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# **Augmented reality users: The effect of virtual try on, live streaming and e-service quality on online purchase intention mediated by customer satisfaction**

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**Abstract**---Research aim: Research Objectives: The purpose of this study is to examine the effect of virtual try-on variables and e-service quality in influencing consumers' online purchase intention in online shopping. This study examines the role of customer satisfaction as well in the mediation of the effect of e-service quality in the system of online purchase intention. Design/Method/Approach: This study uses a quantitative approach with a descriptive research type, which explains the description of each research variable, such as the virtual try on, live streaming, e-service quality, customer satisfaction and online purchase intention. The research instrument used is the questionnaire distributed which is done online. The sample size was taken in the amount as 120 respondents with the sampling method that used purposive sampling. The analysis technique uses SEM PLS. Research Findings: The results appeared to be that 1) Virtual Try On has a positive and significant effect on the online purchase intention. 2) In this part, the live streaming has a positive and essential effect on the online purchase intention. 3) E-service quality has such a positive

and qualified effect on online purchase intention. 4) E-service quality has a positive and significant effect on the customer satisfaction. 5) Customer satisfaction has to be happened with the positive and significant effect on the online purchase intention. 6) Customer satisfaction is being able to mediate the e- service quality in influencing the online purchase intention. Theoretical Contribution/Originality: This research provides theoretical implications that the overall results support several pre-existing studies based on the grand theory of consumer behavior. Practical Implications: It is seen based on the research results, it is happened to be expected that the management can pay more attention to the website design, the fulfillment aspects, consider para-social interactive in order to interact more with viewers, improve the vividness aspect to identify facial features realistically. Research Limitations: Respondents in this study were consumers in Denpasar area, Bali hence, the results of the study cannot be generalized to other regions in the province.

**Keywords**---Virtual try on, live streaming, e-service quality, customer satisfaction, online purchase intention.

## Introduction

The recent state of technology development can be described as stage 5.0, which it represents the integration of high technology with human values. The advent of the internet has facilitated with the smooth functioning of business operations, eliminating communication barriers between businesses and consumers, regardless of geographical location, time zone, or other factors. The evolution of internet technology has influenced consumer behavior, shifting it from conventional shopping patterns to technology-based shopping patterns (Miandari et al., 2021). It can be said that information technology is utilized to support electronic commerce both through websites. Website is a business transaction activity that uses the internet as a medium of exchange and interaction with consumers. (Wafiyyah and Kusumadewi, 2021). Website is the distribution, purchase, sale, marketing of goods and services mediated by electronic systems such as the internet or television or other computer networks (Jogja and Widowati, 2023). Mobile devices are equipped with the internet provider for the consumers with a wider access. In order to that, the consumers can shop comfortably wherever and whenever they want (Rachmiati, 2024). The utilization of this website has caused many changes in the lifestyle of consumers in shopping as an effort to meet their needs and what they want. The way consumers shop has been shifted from conventional shopping activities to the online one these days.

Consumers nowadays think that shopping by utilizing the website is more convenient because it can be done anywhere so that it can save so much time (Jogja and Widowati, 2023). The existence of the website, supported by broad internet access, has made the buying and selling of goods or services undergo significant changes, where digital marketing carried out by sellers can run

quickly, easily and free of charge (Laimeheriwa and Kembau, 2024). Customers consider that these kind of platforms can transform the process of buying online easier than shopping in physical stores with the easy way, convenience, and with the variety of choices offered. Consumers can also compare products in terms of price without the need to move from one offline store to the other. This case causes the consumers behavior in the form of purchasing decisions for certain products or brands (purchase intention).

