

Research Result Articles

Customer Satisfaction Toward Grab Application in Balikpapan

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ABSTRACT

Currently, many people are familiar with e-commerce or online shopping platforms due to their convenience and speed. One of the examples is the Grab application. Behind the rapid development of e-commerce in Indonesia, there are many factors that can contribute to the superiority of one e-commerce platform over another. One important factor is customer satisfaction when they use the services provided by the platform. Customer satisfaction is the primary focus of this research due to the increasingly intense competition in the e-commerce industry. One way to ensure customer satisfaction on e-commerce platforms is by enhancing interface quality, product quality, product variety, and shopping security. When an e-commerce platform provides good service quality and high-quality products, customers will feel satisfied. This satisfaction, in turn, leads to customer loyalty and continued usage of the platform's services. The aim of this study is to examine the influence of interface quality, product quality, product variety, and shopping security on customer satisfaction in the Grab application. The research methodology employed in this study is quantitative. The sample consists of questionnaire responses from 170 users of the Grab application. Data processing in this research utilized AMOS 26 software. The results of the study indicate that interface quality, product quality, and shopping security have a positive and significant partial influence on customer satisfaction.

Keywords: customer satisfaction, interface quality, product quality, product variety, shopping safety

INTRODUCTION

Nowadays, almost everyone knows about e-commerce or online shopping. Online shopping is known for its convenience and fast way to shop, there are a lot of online shopping platform nowadays that enable customers to buy products and delivered it to them in just a few minutes or hours with just using their phone or computer to order something, for example Grab, Gojek, or Shopee can deliver items that the customers purchase such as food, groceries, clothes, and many more to the customer in just a few minutes or hours, but if it's a delivery from different cities it might take longer time.



In several fields of study, including marketing (Andreassen and Lindestad, 1998), consumer research (Yi, 1993), economic psychology (Johnson and Fornell, 1991), welfare-economics (Chipman and Moore, 1978) and economics, customer satisfaction is a well-known and established concept (Van Raaij and Crotts, 1995).

Customers' satisfaction or discontent with a product are based on a comparison of their hopes and expectations with the product (Kotler and Zaltman, 1997). According to the definition given above, customer satisfaction depends on how their hopes and expectations are perceived, and if those expectations are exceeded, customers will be extremely satisfied. If the condition is the opposite, it is also the same.

This research examines customers' satisfaction with the GrabApp. In 2012, during his master's degree program at Harvard Business School, Anthony Tan conceived the idea of establishing a ride-hailing business, which led to the creation of Grab. After collaborating with Hooi Ling Tan and receiving a \$25,000 grant from Harvard Business School, they launched the "MyTeksi" app in Malaysia (Paras, no date; Mulia, 2021).

Subsequently, in 2013, the app was rebranded as "GrabTaxi" and expanded its operations to other countries in the region, including the Philippines, Singapore, and Thailand. As the company introduced additional services such as vehicle and document delivery, it underwent another name change to "Grab" in 2016 (Paras, no date).

The main purpose of this journal is to identify the variables that may influence customer satisfaction (user interface quality, product quality, product variety, shopping safety). Customer satisfaction refers to the overall attitude displayed by customers towards goods or services they have acquired and used (Mowen and Minor, 1998). It is characterized by feelings of pleasure or disappointment that arise after comparing the perceived performance of a product or service to the expected performance (Kotler and Keller, 2016).

This research aims to identify factors that may impact customer satisfaction within the context of the Grab application, which are user interface quality, product quality, product variety, and shopping safety as independent variables that could be important to customer satisfaction.

LITERATURE REVIEW AND HYPOTHESES

Interface Quality

One of the primary goals of e-commerce is customer satisfaction, this satisfaction can be achieved by having a good interface quality. Having a good interface quality significantly enhances the accessibility and usability of an e-commerce application, making it easier for people to access and utilize the platform effectively. Customer perception of the usability of an e-commerce online service is referred to as user interface quality (Eid, 2011). According to research done by (Eid, 2011), the quality of the user interface directly affects customer satisfaction because it offers services like making facilities simple to use.

