The Impact of Perceived Digital Celebrities on Live-Stream Shopping Intention of Shopee Live Users in Jakarta

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Abstract

In the age of digital advancement, shopping activities have changed, one of which is live streaming. Consumers do not need to come to the store to see a product in person, but are represented by a streamer. Through the streamer, the buyer gets a picture of a product before deciding to buy. This study aims to analyze the effect of perceived digital celebrity on live stream shopping intention with the mediation of perceived enjoyment and perceived utility. The sample selection method in this study uses non-probability sampling using purposive sampling technique. The sample size in this study was 260 respondents who were users who had watched Shopee Live live streams and lived in Jakarta. Data collection using a questionnaire distributed online via Google Form. The results showed a positive and significant influence for perceived digital celebrity on live-stream shopping intention, perceived enjoyment and perceived utility can partially mediate between perceived digital celebrity and live-stream shopping intention. Through this research, it can provide information for online sellers to increase perceived enjoyment and perceived utility so that it can foster purchasing intentions on live steam shopping and can increase sales.

Keywords: Perceived Digital Celebrity; Perceived Enjoyment; Perceived Utility; Live-Stream Shopping Intention

Introduction

Technology has started to become a part of human life because it can provide convenience for its users. One technology that is often used is the internet. According to survey data from the Indonesian Internet Service Providers Association (APJII), internet users in Indonesia reached 215.63 million in 2022–2023. There was an increase of 2.67% when compared to the previous period, which amounted to 210.03 million users. Internet users account for 78.19% of Indonesia's total population of 275.77 million people. Due to the demand to understand technology, internet users in Indonesia are predicted to increase
every year. In addition, the ease of access to the internet is also a factor in increasing the number of users. This convenience has made technology develop rapidly. Technology can lead to changes in lifestyle and accelerated technological development. One of them is buying goods via live stream online through a mobile application, or what is commonly called live stream shopping. Live streaming shopping is part of e-commerce and sales promotion activities. Instant ordering, live product demos, real-time questions and answers, special price offers at a certain time, real-time communication, and online streaming services provided by e-commerce are part of live streaming shopping (Wongkitrungrueng and Assarut, 2020). Based on the results of the Opinion Poll survey (2022), 83.7% of Indonesians have watched live streaming shopping. According to the survey results, it also states that 55% of respondents have purchased goods from live streaming shopping.

Through live stream shopping, sellers can display their products as a whole (not just with photos), while from the buyer's side, they will get an idea of how the original form of the item will look if purchased. Prospective buyers can participate in live stream shopping by asking for the size and color, and they can even ask the streamer to try the product before they buy it (Farman, 2019). As a result, live stream shopping attracts buying interest, fulfills buyers' desires, increases interactivity between sellers and buyers, increases sales conversion, and generates faster sales (Mingyao Hu, 2020). This gives shoppers a new shopping experience and shapes a new culture of consumption. In order for potential buyers to be interested in the live stream conducted by the merchant, it must provide its own uniqueness, one of which is the popularity of the streamer. The main thing that is at the core of commercial information in live streaming in general is the attractive appearance of the streamer (Xu et al., 2020). The streamer referred to here is the person who will sell the live stream. Generally, it is a shop owner or streamer profession. When a streamer's level of fame has reached a certain point, they are referred to as digital celebrities (Chen & Lin, 2018). Digital celebrities are distinguished by their streaming style, professionalism, charisma, or beauty (Xu et al., 2020). Streamers can be anywhere as long as they have a smartphone and a stable internet network. Because of this, streamers are one of the new jobs that have emerged due to live stream shopping.