Online purchase intention is a circumstances where in which a person is willing to make transactions online. According to Zhang et al. (2019) online purchase intention refers to the desire of online consumers to make purchases in the near future which depends on consumer attitudes towards using shopping applications as a medium that can help consumers meet their needs. Online purchase intention is formed from past experiences in using some products or services that is offered and the knowledge possessed by consumers about related products. Purchase intention is a marketing concept that shows the consumer's tendency to buy as measured by the consumer's planning action to buy a product or brand until the actual purchase (Apriani and Sulistyowati, 2024). This online purchase is very helpful for consumers in fulfilling their needs and desires, considering that consumers can get products easily, quickly, practically and do not need to spend special time shopping.

Apart from the positives of using websites in shopping as an effort to fulfill needs and desires. Kazmi et al. (2021) and Liu and Napitupulu, (2020) argue that there are major challenges in websites, namely the lack of physical experience that conventional stores can provide, where these platforms present more two-dimensional product presentations to customers, and have limitations in offering options and flexibility. Consumers cannot see, feel, or test the product directly before buying, resulting in a sense of the uncertainty, anxiety, or disappointment if the product received does not match expectations (Whang et al., 2021). So, the companies are currently utilizing augmented reality technology to add features that can create a customer shopping experience.

Augmented Reality or AR is a technology in which the real world and the internet world are combined to form a user's view of the product that will become one with the surrounding environment. AR will be one of the most influential technologies and predicts that it will enter various industries, such as e-commerce, manufacturing, and education (Rajeev et al., 2019). The website industry has been using AR to display virtual products in real-time in real environments (Liu and Napitupulu, 2020). According to Kowalczyk et al. (2021), with this technology, consumers can visualize the products, try color or style variations, and see how the product interacts with the surrounding environment. For example, makeup is one of the products that women often fulfill through the online purchasing activities. However, customers often get products that is not fulfilling the match of their skin tone so that customers must be careful in choosing the makeup shade to be purchased in order to match their skin tone. Augmented reality helps addressing these customers' complaints by providing a virtual try on feature".

The virtual try on feature allows customers to virtually try on products by scanning their skin through the gadget, then customers can match the makeup shade that matches the customer's skin. Virtual purchase alternatives provide an attractive impression for customers where online purchase simulations can help users make repeat purchases. Consumers use virtual try-on technology to find information about beauty products before intending to buy. (Fenanda et al., 2024). One website that utilizes virtual try-on is Wardah's official website. The Wardah company has launched an AR technology-based feature with the expectation of making this feature an instant 'try-on' platform for makeup products by displaying virtual makeup on the face of feature users. This great innovation from the Wardah Company is also intended to maximize the best online shopping experience and become to be an effective solution in answering user concerns also in choosing the makeup color that consumers want when shopping online (Sabira dkk, 2022).

Technology can also be utilized to introduce products and touch the psychological side of consumers towards product perception by live streaming. Live streaming is an action that distributes real-time events via video to drive sales growth by creating an intimate interaction environment with consumers (Zhang et al., 2019). Live streaming as an online marketing model can have an impact on the emotional reactions of e-commerce users which can influence their purchase intentions (Zhu et al., 2023). Consumers can more quickly compare different products over long distances based on quality and price (Rachmiati, 2024). Live streaming media can be used to introduce products by showing and describing products to consumers. This can trigger online purchase intention activities.

Online purchase intention activities can also occur due to the online service quality (e- service quality) received by the customers. E-service quality is a service provided to internet network consumers as an extension of a site's ability to facilitate such activities like shopping, purchasing, and distribution activities effectively and efficiently (Abid and Dinalestari, 2019). E-service quality is the extent to which a company is able to facilitate shopping, purchasing, and delivery of products and services effectively and efficiently (Harahap et al., 2020). E-service quality has a positive and significant effect on online purchase intention (Zarei et al., 2019; Dapas et al., 2019; Irawan et al., 2020; Ramli et al., 2020). Maharsi et al. (2021) stated that e-service quality has no significant effect on online purchase intention. Based on the research gap, this study uses the customer satisfaction variable as an intervening variable between e-service quality and repurchase intention.

