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### FACTORS INFLUENCING THE IMPLEMENTATION OF E-PROCUREMENT WITH PERCEPTIONS OF EASE OF USE AS MEDIATION VARIABLES

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**Abstract**: Cases of corruption that are increasingly rife in the procurement of goods and services have prompted the government to issue a new policy on the use of the e-procurement system. This system is considered capable of overcoming transparency problems so that it is expected to be able to overcome problems in the procurement of goods and services, so that by implementing this system it is necessary to conduct research on the effectiveness of the implementation of the e-procurement system. This research aimed to determine the effect of system and information quality on the successful use of e-procurement at the Universitas Terbuka, with ease of use as a mediating variable. 357 internal users of the e-procurement system made up the population, and 107 people were selected as a sample based on their strata. Additionally, Smart PLS (Partial Least Square) version 4 is the analytical technique employed. The research results show that there is a significant positive influence between system quality and the success of using e-procurement. Moreover, system and information quality had a positive and significant effect on the ease of use. Information quality did not affect the successful use of e-procurement, while system quality had a positive and significant effect through the ease-ofuse mediation variable. Information quality also had a positive and significant effect on the successful use of the e-procurement system through the ease-ofuse mediation variable.

**Keywords**: Successful Use of E-Procurement Systems, Information Quality, System Quality, Ease of Use

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### INTRODUCTION

The Indonesian government has established national policies and strategies for developing and realizing e-government to create public transparency. This policy is stipulated in Presidential Regulation Number 16 of 2018 concerning the Procurement of Goods and Services for government agencies using an electronic auction system, better known as the e-procurement system. The auction system is carried out electronically by utilizing communication and information technology facilities organized by the Electronic Procurement Service (LPSE). The aim of implementing e-procurement is to achieve cost efficiency, including reducing operational costs and reducing the risk of a number of irregularities in the procurement of goods and services. In connection with this, it is necessary to measure the effectiveness and feasibility of implementing the e-procurement system to increase transparency and reduce the risk of irregularities.

The Universitas Terbuka (UT), as a state university with a Public Service Agency (PTN-BLU), has implemented an e-procurement system per Presidential Regulations in procuring goods and services to increase operational efficiency and benefits. It is in accordance with research conducted by Nurchana et al. (2014), which stated that E-Procurement is an auction system for procuring government goods/services by utilizing the internet-based technology, information, and communication so that it can take place effectively, efficiently, openly and accountably. Apart from that, the e-procurement system can also prevent corrupt practices that often occur in procuring goods and services due to the absence of a meeting process between officers and partners. Perceived usefulness is a level where a person believes that using a system can improve performance, increasing productivity and effectiveness (Ginting and Marlina, 2017). Haryati et al. (2019) explain that perceived usefulness means: "The extent to which a person believes that using a particular system will improve his work performance," which means that a person will believe that a particular system will improve the performance or performance of system users. The phenomena related to the implementation of e-procurement in Indonesia are generally not easy and encounter many obstacles in the implementation stage. Research conducted by Gokmauli (2008) suggested that the implementation of the e-procurement system has not been maximized due to the failure to fulfill three implementation requirements from the government, including legal requirements for implementation (not yet ready for a legal umbrella), technical requirements for implementation/level of technological capability, as well as requirements management/human resource capability level. The phenomena found in implementing e-procurement in the Universitas Terbuka environment align with research by Gokmauli (2008), especially on the requirements/level of technological capabilities and the level of human resource capabilities. The phenomena found include: (1) the quality of the system is not running as expected by UT, where the e-procurement system takes quite a long time to respond to each user request, and the navigation system is also not easy/ friendly for the user; (2) The quality of information from e-procurement is not yet optimal, such as the level of accuracy of the information provided by the system and the completeness of the information cannot be entirely relied upon; and (3) perceived ease of use and perceived benefits of using e-procurement in the Universitas Terbuka environment are not optimal.

