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Research Article

Analysis of E-Service Quality Attributes in Delivery Service Application Using the Kano Model

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Abstract: GoSend as an instant delivery service from Gojek plays an important role in meeting the demand for fast and reliable delivery. However, there are still challenges in terms of service quality, customer satisfaction, and competitiveness in the digital logistics industry. This study analyzes GoSend's electronic service quality attributes using the Kano Model to identify the factors that most influence customer satisfaction. The quantitative method is applied through a survey of 206 GoSend users in Semarang, with the integration of E-Servqual indicators and Kano Model attributes. The results of the study show that most service attributes fall into the "Indifferent" category, meaning they do not have a significant effect on customer satisfaction. However, attributes such as transaction data security and item conditions fall into the "One-Dimensional" category, so improvements in these aspects can increase customer satisfaction. The analysis of the Extent of Satisfaction (EOS) and Extent of Dissatisfaction (EOD) shows that responsiveness to complaints and service personalization still need to be improved. Based on these findings, strategic recommendations that can be given are increasing customer service responsiveness, optimizing compensation policies, and strengthening security systems to increase customer trust. The integration of the Kano Model with E-Servqual provides a comprehensive evaluation of the quality of digital logistics services while also being a guide for GoSend in increasing customer satisfaction and loyalty amidst increasingly fierce competition.

Keywords: Customer Satisfaction, Digital Delivery Service, E-Servqual, GoSend, Kano Model.

1. Introduction

Digital-based services provide convenience for customers to carry out various activities, such as shopping online and receiving goods directly without having to come to the store. Other services such as delivery are also available and have recently become increasingly popular from the user side. They are generally available through various platforms. One of the digital-based services is the online delivery service, which is now a solution to meet daily needs. This is supported by the annual increase in the number of internet users in Indonesia. Survey results According to the Indonesian Internet Service Providers Association (APJII), the number of Indonesians using the internet in 2024 will reach 221,563,479 people, from 278,696,200 people in 2023. The results of the 2024 Indonesian internet penetration survey released by APJII showed an increase of 1.4% compared to the previous period. Since 2018, Indonesia's internet penetration has reached 64.8%, then increased to 73.7% in 2020, 77.01% in 2022, and 78.19% in 2023 (APPJII, 2024). Now online delivery services are in great demand by the public. Most Indonesians are interested in and like to use online delivery services because, with only a smartphone and internet quota, people can order services easily (Fidia & Harsoyo, 2022). In supporting digital-based services, goods delivery services are important in the increasingly developing digital era. One of the lifestyles of the Indonesian people today is bold transactions, lifestyle has a positive influence on purchasing decisions, thus showing that every improvement in lifestyle will improve the purchasing decision process (Sapitri & Maulina, 2021). In today's digital era, delivery service applications are faced with the challenge

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of providing fast, accurate, and reliable services, along with increasing consumer expectations (Purbasari et al., 2023). Digital Business in relation to digital services for consumers, service providers are encouraged to design services based on customer needs and preferences, so that they continue to consider customer exploitation of digital offerings. This alignment increases the likelihood of consumers using these services.

GoSend is an instant delivery service developed by Gojek that allows its users to send goods quickly for both personal and business needs (Putri et al., 2022). As a major player in e-commerce logistics, GoSend offers same-day and instant delivery services. Along with the increasing demand for efficient logistics services in e-commerce, the existence of GoSend makes a significant contribution in meeting customer expectations regarding service quality, satisfaction, and loyalty to the e-commerce platform they use (Hertati & Yuliansyah, 2024). This study focuses on GoSend because of the rapid growth of digital logistics, especially in ecommerce. With increasing customer expectations for efficient delivery, business actors must understand the factors that influence satisfaction in order to improve service quality (Nansi, 2022). GoSend was chosen as the subject of the study because of its personal preference and popularity among users compared to other delivery platforms. Its efficiency, accessibility, and wide range of services make it the main choice for instant delivery. This study aims to analyze customer satisfaction factors and identify areas that need to be improved in services in order to maintain competitiveness in the digital logistics industry. Therefore, improving service factors that are considered critical by consumers needs to be done continuously (Kosasih et al., 2020). Currently, online delivery service business actors are competing to provide a sense of comfort and convenience that will encourage customers to remain loyal to the company. This is a response to increasingly fierce competition where service quality is one of the main tools to dominate the market (Zinah et al., 2023).