According to Ma's research (2021), there are two aspects that mediate between perceived digital celebrity and live stream shopping intention, namely perceived enjoyment and perceived utility. Perceived enjoyment is a cognitive and emotional response that reflects how users feel about using a system or technology (Zhou & Feng, 2017). According to Chao (2019), perceived enjoyment is described as the extent to which the act of utilizing technology is considered enjoyable, regardless of the benefits obtained from using the technology itself. Another definition of perceived enjoyment is the excitement a person feels when engaging in a particular action (Tekaqnetha and Rodhiah, 2020). Perceived utility is the extent to which individuals perceive that live streaming purchases are beneficial for certain reasons, such as getting high-quality goods efficiently at a reasonable price (Ma, 2021). Motivations connected to aspects of product category, product quality, convenience, price, income (Lin et al., 2018), and cost reduction (such as money, time, and effort) control utility (Kim & Kang, 1997). Perceived utility has an influence on individual choices and preferences, as well as the ability to design a recommendation before deciding to act (Tomer, 2015).

Shopee Live is a livestream platform in the Shopee app that allows sellers to hold live broadcast sessions to advertise their businesses and goods to customers live. Buyers can view product-related content and communicate with sellers or streamers directly. Shopee Live was launched to meet the growing demand for video content and to help sellers get closer to their customers. Live stream shopping is a method to encourage long-term interaction with consumers, and this has resulted in customers spending more time on the app, making their online shopping more engaging. Shopee Live allows sellers to gain new customers and followers, increase the exposure of their business and products, and communicate directly with their consumers.
Research conducted by Park and Lin (2020) states that the attractiveness of digital celebrities has no effect on live streaming shopping intentions, but previous research by Wang et al. (2018) and Chan et al. (2021) states that celebrity attractiveness affects live streaming shopping intentions. Based on the background described above, the purpose of this study is to determine the effect of perceived digital celebrity on live stream shopping intention, perceived enjoyment, perceived utility, and perceived enjoyment and perceived utility between perceived digital celebrity and live stream shopping intention.

Literature Review

Perceived Digital Celebrity and Live Stream Shopping Intention

A study found that perceived digital celebrity does not have a significant influence on live stream shopping intention, but individuals are motivated by gratifications such as perceived enjoyment, perceived utility, and social interaction (Kelly and Febriyanto, 2022). Another study found that perceived digital celebrity, along with uses and gratifications, perceived network size, and experience-focused shopping orientation, can influence live stream shopping intention (Ma, 2021). Research on the influence of live streaming e-commerce quality found that perceived ease of use, perceived trust, perceived usefulness, perceived value, and purchase intention can be influenced by live stream shopping quality (Qing and Jin, 2022). When customers have a favorable opinion of digital celebrities, they are more likely to engage in live-streaming purchases. The following is the proposed hypothesis:

H1: Perceived digital celebrity has a positive and significant influence on live stream shopping intention among Shopee Live users in Jakarta.

Perceived Digital Celebrity and Perceived Enjoyment

Successful digital celebrities are often considered to have better appeal and can generate more follower engagement than traditional endorsers (Shuweichen et al., 2016). Consumers can feel comfortable buying goods from digital superstars who live stream while enjoying entertainment, novelty, and fun social interactions (Xu et al., 2020). When customers have a favorable perception of digital celebrities, such as influencers, they are likely to like the materials provided by these digital celebrities. The following is the proposed hypothesis:

H2: Perceived digital celebrity has a positive and significant influence on perceived enjoyment among Shopee Live users in Jakarta.

Perceived Digital Celebrity and Perceived Utility

According to Parayitam et al. (2020), digital celebrity endorsements make customers assume that a product or brand is of high quality, depending on the likability, attractiveness, and trustworthiness of the celebrity. Digital celebrities often provide product information by combining their personal user experience and critical comments with product specifications (such as packaging, key features, and usage advice) (Xu et al., 2020). Referring to the context of live-streaming, digital celebrities are often viewed as experts who can provide trustworthy information and helpful purchasing advice (Chetioui et al., 2020; Ma, 2021). As a result, idolized digital celebrities are predicted to help consumers quickly obtain high-quality goods at low prices (Ma, 2021). When customers have a favorable opinion of digital celebrities such as influencers or content creators, they are more likely to see the value or advantages of the products or services offered. The following is the proposed hypothesis:

H3: Perceived digital celebrity has a positive and significant influence on perceived utility among Shopee Live users in Jakarta.
Perceived Enjoyment and Live Stream Shopping Intention

