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Abstract. This research uses the IS Success Model DeLone and McLean approach to finding the relationship that occurs between the quality of the Alodokter application to check the risk of contracting coronavirus. This research also tries to figure out how much benefit users have gained in conducting early detection of COVID-19. This Model uses six interrelated variables, including system quality, information quality, service quality, usage, user satisfaction, and clean benefits. With 200 respondents, data analysis uses the partial least square structural equation model (PLS-SEM) method with SmartPLS 3.0 software. This research gives the results that the better the quality of information and services of the Alodokter application, the more benefits gained by the user. However, the system quality factor from the Alodokter application does not affect how much benefits a user gains while they use the app.

1. Introduction

Currently, the Corona Virus (COVID-19) occurring in various parts of the world[1]. On January 30th 2020, the World Health Organization (WHO) has already determined that COVID-19 is the health problem that should be alarm by the entire world of people[1]. Based on data from The WHO, the COVID-19 has spread in 77 countries.The Virus of COVID-19 found in China for the first time[1].The WHO data reveal that the distribution of COVID-19 in various countries continue to been an increase in number although the spread of COVID-19 has already decreased in China[1]. Based on the Ministry of Health data, the COVID-19 in Indonesia as of June 9th 2020 has 33076 confirmed cases, 38394 people in monitoring, 14108 monitoring patients, 1923 the people dies, and 11414 patients recovered. From this data, the development of the COVID-19 in Indonesia have still experienced a significant increase[2].

One of the digital health companies in Indonesia, namely Alodokter, helped prevent the spread of the COVID-19 by developing an application to check the risk of contracing COVID-19. This is an interactive application web-based that serves to advise on early detection COVID-19 symptoms. This application will ask some questions which ought to be answered by users as, a fever above 38 degrees Celsius; coughs, asphyxiate until feel difficult to speak; The history

of traveling to the country with a coronavirus outbreak outside Indonesia in the last 14 days; Contact history with a person who is positively infected or suspected of being infected with coronavirus; Aged over 60 years and a history of severe illness[3].

This study aims to measure how much benefit the user can receive from alodokter application for early detection of COVID-19 by looking at the quality of the application. Some research related to alodokter discusses the online healthcare[4], e-health communication[5], and online health services[6]. Based on this, a little research discussed the alodokter application for early detection of COVID-19. The approach that used as a conceptual model in the study using the IS Success Model from DeLone and McLean[7]. The model uses six interrelated variables: system quality, information quality, service quality, usage, user satisfaction, and net benefit. Based on the IS Success Model DeLone and McLean conceptual model, as in Figure 1.

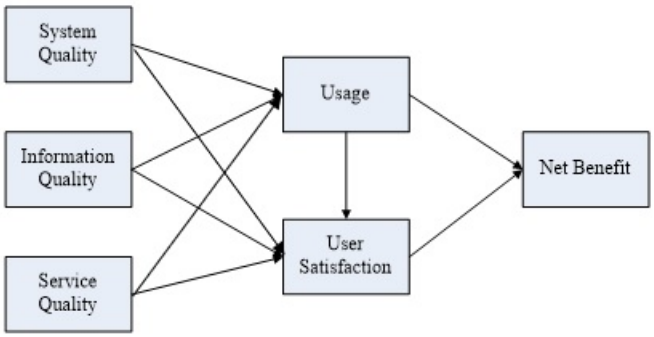

Figure 1. Conceptual Model Research

Based on the relationship between variables on the model, researchers formulated as many as 12 research hypotheses as follows.
H1: The system quality significantly positively affects the use of the application.
H2: The system quality significantly positively affects the user satisfaction of the application.
H3: The quality of information significantly positively affects the use of the application.
H4: The quality of information significantly positively affects the user satisfaction of the application.
H5: The service quality significantly positively affects the use of the application.
H6: The service quality significantly positively affects the user satisfaction of the application.
H7: The use of the application significantly positively affects the user satisfaction of the application.
H8: The use of the application significantly positively affects the net benefits that users obtain.
H9: The user satisfaction significantly positively affects the net benefits that users obtain.
H10: The system quality significantly positively affects the net benefits that users obtain.
H11: The quality of information significantly positively affects the net benefits that users obtain.
H12: The service quality significantly positively affects the net benefits that users obtain.
The next section will try to explain the methods used in the study, to explain the stages and results of data analysis, and finally to explain the results of the study and their contribution.

2. Method

2.1. Design and Procedure

This research uses a quantitative approach to measure relationships between variables that are measurable and can be analyzed statistically[8]. In collecting data, researchers use questionnaires divided into respondent's demographic data and research data based on variables examined.

