

The Effect of E-Service Quality, Sales Promotion, and Price on Customer Satisfaction in the City of Bandung (Study on Millennial and Gen Z Shopee Food Users)

Rayhan Azman Taher¹, Maya Ariyanti², Riski Taufik Hidayah²

¹Student of Economic and Business Faculty, Telkom University, Bandung, Indonesia ²Lecturer of Economic and Business Faculty, Telkom University, Bandung, Indonesia Email: rayhanazman@gmail.com

The online food delivery industry is one of the most frequently used digital services in Indonesia. The main users of online food delivery services are dominated by Generation Z and Millennials who consider Price, Sales Promotion, and Service Quality factors in choosing a service provider. This study aims to analyze the factors that influence Customer Satisfaction of Shopee Food service users of Generation Z and Millennials in Bandung city. The factors that are indicated to affect Shopee Food Customer Satisfaction are E-Commerce Service Quality, Sales Promotion, Price, to Customer Satisfaction, then there are moderator variables, namely Trust and Application Design. The research method used is quantitative. The data analysis technique used is using the Structural Equation Model (SEM) using Smart PLS 3.2.9 software and the data collection technique uses purposive sampling technique. The results showed that Electronic Service Quality, Sales Promotion, and Price Perception have a positive and significant influence on and Customer Satisfaction. However, based on the results of the research conducted, Trust and Application Design have no influence as moderators on the relationship between the Electronic Service Quality variable and Customer Satisfaction.

Keywords: E-Service Quality, Sales Promotion, Price Perception, and Customer Satisfaction.

1. Introduction

The development of technology continues to increase over time. The number of internet

users in Indonesia has reached 212.9 million. This figure is 77% of the total population in Indonesia of 276.4 million (Pertiwi, 2023). With the rapid use of the internet in Indonesia, the lives of many Indonesians rely on digital services in their daily lives, one of which is food delivery services. 63% of people who were respondents used food delivery service applications actively (e-conomy SEA, 2022).

In Indonesia itself, the online food delivery market is dominated by 3 services based on the GMV value achieved, namely Grab food (49%), Go food (44%), and Shopee food (7%). From the total GMV value, Shopee food is still far adrift and cannot compete with its competitors, namely Grab food and Go food.

Most users of online food delivery are Millennials and Generation Z (Antara News, 2022). It is said that Gen Z and millennials order food online 2-3 times. In fact, Gen Z has a tendency to buy food online at an even higher frequency (Southeast Strategics, 2022). Southeast Strategics says that 7 out of 10 online food delivery consumers in Indonesia have more than 1 online food delivery service. This is an opportunity for Shopee food to compete with Grab and Gojek, depending on how Shopee food can attract customers and make them loyal (Southeast Strategics, 2023).

According to some researchers, customer satisfaction is the beginning of customer loyalty. According to Kotler et al (2021) customer satisfaction is a comparison between customer expectations and what customers get. A survey conducted by Southeast Strategics shows that Go food is the most convenient service provider for consumers to use, followed by Grab food in second place and Shopee food in last place (Annur, 2022). based on this, it is known that the Service Quality provided by Shopee Food cannot compete. In fact, for Generation Z and the Millennial generation, price is the top consideration for determining the food delivery service used, but also taking into account the quality of service and the availability of promos from e-Retail services (Rahajeng, 2021; Nurcahyani, 2023).

The price factor is one of the factors that most determines whether customers will be loyal or not (Curry and Gao, 2012). In providing prices, Shopee Food is considered to provide the cheapest service prices (Setyowati, 2023). this is also supported by a survey conducted by Southeast Strategics that Shopeefood is considered the Top Oo Mind online delivery that offers the most price promos (Dihni, 2022).

Based on this description, it can be concluded that Shopeefood provides attractive Sales Promotion for its consumers so that Shopee food can become the top-of-mind online food delivery service that provides the most promotions. This is a positive thing considering that the factors that determine the selection of online food delivery services for Millennials and Gen Z are Price and Promotion (Rahajeng, 2023). According to Mishra et., al (2012) adds that "Customers often realize perceived sales promotions regarding price. Simply put, promotion is to reduce the price or cost of the product to the customer". It can be concluded that Sales Promotion and Price are two things that are related because the existence of Sales Promotion will affect prices.

Research results from Southeast Strategics show that consumers who choose Shopee food services are consumers who are more concerned with competitive prices, while consumers who are more concerned with the quality of electronic services tend to choose Go food services (Antara News, 2022).

In making consumers satisfied, in the online food delivery market. The results of a survey conducted by katadata.id for Generation Z and Millennial Generation, several factors that can satisfy these generations in the context of online food delivery are service quality or E-Service Quality, Price and Sales Promotion. By managing this, online food delivery customers who belong to Generation Z and the Millennial Generation will feel satisfied. (Rahajeng, 2023) By managing factors such as Price, Service quality and Sales Promotion will make consumers satisfied and become the beginning of customer loyalty (Lee and Moghavvemi, 2015; Amin et al., 2013; Caruana, 2002; Rahajeng, 2023).

Apart from these 3 factors, the effect of service quality on Customer Satisfaction with online services can be supported by App Design and Trust factors (Venkatakrishnan et al, 2022). Based on the phenomena that have been described, this research is related to analyzing the factors that influence Customer Satisfaction and Customer Loyalty in Shopeefood application users in order to become a sustainable company and successfully compete with competitors so that the title of this research is "The Effect of E-Service Quality, Sales Promotion, and Price on Customer Satisfaction in Bandung City (Study on Millennial Generation and Gen Z Shopee Food Users)".

