



An Evaluation of KASKUS Internet Forum Usage

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ABSTRACT

The purpose of this study is to find out what factors influence the use of one of the most popular internet forums in Indonesia, KASKUS. Data were taken from the distribution of questionnaires to 400 respondents. Researchers used the UTAUT (Unified Theory of Acceptance and Use of Technology) model combined with the Information System Success DeLone and McLean Model. The variables contained in the proposed model can be analyzed using the Structural Equation Modeling (SEM) technique. The analysis shows that the variable that most contributed and influenced the Use variable was the Intention to Use variable, then the Service Quality variable, and the Net Benefit variable. While the variable that most contributed and influenced the Intention to Use variable was the User Satisfaction variable, then the System Quality variable, and the Social Influence variable. The variable that most provided and changed the User Satisfaction variable is the Net Benefit, then the Information Quality variable, and the Service Quality variable. These factors need to be improved to increase the use of Internet Forum KASKUS.

Key words: Evaluation, Internet Forum, UTAUT, DeLone And McLean IS Success Model, KASKUS.

1. INTRODUCTION

Internet forums are a place for online discussions [1]. One of the most popular internet forums in Indonesia is KASKUS, which was founded in 1999. KASKUS is a platform for discussion and sharing around interests and hobbies. KASKUS has more than 10 million registered members and has approximately 20,000 communities in it [2].

KASKUS (Figure 1) is the most popular internet forum in Indonesia. In 2009, KASKUS was ranked 1st in the category of community sites and was the number one local site in Indonesia that was the most accessed, according to Alexa.com [3].

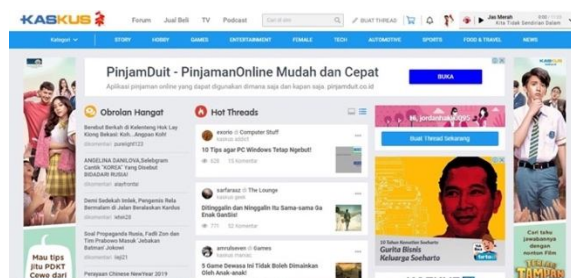


Figure 1: KASKUS Homepage

To strengthen its position as a platform for discussion and to share around interests and hobbies, KASKUS changed the appearance of the main page on August 20, 2017 [2]. In addition to the new look, KASKUS also prepares and develops several programs, products, and technologies, to be more relevant in meeting the needs of discussion forums and communities in the current era. On September 27, 2018, KASKUS introduced KASKUS TV, a video site related to interests and hobbies [11]. After that, on November 6, 2018, KASKUS presented the KASKUS Podcast to appreciate the work of KASKUS users called the “kaskuser” [12].



Figure 2: Alexa ranking of KASKUS (5 February 2019)

Besides, based on the Alexa.com website accessed on April 9, 2019 (Figure 2), the number of pageviews/users or the total number of times a page was viewed or refreshed by each user KASKUS is as follows (Table 1 and Figure 3).

Table 1: Pageviews/user KASKUS (Alexa)

Period	Average per day
July - December 2016	7,2
January - June 2017	4,3
July - December 2017	3,9
January - June 2018	3,4
July - December 2018	3,1



Figure 3: Pageviews/user KASKUS (9 April 2019)

Based on the Alexa.com website accessed on February 5, 2019, KASKUS is the 15th most popular website in Indonesia and 387th globally.

Table 2: Google Trend of KASKUS

Period	Total
2004	120
2005	177
2006	272
2007	348
2008	371
2009	562
2010	837
2011	1050
2012	996
2013	795
2014	726
2015	553
2016	319
2017	193
2018	134

