Measuring and Analyzing the Factors Affecting User's Satisfaction with the PeduliLindungi Application

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Abstract. Many countries in the world use Digital Contact Tracing as an effort to prevent the spread of the Covid-19 virus. On one hand, this application is quite effective in controlling the virus, but on the other hand, issues arise related to the use of personal information collected through the application. This paper attempts to reveal the role of privacy concern, trust belief and risk belief on the satisfaction of users of the PeduliLindungi application, a DCT application developed by the Indonesian government. Apart from these three variables, this paper tries to reveal the role of several variables proposed by DeLone and McLean and Davis related to the adoption of information technology. The method used in this research is quantitative by collecting respondents using a questionnaire sent through online social media platforms and instant messaging platforms. The data collected is processed using Smart PLS 3 software. After analyzing the data from 242 respondents, this study confirmed the role of the variables privacy concern, risk belief, system quality, perceived usefulness, service quality, perceived ease of use on application user satisfaction and it was also found that information quality and trust did not have a significant relationship with user satisfaction. In addition, this study reveals the role of the Risk belief in mediating privacy concerns towards user satisfaction.

1. Introduction

Due to the COVID-19 pandemic across the globe, widescale restrictions followed by isolation policies are applied to many countries as countermeasures to combat the spread of the virus. Furthermore, many governments utilize information technology to further prevent the spread of the virus in the form of digital contact tracing (DCT) applications [1], [2]. To name a few examples, Australia's government released a contact tracing app "COVIDSafe", "Aarogya Setu" from India's government, and Indonesia's "PeduliLindungi".

The applications are generally expected to be able to provide warnings when someone entering areas affected by COVID-19, the location of health facilities and tracking if there are people who have the potential to be infected with the COVID-19 virus. The applications offer guidance and help to the user on what steps they should take depending on their vaccination status [3]. With support of technological capabilities that we have now, the applications generally utilize the use of the internet and GPS to keep the information updated.

The PeduliLindungi application was developed by Indonesian Government. The application was released to the public on March 27, 2020 and is available on mobile for both Android and IOS Operating Systems. In order to use the app, citizens must install the application then fill in their personal information according to their national ID card. The application provides numerous features that can help users about Covid related activities. One feature that has become mandatory within the past years is the use of QR code scanning before entering a public facility. Before anyone can enter a public facility, the users first must scan a barcode at the entrance in the form of a QR code. The application will then decide if the user is allowed to enter or not, based on their recorded medical record. The application is intended to filter only the users who are safe and clear of the virus are eligible to enter, and not as an access limitation.

Users are expected to participate by sharing data such as their personal information, health status, location, etc. and consensually allowing the application to use the said data. It is intended to report all contact history and activities tied to COVID19. Like other contact tracing applications, the results of this follow-up will make it easier for governments to determine who needs further treatment to stop the Covid 19 epidemic. The more citizen's participation this application receives, the better the government will support in tracing and tracking.

A recent study on various Contact tracing apps around the world through the google play store reviews has found that contact tracing apps had a low overall rating and 40% of them were requesting dangerous access permissions [4]. Public suspicion has grown since the news about personal data breaches in the PeduliLindungi application was reported on social media. Many newspapers have raised this issue [5]. One of the other most recent fuss regarding the topic is about how the United States (US) Department of State highlighted the use of the PeduliLindungi application is related to arbitrary or unlawful interference and also stated allegations regarding human rights violations after learning that the PeduliLindungi application stores citizen data, starting

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from the Identification number, date, to the user's travel history[6].

Based on the above phenomenon, it is necessary to conduct research to reveal how the end user's opinion on these issues is. This is very important to measure user acceptance of this application. To the best of the author's knowledge, there has been no scientific publication that has done this, especially in the context of the DCT application in Indonesia.

This paper will address user satisfaction toward the use of PeduliLindungi application and its relationship with three important constructs namely Trust, Privacy Concern and Risk belief. We also examine the role of some more "traditional" constructs proposed by Delone and McLean [7] and Davis [8]. In Section 2 we present the literature reviews and the theories that we used as the base of our research. The methodology used in this paper is presented in Section 3. The data collection process and the demography of respondents are provided in Section 4, followed by the presentation of the results and discussion in Section 5. The paper ends with Conclusion Remarks in Section 6.

