ANALYSIS OF THE SUCCESS OF THE MONITORING INFORMATION SYSTEM FOR REGIONAL DEVELOPMENT IMPLEMENTATION (*SIMONA*) BASED ON THE DELONE & MCLEAN MODEL AND TECHNOLOGY ACCEPTANCE MODEL AT *BAPPEDA* OF EAST JAVA

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ABSTRACT

The aim of this research is to examine the influence of information quality, system quality, service quality, on perceived usefulness and perceived ease of use which will then influence behavioral intentions and actual use. The population in this study were all *SIMONA* users in the East Java Provincial Government. The sample size in this research was determined from 91 regional officials and *BAPPEDA* Partners as input supervisors who had used the *SIMONA* application so that the total research sample was 100 *SIMONA* application users. The research results show that Information Quality and Service Quality have a significant impact on Perceived Usefulness and Perceived Ease of Use, indicating that users tend to view information and service quality as an important factor in assessing the usefulness and ease of use of a system. On the other hand, System Quality does not show a significant influence on Perceived Usefulness and Perceived Ease of Use, indicating that the technical or functional aspects of the system may not really influence user perceptions of usefulness and ease of use. Furthermore, Service Quality is proven to have a positive effect on Perceived Usefulness and Perceived Ease of Use, indicating that good service can increase user perceptions of usefulness and ease of use. Even though Perceived Usefulness does not have a significant impact on behavioral intentions, Perceived Ease of Use has a positive and significant effect on behavioral intentions, indicating that ease of use has an important role in forming users' intentions to use the system. Finally, behavioral intention was proven to be a significant factor in influencing actual use, indicating that a user's positive intention can predict the actual use of a system.

Key words: *information quality, system quality, service quality, perceived usefulness and perceived ease of use, behavioral intentions, actual use*

A. INTRODUCTION

Several previous studies explain that the use of information systems has been utilized for various aspects such as e-learning systems (Tarhini et al., 2014), e-government systemRegina et al. (2020) and banking system (e-banking) (Ghalandari, 2012). The very rapid development of information systems currently provides many benefits for government agencies such as the Regional Development Planning Agency (*BAPPEDA*) which uses the Regional Development Implementation Monitoring Information System (*SIMONA*) system for Reporting the Performance of Regional Apparatus. *SIMONA* is a web-based application, which is used by East Java Province Regional Apparatus to report realization data from monitoring the implementation of their work plans.

The use of the Regional Development Implementation Monitoring Information System (*SIMONA*) is based on the *Peraturan Menteri Dalam Negeri Nomor 86 Tahun 2017* concerning Procedures for Planning, Controlling and Evaluation of Regional Development, Procedures for Evaluation of Draft Regional Regulations Concerning Regional Long-Term Development Plans and Regional Medium-Term Development Plans, As well as Procedures for Amendments to Regional Long-Term Development Plans, Regional Medium-Term Development Plans, and Regional Government Work Plans article 259 paragraph (4) which states that the Head of Provincial Regional Apparatus submits an evaluation report to the governor through the head of the provincial *BAPPEDA* every quarter in the relevant budget year. and article 261 paragraph (4), evaluation is carried out every quarter using the results of the evaluation of the provincial Regional Apparatus Plan. Meanwhile, in article 262 paragraph (1), the Head of the provincial *BAPPEDA* carries out an evaluation of the results of the provincial *RKPD*, based on this, the East Java Province *BAPPEDA* uses Information Technology, namely the Regional Development Implementation Monitoring Information System (*SIMONA*) to facilitate the reporting in question.

The *Undang-undang No. 25 Tahun 2004* concerning *Sistem Perencanaan Pembangunan Nasional* and the *Peraturan Pemerintah No. 39 Tahun 2006* concerning Procedures for Controlling and Evaluation of the Implementation of Development Plans emphasizes the importance of implementing control and evaluation of development progress to ensure efficiency, effectiveness, fairness and sustainability of resource use. This process must be in line with budget allocation based on performance achievements. By utilizing web-based and online information technology, referred to as the Regional Development Implementation Monitoring Information System (*SIMONA*), this application is designed to increase the effectiveness and efficiency of reporting, as well as ensuring a close relationship with the planning and budgeting stages that prioritize performance achievement. Using *SIMONA* provides benefits in the form of increasing the realization of activities and participation of Regional Apparatus Organizations

(*OPD*) in submitting reports on time. This application also allows direct feedback on reports submitted by *OPD*. In its implementation, *SIMONA* continues to be improved to obtain more accurate data to support *BAPPEDA* and *OPD* in monitoring the progress of implementing their respective activities. Therefore, in 2021, the development of the *SIMONA* application will begin, especially for *OPD* which is responsible for performance reports on Regional Revenue and Expenditure Budget (*APBD*) funds in the East Java Province region. It is hoped that the *SIMONA* application can provide assistance to *OPD* in monitoring the implementation of program activities and sub-activities as well as using data to control implementation and carry out evaluation materials for the current year.

