ANALYSIS OF CUSTOMER SATISFACTION WITH DRUG PURCHASE SERVICES AT HALODOC

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ABSTRACT

The rapid advancement of technology and information drives digital transformation, including in the healthcare sector, particularly in the purchase of medication. The Halodoc application is one such strategy for medication sales, providing an online platform that facilitates consumers to purchase medication and access comprehensive health consultation services conveniently and swiftly. One crucial aspect of service provision is ensuring high-quality service to maintain customer satisfaction. The aim of this study is to determine the level of customer satisfaction regarding the quality of medication purchasing services offered through the Halodoc application. This research is an observational study using a descriptive cross-sectional approach. Data collection was conducted through questionnaires distributed to 422 Halodoc users capable of assessing service quality. Customer satisfaction was measured using E-service quality analysis (e-CSI) across five dimensions: reliability, responsiveness, assurance, empathy, and tangibility. The results indicate that customer satisfaction levels in the dimensions of reliability are at 97.40%, responsiveness at 91.10%, assurance at 92.06%, empathy at 82.90%, and tangibility at 91.28%, resulting in an overall Customer Satisfaction Index (CSI) score of 90.98%. Therefore, it can be concluded that respondents utilizing the Halodoc application express significant satisfaction with the services provided.

Keywords: *Customer Satisfaction, Customer Satisfaction Index, Halodoc, Service Quality.*

INTRODUCTION

The swift progress of technology has brought about substantial transformations in the economy and market landscape, fostering heightened competition, particularly in the realm of online shopping. Currently, the number of internet users in Indonesia stands at approximately 202.35 million. With online shopping, consumers exhibit diverse behaviors, and their satisfaction and feedback vary accordingly. The number of online shopping enthusiasts and users reached 32 million people in 2021, skyrocketing by 88 percent compared to 2020, which recorded only 17 million individuals, as cited by CNN Indonesia. [12]

Drugstores, pharmacies, and diverse online platforms vending pharmaceutical

products are harnessing the technological evolution in online shopping. Selling medications through online sites facilitates consumers' search for desired drugs, offering easier access, quicker acquisition, and often lower prices. Another rationale for promoting medical products online is to provide accessibility to a wide range of pharmaceutical products and ensure high levels of privacy for patients who prefer to keep their conditions confidential from others.[3]

The increasing Internet usage in Indonesia is evident in the rising number of consumers engaging in online shopping. The presence of the Halodoc application for purchasing pharmaceutical products and consulting with doctors represents an Indonesian-originated application and website operating in the healthcare sector. It provides services for purchasing medications, medical equipment, and doctor consultations, and also facilitates doctor reservations at hospitals partnering with Halodoc. Moreover, Halodoc offers innovations that bring satisfaction to its users, especially during the COVID-19 pandemic.[4]

E-service quality is one of the primary aspects of providing top-notch service to customers and is considered one of the best options for maintaining customer relationships. This dimension is measured electronically, not through services provided directly by the company, but through services offered via the Internet.[5] Service quality is evaluated based on five dimensions, including tangibles, reliability, responsiveness, assurance, and empathy. The initial dimension, Tangibles, denotes a company's capability to visually exhibit its presence to external entities through tangible elements, such as physical infrastructure, equipment, and overall appearance.

The second dimension, Reliability, signifies a company's ability to consistently deliver services accurately and reliably as promised. The third dimension, Responsiveness, pertains to promptly and appropriately assisting customers, along with clear communication of information to address their needs.

The fourth dimension, Assurance, includes the expertise, courtesy, and competency of company employees in fostering confidence among customers regarding the company. The fifth dimension, Empathy, entails offering genuine and personalized attention to customers by understanding their needs and desires.[6] Using these five dimensions, organizations can conduct a comprehensive assessment of the quality of their services, identify areas that need improvement, and enhance the overall customer satisfaction.[7,8]

Research on the level of customer satisfaction in purchasing medication through the Halodoc application is a highly relevant step considering the rapid growth in the usage of the application. With a significant number of users and a relatively high rating, this research can provide a deeper understanding of how well Halodoc meets customer expectations regarding medication purchases.

METHOD

The descriptive study utilized an analytical survey employing a *cross-sectional* design. The research population consisted of all individuals in DKI Jakarta who purchased medicine through the Halodoc application in October-November 2021. The method employed in this study utilizes *simple random sampling,* and applying the *Lameshow* formula[9], 384

respondents were determined. To anticipate potential dropouts, the sample was increased by 10%, resulting in a total sample size of 422 respondents based on inclusion criteria.