2. Literature Review

2.1 Theoritical Background

We will be using the Information System Success Model by Delone and McLean as a base model [7], [9] to measure the end user's satisfaction towards the application use. User satisfaction has a close relation with the intention to use of a system. However, this relation is not a pure mutual relation because the usage of a system can also occurs because of a compulsion. Typically, the government issues regulations that enforces its citizens to use similar applications to control the spread of viruses. Therefore, measuring the user's satisfaction is considered more relevant in the studying the problem rather than the intention to use or the system use. In addition to using the Delone McLean model as a reference, we also adopt the research from Davis [8] related to User Acceptance. In the publication, Davis reveals two important predictors in predicting User Acceptance of information technology namely Perceived usefulness and perceived ease of use. These are the second category of variables considered in this paper.

The third and most important variable category we examine in this paper are related to the role of trust, perceived risk and privacy concern in the use of this application. Issues regarding perceived risk, privacy and trust in online transactions have attracted the attention of the public and researchers [10]. Regardless of how good and useful an information system or application is, if personal information has the potential to be misused, then the application tends to be abandoned [11] [12] [13] [14]. In the case of contract tracing applications, when someone feels there is a risk that their privacy may be disturbed, and they have a low trust in the party who controls the data, in this case the government, it will result in

dissatisfaction with the application even though they may be forced to use it [4] [15] [16] [17] [18] [19] [20] [21].

2.2 Research Model and Hypotheses

Based on some of the theories stated above, we have selected several variables that are considered relevant to the user satisfaction of the PeduliLindungi application which we summarize below.

System Quality
System Quality: Measures how the system processes data into information itself. In the updated DeLone model, there are 5 indicators for this variable, namely: Adaptability, Availability, Reliability, Response time, Usability.
There are many studies that show a close relationship between system quality and the success of an information system. Some of them are [22], [23], [24], [15], [25]. Based on the theory developed by Delone and McLean as well as some of the results of the research above, we propose the following hypothesis:
H_1: System Quality affects the user satisfaction of PeduliLindungi application.

Information Quality
Information Quality: Measures of Information System Output Rather than measure the quality of the system performance. The initial version of Delone revealed that there were 22 indicators that could be used to measure this construct. However, in the updated version, Delone summarizes it into 5 indicators, namely: Completeness, Ease of understanding, Personalization, Relevance, Security. The following research validates the role of information quality on user satisfaction or acceptance [26], [27], [22], [23], [24] [15], [25], [28]. Based on the theory developed by DeLone and McLean,[7], [9] as well as several research results above, we derive the following hypothesis:
H_2: Information Quality affects user satisfaction of the PeduliLindungi application.

Service Quality
Service Quality appears in the updated version of the DeLone and McLean models [9] and defined as the overall support that can be provided by the service provider or other parties who represent it. This construct is important, weaknesses in user support will have a direct impact on losing user trust in service providers. Service Quality has 3 indicators, namely: Assurance, Empathy and Responsiveness.
Service quality greatly influences user decisions and satisfaction in using the system as shown in [26] [27] [22] [23], [24], [15], [25], [28]. Based on the theory developed by DeLone and McLean [9] as well as some of the results of the research above, we derive the following hypothesis:
H_3: Service Quality affects the user satisfaction of the PeduliLindungi application.

Perceived Ease of Use
Perceived ease of use is defined as the extent to which a person believes that using a technology will be easy or

free of effort [8]. Furthermore, Davis developed 6 indicators for measuring this construct which include: Easy to Learn, Controllable, Clear & Understandable, Flexible, Easy to Become Skillful, Easy to Use.

After being introduced by Davis, many studies that have validated the effect of this construct on technology adoption some of which are [32], [33], [34], [35], [27]. Based on the description above, we derive the following hypothesis:

H4: Perceived Ease of Use affects user satisfaction of the PeduliLindungi application

Perceived Usefulness

Davis (Davis, 1989) defines this construct as the degree to which a person believes that a technology with practical value will improve their performance. Davis proposes 6 indicators, namely: Work More Quickly, Job Performance, Increase Productivity, Effectiveness, Makes Job Easier, and Useful.

Several studies have justified the role of this construct, including: [36], [37] [32], [33], [34], [35], [27]. Based on the description above, we derive the following hypothesis:

H5: Perceived Usefulness affects user satisfaction of the PeduliLindungi application.

Trust

Schnall et all [38], define trust as the belief that a party will behave responsibly and will not exploit the weaknesses of another party. A more complete definition and indicators are contained in [39]. Lin and colleagues developed 5 indicators to measure trust in the use of the DCT Covidsafe application [20].

