The Effect of Live Streaming Methods in Online Sales on Behavioral Intention in Generation Z

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Abstract. This study examines the impact of Hedonic Motivation, Price Value, and Performance Expectancy on Behavioral Intention and Use Behavior in Generation Z in order to explore the impact of the live broadcast technique. A descriptive-quantitative approach (questionnaire) was employed in this study to gather information from 370 respondents who actively utilized streaming services and made purchases. This study uses the proposed framework adapted by UTAUT 2. The results of the analysis show that Hedonic Motivation has a positive and significant effect on consumer buying interest because the T-Statistic value = 2.264 and P-Value = 0.024 are valid numbers, while Price Value with Behavioral Intention has a T-Statistic value = 17.783 and P-Value = 0.000 indicates a positive and significant effect. Performance Expectancy with Behavioral Intention has a T-Statistic value = 3.461 and P-Value = 0.001 which shows a significant effect but with a negative correlation, so it does not fulfill the hypothesis on this research. And the relationship between Behavioral Intention and Use Behavior has a T-Statistic value = 15,284 and P-Value = 0.000 indicating a significant influence and a positive correlation. The study concluded that Price Value and Hedonic Motivation influenced consumers' desire to use the live streaming feature.

1. Introduction

Since the COVID-19 virus outbreak, public shopping habits have changed significantly. People who once preferred to shop offline and physically inspect the goods they were buying, now prefer to shop online and base their decisions on the images of the products. This transition is occurring swiftly, particularly in Generation Z, which is capable of speedy adaptation and has great potential for technological transformation.

According to the results of the survey conducted by the Association of Internet Service Maintenance Indonesia, the number of Internet use in Indonesia currently is 210,026,769 people out of the total population of 272,682,600 people population of Indonesia in 2021. In other words, Internet users in Indonesia by 2021 is 77.02% of total existing population, this makes Internet growth in Indonesia in 2021 up by 3.32% from the previous year, as seen in Fig 1.

According to the Indonesian Central Statistical Agency, the population of Indonesia is estimated to reach 270.20 million people based on the population census results for 2020. Generation Z is the majority of the population. Generation Z comprises 74.93 million people, or 27.34% of the total population.

As many people now see online transactions as a necessity, businessmen race for customers using a variety of strategies, one of which is live streaming, where sellers use hosts to promote their goods through social media features. Using this technique, the seller can easily demonstrate the product, give a profit over the product sold, and conduct two-way communication with the customer. Live streaming enables two-way communication between potential buyers and sellers, as well as real-time product demonstrations, which can potentially boost consumer confidence. Generation Z will be the subject of special attention in this study as they represent the largest segment of technology-savvy customers and have a significant impact on consumer desire to pay for live streaming services. We will explore the elements that influence consumer purchase intentions as well as how live streaming affects their decision making.

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2. Literature Review

2.1 Hedonic Motivation

Hedonic motivation is characterized as a sense of enjoyment from utilizing technology, and it has a significant impact on how people embrace and use technology [1]. Hedonic motivation is influenced by a number of factors. The level of enjoyment experienced when utilizing technology is known as fun. Enjoyment refers to the level of pleasure one experiences when utilizing technology, while entertainment refers to the user's ability to be entertained while using the system [13]. Self Reward, Stress Release, Fear of Missing Out, Looking for Inspiration, and Social Influence are applied forms of each of the factors that have been mentioned, where Self Reward is a form of praise for your accomplishments that you offer to yourself by shopping, going on walks, or spending money on expensive items [2]. A person shopping online for oneself with the intention of rewarding himself for the job he has done is an example of an applied type of fun. An attempt is made by a person to relieve feelings brought on by stress, also known as coping. Stating that coping is a must to go through challenges or release yourself from the negative emotions brought on by stress [3]. An example of an applied type of entertainment is someone watching movies or surfing social media to reduce their stress levels. A person's dread of missing out on something that is becoming a hot topic of conversation is known as FOMO, which is an application of enjoyment. Numerous factors, including extraversion, openness, neuroticism, conscientiousness, and agreeableness, can contribute to FOMO, but of these five, agreeableness is the most important in shaping FOMO in a person [4]. FOMO is exemplified by someone who experiences sadness or depression if they don't get to use the most recent technologies.