In the digital delivery service industry, GoSend and GrabExpress compete in providing the best service quality to increase customer satisfaction (Situmorang, 2024). GoSend excels in integration with the Gojek ecosystem, while GrabExpress offers a wider variety of services, such as GrabExpress Same Day and Multi-Stop. In terms of punctuality, GrabExpress is more reliable in scheduled delivery, while GoSend is more suitable for instant delivery over short distances. However, GoSend still faces challenges in the compensation system and responsiveness of customer service compared to GrabExpress which has a clearer problem-solving mechanism. In addition, GrabExpress is stricter in its data protection policy, while GoSend still receives several complaints regarding transaction security. GrabExpress has a clearer compensation system than GoSend, which still often receives complaints regarding delays in resolving complaints (Fadilah et al., 2022). Through this study, the E-Service Quality attribute on GoSend was analyzed using the Kano Model to identify aspects of service that need to be improved in order to increase customer satisfaction and competitiveness in the digital logistics industry.

A pre-survey was conducted among GoSend users in the Semarang area, highlighting several attributes that need improvement. Efficiency remains a challenge, with 60.9% of respondents feeling the ordering process is slow. Timeliness of delivery is another concern, with 56.5% expressing dissatisfaction. Data privacy (47.8%) and service responsiveness (47.8%) also received mixed reviews, while 39.1% felt the compensation system was inadequate. Additionally, 56.5% of users had difficulty contacting customer service, and 52.2% felt the app lacked personalized recommendations. Overall, the results of this presurvey show that GoSend has several advantages in terms of interface design and service accuracy, but there are several areas that need improvement, especially in responsiveness, compensation systems, and service personalization. This is important to maintain user satisfaction while increasing loyalty to GoSend services. The urgency of this research is driven by the increasing competition in digital delivery services, requiring GoSend to identify which service attributes need improvement to remain competitive in the logistics industry. Additionally, many customers have expressed dissatisfaction with GoSend's responsiveness and compensation system, highlighting areas that need improvement. Therefore, this study aims to identify the factors influencing customer satisfaction and provide recommendations for improving GoSend's overall service quality.

The Kano model is often used to evaluate the extent to which they can provide satisfaction to customers. The Kano model approaches the quality dimension by utilizing the subjective concept of customer satisfaction/dissatisfaction and the objective concept of whether the use of products and services is satisfactory (oh et al., 2012). The Kano model can be used in various industries, and can also be integrated with other goods and services

assessment techniques, including electronic service quality, to continuously improve customer satisfaction (Basfirinci & Mitra, 2015).

Measurement of service delivery quality can be done through the E-Servqual (Electronic Service Quality) approach (Kurniawan et al., 2022). There are several E-Servqual indicators developed to measure technology-based service quality, which include dimensions such as Efficiency, Fulfillment, System Availability, Privacy, Responsiveness, Compensation, Contact, Web Design and Customization (Zuhairah et al., 2024). According to (Fidia & Harsoyo, 2022)research, E-Servqual was designed to evaluate customer experience in the context of digital services. The research discussed the influence of E-Servqual on customer satisfaction with Gojek transportation services. The results showed that availability, fulfillment, and responsiveness had a significant influence on customer satisfaction. By using E-Servqual, companies can evaluate the extent to which their services can meet customer expectations, especially in the digital world.

By combining the E-Servqual method and the Kano model, this study aims to provide a comprehensive overview of the quality of Go-Send delivery services and its impact on customer satisfaction. The results of this analysis are expected to provide in-depth insights for Go-Send in improving its services to create an optimal customer experience, while helping the company understand the most relevant improvement priorities for the sustainability of its business. Ultimately, the implementation of the E-servqual-based Kano Model is expected to be able to increase customer satisfaction and loyalty more effectively, efficiently, and responsively to evolving needs (Kesuma et al., 2016).