The research was carried out using study objects at UT, one of the government's higher education institutions with the mission of equalizing the education for all Indonesian citizens wherever they are. In order to better meet the demands of the digital age, Universitas Terbuka implemented an e-procurement system to enhance operational performance. This innovation process aligns with the transformation process of the Universitas Terbuka from the status of a State University with a Public Service Entity (PTN-BLU) to a State University with a Legal Entity (PTN-BH). This change in status is stated in the Minister of Education and Culture's letter Number 0835/E.E3/KB.00/2021T dated 07 December 2021 concerning the Approval of the Universitas Terbuka to become a Legal Entity PTN. Obtaining this status is one of the reasons for this research. The implementation of the e-procurement system has had an impact on increasing efficiency and making the process of procuring goods and services faster.

Several individuals have carried out research regarding the success of e-procurement systems. The research results show that information

quality has a positive effect on perceived ease of use (Machdar, 2016), system and information quality or ISSM dimensions have an effect on the use of e-learning systems (Purwanto and Pawirosumarto, 2017), and perceptions of usefulness (Tiana et al., 2019), perceived ease of use (Rezvani et al., 2022), and ease of use (Martono et al., 2020). Ease of use influences the success of the ASN SIM at Ministry of Agriculture (Arsyanur et al., 2019). However, Krisdiantoro et al. (2019), Khairrunnisa and Yunanto (2017), and Wahyudi et al. (2017) found that the ISSM dimensions did not affect the implementation of e-procurement systems.

The electronic auction system in Indonesia has many benefits. However, there are still many obstacles at the implementation stage due to technology, which is still relatively expensive, and the availability of less reliable human resources. This research will review the success and ease of implementing an e-procurement system, which is influenced by the availability of system quality and information quality, as well as the existence of research gaps from previous research that connects these variables. Meanwhile, the novelty in this study refers to the research conducted by Gokmauli (2008) focusing on the requirements for the level of technological capability and the level of human resource capability to identify obstacles to implementing e-procurement in UT. The benefit of research is as information for UT, the government, and the private sector. For the government as a reference in making policies and technical implementation of e-procurement, for Universitas Terbuka as input and evaluation of e-procurement implementation, and the private sector as a reference in implementing e-procurement in terms of information technology readiness and the availability of reliable human resources. The objectives of this research are: (1) to determine the influence of the quality of the application system for procurement of goods and services on the success of using the application, (2) to determine the influence of the quality of available information on the application for procurement of goods and services, (3) to determine the influence of the quality of the information provided available on the application. Procurement of goods and services on the successful use of applications, and (4) to determine the role of ease of use in mediating the influence of system quality and information quality on the effective ness of application programs.

### LITERATURE REVIEW Procurement

According to Turban et al. (2018), procurement refers to the process of purchasing goods and services by companies. The understanding of procurement management is the organization of all tasks pertaining to the needs for purchasing goods and services. The function requires significant time and effort in activities such as selecting quality suppliers, negotiating prices, building strategic relationships with suppliers, as well as evaluating suppliers and certificates.

The procurement division is responsible for ensuring that activities are carried out efficiently, focusing on cost-effectiveness while also guaranteeing the quality of goods and services and the convenience of services received (Booth, in Malik 2019). Several factors are considered in the implementation, such as the strategies that need to be aligned with the agreed timeframe and the financing allocated for these activities.

#### **E-Procurement**

In essence, e-procurement is a procedure businesses use to create contracts to purchase goods or services using IT systems. It can encompass the contract negotiation and execution and purchasing through various means, such as auctions, card buying, internet bidding, electronic ordering, and integration of the automated procurement systems (Moon, 2005). Furthermore, e-procurement is applied to an integrated database system and wide area internet-based communication system network in part or all of the purchasing process (Croom and Brandon-Jones, 2005).

Government Regulation No. 24 of 2010 defines e-procurement as the procurement of goods and services that use information technology and electronic transactions following statutory provisions. It refers to using integrated communication systems to conduct part or all of the purchasing process.

### **System Quality**

System quality refers to evaluating information system processes centered on the outcome of the interaction between the user and the system. Specifically, it emphasizes the system's perform-

ance, which denotes how effectively the hardware, software, policies, and procedures can provide the user with the necessary information (Harjito et al., 2015). In line with this, Layongan et al. (2022) asserted that the quality of information systems is contingent on the effectiveness of its components, such as hardware, software, people, procedures, databases, communication networks, data, activities, networks, and technology in generating information for users. To assess system quality, it is essential to examine the effectiveness of the information system deployed within the organization. The evaluation encompasses various aspects, including the access convenience, system flexibility, system integrity capability, and response time, as stated by Bailey and Pearson in Sompotan et al. (2021).