2. Literature Review

E-Service Quality

According to Kotler (2021) service quality is the totality of the characteristics of goods and services that demonstrate their ability to satisfy customer needs, both obvious and hidden. According to Kotler et al (2021) Service quality is the main driver of customer satisfaction. E-Service Quality is the ability of e-retailers to fulfill customer desires through effective website usage, with the aim of ensuring transaction success (Venkatakrishnan et al., 2023). Venkatakrishnan et al., (2023) E-Service Quality refers to the overall assessment of customers regarding the delivery of electronic services in online purchases. The E-Service Quality dimensions used in this study refer to Venkatakrishnan et al., (2023) which suggests there are six dimensions, namely Responsiveness, Ease of use, Credibility, Accessibility, Personalization, and Assurance. According to Venkatakrishnan et al., (2023) which suggests there are six dimensions as follows:

- 1. Responsiveness, is the extent to which service providers respond quickly to consumer problems and provide fast responses through available platforms.
- 2. Ease of use, describes how easily the service provider can be operated, used, and understood by users, without making it difficult for them to use the service.
- 3. Credibility, involves constant service availability, accuracy, speed, and the ability of service providers to provide reliable, consistent, and accurate services in accordance with the promises made.
- 4. Accessibility, refers to the ease with which consumers can access all the features provided through the application or website provided by the service provider.

- 5. Personalization, is the ability of service providers to provide personalized services by identifying the needs, demands, and expectations of each consumer individually.
- 6. Assurance, is the ability of service providers to fulfill their commitments to deliver products and services on time, thus building trust in every consumer.

Sales Promotion

According to Napitulu et al, (2021) Sales promotion is all marketing activities that try to stimulate the action of purchasing a product quickly or making a purchase in a short time. According to Kotler et al (2021) Sales promotions can generate high sales response in the short term but little permanent gain in the long-term Sales promotions can be used to attract attention and usually provide information that can lead consumers to make purchase transactions. Sales promotion tools consist of coupons, contests, premium prices and others.

Price Perception

Price is one element of the marketing mix that generates revenue; other elements generate costs. Price also communicates the company's intended value position for its product or brand (Kotler et al, 2021). According to Tjiptono in Napitulu et al, (2021), price is a monetary unit or other measure (including goods and services) that is exchanged in order to obtain ownership rights or use of a good or service. And price is the only element of the marketing mix that provides income or revenue for the company compared to other elements of the marketing mix (product, promotion and distribution). Price perception is a consumer assessment of the comparison of the amount of sacrifice with what will be obtained from products and services (Zeithaml, 1988).

Based on Collier & Bienstock (2006) and Činjarević et al. (2010), there are two dimensions of price perception used in this study:

- a. Price transparency, which includes clarity and ease for consumers in knowing the prices offered by the company, including clarity, completeness, and actuality of price information.
- b. Reference Price, which involves the ability of consumers to compare the price of a service provider with other service providers.

App Design

According to Baran & Barutçu (2022) Mobile apps are defined as end-user software applications designed to run on mobile device operating systems to enhance the capabilities of these devices. There are many features that influence consumer preferences in choosing a mobile application for shopping. According to Tarute et al (2017), mobile application design is also an important feature that influences consumer choice in shopping via mobile applications. Dimensions of App Design According to Collier & Bienstock (2006) are:

- 1. Navigation, is the position and accuracy of navigation features available in the app, such as navigation maps that make it easy for users.
- 2. Graphic design, is the design created to fulfill the right visual aspects in the application.

- 3. User friendliness, is the ease with which users can use and learn the application.
- 4. Aesthetics, is an application design that displays beauty and has artistic value.
- 5. Alignment, is the symmetrical placement and design between two axes in the application.
- 6. Layout, is the layout of the space in the application that is designed to be placed according to a predetermined portion and plan.
- 7. Integration, is an application design that is integrated with other subsystems or components that have been arranged in order to run the application according to its function.

Trust

According to Kalia et al (2021) Trust involves a willingness to be vulnerable, and there is plenty of room for e-retailing companies to engage in opportunistic behavior. On the other hand, since e-commerce entered Indonesia, it is still in its early stages (adoption). According to (Wijoseno WR and Ariyanti (2017) Online shopping is a challenge for most Indonesian consumers, especially traditional consumers in Indonesia. The Trust dimension used in this study uses the dimensions according to Lee & Moghavvemi, (2015) suggests there are three dimensions as follows:

- 1. Ability, refers to the ability and characteristics of the seller or organization to influence certain aspects. This includes how the seller provides, serves, and protects the transaction. This provides satisfaction and trust.
- 2. Benevolence (Kindness), refers to the seller's ability to create a mutually beneficial relationship between himself and consumers. The seller not only focuses on profit maximization, but also seeks to provide high satisfaction to customers. This creates a mutually beneficial relationship and shows the seller's concern for customer satisfaction.
- 3. Integrity, relates to the seller's behavior and habits in conducting business. This includes the truthfulness of the information provided to consumers and trust in the quality of the products sold. A seller with integrity will provide true and trustworthy information to consumers, and maintain trustworthy product quality.

Customer Satisfaction

Customer satisfaction is a person's feeling of pleasure or disappointment resulting from comparing the perceived performance (or results) of a product in relation to his expectations (Kotler et al, 2021).

According to Ranjbarian in Tobagus (2018) "The ability to easily navigate a Web site and its perceived value (e.g entertainment, convenience, community) will influence both usage levels and satisfaction. By extension, satisfaction in the online environment may also be driven by consumer benefits in using self-service technologies.

1. Case and Methodology

This study aims to evaluate how customers respond to e-Service Quality, Sales Promotion, Price Perception, Application Design, Trust, and Customer Satisfaction. In relation to Shopee Food. In addition, this study seeks to verify that E-Service Quality, Sales Promotion, *Nanotechnology Perceptions* Vol. 20 No.4 (2024)

and Price Perception have an impact on Customer Satisfaction using App Design and Trust as Moderators on the online food delivery platform, Shopee Food. A survey was distributed to 200 Shopee Food user respondents. The research methodology used is quantitative using a Structural Equation Model (SEM) with SmartPLS software version 3.2.9 and data collection using purposive sampling.