The use of an information system such as *SIMONA* is not free from various problems that arise when this application is used, namely there are changes to central policy regarding changes to the nomenclature of programs, activities and sub-activities in accordance with the *Peraturan Menteri Dalam Negeri Nomor 90 Tahun 2019* concerning Classification, Codification and Nomenclature of Development Planning and Regional Finance which has been updated through the *Keputusan Menteri Dalam Negeri Nomor 050-3078 Tahun 2020* concerning Results of Verification and Validation of Updating Classification, Codification and Nomenclature of Development Planning and Regional Finance, the *Keputusan Menteri Dalam Negeri Nomor 050-5889 Tahun 2021* concerning Results of Verification, Validation and Inventory Update of Classification, Codification and Nomenclature of Regional Development and Financial Planning, the *Keputusan Menteri Dalam Negeri Nomor 900.1..15.5-1317 Tahun 2023* concerning the *Keputusan Menteri Dalam Negeri Nomor 050-5889 Tahun 2021*. Results of Verification, Validation and Inventory Update of Classification, Codification and Nomenclature Regional Development and Financial Planning as well as problems related to the application regarding several parts that have errors, bugs, lack of responsiveness, page errors, data not updating, etc. in the application. Apart from that, this application is still in the development stage and will run for 2 years, namely 2021-2023. Based on research, errors do exist in every software development that has just been carried out, there are errors so that the application becomes heavier. Then, from the application developer side, an evaluation needs to be carried out, because the current process of some software developments does not meet good quality assessment standards. To support the quality of the *SIMONA* application, this software assessment was carried out to improve the system in the future.

Research into the success or effectiveness of information systems has been the focus of much research, and a number of conceptual models have been proposed to measure these aspects. One of the well-known models in the literature is the DeLone & McLean (1992) information system success model, which was updated in 2003. This model has six measurement dimensions, including system quality, information quality, service quality, system use intention, user satisfaction, and net benefits. System quality and information quality play a key role in influencing users' attitudes as recipients of information. This model also includes the dimension of intention to use as an alternative system use variable in several contexts. In addition, DeLone & McLean (2003) added the dimension of

service quality and combined individual impact and organizational impact into one variable, namely net benefit. This model is used in a research context to evaluate the success of the *SIMONA* information system, which is a web-based application used by *BAPPEDA* of East Java Province. Apart from that, in order to deepen understanding of user acceptance factors for information systems, research also refers to the Technology Acceptance Model (TAM) by Fred D. Davis. TAM, which is built on the Theory of Reasoned Action Model, focuses on perceived usefulness and ease of use as the main predictors of acceptance of technology use. These models were integrated to investigate the success of the *SIMONA* system as well as user acceptance factors for information technology in the context of *BAPPEDA* East Java.

Research gaps in the Delone & McLean model were found in several previous studies which found different results. Sumanang (2017) in his research found a significant influence of information quality on intention to use. However, other research (Guslan & Yani, 2021; Lee et al., 2019) found an insignificant effect on the influence of information quality on intentions. Syahfitri et al. (2022) found an insignificant effect on the influence of information quality on user satisfaction, whereasMohammadi (2015)found the opposite result. In the system quality variableRosadi (2018) found no significant effect on intention to use, whereasLee & Hsieh (2009)found conflicting results. Zai (2014) found that system quality does not affect user satisfaction, whereasUrbach & Muller (2012)found the opposite. On the service quality variableWidanti et al. (2022)found insignificant results on intention, while Park & Kim (2013) had conflicting research results.Safavi & Hawignyo (2021)found an insignificant effect on service quality on user satisfaction, while Fikri et al. (2016) found conflicting results.

