A Trust Based Purchase Intention Model in E-Commerce: The Role of Online Customer Review and Customer Rating

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Abstract:- Purchasing online is one of the numerous advantages made possible by technological advancements. Convenience, like two sides of a coin, can make it easier for customers to purchase, but there are still issues with consumer trust. This study seeks to ascertain consumer's purchase intentions as they are impacted by online customer reviews and customer ratings based on trust. The research sample consisted of 203 respondents who were chosen using the purposive sampling approach. With the assistance of Smart PLS software, the analytical tool employs structural equation modeling (SEM). According to the study's findings, consumer trust may be developed through the use of customer reviews and ratings, which will pique customers' interest in buying.

Keywords:- Purchase intention, online customer review, customer rating and trust.

I. INTRODUCTION

Consumer purchase decision has changed due to the rapid development of technology. Consumers used to have to go to the store to shop, but now they don't have to because they can shop using e-commerce apps on their smart phones from the comfort of their own homes. Changes in the environment have an impact on consumer purchase decisions. Consumer impressions of items, promotions, prices, and locations that have been decided in advance by the corporation are some of the factors that can influence consumer purchases [1]. Consumers make two decisions when making online purchases: first, they search for information on the goods they want, then compare the options available, and finally, they make a purchasing decision [2]. A marketer must define who can make decisions and who can provide input to him in order to understand how consumers make purchasing decisions [1].

In 2020, Indonesians would spend USD 9.81 billion on e-commerce in the fashion and cosmetics industry, up from USD 4.79 billion the previous year [3]. This is why e-commerce-related research is being carried out. Every year, the rise of e-commerce in Indonesia accelerates. This is because the government continues to invest in infrastructure, logistics, financial institutions, and other areas to promote the long-term growth of e-commerce [4]. E-commerce is typically handled by a payment mechanism known as a payment gateway. Payment gateways make it easier for vendors and buyers to communicate. Payments were formerly done by COD (Cash On Delivery) or direct bank transfer; however, direct debit (BCA KlikPay, Mandiri Clickpay, CIMB Clicks, and e-Pay BRI) and e-wallet (TCASH, GOPAY, OVO and DANA) has made it more easier.

The main reason for this shift in behavior from offline to online is the convenience offered by online shops; however, in addition to the convenience gained, there are a number of factors that cause customers to avoid using e-commerce, namely risk issues, which generally revolve around payment security, fear of fraud, or the quality of goods that do not meet expectations. In online transactions, trust and risk are elements that impact purchasing decisions [5][6] and repurchase [7]. The capacity of a consumer to analyze a product such that it might lead to a desire to make a purchase choice is the major difference between an online shop and an offline shop. As a result, it's critical to understand what elements might influence customers and future consumers to choose to transact via e-commerce, resulting in the growing phenomenon that it is today. When buying, the most important factor for a customer is faith in the website that enables shopping and the seller on the internet. Consumers will be interested in purchasing things through e-commerce once trust has been established. According to TPB theory, the first step before customers make a purchase is for them to plan to buy. The focus of this study will be on buying intent [8]. Trust [9], customer reviews, and customer ratings [10] are all elements that impact purchase intention.

Online Customer Review (OCR), also known as electronic word of mouth (eWOM), is one of the many features of online stores that has gained a lot of attention from academics and the general public as one of the most powerful aspects in deciding consumer purchase decisions [11]. Consumers will normally try to gather information about a product through reviews from blogs, reviews from their favorite influencers, reviews from YouTube, or writings created by website owners about a product, and usually in apps, before purchasing things on online shopping sites. A review column is available in e-commerce. The characteristics, pros and downsides of the goods, and the pricing of the product are all included in the reviews. Consumers engage in this information-gathering activity in order to mitigate the negative effects of internet buying. Examining reviews and ratings on a shop is a simple approach to obtain this information.

