to the research of interactive marketing to a certain extent and provide reference for the development of interactive marketing.

Objectives of the Study - This study explored live streaming interaction, product attributes and purchase intention on purchase behavior, and provide a basis for e-commerce companies to improve customer journey in buying products (Yi, B. J.2022). Specifically, this paper assessed the effectiveness of live-streaming interaction in terms of personalization, responsiveness, entertainment, and mutual assistance; described product attributes in terms of product price, product quality, and product functions; determined the purchase intention in terms of product features, live-streaming platform functions, and anchor characteristics; tested the significant relationship between live streaming interaction, product attributes, and purchase intention and developed a framework to improve Customer Journey in buying products.

2. Methods

Research Design - This study adopted a descriptive research design. Descriptive research design is a research method used to describe the distribution characteristics of specific groups of people, phenomena or variables. It can be quantitative or qualitative and can accurately analyze the research results. explain. Habon et. al. (2019) argue that descriptive methods are appropriate tools for researchers seeking to discern common processes across diverse populations and their respective practices. Rahi (2017) believes that the descriptive method is a research strategy designed to gather data on the present situation and pertinent details of a subject

being studied and can conduct specialized data collection for specific groups of people in order to carry out quantitative analysis. The researcher endeavored to gather information by administering a questionnaire and disseminating it to the participants. This form of descriptive research facilitates the efficient collection of data from the respondents. This study collects data through participant observation and questionnaires to explore the impact of live interaction, product attributes, and purchase intention on customer journey. Use questionnaires to collect data, conduct qualitative and quantitative analysis of the questionnaires collected by the system, and use appropriate tools for verification. Using the form of scoring the questionnaire objects as the basis for measurement, a small-scale pre-test was first passed, and the questionnaire was finally formed after multiple revisions and arguments based on the pre-test results. This design has proven to be effective in obtaining information from respondents.

Participants of the Study - This study involved 395 questionnaires that were disseminated online; the interviewed individuals were consumers who had a certain willingness to purchase and had experience watching e-commerce live-streaming. Respondents were selected based on a random sample from five provinces in China (Jiangsu, Anhui, Shandong, Guangdong, and Qinghai), with each province containing 77 respondents. As stated by Sharma (2017), sampling methodologies are suitable for selection when it is not possible to test all individuals in terms of time, cost, convenience. As a result, the researcher opted to utilize convenience sampling in this study primarily due to the availability, willingness, and accessibility of the participants (Etikan et al., 2016).

Data Gathering Instrument - The questionnaire underwent validation and approval processes specific to the requirements of this study. After being approved, researchers first conducted trial runs in some provinces; 30 respondents were randomly selected for reliability statistics, and the results showed that their Cronbach's Alpha value was above 0.90. According to the reliability statistics, the questionnaire is good and excellent and can be further distributed. This measure guaranteed the questionnaire's consistency and reliability prior to its distribution to the study's participants. Through questionnaire surveys, we can understand the impact of live-streaming interaction, product attributes and purchase intention on customer journey, and find relevant influencing factors and relationships. The researcher provided a link to the questionnaire in hard copy and questionnaire star form to provide options to the respondents. The questionnaire has three variables in total, which are evaluated from three aspects: live-streaming interaction, product attributes and purchase intention. This study is based on Likert scale and follows the principle of multi-item measurement, with no less than 5 questions set for each dimension (Hu, M., & Chaudhry, S. S. 2020). Numbers 1-4 indicate the respondent's level of agreement with the question item. The higher the number, the more consistent the respondent's views are with the question content. Specific Likert scale: 1 - Strongly disagree, 2 - Disagree, 3 - Agree, 4 - Strongly agree. Reliability monitoring results show that the Cronbach α of live interaction (0.947), product attributes (0.949), and purchase intention (0.939). These findings suggest that the items exhibit strong internal consistency.