2. Preliminaries or Related Work or Literature Review

2.1. E-Servqual

E-Servqual is one of the most widely used models in e-service quality research to assess user experience in e-commerce. Created by (Parasuraman et al., 2005), the model consists of two main scales: E-S-QUAL and E-RecS-QUAL. E-S-QUAL assesses the core characteristics of the service provided by a website, while E-RecS-QUAL assesses the quality of the recovery service provided by the type (Dan et al., 2017). Both talk about things like efficiency, fulfillment, privacy, and responsiveness, which are considered important to create a good user experience.

E-service quality is increasingly recognized along with the development of technology and the increasing use of the internet. Studies show that customer satisfaction levels across various e-commerce platforms are directly correlated with better E-Servqual quality. For example, a study conducted by (Park et al., 2007) found that ease of access and information quality are the main factors that influence consumers' decisions to make online purchases. This suggests that web design and content components affect not only aesthetics but also the functionality and performance of the service.

In addition, research has shown that E-Servqual components can differ by industry. For example, components such as security and reliability are more important in the online banking industry compared to the online retail industry. This shows how important it is for E-Servqual models to be tailored to meet the unique needs of different types of services and customers. Therefore, understanding these aspects helps companies improve service and build long-term relationships with customers. Finally, further research on E-Servqual using a quantitative approach is needed to evaluate the causal relationship between E-Servqual aspects and customer satisfaction (Salleh et al., 2024). Future research can investigate the impact of new digital trends on service quality as well as less common e-commerce business models. This will help business practitioners make better plans to improve customer experience in the internet age

2.2 Kano Model

The Kano Model, developed by Dr. Noriaki Kano in 1984, has become an essential tool in product and service management to understand what customers expect. Using this model, product or service attributes can be categorized based on their impact on customer satisfaction (Oey & Gabriella, 2020). Kano distinguishes six main categories: must-be, one-dimensional, attractive, Indifferent, Reverse, and Questionable. These categories help companies determine product development priorities and which features to focus on to improve customer satisfaction.

1. Must-Be (M)

This type of feature is an important feature that must be present in a service. If this feature is not available, customers will be very disappointed. However, if this feature is available and works well, customers will be very dissatisfied because they consider it something that must be there. An example is the GoSend service that protects customers' personal data, such as keeping addresses and phone numbers safe. Customers will be very disappointed if their data is leaked, but if the data is safe, they just consider it a normal thing.

2. One-Dimensional (O)

Customer satisfaction has a linear correlation with this type of attribute. Customers are more satisfied with better features. Customers will be disappointed if these features are not optimal. Delivery speed is an example of this category in the GoSend service. Customers will be satisfied if the delivery is fast, but if it is slow, they will be disappointed.

3. Attractive (A)

Customers can be much more satisfied with this attribute if they have unexpected features. Customers will not be disappointed if this feature is not there. The existence of a free shipping program or cashback for loyal users is an example of this category in the GoSend service. If this feature is available, customers will be very happy, but if not, they can continue to use the service as usual without feeling disadvantaged.

4. Indifferent (I)

Neither customer satisfaction nor dissatisfaction is affected by this category attribute. The user experience with the service is not affected by the presence or absence of this feature. The application display color is an example of GoSend. Since the application color green or blue does not affect the main delivery function, most customers do not care.

5. Reverse (R)

If there is, customers will be less satisfied with the attributes of this category. This happens because the feature does not match the customer's preferences or makes their experience uncomfortable. The application can ask users to provide a review every time they use the GoSend service. Although this is beneficial for businesses in terms of evaluation, it can be annoying for customers who do not want to be bothered.

6. Questionable (Q)

When customers show inconsistent answers on the Kano Model questionnaire, this category appears. This usually happens because customers misunderstand the questions or make mistakes when filling in the data. For example, in the GoSend service, a customer indicates that he "likes" the live tracking feature to be available, but also indicates that he "does not like" it if the feature is available. These disagreeing answers indicate inconsistency, which makes the analysis irrelevant.

The Kano Model has many benefits, one of which is the ability to find and prioritize features that can improve the user experience (Zhang et al., 2024). For example, companies can use a Kano Model-based survey when developing a new product to find out what customers think are the most important features. This way, companies can focus on developing features that not only meet basic expectations but also meet higher expectations.