Customer satisfaction is the feel of being satisfied that is felt by customers based on previous purchasing experiences. The level of satisfaction is a function of the difference between perceived performance and expectations held by the customer (Mafidayu and Vania, 2022). If the performance felt by the customer is below expectations, the customer will feel disappointed, but on the other hand, if the performance felt by the customer is above the expectations they have, the customer will feel satisfied (Febrianty et al., 2023).

Product purchases that can be made through the website by utilizing virtual try on to create satisfaction and repeat purchasing activities are products from

Wardah. Wardah has utilized the "beauty match and shade match" feature on the Wardah website. Wardah beauty products that can be tried on virtually include Wardah Long Lasting Lipstick, Colorfit Velvet Matte Lip Mousse, Exclusive Matte Lip Cream, Intense Matte Lipstick, Colorfit Ulytra Light Matte Lipstick, Wardah Exclusive Blush On, Blush On series A, series B, Series C and Series D. Consumers can try using filters to adjust the product to their skin tone. The quality of service provided at the Wardah official store also increases the satisfaction felt by customers so that this leads to online purchasing activities (online purchase intention). The purpose of this study was to examine the effect of Virtual Try On and E-Service Quality on Online Purchase Intention mediated by Customer Satisfaction.

### *Statement of Problem*

Previous findings conducted by Basegmez and Yaman, (2022) and (Laimeheriwa and Kembau (2024) which states that virtual try on has a significant effect on online purchase intention. Virtual try on is augmented reality content that places real-world elements in a virtual environment (Song et al., 2020). The virtual try on simulation allows customers to visualize products such as jewelry, makeup, clothing, shoes, and furniture in the surrounding environment as if the customer is trying on a physical product directly. This can lead to more interactive customer engagement in their shopping activities. The virtual try-on feature aims to eliminate doubts arising from a sense of uncertainty when shopping (Sabira, et al, 2022). The detailed virtual try-on display can convince customers so that customers are easier to choose the desired product. Interface effects that arise due to the development of real- time and 3D facial recognition technology allow customers to try on products online (Basegmez and Yaman, 2022). Digital simulations can track customer preferences in making purchases so that companies can use this information to predict sales. Customers using personalized 3D model VTOs allow customers to try on the sensation of wearing the product not only from the front, but also from the side (Hwangbo et al., 2020). Virtual try on helps consumers understand product specifications and reduce the risk of purchasing unsuitable products (Fenanda et al., 2024). According to Hwangbo et al. (2020) and Gabriel et al. (2023) virtual try-on can be measured using 4 (four) indicators, including: confident in shade, self congruity, vividness, involvement.

In addition to virtual try on, live streaming is also currently being favored by business people to attract viewers. Live streaming is a way of delivering transaction activities that occur through a real-time streaming platform by making virtual space an interactive space between streamers and consumers (Aprilia and Ambarwati, 2024). Live streaming will be able to increase the purchase intentions with authenticity, visualization and interactivity because consumers who watch are given access to see product details virtually. This can help consumers assess the product both in terms of quality and the estimated suitability of the product for consumers. Guo et al. (2021) live streaming hold the positive influence on purchase intention. Other research was also conducted by (Pongratte et al., 2023) which states that live streaming can influence purchase intentions positively. Indicators that can be used to measure live streaming

variables include: streamer attractiveness, para-social interaction, information quality (Mada and Prabayanti, 2024).

Companies in this case are also important in paying attention to the e-service quality of their website. E-service quality is a measure of the effectiveness and efficiency of website performance perceived by customers in obtaining the right information when making transactions and the smooth delivery of products and services (Rahayu and Saodin, 2021). Customers can assess the service quality through their perceptions compared to the results of the technical services they receive when shopping online, thus by forming customer satisfaction which leads to repurchase activity. When the e-service quality that provided is good and increasing, the customers tend to make online repurchases (Saleh et al., 2022). E-service quality can be defined as a service provided to customers via the internet network to facilitate customer shopping activities in an effort to fulfill needs and desires effectively and efficiently (Febrianty et al., 2023). E-Service Quality can be measured by 6 (seven) indicators, including: efficiency, fulfillment, system availability, privacy, responsiveness, and contact (Kusmita dkk., 2022; Alvin et al., 2022; Febrianty et al., 2023).