Based on the research objectives, the hypothesis put forward is as follows:

H1: E-Service Quality has a positive effect on Customer Satisfaction for Shopeefood service users in Indonesia.

H2: Sales Promotion has a positive effect on Customer Satisfaction for Shopeefood service users in Indonesia.

H3: Price has a positive effect on Customer Satisfaction for Shopeefood service users in Indonesia.

H4: Trust has a positive effect on Customer Satisfaction for Shopeefood service users in Indonesia.

H5: App Design moderates the influence between E-Service Quality and Customer Satisfaction on Shopee food service users in Indonesia.

H6: Trust moderates the influence between App Design (second moderator) which moderates the effect of E-Service Quality on Customer Satisfaction on Shopee food service users in Indonesia.

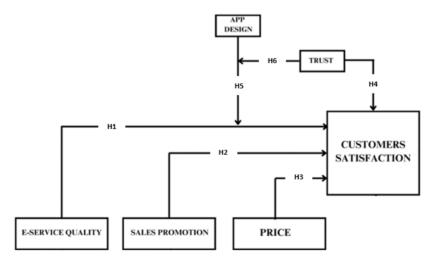


Figure 1 Conceptual Framework

3. Result

The results of the relationship between E-Service Quality, Sales Promotion, Price Perception with Customer Loyalty through Customer Satisfaction as a mediating variable and App Design and Trust as moderator variables calculated using PLS-SEM are presented as

follows:

Outer Model Test:

Measurement model assessment includes verification of individual convergent validity, considering outer loading, average variance extracted (AVE). discriminant validity, and composite reliability. Convergent validity of the measurement model with reflective indicators is assessed based on the correlation between items and construct scores. If the Loading Factor meets the convergent validity criteria with a value> 0.7, it means that all indicators are valid for measuring their respective variables.

Table 1 Outer Loadings & Average Variance Extraced (AVE)

Indicator	Outer Loading	AVE	Indicator	Outer Loading	AVE
X1.1	0.833		X2.1	0.866	
X1.2	0.798		X2.2	0.904	
X1.3	0.825		X2.3	0.873	
X1.4	0.813	1	X2.4	0.893	0.787
X1.5	0.82	1	X2.5	0.89	
X1.6	0.787	1	X2.6	0.895	
X1.7	0.798		X3.1	0.828	
X1.8	0.773		X3.2	0.863	
X1.9	0.819		X3.3	0.87	
X1.10	0.774		X3.4	0.851	
X1.11	0.799		X3.5	0.893	0.739
X1.12	0.816		X3.6	0.879	
X1.13	0.843		X3.7	0.84	
X1.14	0.821		X3.8	0.851	
X1.15	0.818		Y1.1	0.835	
X1.16	0.794	0.653	Y1.2	0.868	
X1.17	0.819		Y1.3	0.889	0.500
X1.18	0.807		Y1.4	0.76	0.702
X1.19	0.796		Y1.5	0.87	
X1.20	0.803		Y1.6	0.799	
X1.21	0.787		M1.1	0.828	
X1.22	0.742		M1.2	0.889	
X1.23	0.831]	M1.3	0.894	
X1.24	0.836		M1.4	0.902	0.760
X1.25	0.803		M1.5	0.831	0.768
X1.26	0.807		M1.6	0.866	
X1.27	0.798		M1.7	0.903]
X1.28	0.839		M1.8	0.894	
X1.29	0.824		M2.1	0.87	
X1.30	0.812		M2.2	0.915]
X1.31	0.787		M2.3	0.892	0.797
X1.32	0.849		M2.4	0.875	0.787
X1.33	0.773		M2.5	0.885]
X1.34	0.799		M2.6	0.886	
X1.35	0.819		M1	0.901	1
A1.33	0.819		M2	0.835	1

Based on the AVE value above, validity is ensured if the value is> 0.7. Based on the convergent validity results outlined in Table 1, it can be seen that all indicators of the E-Service Quality, Sales Promotion, Price Perception, App Design, Trust, Customer Satisfaction, and Customer Loyalty variables used in this study are considered valid. Each indicator has convergent validity because the value is> 0.7 and the AVE value> 0.5.

The next test involves evaluating validity using discriminant validity. Cross Outer Loading values are essential to determine whether latent variables show sufficient discrimination. This is done by comparing the correlation of indicators with their respective latent variables, which should exceed the correlation between indicators and other latent variables.