In addition, the Kano Model helps companies avoid over-engineering by focusing on features that customers really want (Wimarnaya et al., 2021). In many cases, companies may feel the need to add a lot of new features to attract customers, but research shows that features that customers don't value can actually distract them from the important aspects that truly increase customer satisfaction. Companies can use the Kano Model to ensure that resources are allocated effectively to product development (Mustakim et al., 2017). The Kano Model can be used for both physical product and service development (Wang et al., 2023). For example, features such as cleanliness and friendly service are often considered must-haves in the hospitality industry, while additional services, such as a spa or shuttle, may be considered desirable. This demonstrates the model's flexibility across industry contexts and its ability to help companies better understand and meet customer expectations. Overall, the Kano Model helps product managers and other stakeholders create better product development strategies. By understanding how different aspects affect customer satisfaction, businesses can create products and services that not only meet basic needs but also deliver exceptional customer experience (Mustakim et al., 2019)

2.3 GoSend

Go-Send, as one of the services of PT Gojek Indonesia, has been in the spotlight in research related to application-based goods delivery. This service offers a fast and efficient

solution for goods delivery, which is increasingly relevant amidst the increasing public need for practical logistics services. Research conducted by (Ningsih, 2017) shows that Go-Send and Go-Box not only provide convenience in delivery, but also speed up the logistics process compared to traditional methods. This is important considering the changing market dynamics and increasing consumer demands for speed and efficiency of service.

In a further study, research using the EPIC model method by (Fadilah et al., 2022) assessed the effectiveness of using the Go-Send service. The results showed that the empathy dimension scored the highest, indicating that customers felt the attention and understanding of the service. Meanwhile, the impact dimension scored the lowest, indicating that there is room for improvement in providing a positive impact on users. This study emphasizes the importance of a deep understanding of customer experience to improve service quality and user satisfaction.

The legal aspect is also an important part of the discussion regarding Go-Send. Research by (Ningsih, 2017) highlights the legal position of PT Go-Jek Indonesia in implementing goods transportation services. This study shows that Go-Jek operates as a platform provider that connects consumers with driver partners, not as a traditional transportation company. With the insurance guarantee for the goods sent, the company shows its commitment to its responsibility in maintaining customer trust. Overall, Go-Send not only contributes to easy access to goods delivery services but also creates a significant impact on consumer behavior in the digital era. By integrating technology into its operations, Go-Send is able to meet the needs of modern society for fast and efficient services. Further research in this area can explore new innovations and marketing strategies that can increase the competitiveness of services in an increasingly competitive market

2.4 Customer Satisfaction

How well a product or service delivered meets or exceeds customer expectations is called customer satisfaction. Customer satisfaction, according to (Tjiptono & Chandra, 2016), is based on a comparison between the performance of a product or service that customers expect before using it and its actual performance. If the performance of a product or service meets expectations, customers will be satisfied; conversely, if the performance falls short of expectations, customers will be dissatisfied. Therefore, it is very important for businesses to know what influences customer satisfaction if they want to improve the quality of their products and services.

Businesses should improve customer satisfaction by improving products and services, providing employee training to improve service skills, and paying attention to customer feedback. According to (Yadollahi et al., 2018), good service can directly increase customer satisfaction. In addition, businesses should actively manage customer expectations with clear and open communication. By implementing these strategies, companies can provide customers with a good experience, which in turn will make customers more satisfied and more loyal.

Several previous studies have discussed how attributes can affect customer satisfaction, will increasing the performance of certain attributes lead to increased satisfaction. (Zhao & Dholakia, 2009) stated that the Kano category shifts over time and with user experience. By adopting the Kano methodology which is widely used in other research fields, this study examines the relationship between attribute-level interactivity and customer satisfaction with retail websites. According to research (Bakhtiar et al., 2012) the results of the study conducted using the Servqual method and the Kano Model are known that the criteria that must be prioritized first are the criteria included in the must-be category which have the largest negative servqual value. (Silalahi & Kaunang, 2022) in their research with analysis using the Kano Model showed that there are 10 attributes that affect the level of DANA customer satisfaction and 6 of them will increase customer satisfaction. Research conducted by (oh et al., 2012) the results obtained are that the communication-related attributes of electronic shopping centers do not have a significant effect on customer satisfaction, while other attributes such as brand recognition, marketing activities, interface quality, system security, and information quality directly affect customer satisfaction. (Zinah et al., 2023) stated that the results of calculations using the E-Servqual method showed that the quality of service provided had not met customer expectations, because all attributes had negative gap values. Meanwhile, the results of calculations using the Kano method identified 11 attributes that must be prioritized, due to the linear relationship between attribute performance and customer satisfaction, 11 attributes that need to be maintained, because increasing attribute

performance will result in a very high level of satisfaction and five attributes that need to be improved in order to maximize customer satisfaction.