Online purchase intention can also be achieved if the companies take a good care to the level of customer satisfaction. Customer satisfaction can be explained as customer satisfaction regarding previous purchasing experiences with certain online trading companies and resulting in favorable responses, such as purchases and repurchases (Anggraini et al., 2020). According to Putri and Yasa, 2022 customer satisfaction is the level of satisfaction after comparing the service or product received in accordance with what is expected. When customers feel satisfied because their wishes are well met, customers can make repeat purchases. Satisfaction is a measurement of the level of product perceived in accordance with consumer expectations (Wijayanti and Goca, 2022). The customer satisfaction variable can be measured using 4 (four) indicators, they are namely: convenience, merchandising, site design, and security of financial transactions (Kusmita dkk., 2022; Febrianty et al., 2023).

Online purchase intents to the specific concerns to the willingness of consumers to the shop that uses the internet (Sulistyowati and Husda, 2023). Purchase intention refers to the likelihood of consumers to buy a product or service (Aditya and Pratama, 2024). Purchase intention combines consumer interest and allows consumers to buy (Aprilia and Ambarwati, 2024). In this phase, consumers will assess the product or service before deciding. The choice to buy a product or service that is seen is a process of several stages starting from the existence of problems that arise so that consumers have a need to solve these problems, recognition, seeking information, assessing alternatives from existing choices, purchasing decisions to post-purchase evaluation. Indicators used in measuring online purchase intention include: Having an interest in finding information, always considering buying, having a desire to know, having a desire to own them (Roshan and Sudiksa, 2019; Aprilia and Ambarwati, 2024).

## Methodology

Methodologically, the objective of this study is to examine the mediating role of customer satisfaction in the relationship between the e-service quality and the purchase intention, along with the mediating role of customer satisfaction in the relationship between virtual try-on and purchase intention. The data were collected using questionnaires, which were measured on a Likert scale. The validity and reliability of the data were tested on a sample of 30 respondents, and the results demonstrated that the data were valid and reliable. A test for validity is considered valid if it has a correlation value greater than 0.3, as demonstrated in Table 1. A test for reliability is considered reliable if it has a Croanbach's Alpha value greater than 0.6, as demonstrated in Table 2. The total number of respondents in this study was 120. The sampling method used was the nonprobability sampling, specifically purposive sampling, with certain considerations. The data from this study were subjected to an analysis of structural equation modeling (SEM) based on partial least squares (PLS).

## Results and Discussion

The results of the questionnaire survey indicate that the respondents in this study exhibit a wide range of characteristics and identities. Table 1 shows the characteristics of the respondents. Table 1 presents the respondents' demographic characteristics, including age, gender, and occupation. These data can be summarized as follows. The distribution of respondents by age revealed that 10% were below the age of 20, 75% were between the ages of 21 and 30, 12.5% were between the ages of 31 and 40, and 2.5% were above the age of 40. This indicates that the majority of respondents who engage in online shopping belong to Generation Z, born between 1997 and 2012. Generation Z is the most technologically adept generation, with a high level of technological proficiency. Consequently, Generation Z engages in a greater proportion of its activities through the use of technology. With regard to gender, 75 percent of respondents were female, while 25 percent were male. This indicates that the majority of online makeup purchasers are female. Female consumers have specific requirements for beauty and makeup products. These needs must be met on a monthly basis by women in order to maintain their skin and enhance their appearance, thereby improving their overall attractiveness.

