

CUSTOMER SATISFACTION ANALYSIS REGARDING USING HALODOC APPLICATION CUSTOMER SATISFACTION INDEX (CSI) METHOD

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Abstract: Halodoc is an ICT that supports access to health service facilities, with various facilities such as consultations with doctors, purchasing medicines, making appointments with hospitals, as well as several other health support facilities. This research is based on calculations using the Customer Satisfaction Index (CSI) method to determine the overall level of customer satisfaction with an approach that considers the level of importance of product or service attributes as measured by an importance scale (Importance), a satisfaction/performance level scale (Performance) and the question indicators include usability, information quality, interaction quality, then the satisfaction level criteria are obtained with a CSI value of 61.29%, meaning that the patient gives the criteria as being quite satisfied with Halodoc services.

Keywords: CSI, halodoc, patient

Abstrak: Halodoc merupakan TIK yang mendukung akses fasilitas pelayanan kesehatan, dengan berbagai fasilitas yang dimiliki seperti konsultasi dengan dokter, pembelian obat, buat janji dengan rumah sakit, serta beberapa fasilitas pendukung kesehatan lainnya. Penelitian ini berdasarkan perhitungan menggunakan metode Customer Satisfaction Index (CSI) untuk menentukan tingkat kepuasan pelanggan secara menyeluruh dengan pendekatan yang mempertimbangkan tingkat kepentingan dari atribut-atribut produk atau jasa yang diukur dengan skala tingkat kepentingan (Importance), skala tingkat kepuasan/kinerja (Performance) dan indikator pertanyaan meliputi usability, information quality, interaction quality maka diperoleh kriteria tingkat kepuasan dengan nilai CSI 61.29% artinya bahwa pasien memberikan kriteria cukup puas terhadap layanan Halodoc.

Kata kunci: CSI, halodoc, pasien

INTRODUCTION

Technological innovation in the health sector is halodoc [1]. Halodoc health services aim to provide more efficient, accessible and innovative health service solutions, and this technology helps overcome geographical limitations in time and have wider access to health services for the community [2].

The Ministry of Health of the Republic of Indonesia launched four health applications to accommodate and make it easier for the public to obtain accurate, credible and trustworthy health services [3] [4].

The increasing use of smartphones in Indonesia because of increasing internet use has given rise to various innovations that can facilitate various activities. According to research conducted by the Indonesian Internet Service Providers Association (APJII) between 2019 and 2020, there was a significant increase in the number of users of around 8.9% or reaching 73.7% or more than 196.7 million users in Indonesia [5].

With the help of the internet, smartphones have the benefit of searching for information. M-Health and halodoc are digital services in the health sector that have been downloaded by more than one million users with high ratings [6]. Continuous technological developments from year to year have resulted in several new innovations being discovered [7]. The amount of e-commerce in Indonesia is also increasing during this pandemic, one of which is health-focused applications such as halodoc, Alodokter, Go-Dok, and others which offer a few features that can make things easier for their users. to carry out consultations, buy medicine, even make appointments at their homes [8].

The Halodoc application is increasingly known among the public [9]. Digital health services have experienced continuous and significant improvement, in 2020 there was an increase in health service consultations via video by >6500 or reflecting an increase in health service consultations of 2000% [10].

Based on the background above, the problem identification that will be discussed in this research is: Does Service Quality Influence Customer Value of the Halodoc E-Health Application? Does Customer Value Influence Customer Loyalty of the Halodoc E-Health Application? Does Service Quality Influence Customer Loyalty of the Halo-doc E-Health Application? Does Service Quality Influence Customer Loyalty through E-Health Application customer value Hellodoc?

This research analyzes customer satisfaction with the Halodoc application service using the Customer Satisfaction Index (CSI) method so that it can identify patient needs which are influenced by technological readiness related to their interest in using Halodoc, as well as identifying patient who know the benefits of Halodoc so that they do not hesitate to use Halodoc and identify patients. not confused about using the Halodoc application, so there is a high tendency for patients to use the Halodoc application [11]. The Halodoc application is used to simplify health services or provide easy access to health for the Indonesian people. Halodoc is a secure platform that connects patients with licensed physicians, insurers, laboratories and pharmacies into one mobile application [12] [13].