Product Quality

Product quality is important to customers' expectation for the quality of the product, the better the product quality is the better the customers' satisfaction and the better the customers' satisfaction, the better the sales and repeat order. As defined by (Parasuraman and Grewal, 2000) product quality is the assessment of a service by customers, which is determined by comparing the actual performance of the service to the general expectations they have regarding its performance. However, if the product quality falls short of

expectations, it has a detrimental effect on the level of satisfaction (Cai, Jongejan and Holbrook, 2019). The factors of an item that can fulfill its goal are determined by its quality (Armstrong and Kotler, 2009).

Product Variety

A “product” as anything that may be advertised to the public, bought, used, or consumed in order to satiate a need or want (Kotler and Keller, 2016). The ability to come up with a huge variety of products to cover every imaginable application area has quickly become the dominant success factor,” meaning that the capacity to produce numerous product variations in order to satisfy every demand anticipated has quickly come to be one of the key success factors. Gaining the loyalty of customers is success in this scenario. consumers will feel more content if they make purchases at one location and won’t feel the need to make purchases elsewhere the more diverse the number and types of products supplied in one location (Tjiptono, 2013).

Shopping Safety

One of the biggest reasons why internet users don’t make online purchases is security concerns. Security and privacy are closely related (Eri, Aminul Islam and Daud, 2011). Hackers will no longer only originate from within the firm but may also originate from the outside or from any other location and remain anonymous (Salim, Tayib and Abidin, 2000). Consumers are aware of how governments and now businesses use personal data, so privacy is not a new concern. Internet users also desire a sense of privacy protection. In order for internet commerce to grow, the government must also safeguard customer security and privacy (Yu and Abdulai, 2000).

Customer Satisfaction

The sensation of pleasure or disappointment that a person experiences after comparing the performance (results) of the product they are thinking about with the performance (results) predicted is known as satisfaction (Kotler and Keller, 2016). Tse and Wilton in Lupiyoadi and Hamdani (2011) argue that customer satisfaction or discontent is the customer's reaction to the assessment of the apparent disparity between prior expectations and the product's actual performance in. There is usually a difference in the degree of satisfaction among customers. Various factors contribute to this phenomenon, including age, occupation, income, education, gender, social position, economic level, culture, mental attitude, and personality. The level of satisfaction is influenced by the difference between actual performance and expectations.

Hypothesis Development

The Relationship between Interface Quality and Customer Satisfaction

Customer perception of the usability of an e-commerce online service is referred to as user interface quality (Eid, 2011). According to research done by Eid (2011), the quality of the user interface directly affects customer satisfaction because it offers services like making facilities simple to use. Since this affects consumer happiness, 14 essential elements were found to construct a successful B2C e-commerce website. Eid (2011), looked at how satisfaction and trust were affected by the information design, navigation design, and

aesthetic design of B2C e-commerce websites in three developed nations: Canada, Germany, and China.

Furthermore, the conceptual model of customer experience has identified several determinants of customer experience quality, such as social environment, service interface, retail atmosphere, variety, price, and promotion. In this article, we propose that the outcome of interface quality plays a significant role as one of the determinants influencing customer satisfaction (Verhoef *et al.*, 2009).

H₁: Interface quality significantly affects customer satisfaction of e-commerce.

The Relationship between Product Quality and Customer Satisfaction

Product quality is important to customers' expectation for the quality of the product, the better the product quality is the better the customers' satisfaction and the better the customers' satisfaction, the better the sales and repeat order. As defined by Parasuraman and Grewal (2000) Service quality is the evaluation of service by customers which is achieved by comparing actual performance and general expectations of its performance. However, if the product quality falls short of expectations, it has a detrimental effect on the level of satisfaction (Cai, Jongejan and Holbrook, 2019).

H₂: Product quality significantly affects customer satisfaction of e-commerce.

The Relationship between Product Variety and Customer Satisfaction

Kotler and Keller (2016) defines a "product" as anything that may be advertised to the public, bought, used, or consumed in order to satiate a need or want. Conceptually, a product is the manufacturer's subjective perception of something that may be provided in an effort to fulfill customer requirements and activities in line with organizational competence and capacity as well as market purchasing power in order to achieve organizational goals.