Table 1: Characteristics of Respondents

| Characteristics of Respondents | Frequency | Percentage |
|--------------------------------|-----------|------------|
| Age                            |           |            |
| < 20 years old                 | 12        | 10         |
| 21 - 30 years old              | 90        | 75         |
| 31-40 years old                | 15        | 12.5       |
| > 40 years old                 | 3         | 2.5        |
| Total                          | 120       | 100        |
| Gender                         |           |            |
| Man                            | 30        | 25         |
| Woman                          | 90        | 75         |
| Total                          | 120       | 100        |

| Characteristics of Respondents | Frequency | Percentage |
|--------------------------------|-----------|------------|
| Occupation                     |           |            |
| Student                        | 15        | 12.5       |
| Private employees              | 75        | 62.5       |
| Civil Servant                  | 15        | 12.5       |
| Businessman                    | 30        | 25         |
| Total                          | 120       | 100        |

Source: Primary data processed (2024)

Based on the respondents' occupations, 12.5% were students, 62.5% were private sector employees, 12.5% were civil servants, and 25% were entrepreneurs. The aforementioned data indicates that private sector employees are more inclined to procure makeup products online. This study employed composite reliability and discriminant validity to assess the validity and reliability of the instruments utilized in the investigation. An indicator is deemed valid if it exhibits a correlation value exceeding 0.70. However, in the latest research, a correlation value of 0.60 is deemed sufficient for the indicator to be considered valid. Table 2 presents the results of the validity test.

Table 2. Measurement Model Analysis (Outer Model)

| Variable                      | Indicators                                     | Outer Loading |
|-------------------------------|------------------------------------------------|---------------|
| Virtual Try On (X1)           | Confident In Shade (X1.1)                      | 0.817         |
|                               | Self-Congruity (X1.2)                          | 0.742         |
|                               | Vividness (X1.3)                               | 0.843         |
|                               | Involvement (X1.4)                             | 0.762         |
| Live Streaming (X2)           | Streamer Attractiveness (X2.1)                 | 0.848         |
|                               | Para-Social Interaction (X2.2)                 | 0.870         |
|                               | Information Quality (X2.3)                     | 0.742         |
| E-Service Quality (X3)        | Efficiency (X3.1)                              | 0.747         |
|                               | Fulfillment (X3.2)                             | 0.789         |
|                               | System Availability (X3.3)                     | 0.757         |
|                               | Privacy (X3.4)                                 | 0.727         |
|                               | Responsiveness (X3.5)                          | 0.749         |
|                               | Contact (X3.6)                                 | 0.716         |
| Customer Satisfaction (M)     | Convenience (M1)                               | 0.777         |
|                               | Merchandising (M2)                             | 0.755         |
|                               | Site Design (M3)                               | 0.840         |
|                               | Security Of Financial Transaction (M4)         | 0.808         |
| Online Purchase Intention (Y) | Having An Interest In Finding Information (Y1) | 0.767         |
|                               | Always Considering Buying (Y2)                 | 0.748         |
|                               | Having A Desire To Know (Y3)                   | 0.833         |
|                               | Having A Desire To Own Them (Y4)               | 0.760         |

Source: Primary data processed (2024)

The results of the validity test indicate that all indicators in this research study have a value greater than 0.70. This indicates that all indicators meet the criteria for convergent validity and are therefore considered valid. The Fornell-Larcker technique was also employed to assess discriminant validity, with a comparison of the average squared root of the AVE and the latent variables. The square root of



the average variance extracted (AVE) for each construct should be greater than the correlation between that construct and the others.