### **Information Quality**

The variable is the output quality produced by the information system, as described by (Rai et al., 2002). This measure focuses on the system's output value provided to the user. Determining the value considers the benefits and costs of acquiring the information. Webber (2010) assessed the quality of information by grouping it into the following characteristics: originality, accuracy, completeness, uniqueness (nonredundancy), timeliness, relevance, completeness, precision, brevity, and informativeness. To evaluate information quality, Webber (2010) identified several characteristics, including availability, completeness, accuracy, accuracy of the information, consistency, reliability, and currency, as well as the format of the output as the characteristics used by Bailey and Pearson (1983) in Harjito et al. (2015).

### Perceived Ease of Use

Perceived Ease of Use is the extent to which an individual believes that using a specific system will require minimal physical and mental effort (Davis, 1989) (Zhao et al., 2018). It can contribute instrumentally to improving one's performance. Since the user has to exert less effort with an easy-to-use tool, other tasks can be easily completed. Perceived ease of use refers to the belief regarding using a particular system without significant physical or cognitive exertion. It represents the degree to which an individual believes that employing the system can alleviate the effort required to perform

a task (Haryati et al., 2019). In this research, "Perceived Ease of Use" encompasses the following aspects. The system is deemed highly facile for acquisition and characterized by seamless functioning. The users' proficiency levels are expected to advance significantly with an increase in the intensity of system usage and are deemed to be remarkably effortless to operate, as cited in Davis (1989).

### Successful Use of the E-Procurement System

Perceived ease of use refers to the extent to which an individual believes computers to be comprehensible (Davis, 1989). In e-procurement, ease refers to the simplicity of the online auctioning goods and services, whereby the managerial services provided are more straightforward to comprehend than a manual system. Perceived usefulness is the conviction that information technology can enhance user performance or assist them in performing their tasks. The perceived usefulness of technology can be measured by several factors, such as the enhancement of user productivity upon technology adoption, improved work performance, and increased process efficiency. Consequently, adopting a new information technology system, particularly e-procurement, is probable. Kademaunga and Phiri (2019) stated that The perception of usefulness significantly influences the implementation of the e-procurement. Karim and Lasena (2017) stated that ease of usage positively impacts User satisfaction with e-procurement.

# HYPOTHESIS DEVELOPMENT System Quality and Successful Use of the EProcurement

The success of an information system used by an institution is influenced by the quality of the system used (DeLone and McLean, 2003). In this case, to produce good system quality, it must be supported by good condition of the computer equipment. Due to the continuous use of e-procurement systems for input and output of data and information, a tool is needed to help this activity occur without interruption (Sompotan et al., 2021). System quality focuses on the absence of system glitches and easy documentation and sometimes relates to creating codes that are easily understood by users (Seddon and Kiew, 1996). Apart from that, a system that rarely experiences errors will have an impact on increasing user satisfaction and

will improve the quality of the system used.

**H1**: System quality has a positive and significant effect on the Successful Use of e-procurement.

### System Quality and Perceived Ease of Use

System quality can influence user satisfaction (DeLone and McLean, 1992). DeLone and McLean's success model suggests that system quality measures technical success, information quality measures semantic success, and system use, user satisfaction, individual impact, and organizational impact measure effectiveness success. Information system quality is a characteristic of the inherent information about the system itself (De-Lone and McLean, 1992). Information system quality is also defined by Davis (1989) and Chin and Todd (1995) as perceived ease of use, which is the degree to which computer technology is felt to be relatively easy to understand and use. It shows that if information system users feel that using the system is easy, they do not need much effort, so they will have more time to do other things, likely improving their overall performance.