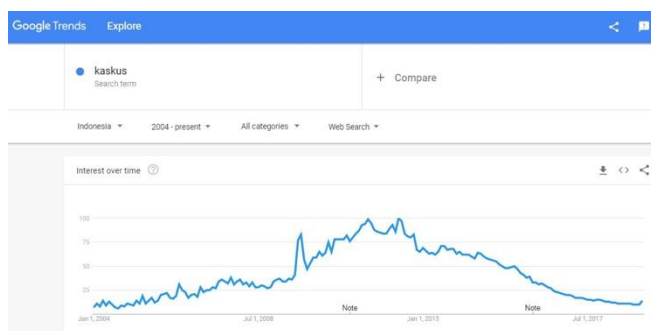


Figure 4: Google Trend of KASKUS

Based on the Alexa.com site, we can see that KASKUS has decreased the ranking of the most popular websites accessed in Indonesia, wherein 2009, it had a ranking of 1st (first) to rank 15th on February 5, 2019 (Figure 2). Also, pageviews/users KASKUS declined (Table 1 and Figure 3). Besides, searches for keywords or topics related to KASKUS also declined (Table 2 and Figure 4). Based on the above

background, then convince researchers to research evaluating the use of KASKUS to find out what factors influence the use of the KASKUS.

2. LITERATURE REVIEW

2.1 Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) is a theory that models how users want to accept and use technology [4]. The primary purpose of TAM is to provide an explanation of what factors determine the acceptance of technology that can explain the behavior of its users [4]. Technology Acceptance Model (TAM) suggests that user motivation is influenced by three factors: perceived ease of use, perceived usefulness, and attitude toward using [4].

Verkantes and Davis (1996) found that perceived ease of use and perceived usefulness had a direct effect on behavior intention [5]. That causes the elimination of the need for attitude toward using from the model. The removal of attitude toward using causes a direct relationship between perceived usefulness and actual system use. Besides, the connection associated with attitude toward using is also removed so that it changes the initial TAM model. Verkantes and Davis (1996) suggest external variables that affect a person's trust in a system (Figure 5). External variable characteristics are system characteristics, user training, user participation in design, and the natural implementation process [5].

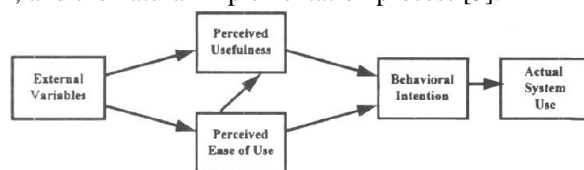


Figure 5: Final version TAM (1996)

2.2 IS Success DeLone And McLean Model

IS Success DeLone And McLean Model is a model used to measure the success of information systems [6]. DeLone and McLean propose six interrelated variables to measure the success of information systems namely, system quality, information quality, use, user satisfaction, individual impact, and organizational impact [6].

Then DeLone and McLean (2003) revealed that the quality of information systems consists of three aspects namely, information quality, system quality, and service quality. Measurement of the three dimensions of the quality of information systems must be measured will affect “use” and “user satisfaction” (Figure 6) [7].

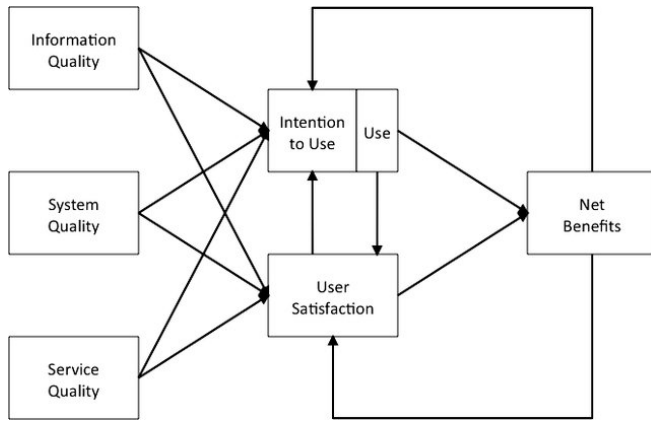


Figure 6: Update IS Success DeLone McLean Model (2003)

2.3 Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT is a theory used to determine user acceptance of information technology [9].

Venkatesh et al. (2003) introduce four factors that determine behavioral intention to use technology, namely performance expectancy, effort expectancy, social influence, and facilitating conditions (Figure 7) [9].

Gender, age, experience, and voluntariness of use are moderation variables that are considered to affect the four main variables on behavior intention and use behavior (Figure 7) [9].