Data Gathering Procedure - Thesis data collection procedure is a key link to ascertain that the research process is scientific, systematic and reliable. First, the researcher clarified the research purpose and questions to ascertain the extent of the research data collection process. After the paper is approved, the first step is to obtain authorization from the organization and other approval departments to ensure that the procedures are reasonable and scientific. Then, first conduct a pre-study to check the consistency of the questionnaire. Questionnaires can be distributed on site or through the Wenjuanxing platform. Upon completion of the preliminary research, the pre-survey results will be sorted out. If they meet the reliability test, a formal survey will be carried out. The formal survey distributed and collected questionnaires through the "Questionnaire Star" platform. The researcher Invited consumers from different provinces to participate in the survey by publishing survey links on multiple live shopping platforms (Huang, H. 2023). On the premise of ensuring the time for the paper, sufficient time was given to the interviewees to ensure that the questionnaires are all thought and argued. Moreover, this questionnaire was conducted in an anonymous form, and the interviewees' information was not disclosed. The data collected was used for academic research only. Additionally, all content underwent rigorous double-checking to safeguard the precision of our results. Since this study involves three variables, this study

used quantitative analysis to analyze the data through questionnaire results.

Ethical Considerations - While conducting the research, ethical considerations was diligently observed to uphold the quality and integrity of the study, it is ensured that all collected information is strictly used for research purposes only. Prior to the commencement of the survey, the researcher actively sought the explicit approval from the participants to uphold their voluntary engagement and protect their privacy (Huang, S., Deng, F., & Xiao, J.2021). The questionnaire responses in this study were anonymous to safeguard the confidentiality of the participants. During the questionnaire, participants were advised that the questionnaire they fill out will solely be utilized for academic research purposes and will not be exploited for any commercial endeavors. If participants would have any questions or discomfort when filling out the survey, at any point during the survey, they had the option to withdraw their participants. At the same time, this research strictly abided by ethical principles to ensure that no harm would be caused to participants during the research process.

Data Analysis - This article employs the statistical analysis software, SPSS, to examine and interpret the collected data. It first conducts descriptive statistical analysis, then conducts reliability and validity testing, then conducts correlation analysis, and finally conducts regression analysis. Descriptive statistical analysis is to collect statistics on the gender, age, education, disposable income, occupation, and whether they have purchased goods in the e-commerce live-streaming room in the past year, etc., to initially understand the basic characteristics of the audience (Gong, X. 2021). Reliability testing measures the reliability and stability of data to measure whether the questionnaire items measure the same concept. This article selects Cronbach's α value as the indicator for reliability testing. If the Cronbach's α value exceeds 0.7, it means that the reliability of the data has passed the test. Validity testing is a test of whether the data truly reflects the content being investigated. Correlation analysis is to measure the correlation between variables. This article selects Pearson coefficient for correlation analysis. Regression analysis is to measure the correlation of variables based on correlation analysis. It further measures the significance level and standard coefficient, determine the causal relationships and strength of effects between variables. Weighted averages and rankings were used to evaluate the personalization, responsiveness, entertainment, mutual assistance, etc. of live-streaming interactions; describe product attributes from product price, product quality, product functions, etc.; describe product characteristics, live-streaming platform functions, anchor characteristics, etc. Measure purchase intention. The Shapiro-Wilk test yielded p-values less than 0.05 for all variables, indicating a deviation from normal distribution in the dataset. Consequently, Spearman's rho was employed as a nonparametric statistical measure to assess significant associations. All analytical procedures were executed utilizing the SPSS software package.