The use of reviews and ratings as tools to boost client interest and confidence is a key component of today's online marketplace. According to a poll of 5000 buyers from five countries, online ratings and reviews on retail websites are the most commonly accessible sources of information. However, online ratings and reviews have not been able to enhance confidence in e-commerce, but trust can make customers plan to purchase.[9]. Trust was discovered to be a variable that mediates the influence of customer rating and customer review on purchase intention in another investigation [12]. The majority of earlier research focused on internet reviews as text reviews. Reviews in the form of text and ratings are split in this study, resulting in two types of online reviews or OCR: Customer Reviews and Customer Ratings, both of which are part of e-WOM. The parameters of producing a customer rating and a customer review are the same [13].

II. LITERATURE REVIEW

A. E-Commerce
E-commerce refers to the capacity to sell or deal online. This includes retail, online banking, and shopping - all of which entail actual purchases and purchases [14]. Some argue that e-commerce encompasses all online transactions, such as replying to an enquiry or browsing a catalog online. B2C (business-to-consumer), B2B (business-to-business), C2C (consumer-to-consumer), and C2B (consumer-to-business) are some of the several types of e-commerce (consumer-to-business). Based on the notion of e-commerce itself from the capacity to make transactions online, online shops and online marketplaces are one part of e-commerce.

B. Purchase Intention
The customer's purchase intention is what he or she intends to buy. Customers' perceptions of the product or service they desire to purchase might be rather nuanced. Customer behavior, perceptions, and attitudes are all linked to purchase intent. Customers' purchasing habits play a crucial role in selecting and evaluating items and services [1]. Purchase intention is a valuable tool for anticipating the purchasing process of certain items and services.

Online purchase intention or online purchase intention is the customer's intention to buy a certain product on online media. This definition is the same as the usual product purchase intention, but the influencing factors are different. Online purchase intention, is an important predictor of actual online customer behavior in real life, referring to the results of customer assessment criteria regarding website quality, information search, and product evaluation [15]. Customers' willingness to make purchases through websites or online businesses on the internet is reflected in their intention to purchase online. Previous study has looked at the aspects that determine the motivation for online purchases.

C. Online Customer Review
A product review is an element of Electronic Word of Mouth (eWOM), which refers to someone's direct opinion rather than an advertising. A person's purchase decision is influenced by a variety of variables, including product reviews. According to Chevalier & Mayzlin (2006) in Lee

(2014), customers might use the quantity of reviews as a sign of product popularity or worth, which can influence their propensity to purchase a product. However, having more reviews and ratings does not guarantee that the product will be purchased by buyers. Customers' decisions to acquire a product are influenced by a variety of variables.

For marketing communications, online reviews may be a valuable promotional tool. Marketers and sellers have adopted this medium since it is a low-cost, high-impact way to reach out to their customers. Marketers are known to have manipulated the buying behavior of potential purchasers by using customer networks of influence. According to reports, chat marketing have penetrated internet review boards.

D. Customer Rating
Customer feedback in online stores may be seen as an indication of how happy they are with the goods. As a result, people frequently utilize a star variable or individual star rating to assess their happiness with a particular product. We define rating as a user's preference for a product's experience in terms of their psychological and emotional state while interacting with virtual items in a mediated environment.

E. Hypothesis
In this research, there are five hypotheses:
- Online customer review affect on purchase intention
- Customer rating affect on purchase intention
- Trust affect to purchase intention
- Online customer review affect on trust
- Customer rating affect on trust

III. RESEARCH METHOD

This research looked at structural equation modeling (SEM) in four stages, including [16]:
- Create the inner model
- Make's Outer Model
- Evaluation of the Model
- The Hypothesis Testing Process

Purposive sampling was used with a total of 203 respondents who were citizens of the Sumbawa sub-district in West Nusa Tenggara province. Residents of the Sumbawa sub-district, who have seen the Shopee application and are aware of the product review and rating menu in the Shopee application were used to choose the sample.