3. Proposed Method

3.1. Type of Research

This study uses quantitative research techniques. This approach was chosen to analyze and describe the quality of electronic services on the Go-Send application using the Kano Model, while E-Servqual is only for questionnaire indicators. With a quantitative approach, the data obtained can be processed statistically to produce objective findings (Berlianti et al., 2024). Data was taken from distributing questionnaires to respondents with attribute statements made in two forms of functional and dysfunctional statements. The answers obtained from distributing questionnaires were matched with the Kano evaluation table to obtain the adjusted level of importance.

				Dysfu	nctional	
Customer Requirements			4. Must Be	3. Neutral	2. Live With	1. Dislike
	5. Like	Q	A	A	A	О
	4. Must Be	R	I	I	I	M
Functional	3. Neutral	R	I	I	I	M
	2. Live With	R	I	I	I	M
	1. Dislike	R	R	R	R	Q

3.2. Research Design

This section contains an overview of the steps that will be taken in the research.

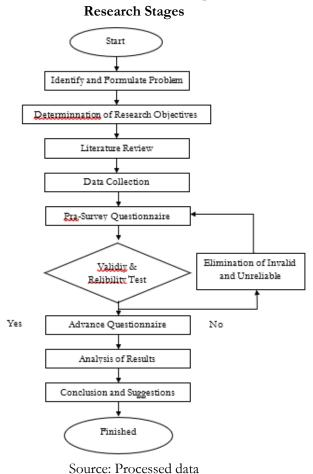


Figure 1. Research Stages.

3.3. Type and Source of Data

This study uses quantitative data, namely data in the form of numbers and can be analyzed statistically to provide an objective picture of the quality of electronic services (e-service) on the GoSend application. This type of data was chosen because it is relevant to measuring customer perceptions and levels of satisfaction based on various predetermined dimensions, such as efficiency, reliability, security, responsiveness, compensation, and service personalization (Yulia & Sari, 2020).

The data in this study were obtained from respondents through a specially designed survey. This survey was conducted using a questionnaire as a data collection tool, which consisted of two main parts: The first part contains demographic questions, such as name, gender, age, and experience using GoSend services. This information is used to understand the characteristics of the respondents. The second part includes questions using the E-Servqual indicators (Efficiency, Fulfillment, System Availability, Privacy, Responsiveness, Compensation, Contact, Web Design, and Customization) and is adjusted to the Kano Model attributes into two types of statements, namely functional and dysfunctional. Respondents were asked to provide an assessment using a 5-point Likert scale to measure their level of satisfaction with various aspects of GoSend services.

Respondents were selected using a purposive sampling technique, where the inclusion criteria were set as follows: respondents are active users of the GoSend application, this survey was conducted online to reach respondents in the Semarang area

4. Results and Discussion

To test whether valid attributes can be used or whether attributes should be removed. Validity and Reliability tests are carried out on the pre-survey. The tool used to test validity is IBM SPSS with the Corrected Item-Total Correlation technique. To determine valid and invalid items at a level of 0.05 is 0.334. Based on the calculation of the validity test criteria, each GoSend service attribute is declared Valid because the R-count value is > 0.334. So there are no attributes that should be removed.

Table 2. Reliability test Functional Attributes

Reliability Statistics					
Cronbach's Alpha	N of Items				
.920	16				

Disfunctional Attributes

Reliability Statistics	
Cronbach's Alpha	N of Items
.941	16

Reliability test using Cronbach's Alpha Technique. The Cronbach's Alpha value obtained from the R table results at a significance level of 5 percent is 0.334. The test results will be reliable if the Cronbach's Alpha value is greater than the R table value. The reliability test on the functional statement was obtained at 0.920. While on the dysfunctional statement it was obtained at 0.941. This value is greater than the R table, so the statement used in this study can be continued.

