Identifying The Influence of Consumer Purchase Intention Through Live Streaming Shopping: A Systematic Literature Review

Irtiyah Izzaty Mindiasari¹, Diah Priharsari², Budi Darma Setiawan³, Welly Purnomo⁴
Brawijaya University, Malang
¹tiyahmindy20@student.ub.ac.id, ²diah.priharsari@ub.ac.id, ³s.budidarma@ub.ac.id, ⁴wepe@ub.ac.id
*Corresponding Author

Received 03 September 2023; accepted 26 March 2024

Abstract. The rapid development of technology influences some changes in e-commerce. One of them is the emergence of live-streaming shopping, which combines live-streaming technology with e-commerce, social networking, and entertainment. This shopping format allows viewers to interact with the streamer (seller) and instantly make a purchase with just one touch. Consumers who watch live streaming shopping generally are those who initially have an interest in the offered product. According to prior studies, the presence of live shopping can enhance both customer desire to buy and business sales. To investigate the factors influencing purchase intention in live-streaming shopping, a systematic literature review was conducted. A total of 40 factors were found from 13 selected articles containing live-streaming shopping and purchase intention. Based on these factors, 34 had a positive impact, 2 had a negative impact, and 4 had no significant impact on buyer purchase intention.

Keywords: online shopping, purchase intention, live streaming shopping, systematic literature review, digital marketing.

1. Introduction

The development of technology and e-commerce is growing rapidly, providing opportunities for people to do transactions easily and peacefully. One example, a new shopping format that becomes more popular today is live-streaming shopping. This shopping method combines social media and entertainment, providing consumers who watch live streaming shopping with more realistic information about products and allowing them to buy the product with just one tap on their smartphone [1]. The popularity of live-streaming shopping began in 2011 and significantly grew during the COVID-19 pandemic, reaching 265 million viewers in 2020 [1][2].

Live-streaming shopping is dissimilar to traditional online shopping, where traditional online shopping only provides information about products through text or pictures posted by sellers [3]. In live shopping, the consumers can see the product in real-time and ask questions directly to the seller who demonstrates the product. From a seller's perspective, live streaming shopping makes them directly interact with their customer to give feedback or answer the product’s question. As a result, live-streaming shopping not just provides benefits in terms of shopping but also develops a good relationship between users or consumers and sellers through real-time interactions [2].
Consumers who watch live streaming shopping (or are interested in watching) generally are those who initially have an interest in the offered product. In accordance with research from [49], it is indicated that a live-streaming shopping strategy can increase consumers’ online purchase intention regardless of the distance and uncertainty of the products. In a study about beauty shopping [4], selling the product via live streaming could increase annual sales by 19.1% and amplify that it is important for companies to switch their business strategies to live-streaming shopping during the Covid-19 pandemic to avoid physical contact and simplify the transaction while maintaining the communication between seller and consumer. It shows live streaming shopping can generate consumer purchase intention through integration between live streaming and e-commerce, providing users with a more interactive, real-time, and immersive experience in that environment [5].

Organizations (companies or businesses) keep working to stimulate consumer purchase intention through live-streaming shopping. Prior studies [6] said TaoBao Live can increase sales to 300 million in 2020. It proves that there is a high consumer purchase intention in live-streaming shopping. However, some research [5][7][8] discussed purchase intention in live-streaming shopping only from the technological perspective, while other studies discussed the purchase intention of live-streaming shopping on emotional stimulation or consumer purchase behavior. In addition to the research, currently, no specific research examines the factors affecting purchase intention in live-streaming shopping. According to [9], from a retailer’s perspective, using live-streaming shopping could help businesses to expand marketing opportunities in services, customers, and revenue. Moreover, another study described the importance of investigating and synthesizing the impact of a phenomenon on customer attitude [10]. In the field of information system discipline, this research has become important and feasible because it encompasses human, social, and technological phenomena related to the design, construction, implementation, and use of computer-based information systems by individuals, organizations, and society [11].