Inclusion criteria were defined as individuals aged 16 years or older, recent users of the Halodoc application, residents of DKI Jakarta, willing to complete the questionnaire, and capable of effective communication. Data collection was facilitated using validated questionnaire tools. Questionnaire validity was assessed by comparing the calculated r-value with the tabled r-value of 0.361; questions with higher calculated r-values were deemed valid. Reliability was tested using Cronbach Alpha, with values above 0.6 considered reliable and below 0.6 considered unreliable.[10]

The questionnaire was formatted as a Google Form and disseminated to Halodoc users. Participants provided informed consent before involvement in the study, affirming their agreement to participate and acknowledging that the data provided would not be misused by the researcher, with the consent form outlining the research objectives and guaranteeing data confidentiality.[11] The measurement of service quality is conducted by distributing questionnaires. In the dimension of Reliability, the questions focus on the company's ability to provide services as promised accurately and reliably, including product information, ease of accessing the application, and ease of purchasing medicine transactions. The Responsiveness dimension is measured through questions about the speed in handling complaints, quick response to requests, and ease of online payment transactions. Questions in the Assurance dimension include product safety and authenticity. Meanwhile, the Empathy dimension is measured by asking about the ease of communication, both via phone and face-to-face meetings. The Tangible dimension is measured through a questionnaire that includes aspects of service quality, product design, and product packaging. This research has passed ethical review by the Research Ethics Committee of the Faculty of Medicine and Health, Universitas Muhammadiyah Jakarta, No: 024/PE/KE/FKK-UMJ/I/2022.

The data analysis utilized the *Customer Satisfaction Index* (CSI) to determine the importance value of product or service attributes (MIS) and the satisfaction value of product or service attributes (MSS). The MIS score is calculated by taking the average of the ratings of variables by respondents. The MSS is calculated based on the total satisfaction scores from all respondents, then divided by the number of respondents. The CSI is calculated by dividing the total weighted score by the maximum possible score on the measurement scale, then multiplying by 100%.[12][13] Based on the obtained results, satisfaction can be categorized as follows[14]:

Table 1. The criteria for the Customer Satisfaction Index (CSI)

No.	Category	Percentage
1	Dissatisfied	0% - 34,99%
2	Somewhat Dissatisfied	35% - 50,99%
3	Neutral	51% - 65,99%
4	Satisfied	66% - 80,99%

| 5 | Very Satisfied | 81% - 100% |

RESULT AND DISCUSSION

The characteristics of respondents are observed based on Age, Gender, Occupation, Education, and the length of time since the last purchase of medicine. It is expected that the data in Table 2 will provide a clear overview of the research participants.

Table 2. Characteristics of Respondents based on Age, Gender, Occupation, Education, and Duration of Medicine Purchases

Variable	Sample (n)	Persentase (%)
Gender		
Male	135	32
Female	287	68
Age		
17-25	336	80
26-35	49	12
36-45	31	7
46-55	6	1
56-65	-	-
Occupation		
Student	309	73
Civil Servant	20	5
Private Employee	87	21
Entrepreneur	6	1
Education		
Junior High School	2	0.5
Senior High School	119	28.2
Diploma/Bachelor's Degree	301	71.3
Last Time of Drug Purchase		
< 1 Month	382	90.5
< 2 Months	35	8.3
< 3 Months	5	1.2

In Table 2, females constitute the highest percentage (68%), indicating that women possibly have a more consumptive lifestyle when it comes to using a product or service. Other statements also support the notion that women tend to dominate in shopping due to their high desire to fulfill their needs and convenience by following existing trends.[15]

The majority of respondents fall within the age group of 17-25 years old (80%), which includes teenagers who are more responsive and adept at grasping issues related to contemporary technology. At this age, individuals also have a better understanding of Internet technology developments. A study funded by UNICEF and conducted by the Ministry of Communication and Informatics found that 98% of children and adolescents are more knowledgeable about the Internet, with 79.5% of them being Internet users.[16]

Based on respondents' occupations, the majority of purchases made on Halodoc

are by students/college students (73%). Within the student/college student group, most are looking for affordable consultations within their budget and prefer a practical and easy way to do so. Many of them are also often asked by their parents to purchase the necessary medications, as teenagers are more inclined to stay updated with existing technology. Additionally, one's occupation generally reflects a specific purchasing behavior towards a desired service or product. Occupation is one of the factors that influence online shopping behavior.[17]