4.1. Kano Model

Each Kano category can be calculated and categorized into a table using the following Blauth formula:

Table 3. Recapitulation of Respondents' Answer Based on The Kano Model

No.	Atribute	Atribute A M O F		R	0	Ţ	Total	Classifi	cation	Kateg	
110.	Milbute	11	11/1		IX	Q	1	Total	A+M+O	R+I+Q	ori
1	Easy to find GoSend delivery options	43	35	49	6	7	66	206	127	79	I
2	GoSend order processing speed	32	35	55	7	9	68	206	122	84	I
3	GoSend delivery accuracy	25	27	51	3	9	91	206	103	103	I
4	Condition of the goods sent	17	42	72	7	8	60	206	131	75	О
5	Availability of GoSend services when needed	33	30	62	6	8	67	206	125	81	I
6	Protection of personal information	13	45	64	9	8	67	206	122	84	I

7	Security of transaction and payment data	24	44	67	8	5	58	206	135	71	О
8	Speed in responding to complaints and problem	12	36	51	10	8	89	206	99	107	Ι
9	Resolution of problems and complaints	15	37	47	8	8	91	206	99	107	I
10	Compensation provided by GoSend	11	34	46	9	8	98	206	91	115	Ι
11	Ease of finding GoSend customer service contact information	21	23	54	8	5	95	206	98	108	I
12	Ease of contacting GoSend customer service	13	41	53	10	7	82	206	107	99	I
13	GoSend order display	29	15	60	8	8	86	206	104	102	I
14	Ease of GoSend feature layout	27	23	61	8	14	73	206	111	95	Ι
15	Variety of GoSend service options	25	22	58	5	10	86	206	105	101	Ι
16	Relevant recommendations based on order story	20	22	50	7	12	95	206	92	114	I

Of the 16 attributes of nature in the table above that are included in the one-dimensional (O) category, there are only 2 attributes and the rest are included in the Indifferent (I) category. In this category, if a feature performs well, customer satisfaction will not increase, and vice versa, customer satisfaction will not decrease.

To determine the level of satisfaction and dissatisfaction with the following formula: EOS = A + O/A + M + O + I while for EOD = M + O/(A + M + O + I)(-1)

Table 4. Extend of Satisfaction and Extend of Dissaatisfaction Value

No.	Atributes	Category	A+O	М+О	A+M+O+I	EOS	EOD	Category
1	Easy to find GoSend delivery options	I	92	84	193	0,48	0,44	EOS
2	GoSend order processing speed	I	87	90	190	0,46	0,48	EOD
3	GoSend delivery accuracy	I	76	78	194	0,39	0,40	EOD
4	Condition of the goods sent	О	89	114	191	0,47	0,60	EOD
5	Availability of GoSend services when needed	I	95	92	192	0,49	0,48	EOS
6	Protection of personal information	I	77	109	189	0,41	0,58	EOD
7	Security of transaction and payment data	О	91	111	193	0,47	0,58	EOD
8	Speed in responding to complaints and problem	I	63	87	188	0,34	0,47	EOD
9	Resolution of problems and complaints	I	62	84	190	0,33	0,44	EOD
10	Compensation provided by GoSend	I	57	80	189	0,30	0,43	EOD
11	Ease of finding GoSend customer service contact information	I	75	77	193	0,39	0,40	EOD
12	Ease of contacting GoSend customer service	I	66	94	189	0,35	0,50	EOD
13	GoSend order display	I	89	75	190	0,47	0,40	EOS
14	Ease of GoSend feature layout	I	88	84	184	0,48	0,46	EOS
15	Variety of GoSend service options	I	83	80	191	0,43	0,42	EOS
16	Relevant recommendations based on order story	I	70	72	187	0,37	0,39	EOD

The table above shows the results of calculating the Extent of Satisfaction and Extent of Dissatisfaction values. The results show that visitor satisfaction will increase if there are 5 service attributes with the EOS category, and visitor satisfaction will decrease if there are 11 service attributes with the EOD category

Customer satisfaction analysis, to complement the Kano Model analysis, helps companies identify the product or service features that have the most impact on customer satisfaction.

