

ANALYSIS OF SYSTEM QUALITY FACTORS & INFORMATION QUALITY WITH MEDIATION VARIABLES OF EASE OF USE TO THE SUCCESS OF PT XYZ'S E-PROCUREMENT

Kenny Hardinata¹, Mentiana Sibarani²

^{1,2} Sekolah Tinggi Ilmu Ekonomi Harapan Bangsa, Bandung, Indonesia

Email: kennyhardinata@gmail.com

ABSTRACT

This study examines the influence of system quality and information quality on the success of e-procurement at PT XYZ, with a focus on the mediating role of ease of use. Data were collected from 42 respondents in the purchasing department, all users of the e-procurement system, and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). Key findings include that system quality and information quality both positively affect ease of use. High-quality systems and accurate information make the e-procurement system easier to use. Information quality also directly enhances the success of e-procurement. Additionally, ease of use positively impacts the success of the system, indicating that when users find the system easy to use, its success rate increases. While system quality alone does not directly impact success, it does so when combined with high information quality and ease of use. For PT XYZ, these findings suggest that improving system quality and information quality can significantly enhance e-procurement success. Practical steps include ensuring robust internet connectivity, comprehensive data documentation, timely updates, and clear, accurate information. Simplifying the e-procurement process and enhancing user skills will also contribute to more effective and efficient procurement operations.

KEYWORDS

E-procurement success, System quality, Information quality



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International

INTRODUCTION

The rapid and often competitive development of web applications and software presents opportunities to improve efficiency, expand global customer reach, reduce operational costs, and redesign business processes in many areas of business practice. The beginning of the electronic commerce revolution initially affected communication between humans (abbreviated as peer-to-peer). Since the end of the 1990s, the business world has increasingly used the Internet as a medium

How to cite:

E-ISSN:

Kenny Hardinata, Mentiana Sibarani (2024). Analysis of System Quality Factors & Information Quality with Mediation Variables of Ease of Use To the Success of PT XYZ's E-Procurement. *Journal Eduvest*. 4 (11): 10650-10670

2775-3727

for trading, transactions, and collaboration (Smart, 2010).

Over the years, the world has seen a major change in business management; from organizations that focus more on internal service functions, conventional multipurpose service functions, to outsourced services. Information technology (IT) has helped many businesses in improving their operational efficiency by providing internet-based solutions for supply chain networks and electronic solutions. Since the late 1990s, various new e-commerce technologies have emerged that have revolutionized work practices and threatened existing business models. As a result of the growing use of e-commerce in the business-to-business market, there has been a significant adoption of new supply chain-related technologies and applications by organizations globally. (Joginapelly, 2011)

Supply chain management (SCM) is one of the areas affected by this revolution. Many technologies such as electronic data interchange at the point of sale to improve the demand profile and availability of products. RFID tagging and technology have allowed users to identify and track the movement of products and improve security. Similarly, better information sharing allows companies to reduce inventory levels through better planning and forecasting based on real-time demand data. These new technologies have the potential to leverage information as a more strategic asset, allowing companies to manage today's increasingly global and complex supply chains more effectively. (Christopher, 2005) (White, Johnson, & Wilson, 2008)

Procurement is a process related to the process of procurement of goods to buy, receive or provide goods or services of other parties. The function of procurement in an organization/company is to provide goods or services needed by the company. Procurement or procurement of goods/services is the process of obtaining goods and services with the best possible expenditure, in the right quality and quantity, at the right time, and in the right place to generate profits or uses directly for the government, company or organization. The following is the definition and definition of procurement from several book sources:

a) According to Siahaya, procurement is an effort to obtain the goods and services needed based on logical and systematic thinking and following applicable norms and ethics that are in accordance with the method of procurement of goods and services. (2013)

b) According to Novitaningrum, procurement is an activity to obtain goods or services in a transparent, effective and efficient manner in accordance with the needs and desires of its users. (2014)

The importance of the purchasing department is increasingly understood by the company, and most importantly, the purchasing performance is considered an important factor for the performance of the company. Therefore, one of the most important tasks of a purchasing strategy is to improve the financial and commercial performance of the company. By capturing and sharing information in real-time, companies can improve the performance of their supply chains and therefore information technology has an important role to play in this process. chain. (González-Benito, 2007) (Devaraj & Wei, 2007)

According to Croom & Brandon-Jones, it states that (2007) b-procurement is a procurement process that uses and utilizes the internet and technological

equipment as tools and means of information/communication.

Based Nurchana et al, (2014) b-procurement is an auction system in the procurement of government goods/services by utilizing technology, information and internet-based communication, so that it can take place efficiently, effectively, openly and accountably.

According to its value of importance, e-procurement can be classified into 3 main categories from strategic, operational and tactical.

In recent years, it has been seen that many companies have carried out their procurement process by using b-procurement process. The benefits of implementing E-Procurement are enormous. Research has shown that the implementation of E-procurement can result in cost savings through reducing transaction costs, improving the quality (accuracy) of the procurement process, shortening cycle times, improving inventory management, and strengthening relationships with trading partners. In addition, the system also allows for better risk control and exploitation of strategic procurement opportunities. (Subramaniam & Shaw, 2004)

Fact b-procurement There are still shortcomings and obstacles in the implementation process such as lack of funds, many agencies and service providers prefer the old system (conventional procurement), lack (conventional procurement), lack of support from management, lack of skills and knowledge about electronic public procurement, and inadequate security systems. The process of purchasing goods/services through electronic procurement of goods/services is still new and requires an in-depth explanation. (Gunasekaran, 2009)

PT XYZ, is one of the multinational companies that produces wood pulp and paper with world-class technology to produce high-quality products where its products are sold all over the world. The company operates on the basic principle of "lean manufacturing" which will produce efficient practices in terms of energy and water utilization and emission reduction.