**H2**: System quality has a positive and significant effect on perceived ease of use.

### Information Quality and Perceived Ease of Use

According to O'Brien (2005), information quality is the degree to which information has content, form, and time characteristics that give it value for specific end users. Liu and Arnett (2000) stated that information with the best quality will increase users' perceived usefulness and use of information systems. Information quality is the output quality in the form of information produced by the information system (Rai et al., 2002). Information quality can also be seen from the potential to produce unlimited information within and outside the organization (Barnes and Vigen, 2003). The quality of information has a positive effect on user satisfaction (Harjito et al., 2015), meaning that the higher the quality of information obtained from using the system, the higher the level of use will increase. In other words, the intensity of system use will increase if the information obtained from using the system is high quality and useful.

**H3**: Information quality has a positive and significant effect on perceived ease of use.

### **Information Quality and Successful Use of the E-Procurement**

Information quality measures the quality of e-procurement implementation output. Because information quality is an important determining factor in the user satisfaction. Information quality shows the results of the implementation of e-procurement, which relate to the value, benefits, and relevance of the information produced for system users, so that providing quality information, namely complete, accurate, up to date and trustworthy, means that a user will feel more satisfied with information obtained. The quality of the information from e-procurement systems that can be used to audit goods and services in research has been proven to increase trust in the system (Sompotan et al., 2021). The quality of e-procurement system data used to procure goods and services in the research has been proven to impact system trust. In this research, ease of understanding information, completeness, accuracy of information, concise and clear content, and presentation of information. The findings of this research show that the higher the quality of the information produced by the eprocurement system, the higher the user's trust in the system.

**H4**: Information quality has a positive and significant effect on Successful Use of e-procurement.

### Perceived Ease of Use and Successful Use of the E-Procurement

The use of information systems that have been developed, according to McGill et al. (2003), refers to how often users use the information system. The more frequently a user uses an information system, the more levels of learning the user obtains regarding the information system. Perceived usefulness is the belief that the use of information technology will improve user performance or will help users in doing their work. In this research, someone will adopt a new information technology system, especially e-procurement, if the system can benefit their work and achievements. In other words, the level of usability influences the user's behavioral intentions (Daud et al., 2018).

**H5**: Perceived ease of use has a positive and significant effect on the Successful Use of e-procurement

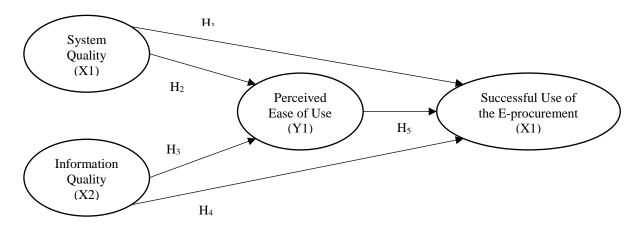


Figure 1. Research Model

## **METHOD** Samples

The research encompassed 357 individuals who had served in various roles. The sampling technique uses a cluster sampling method, including the Quality Controllers, Procurement Officers (PP), Commitment Making Officers (PPK), and the Selection Working Group (POKJA). There were 107 responders in the sample used in this study.

#### Measurement

All items on each construct are measured by five Likert scales ranging from 1 = strongly disa-gree until 5 = strongly agree). The operational definitions of the variable are explained in Table 1.

### Methode

Data analysis was carried out using Partial Least Squares (PLS) structurally Modeling Equation Techniques (SEM) (Ringle et al., 2015).

**Table 1. Operational Definition of Variables** 

No	Variable	Dimensions	Indicator
1.	System Quality	Ease of access	1. The system can be accessed easily.
	(Delone and McLean, 1992)		2. It doesn't require much effort when using the system.
		Accuracy	3. The information generated is very accurate
			4. The reports generated are exact
		Reliability	5. Reliable system
			6. The system provides up-to-date information
2.	Information Quality	Understandability	1. The information generated is very clear
	(Rai et al., 2002)		2. The information format is easy to understand
		Completeness	3. Information meets needs
			4. The information is quite complete
		Accuracy	5. Information is quite accurate
			6. Information can be trusted
		Conciseness	7. Information concise and clear to understand
			8. Information represents function
		Format	9. Presentation of information is easy to understand
			10. Information components are precise and useful