Table 2 Cross Loadings in All Variable

Indicator	E-SQ	SP	PR	CS	TR	AD	M1	M1
X1.1	0.833	0.517	0.714	0.664	0.631	0.585	-0.252	-0.248
X1.2	0.798	0.487	0.565	0.579	0.578	0.55	-0.125	-0.224
X1.3	0.825	0.495	0.63	0.609	0.601	0.574	-0.283	-0.279
X1.4	0.813	0.429	0.637	0.606	0.588	0.546	-0.147	-0.169
X1.5	0.82	0.504	0.649	0.649	0.649	0.608	-0.354	-0.283
X1.6	0.787	0.471	0.614	0.603	0.614	0.578	-0.217	-0.278
X1.7	0.798	0.471	0.618	0.592	0.623	0.555	-0.24	-0.218
X1.8	0.773	0.417	0.622	0.601	0.578	0.526	-0.145	-0.174
X1.9	0.819	0.507	0.61	0.597	0.645	0.565	-0.279	-0.342
X1.10	0.774	0.477	0.578	0.607	0.604	0.559	-0.234	-0.285
X1.11	0.799	0.459	0.633	0.598	0.605	0.534	-0.308	-0.343
X1.12	0.816	0.493	0.636	0.642	0.656	0.613	-0.305	-0.353
X1.13	0.843	0.478	0.671	0.639	0.649	0.599	-0.277	-0.276
X1.14	0.821	0.463	0.612	0.617	0.641	0.546	-0.226	-0.275
X1.15	0.818	0.449	0.621	0.608	0.64	0.559	-0.275	-0.289
X1.16	0.794	0.466	0.672	0.631	0.614	0.587	-0.196	-0.162
X1.17	0.819	0.487	0.625	0.641	0.613	0.616	-0.236	-0.25
X1.18	0.807	0.482	0.646	0.635	0.634	0.587	-0.262	-0.308
X1.19	0.796	0.467	0.619	0.592	0.566	0.573	-0.192	-0.204
X1.20	0.803	0.463	0.613	0.608	0.562	0.518	-0.205	-0.27
X1.21	0.787	0.421	0.547	0.604	0.575	0.533	-0.26	-0.322
X1.22	0.742	0.407	0.588	0.552	0.555	0.436	-0.148	-0.155
X1.23	0.831	0.482	0.625	0.648	0.621	0.585	-0.254	-0.297
X1.24	0.836	0.508	0.635	0.627	0.617	0.576	-0.238	-0.263
X1.25	0.803	0.441	0.61	0.583	0.591	0.549	-0.239	-0.229
X1.26	0.807	0.486	0.622	0.67	0.66	0.643	-0.171	-0.301
X1.27	0.798	0.448	0.574	0.567	0.588	0.484	-0.168	-0.175
X1.28	0.839	0.509	0.63	0.634	0.617	0.57	-0.261	-0.261
X1.29	0.824	0.476	0.604	0.642	0.598	0.551	-0.233	-0.273
X1.30	0.812	0.529	0.619	0.634	0.639	0.553	-0.22	-0.238
X1.31	0.787	0.506	0.632	0.657	0.612	0.559	-0.175	-0.194
X1.32	0.849	0.504	0.68	0.69	0.655	0.619	-0.23	-0.278
X1.33	0.773	0.493	0.648	0.63	0.628	0.522	-0.218	-0.237
X1.34	0.799	0.494	0.62	0.63	0.637	0.593	-0.227	-0.247

Nanotechnology Perceptions Vol. 20 No.4 (2024)

X1.35	0.819	0.47	0.661	0.639	0.616	0.619	-0.245	-0.271
X2.1	0.491	0.866	0.438	0.602	0.583	0.587	-0.152	-0.176
X2.2	0.526	0.904	0.488	0.638	0.58	0.599	-0.216	-0.151
X2.3	0.54	0.873	0.457	0.637	0.56	0.558	-0.233	-0.216
X2.4	0.502	0.893	0.483	0.633	0.571	0.581	-0.18	-0.143
X2.5	0.552	0.89	0.49	0.639	0.564	0.541	-0.171	-0.123
X2.6	0.529	0.895	0.508	0.644	0.57	0.612	-0.216	-0.168
X3.1	0.65	0.498	0.828	0.569	0.549	0.521	-0.127	-0.069
X3.2	0.677	0.476	0.863	0.576	0.558	0.51	-0.196	-0.109
X3.3	0.672	0.496	0.87	0.624	0.551	0.534	-0.164	-0.09
X3.4	0.661	0.454	0.851	0.603	0.509	0.521	-0.168	-0.108
X3.5	0.672	0.472	0.893	0.587	0.518	0.496	-0.078	-0.002
X3.6	0.665	0.461	0.879	0.616	0.532	0.5	-0.134	-0.083
X3.7	0.65	0.413	0.84	0.585	0.515	0.493	-0.129	-0.083
X3.8	0.68	0.433	0.851	0.594	0.548	0.554	-0.162	-0.088
Y1.1	0.682	0.604	0.656	0.835	0.657	0.65	-0.137	-0.163
Y1.2	0.697	0.608	0.566	0.868	0.674	0.659	-0.193	-0.235
Y1.3	0.74	0.643	0.627	0.889	0.705	0.712	-0.247	-0.295
Y1.4	0.534	0.511	0.502	0.76	0.498	0.453	-0.24	-0.184
Y1.5	0.665	0.618	0.621	0.87	0.668	0.659	-0.125	-0.185
Y1.6	0.515	0.592	0.483	0.799	0.531	0.536	-0.26	-0.172
M1.1	0.643	0.567	0.54	0.66	0.828	0.668	-0.038	-0.257
M1.2	0.695	0.585	0.543	0.686	0.889	0.669	-0.079	-0.271
M1.3	0.715	0.59	0.551	0.666	0.894	0.644	-0.211	-0.355
M1.4	0.674	0.557	0.575	0.661	0.902	0.618	-0.115	-0.297
M1.5	0.601	0.497	0.481	0.633	0.831	0.587	-0.154	-0.295
M1.6	0.628	0.587	0.54	0.635	0.866	0.616	-0.139	-0.336
M1.7	0.705	0.581	0.552	0.664	0.903	0.658	-0.203	-0.347
M1.8	0.666	0.544	0.575	0.643	0.894	0.611	-0.095	-0.286
M2.1	0.553	0.558	0.492	0.627	0.593	0.87	-0.198	-0.193
M2.2	0.702	0.633	0.563	0.714	0.669	0.915	-0.323	-0.318
M2.3	0.62	0.577	0.517	0.659	0.638	0.892	-0.278	-0.3
M2.4	0.597	0.558	0.532	0.636	0.646	0.875	-0.24	-0.235
M2.5	0.623	0.575	0.534	0.63	0.655	0.885	-0.268	-0.252
M2.6	0.626	0.575	0.555	0.66	0.652	0.886	-0.256	-0.239
ESQ * TR	-0.285	-0.22	-0.169	-0.234	-0.147	-0.295	1	0.529
TR*AD	-0.318	-0.183	-0.092	-0.248	-0.349	-0.29	0.529	1

As shown in Table 2, the correlation value between a construct and its indicator exceeds the correlation with other constructs. This indicates that each latent construct shows strong discriminant validity. Reliability testing is carried out to determine the reliability and trustworthiness of a measurement tool. In the PLS methodology, indicator reliability in this study was assessed using the Cronbach's Alpha value for each indicator block and the Composite Reliability value. The general guideline for acceptable alpha and composite reliability values is that they should exceed 0.6 or preferably 0.70. as shown by the results presented in Table 3 for Cronbach's Alpha and Composite Reliability, each value exceeds

0.70, indicating that the research model meets the Cronbach's Alpha criteria.