2.2 Price Value

Price Value is an interchange between a user's cognitive judgements of the app's alleged advantages and the corresponding monetary expenses of utilizing it [5]. Price value has two components: reasonable, meaning that the system's price is reasonable and worth, meaning that the value derived from utilizing the system is equal to the cost incurred. One of the most potent predictors of how well technology is received by its users is Price Value [6]. Price value can be used as a metric when making choices about how to use technology and information. A number of factors, including Price to Quality, Pricing Benefits, Discounts and Promotions, Shipping Cost, and Guarantee, might affect Price Value. A discount is a one-time, direct reduction in the price of goods [7]. Discounts and promotions may have an impact on a person's purchase decision. Discounts and promotions are powerful marketing tools that can pique consumer's attention and encourage them to purchase the goods or services being offered because they perceive a better value at a lower cost. A warranty is a legal pact connected to the purchase of a product that obligates the maker to fix or pay for a product failure within a predetermined amount of time [8]. A guarantee is a factor that supports price value since it is a guarantee or commitment made by the seller or manufacturer to the customer that the product will work as intended or that it will be fixed or replaced if there are any damages or difficulties within a specific time frame. Therefore, it is crucial to include the guarantee offered by the seller or manufacturer as part of the overall value provided to the buyer when determining the price value of a product. One of the aspects influencing consumers when selecting online merchants is reliability and trustworthiness, particularly in terms of product delivery, guarantee, or refunds. Online retailers must be able to ensure that the goods the customer buys arrives to them in good condition and on time. They must also be able to provide the customer a return option if the product is not what they expected and does not arrive on time [14]. When purchasing something, the price usually includes both the cost of the actual product as well as the shipping charges necessary to get the product to the specified location. Shipping costs thus serve as a pillar of pricing and value. In the context of e-commerce or online sales, shipping expenses are frequently excluded from the product price and shown as extra charges that the customer must pay. This is due to the fact that shipping charges can vary depending on a number of variables, including the weight of the products, the shipment's destination, the delivery method, and the shipping company utilized. Product prices, shipping costs and discounts play a major role when selecting a product [15]. Consumer confidence in online shopping is affected by concerns like shipping costs [16].

2.3 Performance Expectancy

Performance Expectancy depending on the activities often carried out by daily consumer levels is the advantage acquired by customers by increasing the use of a technology [9]. Performance expectancy measures a person's level of trust in using an information system to improve their performance at work [10]. Performance Expectancy is a variable that the user will gain considerable advantages from after using the system [11]. In this study, the host's self-efficacy, the streamer's performance, the live stream's effectiveness, and the interaction between users can all be used to determine performance expectations. In this study, individual personal elements with the aid of technology can identify each host in carrying out marketing and pique customer interest in purchasing. Self-efficacy is a sequence of acts required to determine performance based on individual judgment [12].
2.4 Behavioral Intention

The consumers’ desire to act in a particular way in order to acquire, utilize, and dispose of a good or service is known as behavioral intention [9]. The indicators include having the goal, planning to use it, doing things for nothing, and making mistakes [9]. The outcome of the customer satisfaction process is behavioral intention. Consumer behavior involves the usage of services, activities, experiences, and thoughts in addition to the purchase of actual items [11]. In this study, planning, intention, recommendation, loyalty, and switchability are all indicators of behavioral intention. These indicators may have an impact on consumer preferences for using information and technology.

2.5 Use Behavior

The way a user uses a technology and their level of satisfaction with it are both considered use behaviors. Due to the idea that a person using a system can improve the performance of his work, an information technology will be used when the user has an interest in using the information system [9]. Behavioral Intention has a direct impact on use behavior. However, a number of factors can influence how people use technology, including: Easy to Use, Bias, User Satisfaction, Addiction, and Reliability are the top five criterias.