No	Variable	Dimensions	Indicator
4.	Perceive Ease of Use	The system is very easy to learn	1. Easy-to-understand system
	(Davis, 1989)		2. Easy-to-learn system
		The system can work easily	3. Very flexible system
			4. The system lightens the work.
		The user's skill will increase	5. Increase in skill along with intense usage
		with increasing usage intensity	6. The system can improve Technology prowess
		System	7. Interaction with the system does not require much effort
		The system is very easy to operate	8. Easy interaction with the system when used
5.	Successful Use of the E-procurement System (Hartono, 2007)	Improving the performance of the procurement process of goods and services	1. The system helps in completing work on time
			2. The input process is done faster
		Reduce operational costs	3. Operational costs can be reduced.
			4. More efficient operational costs
		Increased access to auction information to make it more transparent	5. Can access auction information easily
			6. Auction information is easier to obtain
		Increase supplier participation	7. Supplier participation increases while using the system
			8. The system makes it easy for suppliers to participate

### **Data Analysis**

The outer model measurement functions to evaluate the relationship between the construct and its indicators, and the measurement is divided into validity and reliability tests. The first stage of the validity test through confirmation factor analysis (CFA) used to identify the unobserved variable can be measured using the observed construct. Furthermore, an indicator meets the validity requirements when the loading factor value is > 0.70(Hair, 2021). The data processing results based on the loading factors of the three variables have met the loading factor requirements > 0.70, and the data is declared valid. After conducting the validity test, the subsequent stage is to determine the Average Variance Extracted (AVE) value, which is said to be good or meet when > 0.05 (Palupi, 2021). The following Ave values of the three variables that have met the requirements > 0.05

Requirements for reliability test results are declared reliable when they produce a composite value above 0.7. The construct value is reliable with a Cronbach's Alpha value> 0.6 (Ghozali and Latan, 2015). The output results from the reliabili-

ty test based on the outer model meet the test requirements with composite reliability and Cronbach's Alpha values above 0.7 and 0.6.

#### RESULTS

The R-squares value, which indicates the goodness of fit for the model, is sequentially determined to be strong, moderate, or weak for values of 0.75, 0.50, and 0.25, respectively. Based on the results of data processing, the value for the ease-of-use variable (Y1) is 0.602, while for the Sustained Use of the e-procurement System (Y2) variable is 0.816, as shown in Table 2.

Table 2. R-square (R2) Value of The Research Model

Construct	R Square	
Perceived Ease of Use	0.602	
Successful Use of e-procurement System	0.816	

The R-square results in Table show that 60.2% of the Perceived Ease of Use variable (Y1)

can be influenced by system (X1) and information quality (X2). Meanwhile, the Successful Use of the e-procurement System (Y2) of 81.6% is influenced by the system quality (X1), information quality (X2), and the Perceived Ease of Use variable (Y1). The Q2 values can be calculated using the following formula:

Q2 = 
$$1 - ((1 - R12)(1 - R22)...(1 - Rx2))$$
  
=  $1 - ((1 - 0.6022)(1 - 0.8162))$   
=  $0.787$ 

The results of the calculation of the Q2 value have met the Q2> 0 requirements. Therefore, the research model has a predictive relevance value with the observation produced by the model, and the estimation of the parameters is relevant. The goodness of Fit Index (GOF) is also calculated manually from the square root of the Average Communality Index and Average R-squares using the formula as follows:

GoF Index = 
$$\sqrt{\text{AVE x R2}}$$
  
=  $\sqrt{((0.737+0.619+0.610+0.657)/4)} \times ((0.602+0.816)/2)$   
= 0.682

Based on the calculation results above, the GOF Index value can be said to be large, above 0.682, indicating an appropriate model. The next stage is hypothesis testing related to the influence of system (X1) and information quality (X2) on endogenous variables, namely Perceived Ease of Use (Y1) and Successful Use of the e-procurement System (Y2) with Perceived Ease of Use (Y1) acting as mediation, as shown Table 3.

Referring to the hypothesis testing statistics in Table 7, the description of results is described

as follows. Hypothesis 1. The system quality variable for the successful use of the e-procurement system has a path coefficient of +0.432 with a t-value of 5.851 > 1.983 and a p-value of 0.000 < 0.05. Therefore, the system quality has a positive and significant effect on the successful use of e-procurement.