Table 3 Cronbach's Alpha & Composite Reability

	Cronbach's Alpha	Terms	Composite Reliability	Terms	Ket
E-service Quality	0.984	> 0.70	0.985	> 0.70	Valid
Sales Promotion	0.946	> 0.70	0.957	> 0.70	Valid
Price Perception	0.949	> 0.70	0.958	> 0.70	Valid
Customer Satisfaction	0.915	> 0.70	0.934	> 0.70	Valid
App Design	0.946	> 0.70	0.957	> 0.70	Valid
Trust	0.957	> 0.70	0.964	> 0.70	Valid
Moderation 1	1	> 0.70	1	> 0.70	Valid
Moderation 2	1	> 0.70	1	> 0.70	Valid

Inner Model Test:

This model describes the relationship between latent variables, which is also called the inner relationship. In this testing stage, the nature and extent of the influence of independent latent variables on dependent latent variables is explored. The test uses the R Square Coefficient of Determination, where the R value indicates the proportion of independent variables hypothesized in the equation that can explain the dependent variable. According to Ghozali & Latan (2017), the classification of the significance of the R value is substantial (0.67), moderate (0.33), and weak (0.19).

Table 4 R-Square and Adjusted R-Square

	R Square	R Square Adjusted	Description
App Design	0.525	0.522	Moderate
Customer Satisfaction	0.739	0.730	Moderate

Hypothesis Test:

Hypothesis testing between constructs was carried out using the bootstrap resampling method. Calculation of hypothesis testing using SmartPLS 3.3.2 is seen from the Path Coefisien value which is the t-statistic value of the relationship between variables in the study, with a critical t-table value of 1.64 at the significance level (α) of 0.05. The decision-making process is as follows:

- a. If P-Values > 0.05 or t count < t table then Ho is accepted and Ha is rejected.
- b. If P-Values <0.05 or t count> t table then Ho is rejected and Ha is accepted.

Based on table 5, the results of testing the hypothesis of the effect of social media marketing on purchase intention with brand image and brand trust as mediating variables are as follows:

1. Based on the research results, the T-Statistic value is 2.696 with a P-Values value of 0.007 which is smaller than $\alpha=0.05$, it can be concluded that H1 is accepted, accepted, namely *Nanotechnology Perceptions* Vol. 20 No.4 (2024)

there is an influence on the E-Service Quality variable (X1) on Customer Satisfaction (Z).

- 2. Based on the research results, the T-Statistic value is 4.074 with a P-Values value of 0.000 which is smaller than $\alpha = 0.05$, it can be concluded that H2 is accepted, accepted, that is, there is an influence on the Sales Promotion variable (X2) on Customer Satisfaction (Z).
- 3. Based on the research results, the T-Statistic value is 2.657 with a P-Values value of 0.008 which is smaller than $\alpha = 0.05$, it can be concluded that H3 is accepted, accepted, that is, there is an influence on the Price Perception variable (X3) on Customer Satisfaction (Z).
- 4. Based on the research results, the T-Statistic value is 2.141 with a P-Values value of 0.033 which is smaller than $\alpha = 0.05$, it can be concluded that H4 is accepted, accepted, that is, there is an influence on the Trust variable (M1) on Customer Satisfaction (Z).
- 5. Based on the research results, the T-Statistic value is 0.155 with a P-Values value of 0.877 which is greater than $\alpha=0.05$, it can be concluded that H5 is rejected, that is, there is no moderating effect of App Design (M2) on the effect of E-Service Quality (X1) variables on Customer Satisfaction (Z).
- 6. Based on the research results, the T-Statistic value is 0.155 with a P-Values value of 0.876 which is greater than $\alpha = 0.05$, it can be concluded that H6 is rejected, namely there is no moderating effect of Trust (M1) as a second moderator on the moderating effect of App Design (M2) on the effect of E-Service Quality (X1) variables on Customer Satisfaction (Z).

4. Discussion

Based on the results of the research conducted, it shows that there is a positive and significant influence between the E-Service Quality variable on Customer Satisfaction. These positive results indicate that the better and higher quality E-Service Quality is provided, the greater the resulting Customer Satisfaction. Research by E. Herington and Weaver (2009) proves a positive relationship between the dimensions of service quality and customer satisfaction. These findings reinforce the view that perceived service quality is the main driving factor for customer satisfaction. This relationship is also supported by previous research conducted by Naik et al. (2010) and Yee et al. (2011). In other words, the higher the service quality perceived by customers, the higher their satisfaction. Herington and Weaver's (2009) research along with other studies emphasize the importance of maintaining and improving service quality to increase customer satisfaction.

This study also shows that there is a positive and significant influence between Sales Promotion (X2) on Customer Satisfaction (Z). These positive results indicate that the better and higher quality Sales Promotion provided, the greater the resulting Customer Satisfaction (Z). Even so, sales promotion cannot be done continuously, because it will eventually become ineffective. This means that for sales promotions to be truly effective, they must be short and attractive, offered for a limited time, and considered to provide benefits to customers (Ngolanya, et al, 2006). The results of this study are in line with the results of research conducted by Lau et al. (2006), Nagar (2009), Zhang and Tang, (2010) which state that Sales Promotion has a positive and significant effect on Satisfaction. The results of these studies are also in line with the research of Nguyen-Phuoca et al (2020) which states that the

better the Sales Promotion provided, the better the resulting Customer Satisfaction.