PT XYZ has adopted the system b-procurement for the process of purchasing materials and services to increase efficiency in the purchasing process and also process transparency. System b-procurement PT XYZ has been implemented since December 2020 with the number of internal users of the Company of more than 100 users and external users (vendors) of more than 1,800 active users. Use b-procurement Based on the existence of a roadmap digitalization launched by PT XYZ and one of its scopes is in digitizing the purchase process at PT XYZ.

The e-procurement system at PT XYZ uses the system from SAP Ariba and adopts two main modules, namely the sourcing module and the supplier lifecycle and performance (SLP) module, supported by an integration module with the ERP system used, namely SAP ECC (SAP ERP Central Component). The sourcing module is one of the strategic and main modules developed by SAP Ariba that can help an organization in managing the procurement process of goods and services. This module includes identifying potential new suppliers, negotiating contracts, and managing the entire procurement cycle of goods and services. The SLP module helps in the process of accepting new suppliers, evaluating supplier performance and maintaining healthy relationships with suppliers.

Here are some of the important functions in the two modules above:

1. Sourcing
 - a. Requisition management: Submit, track and approve
 - b. Purchase Order Automation: Automate the creation of Purchase Orders based on predefined rules and approvals, eliminating manual tasks.
 - c. Requisition Routing: Standard request for approval through appropriate channels, ensuring compliance in accordance with SOPs and timely processing.
 - d. Self service Procurement: Empower employees to make routine purchases through an easy-to-use self-service portal, thereby reducing the procurement workload.
2. Supplier Lifecycle and Performance
 - a. Onboarding: Simplifying the process of registering and qualifying new suppliers with automated process flows and checking compliance with pre-determined legality documents.
 - b. Information Management: Managing a centralized storage place for all supplier data, ensuring data accessibility.
 - c. Collaboration: Improve communication and collaboration with suppliers through a secure online portal and real-time updates .
 - d. Risk Management: Proactively identify and mitigate potential risks to suppliers based on financial stability, quality certification, and other factors.
 - e. Compliance Management: Ensuring compliance with internal regulatory and policy requirements through automated controls and audit trails.

In short, the development process of PT XYZ's e-procurement system goes through several stages, namely:

1. Global design and blueprint
2. Build – Sourcing module and blueprints.
3. Test & Implementation
4. User Acceptance Test
5. Training & Deploy
6. Post Go-Live Stabilization period

The e-procurement process at PT XYZ is integrated and connected digitally. The following is attached to the beginning of PT XYZ's e-procurement.

The phenomena found include in the b-procurement on PT XYZ:

1. Since the e-procurement system was adapted by PT XYZ, there has never been an assessment of the quality of the e-procurement software used. Referring to the ISO 25010 standard, there are 2 main categories of assessment, namely: Product Performance and User Satisfaction. The following are attached explanations & points contained in the 2 main categories of research:
 1. Product Performance
 - a. Functionality: Assess whether the software meets the desired functional needs. This includes the software's ability to perform specific tasks and meet user requirements.
 - b. Reliability: Assesses the software's ability to provide stable and reliable performance. This includes the stability of the system and its ability to avoid errors or failures.
 - c. Ease of Maintenance: Measures the extent to which software can be

modified and improved. This includes the availability of documentation, a good code structure, and ease of making changes.

- d. **Compatibility:** Assessing the extent to which the software can interact with other systems or different environments without experiencing problems.
- e. **Ease of Use:** Measures how easy the software is to use by the end user. It includes aspects such as user interface, clarity, and efficiency in use.

2. **User Satisfaction**

- a. **Efficiency:** Assesses how efficiently the software uses resources, such as memory and CPU, to achieve a specific goal.
- b. **Security:** Measures the ability of software to protect data and systems from unauthorized access as well as security attacks.
- c. **Resiliency:** Assessing the extent to which software can be adopted and used in different environments or platforms without the need for major changes.
- d. **User Satisfaction Functionality:** Assesses the extent to which the software meets user expectations and satisfaction. It involves the user's perception and response to the experience of using the software. (Kriteria Penilaian Kualitas Perangkat Lunak Berdasarkan ISO 25010, 2024)

2. The quality of the system has not been as expected by PT XYZ, where the e-procurement system takes a long time to respond to every re-request from users, and the navigation system is not easy / friendly for users; This can be strengthened by the screenshot below which is listed below where there are complaints from users of the PT XYZ e-procurement system who feel that the system loading is very slow. What is meant by very slow system loading is when the user interacts using the e-procurement system, the screen display does not change and the system displays a "loading in progress" display.

Referring to the number of incident tickets or complaints made by users of the e-procurement system at PT XYZ, there are a total of 26 reports related to system performance.

The following is attached a table of data on the number of complaints made by users of PT XYZ's e-procurement system from 2021 to the end of May 2024. From the table below, it can be seen that 2022 is the year with the most incident tickets made by internal users of PT XYZ's e-procurement system, namely 13 complaints. From the table below, it can also be seen that until May 2024, there are still complaints from users regarding the performance of PT XYZ's e-procurement system.

Table 1. Total incident ticket / complain terkait performance e-procurement

Year	Number of <i>incident tickets</i> /complaints from users of <i>PT XYZ's</i> e-procurement system
2021	3
2022	13
2023	8
Jan 2024 - May 2024	2

3. The quality of information from e-procurement is not optimal, such as the level of accuracy of the information provided by the system and the completeness of the information cannot be fully reliable; This can be strengthened by the screenshot image listed below where there is a complaint from a user of the e-procurement system at PT XYZ who feels that there is a price error during the integration of the e-procurement system into the SAP system.
4. The perceived ease of use and perceived benefit of the use of e-procurement in PT XYZ have not existed and have not been studied before.