Someone will be more likely to continue using something if they find it fun, interesting, and curious when using it (Gallego et al., 2016). According to Cai et al. (2018), the pleasure motive influences customers' desire to engage in live streaming purchasing activities in a live streaming setting for live streaming shopping activities. Then, Park and Lin (2020) found that perceived enjoyment and trust in digital celebrities can increase the likelihood of viewers buying recommended items. When viewers like live-streamed information, whether for entertainment, interactivity, or educational value, they are more motivated to make a purchase. The following is the proposed hypothesis:

H₄: Perceived enjoyment has a positive and significant influence on live stream shopping intention among Shopee Live users in Jakarta.

Perceived Utility and Live Stream Shopping Intention

Consumers are more interested in efficient and timely shopping (Childers et al., 2001). Consumers will be happier when determining which product to buy if they think the item has maximum utility. In this case, consumers will choose products that provide the most efficient use (Bagyarta & Dharmayanti, 2014; Ferrand & Vecchiatiini, 2002). When consumers perceive tangible benefits from live-streaming, such as relevant product information, satisfying conversations, or an engaging shopping experience, they are more likely to make a purchase via live-stream. The following is the proposed hypothesis:

H₅: Perceived utility has a positive and significant influence on live stream shopping intention among Shopee Live users in Jakarta.

Perceived Digital Celebrity and Live Stream Shopping Intention through Perceived Enjoyment

If someone considers social media to be fun and satisfying and keeps them interested while using it, they are likely to continue using it (Gallego et al., 2016). According to Cai et al. (2018), pleasure motivation motivates consumers’ desire to engage in live streaming purchasing activities. In addition, Park and Lin (2020) found that hedonic attitudes and digital celebrity trust drive viewers' intentions to purchase recommended goods. When people have a favorable perception of digital celebrities, this increases their satisfaction, which increases their propensity to engage in purchases through live streaming. The following is the proposed hypothesis:

H₆: Perceived enjoyment mediates the significant influence between perceived digital celebrity and live stream shopping intention among Shopee Live users in Jakarta.

Perceived Digital Celebrity and Live Stream Shopping Intention through Perceived Utility

Consumers are more interested in efficient and timely shopping (Childers et al., 2001). Consumers will be happier when determining which product to buy if the utility value is maximized. This is achieved by choosing products that provide the most efficient use (Bagyarta & Dharmayanti, 2014; Ferrand & Vecchiatiini, 2002). When viewers perceive digital celebrities to be knowledgeable, trustworthy, and relevant, they are more likely to enjoy the live stream buying experience. These perceived benefits may include various factors, such as the explanation of product information, the relevance of the product to the audience's needs, or the overall efficiency of the shopping process during the live stream. The following is the proposed hypothesis:

H₇: Perceived utility mediates the significant influence between perceived digital celebrity and live stream shopping intention on Shopee Live users in Jakarta.
Based on the previous explanation, Figure 1 below shows the research model.

Figure 1. Research Model

**Research Methods**

The population of this study were all Shopee Live users located in Jakarta. This study uses a purposive sampling technique where the units to be sampled are selected on the basis of certain considerations and conditions that are appropriate and representative of the problem under study. The total sample studied was 260 respondents. Data collection for this study was carried out using a questionnaire that was distributed online. The questionnaire was distributed online to users who have watched live-stream shopping on Shopee Live and live in Jakarta. The questionnaire was distributed through social media in the form of direct messages on Instagram, Line, and Whatsapp, with the use of Google Forms as an online questionnaire platform. This study examines the following variables: perceived digital celebrity measured using 6 statement items; perceived enjoyment measured using 5 statement items; perceived utility measured using 5 statement items; and live stream shopping intention measured using 5 statement items. The data in this study were processed using PLS-SEM software, which involves two types of analysis: the outer model and the inner model.

**Results and Discussion**

**Outer Model**

Outer model testing consists of validity testing in two ways, namely convergent validity (AVE) and discriminant validity (Fornell Larcker) and reliability testing (Composite Reliability).

