Analysis of the use of Halodoc Application for Medical Information

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ABSTRACT

The rapid spread of mobile technology in developing countries is also contributing to the increased use of mobile-focused health apps. The potential for healthcare delivery is greater with increasing access to mobile devices, even in remote areas. The LinkDokter application, which is the fourth company founded by Jonathan, connects users with doctors without having to travel and only asks users about their illnesses. This research is a cross-sectional quantitative study. To collect 29 individuals, the Lemeshow formula was applied to an unknown or infinite population size, with 5% considered significant and 0.5 used. The use of quantitative methods in research on individual and population samples is based on a positive philosophical approach. Random sampling is the process of collecting data through research instruments. Data analysis was carried out using quantitative methods to test the research hypothesis. The results of the research were 8 respondents (27.5%), 10 respondents (34.4%) had moderate application use, and 9 respondents (38.1%)) has high application usage. From these results it can be interpreted that the majority of respondents have a moderate level of application use. The effect of media use can be operationalized as an evaluation of the media's ability to provide satisfaction, for example the extent to which someone can clarify a problem. This application has an important role in increasing public health literacy. Halodoc, as a popular telemedicine application in Indonesia, offers various features that help users obtain accurate and reliable health information.

Keywords: Halodoc, informative medical decisions, trust

1. INTRODUCTION

The COVID-19 pandemic has led the Indonesian government to issue several health policies, including social restrictions and changes to health services. The policies aim to reduce the risk of the virus spreading in health facilities and prioritize COVID health services. As part of the response, the government has issued the Decree of the Minister of Health of the Republic of Indonesia Number HK.01.07/MENKES /4829/2021 which contains guidelines and reference documents for implementing telemedicine during the pandemic.

The utilization of ICT to provide health services through remote locations is known as telemedicine. Patients can communicate with healthcare providers directly regarding their medical needs without the need to visit a healthcare facility. Patients can usually access medical services more easily and often at a lower cost through telemedicine. Despite the pandemic, telemedicine is still being used in Indonesia, which shows that people are starting to feel the benefits of the services provided. Between the COVID-19 pandemic and its successor, telemedicine app users increased from 4 million to 15 million. The most commonly used telemedicine service in Indonesia is Halodoc which accounts for 46.5% of population usage. Founded in 2016, Halodoc is an Indonesian technology company that specializes in remote consultation services for healthcare, giving consumers the ability to consult and seek medical advice from general practitioners or specialists at their convenience. Halodoc's goal is to provide healthcare services to all Indonesian citizens. (Solihin, 2023)

Businesses face challenges and opportunities to prevent the COVID-19 pandemic and restore community-based health services. The majority of respondents (72%) stated that they have never used telemedicine because they prefer the convenience of getting to know the doctor in person. Nevertheless, the company must determine the right marketing strategy so that Halogendoc remains competitive in its telemedicine offering business status. The use of a product or service by a person can be influenced by several factors, one of which is marketing. It is important to determine the most suitable strategic approach.

The use of mobile device technology for healthcare is a component of the e-health concept known as mobile health. The advent of mobile devices, such as smartphones, has enabled the accessibility of health services to areas where there are no health professionals. Despite limitations, M-Health applications are experiencing rapid growth, mainly due to the lack of diversity in healthcare systems in developing countries. High disease rates, extensive disease outbreaks, dense urban areas, and insufficient funding to sustain healthcare infrastructure.(Putra, 2021)

The rapid spread of mobile technology in developing countries has also contributed to the increased use of mobile-focused health applications. The potential for healthcare delivery has increased with increased access to mobile devices, even in remote areas. Overall, advances in smartphone technology have enabled M-Health Health to expand its functions beyond just diagnostic testing, including telehealth magnetic diagnosis and reassurance, GPS tracking, and health monitoring and support information system management. Indonesia's Ministry of Health conducted an online survey in Jakarta in January 2016 and found that 52% of the public tended to seek medical services from doctors when they needed more.

Even so, 65% of respondents stated that they could not always contact a doctor, while 74% wanted to contact a doctor at any time. The problem was identified by Jonathan Sudhart, who created HaloDoc, an online health consultation app that allows patients to easily "visit" a doctor at any time. The LinkDokter app, which is the fourth company founded by Jonathan, connects users with doctors without having to travel and simply asks users about their ailments. At least one patient can be informed of the initial steps and resolution of his or her complaint, despite having to go to a health facility such as a puskesmas or health center for a direct examination.

In addition to offering comprehensive health consultations, HaloDoc also offers the option of purchasing medicine online through member ApotikAntar. Remember the laboratory features that are used to help with blood tests or health checks without the need to visit a laboratory. As of January 2018, according to Google Play, the number of HaloDoc app users has reached 500,000 to 1,000,000 users with 4,444 ratings of 4.2 out of 6,257 users acting as participants. The public can benefit greatly from this application in solving their health problems. Especially to ensure or immediately find out the symptoms they experience. (Indriyarti, 2020).