RESEARCH METHOD

This type of research is quantitative research that tests hypotheses in the form of relationships or influences between variables. This study uses a quantitative approach with *causal explanatory*. This research intends to explain the position of the variables studied and the influence between one variable and another through hypothesis testing. Explanatory studies are used to look for data patterns in cases where there is no or still limited theory that states how the relationship between variables is (Sholihin & Ratmono, 2013, p. 2)

To conduct descriptive analysis and PLS SEM on the data obtained, the questionnaire survey collection method was used on system users *b-procurement* PT XYZ. To collect data, this study uses a questionnaire and the source of the data is respondents, who are individuals who respond to or answer the researcher's questions, either in writing or orally. The subject of this research is the user of the *b-procurement*, and the data used is data derived from respondents' answers to questionnaires that are quantified using the Likert scale. Information quality, system quality is an independent variable is a research variable because the purpose of the research is to find out the benefits felt by individuals from the application of the *b-procurement*. The dependent variable is the success of the system *b-procurement*, which is meddied by the ease of use variable.

RESULT AND DISCUSSION

Research Results

Respondent Description

The respondents taken in this study are employees of the purchasing department who already have access to and use the *e-procurement system* at PT XYZ. The total respondents obtained from the distribution of this questionnaire were 42 people. Of the total respondents, there were 54.8% of employees who worked for more than 3 years, 28.6% worked between 1-3 years, 9.5% worked 6 months to 1 year and 7.1% worked less than 6 months. From the chart below, it can be concluded that the majority of respondents are employees who have worked for more than 3 years and it can be concluded that these employees are employees who have used the *e-procurement* system since the system went live in December 2020.

Lama Bekerja :
42 responses

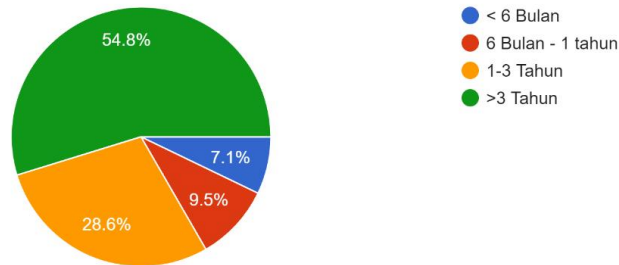


Figure 1. Respondents' characteristics based on length of work

Data Processing Using The PLS-SEM Method

In this study, data processing using the PLS-SEM method consists of a research model and evaluation of the measurement model (outer model), and a structural model (inner model).

Research Model PLS-SEM

The research model that has been created in Figure 2.5 is then made using SMART-PLS 4.0 software. This study was conducted to analyze the relationship between system quality, information quality mediated by ease of use to the success of the use of the e-procurement system at PT XYZ. The SMART-PLS research model can be seen in figure 2 below.

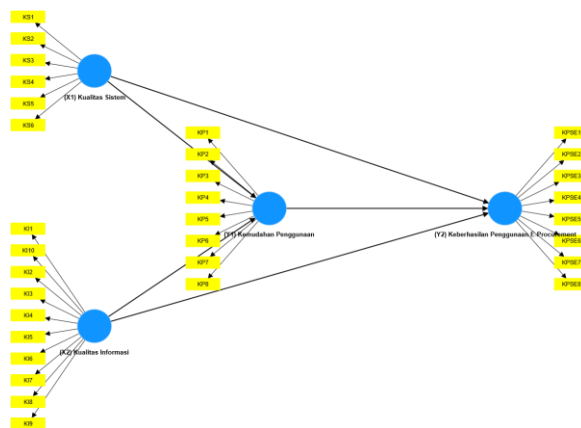


Figure 2. SMART-PLS Research Model

The SMART-PLS research model above uses reflective arrow grooves for each variable. The latent variable of the research model is represented by a blue circle, and the manifest variable is represented by a yellow rectangle.

Indicators and Descriptions in the Research Model

The research indicators and descriptions for each code contained in the

SMART-PLS research model are in Table 2.

Evaluasi Measurement Model (*Outer model*)

Outer model analysis defines how each indicator relates to its latent variable.

Validity Test

An indicator is declared valid if the measurement of the loading factor is above 0.50 so that if there is a loading factor below 0.50, it will be dropped from the model (Ghozali, 2014). Validity testing for reflective indicators uses a correlation between an item's score and its construct score. Measurements with reflective indicators indicate a change in an indicator in a construct if other indicators in the same construct change (or are removed from the model).

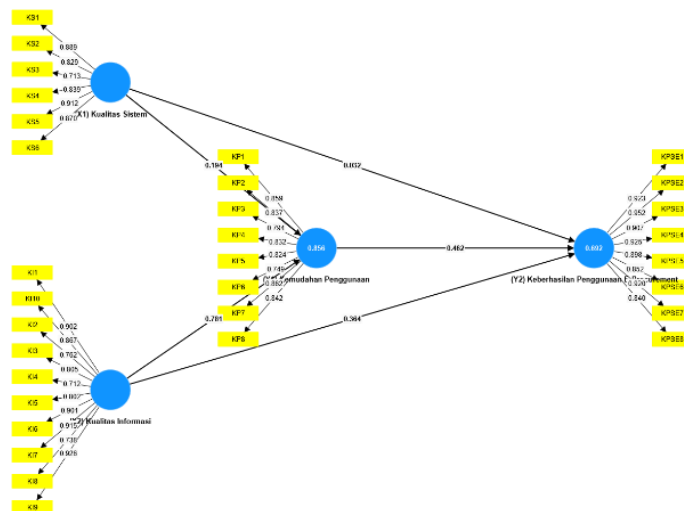


Figure 3. Outer Model

Table 2. Outer Loadings

Construct ion	(X1) System Quality	(X2) Quality of Information	(Y1) Ease of Use	(Y2) Successful Use of E-Procurement
KI1		0,902		
KI10		0,867		
KI2		0,762		
KI3		0,805		
KI4		0,712		
KI5		0,802		
KI6		0,901		
KI7		0,915		
KI8		0,738		
KI9		0,926		
KP1			0,859	
KP2			0,837	