The research gaps contained in the Delone & Mclean model encourage research again in different contexts and development of previous models, so that in this research the Delone & Mclean model is integrated with the technology acceptance model (TAM) in the *SIMONA* application context so that it will provide broader results in Information Technology Success theory. Several studies on the success model of the Delone & Mclean information system have found that there is no research that evaluates *SIMONA* using the Delone & Mclean model which is integrated with the Technology Acceptance Model (TAM), especially in *BAPPEDA* JATIM. Apart from that, the *SIMONA* application has only been running for about 3 years, so research is needed on the success of Information Technology. Thus, this research examines the influence of information quality, system quality, service quality, on perceived usefulness and perceived ease of use which will then influence behavioral intentions and actual use.

B. THEORIES AND CONCEPTS

Delone and McLean's Information Systems Success Model

System design and systems with respectable functionality are one of the cornerstones of the systems development life cycle. It is also a key factor to ensure the successful implementation of information systems(Delone & McLean, 1992; Detlor et al., 2013). Learners are more likely to use online learning if they

find that the online learning system has quality(Lin, 2007). The quality of the application is important. Especially educational applications because online learning applications lack face-to-face contact between students and teachers. With the online learning context, students use the system for learning activities. The updated D&M IS success model can be used to study online learning systems(Wang et al., 2007).

Initially, the IS success model was designed by DeLone & McLean (1992) to evaluate the success of information systems. This model presents six key success variables – (1) system quality, (2) information quality, (3) information system use, (4) user satisfaction, (5) individual impact and (6) organizational impact. Later, Delone & McLean (2003) presented an updated IS success model and assessed the benefits arising from changes in IS practices, particularly increased use of the Internet. Thus, Delone & McLean (2003) added 'service quality' as a new dimension in the IS success model. Also, 'impact' becomes 'net benefit'. Thus, the updated model includes 6 variables: (1) information quality, (2) system quality, (3) service quality, (4) use/intention to use, (5) user satisfaction, and (6) net benefits. Most previous research papers apply the IS success model, presented by Delone & McLean (2003) to the development and assessment of online learning(Wang et al., 2007). Delone & McLean (2003) present that the updated IS success model can adapt to suit the assessment of online learning challenges.

Technology Acceptance Model (TAM)

The TAM model is well known and used in studies of new technology innovation (Pertiwi et al., 2020) and is considered a theoretically strong model for identifying the determinants of intention towards new technology (Abdullah et al., 2016; Nunes et al., 2018). Recent studies used TAM to predict mobile wallet technology usage intentions (Lew et al., 2020; Singh et al., 2020). However, Davis (1989) predicted that TAM is a very persuasive model that helps gather information related to information systems. According to Slade et al. (2015), research conducted in the context of mobile wallets mostly uses the TAM model.

As per recent research by Lew et al. (2020), mobile wallets have turned out to be a disruptive advancement. Mobile wallets are a recent development in the Indian context, and users are shifting from offline to online payment modes due to the COVID-19 outbreak (Chawla and Joshi, 2020). Online payment modules have become a unique payment mode in the Asian continent (Schmidthuber et al., 2020), which has driven unprecedented growth and increased demand for mobile wallet usage (Singh et al., 2020). As postulated in recent research, advances in mobile innovation have empowered the use of mobile wallets or m-wallets as imaginative payment techniques to replace conventional elements of actual wallets (Leong et al., 2020). Furthermore, Karim et al. (2020) analyzed the elements that influence teenagers in using e-wallets as a payment method by implementing extended TAM. Extant research examines millennials' intentions to use mobile wallets using TAM (Pertiwi et al., 2020). However, Hasan and Gupta (2020) stated that in India there are 135 million e-wallet users, and they have conducted research with the aim of finding out the factors that determine tourists' behavioral intentions to use m-wallet payments with the extended TAM model. In

this research, we have applied the TAM model in the context of a developing country. The basic TAM model has been studied with Perceived Ease of Use as an additional variable in the basic TAM model in previous research.

Hypothesis

The influence of information quality on Perceived Usefulness

Information quality is a key and essential factor in determining the performance of information and e-learning environments. Information has an important role in achieving learning goals and serious challenges arise due to the low quality of information. Alsabawy et al. (2016). In addition, Wu (2013) observed that the relationship between information quality and perceived usefulness was significant. Consequently, we can conclude that improving the quality of information in e-learning environments can contribute to greater perceived benefits. So, we hypothesize that:

H1: Information quality has a significant effect on perceived usefulness.