Based on the background, this study's objective is to provide a better understanding regarding the factors that influence consumers’ purchase intention on live-streaming shopping and bridge the gap between the previous research. To achieve this goal, a systematic literature review has been conducted on previous research that studied live-streaming shopping and purchase intention. Using this method, research will comprehensively focus on identifying the influence factors that enhance purchase intention through live-streaming shopping. The advantages of this research include filling the gaps in previous studies regarding purchase intention and live shopping. The results of this study will completely define the variables that affect live shopping purchase intention, offering useful information for businesses and upcoming academics in related fields. This study also has the advantage of serving as a manual for writing systematic reviews of the literature on pertinent subjects.

2. Related Work

In several studies, the term live streaming shopping has also been called as live streaming commerce [1][6][12][13] In simple terms, live streaming shopping is the activity of selling products directly through online and sellers can interact with the consumer while demonstrated their product. According to [48] purchase intention refers to customer behavior that reflects a willingness to purchase a product.

Many previous studies have examined purchase intention from an IT perspective [5][13][8][34] and linked it to other factors that may influence purchase intentions. On the other hand, studies in [14][15] discussed purchase intention from the consumer
trust aspect and yielded different research findings. In [14] article said purchase intention does not significantly enhance by trust while another study [15] said believed trust can enhance purchase intentions.

Those previous studies do not specifically pay attention to what influences consumers’ purchase intention when they engage in live-streaming shopping. There is a lack of definition about purchase intention in live-streaming shopping because some research [16][17] defined purchase intention as customer engagement, purchasing behavior, or impulsive buying. Thus, the gap between these research findings needs to be reevaluated to prevent misunderstandings.

The importance of conducting a Systematic Literature Review was to identify, evaluated, and interpreted previous research to overcome the lack and clarified the phenomenon [47]. This method were highlight the search process which could be utilized as a guide for subsequent research, transforming subjective research findings into objective ones and minimizing bias [19]. A study in [46] explained three reasons to conduct a systematic literature review:

a) to provide a summary of the available data regarding a procedure or technology;

b) to find any gaps in the existing research and recommend areas for additional study;

c) to offer a foundation or context in order to situate new research initiatives properly.

Another study in [17] explained the influence of consumer engagement in social commerce using a systematic literature review. A total of 108 articles were found, and the data was analyzed by Nvivo 10 software. The method deployed in the study was adopted in this study, combined with the research method utilized in [20] [21] about implementing systematic literature review in the information system field.

3. Research Method

This research methodology was based on previous research that used a qualitative systematic literature review [18][22][21][23]. The following actions are described in Figure 1.

3.1 Defining Research Objectives

Prior to using a systematic literature review, a researcher should know the aim of their research study. As previously mentioned, this study aims to investigate the factors that influence purchase intention in live-streaming shopping. It can also serve as a basis for future research using similar cases. Second, research questions related to the objectives were designed. We formulated the research question be “What are the influencing factors of consumer purchase intention in live streaming shopping?”

3.2 Initiation and Literature Selection

This section aims to determine research criteria and conduct pilot searching. The selection step can be seen in Figure 2. Criteria are chosen by knowledge combination related to the topic [25] study literature and expert opinion (i.e. lecturer or someone knowledgeable in the field) [24]. The research criteria were based on key terms “live shopping “live streaming shopping or “live streaming commerce,” which had the same meaning in the field.
"live AND streaming AND (shopping OR commerce) AND purchase AND intention"

The research area or topics have been limited to avoid the struggle of overload information [31][16]. The result can be more relevant compared with other research if the subject area of topics is closer to the main study. Accordingly, literatures from 2011 were used because live-streaming shopping arise in that time. Article types were chosen based on peer review articles. Subject areas were limited to Computer Science, Decision Sciences, Business, Management and Accounting also Psychology to cover human interaction with technology. The paper chosen is limited written in English. Furthermore, selection continued to title, abstract, and body text screening. Because of limited access to articles, the database for articles selection is collected from ScienceDirect which can use free from the institution.