KP3	0,794
KP4	0,832
KP5	0,824
KP6	0,749
KP7	0,862
KP8	0,842
KPSE1	0,923
KPSE2	0,952
KPSE3	0,907
KPSE4	0,925
KPSE5	0,898
KPSE6	0,852
KPSE7	0,920
KPSE8	0,840
KS1	0,889
KS2	0,829
KS3	0,713
KS4	0,839
KS5	0,912
KS6	0,870

Based on Table 2, it is known that all variable items are valid. This is because the loading factor value is above 0.50. In addition to the Loading Factor value, to analyze the validity of the research data, the Average Variance Extracted (AVE) value can be used. The following are the results of the validity test using the AVE value.(Ghozali, 2014).

Table 3. AVE Test Results

Construction	Average variance extracted (AVE)
(X1) System Quality	0,713
(X2) Quality of Information	0,700
(Y1) Ease of Use	0,682
(Y2) Successful Use of E-Procurement	0,815

Based on Table 3, it is known that all research variables are valid. This is because the AVE value is above the provision of 0.50.(Ghozali, 2014)

Discriminant Validity Test

To test discriminant validity, it can be done by examining the Fornell-Lacker Criterion. In the Fornell-Lacker Criterion, discriminatory vandalism is carried out by comparing the correlation between variables and AVE on a variable. A good model of measurement of discriminant validity if the AVE on the variable itself is greater than the correlation between other variables. The overall AVE values can be seen in the following table:(Ghozali, 2014)

Table 4. Fornell Lacker

Construction	(X1) System Quality	(X2) Quality of Information	(Y1) Ease of Use	(Y2) Successful Use of E- Procurement
(X1) System Quality	0,845			
(X2) Quality of Information	0,690	0,837		
(Y1) Ease of Use	0,733	0,791	0,826	
(Y2) Successful Use of E- Procurement	0,622	0,809	0,818	0,903

In Table 4, it can be seen that the correlation value of these variables is greater than the correlation of other variables, therefore it is concluded that all variables are valid for use. In addition to the test *Fornell-Lacker*, *discriminant validity* can also be tested based on the value *Cross Loading*. An indicator is declared to meet discriminant validity if the dimension cross loading value on the variable is the largest compared to other variables. The following are the results of the cross loading values in table 4.(Ghozali, 2014)

Table 5. Cross Loading Value Results

Construct ion	(X1) System Quality	(X2) Quality of Informati on	(Y1) Ease of Use	(Y2) Successful Use of E- Procurement
KI1	0,636	0,902	0,866	0,711
KI10	0,666	0,867	0,835	0,663
KI2	0,480	0,762	0,700	0,538
KI3	0,617	0,805	0,814	0,738
KI4	0,467	0,712	0,592	0,665
KI5	0,530	0,802	0,735	0,634
KI6	0,596	0,901	0,775	0,718
KI7	0,614	0,915	0,778	0,745
KI8	0,475	0,738	0,728	0,531
KI9	0,646	0,926	0,792	0,780
KP1	0,660	0,762	0,859	0,536
KP2	0,701	0,770	0,837	0,609
KP3	0,518	0,697	0,794	0,457
KP4	0,576	0,764	0,832	0,665
KP5	0,583	0,702	0,824	0,820
KP6	0,481	0,594	0,749	0,664
KP7	0,632	0,795	0,862	0,804

KP8	0,661	0,912	0,842	0,769
KPSE1	0,593	0,789	0,784	0,923
KPSE2	0,522	0,720	0,693	0,952
KPSE3	0,549	0,736	0,796	0,907
KPSE4	0,574	0,810	0,792	0,925
KPSE5	0,536	0,786	0,697	0,898
KPSE6	0,607	0,649	0,728	0,852
KPSE7	0,481	0,665	0,643	0,920
KPSE8	0,617	0,660	0,753	0,840
KS1	0,889	0,630	0,678	0,600
KS2	0,829	0,523	0,628	0,402
KS3	0,713	0,402	0,462	0,511
KS4	0,839	0,519	0,559	0,501
KS5	0,912	0,665	0,673	0,580
KS6	0,870	0,710	0,685	0,540

In Table 5, it can be seen that the correlation value of the indicator in this variable is greater than the correlation in other variables, therefore it is concluded that all variables are valid for use.

Table 6. Validity Test *Discriminan Heterotrait-Monotrait Ratio (HTMT)*

Construction	(X1) System Quality	(X2) Quality of Information	(Y1) Ease of Use	(Y2) Successful Use of E-Procurement
(X1) System Quality				
(X2) Quality of Information	0,727			
(Y1) Ease of Use	0,783	0,868		
(Y2) Successful Use of E-Procurement	0,657	0,838	0,845	

In Table 6, it can be seen that the correlation value between variables is below 0.90, therefore it is concluded that all variables are valid for use.

Reliability Test

Reliability indicates the accuracy, consistency, and precision of a measuring instrument in making measurements. If a study is reliable, then the research data has been tested for reliability and consistency of the research results. Reliability Test in PLS can use 2 methods, namely (Ghozali, 2014) *Cronbach's alpha* and *Composite reliability*.