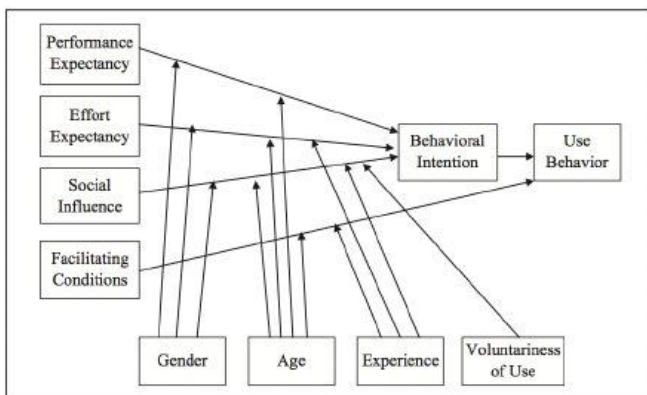


Figure 7: UTAUT

2.4 The Extended DeLone McLean Model

The extended DeLone-McLean model is a model that combines the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) with the Information System Success DeLone And McLean Model [8]. Not all variables of TAM and UTAUT are combined in The Extended DeLone-McLean Model. The variables of TAM combined are perceived usefulness. The variables of UTAUT combined are performance expectancy, effort expectancy, and social influence [8]. Here is The Extended DeLone-McLean Model (Figure 8).

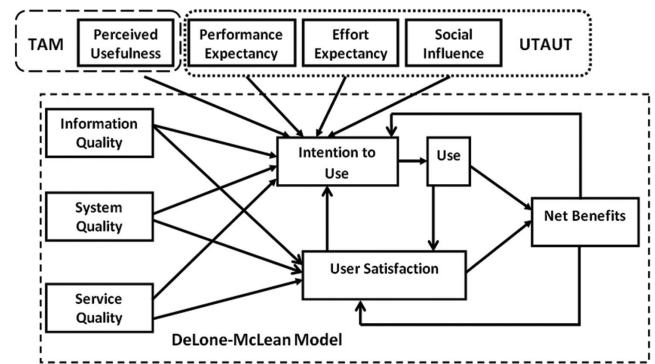


Figure 8: The Extended DeLone McLean Model

3. RESEARCH METHODOLOGY

This study uses variables from the Unified Theory of Acceptance and Use of Technology (UTAUT) model combined with the Information System Success DeLone and McLean Model (Figure 9). The merging of models is expected to provide a stronger theoretical background to find out the factors that influence the use of KASKUS [8].

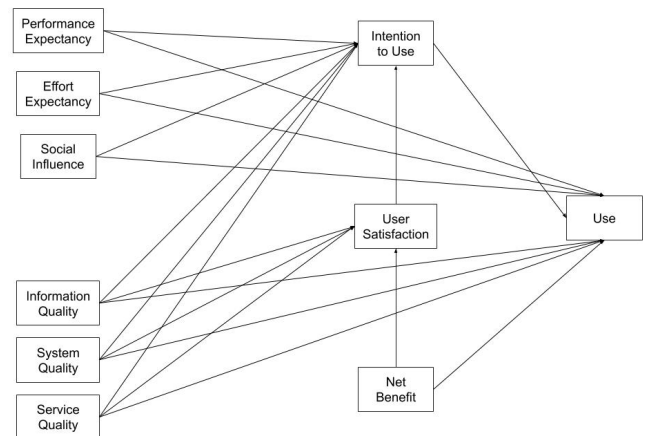


Figure 9: Theoretical Framework

The Performance Expectancy (PeEx) variable is used to measure a person's level of trust where using the KASKUS internet forum will help improve their work performance [9]. This study shows whether Performance Expectancy affects the Intention to Use [9], [25], and Use [13].

The Social Influence variable (SoIn) is used to measure the extent to which an individual perceives that other people are important to believe that they should use the KASKUS internet forum [9]. This study shows whether Social Influence affects the Intention to Use [9], [25], [26], and Use [14].