Table 5. Average Customer Satisfaction Rating

No.	Atributes	Average
1	Easy to find GoSend delivery options	4,39
2	GoSend order processing speed	4,18
3	GoSend delivery accuracy	4,17
4	Condition of the goods sent	4,30
5	Availability of GoSend services when needed	4,32
6	Protection of personal information	4,20
7	Security of transaction and payment data	4,31
8	Speed in responding to complaints and problem	3,94
9	Resolution of problems and complaints	4,00
10	Compensation provided by GoSend	3,91
11	Ease of finding GoSend customer service contact information	4,18
12	Ease of contacting GoSend customer service	4,06

13	GoSend order display	4,32
14	Ease of GoSend feature layout	4,25
15	Variety of GoSend service options	4,33
16	Relevant recommendations based on order story	4,22

The level of user satisfaction with the service is in the high category, with an overall average of 4.19 from the available scale, based on the analysis of the average results of the satisfaction questionnaire. The satisfaction value ranges between 3.91 and 4.39, with a standard deviation of 0.14, indicating that the values are spread fairly evenly without significant differences between attributes. Most attributes receive scores above 4.0, indicating that users are generally satisfied with the services they receive. For further evaluation of improving service quality, there are several attributes that have values close to the lower limit (3.91). By maintaining attributes that have received high scores and improving attributes whose values are still below average, user satisfaction can be improved in the future.

Table 6. High Priority

No.	EOS		Atribute	Ranking Satisfaction Level
140.	Highest	Score		
1	Availability of GoSend service when needed	0,49	I	2
2	Easy to find GoSend delivery option	0,48	I	1
3	Ease of GoSend feature layout	0,48	I	6
4	Condition the goods sent	0,47	О	5
5	Security of transaction and payment data	0,47	О	4
6	GoSend order display	0,47	I	3
	EOD		Atribute	Ranking Satisfaction Level
	Highest	Score		
1	Condition the goods sent	0,60	О	3
2	Protection of personal information	0,58	I	4
3	Security of transaction and payment data	0,58	О	2
4	Ease of contacting GoSend customer service	0,50	I	6
5	GoSend order processing speed	0,48	I	5
6	Availability of GoSend service when needed	0,48	I	1

In the table there are six highest values of Extent of Satisfaction and Extent of Dissatisfaction. in EOS the highest value is obtained in the Availability attribute with a score of 0.49 and in the satisfaction level ranking at number 2, GoSend needs to maintain this service quality even though it is already good. in EOD the highest value is the condition of the goods sent with a score of 0.60 and is in position 3 in the satisfaction level ranking, which means that this attribute is recommended to make improvements by enhancing packaging quality and using fragile labels so that the condition of the goods sent is not damaged when they arrive at their destination. based on the high priority table there are 3 attributes included in EOS and EOD, these attributes are availability of Gosend service when needed, condition of the goods sent, and security of transaction and payment data which means that these 3 attributes are very important, if these attributes are lost or absent it will greatly affect customer satisfaction

6. Discussion

The results of the research on GoSend customer satisfaction regarding the use of the kano model to improve service quality resulted in the following discussion:

1. Pre-Survey Results

An initial overview of user perceptions of GoSend services was obtained through a presurvey. According to the pre-survey results, GoSend offers a number of benefits in terms of interface design and delivery service accuracy. Nonetheless, there are a number of areas that require improvement, particularly with regard to service customization, compensation schemes, and responsiveness. According to the respondents, the ordering process and the simplicity of locating service options were both quite acceptable; However, the promptness of delivery and the resolution of complaints remain challenges.

2. Validity and Reliability Test

Validity Test: R-table were used for validity testing, which was conducted at a significance level of 0.05. With an R-count value higher than R-table (> 0.334), the test results demonstrated that all 16 GoSend service attributes were deemed valid in both functional and dysfunctional statements. Therefore, this study does not require the removal of any attributes.

Reliability Test: The Cronbach's Alpha method was used to assess reliability. Cronbach's Alpha values for functional and dysfunctional statements, respectively, were 0.920 and 0.941, according to the test results. All of the questionnaire's statements are deemed reliable and suitable for use in future studies because both of these values are higher than 0.334.