People's limitations in accessing health services during the pandemic have shifted people's interest in considering long-distance access to health using telemedi-

cine soon. The government is also developing telemedicine to increase access to quality health services amidst the Covid-19 pandemic. The Ministry of Health is developing the use of technological developments, to make it easier for people to seek treatment without having to meet a doctor face to face. Telemedicine services are health services provided by doctors using information and communication technology to diagnose, treat, prevent, and evaluate patients' health conditions. This service allows doctors to provide services without face-to-face contact. Until 2018, the total funding received was around US\$13 million or around Rp. 170 billion; Some of its investors include Gojek, Blibli, Clermont, and NSI Ventures. Halodoc announced a collaboration with Gojek in May 2018. Through this collaboration, Gojek will connect the Gomed feature in the Gojek application with the Halodoc application. So Gojek users will be directly directed to the Halodoc application to order medical needs such as medicine or vitamins.

According to the Halodoc.com website, Halodoc provides the most complete health solutions in Indonesia, such as chatting with doctors, buying medicine, making hospital appointments, lab checks, the latest information about health and others that can be accessed anywhere, anytime. Halodoc services are available in more than 100 cities throughout Indonesia for drug delivery, to more than 20,000 doctors with various specialties, and to 1,600 hospitals throughout Indonesia[14].

There are 4 types of business models available at halodoc including: First Consult in the consult business model, there are several services available to patients, including: Users can consult a general practitioner or specialist doctor. Users

will be charged a consultation service fee with prices starting from Rp. 15,000, Users will be given a few minutes to consult via chat with several selected doctors. After sufficient consultation, the doctor will prepare a prescription for the user's medication needs. Next, the medication will be ordered through the Halodoc partnership pharmacy and will be sent directly to the home. Book. In the book business model, there are several services available to patients, including: Patients simply make an appointment with a doctor online at the hospital of their choice and arrive at the specified time.

To use it, patients only need to go to the 'Hospital' section on the official Halodoc website. Then, select the hospital you want to visit and determine the type of registration. Next, the patient just must choose the type of treatment based on the polyclinic, select a doctor, then determine the date and time of the consultation. After determining the schedule, the patient only needs to fill in the requested data. If approved, a confirmation SMS will be sent to the patient's cellphone number via SMS. Next, patients only need to come to the hospital 30 minutes before the scheduled consultation, then show the verification code to confirm attendance. Orders. In the order business model, there are several services available to patients, including: The Halodoc application is equipped with a Health Shop which allows us to buy online medicines, supplements, vitamins, and medicines with a doctor's prescription. Online orders are a Pharmacy Delivery service where orders are placed directly by the buyer or on the recommendation of the doctor who handles the patient/buyer based on previous online consultations carried out by the patient. Offline Orders is a service where the Pharmacy (user) and Patient Rela-

tions Officer make orders for patients/buyers based on a doctor's prescription [11]. Orders made can be sent via the Go-Jek delivery service (Delivery Order) or patients can pick up the medicine directly at the Pharmacy (Pickup Order)[15]. Insurance. In the insurance business model, there are several services available to patients, including: FWD Insurance Indonesia (FWD Insurance) is improving the FWD Max application service through collaboration with Halodoc. Making it easier for the public to access health services, by providing features to ask a doctor, buy medicine, laboratory tests, and make appointments with doctors at hospitals via the application. Easy access to health services at halodoc can also be connected to your health insurance[11].