Questionnaires were created using Google forms and deployed online via WhatsApp Messenger. To be to examine the results of the respondent's response, researchers use Likert scale of Vagias[9]. The scale use consisting of five level, covering strongly agreed (5) to the very disagreement (1).

In conducting a research hypothesized test, researchers use SmartPLS 3.0 as software. SmartPLS 3.0 accommodates data analysis using partial least square-structural equation modeling (PLS-SEM). PLS-SEM is used to make predictions and estimate the relationship between independent variables of binding variables. PLS-SEM also maximizes the relationship that arises between the variables[10].

2.2. Respondents Demographic

The population of this research is Indonesian people who have used the Alodokter application at least once. The sample of respondents is taken by simple random sampling method where each respondent is chosen randomly with the same opportunity. Because of the limitations of researchers in collecting respondents, the sample used as many as 200 respondents with demographic data as in Table 1.

Table 1. Respondents Demographic

Category	Variable	%	Category	Variable	%
Gender	Male	52%	Province	West Java	40%
	Female	48%		Central Java	26%
Age	$\leq$ 19 years	2%		East Java	2%
	20 - 29 years	59%		Yogyakarta	6%
	30 - 39 years	24%		Jakarta	20%
	40 - 49 years	12%		Bangka Belitung	1%
	50 - 59 years	4%		Banten	5%
	$\geq$ 60 years	0%		East Nusa Tenggara	1%
				West Kalimantan	1%
				South Sumatera	1%

Based on the demographic data, from 200 respondents consisting of people residing in various provinces in Indonesia, most of the respondents came from West Java as much as 40%, with average male gender and age between 20 – 29 years old.

3. Result and Discussion

3.1. Measurement Model Evaluation

The first step taken before conducting data analysis is to make a path diagram based on the conceptual model that can be seen as in Figure 2. In evaluating the research model, conducted several tests to determine the validity and reliability of the models and research instruments in this study.

First, the researcher measures the results of the outer loading factor of each indicator in latent constructs with more provisions of a value of more than 0.7 to be declared valid, as shown in Table 2[11][12]. Furthermore, researchers measured the value of the Average Variance Extracted (AVE) with the provisions of the value greater than 0.5 to be valid, as shown in Table 3[11][12]. As for testing, the reliability of the model and the instrument research is measured from the value of Cronbach's alpha and Composite Reliability, with the provisions of value more than 0.7 to be expressed as reliable, as shown in Table 3[11][12].

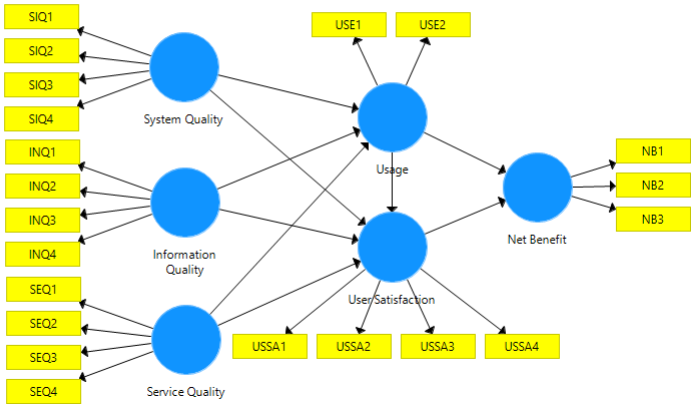

Figure 2. Path Diagram Model

Table 2. Outer Loading Factor

	INQ	NB	SEQ	SIQ	USE	USSA	Results
INQ1	0.850						Valid
INQ2	0.829						Valid
INQ3	0.841						Valid
INQ4	0.732						Valid
NB1		0.890					Valid
NB2		0.906					Valid
NB3		0.929					Valid
SEQ1			0.829				Valid
SEQ2			0.774				Valid
SEQ3			0.829				Valid
SEQ4			0.882				Valid
SIQ1				0.891			Valid
SIQ2				0.904			Valid
SIQ3				0.904			Valid
SIQ4				0.833			Valid
USE1					0.870		Valid
USE2					0.901		Valid
USSA1						0.895	Valid
USSA2						0.921	Valid
USSA3						0.898	Valid
USSA4						0.908	Valid

Table 3. AVE, Cronbach's Alpha, Composite Reliability

	AVE	Cronbach's Alpha	Composite Reliability	Results
SIQ	0.780	0.906	0.934	Valid & Reliable
INQ	0.663	0.829	0.887	Valid & Reliable
SEQ	0.687	0.850	0.898	Valid & Reliable
USE	0.784	0.726	0.879	Valid & Reliable
USSA	0.820	0.927	0.948	Valid & Reliable
NB	0.826	0.894	0.934	Valid & Reliable

3.2. Hypothesis Evaluation

In evaluating the research hypothesis, researchers conduct hypothesized testing by doing a bootstrapping process using SmartPLS 3.0. The bootstrapping process uses 5000

subsamples[11][12]. Table 4 showing the result of the bootstrapping process.