Each selection was conducted twice and the reliability was measured using Cohen’s Kappa to make the approach employed stronger as it chance agreement [24][27]. Cohen’s Kappa measures the two researchers' agreement by considering the proportion of agreement. If it equals 1, the researcher selects the same papers. If it equals 0, there is no agreement. After the selection process between two researchers, calculations are conducted using Cohen’s Kappa equation in Equation (1)

\[
Cohen's\ Kappa = \frac{Pa - Pc}{1 - Pa}
\]

Where \(Pa\) is the proportion of the selected paper by the researchers and \(Pc\) is the proportion of probability papers selected and not selected by two researchers.
The title, abstract, and body text screening with a value above 0.4 is acceptable and reflects the selection's stability and accuracy [27]. If disagreement caused the value didn’t meet the minimum score, reading the body text for the third time can resolve it. This research generates a value above 0.5 per selection title, abstract, and body text screening. As a result, there are 13 documents that contain all the criteria and are selected for review.

![Diagram of the selection process]

**Figure 2. Selection Process**

### 3.3 Data Analysis and Coding Procedure

A total of 1813 articles were found from key term selection, and 13 of them were selected. Continuously, data extraction was conducted and we synthesized the finding information to become a conceptual model and classified it.

### 3.4 Quality Assessment

To improve the validity and reliability of the research, reviews from an external expert are one way to evaluate the research results and give feedback about what should the researcher repair from the result [19]. The criteria for chosen experts are to have the same field as the topic (e.g. business management, information systems, or librarian) and to do with a minimum of two experts. This process is held after all the systematic literature process done.

### 4. FINDINGS

Provide a statement that what is expected as stated in the Introduction section, and obtained in the Findings section. Moreover, it can also be added the prospect of the development of research results and application prospects of further studies into the next (based on results and discussion).
i. **Selected Journal Description**

From 13 articles selected, it was found that live-streaming shopping actually became popular from 2019 to 2020, even though live-streaming shopping already appeared since 2011. This demonstrates that the live-streaming shopping trend is genuinely popular and keeps expanding. The majority of the article’s methods were found to be quantitative. Based on the journal names discovered in the chosen literature, it is known that business, management, and accounting journals are the ones that explore the topic of live shopping and buying interest the most. Figure 3 and Table 1 both contain details on the chosen journals.

![Figure 3. Years of Selected Journal](chart.png)

<table>
<thead>
<tr>
<th>Subject Areas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business, Management and Accounting</td>
<td>12</td>
</tr>
<tr>
<td>Computer Science</td>
<td>6</td>
</tr>
<tr>
<td>Decision Sciences</td>
<td>5</td>
</tr>
</tbody>
</table>

ii. **The Factor Influencing Purchase Intention in Live Streaming Shopping**

Through the data extraction, it was found that there are 40 possible factors that potentially influence consumers’ purchase intention. The factors were classified into 7 themes based on the same meaning, namely: Product Fit, Consumer Interactivity, Technology of Live Streaming Shopping, Consumer Feels, Relation Between Consumer and Streamer, Consumer Behavior, and Uncertainty.

Product Fit is defined as the consumer’s feeling when they think the promoted product is suitable for them. Second, the Technology of Live Streaming Shopping is defined as all of the technological elements that are used or impactable to consumers through live-streaming shopping. Third, Consumer Interactivity according to William et. al (1988) is the communication process of participants (the viewers or the streamer) in live streaming that had controls through live streaming and mutual communication. Fourth, Consumer Feels refers to every emotion that the consumer feels when the live streaming shopping activity is going on. Fifth, the Relation Between Consumers and Streamer refers to a relationship that is created between the streamer and the viewers (consumers who watched live) when they demonstrated the product. Sixth, Consumer Behavior is defined as behaviors or habits that appear after consumers frequently attend live-streaming shopping. Finally, Uncertainty refers to negative factors from live streaming shopping when consumers do not have trust in the product or the quality of the product. Figure 4 shows the widest factors found from data extraction.
Each factor apparently has an impact on purchase intention in live-streaming shopping. The factors are labeled with symbols to represent the impact, 1 for positive, 0 for neutral or has no impact, and -1 for negative impact [45]. It was found that 34 factors had a positive impact, two factors had a negative impact and four factors can be said neutral or has no impact. It is shown in Table 2 – Table 8.