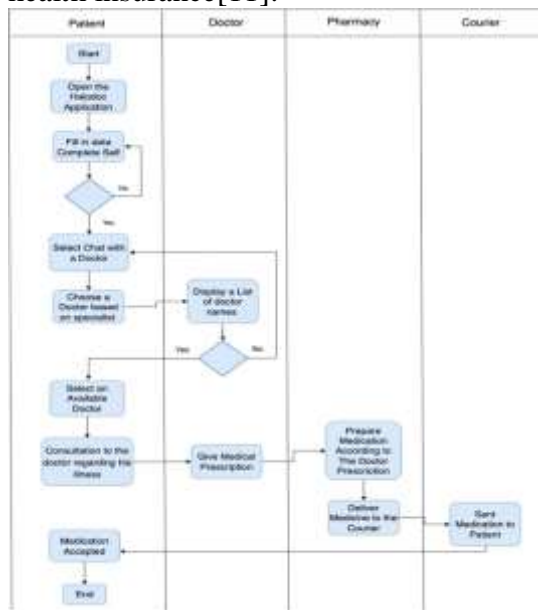


Image 1 Business Process Flowchart Halodoc

According to Kasmir, service is the actions or deeds of a person or organization to provide satisfaction to customers, fellow employees, and leaders.

A service or service is an appearance performance, intangible and can be felt, disappears more quickly, and can be owned

or imitated, and customers are more able to participate actively in the process of using or utilizing the service. Services are a form of service consisting of appearance, activities and benefits or satisfaction which are basically intangible and do not result in a transfer of ownership but can be felt[16].

METODE

The following is a research data collection technique for customer satisfaction analysis of Halodoc application services using the Customer Satisfaction Index (CSI) method [17]. There were 50 questionnaires distributed to patients using Halodoc which received 45 valid answers.

Data collection in this research used observation and literature study methods. Observations are carried out to study problems in the field which is related to the object under study. Literature Study This method is carried out by looking for materials that support the definition of the problem through books, journals, and the internet. Questionnaire, a method used to collect user opinions and experiences regarding the digital health services provided [18].

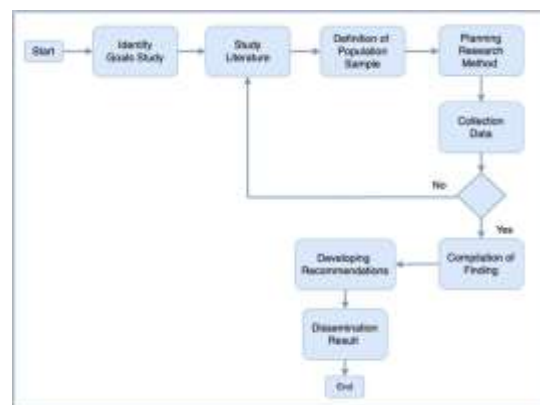


Image 2 Research Diagram

The following is a research design for customer satisfaction analysis of the halodoc application service using the Customer Satisfaction Index (CSI) method to determine the attributes that need to be prioritized in improving quality and service to increase halodoc customer satisfaction [17]. By using CSI it provides clear data on the level of customer satisfaction so that regular evaluations can be carried out over time to correct deficiencies and improve service as assessed by consumers [19]. Objective Identification The research aims to determine the overall level of customer satisfaction using the approach and consideration of the product attributes being measured, so that the level of customer satisfaction is obtained to be evaluated periodically by making improvements that are lacking to improve health services. Study of literature. To understand the conceptual framework, previous research findings and current trends in related research, so that significant results will be obtained. Definition of population and sample. Determine the halodoc population and sample to reflect the diversity of users for more representative results[20].

Tabel 1. Customer Satisfaction Indeks (CSI)

Atribut	Interest (I)	Satisfaction (P)	Score (S)
.....	Scala 1-5	Scala 1-5	(S) = (I) x (P)
.....			
Score Total	Total (I)=(Y)		Total (S)=(T)

Customer Satisfaction Index (CSI) calculated by the formula:

$$CSI = \frac{T}{5Y} \times 100\% \dots \dots \dots$$

Information:

T = Total CSI Value

1 = Maximum value on scale measurement

Y = Total Value of the expected column

Table 2 Satisfaction Level Criteria

No	Nilai CSI (%)	Keterangan (CSI)
1	81% - 100%	Very satisfied
2	66% - 80.99%	Satisfied
3	51% - 65.99%	Quite satisfied
4	35% - 50.99%	Less Puas
5	0% - 34.99%	Not Puas

The maximum CSI value is 100%. A CSI value of 50% or lower indicates poor service performance. A CSI value of 80% or higher indicates that users are satisfied with service performance.