Composite Reliability Test

Based on Table 7, it can be seen that all constructs in the study are declared Reliable due to the value of *Composite Reliability* for all constructs is above 0.70.(Hair, 2017)

Table 7. Result Composite Reliability Test

Construction	Composite reliability (rho_a)
(X1) System Quality	0,927
(X2) Quality of Information	0,955
(Y1) Ease of Use	0,938
(Y2) Successful Use of E-Procurement	0,969

Cronbach's Alpha Test

Based on Table 8, it can be seen that all the constructs in the study are declared Reliable due to the value of *Cronbach's Alpha* for all constructs is above 0.70.(Hair, 2017)

Table 8. Cronbach Alpha Test Results

Construction	Cronbach's alpha
(X1) System Quality	0,918
(X2) Quality of Information	0,951
(Y1) Ease of Use	0,933
(Y2) Successful Use of E-Procurement	0,967

Structural Model Evaluation (Inner Model)

Determination Coefficient Test (R2)

According to Hair et al. (2017), the r-square criterion consists of three values, 0.75 (strong), 0.50 (moderate), and 0.25 (weak), respectively, and is used to measure the degree of influence of exogenous variables on endogenous variables.

After the estimated model meets the *Outer Model criteria*, the researcher then conducts a test of the Structural Model (*Inner Model*). The following is the value of R-Square (R2) in the research construct:

Table 9. Coefficient of Determination Test

	R-square	R-square adjusted
(Y1) Ease of Use	0,856	0,849
(Y2) Successful Use of E-Procurement	0,692	0,668

Based on Table 9, it can be seen that the Adjusted R-Square value for the ease of use construct is 0.856. It means that the model has a good level of *good-fit model*. This also means that the variability of ease of use can be explained by variables in the model of 85.6%.

The R-Square value for the successful construction of e-procurement use is 0.692. It means that the model has a good level of *good-fit model*. This also means

that the variability of the successful use of e-procurement can be explained by the variables in the model of 69.2%.

Signification Test

To see the results of the significance of the parameter coefficient, it can be calculated from the dimensions of the variables that have been validated. The researcher wanted to find out if there was a positive or negative influence and significant or insignificant based on the calculation of P Values which must be below 0.05 and t statistically greater is equal to 1.96. If the statistical t is greater than the table t (1.96) then the two constructs are declared significant and vice versa.(Ghozali, 2014)

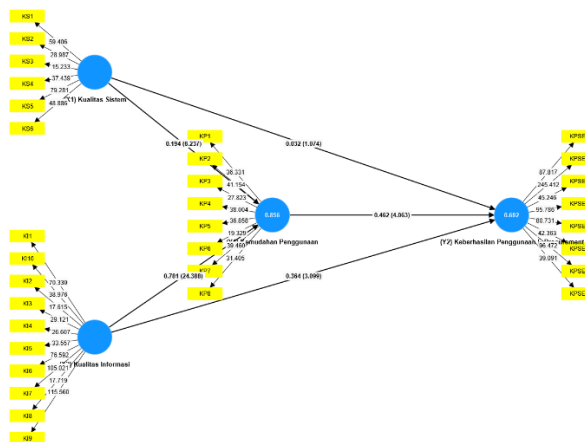


Figure 4. Inner Model

Hypothesis Test

Table 10. Hypothesis Test

	Original sample (O)	T statistics (O/STDEV)	Ttable	P values
(X1) -> System Quality (Y1) Ease of Use	0,194	6,237	1,96	0,000
(X2) Quality of Information -> (Y1) Ease of Use	0,781	24,388	1,96	0,000
(X2) Quality of Information -> (Y2) Successful Use of E-Procurement	0,364	3,099	1,96	0,002
(Y1) Ease of Use -> (Y2) Successful Use of E-Procurement	0,462	4,063	1,96	0,000
(X1) System Quality -> (Y1) Ease of Use -> (Y2) Successful Use of E-Procurement	0,090	3,325	1,96	0,001
(X2) Quality of Information -> (Y1) Ease of Use -> (Y2) Successful Use of E-Procurement	0,361	3,984	1,96	0,000
(X1) System Quality -> (Y2) Successful Use of E-Procurement	0,032	1,074	1,96	0,283

Based on Table 10, it can be seen that the research hypothesis can be answered as follows:

1. System Quality vs. Ease of Use

Based on Table 4-9, it can be seen that the value of *original sample estimate* The system quality variable to the ease of use variable was positive, which was 0.194. Then, it can be seen that the statistical t is $6.237 > 1.96$ and the p value is $0.000 < 0.0005$ so that it can be said to have a positive and significant effect. Thus, the H1 hypothesis in this study was declared accepted. (Ghozali, 2014)

The results of this study are in line with the results of the research conducted Purwanto & Pawirosumarto (2017), Sari and Arifin (2016), Setyadi et al. (2023) and Wahyudi et al. (2017).

Conclusion: The quality of the system has a positive and significant effect on ease of use.

2. Quality of Information on Ease of Use

Based on Table 4-9, it can be seen that the value of *original sample estimate* The system quality variable to the ease of use variable was positive, which was 0.781. Then, it can be seen that the t statistic is $24.388 > 1.96$ and the p value is $0.000 < 0.0005$ so that it can be said to have a positive and significant effect. Thus, the H2 hypothesis in this study was declared accepted. (Ghozali, 2014)

The results of this study are in line with the results of research conducted by Setyadi et al. (2023), Harjito et al. (2015), Krisdiantoro et al. (2019), Karim and Lasena (2017), and Purwanto & Pawirosumarto (2017).

Conclusion: The quality of information has a positive and significant effect on ease of use.

3. Quality of Information on the Successful Use of E-Procurement

Based on Table 4-9, it can be seen that the *original sample estimate* The information quality variable to the success variable of e-procurement use was positive, which was 0.364. Then, it can be seen that the statistical t is $3.099 > 1.96$ and the p value is $0.002 < 0.0005$ so that it can be said to have a positive and significant effect. Thus, the H3 hypothesis in this study was declared accepted. (Ghozali, 2014)

The results of this study are in line with the results of research conducted by Ramadhani et al. (2021) and Krisdiantoro et al. (2019) but are not in line with the research conducted by Setyadi et al. (2023) and Sompotan et al. (2021) where the quality of information does not have an impact on the success of the use of *e-procurement*.