**a. Convergent Validity**

<table>
<thead>
<tr>
<th></th>
<th>Average Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Digital Celebrity</td>
<td>0.642</td>
</tr>
<tr>
<td>Live Stream Shopping Intention</td>
<td>0.679</td>
</tr>
<tr>
<td>Perceived Enjoyment</td>
<td>0.672</td>
</tr>
<tr>
<td>Perceived Utility</td>
<td>0.796</td>
</tr>
</tbody>
</table>
Based on the Average Variance Extracted (AVE) results, it is known that each variable has an Average Variance Extracted (AVE) value of more than 0.50 (>0.50). So that it meets the convergent validity criteria as seen from the Average Variance Extracted value.

b. Discriminant Validity

Table 2. Discriminant Validity

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Digital Celebrity</td>
<td>0.801</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Live Stream Shopping Intention</td>
<td>0.620</td>
<td>0.824</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Enjoyment</td>
<td>0.569</td>
<td>0.762</td>
<td>0.819</td>
<td></td>
</tr>
<tr>
<td>Perceived Utility</td>
<td>0.550</td>
<td>0.738</td>
<td>0.813</td>
<td>0.892</td>
</tr>
</tbody>
</table>

Based on the Fornell-Larcker test contained in Table 2, the AVE value of each latent construct is greater than the square value of the construct with other latent constructs. Thus, all indicators of each variable are acceptable.

c. Composite Reliability Test

Table 3. Composite Reliability

<table>
<thead>
<tr>
<th></th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Digital Celebrity</td>
<td>0.878</td>
</tr>
<tr>
<td>Live Stream Shopping Intention</td>
<td>0.894</td>
</tr>
<tr>
<td>Perceived Enjoyment</td>
<td>0.860</td>
</tr>
<tr>
<td>Perceived Utility</td>
<td>0.921</td>
</tr>
</tbody>
</table>

The composite reliability value of each variable in this study is greater than 0.7, based on the reliability test results presented in Table 3. Reliability test results that are greater than 0.7 indicate that the study meets the reliability test criteria.

Inner Model

a. Coefficient of Determination Test

Table 4. Coefficient of Determination

<table>
<thead>
<tr>
<th></th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live Stream Shopping Intention</td>
<td>0.656</td>
</tr>
<tr>
<td>Perceived Enjoyment</td>
<td>0.321</td>
</tr>
<tr>
<td>Perceived Utility</td>
<td>0.300</td>
</tr>
</tbody>
</table>
Based on the results of the $R^2$ analysis described in Table 4, the $R$-Square value on the live-stream shopping intention variable of 0.656 indicates that the perceived digital celebrity variable can explain the live-stream shopping intention variable by 65.6%, while the rest is explained by variables not included in this study.

The perceived enjoyment variable can only explain 32.1% of the perceived digital celebrity variable, with the rest explained by other variables not included in this study, while perceived utility can only explain 30% of the other perceived digital celebrity variables explained by other variables not included in this study.

**Hypothesis Testing**

![Figure 2. Bootstrapping Results](image)

The following are the results of the bootstrapping that has been carried out by the author.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypothesis Statement</th>
<th>Path Coefficient Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_1$</td>
<td>Perceived digital celebrity à Live-Stream Shopping Intention</td>
<td>0.238</td>
<td>0.000</td>
</tr>
<tr>
<td>$H_2$</td>
<td>Perceived digital celebrity à Perceived Enjoyment</td>
<td>0.569</td>
<td>0.000</td>
</tr>
<tr>
<td>$H_3$</td>
<td>Perceived digital celebrity à Perceived Utility</td>
<td>0.550</td>
<td>0.000</td>
</tr>
<tr>
<td>$H_4$</td>
<td>Perceived Enjoymentà Live-Stream Shopping Intention</td>
<td>0.393</td>
<td>0.000</td>
</tr>
<tr>
<td>$H_5$</td>
<td>Perceived Utilityà Live-Stream Shopping Intention</td>
<td>0.287</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Based on the test results above, it is clear that all hypotheses are accepted because the $p$ value is smaller than 0.05 (0.05) and the path coefficient value is above 0.
b. Mediation Hypothesis Testing