The Effort Expectancy variable (EfEx) is used to see the level of convenience associated with the use of the KASKUS internet forum [9]. This study shows whether Effort Expectancy affects the Intention to Use [9], [25], and Use [15].

The Information Quality variable (InQu) refers to the quality of information that can be stored, sent, or produced by the KASKUS internet forum [7]. This study shows whether Information Quality affects the Intention to Use [8], User Satisfaction [8], and Use [16], [17], [18].

System Quality (SyQu) refers to the aspects of the usability and characteristics of KASKUS internet forum performance [7]. This study shows whether System Quality affects the Intention to Use [8], User Satisfaction [8], and Use [16], [19], [20], [18].

Service Quality (SeQu) is a measure of how well the level of service provided is in line with the expectations of KASKUS internet forum users [7]. In this study shows whether Service Quality affects the Intention to Use [8], User Satisfaction [8], and Use [21], [22].

Intention to Use (InUs) is a behavioral tendency to continue to apply the KASKUS internet forum [7]. In this study shows whether Intention to Use affects the Use [8].

The User Satisfaction variable (UsSa) is used to measure user satisfaction with the KASKUS internet forum [7]. In this study shows whether User Satisfaction affects the Intention to Use [8].

The Net Benefit variable (NeBe) is the benefit felt by individuals or organizations after using the KASKUS internet forum [7]. In this study shows whether Net Benefit affects User Satisfaction [8], and Use [19], [23], [24].

Use variable (Use) is defined as the real condition of system application [4]. Use variable is the target variable to be achieved in this study.

Based on the theoretical framework, the hypothesis in this study is as follows (Figure 10):

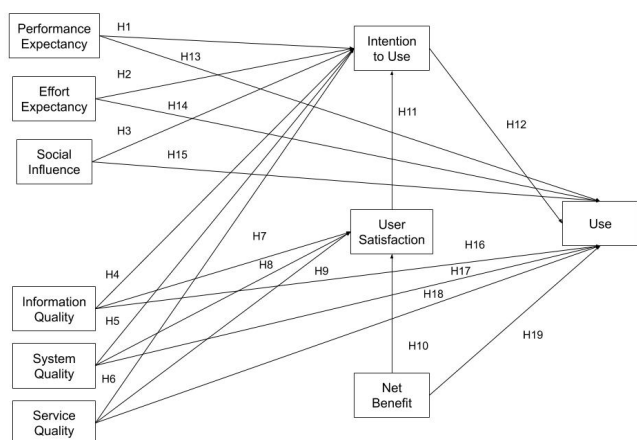


Figure 10: Hypothesis

- H1: Performance Expectancy is having a significant effect on the Intention to Use
- H2: Social Influence is having a significant effect on the Intention to Use
- H3: Performance Expectancy is having a significant effect on the Intention to Use
- H4: Information Quality is having a significant effect on the Intention to Use
- H5: System Quality is having a significant effect on the Intention to Use
- H6: Service Quality is having a significant effect on the Intention to Use
- H7: Information Quality is having a significant effect on User Satisfaction
- H8: System Quality is having a significant effect on User Satisfaction
- H9: Service Quality is having a significant effect on User Satisfaction
- H10: Net Benefit is having a significant effect on User Satisfaction
- H11: User Satisfaction is having a significant effect on the Intention to Use
- H12: Intention to Use is having a significant effect on the Use
- H13: Performance Expectancy is having a significant effect on the Use
- H14: Social Influence is having a significant effect on the Use
- H15: Performance Expectancy is having a significant effect on the Use
- H16: Information Quality is having a significant effect on the Use
- H17: System Quality is having a significant effect on the Use
- H18: Service Quality is having a significant effect on the Use
- H19: Net Benefit is having a significant effect on the Use

The data collection method used to support this research is a questionnaire. The questionnaire will be distributed to 400 respondents using random sampling techniques. In this study, the assessment of internet forums uses a survey designed with a Likert scale with 5 points of range.

The variables contained in the proposed model can be analyzed using the Structural Equation Modeling (SEM) technique which, consists of two stages namely, the Measurement Model and the Structural Model.