The influence of information quality on perceived ease of use

Information quality has a significant influence on perceived convenience because information that is accurate, clear, and easy to understand will help eliminate ambiguity and confusion, allowing users or recipients of information to quickly understand how to carry out tasks or use technology.The suitability of information to the context, good readability, and clear guidance support also play an important role in stimulating the perception that the task or use of technology is easy to carry out. Conversely, information that is inaccurate, difficult to access, or complicated can create obstacles in the perception of ease, making individuals tend to feel constrained in adopting or using a new concept or technology. Previous research found a significant influence on information quality on perceived convenience (Hidayah et al. 2020). Thus the following hypothesis is proposed:

H2: Information quality will have a positive effect on user satisfaction

The influence of system quality on perceived usefulness

System quality refers to the technical quality and functionality of a system or technology. The influence of system quality on perceived usefulness (perception of usefulness) is very influential in encouraging user adoption and acceptance of a technology. Systems that operate smoothly, are responsive, and intuitive tend to provide a positive user experience. High system qualities, such as good performance, an attractive interface, and ease of navigation, increase the perception that the technology is useful in helping users achieve their goals more efficiently and effectively. By providing a satisfying experience and performing functions well, system quality positively influences users' views of the extent to which the technology is useful, which in turn encourages interest and intention to adopt and continue using the technology. Previous research found a significant influence on system quality on perceived usability (Hidayah et al. 2020). Therefore, we make a hypothesis:

H3: System quality has a significant effect on perceived usefulness.

The influence of system quality on perceived ease of use

The relationship between system quality and perceived ease of use is not demonstrated empirically, as stated by Al-Fraihat (2020). According to Al-Fraihat

(2020), it is said that the lack of quality of the support system is often helped to have a beneficial impact on the system and understanding of the e-learning system among users. Ease of use must be considered for the utilization of a system. Furthermore, with the advent of communication features, such as forums, messages, and email, data from messages and forums can convey views and personal data that a student may not want the outside world to know via an internet service provider. Therefore, providing details before using the technology or system will increase their understanding and significantly influence their attitudes towards the overall usability of the system (Al-Fraihat, 2020). Therefore, this study seeks to test the following hypothesis:

H4: system quality has a significant effect on perceived ease of use.

The influence of service quality on perceived usefulness

Service quality refers to the quality of service provided to users by service providers. The influence of service quality on perceived usefulness (perception of usefulness) has strong implications for user acceptance of a service or product. High-quality services, including responsiveness to user needs, good customer support, and clear communication, can increase the perception that the service is useful in meeting user needs and goals. Users who feel well supported and receive solutions to problems they may encounter are more likely to feel that the service has real value and can help them achieve their desired outcomes. Thus, good service quality can positively influence users' views on the level of service usefulness, encouraging the desire to use it more widely and sustainably.Previous research found a significant influence of service quality on perceived usefulness (Hidayah et al. 2020). Therefore, we make a hypothesis:

H5: Service quality has a significant effect on perceived usefulness.

The influence of service quality on perceived ease of use

The influence of service quality on perceived ease of use is very influential in shaping the user's view of the ease of use of a service or product. High quality service, which includes smooth interactions, good support, and effective communication, can create a positive experience for users. When users feel well supported and guided through the usage process, they are more likely to find the service easy to use. Factors such as responsiveness to user questions, providing clear guidance, as well as quick responses to technical issues all contribute to the perception that the service is easy and seamlessly accessible. By providing high quality service, service quality positively influences perceived ease of use, which in turn can encourage greater interest and acceptance of the service or product.Previous research found a significant influence on service quality on perceived convenience (Hidayah et al. 2020).

H6: Service quality has a significant effect on perceived ease of use

The influence of perceived usefulness on behavioral intention

Perceived Usefulness (PU) is defined as the extent to which a person believes that using a particular information system or information technology will improve their performance (Davis, 1989). PU under TAM is hypothesized to have a direct relationship with behavioral intention (BI) to utilize the technology (Park et al., 2014). By applying the TAM model, Al-Maroof and Al-Emran (2018) have found an important relationship between PU and behavioral intentions to adopt

and use certain technologies. Additionally, previous research has found a positive relationship between PU and behavioral intentions to use technology in relation to electronic textbooks (BakerEveleth and Stone, 2015; Stone and Baker-Eveleth, 2013), mobile service providers (Abbas and Hamdy, 2015), travel online services (Li and Liu, 2014) and e-learning (Lin and Wang, 2012) and mobile wallets (Shin, 2009). A recent study concluded that PU positively influences user attitudes and intentions in the context of mobile wallets (Chawla and Joshi, 2019). In this view, previous research suggests that the intention to use mobile payment services is positively influenced by PU (Routray et al., 2019; Routray, 2019; Pertiwi et al., 2020; Jin, 2020). Therefore, based on these arguments, it can be hypothesized that:. Based on the conclusions of this research, the author proposes the following hypothesis:

H7: perceived usefulness has a significant effect on behavioral intention.