The highest educational attainment among respondents is Diploma/Bachelor's degree (71.3%), which contributes to evaluating service quality. A person's level of education impacts their values, thought processes, perspectives, and even their perception of a problem. Respondents with higher education tend to be more responsive to information. Education also influences respondents' choices of products and brands.[6,17]

The overview based on the length of time since the last purchase of medicine indicates that the highest number of respondents made their last purchase one month ago, totaling 382 individuals. This variation is due to differences in the timing of when someone needs the medication. The difference in time for the last purchase of medicine can also be attributed to the surge in Halodoc users during the Covid-19 pandemic, with many people regularly purchasing vitamin stocks and health equipment for home use during this period, as Halodoc's prices remained stable without significant increases. Halodoc's service ranks first among healthcare apps, with 45.3% of urban respondents from a sample of 600 individuals involved in.[14]

Customer satisfaction serves as a benchmark for service quality. In general, consumer needs necessitate access to healthcare services, timely service, effective and efficient communication, and accuracy. Low customer satisfaction will impact their overall satisfaction with the service quality. Customer satisfaction is an individual's level of contentment when purchasing a product or service for their needs and comparing the received product/service with their expectations.[18] The levels of expectation and satisfaction of customers regarding the quality of service provided by Halodoc can be observed in Table 3.

Table 3. Customer Expectations and Satisfaction Levels Regarding Service Quality

No	Item	MSS	MIS	Satisfaction Level (%)	Total Dimension Satisfaction
	Reliability Dimension				
A1	The product information available in the Halodoc application is clear.	3.98	3.99	99.53	
A2	The products delivered match the ones ordered by the customer.	3.96	3.96	99.11	
A3	The transaction process for purchasing medication is easy.	3.77	3.77	94.31	97.40 % (Very Satisfied)
A4	The application can be easily downloaded on IOS and Android.	3.98	3.39	99.41	
A5	Halodoc can be accessed via web	3.77	3.40	94.31	

No	Item	MSS	MIS	Satisfaction Level (%)	Total Dimension Satisfaction
	Reliability Dimension				
	browsers, such as Chrome.				
	Responsiveness Dimension				
B1	Responsive in addressing customer complaints.	3.70	3.99	92.42	
B2	The company provides quick responses to customer requests.	3.70	3.98	92.59	91.10 % (Very Satisfied)
B3	Quick response in handling issues related to online transactions provided by the company.	3.89	3.98	97.27	
B4	Halodoc's customer service is easily accessible.	3.67	3.77	91.77	
B5	The delivery time of products does not exceed the specified estimate.	3.17	3.20	79.15	
	Assurance Dimension				
C1	The product information available in the Halodoc application can be trusted.	3.19	3.26	79.86	
C2	Security in transactions and customer data is guaranteed.	3.20	3.77	79.92	92.06 % (Very Satisfied)
C3	Health products sold are genuine and registered with BPOM and the KEMENKES RI	3.97	3.98	99.29	
C4	Products arrive in good condition.	3.98	3.98	99.53	
C5	The expiration dates on the products received by customers are safe.	3.97	3.79	99.29	
	Empathy Dimension				
D1	Purchasing products available on the Halodoc application is enjoyable.	3.19	3.41	79.68	
D2	Pharmacists contact customers if there are specific medication usage instructions.	3.18	3.41	79.38	82.90 % (Very Satisfied)
D3	Pharmacies contact customers if there are medication shortages.	3.18	3.41	79.44	
D4	Doctors conduct consultations in a friendly manner.	3.20	3.99	80.09	
D5	Doctors prescribe medications according to customer complaints.	3.78	3.98	94.43	
	Tangible Dimension				
E1	The product design available in the Halodoc application is easy to understand and attractive.	3.19	3.98	79.80 %	
E2	It is easy to find the desired products on the Halodoc application.	3.76	3.97	93.90 %	
E3	The packaging of Halodoc (packaging) is attractive and practical.	3.77	3.97	94.31 %	91.28% (Very Satisfied)
E4	In addition to purchasing health	3.77	3.41	94.19 %	

		Reliability Dimension			
No	Item	MSS	MIS	Satisfaction Level (%)	Total Dimension Satisfaction
	products, Halodoc provides services such as Doctor Consultation, Covid Vaccination Registration, Covid Testing, etc.				
E5	Halodoc provides "More Savings" services, making the prices more affordable for medication purchases.	3.78	3.98	94.61 %	