Table 3. Results of the Fornell-Larcker Criterion Approach

|    | M     | X1    | X2    | X3    | Y     |
|----|-------|-------|-------|-------|-------|
| M  | 0.796 |       |       |       |       |
| X1 | 0.724 | 0.792 |       |       |       |
| X2 | 0.623 | 0.588 | 0.822 |       |       |
| X3 | 0.729 | 0.751 | 0.464 | 0.748 |       |
| Y  | 0.794 | 0.739 | 0.648 | 0.722 | 0.777 |

Source: Primary data processed (2024)

Table 3 demonstrates that the data exhibits discriminant validity when evaluated using the Fornell-Larcker criterion approach. This is evidenced by the fact that the root AVE value is higher than that of the other constructs. The construct reliability test is evaluated by two criteria: the composite and Cronbach's alpha on the indicator block, which measures a specific variable. A variable is deemed reliable if the composite reliability value and Cronbach's alpha are above 0.70. The results of the reliability test are presented in the following table.

Table 4. Construct Reliability

|                           | Cronbach's alpha | Composite reliability |
|---------------------------|------------------|-----------------------|
| Customer Satisfaction     | 0.806            | 0.809                 |
| Virtual Try On            | 0.802            | 0.810                 |
| Live Streaming            | 0.758            | 0.767                 |
| E-Service Quality         | 0.843            | 0.847                 |
| Online Purchase Intention | 0.783            | 0.787                 |

Source: Primary data processed (2024)

Table 4 indicates that the results of composite reliability and Cronbach's alpha exceed 0.70. This shows that all variables in this study are reliable. The R-square value is employed to assess the inner model, such as the goodness-of-fit model test. The predictive relevance of the R-square for variable models can be employed to assess the R-square of PLS models. The R-square value indicates the degree to which the observed values and parameter estimates are generated by the model. The R-square value is employed to ascertain the magnitude (percentage) of the effect of exogenous variables on endogenous variables. The range of R-square values is 0-1. If the R-square value is close to zero, the influence of exogenous variables on endogenous variables is weaker, and vice versa. Conversely, if the R-square value is close to one, the influence of exogenous variables on endogenous variables is stronger. The variable R-squared values are presented in the following table.

Table 5. R-Square Value Result

|                           | R-square | R-square adjusted |
|---------------------------|----------|-------------------|
| Customer Satisfaction     | 0.532    | 0.528             |
| Online Purchase Intention | 0.736    | 0.727             |

Source: Primary data processed (2024)

Hypothesis testing is conducted using Partial Least Squares (PLS). Hypothesis testing is employed to ascertain the extent to which the independent variable exerts an influence on the dependent variable. Bootstrapping techniques are used as the ascertain the significance value of each variable and indicator utilized in the study. Additionally, statistical tests were conducted to evaluate the hypothesis by examining the statistical t-value generated for each path of influence between variables. The results of bootstrap testing for direct effects with SEM PLS are presented in the following table.

Table 6. Path Coefficients Result

|         | Original sample (O) | T statistics ( O/STDEV ) | P-values |
|---------|---------------------|--------------------------|----------|
| M -> Y  | 0.424               | 4.134                    | 0.000    |
| X1 -> Y | 0.174               | 2.123                    | 0.034    |
| X2 -> Y | 0.192               | 2.675                    | 0.007    |
| X3 -> M | 0.729               | 16.959                   | 0.000    |
| X3 -> Y | 0.193               | 2.032                    | 0.042    |

Source: Primary data processed (2024)

The results of the test indicate that the original sample value of the customer satisfaction variable on online purchase intention is 0.424, with a p-value of 0.000, which is less than 0.050. In the virtual try-on relationship to online purchase intention, the value is 0.174, with a p-value of 0.034, which is less than 0. The relationship between live streaming and online purchase intention is 0.192 with a p-value of 0.007. The relationship between e-service quality and customer satisfaction is 0.729 with a p-value of 0.000. Finally, the relationship between e-service quality and online purchase intention is 0.193 with a p-value of 0.042. This indicates that the direct relationship between each variable is positive and significant.

The mediating variable in this study was tested for its role in mediating the effect of e-service quality on online purchase intention. This test was done by testing the indirect effect. The results of the analysis, presented in the following table, demonstrate the testing of the indirect effect in this study.