Table 4. T-Statistics Test Results

Hypothesis	Path	Original Sample	T Statistics	Results
H1	SIQ → USE	0.112	1.216	Rejected
H2	SIQ → USSA	-0.003	0.046	Rejected
H3	INQ → USE	0.440	5.503	Accepted
H4	INQ → USSA	0.603	8.513	Accepted
H5	SEQ → USE	0.236	0.948	Accepted
H6	SEQ → USSA	0.289	3.940	Accepted
H7	USE → USSA	0.334	4.381	Accepted
H8	USE → NB	0.512	9.057	Accepted
H9	USSA → NB	0.420	5.842	Accepted
H10	SIQ → NB	0.040	0.662	Rejected
H11	INQ → NB	0.417	7.043	Accepted
H12	SEQ → NB	0.209	3.500	Accepted

In this study, a hypothesis is accepted if it has a T-statistics value of more than 1.97. Based on the data in Table 4 the results obtained are nine hypotheses of the study declared accepted and three hypotheses declared not accepted. The hypothesis that is not accepted is the effect of system quality on application use (H1), the effect of system quality on user satisfaction (H2), and the indirect effect between system quality on net benefits (H10). The influence between latent constructs is the most powerful is the effect of the use of applications on net benefits (H8).

3.3. Discussion

The previous section shows that the quality of information has a significant positive effect on the use and satisfaction of application users. These results are in line with research from Farizi et al., Dalle et al., and Dari & Prahartiwi[13][14][15]. Service quality also has a significant positive effect on the use and satisfaction of application users. The results are consistent with research from Farizi et al. and Dalle et al.[13][14]. Application use factors have a significant positive effect on the benefits obtained by users. These results are in line with the results of Farizi et al.'s research and Dari & Prahartiwi[13][15]. The benefits obtained by users are also significantly affected positively by the satisfaction of application users, according to the results of research from Farizi et al., Yel et al., And Aditya et al.[13][16][17]. Furthermore, the quality of the system do not affect the use or satisfaction of application users. This result is consistent with research from Farizi et al.[13], and also with research from Roky & Meriouh [18]. Also, the application use factor has a significant influence on the satisfaction factor of Alodokter application users. The results are in line with research from Dwivedi et al. and with Tam & Oliviera's research[19][20].

These results explain that the better quality of information and services from the Alodokter application will increase the benefits obtained by users based on the influence of the use and satisfaction of the application users. Also, the system's quality is not one of the factors that influence the increase in user benefits because the system's quality does not affect the use and satisfaction of Alodokter application users.

The quality of the system does not affect the benefits that users have gained likely because they have a good knowledge of the various system types of applications that can be accessed online. They are accustomed to seeing interfaces from web-based applications. Given the function of the Alodokter application to check the early symptoms of COVID-19, the respondents are more likely to want a complete and accurate quality of information and ease in accessing the application. Excellent quality of information and services make them quicker to respond

in preventing the spread of COVID-19. Therefore, the quality of information and services significantly affects how much benefit the user gained.

4. Conclusion

This research was conducted in order to find out how much benefit is obtained by users of the Alodokter application to check the risk of contracting coronavirus. The model approach used is the IS Success model of DeLone and McLean with six variables including system quality, information quality, service quality, usage, user satisfaction, and net benefits [6]. Supported by data that has been collected and analyzed, the results of the study indicate that the quality of information and services provided by the application are the main factors in influencing the benefits obtained by users compared to the quality factor of the system. The influence of these factors is supported by the significant influence of usage factors and application user satisfaction. So overall by using the model, the quality factor of the Alodokter application to check the risk of contracting coronavirus significantly affects the benefits obtained by the user. the findings of this study can certainly have implications for research related to the application of DeLone and McLean IS success models in the future.

This research certainly still has many shortcomings to be studied more deeply in subsequent studies, considering the limited researchers in collecting the number of respondents dominated by the Java island, where the population coverage can be broader, so the results obtained more accurately. In addition, the use of one application becomes its own limitations, so the results obtained, can only be applied to applications that become research object. The results of this study are also limited to research models, because it only uses the IS Success Model DeLone and McLean.

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