The Measurement Model is used to conduct validity and

reliability testing. The validity and the reliability testing are evaluated through a measurement model using Confirmatory Factor Analysis (CFA).

The Validity test aims to test whether each indicator of the questionnaire in the study is valid or not [10]. Validity test calculations are performed to determine the correlation between variables with the indicators used. The testing technique used to test the validity of using Corrected Item-Total Correlation conducted using the SPSS Statistics 1.0 program. The indicator is declared valid if the correlation value ≥ 0.5 .

The reliability test aims to measure the consistency of the respondents' answers [10]. To determine the responses of respondents stated reliable, could use Cronbach's alpha measure. Cronbach's alpha criteria are divided into three parts: can be said to be good if the value is > 0.7 , can be said to be accepted if the value is > 0.6 , and can be said to be rejected if the value is < 0.5 .

The Structural Model is used to conduct hypothesis testing. The data obtained in this study used a multiple regression test technique (multiple regression). The use of multiple linear regression testing techniques helps to see the relationship between the independent variable (X) and the dependent variable (Y). For hypothesis testing, H_0 means the independent variable does not affect the dependent variable. While H_a means the independent variable influences the dependent variable. The regression equation in this study are:

$$\text{InUs} = \beta_{10} + \beta_{11}.\text{PeEx} + \beta_{12}.\text{EfEx} + \beta_{13}.\text{SoIn} + \beta_{14}.\text{InQu} + \beta_{15}.\text{SyQu} + \beta_{16}.\text{SeQu} + \beta_{17}.\text{UsSa} + \xi_1 \dots\dots(1)$$

$$\text{UsSa} = \beta_{20} + \beta_{21}.\text{InQu} + \beta_{22}.\text{SyQu} + \beta_{23}.\text{SeQu} + \beta_{24}.\text{NeBe} + \xi_2 \dots\dots(2)$$

$$\text{Use} = \beta_{30} + \beta_{31}.\text{InUs} + \beta_{32}.\text{PeEx} + \beta_{33}.\text{EfEx} + \beta_{34}.\text{SoIn} + \beta_{35}.\text{InQu} + \beta_{36}.\text{SyQu} + \beta_{37}.\text{SeQu} + \beta_{38}.\text{NeBe} + \xi_3 \dots\dots(3)$$

Note:
 ξ = Error

All hypothetical results will be processed using the SPSS-Amos statistical package.

4. RESULT

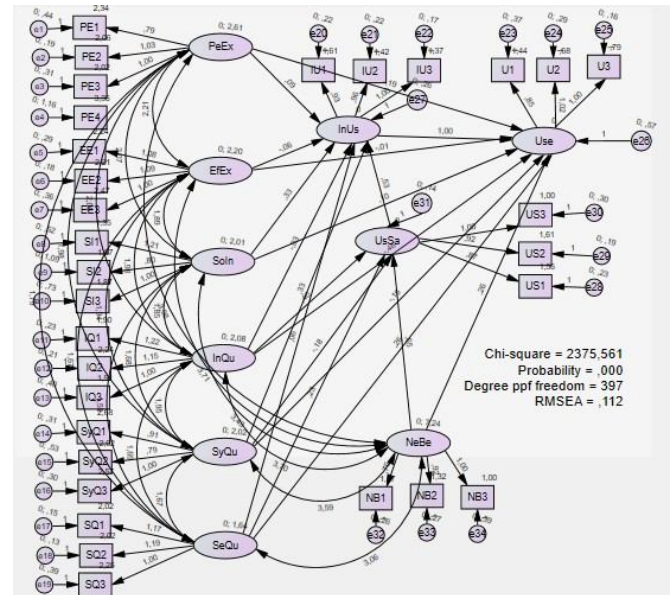


Figure 11: SPSS Amos Output

Based on the results of the output graph in Figure 11, it can be determined which constructs are significantly influential and which constructs that have no significant effect.