Many studies reveal a close relationship between this construct and the adoption and use of a technology. Some of them are:[20] [39] [26], [27], [21], [20], [20], [15]. From this review, we formulate the following proposition:

H6: Trust has a positive effect on the satisfaction of using the PeduliLindungi application.

Privacy Concern

Lin et al [20] suggest that Information privacy is related to a person's ability to control conditions in situations where personal information is provided and used by other parties. There are 3 indicators of privacy concern used by Lin et al, namely Awareness, Collection and Control.

According to Lin, information privacy concerns have a negative relationship with trusting belief and a positive relationship with risk belief. Apart from Lin, several researchers have the same opinion as in [39], [18], [14], Based on the description above, we derive the following hypothesis:

H7: Privacy concern has a negative effect on Trust and

H8: Privacy concern has a positive effect on Perceived Risk

Perceived Risk

Nuno [39] defines perceived risk as a person's belief in the possibility of bringing risk or loss to the attitude or action taken. Nuno and [20] show that privacy concern has a positive effect on Risk Belief, while Trust has a negative effect on Risk Belief.

In this study, we want to validate these statements in the context of using the PeduliLindungi application. Where:

H9: Privacy concern has a positive effect on Risk Belief

H10: Risk Belief has a positive effect on User Satisfaction

User Satisfaction

According to Kotler [40], in his book Marketing Management provides a definition that satisfaction is a person's feeling of pleasure or disappointment with a product after the customer compares the performance of the product with his expectations. Regarding information systems, DeLone and McLean in their early version [7] defined User Satisfaction as a user response after using the output generated by the Information System. In the early version DeLone and McLean proposed 9 indicators to measure this construct. However, in the second version, the authors only propose 3 indicators, namely: Repeat purchases, Repeat visits, and satisfaction through User surveys.

As a summary of this session, below is the model that we propose in this research.
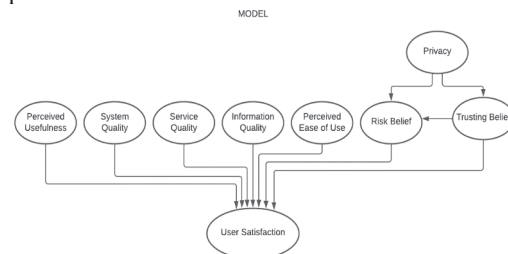

Figure 1. Proposed Model of The Research

3. Methods

In this section, we will describe the methods used to validate the model developed in the Theoretical Background Section. For this reason, the very first step is the development of a valid and reliable questionnaire to measure the variables mentioned in the model above. In our model in Figure 1. there are 9 variables to be measured. Each variable needs to be measured using the appropriate indicator. We use several references from the literature for this process. In Table 1, the names of the variables, definitions, and indicators used in measuring these variables are presented, accompanied by the references used. In this table we also show the number of items from each indicator.

Table 1. Variable Definition and Indicators

Variables Name	Definition	Indicator	#Of Items	# Of items
Privacy Concerns	One's personal view of fairness in the context of personal information (Fortes et al., 2017)	Awareness	2	6
		Collection	2	Priv1 – Priv6
		Control	2	

Variable	Definition	Indicator		Total	Code
Risk Belief	Perceptions about the possibility of risk or harm towards the action taken (Fortes et al., 2017)	Risky	1	5	Risk1 – Risk5
		Potential Loss	1		
		Uncertainty	1		
		Unexpected Problems	1		
		Feeling Safe	1		
Trusting Belief	Belief that the other party will behave responsibly and will not exploit the weaknesses of one party [20]	Trustworthy	1	5	Trust1 - Trust5
		Telling the truth	1		
		Individual Interest	1		
		Predictable and consistent	1		
		Honesty	1		
Perceived Ease of Use	the extent to which a person believes that using a technology will be effort-free (Davis, 1989)	Easy to Learn,	1	4	PEOU1-PEOU4
		Controllable,	1		
		Clear & Understandable,	1		
		Easy to Become Skillful	1		
Information Quality	Measures of Information System Output Rather than measure the quality of the system performance [9]	Completeness	1		IQ1-IQ5
		Ease of understanding	1		
		Personalization	1		
		Relevance,	1		
		Security	1		
Service Quality	Overall support that can be provided by the service provider or other parties representing it in fulfilling the wishes of the user [7]	Assurance,	1	3	SerQ1 - SerQ3
		Empathy	1		
		Responsiveness	1		
System Quality	Measures how the system processes data into information itself [9]	Adaptability,	1	6	SQ1-SQ6
		Availability,	1		
		Reliability,	2		
		Response time	1		
		Usability	1		
Perceived Usefulness	The degree to which a person believes that using a technology will improve performance (Davis, 1989)			4	PU1-PU4
		Effectiveness	1		
		Make job easier	1		
		Useful	1		
User Satisfaction	A person's feelings of satisfaction or disappointment with a product after the customer compares the performance of the product with his expectations [9]	Long term use,	1	4	US1-US4
		Repeat visits,	1		
		Overall feeling	1		
		Recommendation	1		