3. Methodology

In this study, samples are collected, processed and presented using quantitative methods. Quantitative research method is a scientific research approach carried out by collecting numerical data and then analyzing with the intention of assessing the impact of live broadcasting techniques in online sales on customer's purchasing preferences among Generation Z, it employs statistical analysis tools. Respondents are contacted via social media sites, including WhatsApp, Line, Instagram, and Facebook, after questions have been organized using Google Forms. The survey received responses from 370 individuals. The demographic information of the respondents was broken down into categories based on gender, age, work, screen time, online shopping budget, methods of payment and delivery, and gadgets utilized.

Based on the survey, men are most prevalent among respondents, with an average age range of 11 to 26 years, a typical job as a student and a private sector employee, a long screen time of more than five hours per day, an average monthly online shopping budget of Rp 500,000, a preference for regular 3-5 day delivery, and mobile banking as a preferred payment method when using a smartphone to shop.

For the distribution of questionnaires, a structured questionnaire is utilized. It contains statements based on previously identified variables and indicators about how live broadcasting techniques in online sales affect Generation Z consumers interest in making purchases. The SmartPLS 3.0 application was utilized for testing, which included Validity and Reliability checks, Fornell-Larcker criteria, and Path Coefficients.

Researchers use the proposed framework adapted from UTAUT 2, where researchers want to explore more about the influence of Hedonic Motivation, Price Value and Performance Expectancy on the Behavioral Intention and Use Behavior of livestreaming platform users, this study aims to predict how end users will react to technology new in particular to the three main components, namely when a user watches live streaming it will generate interest in buying even though previously the user was reluctant to buy the item, when a discount is given in a short time during live streaming it will increase user buying interest as well as the performance of the host which is able to attract customers to buy the goods via live streaming, these three components are used to develop our proposed model in this work. The purpose and Use of Behavior are then influenced by each of these factors, as shown in Fig 2.

![Fig 2. Our Proposed Model](https://example.com/fig2)

Based on previous study, Hedonic Motivation has a significant and positive influence on Behavioral Intention. In this study[17], H1 is therefore selected:

**H1**: Hedonic Motivation has a positive and significant influence on Behavioral Intention

According to a previous study, Price Value does not have a significant impact on consumers' Behavioral Intentions when live streaming shopping [17]. H2 is therefore selected:

**H2**: Price Value has a positive and significant influence on Behavioral Intention.

According to a previous study, Performance Expectancy positively impacts Behavioral Intention toward Livestream shopping in Indian consumers [18]. H3 is therefore selected:

**H3**: Performance Expectancy has a positive and significant influence on Behavioral Intentions.

### Table 1. Table Operational Variables

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>Indicators</th>
<th>Codes</th>
<th>Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hedonic Motivation</td>
<td>Self Reward</td>
<td>HM 1</td>
<td>You feel shopping for yourself is a gift you deserve after the hard work you do.</td>
</tr>
<tr>
<td>2</td>
<td>Stress Release</td>
<td>HM 2</td>
<td></td>
<td>You feel like shopping or just looking at the items on the online store can relieve</td>
</tr>
</tbody>
</table>
4. Result and Discussion

The Validity and Reliability of each existing variable were measured based on the test results that the researchers got using the SmartPLS version 3.0 application, utilizing a maximum iteration of 300. In order to determine which indicator is considered legitimate, the outer load of each indicator must first be calculated. This is the first of several processes to assess the Validity and Reliability of the data collected from respondents. Outer loads have an impact on how much the indicator and latent variable correlate, with an outer load of > 0.7 considered valid. Numerous indicators in this study, including HM1, HM5, PV5, PE1, PE2, PE3, BI1, UB1, and UB5, do not meet the minimum values for outer load. As a result, the indicators are deemed invalid and should be removed.