Hypothesis 2. The system quality for the ease of use of e-procurement has a path coefficient value of +0.520 with a t-value of 6.030 > 1.983 and a p-value of 0.000 < 0.05. Therefore, the system quality has a positive and significant effect on the ease of use of e-procurement.

Hypothesis 3. The information quality variable on the ease of use of e-procurement has a path coefficient of +0.347 with a t-value of 3.498 > 1.983 and a p-value of 0.000 < 0.05. Therefore, information quality has a positive and significant effect on the ease of use of e-procurement.

Hypothesis 4. The information quality variable on the successful use of e-procurement has a path coefficient of +0.067 with a t-value of 1.459 < 1.983 and a p-value of 0.144 > 0.05. Therefore, the information quality does not affect successful use of e-procurement.

Hypothesis 5. The variable ease of use for the e-procurement system has a path coefficient of +0.492 with a t-value of 7.264 > 1.983 and a p-value of 0.000 < 0.05. Therefore, ease of use has a positive and significant effect on the successful use of e-procurement.

Hypothesis 6. The system quality variable on the successful use of the e-procurement system through ease of use has a path coefficient of +0.256 with a t-value of 4.407 > 1.983 and a p-value of 0.000 < 0.05. Therefore, the system quality has a positive and significant effect on the successful use of e-procurement through ease of use.

Relations Between Constructs	Original Sample (O)	T Statistics ( O/STDEV )	P Values
SQ -> SUS	0.432	5.851	0.000
SQ -> PEU	0.520	6.030	0.000
IQ -> PEU	0.347	3.498	0.000
IQ -> SUS	0.067	1.459	0.144
PEU -> SUS	0.492	7.264	0.000
SQ -> PEU -> SUS	0.256	4.407	0.000
IQ -> PEU -> SUS	0.171	3.191	0.001

**Table 3. Hypothesis Test Results** 

Hypothesis 7. The information quality variable on the successful use of the e-procurement system through ease of use has a path coefficient of +0.171 with a t-value of 3.191 > 1.983 and a p-value of 0.000 < 0.05. Therefore, the information

quality has a positive and significant effect on the successful use of the e-procurement through ease of use. Hypothesis testing results using the following Smartpls software can be seen in Figures 2 and 3.