3. Results and discussion

Table 1

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Key Result Areas	Composite Mean	VI	Rank
Personalization	3.10	Agre	3.5
Responsiveness	3.10	Agre	3.5
Entertainment	3.15	Agre	1
Mutual Assistance	3.14	Agre	2
Grand Composite Mean	3.12	Agre	

Summary Table on Live-streaming Interaction

Legend: 3.50-4.00=Strongly Agree; 2.50-3.49=Agree; 1.50-2.49=Disagree; 1.00-1.49=Strongly Disagree

Table 1 lists the summary table of live-streaming interactions. The average item value is 3.12, and verbal interpretation means agreement. The mean score for entertainment is 3.15, ranking first, verbal explanation is consent, followed by mutuality, with an average value of 3.14, and then personalization and responsiveness, with a weighted average of 3.10. The results show that entertainmen", mu'ual assistance, personalization and responsiveness directly affect live interaction, and the key to the effectiveness of interaction lies in entertainment. Personalization means that during the live-streaming process, the anchor can provide corresponding services or products according to consumer needs, pay attention to consumers' different needs in a timely manner, provide

professional information or give personalized discounts, which can enhance consumers' sense of identity and make it easier to Make consumers purchase intention.

Responsiveness refers to the anchor's response speed to various consumer questions, the relevance of the reply content, the results of the reply questions, and the attitude and atmosphere during the communication process. Response speed and quality will directly affect further live interaction and purchase interest with consumers. Entertainment means that the live-streaming process can bring a sense of relaxation and pleasure to consumers, interesting activities and various forms of explanations or introductions, making consumers very willing to participate in the interaction and feel the happy atmosphere, thereby generating purchase intention. Mutual help means that during the live-streaming process, consumers can help each other or share valuable information and shopping experiences, and then influence their own decisions through sufficient communication.

The findings show that personalization, responsiveness, entertainment and mutuality all influence live interaction. If companies want to achieve higher sales, they must pay more attention to the entertainment of live-streaming during e-commerce live-streaming, attract more consumers who are willing to participate in live-streaming activities, and have deeper interactions with anchors and other consumers. Not only it can help consumers understand the goods or services but also make it easier for consumers to generate emotional identification and trust, thereby enhancing purchase intention and generating customer journey.

Table 2

Key Result Areas	Composite Mean	VI	Rank
Product Price	3.12	Agree	2
Product Quality	3.10	Agree	3
Product Functions	3.16	Agree	1
Grand Composite Mean	3.13	Agree	

Summary Table on Product Attributes

Legend: 3.50-4.00=Strongly Agree; 2.50-3.49=Agree; 1.50-2.49=Disagree; 1.00-1.49=Strongly Disagree

Table 2 shows a summary table of product attributes. The average value of the items is 3.13, which is interpreted verbally as agreement. The average value of product functions is 3.16, ranking first, with verbal explanations indicating agreement, followed by product price, with an average value of 3.12, and product quality, with a weighted average of 3.10.

The results show that product functions, product prices and product quality directly affect product attributes, and the key to product attribute evaluation lies in product functions. Product price means that the product is priced reasonably, is affordable to most people, and is good value for money. This can improve consumers' recognition of the product and make it easier for consumers to have a purchase intention. Product quality means that the product can meet consumer needs, has high cost performance, good overall performance, is consistent with the promotion, and is higher than similar offline products. This can increase consumers' affirmation of product quality and generate purchase intention. Product function means that the product has certain functions and can be displayed. At the same time, the anchor provides a detailed and comprehensive introduction to the product functions, which can enable consumers to fully understand the functions and functions of the product and adjust their purchasing decisions based on psychological expectations. The findings show that product features, product price, and product quality all influence product attributes. If companies want to promote Internet marketing, they must pay special attention to improving product attributes. For example, product functions must be more reasonable and cost-effective, product prices must be proportional to quality, and product quality must start from consumer needs and consider the wishes of consumer groups, during e-commerce live-streaming, anchors should pay more attention to the description of product attributes, especially product functions, which is what consumers are most concerned about. As long as the product has comprehensive functions, reasonable price, and stable quality, it can attract consumers. Thereby enhancing purchase intention and generating customer journey.