The results are shown in Table 2 after obtaining a valid indicator, which is followed by measuring Average Variance Extracted (AVE), where the valid AVE value proclaimed in this test is that value > 0.5. Using the Fornell-Larcker standard Cross Loading and Fornell-Larcker Criterion measurements are the last steps in this validity test. The correlation between a variable and the variable itself cannot be smaller than the correlation between a variable with another variable, according to the Fornell-Larcker criterion. The Fornell-Larcker test's findings are as follows:

Table 2. Fornell-Larcker Criterion

<table>
<thead>
<tr>
<th></th>
<th>Loyalty</th>
<th>BI4</th>
<th>Desire to make repurchases regularly using the live stream platform as a selling method.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td></td>
<td></td>
<td>They want to continue to use live streaming as a trading platform.</td>
</tr>
<tr>
<td>21</td>
<td>Use Behavior</td>
<td>Easy to use</td>
<td>UB1</td>
</tr>
<tr>
<td>22</td>
<td>Bias</td>
<td>UB2</td>
<td>Because you have often watched certain streamers, you are biased towards the statements spoken by the streamer.</td>
</tr>
<tr>
<td>23</td>
<td>Addicted</td>
<td>UB3</td>
<td>You feel the urge to always watch a live sales transaction, even if you don’t want to make a purchase.</td>
</tr>
<tr>
<td>24</td>
<td>User Satisfaction</td>
<td>UB4</td>
<td>While many other live streaming platforms offer the same features, you prefer a live streaming platform that makes you feel comfortable.</td>
</tr>
<tr>
<td>25</td>
<td>Reliability</td>
<td>UB5</td>
<td>You prefer live-streamed sales transactions that provide accurate information.</td>
</tr>
</tbody>
</table>
The above table demonstrates that the value of the correlation between a variable and another variable is not greater than the correlation between a variable and the variable itself, demonstrating that the correlation between variables is valid.

Cross loadings are the last step in this validity measurement. In this measurement, correlation between the indicator and the measured variable must be stronger than the correlation between the indicator and other variables. The remaining indicators and variables can be verified as valid and checked for reliability based on the findings of the test. Construct Reliability and Validity can be used to measure this reliability, it should be > 0.7 for Cronbach's Alpha and Composite Reliability. Here are the findings from the calculation of the validity and construct reliability of the indicators that have already been deemed reliable:

**Table 3. Construct Reliability and Validity**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Cronbach’s Alpha</th>
<th>rho_A</th>
<th>Composite Reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 (HM)</td>
<td>0.878</td>
<td>0.890</td>
<td>0.916</td>
<td>0.731</td>
</tr>
<tr>
<td>X2 (PV)</td>
<td>0.774</td>
<td>0.883</td>
<td>0.858</td>
<td>0.669</td>
</tr>
<tr>
<td>X3 (PE)</td>
<td>0.776</td>
<td>0.776</td>
<td>0.899</td>
<td>0.817</td>
</tr>
<tr>
<td>Y1 (BI)</td>
<td>0.826</td>
<td>0.848</td>
<td>0.883</td>
<td>0.654</td>
</tr>
<tr>
<td>Y2 (UB)</td>
<td>0.769</td>
<td>0.785</td>
<td>0.866</td>
<td>0.683</td>
</tr>
</tbody>
</table>

From the table above, it can be concluded that the variable Hedonic Motivation does not significantly influence Behavioral Intention because its statistical T Value < 1.96. A significant variable can be indicated for other correlations.

### 4.2 Test Result

#### 4.2.1 Hedonic Motivation has a positive and significant influence on Behavioral Intention

Based on the aforementioned data, it is known that Hedonic Motivation has a positive influence and significantly affects Behavioral Intention. This is demonstrated by the statistical T Value on the relationship between Hedonic Motivation and Behavioral Intention which only gets a value of 2.236 with a P Value of 0.025. Based on the results of such calculations, it can be stated that the first hypothesis in this study is declared correct. In the process of getting the results of this hypothesis, there are several indicators that need to be removed, namely HM1 because it has an Outer Loading value of 0.660, which is below the accepted standard value, which is > 0.7 and HM2 because the Fornell-Larker value is between HM and PE has a greater value than the value of PE compared to the variable itself.