The influence of perceived ease of use on behavioral intention

In the present context, PEOU can be defined as the convenience associated with using *SIMONA*. Amin et al. (2014) consider PEOU as one of the important determinants for assessing user acceptance of technology. Previous research has shown that PEOU significantly influences user behavior (Ramayah and Lo, 2007) in the context of enterprise resource planning. Morosan (2014) reported that users will adapt new technology if they find it easy to use. BI is positively influenced by PEOU in terms of technology use (Jackson et al., 1997). The investigation of Venkatesh et al. (2002) highlighted that the PEOU and BI used have a fairly large and positive relationship. Likewise, BI uses the information system projected by PEOU (Eze et al., 2011). Barry and Jan (2018) suggested a significant and positive influence of PEOU on PU and perceptions of using BI to use certain systems. Furthermore, Al-Maroof and Al-Emran (2018) concluded that Web service technology is soft and easy to use; therefore, this has a positive impact on PU and BI. A recent study conducted by Reddy and Rao (2019) concluded that PEOU has a beneficial and strong effect on intent and is considered a key driver for users to continue using mobile wallet applications. As a result, Mun et al. (2017) stated that PU is the most influential determinant in predicting mobile payment services among millennials. More specifically, recent studies suggest that ease of use significantly influences users' intention to use mobile wallet services (Singh et al., 2020; Singh, 2020; Karim et al., 2020; Chawla and Joshi, 2020; Chopra and Ranjani, 2020 ; Saura et al., 2020). Based on the conclusions of this research, the author proposes the following hypothesis:

H8: Perceived ease of use has a significant effect on behavioral intention.

The influence of behavioral intention on actual use

Behavioral intention (BI) helps identify a user's intention to perform a task or voluntary behavior (Fishbein and Ajzen, 1975; Sheppard et al., 1988). Likewise, Fishbein and Azjen (1975) postulated that BI is considered a person's strength that helps achieve certain behavior. According to Cristea and Gheorghiu (2016), BI refers to a person's willingness to perform a certain task based on the premise of action. In previous research studies, BI as a construct was examined as a dependent variable in TAM studies and had a direct influence on technological AU (Shin, 2009; Yu and Huang, 2020). Previous research studies have found a

positive and significant relationship between BI and the use of new technologies (Barry and Jan, 2018; Faqih and Jaradat, 2015; Jaradat and Al Rababaa, 2013). Furthermore, Kurniasih et al. (2020) found a positive and significant influence of BI on AU. In accordance with the expansion of TAM with four variables by (Venkatesh et al., 2003), the results show that BI use has a significant and positive influence on user usage behavior. Based on the conclusions of this research, the author proposes the following hypothesis:
H9: Behavioral intention has a significant effect on actual use.