Furthermore, Mofokeng (2021) research results show that customer satisfaction of online buyers is influenced by product delivery, perceived security, information quality, and product variety. Customer satisfaction and information quality determine customer loyalty to a web shop.

H₃: Product variety significantly affects customer satisfaction of e-commerce.

The Relationship between Shopping Safety and Customer Satisfaction

One of the biggest reasons why internet users don't make online purchases is security concerns. According to Udo (2001), security and privacy are closely related. Although firm decisions surrounding customer data are related to privacy, security is also taken into account by comparing consumer data in third groups (such as hackers and identity theft). According to Salim, Tayib and Abidin (2000), hackers will no longer only originate from within the firm but may also originate from the outside or from any other location and remain anonymous.

H₄: Shopping Safety significantly affects customer satisfaction of e-commerce.

Conceptual Framework of the Study

Here is a summary of the developed models:

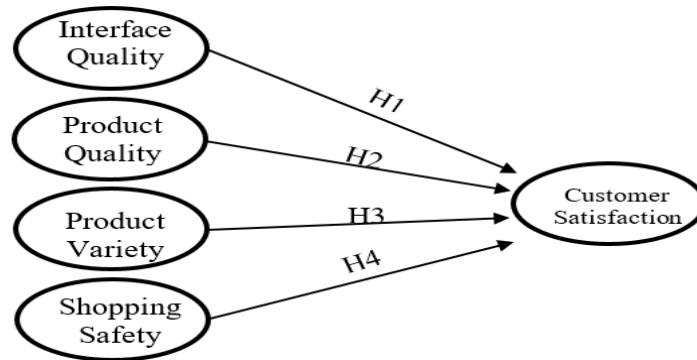


Figure 1. Research Framework

RESEARCH METHODOLOGY

Population is a broad category made up of items or subjects with specific attributes and characteristics chosen by the researcher to be investigated before conclusions are drawn (Sugiyono, 2016). The population in this research is people in Balikpapan who have used the service from Grab Application. Primary data is collected directly from the research subjects using measurement tools or surveys. For this study, a questionnaire was distributed to 170 respondents through an online platform (Google form), providing a flexible and convenient method for data collection. According to SEM (*structural equation modeling*) requirements, the sample size should ideally be 5-10 times the number of observations for each estimated parameter or indicator used (Ferdinand, 2005).

Table 1. Respondents' Classification

Demographic variables	N	%
<i>Gender</i>		
Male	98	57,6
Female	72	42,4
<i>Age</i>		
16 – 20	39	22,9
21 – 25	79	46,5
26 – 30	30	17,6
>30	22	12,9
<i>Educational Background</i>		
High School	32	18,8
Undergraduate	91	53,5
Postgraduate	25	14,7
Others	22	12,9
<i>Job</i>		
Student	71	41,8
Civil Servant/TNI/Polri	9	5,3
Employee	52	30,6
Entrepreneur	28	16,5
Other	10	5,9

Source: Primary Data, Computed (2023)

DATA ANALYSIS AND DISCUSSIONS

Structural Equation Model (SEM)

There are two tasks that need to be accomplished: first, structuring the structural model by establishing connections between latent constructs, both endogenous and exogenous; and second, determining the model by linking the endogenous and exogenous latent constructs with indicator or manifest variables.

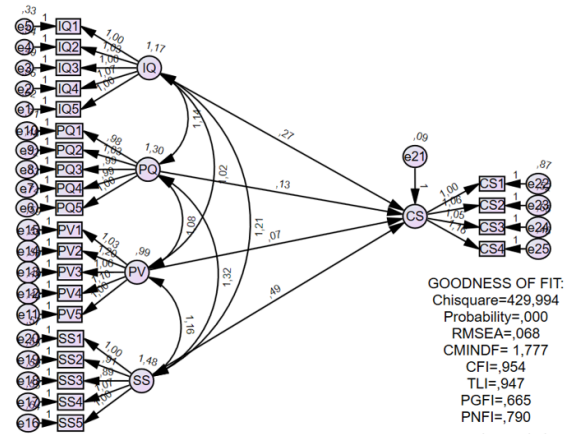


Figure 2. Structural Diagrams

Normality Test

The data can be utilized for further processing in structural equation modeling (SEM) when the normality assumption of the data is satisfied. The assessment of multivariate normality is conducted by examining the critical ratio (CR) values of the data under consideration. The data can be deemed normally distributed if the CR values fall within the range of $\pm 2,58$. The table below presents the normality assessment of the data utilized in this analysis.