Conclusion: The quality of information has a positive and significant effect on the success of the use of e-procurement.

4. Ease of Use for Successful Use of E-Procurement

Based on Table 4-9, it can be seen that the *original sample estimate* The ease of use variable to the variable of success in the use of e-procurement is positive, which is 0.462. Then, it can be seen that the statistical t is $4.063 > 1.96$ and the p value is $0.000 < 0.0005$ so that it can be said to have a positive and significant effect. (Ghozali, 2014)

The results of this study are in line with the research of Setyadi et al. (2023), Karim and Lasena (2017), Tulodo and Solichin (2019), and Kadema-unga and Phiri (2019).

Conclusion: Ease of use has a positive and significant effect on the success of e-procurement use.

5. System Quality to Successful Use of E-Procurement mediated by Ease of Use

Based on Table 4-9, it can be seen that the *original sample estimate* System Quality Variables to Success Variables *b-procurement* Through the variable ease of use is positive, which is 0.090. Then, it can be seen that the statistical t is $3.325 > 1.96$ and the p value is $0.001 < 0.0005$ so that it can be said to have a positive and significant effect. (Ghozali, 2014)

Conclusion: The quality of the system has a positive and significant effect on the success of the use *of e-procurement* mediated by ease of use.

6. Quality of Information on the Successful Use of E-Procurement mediated by Ease of Use

Based on Table 4-9, it can be seen that the *original sample estimate* The information quality variable on the variable of successful use of e-procurement through the ease of use variable is positive, which is 0.361. Then, it can be seen that the statistical t is $3.984 > 1.96$ and the p value is $0.000 < 0.0005$ so that it can be said to have a positive and significant effect. (Ghozali, 2014)

Conclusion: The quality of information has a positive and significant effect on the success of the use *of e-procurement*, which is mediated by ease of use.

Thus, the H4 hypothesis in this study was declared accepted.

7. System Quality for the Success of *e-Procurement Use*

Based on Table 4-9, it can be seen that the value of *original sample estimate* System Quality Variables to Success Variables *b-procurement* is positive, which is 0.032. Then, it can be seen that the statistics are $1.074 < 1.96$ so that it can be said that the quality of the system has no effect on the success of the use (Ghozali, 2014)*b-procurement*. Thus, the H5 hypothesis in this study was rejected and H0 was accepted.

This result is in line with the results of research conducted by Wahyudi et al. (2017) and Ramadhani et al. (2021) where the quality of the system has no effect on the success of use *b-procurement*. However, the results of this study are not in line with the research conducted by Setyadi et al. (2023), Krisdiantoro et al. (2019), Khairunnisa & Greek (2017), Sari and Arifin (2016), and Layongnan dkk. (2022).

CONCLUSION

Based on the results of the research that has been carried out, it can be concluded that: 1. The system quality variable has a positive and significant influence on ease of use. The better the quality of *the e-procurement* system at PT XYZ, the easier it will be to use the *e-procurement* system for its users. 2. The information quality variable has a positive and significant influence on ease of use. The better the quality of information displayed by the *e-procurement* system at PT XYZ, the easier it will be to use the *e-procurement* system for its users. 3.

Information quality variables have a positive and significant effect on the success of *e-procurement use*. The more the quality of information displayed by PT XYZ's *e-procurement* system increases, it will increase the success rate of using *e-procurement* at PT XYZ. 4. The variable of ease of use has a positive and significant effect on the success of the use of e-procurement. Increased perception of ease of use by users is positively correlated with higher success rates in using the system. 5. The variables of system quality and information quality have a positive and significant effect on the success of the use of *e-procurement* mediated by ease of use. 6. The variable of system quality has no effect on the success of the use of *e-procurement*. It can be concluded that system quality along with good information quality can have an influence on the success of the use of *e-procurement* at PT XYZ.

Managerial implications

Based on the results of this study, it can be concluded that information quality and system quality are very closely related and have an impact on the success of system use *b-procurement* at PT XYZ. Managerial implications can be described as follows: 1. PT XYZ is expected to be able to improve the quality of the system, the quality of information, the ease of use, and the success of e-procurement to increase the success of the system implementation. System quality by providing a system that is easily accessible through a good internet connection, complete and systemic data documentation, timely reporting process, and up-to-date information systems in the procurement of goods and services. The quality of information through an accurate information system, an easy-to-understand format to facilitate monitoring and evaluation, provision as needed, and clarity and accuracy of information as the basis for making appropriate decisions. An easy-to-use e-procurement process, uncomplicated stages, improving user skills, can create added value and carry out the procurement process of goods and services effectively and efficiently. The success of *the e-procurement* process by reducing the risk of errors at the data input stage, saves the time and resources required to do so.

REFERENCES

- Arindra Rossita Arum Nurchana, B. S. (2014). EFFECTIVENESS OF E-PROCUREMENT IN THE PROCUREMENT OF GOODS/SERVICES (Study on the Application of E-Procurement in the Procurement of Goods/Services in Bojonegoro Regency). *Journal of Public Administration (JAP)*, Vol. 2, No. 2,, 355-359.
- Attaran, M. (2001). The coming age of online procurement. . *Industrial Management & Data Systems*, 101(4), 77-181.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management* 17(1), 99-121.
- Chen, I. a. (2004). Towards a theory of supply chain management: the. *Journal of Operations Management*, Vol. 22, 119-150.
- Christopher, M. (2005). *Logistics and Supply Chain Management*. UK: Prentice Hall,.