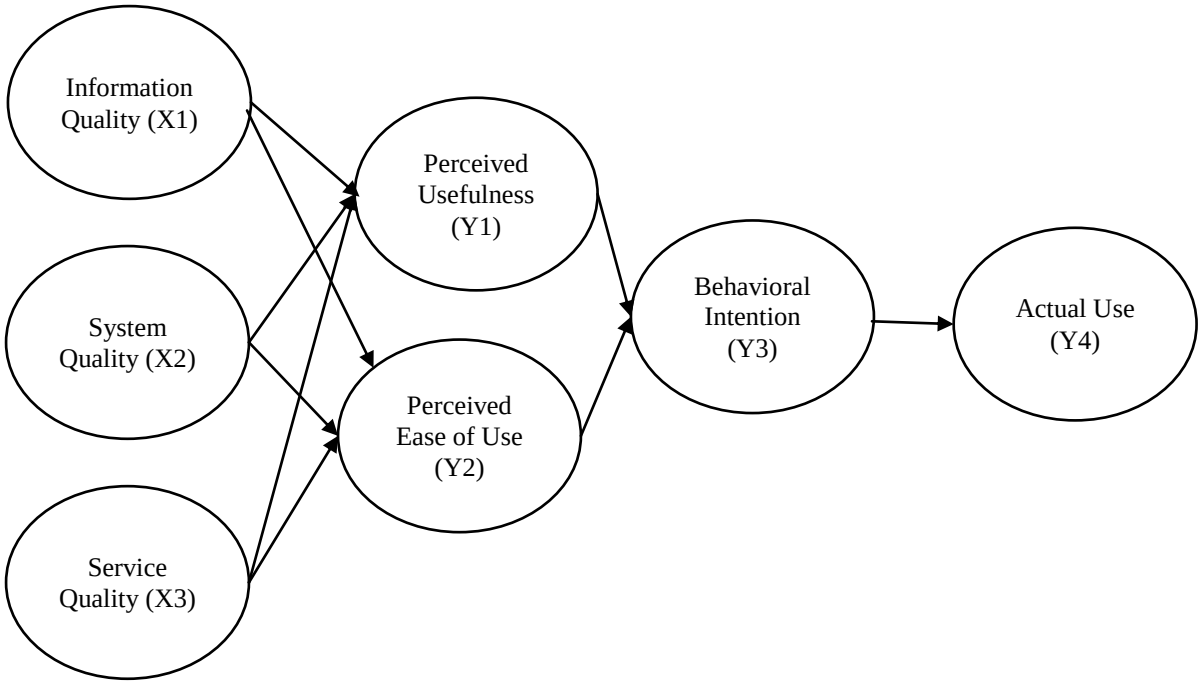

Figure 1.1 Conceptual Model

C. RESEARCH METHODS

Research methods are a way to understand a research object by guiding researchers in the sequence of how research is carried out which includes the techniques and procedures used in research. In this research, the approach used by researchers is quantitative research and uses statistical formulas to help analyze the data and facts obtained. Based on the background and problem formulation, the research design used is Causal Explanatory Research, namely research used to show the position of the variables studied and the influence between one variable and another.(Sugiyono, 2012:21).

The population in this study was all *SIMONA* users in the East Java Provincial Government. The sample size in this research was determined from 91 regional officials and *BAPPEDA* Partners as input supervisors who had used the *SIMONA* application so that the total research sample was 100 *SIMONA* application users. The data collection technique in this research is by using a questionnaire (Google Form). A questionnaire is a data collection technique that is carried out by giving a set of questions or written statements to respondents to

answer(Sugiyono, 2012:99). The type of questionnaire distributed via Google Form is a closed questionnaire. The answers to the questionnaire will be given a certain scale as a form of applying the Likert scale. The questionnaire distributed contained statements consisting of questions regarding the characteristics of the respondent as well as questions regarding the variables studied. The research results were then analyzed using structural equation model analysis with the help of the AMOS 24 application.

D. RESEARCH RESULT

Distribution and collection of questionnaires will take place from September 15 2023 to September 25 2023 or last for 10 days. Distribution and collection of questionnaires to respondents used as research samples was carried out using Google Form. Researchers distributed questionnaires online via social media such as WhatsApp to respondents who were deemed to meet the research criteria. A total of 100 respondents have filled out the questionnaire and will then be analyzed using SEM analysis with the help of the AMOS 24 application.

Respondent Characteristics

The table below describes respondent data based on gender. Of the 100 people studied, the majority of respondents, namely 54 respondents (54%) were women. Of the 100 people studied, the majority of respondents, namely 43 people (43%) were aged 36-45 years. Based on education. Of the 100 people studied, the majority of respondents, namely 71 people (71%) had a Bachelor's degree (S1).

Table 1.1 Respondent Characteristics

No	Gender	Frequency	%
1.	Man	46	46
2.	Woman	54	54
3.	17-25	4	4
4.	26-35	36	36
5.	36-45	43	43
6.	>45	17	17
7.	Diploma 3 (D3)	4	4
8.	Bachelor 1 (S1)	71	71
9.	Postgraduate (S2/S3)	25	25
Total		100	100

Source: Processed data (2023)