Table 2. Normality Test Result

Variables	Min	Max	Skew	C.R.	Kurtosis	C.R.
CS4	1	6	-1,153	-6,139	0,536	1,426
CS3	1	6	-0,808	-4,299	-0,131	-0,349
CS2	1	6	-1,033	-5,501	0,404	1,076
CS1	1	6	-0,952	-5,07	0,144	0,384
SS1	1	6	-1,148	-6,11	0,493	1,313
SS2	1	6	-1,336	-7,11	1,288	3,429
SS3	1	6	-1,261	-6,712	1,169	3,112
SS4	1	6	-1,213	-6,457	0,576	1,532
SS5	1	6	-0,988	-5,261	0,204	0,543
PV1	1	6	-1,323	-7,043	1,494	3,977
PV2	1	6	-1,428	-7,6	1,51	4,018
PV3	1	6	-1,27	-6,762	1,358	3,614
PV4	1	6	-1,346	-7,163	1,557	4,143
PV5	1	6	-1,244	-6,624	1,816	4,834
PQ1	1	6	-1,028	-5,475	0,404	1,076
PQ2	1	6	-1,363	-7,256	1,183	3,15

Variables	Min	Max	Skew	C.R.	Kurtosis	C.R.
PQ3	1	6	-1,208	-6,432	1,165	3,1
PQ4	1	6	-1,393	-7,416	1,231	3,277
PQ5	1	6	-0,819	-4,359	0,122	0,325
IQ1	1	6	-1,163	-6,188	1,091	2,904
IQ2	1	6	-1,721	-9,16	2,449	6,517
IQ3	1	6	-1,055	-5,617	0,591	1,572
IQ4	1	6	-1,116	-5,94	0,785	2,089
IQ5	1	6	-1,332	-7,088	1,244	3,311
Multivariate					104,919	19,362

Source: Primary Data, Computed (2023)

From the table presented, it is evident that the multivariate CR value remains above 2,58 specifically at 19,362; indicating non-normality of the data. To attain a normal distribution, it becomes imperative to identify and exclude respondent data containing outliers. The identification of outlier respondent data is performed based on the Mahalanobis Distance table. Following the removal of several outlier data points from the analysis, a subsequent normality test was conducted, yielding the results presented below:

Table 3. Modify Normality Test Result

Variables	Min	Max	Skew	C.R.	Kurtosis	C.R.
CS4	1	6	-1,482	-3,827	1,905	2,46
CS3	1	6	-1,377	-3,555	1,79	2,31
CS2	1	6	-1,236	-3,191	1,251	1,615
CS1	1	6	-0,95	-2,453	0,528	0,681
SS1	1	6	-1,963	-5,069	3,863	4,987
SS2	2	6	-1,585	-4,093	2,192	2,829
SS3	1	6	-1,866	-4,817	3,389	4,375
SS4	1	6	-1,721	-4,444	3,008	3,884
SS5	1	6	-1,723	-4,448	3,076	3,971
PV1	1	6	-1,965	-5,073	3,716	4,797
PV2	1	6	-1,699	-4,386	2,675	3,453
PV3	2	6	-1,501	-3,876	1,816	2,344
PV4	1	6	-1,888	-4,874	3,306	4,268
PV5	1	6	-1,973	-5,094	3,693	4,768
PQ1	1	6	-1,909	-4,93	3,794	4,898
PQ2	2	6	-1,369	-3,536	1,583	2,044
PQ3	1	6	-1,673	-4,32	2,809	3,626
PQ4	2	6	-1,521	-3,926	1,812	2,339
PQ5	1	6	-1,031	-2,663	1,383	1,786
IQ1	1	6	-1,839	-4,749	3,63	4,687
IQ2	1	6	-1,831	-4,727	3,297	4,257
IQ3	1	6	-1,965	-5,073	3,716	4,797
IQ4	1	6	-1,909	-4,93	3,794	4,898
IQ5	1	6	-1,627	-4,202	2,669	3,445
Multivariate					81,892	7,33