Table 2. Technology Live Streaming Shopping

<table>
<thead>
<tr>
<th>Theme</th>
<th>Factors</th>
<th>Impact</th>
<th>Citation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology of Live Streaming Shopping</td>
<td>Convenience of product search</td>
<td>✓</td>
<td>[32]</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Visibility</td>
<td>✓</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Metavoicing</td>
<td>✓</td>
<td>[5] [7]</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Guidance Shopping</td>
<td>✓</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Background Visual Complexity</td>
<td>✓</td>
<td>[8]</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Screen bullet</td>
<td>✓</td>
<td>[14] [40]</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Content</td>
<td>✓</td>
<td>[30]</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Video-based real-time interaction</td>
<td>✓</td>
<td>[50]</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3. Consumer Feels

<table>
<thead>
<tr>
<th>Theme</th>
<th>Factors</th>
<th>Impact</th>
<th>Citation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Feels</td>
<td>Perceived Authenticity</td>
<td>✓</td>
<td>[32]</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Perceived Enjoyment</td>
<td>✓</td>
<td>[5]</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Immersion</td>
<td>✓</td>
<td>[5] [7]</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Presence</td>
<td>✓</td>
<td>[50]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Pleasure</td>
<td>✓</td>
<td>[14]</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Arousal</td>
<td>✓</td>
<td>[10] [15]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Hedonic</td>
<td>✓</td>
<td>[30] [51]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Utilitarian</td>
<td>✓</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Affective Reactions</td>
<td>✓</td>
<td>[15]</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Emotional responses</td>
<td>✓</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Emotional contagion</td>
<td>✓</td>
<td>[14]</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Admiration emotion</td>
<td>✓</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Mental imagery quality</td>
<td>✓</td>
<td>[51]</td>
<td>1</td>
</tr>
</tbody>
</table>
The factors are said to have a positive impact when they can enhance consumer purchase intention, both directly or indirectly through live-streaming shopping. For example, hedonic factors can significantly increase purchase intention caused by

![Image](image-url)
enjoyable features of live-streaming shopping such as comments or gifts that increase consumer experience [5][11]. The positive factor was symbolized by 1 in the tables.

Negative factors appear when there is uncertainty and doubt in consumers’ experience regarding the product offered through live-streaming shopping, leading to negative feelings toward those products. However, these factors cannot determine whether consumers want to make a purchase or not. In this case, product fit uncertainty and product quality uncertainty represent consumers’ doubts about the suitability of the product presented during the live [10]. The negative factor was symbolized by -1 in the tables.

The factors are said to have no significant influence or are considered neutral when they do not significantly increase purchase intention in live-streaming shopping or when there are contradictory findings in multiple studies regarding their positive influence. For example, customer likes and utilitarianism do not have an effect on purchases, because consumers just tend to like the streamer, but do not have the intention to make a purchase. Utilitarian factors cannot increase consumers' purchase intention when the consumers prioritize the practical benefits and usefulness during live streaming shopping. Since of the time restrictions imposed by streaming, customers frequently choose not to make a purchase since they are unable to examine the quality of a product [10].

The most commonly mentioned factors in selected articles are hedonic and utilitarian [16][10][31][32]. This suggests that the majority of researchers are interested in investigating how hedonic and utilitarian aspects influence purchase intention during live shopping. Additionally, certain elements are only mentioned once in each publication, suggesting that although they have an impact, there is not much research on them. As a result, they might be consulted when conducting additional studies to learn more about and investigate these factors.

5. Conclusion and Limitations

This research was conducted using Systematic Literature Review and inductive coding for the data extraction. Thirteen chosen articles, with publication dates ranging from 2019 to 2022, were obtained based on the literature selection involving live shopping and consumer purchase intention. Two rounds of selection and the computation of Cohen's Kappa were applied to each chosen journal. The selected journals met the requirements and are regarded as reliable with a Cohen's Kappa rating of 0.7. The most prevalent factors were hedonic and utilitarian with a total of 40 factors impacting purchase intention in live shopping. It was discovered that 34 factors had positive impacts on purchase intention, two had negative impacts, and four had no significant influence or were considered neutral.

The limitation of this research are do not include forward and backward citation because of time limitation. For future research, forward and backward citation steps would be included to ensure that every article has been considered in the selection process and that nothing has been left out. It can broaden the range of sources of literature in order to enhance outcomes and raise awareness of that subject.

References


20 D. Priharsari, B. Abedin and E. Mastio, "Value co-creation in firm sponsored online