Table 6. Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypothesis Statement</th>
<th>Path Coefficient Value</th>
<th>P Value</th>
<th>Mediation Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₆</td>
<td>Perceived digital celebrity → Perceived Enjoyment→ Live-Stream Shopping Intention</td>
<td>0.223</td>
<td>0.000</td>
<td>Partial mediation</td>
</tr>
<tr>
<td>H₇</td>
<td>Perceived digital celebrity → Perceived Utility→ Live-Stream Shopping Intention</td>
<td>0.158</td>
<td>0.002</td>
<td>Partial mediation</td>
</tr>
</tbody>
</table>

Based on the test results above, it is clear that all hypotheses are accepted because the p value is smaller than 0.05 (0.05) and the path coefficient value is above 0.

Discussion

The results of research on the first hypothesis (H1) show that perceived digital celebrity has a positive and significant influence on live-streaming shopping intention at Shopee Live, which indicates that the first hypothesis (H1) is accepted. The results of the first hypothesis analysis are evidenced by a p-value of 0.000, which also shows that the perceived digital celebrity variable has a significant effect in this study. The results of the analysis of the first hypothesis (H1) differ from the results of Kelly and Febriyantoro's (2021) research, which found that perceived digital celebrity has no influence on live-streaming shopping intention. However, other research by Ma (2021) revealed that perceived digital celebrity has a significant effect on live-stream shopping intention. This shows the importance of digital celebrities in live-streaming marketing techniques, not only to attract attention but also to encourage purchasing activities.

Based on the results of the second hypothesis test (H2), perceived digital celebrity has a positive and significant influence on perceived enjoyment, which indicates that the second hypothesis (H2) is accepted. The results of this second hypothesis analysis are supported by a p-value of 0.000, which indicates that the perceived digital celebrity variable has a significant influence in this study. This emphasizes the need to select influencers who not only have a wide reach but also the ability to engage effectively with their audience.

The third hypothesis (H3) is accepted because the results of the third hypothesis test (H3) show that perceived digital celebrity has a positive and significant effect on perceived utility. This third hypothesis analysis produces a p-value of 0.000. The results of this third hypothesis (H3) support research conducted by Ma (2021) and Kelly and Febriyantoro (2021), who found that perceived digital celebrity has a significant effect on perceived utility. When customers have a favorable opinion of digital celebrities such as influencers or content creators, they are more likely to see the value or benefits of the products or services offered. This is due to the trust, credibility, and emotional connection that digital celebrities have built with their fans. As a result, companies that collaborate with well-known digital celebrities can increase the usability value of their products. This emphasizes the importance of choosing influencers who share the same brand values and have a large following to maximize the effectiveness of digital marketing campaigns.
The fourth hypothesis (H₄) is accepted based on the results of the fourth hypothesis test (H4), which shows that perceived enjoyment has a positive and significant influence on live-stream shopping intention. The T-statistic value of 4.915 and the p-value of 0.000 support the results of the fourth hypothesis analysis. The results of the analysis of the fourth hypothesis (H4) are in accordance with previous research by Ma (2021) and Kelly and Febriyantoro (2021), which show that perceived enjoyment has a significant effect on live-stream shopping intention. When viewers like live-streamed information, whether for entertainment, interactivity, or educational value, they are more motivated to make purchases. Factors such as an engaging presentation, the host's communication skills, and good visual quality all contribute to an enjoyable experience. To increase purchase intent, brands and influencers should focus on generating an engaging and enjoyable experience during live-stream sessions. This method not only increases sales but also contributes to long-term consumer loyalty, thus emphasizing the importance of perceived enjoyment in live-stream marketing strategies.