Table 3 shows the summary table of purchase intention. The average value of the items is 3.19, and the verbal explanation is agreement. The average value of anchor characteristics is 3.21, ranking first, with verbal explanations indicating agreement, followed by product characteristics and live-streaming platform functions, with average values of 3.18.

Table 3

Summary Table on Purchase Intention

Key Result Areas	Composite Mean	VI	Rank
Product Features	3.18	Agree	2.5
Live-streaming Platform Functions	3.18	Agree	2.5
Anchor Characteristics	3.21	Agree	1
Grand Composite Mean	3.19	Agree	

Legend: 3.50-4.00=Strongly Agree; 2.50-3.49=Agree; 1.50-2.49=Disagree; 1.00-1.49=Strongly Disagree

The results show that product characteristics, live-streaming platform functions and anchor characteristics all affect consumers' purchase intention, and the anchor characteristics play an important role. Product characteristics refer to the performance of the product itself, the design of the product, whether the style is trendy, whether it is suitable for activities, and whether it is the same model as the celebrity. Products with high performance are more likely to attract consumers to purchase. Live-streaming platform functions refer to the functions of the platform where the live-streaming is located, including the platform's simple and reliable payment method, the platform's interface is simple and easy to operate, the platform information security and the platform's products can meet consumer needs and consumers' online shopping habits, etc. What consumers are most concerned about is simple and safe payment and easy-to-operate platform design.

Therefore, optimizing the platform design can increase consumers' willingness to purchase. Anchor characteristics refer to the personality charm of the anchor, such as being professional in products and live streaming, having good interactions, having certain influence and reputation, etc. Consumers like highly professional anchors who can bring professional product interpretations, professional live-streaming experience and relaxed and pleasant shopping atmosphere, so they like the anchors and the products, which in turn generates purchase intention. Research results show that product characteristics, live-streaming platform functions and anchor characteristics will all affect consumers' purchase intention. There is a need to pay more attention to the characteristics of the anchor. An excellent anchor should have rich product knowledge, rich live-streaming experience, pleasant live-streaming interaction and a certain reputation foundation. Only such anchors are more likely to be accepted by consumers and generate purchase intentions.

Table 4

Relationship Between Live-streaming Interaction and Product Attributes

Variables	rho	p-value	Interpretation	
Personalization				
Product Price	0.741**	< .001	Highly Significant	
Product Quality	0.745**	< .001	Highly Significant	
Product Functions	0.734**	< .001	Highly Significant	
Responsiveness				
Product Price	0.807**	< .001	Highly Significant	
Product Quality	0.782**	< .001	Highly Significant	
Product Functions	0.755**	< .001	Highly Significant	
Entertainment				
Product Price	0.796**	< .001	Highly Significant	
Product Quality	0.776**	< .001	Highly Significant	
Product Functions	0.760**	< .001	Highly Significant	
Mutual Assistance				
Product Price	0.838**	< .001	Highly Significant	
Product Quality	0.815**	< .001	Highly Significant	
Product Functions	0.790**	< .001	Highly Significant	

**. Correlation is significant at the level 0.01

As indicated in the table, the calculated rho-values vary between 0.734 and 0.838 suggest a robust to extremely robust direct correlation among the sub-variables pertaining to live-streaming interaction and the attributes of the product. A statistically significant linkage was observed between live-streaming interaction and product attributes which is due to the fact that the derived p-values fell below 0.01.

This implies that product attributes are an important factor in live-streaming interaction. Explaining that improving or optimizing product attributes can promote live-streaming interaction. Product attributes include product price, product quality and product functions, which are the basis for consumers to understand the product, enhance product identity and participate in interactions. Live interaction is the prerequisite for eventual purchase behavior. It is an important way to stimulate consumers' interest, learn more about the product and generate purchase intention. There is a high correlation between product attributes and live-streaming interaction in all dimensions. This finding shows that product attributes are an important influencing factor of live-streaming interaction. Companies that can set reasonable product prices, improve product quality, and optimize product functions are more likely to Retain consumers, meet consumer needs, and promote customer journey. Here are some examples of how companies can enhance live-streaming interaction through product attributes: Companies can lower product prices to entice consumers to shop within the live-streaming room. The company can improve product quality to meet consumer demand while ensuring price stability. Companies can use optimized product features to help consumers fully understand the product and generate purchase intentions. By optimizing product attributes, companies can attract consumers, promote consumers' participation in live-streaming interactions, generate emotional identification, and ultimately achieve customer journey.