In Table 3, the majority of respondents express very high satisfaction with the reliability dimension, especially regarding the availability of product information on the Halodoc application, as well as with the products and transaction processes involved in medicine purchases. Additionally, respondents' ease in downloading the there has application on both iOS and Android platforms, as well as its usability on web browsers, further enhances their satisfaction with the service provided. Users of the Halodoc application have high expectations for the reliability dimension (97.40%) of the service provided. Reliability refers to a company's capability to consistently deliver services accurately and reliably as pledged. Performance should align with customer expectations, encompassing timely service, uniformity for all customers without errors, empathetic demeanor, and high precision. Reliability positively impacts customer satisfaction.[19–21]

Furthermore, respondents express satisfaction with the responsiveness dimension (91.10%), indicating that customers' perceptions of service quality have met their desired expectations. However, in the fifth statement, regarding the delivery time of products not exceeding the specified estimate, the satisfaction rating is the lowest. This is because, during the pandemic, there has been a drastic surge in demand for Halodoc services, causing occasional issues with the Halodoc system and its delivery partner, Go-Jek, in finding drivers to fulfill orders. Additionally, been a very high demand for medication during COVID-19, resulting in delays in handling other customers promptly. Responsiveness signifies the readiness to aid and offer swift (responsive) and precise service to customers. Service responsiveness correlates with customer satisfaction; the greater the responsiveness data, the higher the level of customer satisfaction.[22]

Respondents' satisfaction with the assurance dimension (92.06%) is very high, indicating that their perceptions align with their expectations. However, there is still room for improvement, particularly concerning trustworthy product information and the security and confidentiality of transactions and customer data, to ensure that Halodoc users feel more secure and have fewer concerns when conducting transactions on the Halodoc application. Assurance can encompass knowledge, capabilities, courtesy, and trust. Security factors that provide customers with a sense of safety and assurance are essential for customer satisfaction.[22]

In the empathy dimension, respondents express satisfaction (82.90%), indicating that their perceptions of

Halodoc's service align with their expectations. However, there is still significant room for improvement in several aspects within the empathy dimension. Service delivery functions optimally when all stakeholders involved in the service have empathy or concern for providing service. Empathy is one of the most effective ways to understand the feelings of others.[23]

Respondents demonstrate very high satisfaction in the physical evidence dimension (Tangible), suggesting that their perceptions of Halodoc's service meet their expectations. However, enhancements are necessary concerning product design. Physical evidence positively impacts customer satisfaction. The more superior the physical evidence provided, the greater the customer satisfaction with the service.[24]

The subsequent calculation of the respondent satisfaction level using the Customer Satisfaction Index (CSI) method for the quality of service provided by Halodoc yields the following results:

Table 4. The average value of the Customer Satisfaction Index

Item	Mean CSI Score	Category
Satisfaction Level of Medication Purchase Service in the Halodoc Application	90,98%	Very Satisfied

Thus, the satisfaction level of respondents regarding the quality of service provided by Halodoc is 90.98%, indicating that the majority of customers using the Halodoc application are highly satisfied with the service provided. However, these findings contrast with Farah's research results, indicating that the quality of service provided does not meet customer expectations.[25] Meanwhile, Dimas, in his study, shares the same view as the aligns researcher, stating that 53% of customers are satisfied with the HaloDoc application services and affirming that service quality correlates with customer satisfaction.[26] This with Jimmi's study, which states that the satisfaction level of HaloDoc application users is already satisfied with HaloDoc's services.[27]

Customer satisfaction represents an individual's evaluation of a product's performance in comparison to their expectations. If the performance significantly lags behind expectations, consumers will be disappointed. If the performance aligns with expectations, consumers will feel satisfied, and if it surpasses expectations, consumers will feel delighted.[6] A good quality of service on the HaloDoc application will increase customer satisfaction by 11.6 times compared to a poor quality of service.[25,26,28]

CONCLUSION

Based on the research findings, it can be concluded that the assessment of consumer satisfaction, in this case, respondents, regarding the quality of medication purchase service using the Halodoc application with the Customer Satisfaction Index (CSI) method, has a high interpretation across all dimensions. This indicates that the level of customer/respondent satisfaction is already very high with the medication purchase service on the Halodoc application.

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