IV. RESULT AND ANALYSIS

A. Create Inner model
The design of an inner model is the first step in executing structural equation modeling (SEM) study.
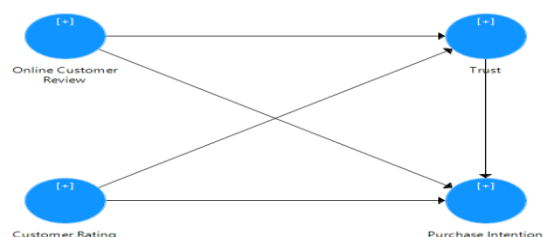

Fig. 1: Design Inner Model

B. Make's Outer Model

This study uses reflective indicators. The following is an image for the outer research model:
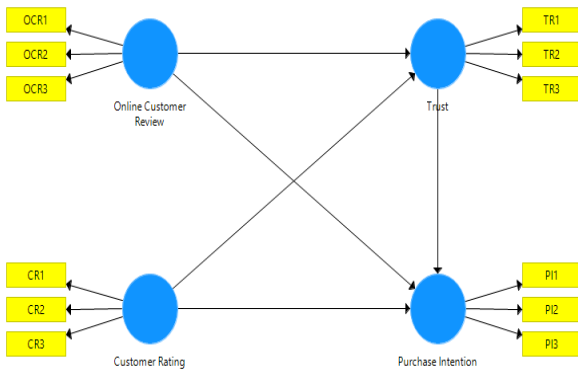

Fig. 2: Outer Model

C. Evaluation of The Model

The first stage is to analyze the outer model, which is to determine whether the produced statements can be used to measure variables (valid) and how consistent the measuring instruments employed are (reliable). It is considered legitimate if the discriminant validity value is greater than 0.60 or the average variance extracted value is greater than 0.50 [16].

Statement	Cross loading	AVE	Category
PI1	0.897		Valid
PI2	0.917	0.817	Valid
PI3	0.897		Valid
TR1	0.931		Valid
TR2	0.936	0.868	Valid
TR3	0.928		Valid
OCR1	0.943		Valid
OCR2	0.921	0.863	Valid
OCR3	0.922		Valid
CR1	0.907		Valid
CR2	0.920	0.841	Valid
CR3	0.924		Valid

Table 1: Validity Test

Source : Researcher processed data, 2021

Following the validity test, the next stage is to conduct a reliability test, with the requirements for variables that are certified trustworthy being those with a Cronbach alpha value and composite reliability more than 0.60 [16].

Contruct	Cronbach Alpha	Composite Reliability
Purchase Intention	0.888	0.931
Trust	0.924	0.952
Online Customer Review	0.921	0.950
Customer Rating	0.906	0.941

Table 2: Reliability Test

Source : Researcher processed data, 2021

Table 5 shows that all of the Cronbach's alpha and composite reliability variables have values more than 0.70, implying that they are reliable. The inner structural model is then evaluated. The model is regarded to be good if the R-Square is more than 0.67, moderate if the R-Square is greater than 0.33, and weak if the R-Square is greater than 0.19 [16].

Construct	R-Square	Status
Purchase Intention	0.804	Good
Trust	0.793	Good

Table 3: Inner Model Evaluation

Source : Researcher processed data, 2021

The relevance of predictions (Q-square) calculation may be used to determine how well the model predicts purchase intention.

$$Q^2 = 1 - (1-R1^2)(1-R2^2)$$
$$= 1 - (1-0.196)(1-0,207)$$
$$= 0,9593 \ (95,93\%)$$

D. The Hypothesis Testing Process

The statistical t test was used to demonstrate the influence of exogenous factors on endogenous variables. If the t statistic value is greater than 1.960, the hypothesis is accepted [16]. The test findings are as follows:

Contruct	Original Sampel	T Statistik	Status (>1,960)
CR -→ PI	0.416	4.293	Significant
CR →TR	0.373	4.351	Significant
OCR -→ PI	0.266	2.488	Significant
OCR -→ TR	0.550	6.343	Significant
TR -→ PI	0.261	2.738	Significant

Table 4: Hypothesis Test

Source : Researcher processed data, 2021

According to Table 4, all research hypotheses are accepted. This indicates that all factors have a direct and meaningful influence. The Sobel test will be used to examine the indirect impact next. The Sobel test findings revealed that trust mediates the association between online customer review (sobel test 2.519) and customer rating on purchase intention (sobel test 2.321).