Table 5

Variables	rho	p-value	Interpretation
Personalization			
Product Features	0.702**	< .001	Highly Significant
Live-streaming Platform Functions	0.703**	< .001	Highly Significant
Anchor Characteristics	0.693**	< .001	Highly Significant
Responsiveness			
Product Features	0.712**	< .001	Highly Significant
Live-streaming Platform Functions	0.731**	< .001	Highly Significant
Anchor Characteristics	0.731**	< .001	Highly Significant
Entertainment			
Product Features	0.729**	< .001	Highly Significant
Live-streaming Platform Functions	0.782**	< .001	Highly Significant
Anchor Characteristics	0.757**	< .001	Highly Significant
Mutual Assistance			
Product Features	0.745**	< .001	Highly Significant
Live-streaming Platform Functions	0.794**	< .001	Highly Significant
Anchor Characteristics	0.766**	< .001	Highly Significant

Relationship Between Live-streaming Interaction and Product Intention

**. Correlation is significant at the 0.01 level

As indicated in the table, the calculated rho-values fall within the range of 0.693 to 0.794. This signifies a robust direct correlation among the sub-variables of live-streaming interaction and product intention. A statistically noteworthy linkage was established between live-streaming interaction and product intention, as evidenced by the derived p-values being below 0.01. This serves to demonstrate that live interaction is an important factor in purchase intention. It shows that enhancing live-streaming interaction can stimulate consumers' purchase intention. Live interaction includes personalization, responsiveness, entertainment and mutual assistance, which are the premise and basis for forming purchase intention. It can stimulate consumers' desire to buy, increase their enthusiasm for participating in live-streaming activities, and form purchase intentions.

There is a close correlation between all dimensions of live-streaming interaction and purchase intention. This discovery demonstrates that live-streaming interaction exerts a notable influence on consumers' willingness

to buy. Anchors pay attention to consumer needs to provide personalized services, respond to consumer needs in a timely manner, and add live-streaming activities. With fun and adequate communication between consumers, the company is more likely to achieve sales. The following are some examples of how companies can increase consumer purchase intentions through live-streaming interactions: Companies can provide professional training for anchors to enhance their professionalism, provide professional advice more quickly, design diverse and interesting marketing interactive activities, and increase consumer participation degree and enhance consumers' enthusiasm for purchasing. Only by responding to consumer issues in a timely manner and effectively solving shopping queries can we successfully arouse consumer trust and generate purchase intention.

Table 6

Variables	rho	p-value	Interpretation	
Product Price				
Product Features	0.762**	<.001	Highly Significant	
Live-streaming Platform Functions	0.788**	<.001	Highly Significant	
Anchor Characteristics	0.768**	< .001	Highly Significant	
Product Quality				
Product Features	0.793**	< .001	Highly Significant	
Live-streaming Platform Functions	0.847**	< .001	Highly Significant	
Anchor Characteristics	0.781**	< .001	Highly Significant	
Product Functions				
Product Features	0.842**	< .001	Highly Significant	
Live-streaming Platform Functions	0.823**	<.001	Highly Significant	
Anchor Characteristics	0.760**	< .001	Highly Significant	

Relationship Between Product Attributes and Product Intention

**. Correlation is significant at the 0.01 level

The table reveals that the rho-values, ranging from 0.760 to 0.847, suggest a robust to extremely robust direct correlation among the sub-variables of product attributes and purchase intention. There was a statistically significant relationship between product attributes and product intention because the obtained p-values were less than 0.01. This means that product attributes are strong predictors of purchase intention. This means that companies that value product attributes are better able to facilitate the realization of consumers' purchase intentions. This finding is intuitive because product attributes are usually adjusted to attract consumers through price, quality and other factors. For example, a company may make adjustments to a certain aspect of product attributes, such as price, to make the product more in line with consumers' psychological expectations, or to optimize product quality at the same price, or to enrich innovative product features, etc.