RESULT AND DISCUSSION

Continuous technological developments from year to year have resulted in several new innovations being discovered. To carry out consultations, buy medicine, even make appointments at their homes. The following are the results of demographic data on the distribution of respondents. Respondent demographics base on age based on the data that has been collected, it can be concluded, showing that most respondents who use the halodoc application are aged 19 to 25, numbering 14 or 70%, then those aged 26 to 35 are 6 people out of 20 respondents or 30%.

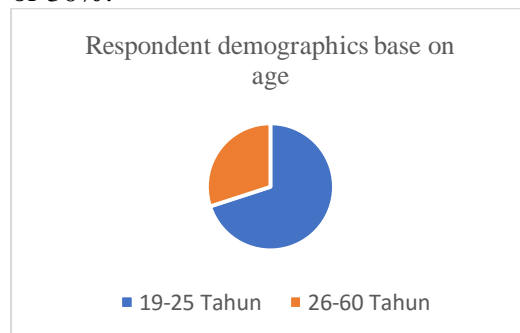


Image 2 Respondent demographics base on age

Respondent demographics base on gender. Based on the data that has been collected, it can be concluded showing that the majority of Halodoc application users are women with a total of 11 people or 55% and male respondents totaling 9 people or 45% of the total sample of 20 data.

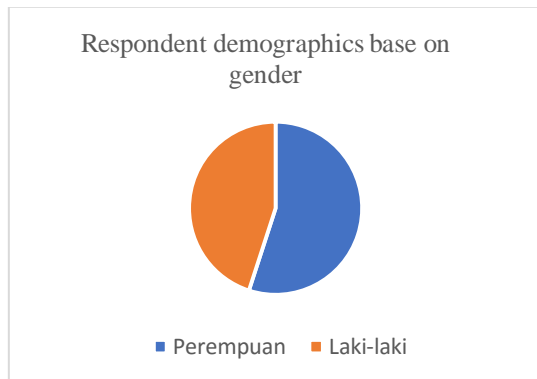


Image 2 Respondent demographics base on gender

Respondent demographics base on occupation Based on the data that has been collected, it can be concluded, the diagram shows that most respondents are students with a total of 16 people or 80% of the 20 data, then employees etc. are 4 people or 20%.

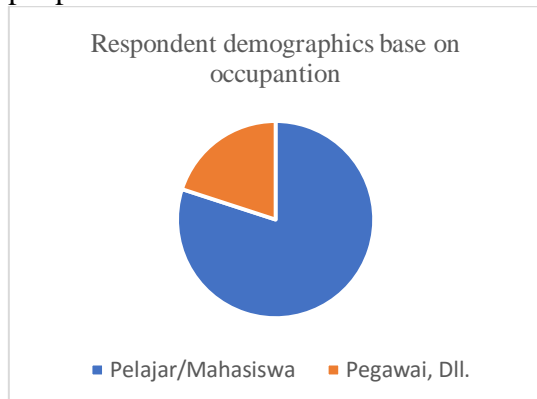


Image 2 Respondent demographics base on occupation

The Customer Satisfaction Index (CSI) is an index to determine the overall level of customer satisfaction with an approach that considers the level of importance of

product and service attributes. In implementing the CSI method, a questionnaire will be carried out which will be filled in by consumers and will produce data on the level of satisfaction that has been achieved [13]. to determine the attributes that need to be prioritized in improving quality and service to increase halodoc customer satisfaction [14]

The following is the required questionnaire: Determining the Importance Level Scale as a guide for customers to assess the level of importance of service quality, using a Likert scale with a value of 1-4. Seen in table 3.