Source: Primary Data, Computed (2023)

After the subsequent normality test, it was observed that the multivariate CR value was 7,33, which remained above 2,58 but below 10,000. As per (Ulum, Ghozali and Chariri, 2008), data with a multivariate CR value below 10,000 can still be considered to exhibit normality. Consequently, structural equation modeling (SEM) can be employed to analyze the data in this research.

Outliers Test

The mahalanobis distance test was performed using the chi-square value with 24 degrees of freedom at a significance level of $p < 0,001$, yielding $X^2(24; 0,001) = 51,179$. The results of the multivariate outlier analysis are presented in the following table:

Table 4. Outliers Test Result

Observation Number	Mahalonobis d-squared	P1	P2
35	39	0,027	0,67
32	35,153	0,066	0,752
6	33,463	0,095	0,743
13	32,759	0,109	0,649
....

Source: Primary Data, Computed (2023)

Revealing from that table, none of the values exceed 51,179. Hence, it can be inferred that there are no outlier data points within the dataset.

Confirmatory Test Result

The validity test in this study utilizes confirmatory factor analysis (CFA). CFA is employed to assess the unidimensional validity and reliability of the measurement model for constructs that cannot be directly measured. CFA serves two main purposes: to measure the indicators that are conceptually unidimensional accurately and consistently, and to identify the indicators that predominantly form the construct under investigation. By examining the correlations between each variable, both exogenous and endogenous variables, this can be observed through the loading factors of each indicator. If the loading factor is above 0,5, it is considered valid.

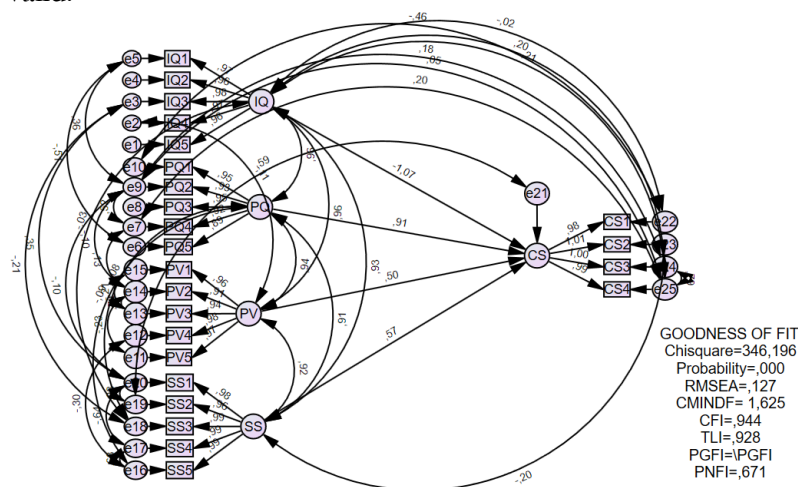


Figure 3. Confirmatory Analysis Model

The loading factor values obtained are as follows:

Table 5. Loading Factors Result

Variable	Indicator	Loading Factors
Interface Quality	IQ5	0,963
	IQ4	0,968
	IQ3	0,983
	IQ2	0,963
	IQ1	0,971
Product Quality	PQ5	0,891
	PQ4	0,924
	PQ3	0,951
	PQ2	0,93
	PQ1	0,95
Product Variety	PV5	0,968
	PV4	0,981
	PV3	0,937
	PV2	0,914
	PV1	0,956
Shopping Safety	SS5	0,985
	SS4	0,991
	SS3	0,995
	SS2	0,963
	SS1	0,984
Customer Satisfaction	CS1	0,983
	CS2	1,007
	CS3	0,998
	CS4	0,989