These can improve consumer satisfaction and loyalty, and ultimately realize purchase intention, thereby generating customer journey. The following are some specific examples of how product attribute optimization can increase purchase intention: A company makes adjustments to product prices, fully investigate the market, and set prices that are as reasonable as possible lower than similar offline products in the market, which can promote consumer purchases, increase income. The company can improve product quality and provide the highest quality products at the same price, arousing consumer recognition. The company can make more efforts on product functions, innovate product functions, meet the different needs of consumers, and realize purchase wishes. Overall, the finding is positive that a highly noteworthy association exists between product attributes and purchase intention. Companies that can optimize product attributes are more likely to win the favor of consumers and achieve more sales in the long run.

Research Output

This framework shows a high correlation between live-streaming interaction, product attributes and purchase intention. It shows that this is a powerful interrelated system that lists the scenes that promote consumer customer journey from several aspects: personalization of live interaction, quick response from anchors, fun of live events, and mutual help of consumers in the live-streaming room Both can make consumers

trust the anchor, which is conducive to increasing purchase intention and ultimately converting it into customer journey. At the same time, the price, quality, and functions of the product itself are also important factors that affect consumers' decision-making. Products of high cost performance and multi-function are more likely to capture the hearts of consumers. Additionally, the stability of product functions, simplicity and safety of features on the live-streaming platform, as well as the anchor's personal allure, aid in evoking emotional affinity and trust among consumers, which can then be converted into customer journey and increase sales.

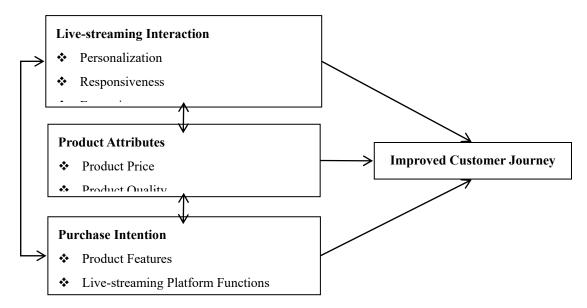


Figure 1. A framework for improving customer journey

This high degree of correlation can form a positive cycle. Good live interaction can better demonstrate product attributes, thereby leading to stronger purchase intentions. Cost-effective and multi-functional products can attract consumers to participate in live-streaming interaction. Through live interaction, consumers can increase their interest, better understand product attributes, and increase the likelihood of purchase. Excellent product attributes can enhance product competitiveness, meet consumer needs, and increase the possibility of impulse consumption. Only when consumers have a strong willingness to purchase can they recognize product attributes and actively participate in live-streaming interactions, which can then be converted into customer journey and improve Internet marketing performance.

4. Conclusions and recommendations

Respondents assessed the live-streaming interaction particularly product attributes, and purchase intention as moderately effective. Respondents agreed that product attributes are generally good. Respondents' purchase intention is moderately high. There is a strong and statistically significant relationship between live-streaming interaction, product attributes, and purchase intention. A framework is developed for improved customer journey. Companies may improve the efficiency and effectiveness of live-streaming interactions by fostering deeper audience engagement and ultimately driving sales activities. Companies may work hard to optimize product attributes to increase consumers' recognition of the product and promote consumption. The framework may be used to promote customer journey during Internet marketing of e-commerce companies. Future studies may incorporate additional variables, such as scenarios specific to live-streaming and the design of the platform.

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