A total of 48 items were used in this questionnaire. The questionnaire consists of 2 parts, the first part explores information about respondents' demographics and application usage history (6 questions), the second part consists of 42 questions aimed at measuring the variables according to Table 1.

The sample used in this study were PeduliLindungi application users spread across Indonesia. Determination of the number of samples is based on the rule of ten [20] which says that "The minimum number of samples required to conduct SEM is 10 times the number of variables".

Data analysis uses a two-step approach where the first step is to assess the reliability and validity of the instrument and the second step is to test the research model. Confirmatory factor analysis is done to assess the reliability and validity of the measurement model. To evaluate the reliability, we estimate the Cronbach alpha and Composite Reliability (CR). Based on the paper by Bagozzi and Nunnally used in [20], Composite reliability measures the internal consistency of scale items, while having a baseline index of 0.700. Cronbach alpha is used to test the reliability of questionnaire items, where the items are considered reliable if it has a value greater than 0.7, [23].

The validity of the instrument is tested using Discriminant validity consisting of Factor loading, Average Variance Extracted (AVE) and Fornell Larcker Criterion. Factor loading is used to test the correlation between the indicators and their variable constructs and is expected to be greater than 0.7 [20]. Average Variance Extracted (AVE) indicates the amount of variance given by the latent construct and its measures. An AVE of at least 0.500 is recommended to consider valid. The Fornell Larcker Criterion is where the square root of an indicator's AVE to its corresponding variable must be greater than its correlation to other variables. The second step is to test the research model and hypotheses proposed through the model (Figure 1.). For this we use p-value to determine whether the hypothesis formulated in Section 2 is acceptable or not. A p-value less than or equal to 0.05 indicates that the hypothesis is accepted.

4. Data Collection

4.1 Sample and Data Collection

Questioners was distributed using google form in several communities spread throughout Indonesia between April 3, 2022, and April 25, 2022. We target respondents who have used the PeduliLindungi application aged 15 years and over. Initially there were 258 respondents who filled the form, however 16 of them did not meet our criteria, therefore only 242 respondents were included in the analysis. The demographics of the respondents and the frequency of use of the PeduliLindungi application are shown in Table 2.

Table 2. Demographic and Intensity of Use

Demographics	Frequency	Percent
Domicile		
Jabodetabek	118	49%
Outside Jabodetabek	124	51%
Gender		
Female	141	58%
Male	101	42%
Age		
Teenager (<18)	7	3%
Adult (<18-59)	226	93%
Senior (60+)	9	4%
Current Job		
Student	8	3%
College Student	34	14%
Entrepreneur	41	17%
Private employee	68	28%
Government employee	19	8%
Others	72	30%
Use frequency		
At least once a week	74	31%
At least once a month	78	32%
More than once a month	90	37%

Jabodetabek = Cities of Jakarta metropolitan area (Jakarta, Bogor, Depok, Tangerang, Bekasi)

5. Results and Discussion

The data obtained is analyzed using SMART-PLS Ver 3.29.

5.1 Numerical Results: Descriptive statistics and Confirmatory Factor Analysis

In Table 3, we present the results of data processing related to descriptive statistics for each variable and analyze towards the factors used in the measurement.