Table 7. Indirect Influence Test Result

|              | Original sample (O) | T statistics ( O/STDEV ) | P-values |
|--------------|---------------------|--------------------------|----------|
| X3 -> M -> Y | 0.309               | 3.984                    | 0.000    |

Source: Primary data processed (2024)

The test results indicate that the t-statistic value is 3.984, which is greater than 1.96, and the p-value is 0.000, which is less than 0.05. This indicates that the customer satisfaction variable serves as a mediator in the relationship between the e-service quality variable and online purchase intention. The exogenous variable e-service quality exhibits a significance value of  $0.042 < 0.050$ , indicating a statistically significant effect. The e-service quality variable's significance level on customer satisfaction is  $0.000 < 0.05$ , also demonstrating a statistically significant effect. Finally, the customer satisfaction variable's significance level on online purchase intention is  $0.000 < 0.05$ , indicating a statistically significant effect. The results of the effect examination indicate that the effects of a, b, and c are significant, thereby demonstrating that the mediating role of customer satisfaction is partially mediated. Once the mediation criteria have been met, the Variance Accounted For (VAF) should be calculated. VAF is a measure of the extent to which the mediating variable is able to absorb the previously significant direct effect of the model without mediation.

Table 8. Variance Accounted For (VAF) Test Result

|                                                | Direct Influence | Indirect Influence | Total Influence |
|------------------------------------------------|------------------|--------------------|-----------------|
| E-Service Quality to Online Purchase Intention | 0.193            | 0.309              | 0.502           |

Source: Primary data processed (2024)

$$\text{VAF}_{\text{customer satisfaction}} = \frac{(b \times c)}{(a) + (b \times c)} = \frac{0,309}{0,502} = 61,55\%$$

The results of the VAF calculation indicate that the VAF value for the e-service quality influence model on online purchase intention is mediated by customer satisfaction to the extent of 61.55 percent. The VAF value falls within the range of 20% to 80%, along with the value of 61.55%, indicating partial mediation.

## Discussion of Result

### 1) The Effect of Virtual Try-On on Online Purchase Intention

The outcome happened by the testing of initial hypothesis indicate that virtual try-on has a positive and statistically significant impact on online purchase intention. The results of hypothesis testing indicate that the use of virtual try-on can stimulate the growth of consumer online purchases. The quality of the virtual try-on feature presented by the digital makeup sales platform is positively correlated with the consumer's intention to make an online purchase. The respondents in this study require a feature that enables them to try on products without having to visit an offline store, thus eliminating the need to determine the appropriate shade for their skin. Virtual try-on provides a visual representation of the makeup products that can be adjusted to the face, allowing consumers to experience the product in a way that is similar to trying it directly (Gabriel et al., 2023). The availability of a virtual try-on feature can assist consumers, particularly those who encounter difficulties in determining the color match of makeup products. This finding is consistent with the results of previous research conducted by Zhang et al. (2019);

Basegmez and Yaman, (2022) and (Laimeheriwa and Kembau (2024) The study found that virtual try-on has a positive and significant effect on online purchase intention.

2) Influence of Live Streaming to Online Purchase Intention

Live streaming is one of the variables that has the most influence on consumers' online purchase intention. The results of hypothesis testing indicate that live streaming has a significant effect on online purchase intention. Consequently, the greater the number of streams broadcast, the greater the likelihood of website users making a purchase. Furthermore, consumers can communicate directly with the live streamer, enabling them to pose detailed questions regarding the specifications of the goods, the advantages of the product in question in comparison to other products, and so forth. The use of live streaming as a marketing tool involves the integration of broadcasters, customers, and community members on social media platforms, facilitating direct interaction in online chat rooms. This approach enables the facilitation of transactions related to the purchase and sale of products (Guo et al., 2021). The results of this study are consistent with those of previous research conducted by Zhang et al. (2019) and Aprilia and Ambarwati (2024) The aforementioned study posits that the act of live streaming activities can enhance consumer purchase intentions when conducted online. Live streaming is one activity which is the most rapidly expanding marketing strategies.