This study also shows that there is a positive and significant influence between Price Perception (X3) on Customer Satisfaction (Z). These positive results indicate that the better and higher quality Price Perception is given, the greater the resulting Customer Satisfaction (Z). The results of this study are in line with the results of research conducted by Venkatakrishnan et al. (2022) which states that Price Perception has a positive and significant effect on Customer Satisfaction. The results of these studies are also in line with the research of Shen & Yahya (2020) which states that the price given also significantly affects customer satisfaction.

Consumers will only choose and consider purchasing products limited to the images and information listed on the website page. So this is where the purchase will fully depend on consumer perceptions and trust in site managers and manufacturers. One of the main foundations of online shopping is the level of consumer trust (Hidayah, 2017). This study also shows that there is a positive and significant influence between Trust on Customer Satisfaction. These positive results indicate that the better and higher quality Trust is given, the greater the resulting Customer Satisfaction. The results of this study are in line with the results of research conducted by Rahmawaty et al. (2021), which states that Trust has a positive and significant effect on Customer Satisfaction. The results of these studies are also in line with the research of Hakam et al., (2022) which even states that Trust affects the relationship between E-satisfaction and Customer Loyalty. Therefore, it can be concluded that the greater the trust that customers have in a service, the greater the resulting customer satisfaction.

This study also shows that there is no moderator effect of the App Design and Trust (Second Moderator) variables on the E-Service Quality variable on Customer Satisfaction (Z). These results contradict the results of the analysis conducted by Ventakrishnan et al. (2022) which states that App design and Trust (Second Moderator) can moderate the E-Service Quality variable on Customer Satisfaction. These conflicting results can be caused by differences in the research location and the object under study. In this study, the object under study is a Mobile App Based platform located in Bandung City in Indonesia, while in the previous study used as a reference the object under study is a Web Based platform located in India. There are also differences in characteristics between objects in previous research (Web Based) and the research conducted (Mobile App Based), one of which is in terms of platform security which affects consumer confidence. Security on the website depends on the protocol used so that it is more vulnerable to phishing and malware, besides that the data accessed is stored on the web so that the data is more vulnerable to data leakage, in contrast to Mobile App Based where the data entered by the user is stored on the device used and encrypted so that it is safer from phishing and data leakage (Thalesgroup.com, 2024). Based on this, it can be concluded that the Trust factor is no longer an issue in using the Mobile App and has no effect on the App Design provided. Based on previous research conducted by Raptis et el (2005), it is stated that what can affect App Design is the display quality of the interface design of the application provided, but this is influenced by the culture and culture of and the characteristics of the place where the object is located (El-Gohary and Eid, 2012; Tarute et al., 2017). According to Marcus et al. (2011) also stated that it would be useful to consider the culture of a country where the application will be used when designing a mobile application.

5. Conclusion

The main objective of this study is to assess how customers respond to E-Service Quality, Sales Promotion, Price Perception with Customer with App Design and Trust as moderator variables related to the online food delivery service Shopee Food (Case study on Millennials and Gen Z generation in Bandung City). This research also seeks to provide assistance to companies in designing digital marketing strategies that are effective and have a positive impact on their business. The results of this study indicate that all variables have a direct, positive, and significant influence. However, this study did not identify any moderator effects of App Design and Trust that could change the relationship between E-Service Quality and Customer Satisfaction.

6. Suggestion

The results showed that Sales Promotion is the most important factor with an influence of 33.5%. Shopee needs to improve the quality of Sales Promotion and focus on "Promotional Clarity". In addition, Customer Satisfaction can also be increased by improving E-Service Quality, Sales Promotion, and Price Perception. Regarding App Design on Mobile App Based Shopee Food, Shopee needs to focus on App Design that is Compact, Reliable, and in accordance with the behavior of Indonesian people in shopping online.

References

- 1. Amin, M., Isa, Z. and Fontaine, R. (2013), "Islamic banks: contrasting the drivers of customer satisfaction on image, trust, and loyalty of Muslim and non-Muslim customers in Malaysia", International Journal of Bank Marketing, Vol. 31 No. 2, pp. 79-97.
- 2. Annur, C. M. (2022). Survey: gofood service rated superior to grabfood and shopeefood | databoks. Databoks.katadata.co.id. https://databoks.katadata.co.id/datapublish/2022/06/16/survei-layanan-gofood-dinilai-unggul-dari-grabfood-dan-shopeefood
- 3. Annur, C. M. (2023a). Grab's online food delivery wins in ASEAN, gojek and shopee lose out | databoks. Databoks.katadata.co.id. https://databoks.katadata.co.id/datapublish/2023/01/19/online-food-delivery-milik-grab-juara-di-asean-gojek-dan-shopee-kalah
- 4. Annur, C. M. (2023b, January 19). Bandung city is the largest online food delivery market in ASEAN | databoks. Databoks.katadata.co.id. https://databoks.katadata.co.id/datapublish/2023/01/19/Kota Bandung-biggest-online-food-delivery-market-in-ASEAN
- 5. antaranews.com. (2022a, June 2). Digital transactions become more inclusive, generation X consumers increase. Antara News. https://www.antaranews.com/berita/2915701/transaksi-digital-makin-inklusif-konsumen-dari-generasi-x-meningkat
- 6. antaranews.com. (2022b, June 15). Research: GoFood top choice, ShopeeFood most competitively priced. Antara News. https://www.antaranews.com/berita/2940405/riset-gofood-