However, to increase the use of the Halodoc app, it is necessary to further analyze how it is used and how it affects informed and purposeful medical decisions. In this analysis, we will study how the Halodoc app is used in informative and purposeful medical decision-making, and how it can be improved to increase usability and improve the quality of healthcare provided.

2. KAJIAN PUSTAKA

a) Halodoc Application

In 2016, MHealth Tech founded Halodoc, a health app and website created by Jonathan Sudhart. Medical services are now more easily and effectively integrated with this website, which is designed to facilitate users' access to medical services through their devices. Halodoc Doctor Consultation. The most popular service on this site is Halodoc Doctor Consultation. Through the Halodoc app and website, patients can ask questions and interact with their preferred healthcare provider through voice or video calls. The following features are available on the Halodoc app and website:

1. Chat with Doctor

This is very useful for users or patients who have health concerns, as well as those who need specific health data. With the chat function on the halodoc platform, users can easily and without obligation request a consultation with a specialized medical professional through the utility. The app is easy to use, users only need to contact a doctor who is currently active and is marked in blue next to his/her profile picture. There are more than 16,000 doctors from various parts of Indonesia who have collaborated with the Halodoc application and are ready to answer any questions.

2. Buy medicine

Through Halodoc, you can order a wide range of medicines, from pharmaceutical drugs, vitamins, to facial care products. Within 60 minutes, the order will be sent directly to the customer's home, sealed (depending on location).

3. Make an Appointment with a Doctor

Under certain conditions, patients cannot know their health problems through consultation alone and need a medical examination to diagnose their illness properly. The main purpose is to facilitate doctor appointments for users and patients. This means that users do not need to register and manage directly, so they can see a doctor immediately. Long queues can sometimes be a draining experience. Simply register through the Halodoc website or app and queue for an appointment, then simply walk to the office or hospital.

4. Laboratory Checks at Home

Home testing services for patients is another valuable feature. Through its partnership with Halodoc, Prodia offers this service to improve patient access to health services. User accounts will be updated with lab test results, so users don't have to worry about getting them.

5. Updated Health Information

There is a special channel in the Halodoc application that presents the latest health information with high accuracy.(Yustikawati, 2022)

b) Information System

The interdependence of components to achieve a system is what defines the system. The setting is a depiction that includes events and entities that are a real thing. A network of interconnected processes is present in the system to carry out tasks related to a specific goal. The interpretation of information can be based on processing it in a form that is more useful to users and provides a picture of events that can inform decision-making. The data entered is then processed to produce information, but the data entered and converted into information is first placed in a storage area called a database. (Jogiyanto, 2017)

Information systems are components related to the functions of collecting, processing, storing and distributing information to support decision making and monitoring in a business or organization. Information is generated by information systems. Information is generated by the information system. Information systems are more effective in achieving their goals through the use of three pillars. The result of these three pillars can produce more useful information. System outputs must meet the three pillars of useful information to be considered relevant (Purnama, 2016)

3. METHODOLOGY

This research was a cross-sectional quantitative study conducted using Google Form. To collect 29 individuals, Lemeshow's formula was applied to an unknown or unlimited population size, with 5% considered significant and 0.5 used. The use of quantitative methods in research on individual and population samples is based on a positive philosophy approach. Random sampling is the process of collecting data through research instruments. Data analysis is carried out using quantitative methods to test the research hypothesis (Sugiyono, 2017).

Sampling is done considering the very large population and the exact population size is unknown, therefore, a representative population is formed by random sampling with inclusion. Individuals had to be between 17 and 30 years old, who used Halodoc application services, had used Halodoc services at least once, and were willing to participate in the study. Participants were excluded due to their incomplete or missing responses. Google Forms provided an online questionnaire that was used to collect data.

The data collection methods used aimed to save time, reduce data entry errors, minimize physical interaction with participants, and be environmentally friendly. The survey was publicized through social media platforms and conducted by individuals, including researchers and other users.

Descriptive Analysis is a tool used to analyze data by using descriptions and images of data collected together without making applicable conclusions (Sugiyono, 2017). In conducting an analysis of the tools used to be able to increase acceptance in the use of a system or application. The following is the Mean formula according to (Arikunto, 2012):

$$\overline{X} = \frac{\Sigma X}{N}$$

Description:
X = mean
ΣX = total questionnaire result
N = total respondents

4. DISCUSSION

Based on the data analysis results of 29 respondents, there was found to be 15 respondents from univeristy students (51,1%), 13 respondents from students (1,2%), and 1 from a worker (48,7%).