#### 4.2.2 Price Value has a positive and significant impact on Behavioral Intention

Based on the results of the test, it is known that the influence of Price Value with Behavioral Intention has...
a positive direction of relationship with a statistical T Value > 1.96 and P Value < 0.05. From these results, it can be demonstrated that Price Value has a significant influence on Behavioral Intention and correlates positively between the two. From the results of such calculations, it can be stated that the second hypothesis in this study is correct. In the process of obtaining the result of this hypothesis, there are several indicators that need to be removed, namely PV5 because it has an Outer Loading value below the accepted standard value > 0.7.

4.2.3 Performance Expectancy has a positive and significant influence on Behavioral Intention

After testing through T Statistic and P Value, it is known that the influence of Performance Expectancy with Behavioral Intention has a negative direction of relationship but qualifies with a Statistical T Value > 1.96 and a P Value < 0.05. Thus, the results of such calculations can prove that Performance Expectancy can affect Behavioral Intention significantly, but the value is negative. The third hypothesis in this study was rejected. In the process of obtaining results from this hypothesis, there are several Indicators that need to be removed, namely PE1, PE2, and PE3, because they have Outer Loading values below the accepted standard value of >0.7.

Based on the results of the research, Hedonic Motivation has the highest value on HM2, where users feel that shopping or just looking at the items on the online store can relieve the stress that they are experiencing, while Price value has the highest value in PV2, where the user feels that the price of a product corresponds to the benefits given, whereas Performance Expectancy has the highest value in PE5, where the good description and demonstration of the product by the host can increase the sense of user confidence to buy a product. In order to obtain the results of Behavioral Intention the highest is in B14, that is the user wants to make re-buys regularly using the live streaming platform as a method of selling, and the user feels the urge to always see a live stream to see the sale transaction even if they do not want to make a purchase. In accordance with UB3, users feel the presence of being addicted to watching live streaming.

5. Conclusion

The study examined the impact of live broadcasting methods in online sales on consumer purchasing interest in Generation Z. The application used to test the hypothesis uses smartPLS 3.0 and produces several indicators that have an outer load value below 0.5, so the indicator must be eliminated because it does not meet the minimum external load, such as HM1, HM5, PV5, PE1, PE2, PE3, BI1, UB1, and UB5. So in this study can be concluded that Indonesians especially Generation Z feel that shopping can relieve stress, anxiety when passing a trend to have goods, feel the presence of an impulse from around to buy goods online, are willing to pay more for products with better quality and corresponding to the benefits given, like to get promo and feel that shipping cost affects the decision of the buyer, in addition to the host that characterizes and explains the product well can also increase the purchase interest of customers, customers are also willing to recommend the use of the platform, keep making purchases regularly and feel encouraged to always see a live streaming even if they do not want to make a purchase because they already feel comfortable to transact on the live streaming platform. On the part of the study hypothesis, H1 and H2 have statistical values of T Value > 1.96 and P Value < 0.05 with a positive correlation, so both these hypotheses can be stated correctly, so Hedonic Motivation and Price Value influence Behavioral Intention. While H3 is Performance Expectancy rejected because statistics T Value > 1.96 and P Value < 0.05 are already relevant and significant, the correlation shows negative results. From the results of this study, researchers are expected to further study the hypothesis of the impact of Performance Expectancy on Behavioral Intention and to further dig into the potential of other variables found in UTAUT 2, such as Effort expectancy, Social Influence, Facilitating Conditions and Habit. The limitation of this study is that researchers only conduct research on Gen Z. The study concluded that the price and intensity of consumer desire to buy unnecessary goods can affect consumers’ desire for live streaming in making sales transactions as well as their interest in buying from consumers.

References