4.1 Validity Testing

The following are the results of the validity test in this study (Table 3):

Table 3: Validity Testing Result

Indicator Code	Corrected Item-Total Correlation	Description
PE1	0.766	Valid
PE2	0.898	Valid
PE3	0.921	Valid
PE4	0.901	Valid
EE1	0.891	Valid
EE2	0.920	Valid
EE3	0.864	Valid
SI1	0.818	Valid
SI2	0.769	Valid
SI3	0.794	Valid

IQ1	0.908	Valid
IQ2	0.889	Valid
IQ3	0.845	Valid
SyQ1	0.811	Valid
SyQ2	0.819	Valid
SyQ3	0.855	Valid
SQ1	0.922	Valid
SQ2	0.931	Valid
SQ3	0.865	Valid
IU1	0.940	Valid
IU2	0.941	Valid
IU3	0.949	Valid
US1	0.912	Valid
US2	0.931	Valid
US3	0.907	Valid
NB1	0.884	Valid
NB2	0.927	Valid
NB3	0.909	Valid
U1	0.916	Valid
U2	0.954	Valid
U3	0.960	Valid

Table 3 shows that all indicators are valid.

4.2 Reliability Testing

The following are the results of the reliability test in this study (Table 4):

Table 4: Reliability Testing

Variable	Cronbach's Alpha	Description
PeEx	0.896	Reliable

EfEx	0.870	Reliable
SoIn	0.706	Reliable
InQu	0.855	Reliable
SyQu	0.771	Reliable
SeQu	0.891	Reliable
InUs	0.938	Reliable
UsSa	0.904	Reliable
NeBe	0.891	Reliable
Use	0.938	Reliable

Table 4 shows that all variables are reliable.

4.3 Hypothesis Testing

The following are the results of the hypothesis test in this study (Table 5):

Table 5: Hypothesis Testing

Hypothesis	Estimate	P	Description
H1	0.095	0.21 1	H ₀ Accepted, H _a Rejected
H2	-0.061	0.53 2	H ₀ Accepted, H _a Rejected
H3:	0.330	0.00 3	H ₀ Rejected, H _a Accepted
H4	-0,034	0.83 8	H ₀ Accepted, H _a Rejected
H5	0.334	0.02 5	H ₀ Rejected, H _a Accepted
H6	0.062	0.44 8	H ₀ Accepted, H _a Rejected
H7	0.402	0.00 0	H ₀ Rejected, H _a Accepted

H8	-0.177	0,07 1	H ₀ Accepted, H _a Rejected
H9	0.233	0.00 0	H ₀ Rejected, H _a Accepted
H10	0.646	0.00 0	H ₀ Rejected, H _a Accepted
H11	0.528	0.00 0	H ₀ Rejected, H _a Accepted
H12	1.003	0.00 0	H ₀ Rejected, H _a Accepted
H13	-0.191	0.08 1	H ₀ Accepted, H _a Rejected
H14	-0.011	0.93 4	H ₀ Accepted, H _a Rejected
H15	0.096	0.53 7	H ₀ Accepted, H _a Rejected
H16	-0.461	0.03 2	H ₀ Rejected, H _a Accepted
H17	-0.163	0.45 0	H ₀ Accepted, H _a Rejected
H18	0.262	0.02 7	H ₀ Rejected, H _a Accepted
H19:	0.255	0.00 4	H ₀ Rejected, H _a Accepted

Based on Table 5, the results of the study can be concluded as follows:

Variables that significantly influence the Use (Use) variable of the KASKUS internet forum are Intention to Use, Service Quality, Information Quality, and Net Benefit variables. The results of the equation using the estimated value of the

variable are as follows:

$$Use = 1.003InUs + 0.262SeQu + 0.255NeBe + (-0,461)InQu$$

Variables that significantly influence the Intention to Use variable are the Social Influence, System Quality, and User Satisfaction variables. The results of the equation using the estimated value of the variable are as follows:

$$InUs = 0.33SoIn + 0.334SyQu + 0.528UsSa$$

Variables that have a significant effect on User Satisfaction variables are Information Quality, Service Quality, and Net Benefit variables. The results of the equation using the estimated value of the variable are as follows:

$$UsSa = 0.402InQu + 0.233SeQu + 0.646NeBe$$

5. CONCLUSION

Based on the result, the variable that most contributed and influenced the Use variable was the Intention to Use variable, then the Service Quality variable, and the Net Benefit variable. While the variable that most contributed and influenced the Intention to Use variable was the User Satisfaction variable, then the System Quality variable, and the Social Influence variable. The variable that most contributes and influences the User Satisfaction variable is the Net Benefit, then the Information Quality variable, and the Service Quality variable. These factors need to be improved to increase the use of Internet Forum KASKUS.