***Confirmatory Factor Analysis Test*(CFA)**

Table 1.2 CFA Test

Indicator	p	*Loading Factor*	Information	*Construct Reliability*	Information
X1.1	***	,522	Valid		
X1.2	***	,657	Valid	0.819	Reliable
X1.3	***	,535	Valid		
X1.4	***	,729	Valid		
X1.5	***	,657	Valid		
X1.6	***	,751	Valid		
X2.1	***	,715	Valid		
X2.2	***	,712	Valid	0.785	Reliable
X2.3	***	,687	Valid		
X2.4	***	,654	Valid		
X3.1	***	,672	Valid		
X3.2	***	,758	Valid	0.859	Reliable
X3.3	***	,864	Valid		
X3.4	***	,826	Valid		
Y1.1	***	,650	Valid	0.843	Reliable
Y1.2	***	,718	Valid		
Y1.3	***	,823	Valid		
Y1.4	***	,835	Valid		
Y2.1	***	,713	Valid		
Y2.2	***	,788	Valid	0.805	Reliable
Y2.3	***	,782	Valid		
Y3.1	***	,881	Valid		
Y3.2	***	,888	Valid		
Y3.3	***	,869	Valid	0.908	Reliable
Y3.4	***	,777	Valid		
Y4.1	***	,884	Valid		
Y4.2	***	,715	Valid	0.815	Reliable
Y4.3	***	,661	Valid		

Source: Processed data (2023)

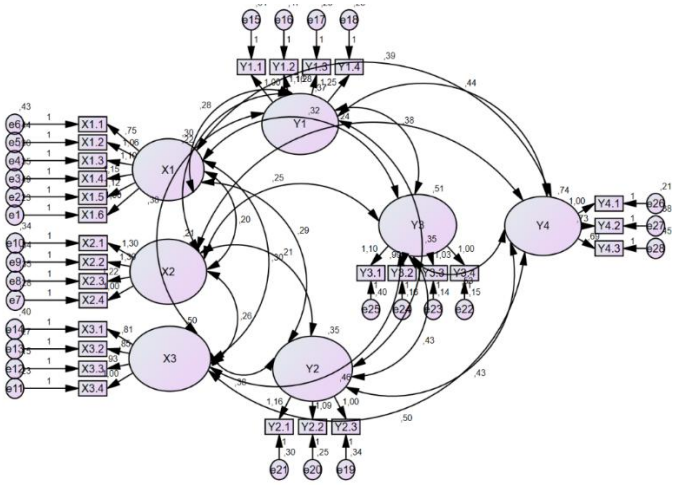

Figure 1.2 CFA test

Based on the results of SEM analysis in the Validity Test, it was found that all indicators met the validity requirements (Loading factor > 0.5). Meanwhile, the entire construct has passed the reliability test with a cut off value greater than 0.6.

Model Suitability Test (Goodness of Fit Test)

Table 1.3 Model Test

Criteria	Cut Off Value	Test result	Information
CMIN/DF	< 2	1,115	Fit
Sig. Probability	≥ 0.05	0.087	Fit
RMSEA	≤ 0.08	0.034	Fit
RMR	≤ 0.05	0.040	Fit
TLI	≥ 0.95	0.979	Fit
CFI	> 0.95	0.984	Fit

Source: Processed data (2023)

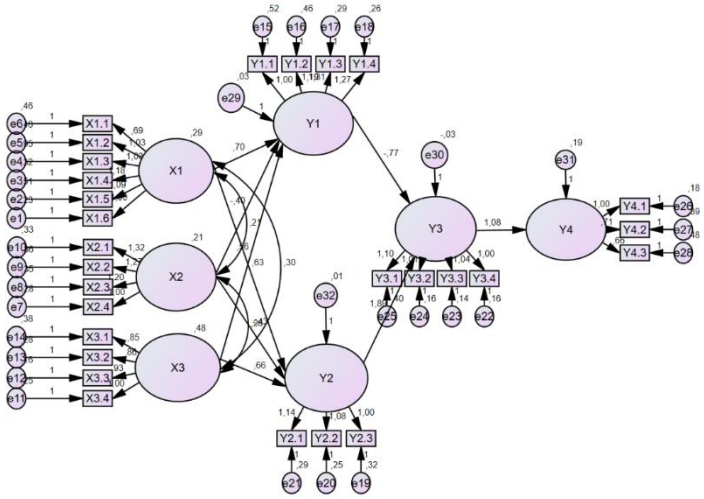

Figure 1.3 SEM Model Test

Based on Table 1.3, it can be seen that all the criteria have fit criteria which indicate whether the model is fit. Ferdinand (2014) states that based on the

parsimony rule, if some of the model fit criteria are good then the model has been declared fit.

