

Original Article

The Effect of E-Tendering Effectiveness on the Process of Procurement of Goods and Services to Accelerate Development in Enrekang Regency

Jaelani¹, Achmad Ruslan², Palmarudi Mappigau³

^{1,2,3}Regional Planning and Development Study Program, Hasanuddin University, Makassar, Indonesia.

¹Corresponding Author : unhasjarelani@gmail.com

Received: 20 March 2024

Revised: 01 June 2024

Accepted: 26 August 2024

Published: 28 September 2024

Abstract - Electronic Procurement is a system for procuring goods or services whose implementation process is carried out electronically and on a web basis by utilizing communication and information technology facilities. To find out whether the E-Tendering Effectiveness Variable in Goal Achievement Indicators Partially Influences the Process of Procurement of Goods and Services to Accelerate Development in Enrekang Regency. The type of research used is mixed methods. The population used in this research was 18 government work units in Enrekang Regency. The sample used is an existing sample and population. The Effectiveness of E-Tendering on Goal Achievement Indicators (X1) Provides a Positive Influence on the Goods and Services Procurement Process (Y) to Accelerate Development in Enrekang Regency. The interpretation of these findings is that the higher the goal achievement, the better the process of procuring goods and services in Enrekang Regency. There is a positive influence between the E-Tendering Effectiveness variable and the integration indicator (X2) in the process of procuring goods and services to accelerate development in Enrekang Regency. So, it can be interpreted that the better the integration, the better the procurement process in Enrekang Regency. The E-Tendering Effectiveness variable on the Adaptation Indicator (X3) has a positive influence. This means that the higher the adaptation, the greater the influence it will have on the process of procuring goods and services to accelerate development in Enrekang Regency. Achievement of Goals (X1), Integrity (X2), and Adaptation (X3) Simultaneously or Simultaneously Can Explain Around 70.2% of the Variations Existing in the Procurement Process for Goods and Services (Y).

Keywords - Effectiveness of E-tendering, Procurement of goods and services, Development.

1. Introduction

Electronic Procurement Services, according to Presidential Regulation of the Republic of Indonesia Number 12 of 2021 concerning Amendments to Presidential Regulation Number 16 of 2018 concerning Government Procurement of Goods/Services, are information technology management services to facilitate the implementation of electronic Procurement of Goods or Services. The implementation of this electronic system has actually been around since 2010 through Presidential Regulation Number 54 of 2010, which strictly requires electronic procurement of goods or services to be carried out electronically, namely that provincial, district/city governments are required to procure goods/services electronically.

Electronic procurement, commonly abbreviated as e-procurement, is a system for procuring goods or services whose implementation process is carried out electronically and on a web basis using communication and information technology facilities. Procurement of goods or services based

on e-procurement is carried out to realize good governance or to achieve good governance.

The principles of good governance are in line with the principles of procurement of goods or services, namely efficient, effective, transparent, open, competitive, fair, and accountable (Kurnia et al., 2017). Changing the form of government goods or services procurement services from conventional services to electronic-based services because of the many problems that occur in conventional government goods/services procurement (Mulyono, 2017).

According to Suprianto (2019), the implementation of e-procurement is a transformation of the national procurement mechanism through manual auctions. Manual auctions are full of various weaknesses that can be exploited by both the auction committee and service providers, such as the emergence of closed and fragmented procurement market conditions so that procurement can only be carried out by limited users and providers.



The adoption of e-procurement, using advancements in information technology, offers numerous benefits for both users and providers of goods and services. The principles of good governance align with the principles of procurement, emphasizing efficiency, effectiveness, transparency, openness, competitiveness, fairness, and accountability (Budiarti, 2011). The transition from traditional to electronic-based government procurement is driven by the numerous challenges associated with conventional procurement practices.

The services currently available in the Electronic Procurement System are tenders whose operational technical provisions are regulated in LKPP Institution Regulation Number 9 of 2018 concerning E-Tendering Procedures. Enrekang Regency is one of the districts that welcome the Presidential Regulation regarding the goods or services procurement system, the implementation process of which is carried out electronically and web-based, in this case, e-procurement. Based on secondary data obtained from initial observations at the Regency Regional Secretariat. Enrekang, at least since 2018, 39 procurements or tenders have been carried out through the Regency Regional Secretariat e-procurement. Enrekang, in 2019, there were 85 tender packages, and in 2020, there were 83 tender packages.