For further research, it can identify other factors that influence User Satisfaction, Intention to Use, and Use from the KASKUS internet forum. This is because in this study User Satisfaction can be explained by the independent variable at 97.5%, the construct of Intention to Use (InUs) can be explained by the independent variable at 94.9% and the construct of Use (Use) can be explained by the independent variable in this study at 89.7%.

APPENDIX

Appendix 1 Variable and Indicator

Table 6 is the variables and indicators used in this study.

Table 6: Variabel and Indicator

Variable	Indicator	Code
Performance	Saya menggunakan KASKUS karena	PE1
Expectancy (PeEx)	KASKUS akan berguna dalam kehidupan sehari-hari saya	

	Saya menggunakan KASKUS karena saya ingin KASKUS membantu memudahkan pekerjaan saya	PE2		menggunakan KASKUS	
	Saya menggunakan KASKUS karena saya ingin dengan menggunakan KASKUS meningkatkan kinerja saya	PE3	Information Quality (InQu)	Informasi yang disajikan KASKUS lengkap	IQ1
	Saya menggunakan KASKUS karena saya ingin KASKUS mempercepat penyelesaian pekerjaan saya	PE4		Informasi yang disajikan KASKUS mudah dimengerti	IQ2
				Informasi yang disajikan KASKUS akurat	IQ3
			System Quality (SyQu)	KASKUS selalu tersedia untuk digunakan	SyQ1
Effort Expectancy (EfEx)	Saya menggunakan KASKUS karena KASKUS akan mudah dipahami dan digunakan	EE1		KASKUS tidak sering mengalami gangguan atau dalam masa perbaikan	SyQ2
	Saya menggunakan KASKUS karena panduan penggunaan KASKUS akan mudah dipelajari dan dipahami	EE2		Mengakses KASKUS cepat	SyQ3
	Saya menggunakan KASKUS karena akan mudah mencari informasi atau layanan yang ada pada KASKUS	EE3	Service Quality (SeQu)	Customer service KASKUS mudah dijangkau	SQ1
				Customer service KASKUS selalu membantu saya ketika ada permasalahan dalam menggunakan KASKUS	SQ2
Social Influence (SoIn)	Saya menggunakan KASKUS karena teman, keluarga, atau kolega saya menyarankan untuk menggunakan KASKUS	SI1		KASKUS mengerti kebutuhan spesifik pengguna KASKUS pada saat ini dan kedepannya	SQ3
	Saya menggunakan KASKUS karena adanya pengaruh iklan, email promosi, media social atau media promosi lainnya	SI2	Intention to Use (InUs)	Saya berniat akan menggunakan KASKUS di masa yang akan datang	IU1
	Saya menggunakan KASKUS karena banyak orang di sekitar saya	SI3		Saya berniat akan merekomendasikan orang lain menggunakan KASKUS	IU2
				Saya berencana akan menggunakan KASKUS secara rutin	IU3
			Use (Use)	Saya selalu menyempatkan diri untuk	U1

	mengakses KASKUS	
	Saya mengakses KASKUS amper setiap hari	U2
	Saya menggunakan KASKUS untuk aktivitas sehari-hari	U3
User Satisfaction (UsSa)	Saya puas dengan layanan yang saya terima dari KASKUS	US1
	Menggunakan KASKUS menyenangkan	US2
	KASKUS sudah sesuai dengan kebutuhan saya	US3
Net Benefit (NeBe)	KASKUS meningkatkan pengetahuan atau wawasan saya	NB1
	KASKUS memperluas jaringan sosial atau komunitas saya	NB2
	KASKUS membantu untuk berbagi hobi saya	NB3

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