3. Service Categorization Based on the Kano Model

The Kano Model, which divides service characteristics into multiple categories—must-be (M), one-dimensional (O), attractive (A), indifferent (I), reverse (R), and doubtful (Q)—is the basis for the categorization of service traits. The analysis's findings indicate that only two of the sixteen attributes—the state of the sent goods and the security of the transaction and payment information—fit into the one-dimensional (O) category. This indicates that client contentment and the quality of these traits are directly correlated; the higher the level of customer satisfaction, the better the service. The majority of service qualities are classified as indifferent (I), meaning that their presence or enhancement has little effect on customer satisfaction.

4. Customer satisfaction analysis was conducted using the Extent of Satisfaction (EOS) and Extent of Dissatisfaction (EOD) methods.

The calculation results indicate that several service attributes have a high EOS, meaning these attributes significantly contribute to increasing customer satisfaction. These attributes include the availability of GoSend services when needed, ease of finding the GoSend delivery option, user-friendly GoSend feature layout, condition of delivered goods, security of transaction and payment data, and GoSend order display. On the other hand, some attributes with high EOD values contribute to customer dissatisfaction, requiring priority improvements in GoSend services. These attributes include the condition of delivered goods, protection of customer personal data, security of transaction and payment data, ease of contacting GoSend customer service, GoSend order processing speed, and availability of GoSend services when needed. These findings suggest that key improvements should focus on the condition of delivered goods as well as the security and protection of customer data.

5. Priority Repair and Maintenance of Attributes

Based on the analysis, several attributes with high average values indicate good service performance and should be maintained. One of them is the ease of finding the GoSend delivery option, which has a high EOS, meaning it significantly increases customer satisfaction. This attribute demonstrates optimal service performance, and the company needs to maintain its quality. Additionally, the variety of GoSend service options has high EOS and low EOD, making it one of the main attractions for customers. Therefore, the company should continue to optimize this attribute to maintain customer loyalty. Furthermore, the availability of GoSend services when needed and the GoSend order display also have high average values and contribute to customer satisfaction. However, some attributes with low average values require immediate improvement, as they significantly impact customer satisfaction. The speed in responding to complaints and issues has a high EOD, meaning failure to meet this attribute results in significant dissatisfaction. Therefore, improvements in this aspect are crucial to enhancing the customer experience. Additionally, compensation provided by GoSend shows low EOS and high EOD, indicating that this attribute is critical but its current performance is suboptimal. Hence, immediate improvements are necessary to reduce customer dissatisfaction and enhance trust in GoSend services.

7. Conclusions

This study reveals that GoSend service quality has several advantages in terms of interface design and delivery accuracy. However, there are still several weaknesses, especially in terms of responsiveness to customer complaints, compensation systems, and service capabilities in providing more relevant recommendations. The results of the analysis using the Kano model show that most service attributes are in the indifferent category, meaning that many features have not provided significant added value to customers. Therefore, companies need to focus on service attributes that have a major impact on customer satisfaction.

8. Suggestion

Based on the results of the analysis and research findings, several recommendations should be considered for GoSend to enhance customer satisfaction and strengthen its position in the digital delivery service industry. First, **improving responsiveness** is crucial, as GoSend

needs to speed up and enhance its effectiveness in addressing customer complaints through both customer service and automated app features. Second, the compensation system optimization should be prioritized by clarifying and improving the process for compensating customers who experience delivery issues, which will help boost trust and satisfaction. Third, service personalization through the use of order history data can provide more relevant service recommendations, enhancing the user experience and fostering customer loyalty. Additionally, improving security and privacy remains a must, as customers consider data protection essential, and GoSend must ensure the security of users' personal information to maintain their trust. Finally, the strategy to evaluate customer satisfaction based on the **Kano** Model should be implemented: if average customer satisfaction is high and the EOS (Effort of Satisfaction) is also high, the focus should be on maintaining the attribute to preserve customer satisfaction; if satisfaction is low and EOD (Effort of Dissatisfaction) is high, this attribute should be prioritized for improvement. By implementing these strategies, GoSend can effectively improve customer satisfaction and secure a competitive edge in the delivery service market.

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