Table 3. Descriptive Statistics and CFA

	Min.	Max	Mean	Std. Deviation	Outer Loadings	Cr's-Alpha	Composite Reliability	AVE
SY	1	5	4.234	0.868		0.867	0,904	0.652
SY1	1	5	4.351	0.875	0.828			
SY2	1	5	4.372	0.814	0.777			
SY3	1	5	4.186	0.873	0.801			
SY5	1	5	4.045	0.924	0.802			
SY6	2	5	4.215	0.805	0.829			
PR	1	5	3.717	1.175		0.915	0,934	0.702
PR1	1	5	3.851	1.107	0.755			
PR2	1	5	3.678	1.173	0.849			
PR3	1	5	3.579	1.115	0.839			
PR4	1	5	3.748	1.226	0.854			
PR5	1	5	3.818	1.168	0.870			
PR6	1	5	3.628	1.227	0.856			
IQ	1	5	3.998	0.889		0.888	0,918	0.691
IQ1	1	5	3.825	0.871	0.823			
IQ2	1	5	4.124	0.914	0.781			
IQ3	1	5	3.938	0.882	0.874			
IQ4	1	5	4.149	0.825	0.834			
IQ5	1	5	3.942	0.907	0.841			
SQ	1	5	3.66	0.916		0.846	0,907	0.764
SQ1	1	5	3.727	0.909	0.871			
SQ2	1	5	3.620	0.907	0.875			
SQ3	1	5	3.632	0.928	0.876			
PEOU	1	5	4.156	0.853		0.854	0,902	0.697
PEOU1	1	5	4.236	0.827	0.874			
PEOU2	1	5	4.070	0.852	0.860			
PEOU3	1	5	4.384	0.759	0.838			
PEOU4	1	5	3.938	0.900	0.761			
PU	1	5	3.872	0.989		0.904	0,933	0.778
PU1	1	5	4.033	0.940	0.890			
PU2	1	5	3.959	0.935	0.911			
PU3	1	5	3.893	0.956	0.907			
PU4	1	5	3.603	1.064	0.818			
TU	1	5	3.631	0.989		0.951	0,962	0.836
TU1	1	5	3.657	0.968	0.898			
TU2	1	5	3.665	0.983	0.914			
TU3	1	5	3.657	0.989	0.922			
TU4	1	5	3.599	0.996	0.903			
TU5	1	5	3.579	1.006	0.936			
RI	1	5	3.322	1.16		0.931	0,948	0.786
RI1	1	5	3.450	1.143	0.814			
RI2	1	5	3.269	1.163	0.935			
RI3	1	5	3.277	1.144	0.902			
RI4	1	5	3.190	1.170	0.900			
RI5	1	5	3.426	1.156	0.877			
US	1	5	4.007	0.917		0.907	0,935	0.783
US1	1	5	4.091	0.909	0.819			
US2	1	5	3.942	0.912	0.884			
US3	1	5	4.062	0.905	0.919			
US4	1	5	3.934	0.929	0.913			

SY = System Quality; PR = Privacy; IQ = Information Quality; SQ = Service Quality; PEOU = Perceived Ease of use; PU = Perceived Usefulness; TU = Trust; RI = Risk; US = User Satisfaction.

All items have an appropriate loading for the variable, which is greater than 0.7, except for one item, namely SY4 which we must remove from the next analysis due to having a loading score lower than 0.7. From Table 3, we can conclude that the Cronbach Alpha and AVE values for all variables meet the requirements (Cr Alpha > 0.7 and AVE > 0.5). To check the discriminant Validity, the composite reliability ranges from 0.902 to 0.962 which is above the baseline 0.700.

Table 4. Fornell-Larcker Criterion

	Ease of Use	Infomation Quality	Privacy	Risk	Satisfaction	Service Quality	System Quality	Trust	Usefulness
Ease of Use	0.835								
Infomation Quality	0.763	0.831							
Privacy	0.070	0.147	0.838						
Risk	0.003	0.027	0.665	0.886					
Satisfaction	0.647	0.537	-0.122	-0.130	0.885				
Service Quality	0.598	0.565	-0.029	0.022	0.583	0.874			
System Quality	0.731	0.669	-0.033	-0.080	0.629	0.556	0.808		
Trust	0.580	0.558	-0.158	-0.162	0.551	0.649	0.622	0.915	
Usefulness	0.692	0.673	0.008	0.024	0.703	0.647	0.656	0.634	0.882

Table 4 presents a Fornell-Larcker Criterion. In the table it is clearly shown that the square root of AVE of each variable is greater than its correlation to other variables, confirming the discriminative ability of the items.

From Table 3 and Table 4 it can be concluded that both the reliability and validity of the instrument used fulfills all the requirements as a good measuring instrument.

Therefore, the analysis can be continued to validate the theory developed in this study.

5.2 Numerical Results: Hypothesis Testing

In Table 5, we present the results of hypothesis testing using Smart-PLS.