Source: Primary Data, Computed (2023)

The analysis results indicate that all indicators possess loading factor values of 0.5 or higher, signifying that all indicators in this research are valid measures of their respective constructs. Subsequently, a confirmatory analysis goodness of fit test was conducted, producing the following results:

Table 6. Goodness of Fit Result

Goodness of Fit	Criteria	Cut-off Value	Description
Chi-square	Expected Little	346,196	Marginal Fit
Probability	$\geq 0,05$	0,000	Poor Fit
RMSEA	$\leq 0,08$	0,127	Poor Fit
CMINDF	$\leq 2,00$	1,625	Fit
TLI	$\geq 0,90$	0,928	Fit
CFI	$\geq 0,90$	0,944	Fit
PNFI	$\geq 0,60$	0,671	Fit

Source: Primary Data, Computed (2023)

The results of the goodness-of-fit test indicate that all of the criteria for assessing goodness-of-fit are satisfied, confirming that the model used in this study is deemed to be a good fit.

Reliability

Construct reliability values greater than 0,7 and extracted variance values exceeding 0,5 are considered indicative of good construct reliability. The formula used to calculate construct reliability is as follows:

$$\text{Construct Reliability} = \frac{(\sum \text{Std. loading})^2}{(\sum \text{Std. loading})^2 + \sum e_j} \quad (1)$$

On the other hand, the formula used to calculate extracted variance is as follows:

$$\text{Variance Extracted} = \frac{\sum \text{Std. loading}^2}{\sum \text{Std. loading}^2 + \sum e_j} \quad (2)$$

Table 7. Reliability Test Result

Variables	Indicator	LF	LF	Measurement Error	CR	VE
Interface Quality	IQ5	0,963	0,927	0,07	0,99	0,94
	IQ4	0,968	0,937	0,06		
	IQ3	0,983	0,966	0,03		
	IQ2	0,963	0,927	0,07		
	IQ1	0,971	0,943	0,06		
Product Quality	PQ5	0,891	0,794	0,21	0,97	0,86
	PQ4	0,924	0,854	0,15		
	PQ3	0,951	0,904	0,1		
	PQ2	0,93	0,865	0,14		
	PQ1	0,95	0,903	0,1		
Product Variety	PV5	0,968	0,937	0,06	0,98	0,91
	PV4	0,981	0,962	0,04		
	PV3	0,937	0,878	0,12		
	PV2	0,914	0,835	0,16		
	PV1	0,956	0,914	0,09		
Shopping Safety	SS5	0,985	0,97	0,03	0,99	0,97
	SS4	0,991	0,982	0,02		
	SS3	0,995	0,99	0,01		
	SS2	0,963	0,927	0,07		
	SS1	0,984	0,968	0,03		
Customer Satisfaction	CS1	0,983	0,983	0,966	1,00	0,99
	CS2	1,007	1,007	1,014		
	CS3	0,998	0,998	0,996		
	CS4	0,989	0,989	0,978		

Source: Primary Data, Computed (2023)

Based on the presented table 9, it is evident that all variables exhibit constructive reliability values of $\geq 0,7$. Additionally, the variance extracted for each variable exceeds 0,5. Consequently, it can be concluded that the questionnaire utilized in this research demonstrates satisfactory reliability.

Model Modification and Complete Goodness

In the initial goodness of fit test of the model, it was found that three goodness of fit index criteria did not meet the cut-off values, namely probability, RMSEA, and PGFI. AMOS

calculations provide a solution for model respecification if the tested model does not meet the recommended minimum values. Respecification can be done by examining the AMOS output for modification indices (MI).