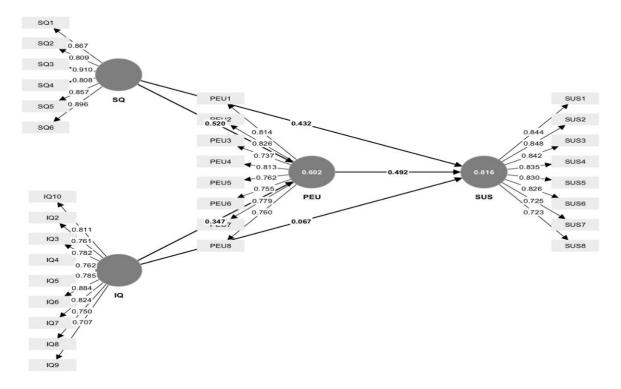


Figure 2. Outer Model Results

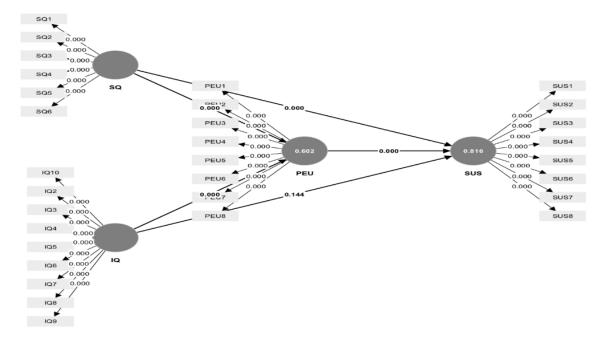


Figure 3. Hypothesis Test Results

#### DISCUSSION

### The System Quality Influences the Successful Use of E-Procurement

System quality has a positive and significant effect on the successful use of the e-procurement system. The better the system quality, the more successful the use of e-procurement at the Universitas Terbuka. This research is consistent with Krisdiantoro et al. (2019). Khairrunnisa and Yunanto (2017), Sari and Arifin (2016), and Layongan et al. (2022). However, this contradicts Wahyudi et al. (2017) and Ramadhani et al. (2021), where system quality does not affect the success of e-procurement. Davis (1989) defines the quality of information systems as perceived ease of use, the degree to which computer technology is felt to be relatively easy and easy to use. If information system users feel that using the system is easy and does not require a lot of effort, they will have more time to do other things, which may have an impact on improving overall performance. The higher the user's perception of the quality of an information system, the more satisfied they are with the system (Bailey and Pearson, 1983). The results of this research also support the theory put forward by De-Lone and McLean (2003) that the success of an information system used by an agency is influenced by the quality of the system used. System quality measures the information and focuses on the interaction between the user and the system. Information users can optimize their overall performance by perceiving the system as user-friendly, requiring minimal effort for operation and providing more time for the other activities (Wahyudi et al., 2017).

## System Quality Affects Ease of Use of the E-Procurement Systems

The results of hypothesis 2 indicate that system quality has a positive and significant effect on the ease of use of e-procurement at the Universitas Terbuka. The higher the quality provided, the easier it is to use the system. The results are consistent with Purwanto and Pawirosumarto (2017), Sari and Arifin (2016), and (Wahyudi et al., 2017). The results of this research support the theory by Davis (1989) and Chin and Todd (1995) as perceived ease of use, which is the degree to which computer technology is felt to be relatively easy to under

stand and use. Perceived usefulness is the level at which someone believes that using a particular system can improve performance (Davis, 1989). The results support and expand research conducted by Petter and McLean (2009) that there is a strong relationship between the variables: system quality and user satisfaction, information quality and user satisfaction, information quality and intention to use, and system quality and intention to use. The ease of e-procurement refers to the simplicity of auctioning goods and services through an online platform. It implies that the services managers offer are more comprehensible than a manual system. A frequently used system indicates that it is well-known, user-friendly, and easier to operate for its users.

### The Quality of Information Affects the Ease of Use of the E-Procurement System

The research results show that the quality of information has a positive and significant effect on the ease of use of the e-procurement system at the Universitas Terbuka. The better the information system the campus provides in procuring goods and services, the easier it is to use e-procurement. This research supports Harjito et al. (2015), Krisdiantoro et al. (2019), Karim and Lasena (2017), and Purwanto and Pawirosumarto (2017). However, Livari (2005) provided empirical evidence that the quality of information has no significant effect on the intensity of use because the research uses a mandatory system. The research results confirm and expand research conducted by Lederer et al. (2000), which stated that information quality is the variable that has the most positive and significant influence on interest in using technology systems. Lederer's research was conducted on the acceptability of the use of technology and the World Wide Web. Suppose internet users are confident in the quality of the system they use and feel that using the system is not difficult. In that case, they will believe using the system will provide greater benefits and improve their performance. The information quality refers to the output of the information system regarding its production's value, benefits, relevance, and urgency (Pitt et al., 1998). Meanwhile, "ease of use" maintains the frequency with which users engage with the system through various learning levels McGill et al. (2003).

### The Quality of Information Affects the Successful Use of the E-Procurement System

The quality of information does not affect the successful use of e-procurement at the Universitas Terbuka. This research contradicts Ramadhani et al. (2021) and Krisdiantoro et al. (2019) but supports Sompotan et al. (2021), where information quality does not affect the implementation of eprocurement. According to Delone and McLean (1992, 2003), information quality is related to system use, user satisfaction, and net benefits. This variable is the user's perception of the quality of the information generated by e-procurement. According to Dwivedi et al. (2012), quality information comprises several essential attributes. These attributes include accuracy, adequacy, availability, completeness, conciseness, consistency, format, precision, relevance, reliability, scope, timeliness, understandability, uniqueness, and usefulness.