Causality Test

Table 1.4 Results of Causality Testing

			Estimate	S.E	CR	P	Information
Y1	<---	X1	,698	,308	2,263	,024	Hypothesis accepted
Y2	<---	X1	,626	,257	2,438	,015	Hypothesis accepted
Y1	<---	X2	-,400	,385	-1,038	,299	Hypothesis rejected
Y2	<---	X2	-,426	,310	-1,375	,169	Hypothesis rejected
Y1	<---	X3	,562	,198	2,843	,004	Hypothesis accepted
Y2	<---	X3	,660	,168	3,932	***	Hypothesis accepted
Y3	<---	Y1	-,768	,805	-,953	,340	Hypothesis rejected
Y3	<---	Y2	1,893	,828	2,285	,022	Hypothesis accepted
Y4	<---	Y3	1,081	,110	9,831	***	Hypothesis accepted

Source: Processed data (2023)

Based on Table 4.13, the interpretation of each path coefficient is explained, namely, Information Quality was found to have a significant effect on Perceived Usefulness. This is proven by the CR value of 2.263 and the significant probability (p) obtained is 0.024, which is smaller than the required significance level, namely 0.05. Information Quality was found to have a significant effect on Behavioral Intentions. This is proven by the CR value of 2.438 and the significant probability (p) obtained is 0.015, which is smaller than the required significance level, namely 0.05. System Quality was found to have an insignificant effect on Perceived Usefulness. This is proven by the CR value of -1.038 and the significant probability (p) obtained is 0.299, which is greater than the required significance level, namely 0.05. System Quality was found to have an insignificant effect on Behavioral Intentions. This is proven by the CR value of -1.375 and the significant probability (p) obtained is 0.169, which is greater than the required significance level, namely 0.05. Service Quality was found to have a significant effect on Perceived Usefulness. This is proven by the CR value of 2.843 and the significant probability (p) of 0.004 is obtained, which is smaller than the required significance level, namely 0.05. Behavioral intentions were found to have a significant effect on actual use. This is proven by the CR value of 9.831 and the significant probability (p) of 0.000 is obtained, which is smaller than the required significance level, namely 0.05.

Discussion

Findings from the research results show that the quality of information significantly influences the perception of usefulness (Perceived Usefulness) in using the *SIMONA* application, as well as having a significant influence on the perception of ease of use (Perceived Ease of Use) of the application. However, the findings show that system quality does not have a significant influence on the perceived usefulness and ease of use of the *SIMONA* application. On the other hand, service quality has a positive and significant impact on the perception of application usability and ease of use. Although perceived usefulness does not have a significant effect on behavioral intention to use, however, perceived ease of use has a significant impact on behavioral intention. Furthermore, the behavioral intention to use the *SIMONA* application significantly influences the actual use of the application. These findings provide important insights regarding the factors influencing the acceptance and use of the *SIMONA* application, which can form the basis for developing further strategies to increase adoption of this application.

The implications of this research provide valuable insights for the development and implementation of the *SIMONA* application. The finding that information quality and service quality have a significant influence on perceived usefulness and ease of use of applications highlights the importance of providing accurate and high-quality information to users, as well as attention to adequate service aspects. Although system quality does not appear to influence user perceptions, it does signal that a focus on improving the system may need to be paid more attention or developed to better suit user needs. Furthermore, the finding that perceived ease of use has a significant impact on behavioral intention to use indicates that designThe user interface must be optimized to be easy for users to understand and use. By evaluating and improving these aspects, developers and stakeholders can increase adoption of the *SIMONA* application and optimize its actual use. These implications create the foundation for the development of more targeted and effective strategies to address the challenges of user acceptance of these applications in the future.

The implications of this research for previous research are related to research models that integrate the Delone & McLean model with the Technology Acceptance model. The integration of these two models was adapted from Prasetyo's (2021) research model, so that the results of this research and previous research contribute to sustainable learning related to the use of technology and the success of that use. Ease of use, system quality, service quality and information between the platforms used will generate positive behavioral intentions for actual use.

E. CONCLUSION

From the reported research results, it can be concluded that the quality of information has a significant impact on the perception of usefulness and ease of use of a system or service. Service quality has also been proven to positively and significantly influence user perceptions of usefulness and ease of use. However, system quality does not show a significant influence on these two aspects. Furthermore, although there is a negative trend between perceived usefulness and

behavioral intention, the relationship cannot be considered statistically significant. On the other hand, perceived ease of use is proven to have a positive and significant influence on user behavioral intentions. Furthermore, behavioral intentions significantly influence actual use, indicating that an individual's desire or willingness to use a system or service has a real impact on actual usage actions. Overall, these findings provide important insights for the development and improvement of systems or services, emphasizing the importance of information quality, service quality, and ease of use in designing better user experiences.

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