- Cocks, M. C. (2008). *Information systems and outsourcing: studies in theory and practice*.
- Croom, S. R. (2000). The impact of web-based procurement on the management of operating resources supply. *Journal of Supply Chain Management* 36(4), 4-13.
- Croom, S., & Brandon-Jones, A. (2007). Impact of e-procurement: experiences from implementation in the UK public sector. *Journal of Purchasing and Supply Management*, 13(4), 294-303.
- Croxtan, K. G.-D. (2001). The Supply Chain Management Processes. *The International Journal of Logistics Management Vol. 12, No. 2*, 13-36.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340. doi:<https://doi.org/10.2307/249008>
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *MANAGEMENT SCIENCE Vol. 35, No. 8, August 1989*, 982-1003.
- De Boer, L. H. (2002). A conceptual model for assessing the impact of electronic procurement. *European Journal of Purchasing & Supply Management*, 8(1), 25-33.
- Delone, W. H., & Mclean, E. R. (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems / Spring 2003, Vol. 19, No. 4*, 9-30.
- Devaraj, S. K., & Wei, J. (2007). Impact of eBusiness technologies on operational performance: The role of production information integration in the supply chain. *Journal of Operations Management* 25(6), 1199-1216.
- Easton, L. M. (2002). Purchasing performance evaluation: With data envelopment analysis. *European Journal of Purchasing and Supply Management* 8(3), 123-134.
- Ellram, L. a. (1993). Characteristics of Supply Chain Management and the Implication for Purchasing and Logistics Strategy. *International Journal of Logistics Management*, 4, 13-24.
- Fernandes, T., & Vieira, V. (2015). Public e-procurement impacts in small-and medium-enterprises. *International Journal procurement management* 8, (5), 587-607.
- Ghozali, I. (2014). *Structural Equation Modeling, an Alternative Method with Partial Least Square (PLS). Edition 4*. Semarang: Diponegoro University Press.
- González-Benito, J. (2007). A theory of purchasing's contribution to business performance. . *Journal of Operations Management* 25(4), 901-917.
- Gunasekaran, A. M. (2009). Procurement adoption in the Southcoast SMEs. *International Journal of Production Economics* 122(1), 161-175.
- Hair, J. F. (2017). *Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) Second Edition (2nd ed.)*. Los Angeles:: Sage.
- Harjito, Y., Achyani, F., & Payamta. (2015). THE IMPLEMENTATION OF E-PROCUREMENT WAS REVIEWED FROM. *Journal of Economics and Business Volume XVIII No. 1, April 2015*, 61-82.

- Hartono, J. (2007). *Information Technology System Success Model*. Yogyakarta: Andi.
- HERIAWATI, L. (2018). THE EFFECT OF THE IMPLEMENTATION OF ELECTRONIC PROCUREMENT AND GOOD GOVERNANCE ON THE PERFORMANCE OF PROCUREMENT OF GOODS/SERVICES IN THE PROCUREMENT OF GOODS AND SERVICES SECTION OF THE REGIONAL SECRETARIAT OF PANDEGLANG REGENCY.
- Joginapelly, T. (2011). Effect of web atmospheric cues on users' emotional responses in ecommerce".
- Kademaunga, C. K. (2019). Factors Affecting Successful Implementation of Electronic Procurement in Government Institutions Based on the Technology Acceptance Model. *Open Journal of Business and Management*, 7(4), 705–1714.
- Karim, J., & Lasena, M. (2017). Analysis of E-Procurement Policy in the Gorontalo Provincial Government Using the Technology Acceptance Model and End User Computing Satisfaction Method. *ILKOM Scientific Journal*, Vol. 9, Number 3.
- Khairunnisa, U., & Yunanto, M. (2017). The Effect of System Quality on User Satisfaction and Net Benefits on the Implementation of E-Invoking: Validation of the Success Model of Delone and Mclean Information Systems. *Scientific Journal of Business Economics*, 22(3).
- Krisdiantoro, Y., Subekti, I., & Prihatiningtias, Y. W. (2019). The Effect of System Quality and Information Quality on Net Benefits with Usage Intensity as a Mediation Variable. *Journal of Actual Accounting*, 5 (3), 261-279.
- Software Quality Assessment Criteria Based on ISO 25010*. (2024, June 10). Retrieved from <https://isoindonesiacenter.com/kriteria-penilaian-kualitas-perangkat-lunak-berdasarkan-iso-25010/>
- Lambert, D. a. (2000). Issues in Supply Chain Management. *Industrial Marketing Management*, 29, 65-83.
- Layongan, C. A., Nangoi, G., & Kalalo, M. (2022). The Influence of System Quality and Information Quality of SAP Software on. *LPPM Journal of EcoSosBudKum (Economic, Social, Cultural, and Legal) Vol. 5 No. 2 January-June 2022* , 309-322.
- Lennon, C. (2002). *Achieving Bottom Line Results in a Flat Economy: Leveraging Procurement Business Services*. El Segundo, CA: Computr Sciences Corporation.
- Love, P. E. (2005). Researching the investment of information technology in construction: An examination of evaluation practices. *Automation in Construction*, 14(4), 569-582.
- Madhani, P. M. (2010). Resource Based View (RBV) of Competitive Advantage: An Overview. Available at SSRN: <https://ssrn.com/abstract=1578704>, 3-22.
- Mathenge, M. M. (2018). Critical Factors for successful implementation of e-procurement in the Kenyan public sector.
- Monczka, D. T. (2005). *Purchasing and supply chain management (3rd ed.)*. New York, NY: McGraw-Hill.