The results of the fifth hypothesis test (H₅) state that perceived utility has a positive and significant influence on live-stream shopping intention, so the fifth hypothesis (H₅) is accepted. The results of the fifth hypothesis analysis are supported by a T-statistic value of 2.583 and a p-value of 0.010. The results of the fifth hypothesis analysis (H₅) are not in line with Ma's (2021) research, where perceived utility does not have a significant influence on live-stream shopping intention. However, other research by Kelly and Febriyantoro (2021) revealed that perceived utility has a significant effect on live-stream shopping intention. When consumers perceive tangible benefits from live-streaming, such as relevant product information, satisfying conversations, or an interesting shopping experience, they are more likely to make purchases via live-stream. Content quality, streamer ability, and consumer engagement are important factors in increasing perceived utility. Therefore, e-commerce companies and influencers should focus their strategies on strengthening these factors to increase purchase intention through live streaming. This provides a great opportunity for e-commerce businesses to attract and retain customers in the digital era.

Based on the results of the sixth hypothesis test, it can be stated that perceived enjoyment mediates the relationship between perceived digital celebrity and live stream shopping intention positively because the value of the p value is 0.000 and the path coefficient value is 0.223. The mediation that occurs is partial mediation. The results of this hypothesis support research conducted by Ma (2021) and Kelly and Febriyantoro (2021), who found that perceived enjoyment mediates the relationship between perceived digital celebrity and live stream shopping intention. When people have a favorable perception of digital celebrities, this increases their satisfaction, which increases their tendency to engage in purchases through live streaming. The charm and appeal of digital celebrities can be powerful motivators, making the purchase experience more interesting and enjoyable for viewers. This enjoyment extends beyond just the act of purchase but also includes the overall interaction with the live stream, including the entertainment benefits provided by the digital celebrity. As a result, the higher the perceived satisfaction from watching these digital celebrities, the more likely people are to purchase the items in the live stream. This relationship emphasizes the importance of digital celebrities in e-commerce businesses, especially in terms of how they influence customer behavior and the decision-making process for purchasing through live streaming.

Based on the results of the seventh hypothesis test, it can be stated that perceived utility mediates the relationship between perceived digital celebrity and live stream shopping intention positively because the value of the p value is 0.000 and the path coefficient value is 0.569. The mediation that occurs is partial mediation. The results of this hypothesis support research conducted by Ma (2021) and Kelly and Febriyantoro (2021), who found that perceived utility mediates the relationship between perceived digital celebrity and live stream shopping intention. Viewers' perceptions of the practical utility and benefits of connecting with digital celebrities during live streams have a major influence on their purchasing tendencies. When viewers perceive digital celebrities to be knowledgeable, trustworthy, and relevant, they
are more likely to enjoy the live stream buying experience. These perceived benefits can include factors such as the explanation of product information, the relevance of the product to the viewer's needs, or the overall efficiency of the shopping process during the live stream. Viewers are more likely to participate in a live stream purchase when their perceived utility grows, due to the influence of the information provided by digital celebrities. This emphasizes the importance of digital celebrities not only in attracting viewers but also in offering meaningful and useful buying experiences that enhance the shopping experience, thus influencing consumer behavior in the digital world.

**Conclusion**

The following are the conclusions of this study: Perceived Digital Celebrity has a significant influence on Live Stream Shopping Intention on Shopee Live users in Jakarta, Perceived Digital Celebrity has a significant influence on Perceived Enjoyment on Shopee Live users in Jakarta, Perceived Digital Celebrity has a significant influence on Perceived Utility on Shopee Live users in Jakarta, Perceived Enjoyment has a significant influence on Live Stream Shopping Intention on Shopee Live users in Jakarta, Perceived Utility has a significant influence on Live Stream Shopping Intention in Shopee Live users in Jakarta, Perceived Enjoyment mediates a significant influence between Perceived Digital Celebrity and Live Stream Shopping Intention in Shopee Live users in Jakarta, Perceived Utility mediates a significant influence between Perceived Digital Celebrity and Live Stream Shopping Intention in Shopee Live users in Jakarta.

It is hoped that e-commerce companies and online sellers have begun to realize live stream shopping by collaborating with digital celebrities who have their own uniqueness that can create a sense of comfort for the audience and increase the effectiveness of product demonstrations and trust in information conveyed by digital celebrities, so as to increase the purchase intention of consumers, which then leads to customer loyalty.

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**References**


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