Tabel 1. Respondents Occupation Data

Occupation	Total	%
University Students	15	51,1
Students	13	48,7
Work	1	1,2
Total	29	100,0

The table above shows that workers and students show different attitudes and behaviours, as indicated by Kotler and Keller (2019) The perspective of the gap between the work performed is supported by a literature review which shows the increasingly frequent use of mobile devices for health information searches by workers who are caused to be more at risk when at work (Setiawan, 2021) It is true that students prefer applications related to nutrition and personal health services (Kalumata, 2021).

Use of the Halodoc Application Based on the results of descriptive analysis on the variable use of the Halodoc application which consists of 13 questions with the calculation of class interval categorization, the respondents' answers are as follows:

Tabel 2. Variable X Descriptive Analysis

Category	Total	%
Low	8	27,5
Medium	10	34,4
High	9	38,1
Total	29	100,0

It is known that there is no low application usage. However, as many as 8 respondents (27.5%), as many as 10 respondents (34.4%) have moderate application usage, and as many as 9 respondents (38.1%) have high application usage. From these results it can be interpreted that most of the respondents have moderate use of the application. The effect of media use can be operationalized as an evaluation of the media's ability to provide satisfaction, for example the extent to which a person can clarify a problem.

The search results show that the halodoc application plays an important role in meeting their health information needs. Understanding Media (1964), a book by Marshall McLuhan, highlights the role of technology in human existence. Human technology is essential to the existence of nothingness. The use of media in this study is related to the HaloDoc app. In the context of media consumption, Rosengren (Izzati, 2022) explains that media use includes time spent on different types of media as well as individual media consumers, and also considers the relationship between personal media users and media content used or consumed by communication in general.

All individuals need information at all times, especially those related to their profession or daily routine. Any data, facts or information about a person is information in this context. Health information is the focus of researchers' research in this particular scenario. Health communication is a collaborative process that involves an interactive atmosphere, exchange of ideas, and consensus in identifying measurable units of consensus. Health is a method used by senders and receivers to gather information about health balance and restore mutual understanding. Researchers who have used the halodoc app indicate that it is easy and useful for obtaining health information tailored to individual needs, while other doctors provide comprehensive and accurate data. More details about how the use of the halodoc application affects the satisfaction of health information needs, how people can benefit from technological advances, especially in the health sector, where people can find out information about health complaints by consulting directly with doctors, and additional features in this application really help people get the health information they need without the need to come directly to the hospital, especially during the Covid-19 pandemic where the space and movement of residents is very limited. The halodoc application is still not accessible to many people who need health information, because awareness of its use is still low and the technology itself is not widely known.

Such applications have an important role in improving the quality of medical decisions taken by users. Here are some relevant findings:
1. Digital Marketing and Brand Image

Research conducted by Setiawan (2022) shows that digital marketing and brand image have a positive and significant influence on purchasing decisions for telemedicine products at Halodoc. This means that an effective marketing strategy and a strong brand image can increase users' awareness and trust in the application, so they are more likely to use telemedicine services at Halodoc.

2. Service Quality

   The quality of service provided by Halodoc also has a positive and significant influence on purchasing decisions for telemedicine products. This means that users prioritize the quality of services provided, such as the ease of accessing doctors and health information, as well as the ability to schedule visits, when making the decision to use telemedicine services.

3. Use of Halodoc Application

   Other research shows that the use of the Halodoc application has a positive influence on fulfilling health information needs. This means that the Halodoc application is effective in providing relevant and accurate health information, so that users can make better medical decisions.

4. User Perception

   User perception of the Halodoc app is also very important. Research shows that users of the Halodoc app have a positive perception of the app, including in improving health literacy. This means that the Halodoc app can increase users' awareness and trust in health information, making them more likely to use telemedicine services.

   In synthesis, the analysis of the use of Halodoc towards informative and purposeful medical decision-making shows that the app has an important role in improving the quality of medical decisions taken by users. Effective marketing strategies, good service quality, effective app usage, and positive user perceptions all contribute to increasing the use of telemedicine services in Halodoc.

5. CONCLUSION

The conclusion of this study is that as many as 8 respondents (27.5%) have low use of the Halodoc application, as many as 10 respondents (34.4%) have moderate application use, and as many as 9 respondents (38.1%) have high application use. From these results it can be interpreted that most of the respondents have moderate use of the application. The effect of media use can be operationalized as an evaluation of the media's ability to provide satisfaction, for example the extent to which a person can clarify a problem. This application has an important role in improving public health literacy. Halodoc, as a popular telemedicine application in Indonesia, has offered various features that assist users in obtaining accurate and reliable health information. By using this app, users can gain access to doctors, pharmacies and other health facilities online, making it easier for them to obtain the necessary health information.

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