Table 5. Path Coefficients and P-Values

	Sample Mean (M)	T Statistics (|O/STDEV|)	P Values
Ease of Use -> Satisfaction	0.236	2.858	**0.004**
Information Quality -> Satisfaction	-0.109	1.339	0.181
Privacy -> Risk	0.669	12.605	**0.000**
Privacy -> Satisfaction	-0.082	2.760	**0.006**
Privacy -> Trust	-0.161	2.056	**0.040**
Risk -> Satisfaction	-0.124	3.343	**0.001**
Service Quality -> Satisfaction	0.140	2.042	**0.042**
System Quality -> Satisfaction	0.177	2.198	**0.028**
Trust -> Risk	-0.055	0.954	0.341
Trust -> Satisfaction	0.000	0.075	0.940
Usefulness -> Satisfaction	0.414	4.752	**0.000**
Privacy -> Risk -> Satisfaction	-0.085	2.895	**0.004**

From Table 5, we can conclude that 7 out of 10 hypothesis that were tested in this study were accepted, and the remaining 3 were rejected. In addition, the analysis also shows the mediation role of risk belief on the effect of privacy concern to user satisfaction.

5.3 Results Discussion

Based on Table 3, it can be concluded that in general user satisfaction with the PeduliLindungi application is at around 4, indicating that users are satisfied. This is in line with the user's opinion on the quality of the system, ease of use, and the quality of information which also received a fairly high appreciation. Even though the opinion is still quite good, the service quality variable is at the lowest level in this category. From the Trust side, it can be concluded that the user still has enough trust in the government as the owner of this application. Table 3 also shows that in general users have fairly high privacy concerns for the use of this application. Risk belief has the lowest average, which is close to 3 which can be interpreted that the user is quite divided in responding to the use of this application. The proportion of users who believe that the use of this application has a risk is almost as much as the number of users who believe that the use of this application is not risky.

Table 5 presents the main information related to the research problem. There are 7 accepted hypotheses, namely.

H_1: System Quality positively affects the user satisfaction of PeduliLindungi application

H_3: Service Quality positively affects the user satisfaction of the PeduliLindungi application.

H_4: Perceived Ease of Use positively affects user satisfaction of the PeduliLindungi application

H_5: Perceived Usefulness positively affects user satisfaction of the PeduliLindungi application.

H_7: Privacy concern has a negative effect on Trust and

H_8: Privacy concern has a positive effect on Perceived Risk

H_9: Risk Belief has a positive effect on User Satisfaction

These hypotheses confirmed the theory developed in the section 2 and justify the findings of many previous publications [20], [27] [35] [34]. Privacy concern has positive influence to Risk belief and negative effect on Trust belief confirming the importance of this construct. Although we do not state it as a hypothesis, the results shown in Table 6 also confirm the influence of privacy concern to user satisfaction mediated by perceived risk. This says the more people concern on their privacy, the more they feel that the use of their private information is at risk. Consequently, this reduces their satisfaction on the PeduliLindungi application. The R square of the model is 0.579 which is high, and this confirms the significance contributions of the variables in predicting user satisfaction of the application.

5.4 Results Implications and Recommendations

Ease of use has a positive relationship with user satisfaction. Users hope that the use of the application should be free from effort. Therefore, one of the recommendations is that application makers are expected to take advantage of the latest technology in Artificial Intelligence (AI) and voice recognition to help users access existing menus. Perceive usefulness has a positive relationship with user satisfaction, so it is hoped that this application will add several services related to DCT and other health information. System quality and service quality are proven to affect user satisfaction. The direct implications of these two findings are improvement of the existing system, so that there are less frequent system crashes, ease of access with various devices, and improvement of user services such as the use of Chat bots and other AI-based applications.

Because the risk belief and privacy concerns are a major factor in effecting the user satisfaction, it is recommended that the government is more open about how they use the data within the PeduliLindungi application. It is also recommended that the government conducts an intensive socializing on how they use and store the public's personal data. Also, governments must have a higher desire to strengthen and implement up-to-date cyber security system techniques so that data is guaranteed to protect stored data.

6. Conclusion

The results of this study can be evaluated to view the perception of the users who are using an application that has been around for almost two years of implementation by the government. The research aims to view the user's satisfaction of the application where the users don't really have much choice, as it is mandatory to use it. The results of the study confirmed that the role of the variables privacy concern and risk belief, effects the user's perception negatively within trusting their personal data to the government through the internet. On the other hand, if the system quality, perceived usefulness, service quality, perceived ease of use of an application, is viewed positively, people wouldn't mind using it. In addition, this study reveals the role of the Risk belief variable in mediating privacy concerns and application usage satisfaction. Some recommendations are provided as implications of the results.

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