- pilihan-utama-shopeefood-beri-harga-paling-kompetitif
- 7. Avania, I., & Widodo, A. (2022). Affect of e-service quality on e-customers loyalty through E-customers satisfaction on e-commerce shopee. Ffect of E-Service Quality on E-Customers Loyalty through ECustomers Satisfaction on E-Commerce Shopee, 5. https://doi.org/10.33258/birci.v5i1.3641
- 8. Baran, T., & Barutçu, S. (2022). Attitudes toward the design of Islamic mobile shopping apps in Turkey: the case of hijab clothing mobile apps from the perspective of conservative consumers. Journal of Islamic Accounting and Business Research, 14(3), 398-415. https://doi.org/10.1108/jiabr-12-2020-0380
- 9. Caruana, A. (2002), "Service loyalty: the effects of service quality and the mediating role of customer satisfaction", European Journal of Marketing, Vol. 36 Nos 7 and 8, pp. 811-828.
- Chodzaza, G. E., & Gombachika, H. S. H. (2013). Service quality, customer satisfaction and loyalty among industrial customers of a public electricity utility in Malawi. International Journal of Energy Sector Management, 7(2), 269-282. https://doi.org/10.1108/IJESM-02-2013-0003
- 11. Chu, P.-Y., Lee, G.-Y., & Chao, Y. (2012). Service quality, customer satisfaction, customer trust, and loyalty in an e-banking context. Social Behavior and Personality, 40(8), 1271-1284.
- 12. Cinjarevic, M., Tatic, K. and Avdic, A. (2010), "An integrated model of price, service quality, satisfaction and loyalty: an empirical research in the banking sector of Bosnia and Herzegovina", Economic Research-EkonomskaIstrazivanja, Vol. 23 No. 4, pp. 142-161, doi: 10. 1080/1331677X.2010.11517439.
- 13. Collier, J.E. and Bienstock, C.C. (2006), "Measuring service quality in E-retailing", Journal of Service
- 14. Research, Vol. 8 No. 3, pp. 260-275
- 15. Curry, N., Gao, Y., 2012. Low-cost airlines-a new customer relationship? An analysis of
- 16. service quality, service satisfaction, and customer loyalty in a low-cost setting. Serv. Market. Q. 33 (2), 104-118.
- 17. Dewi, F. K., & Ariyanti, M. (2020). Comparison of User Experience of Digital Wallet Applications (Go-Pay, OVO, DANA, and LinkAja Users) in Bandung Students. Journal of Technology Management, 19(2). http://dx.doi.org/10.12695/jmt.2020.19.2.1
- 18. Dihni, V. A. (2022). Research: GrabFood is less popular than gofood and shopeefood | databoks.

 Databoks.katadata.co.id.
 https://databoks.katadata.co.id/datapublish/2022/06/16/riset-grabfood-kalah-populer-dibandingkan-gofood-dan-shopeefood
- 19. El-Gohary, H. and Eid, R. (2012), "DMA model: understanding digital marketing adoption and implementation by Islamic tourism organizations", Tourism Analysis, Vol. 17 No. 4, pp. 523-532.
- 20. Fettera, A., & Michael, W. (2022). Effect of Sales Promotion in Brand Loyalty, a Case of Selected Commercial Banks in Hawassa, Ethiopia. Quest Journals Journal of Research in Business and Management, 10(7), 2347-3002.
- 21. Fida, B. A., Ahmed, U., Al-Balushi, Y., & Singh, D. (2020). Impact of service quality on customer loyalty and customer satisfaction in Islamic banks in the sultanate of oman. In Journals.sagepub.com/home/sgo. Sage.
- 22. Ghozali H. (2021). Partial Least Squares Concepts, Techniques and Applications using the SmartPLS 3.2.9 program for empirical research. Diponegoro University Publishing Agency.
- 23. Hakam, A., Hidayati, N., & Supriyanto. (2022). The Effect of E-Service Quality and E-Trust on Consumer Loyalty through Consumer Satisfaction as Intervening Variables (Case Study on Shopee Users in Malang Regency). The Effect of E-Service Quality and E-Trust on Consumer Loyalty through Consumer Satisfaction as Intervening Variables (Case Study on Shopee Users in Malang Regency), 5. https://doi.org/10.33258/birci.v5i2.5112