Tabel 3. Likert Scale of Level of Importance

Bobot	Keterangan
1	Very unimportant (VU)
2	Not Important (NI)
3	Important (I)
4	Very Important (VI)

Determining the level of satisfaction/ performance scale (Performance). As a guide for customers to assess the level of service quality performance, using a Likert scale with 1-4. As in table 4

Table 4. Performance Level Likert Scale

Bobot	Keterangan
1	Very dissatisfied (VD)
2	Not satisfied (NS)
3	Satisfied (P)
4	Very Satisfied (VS)

Determining question indicators. In measuring service quality factors, the model (WEBQUAL) is used which consists of three indicators Usability, Information Quality, Interaction Quality as in table 5

Tabel 5. Question Indicator Table

No	Indikator	Kode
-	Usability	-
1	Availability of consultation services with the right doctor on the Halodoc application	A1
2	Halodoc application services make it easy for users to immediately get solutions to health problems	A2
Information Quality		
3	The Halodoc application is my main choice in increasing my knowledge about health	A3
4	The Halodoc application provides accurate health information according to user needs.	A4
Interaction Quality		
5	Medical explanations in the Halodoc application provide accurate information according to the needs of application users	A5
6	The availability of hospitals that collaborate with Halodoc makes it easier for users to schedule hospital visits as desired	A6

Based on the data that has been collected, it can be concluded, showing that most respondents who use the halodoc application are aged 19 to 25, numbering 14 or 70%, then those aged 26 to 35 are 6 people out of 20 respondents or 30%.

Based on the data that has been collected, it can be concluded, showing that the majority of Halodoc application users are

women with a total of 11 people or 55% and male respondents totaling 9 people or 45% of the total sample of 20 data.

Based on the data that has been collected, it can be concluded, the diagram shows that most respondents are students with a total of 16 people or 80% of the 20 data, then employees etc. are 4 people or 20%. The following is a manual calculation using only three respondents as follows:

Table 6. Table of Interests

Kode	R1	R2	R3	Total	Average
A1	4	2	1	7	2.33
A2	3	4	3	10	3.33
A3	2	4	2	8	2.67
A4	5	4	2	11	3.67
A5	4	5	5	14	4.67
A6	3	1	2	6	2

Table 7. Satisfaction Table

Kode	R1	R2	R3	Total	Average
A1	3	3	2	8	2.67
A2	1	3	2	6	2
A3	1	5	1	7	2.33
A4	5	3	3	11	3.67
A5	3	5	4	12	4
A6	4	2	3	9	3

Table 8. Table Customer Satisfaction Index (CSI)

Kode	Kepentingan (I)	Kepuasan (P)	Skor (S) (I x P)
A1	2.33	2.67	6.22
A2	3.33	2	6.67
A3	2.67	2.33	6.22
A4	3.67	3.67	13.44
A5	4.67	4	18.67
A6	2	3	6
Total (I) = 18.67		Total (S) = 57.22	
Total (I) = (Y)		Total (S) = (T)	

$$CSI = \frac{T}{5Y} \times 100\%$$

$$= \frac{57.22}{5(18.67)} \times 100\%$$

$$= \frac{57.22}{93.35} \times 100\%$$

$$= 61.29\%$$

Tabel 9. Satisfaction Level Criteria

No	Nilai CSI (%)	CSI
1	81% - 100%	Very Satisfied
2	66% - 80.99%	Satisfied
3	51% - 65.99%	Quite Satisfied
4	35% - 50.99%	Less satisfied
5	0% - 34.99%	Not Satisfied

CONCLUSION

Based on the Customer Satisfaction Index (CSI) calculation, halodoc has 61.29% satisfaction criteria levels from the importance table, satisfaction table and CSI table, meaning that there is convenience in the halodoc application from fast health access so that patients can consult with doctors equipped with the convenience of consulting without needing come physical health facilities with online medicine ordering.

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