### Ease of Use Affects the Success of Using the E-Procurement System

Ease of use has a positive and significant effect on the success of using e-procurement. An elevated perception of ease of use by the user correlates positively with a higher success rate of using the system. This study supports Karim and Lasena (2017), Tulodo and Solichin (2019), and Kademaunga and Phiri (2019). The ease of use of information systems implies that users can operate with greater efficiency and efficacy. The perceived ease of use in implementing e-procurement signifies that the system is comprehensible and user-friendly. It consequently fosters users' intent to regularly utilize the system (Daud et al., 2018). Kademaunga and Phiri (2019) showed that perceived usefulness has a significant effect on the implementation of e-procurement. According to Karim and Lasena (2017), ease has a positive effect on e-procurement user satisfaction.

### System Quality Affects the Successful Use of E-Procurement Systems through Ease of Use

System quality has a positive and significant effect on the successful use of the e-procurement through ease of use as the mediation variable. Higher quality standards of e-procurement result in a perception of ease of use, thereby instilling a sense of accomplishment among the users in

successfully implementing the system.

# The Quality of Information Affects Successful Use of the E-Procurement System through Ease of Use

Information quality has a positive and significant effect on the successful use of e-procurement through ease of use as the mediation variable. The information quality significantly impacts the ease of use, which ultimately influences the successful implementation of e-procurement.

### **IMPLICATIONS**

In practice, this research shows that implementing the e-procurement system has provided direct and indirect benefits. Direct benefits include increasing data accuracy, providing efficiency in operational processes, faster processes, and reducing costs from administration to operations. It supports and expands the theory used in research, including system quality theory, information quality, perceived ease of use, and successful use of e-procurement. With a number of benefits, the Universitas Terbuka and the government agencies and universities can procure goods and services by implementing the e-procurement system by improving system quality and information quality.

### RECOMMENDATIONS

Suggestions for the Universitas Terbuka. To increase the successful implementation of the e-procurement system, the Universitas Terbuka and similar institutions that implement e-procurement should further improve System quality, Information quality, Ease of use, and The successful use of e-procurement. System quality by providing a system easily accessible with a good internet connection, complete and systemic data documentation, timely reporting process, and provision of up-to-date information systems in goods and services procurement activities. Information quality through accurate information systems, easy-to-understand formats to facilitate monitoring and evaluation, provisions according to needs, clarity, the accuracy of information as a basis for decisionmaking, and appropriate and useful components. Ease of use through ease of use of e-procurement, uncomplicated stages of the goods/services procurement process, enhancing user skills, and increasing the capabilities of the Universitas Terbuka in

creating added value and an effective and efficient process of procuring goods/services. The successful use of e-procurement by reducing the risk of errors in the data input stage, savings in procurement and administration, and transparency in procuring goods and services.

Suggestions for Further Researchers. Other variables were added or subtracted, including the computer self-efficacy, service quality, and the satisfaction with using the system. It is also recommended to research other sector companies that implement e-procurement using mediating variables as well as mediators. Therefore, further research in the management field will be more beneficial to practitioners, academics, and the public.

#### CONCLUSIONS

Based on the research and discussion, it can be concluded that the factors influencing the implementation of the e-procurement system at the Universitas Terbuka with the ease of use variable as the mediating variable are: The system quality has a positive and significant effect on the successful use of e-procurement. The highest and lowest scores on the cross-dimensional relationship between the information and report produced are accurate (SO3) and precise (SO4), respectively. System quality has a positive and significant effect on the ease of use of the e-procurement system at the Universitas Terbuka. The highest and lowest scores are on cross-dimensional relationships of Reliable information (IQ6) and presentation of easyto-understand information (IO9), respectively. Information quality has a positive and significant effect on the ease of use of e-procurement. The highest and lowest scores are on cross-dimensional relationships. Easy to learn System (PEU2) and the System can increase the Technology proficiency (PEU6). Information quality has a positive and significant effect on the successful use of e-procurement. The highest and lowest scores are on crossdimensional relationships and faster input processes (SUS2), and the System makes it easier for suppliers to participate (SUS8). Ease of use has a positive and significant effect on the successful use of e-procurement system. Furthermore, the system and the information quality have a positive and significant effect on the successful use of e-procurement, with ease of use as the mediating variable.

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