- Nelson, R. R., Todd, P. A., & Wixom, B. H. (2005). Antecedents of Information and System Quality: An Empirical Examination Within the Context of Data Warehousing. *Journal of Management Information Systems / Spring 2005, Vol. 21, No. 4,* 199-235.
- Nofita, M., & Sebastian, D. (2022). Technology Acceptance Models on Digital Technology: Survey Paper. *CONSTELLATION: Convergence of Technology and Information Systems*.
- Novitaningrum, B. D. (2014). Accountability and Transparency of Government Procurement of Goods and Services Through Electronic Procurement (Best Practice in the Surabaya City Government). *Public Policy and Management, Volume 2, Number 1,*
- Nugroho, H., Suhud, U., & Rochyati. (2019). THE APPLICATION OF THE DEVELOPMENT OF TECHNOLOGY ACCEPTANCE MODEL (TAM) THEORY AND MOTIVATION FOR STUDENTS' INTENTION TO USE TABLETS IN JAKARTA. *Journal of Communication Studies*, 45-64.
- Nurchana, A., R., H. B., & Adiono, R. (2014). The Effectiveness of E-Procurement in the Procurement of Goods/Services (Study on the Application of E-Procurement in the Procurement of Goods/Services in Bojonegoro Regency). *Journal of Public Administration*, 2(2).
- Nurdin, I., & Hartati, S. (2019). *Social Research Methodology*. Surabaya: Media Publisher Sahabat Cendekia.
- Panwar, V. &. (2014). Literature Review on the Benefits and Barriers of Electronic Procurement in Organizations. 17.
- Parveen, H., & Gull, M. (2017). Conceptual and operational definition of continuous and discrete variables.
- Petter, S., DeLone, W. ..., & McLean, E. (2008). Measuring information systems success: models, dimensions, measures, and interrelationships. *European Journal of Information Systems. Journal of Information Systems*, 236–263.
- Piotrowicz, W. &. (2010). Analysing B2B electronic procurement benefits: information systems perspective. . *Journal of Enterprise Information Management*, 23(4), 559-579.
- Porter, M. (2004). *Competitive advantage: creating and sustaining superior*. New York: Free Press.
- Purwanto, S. K., & Pawirosumarto, S. (2017). The Effect of System Quality, Information Quality, and Service Quality on the Use of e-Learning System in the Postgraduate Program of Mercu Buana University. *Journal of Management*, 21(2), 282-305.
- Puschmann, T., & Alt, R. (2005). Successful use of e-procurement in supply chains. *Supply Chain Management: An International Journal, Vol.10 No.2*, 122-133.
- Rahim, M. &. (2014). Understanding E-Procurement System Benefits using organisational Adoption Motivation Lens: a Case Study. *Paper presented at the PACIS*.
- Rai, A. L. (2002). Assessing the Validity of IS Success. *Information System Research Vol.13, No.1*, 29-34.

- Ramadhani, K. Y., Adawiyah, W. R., & Novandari, W. (Sustainable Co-mpetitive Advantage, 11(1)). Successful E-Procurement Implementation: A Case Study in a Constr-uction Industry Company. 2021, 938-946.
- Sari, I. P., & Arifin, J. (2016). Analysis of Factors Influencing the Successful E-Procurement Implementation. . *Analysis of Factors Influencing the Successful E-Procurement Implementation*, 1-30.
- Sari, I. P., & Arifin, J. (2016). Analysis of Factors Influencing the Successful E-Procurement Implementation. Analysis of Factors Influ-encing the Successful E-Procurement Im-plementation. 1-30.
- Setyadi, A., Prianto, S. E., Pawirosumarto, S., & Ismail, S. (2023). FACTORS INFLUENCING THE IMPLEMENTATION OF E-PROCUREMENT WITH PERCEPTIONS OF EASE OF USE AS MEDIATION VARIABLES. *JURNAL APLIKASI MANAJEMEN VOLUME 21*, 901-914.
- Sholihin, M., & Ratmono, D. (2013). *SEM-PLS analysis with WarpPLS 3.0*. Yogyakarta: Andi.
- Siahaya, W. (2013). *Sukses Supply Chain Management Akses Demand Chain Management*. Jakarta: In Media.
- Smart, A. (2010). THE ROLE OF E-PROCUREMENT IN PURCHASING.
- Sompotan, R. M., Mandey, S. L., & Saerang, I. S. (2021). The influence of information quality, system quality and regulations. *TEXT: Journal of Non-Formal Education*, 605-618.
- Subramaniam, C., & Shaw, M. J. (2004). The effects of process characteristics on the value of B2B e-procurement. *Information Technology and Management* ,5(1-2), 161-180.
- SUGIYONO. (2004). *Business Research Methods*. Jakarta: Rineka.
- Sugiyono. (2019). *Quantitative, Qualitative, and R&D Research Methods*. Alfabeta.
- Tan, K. (2001). A framework of supply chain management literature. *European Journal of Purchasing & Supply Management* 7, 39-48.
- Tulodo, B. A., & Solichin, A. (2019). Analysis of the Influence of System Quality, Quality of Information and Perceived Usefulness on User Satisfaction of Care Applications in Speech of Employee Performance Improvement. *Indonesia Journal of Science Management Research*, 10(1), 25–43.
- Turban, E. K. (2018). *Electronic Commerce: A Managerial Perspective*. New Jersey: Pearson Prentice Hall, Inc.
- van Weele, A. J. (2014). *Purchasing and supply chain management: Analysis, strategy, planning and practic* . 6. Hampshire: Cengage Learning.
- Wahyudi, R., Astuti, E. S., & Riyadi. (2017). The Effect of the Quality of SIAKAD System, Information and Services on Student Satisfaction. *Journal of Business Administration*, 23(2), 28-39.
- White, A., Johnson, M., & Wilson, H. (2008). RFID in the supply chain: lessons from European early adopters. *International Journal of Physical Distribution and Logistics Management*, Vol. 38, 88-107.
- Will, L. a. (2008). *Information systems and outsourcing: studies in theory and practice*. Palgrave Macmillan.

Kenny Hardinata, Mentiana Sibarani

Yakin, I. H. (2023). *RESEARCH METHODOLOGY (QUANTITATIVE & QUALITATIVE)*. Garut: CV. ACADEMIC GLOBAL SCRIPT.