- 24. Hidayah, R. T. (2017). The Influence of E-Trust And Marketing Public Relations on E-Loyalty of Consumers of The Lazada Buying and Selling Site. Journal of Applied Economics.
- 25. Kalia, P., Kaushal, R., Singla, M. and Parkash, J. (2021), "Determining the role of service quality, trust and commitment to customer loyalty for telecom service users: a PLS-SEM approach", The TQM Journal, Vol. 33 No. 7, pp. 377-396, doi: 10.1108/TQM-04-2021-0108.
- 26. Keller, P. (2021). Marketing Management, Global Edition. Pearson Education Limited.
- 27. Lau, M., Chang, M., Moon, K., Liu, W., 2006. The brand loyalty of sportswear in Hong Kong. J. Textile Apparel, Technol. Manage. 5, 1-10.
- 28. Lee, S.-P. and Moghavvemi, S. (2015), "The dimensions of service quality and its impact on customer satisfaction, trust, and loyalty: a case of Malaysian banks", Asian Journal of Business and Accounting, Vol. 8 No. 2, pp. 91-121.
- 29. Marcus, A., Cardei, M., Cardei, I., Fern and E., Frati, F. and Damiani, E. (2011), "A pattern for web-based WSN monitoring", Journal of Communications, Vol. 6 No. 5, pp. 393-399.
- 30. Mishra, U.S., Das, J.R., Mishra, B.B., Mishra, P., 2012. Perceived benefit analysis of sales promotion: a case of consumer durables. Int. Res. J. Finance Econ. 98, 145-154.
- 31. Nagar, K. (2009). Evaluating the Effect of Consumer Sales Promotions on Brand Loyal and Brand Switching Segments. Vision: The Journal of Business Perspective, 13(4), 35-48. https://doi.org/10.1177/097226290901300404
- 32. Naik, C. N. K., Gantasala, S. B., & Prabhakar, G. V. (2010). SERVQUAL, customer satisfaction and behavioral intentions in retail.
- 33. Napitulu, S., Tapiomas, N., & Tobink, R. (2021). MARKETING MANAGEMENT A Practical Approach with Expert Theories. PT Atalya Rileni Sudeco.
- 34. Nguyen-Phuoc, D. Q., Su, D. N., Tran, P. T. K., Le, D.-T. T., & Johnson, L. W. (2020). Factors influencing customer's loyalty towards ride-hailing taxi services A case study of Vietnam. Transportation Research Part A: Policy and Practice, 134, 96-112. https://doi.org/10.1016/j.tra.2020.02.008
- 35. Nurcahyani, I. (2023, February 8). Behind the rising trend of online food ordering. Antara News; Antara News. https://www.antaranews.com/berita/3385476/mengulik-di-balik-naiknya-tren-pesan-makanan-online
- 36. Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985), "A conceptual model of service quality and its implications for future research", Journal of Marketing, Vol. 49 No. 4, pp. 41-50.
- 37. Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality", Journal of Retailing, Vol. 64 No. 1, pp. 12-40.
- 38. Pertiwi, W. K. (2023, February 13). Internet users in Bandung City reached 212.9 million in early 2023, page all. KOMPAS.com. https://tekno.kompas.com/read/2023/02/13/19300087/pengguna-internet-di-Kota Bandung-tembus-212-9-million-at-the-beginning-of-2023?page=all
- 39. Rahajeng, K. (2021). 50% of Generation Z Bandung City Choose GrabFood Food Order Service. CNBC Bandung City. https://www.cnbcKota Bandung.com/tech/20210614102310-37-252849/50-generation-z-bandung-city-chooses-grabfood-order-service
- 40. Rahmawaty, S., Kartawinata, B. R., Akbar, A., & Wijaksana, T. I. (2021). The effect of eservice quality and e-trust on E-customer loyalty through e-customer satisfaction as an intervening variable (study on gopay users in Bandung).
- 41. Ranjbarian, B., Fathi, S., & Rezaei, Z. (2012). Factors influencing on customers' e-satisfaction: A case study from iran. Interdisciplinary Journal of Contemporary Research in Business, 3(9), 1496-1511.
- 42. Raptis, D., Tselios, N. and Avouris, N. (2005), "Context-based design of mobile applications *Nanotechnology Perceptions* Vol. 20 No.4 (2024)

- for museums: a survey of existing practices", Proceedings of the 7th International Conference on Human-Computer Interaction with Mobile Devices and Services, pp. 153-160.
- 43. Setyowati, D. (2023a, January 19). Grab's GrabFood Transactions 7 Times ShopeeFood in Bandung City Startup Katadata.co.id. Katadata.co.id. https://katadata.co.id/desysetyowati/digital/63c8dca079b93/transaksi-grabfood-grab-7-kali-lipat-shopeefood-di-Kota Bandung
- 44. Setyowati, D. (2023b, January 19). Transactions down, shopee reduces shopeefood promotion last year startup katadata.co.id. Katadata.co.id. https://katadata.co.id/desysetyowati/digital/63c8e7b37cae9/transaksi-turun-shopee-kurangi-promosi-shopeefood-tahun-lalu
- 45. Setyowati, D. (2023c, June 5). Cost Comparison of GoFood, GrabFood, ShopeeFood, Maxim Startup Katadata.co.id. Katadata.co.id. https://katadata.co.id/desysetyowati/digital/647d68b66e285/perbandingan-biaya-pesan-makanan-gofood-grabfood-shopeefood-maxim
- 46. Shen, C., & Yahya, Y. (2021). The impact of service quality and price on passengers' loyalty towards low-cost airlines: The Southeast Asia perspective. Journal of Air Transport Management, 91, 101966. https://doi.org/10.1016/j.jairtraman
- 47. Tarute, A., Nikou, S. and Gatautis, R. (2017), "Mobile application driven consumer engagement", Telematics and Informatics, Vol. 34 No. 4, pp. 145-156.
- 48. Southeast Strategics. (2022a). Survey on Perception & Consumption Behavior of Online Food Delivery (OFD) in Bandung City.
- 49. Southeast Strategics. (2022b, June 17). Online Food Delivery (OFD) Consumption Behavior and Perception Survey in Bandung City. Southeast.id. https://tenggara.id/research/Online-Food-Delivery-OFD-Consumption-Behavior-and-Perception-Survey-in-Kota Bandung
- 50. thalesgroup. (2024). Mobile Security Core inside for trusted Digital ID. Www.thalesgroup.com. https://www.thalesgroup.com/en/markets/digital-identity-and-security/government/identity/digital-identity-services/mobile-software-security
- 51. Tobagus, A. (2018). The effect of e-service quality on e-satisfaction for users on the tokopedia site. AGORA, 6(1), 1-10.
- 52. Venkatakrishnan, J., Alagiriswamy, R., & Parayitam, S. (2023). Web design and trust as moderators in the relationship between e-service quality, customer satisfaction and customer loyalty. The TQM Journal. https://doi.org/10.1108/tqm-10-2022-0298
- 53. Wijoseno WR, J., & Ariyanti, M. (2017). Perceived Factors Influencing Consumer Trust and Its Impact on Online Purchase Intention in Indonesia. International Journal of Science and Research (IJSR), 6(8).
- 54. Wu, J. (Snow), & Law, R. (2019). Analyzing behavioral differences between e- and m-bookers in hotel booking. International Journal of Hospitality Management, 83, 247-256. https://doi.org/10.1016/j.ijhm.2018.10.023
- 55. Wu, J. S., Ye, S., Zheng, C. J., & Law, R. (2021). Revisiting customer loyalty toward mobile e-commerce in the hospitality industry: Does brand viscosity matter? International Journal of Contemporary Hospitality Management, ahead-of-print. https://doi.org/10.1108/ijchm-11-2020-1348
- 56. Zhang, L.-X., Tang, S.-L., 2010. An empirical study on the impact of sales promotion on brand loyalty of service enterprises. Management and Service Science (MASS). IEEE, pp. 1-3.