V. DISCUSSION

These findings suggest that OCR is a significant component that customers pay attention to and that it influences their level of trust in shopping online at the Shopee online store in Sumbawa Regency. OCR with Shopee information makes it easy for customers to purchase online and search for information about their items. Furthermore, Shopee OCR services do not confuse clients and they find it simple to grasp, therefore the information influences their confidence. Furthermore, when customers read customer feedback on Shopee, they feel more in control of their online purchase. Furthermore, additional user comments provide future customers more authority over the Shopee service process, therefore the material affects consumer trust in the Shopee online shop. The findings of this investigation are

consistent with the findings of Kanitra and Kusumawti (2018) research.

Because it is extremely simple and easy to use, the rating is in the shape of a star symbol, which may boost the efficacy of consumer purchasing. Ratings may be used to pick or compare products quickly in the sort of customers that are simple or contain limited issue solving, particularly those who are simple in buying anything without much consideration and with a faster time (Solomon, 2012). As a result, the better the rating given, the more consumers will trust in the shop.

According to the study's findings, trust has an influence on purchase intention. This suggests that consumers' trust is expressed in the form of financial assurances when they make purchases on Shopee, as well as security guarantees when they make electronic payments. Furthermore, consumer trust in Shopee is determined by the guarantee of data protection and privacy, as well as the collection of consumer personal data in the transaction service process at Shopee, as well as their trust in Shopee for acting honestly and reliably in providing shopping information to consumers. Shopee has an adequate stock of items to ensure online purchases. These are essential factors that consumers consider and influence their online purchase intentions at online retailers. Farki et all (2016) also found the same results with this study.

Other research' findings reveal that previous Shopee customers' OCR influences consumers' online purchase intentions at Shopee online retailers. Previous customers' OCR made it easy for other potential customers to purchase online and look for information on their items. Furthermore, the OCR service supplied by consumers may serve as a reference for future customers so that it is not complex and easy to comprehend, and this information can affect their online buying intentions. Furthermore, reading other consumers' remarks makes them feel more in control of their online purchase. The review is an example of electronic word of mouth (eWOM), which is someone's own opinion rather than a commercial marketing. A review is one of the elements that influence a buyer's decision [18]. This demonstrates that someone may take the amount of reviews as a sign of a product's popularity or worth, which can influence their decision to purchase the product.

Ratings were used to judge films and books in practice. Ratings for films and books were used to determine the quality of the work or consumer preference for the book or film. This may be done in the internet marketplace by evaluating, whereas ratings cannot do so since the factors considered by this rating are not very apparent. The ranking considers both the item's quality and the service offered by the seller or online marketplace. In the online marketplace, an item may have a bad rating value just because it was not delivered on time, even if it has acceptable quality at a reasonable price. This is why reviews are more powerful than ratings. Nonetheless, the rating has been shown to have a substantial link value to purchase intention. This is due to the fact that not everyone has the time or desire to read reviews. The key advantage of rating is its ease of use. This is also evident in the perceived utility, which contributes the most to the ranking. Consumers consider rating as an easy-to-use tool

that may improve the efficacy of their buying. Very good for folks who do not give much thought to their buying. Users are also more inclined to contribute ratings than reviews since the time it takes to give a rating is less than the time it takes to submit a review. The findings of this research are consistent with the findings of Elwalda et all (2016) research.

VI. CONCLUSION

According to the study's findings, the higher the evaluations and ratings that potential buyers receive from other consumers, the more likely they are to shop online, either directly or through the trust. Consumer reviews obtained and given at each online store on Shopee will be a significant aspect in creating trustworthiness. Consumer trust may be utilized as the foundation for an online transaction's success. This is due to the fact that online shoppers are unable to connect directly with the things they require. They just look at what is presented on online buying sites, thus Shopee must be able to develop high confidence in potential customers in order for them to shop online on the Shopee site.

Shopee and online shop should enhance online customer reviews to promote consumers' online buying intents on online shopping platforms. One method is to reply to consumer remarks in the comments section as quickly as possible, including those that are directly relevant to the items presented and those that are not. Shopee and online retailers, on the other hand, are recommended to supply items to consumers in accordance with the original product. Shopee must also present its own product image and match the goods to be offered to its customers.

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