3) Influence of E-Service Quality to Online Purchase Intention

The results of testing the third hypothesis indicate that e-service quality has a positive and important effect on online purchase intention. The results of the hypothesis indicate that an improvement in the quality of online services provided by the company will result in a higher consumer intention to purchase Wardah makeup products. The findings of this study align with those of previous research conducted by Zarei et al. (2019); Irawan et al. (2020); (Ramli et al. (2020); Pongtawan and Methavasarakphak (2024); and Sari and Muna (2024) The study found that e-service quality has a positive and significant effect on online purchase intention. This demonstrates that individuals are becoming increasingly aware of the rapid advancement of technology. Time constraints in activities cause consumers to prefer to access quality e-service technology without having to expend additional time.

4) Influence of Customer Satisfaction to Online Purchase Intention

The present study examines the influence of customer satisfaction on purchase intention. The findings indicate that customer satisfaction exerts a positive and significant impact on online purchase intention. This indicates that when consumers are satisfied with the use of the website in trying out makeup products that they intend to purchase, regarding the match of colors and types of makeup with their skin tones, consumers will tend to be interested in the purchasing process. Consequently, the intention to purchase Wardah makeup products will be enhanced. The findings of this study are explained to be consistent with those of previous research conducted by Maharsi et al. (2021); Apriani and Sulistyowati (2024) and Sherwani et al. (2024) states that customer satisfaction has a positif and signifikan on online purchase intention.

5) Influence of E-Service Quality to Customer Satisfaction

The results of testing the fifth hypothesis indicate that e-service quality has a positive and significant effect on customer satisfaction. This implies that an enhancement in the quality of electronic services provided by the Wardah makeup company will result in an augmented level of customer satisfaction with the features of the Wardah website. According to Saodin et al. (2019) The quality of e-services is determined by an evaluation process in which consumers compare their expectations with the quality of the services they receive. This comparison is particularly relevant in the context of electronic services. The findings of the research are consistent with those previously reported by Zarei et al. (2019) and Purnamasari and Suryandari (2023) The study found that e-service quality has a positive and significant effect on customer satisfaction. It is of paramount importance for the Wardah makeup company to enhance the quality of its services, both on the website and in-store, in order to foster consumer satisfaction and encourage purchases.

6) Customer Satisfaction as Mediated between The Effect of E-Service Quality on Online Purchase Intention

The objective of this study was to ascertain the capacity of customer satisfaction variables to act as a mediator between e-service quality and online purchase intention. The results of the test indicate that customer satisfaction plays a partial mediating role in the relationship between e-service quality and online purchase intention. This implies that the greater the satisfaction experienced by consumers when utilising the Wardah website, the greater the impact of the e-service quality relationship on the online purchase intention of consumers. The findings of this study are consistent with those of Maharsi et al. (2021) and Sherwani et al. (2024) which indicate that customer satisfaction can act as a mediator between e-service quality and online purchase intention.

## Conclusion

The utilization of augmented reality technology for online buyers represents a significant factor influencing the likelihood of consumers making online purchases. The virtual try-on feature, e-service quality, and customer satisfaction have been demonstrated to influence the increase in consumer online purchase intention activities. This study has identified a mediating role for customer satisfaction in the relationship between e-service quality and online purchase intention. The utility of satisfactory e-service quality is capable of fulfilling consumer expectations regarding website usage, thereby increasing the likelihood of purchase intention. This research has shown the theoretic implications, called by that it adds to the theoretical study. Overall, the results support several existing studies based on the grand theory of consumer behavior. In practical terms, this research can contribute to management by suggesting that greater attention should be paid to aspects such as site design, fulfilment, para-social interaction, and vividness.

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