This research went through five stages of model respecification, with each stage involving correlations between latent/indicator/error variables at the highest MI values or removing latent/indicator/error variables that appeared frequently. The specific results from the final analysis pass are as follows:

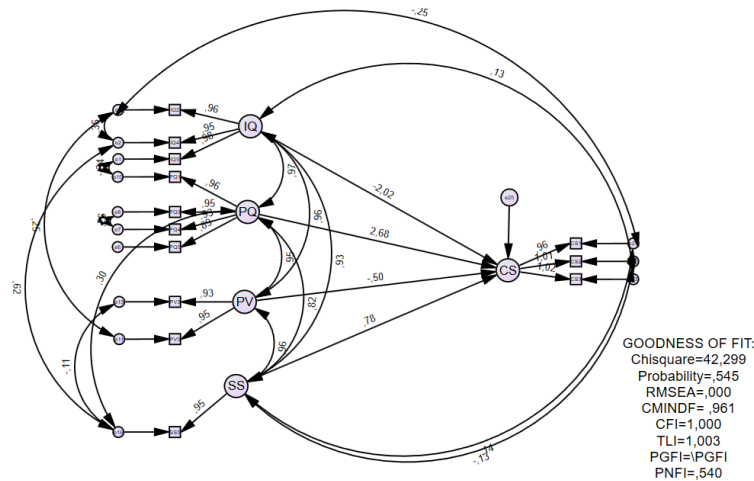


Figure 4. Final Research Model

The loading factor values obtained are as follows:

Table 8. Complete Goodness of Fit Result

Goodness of Fit	Criteria	Cut-off Value	Description
Chi-square	Expected Little	42,299	Marginal Fit
Probability	≥ 0,05	0,545	Fit
RMSEA	≤ 0,08	0,000	Fit
CMINDF	≤ 2,00	0,961	Fit
TLI	≥ 0,90	1,003	Fit
CFI	≥ 0,90	1,000	Fit

Source: Primary Data, Computed (2023)

Hypothesis Testing

To investigate the hypotheses formulated in this study, a comprehensive analysis was conducted using a full model structural equation model (SEM) analysis. The results of the regression weight tests in this study are presented as follows:

Table 9. Hypothesis Testing

Hypothesis	Estimate	S.E.	C.R.	P	Result
H1 CS ← IQ	-2,17	0,959	-2,263	0,024	Significant
H2 CS ← PQ	2,964	1,469	2,018	0,044	Significant
H3 CS ← PV	-0,519	0,964	-0,539	0,59	Not Significant
H4 CS ← SS	0,874	0,437	1,998	0,046	Significant

Source: Primary Data, Computed (2023)

Result Discussions

The Influence of Interface Quality to Customer Satisfaction

The CR value of -2,263 and the p-value of 0,024 demonstrate that the CR value exceeds 1,96 and the p-value is below 0,05. Therefore, it can be concluded that interface quality significantly influences customer satisfaction. The conceptual model of customer experience has identified several determinants of customer experience quality, such as social environment, service interface, retail atmosphere, variety, price, and promotion. In this article, we propose that the outcome of interface quality plays a significant role as one of the determinants influencing customer satisfaction (Verhoef *et al.*, 2009).

Grab, as Indonesia's leading ride-hailing platform, has recognized the importance of providing a user-friendly and efficient interface to enhance the customer experience. By offering an intuitive and well-designed interface, Grab ensures that users can easily book rides, track drivers in real-time, and make seamless payments (Fitriana and Susanti, 2022). The positive impact of a high-quality interface has led to increased customer satisfaction and strengthened Grab's position as a preferred choice for transportation services in Indonesia.

The Influence of Product Quality to Customer Satisfaction

The findings from the conducted research suggest that product quality has a positive and significant impact on customer satisfaction in the Grab application. Data analysis reveals a CR value of 2,018 and a p-value of 0,044, indicating that the CR value exceeds 1,96, and the p-value is below 0,05. Therefore, it can be concluded that product quality significantly influences customer satisfaction. However, there has been limited attention given to exploring strategies aimed at enhancing customer satisfaction through improving product quality, service quality, and food quality, which could contribute to customer retention in the industry (Al-Tit, 2015).

As one of the leading ride-hailing platforms in the country, Grab has recognized that good product quality plays a crucial role in creating a satisfying experience for its customers (Sambara, 2019). By providing reliable, safe, and high-quality services, Grab has successfully enhanced customer satisfaction and built strong trust among its users. The focus on product quality has helped Grab maintain its position as the top choice for customers in meeting their transportation needs in Indonesia.

The Influence of Product Variety to Customer Satisfaction

Data processing yields substantial evidence that product variety has an insignificant impact on customer satisfaction. This is supported by the CR value of -0,539 and the p-value of 0,059 where, the CR value falls below 1,96; and the p-value exceeds 0,05. Hence, it can be concluded that product variety does not significantly influence customer satisfaction. On the other hand, the physical environment plays a pivotal role in shaping social interactions. In other words, customers who engage with positive relationships and the physical aspects of their experience are more likely to feel satisfied, emotionally fulfilled, and loyal to that environment (Bitner, 1992).

The influence of product variety on customer satisfaction for Grab in Indonesia is not considered significant. Despite offering a diverse range of services, including ride-hailing, food delivery, and logistics, the impact on customer satisfaction is not prominent. Other factors such as service quality, pricing, and overall user experience appear to play a more dominant role in shaping customer satisfaction levels (Wibawa *et al.*, 2022). While product

variety may provide some options, it does not have a substantial effect on the overall satisfaction of Grab's customers in the Indonesian market.

The Influence of Shopping Safety to Customer Satisfaction

According to Hermawan (2017) safety is identified as the most influential factor in consumer attitudes towards online shopping, alongside website design, convenience, and time-saving factors. Hence, safety factors are considered crucial for analysis in online marketing research. The analysis conducted in this study reveals that shopping safety has a positive and significant impact on customer satisfaction in the Grab application. This conclusion is supported by data processing, with a CR value of 1,998 and a p-value of 0,046. These statistical findings indicate that the CR value exceeds 1,96; while the p-value is below 0,05. Therefore, it can be concluded that shopping safety significantly influences customer satisfaction.

The influence of shopping safety on customer satisfaction is highly significant for Grab in Indonesia. As one of the largest ride-hailing platforms in the country, Grab has recognized the importance of creating a safe and trustworthy shopping environment for its users. By prioritizing safety in every aspect of their services, including real-time driver tracking and secure payment systems, Grab has established a strong sense of trust among its users (Altino, Aryadita and Rokhmawati, 2018). This positive perception will impact customer loyalty, as they are more likely to return to Grab for their transportation needs in the future.

RESEARCH LIMITATIONS

This research may be limited by the available time for conducting the study. The time constraint can influence the amount of data that can be collected or impose limitations on the research methods used. Resource constraints, such as limited budget or technological limitations, can impact the research design and the sample size used. This may restrict the ability to investigate phenomena in more detail or involve a larger number of participants. External factors beyond the control of the researcher, such as environmental changes or situational factors, can influence the research outcomes and lead to unexpected variations in the studied variables.

RECOMMENDATION

Future studies can consider different research frameworks to find a more accurate model in explaining interface quality, product quality, product variety, and shopping safety in applications. Furthermore, future research is recommended to involve different respondents. Customer satisfaction with the Grab application service can vary for each individual. If users have an exceptional experience when using the Grab application, they will provide positive testimonials to others about their experience as Grab app customers.

CONCLUSIONS

This study examines the attributes of the Grab application in the context of customer satisfaction by designing a more holistic model that considers interface quality, product quality, product variety, and shopping safety. Based on data analysis, not all four hypotheses proposed in this study were accepted. The results indicate that interface quality, product quality, and shopping safety have an influence on customer satisfaction with the Grab

application. However, one remaining variable, namely product variety, does not significantly affect customer satisfaction with the Grab application.

This research demonstrates that the Grab application has a good interface quality, product quality, and reliable data security, which contribute to high customer satisfaction. However, this study also indicates that product variety is the weakest variable compared to the other variables. In addition to focusing on improving interface quality, product quality, and shopping safety, Grab also needs to enhance product variety to increase customer satisfaction and gain a competitive advantage over other competitors. It is important for Grab to continuously improve and expand its range of products to meet the diverse needs of customers, even though the findings of this research may not consistently apply to all variables examined.

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