The national procurement method via manual auctions is being transformed by the use of e-procurement (Endianingsih, 2014). There are many vulnerabilities in manual auctions which can be taken advantage of by the auction panel and service suppliers. For example, there are changes in the procurement market that affect how efficient e-tendering is when the Enrekang Regency Secretariat is procuring goods and services.

So, researchers consider it very important to conduct research with the title "The Effect of E-Tendering Effectiveness on the Procurement Process of Goods and Services to Accelerate Development in Enrekang Regency". This research focuses on the research location of the Enrekang Regency Regional Secretariat office based on the rationalization of the problems that have been explained.

2. Materials and Methods

2.1. Study Area

This research will be carried out by government work units, both OPD and the Regional Agency and Secretariat, as well as the Enrekang Regency DPRD Secretariat in the government procurement of goods and services section. The target of this research is to last two months after the pre-research seminar is held.

2.2. Methodology Overview

The type of research used is mixed methods, meaning that this research combines two forms of research approaches,

namely quantitative and qualitative methods. Meanwhile, the method used is descriptive. Location This research will be carried out by government work units, both OPD and Regional Agencies and Secretariats, as well as the Enrekang Regency DPRD Secretariat in the government procurement of goods and services section. The population used in this research was 18 government work units in Enrekang Regency, which were organizers of the 2018-2020 tender package. The sample used is by taking existing samples and populations.

2.3. Data Collection

The data collection instrument used by the author in the process of collecting data and information for this research is field research (Field Research). Data collection techniques are tools used to measure or obtain information about the characteristics of variables attached to a unit of observation systematically and objectively. Researchers will provide written questions or statements and then distribute them to respondents to obtain the necessary data. A number of questions or statements are used to obtain information from respondents in the sense of reports about their personalities or things they know.

Table 1. Sample Determination (Respondents)

| No. | SKPD Enrekang District | Amount |
|-----|---|--------|
| 1 | Education & Training Personnel Agency Enrekang Regency area | 4 |
| 2 | District Regional Disaster Management Agency | 4 |
| 3 | District Youth Sports & Tourism Department | 4 |
| 4 | District Health Service | 4 |
| 5 | Department of Cooperatives, Small and Medium Enterprises, Manpower & Transmigration | 4 |
| 6 | District Environmental Service | 4 |
| 7 | District Public Works Department | 4 |
| 8 | District Community and Village Empowerment Service | 4 |
| 9 | District Education and Culture Department | 4 |
| 10 | District Population Control and Family Planning Service | 4 |
| 11 | District Industry and Trade Service | 4 |
| 12 | District Library and Archives Service | 4 |

Table 2. R-square value

| | R-Kotak | R-Square adjustable |
|---|---------|---------------------|
| Goods and Services Procurement Process (Y) | 0.702 | 0.687 |

Source: Results of primary data processing via SmartPls 4, 2023

2.4. Data Analysis

Research hypothesis testing is carried out using the approach Structural Equation Model (SEM) based on Partial Least Square (PLS). PLS is a component or variant-based Structural Equation Model (SEM). Structural Equation Model (SEM) is a field of statistical study that can test a series of relationships that are relatively difficult to measure simultaneously. According to Santoso (2014), SEM is a multivariate analysis technique which is a combination of factor analysis and regression (correlation) analysis, which aims to test the relationship between variables in a model, whether between indicators and their constructs or the relationship between constructs. In this research, researchers used quantitative data analysis techniques, while this quantitative data was analyzed using statistical analysis. The statistical analysis used is descriptive statistical analysis. Descriptive analysis describes or provides an overview of data in tabular form so that others can easily get an idea of the nature (characteristics) of the two objects. Before testing the hypothesis, a prerequisite test for proving the hypothesis is carried out.

2.4.1. Analysis of Variance (R2) R-Square

The estimated R-square value can be seen in Table 2. The R-Square value is categorized as strong if it is more than 0.67, moderate if it is more than 0.33 but lower than 0.67, and weak if it is more than 0.19 but lower than 0.33. From the data presented in Table 2, it can be seen that the R-square value of the Goods and Services Procurement Process variable (Y) is 0.702, which can be interpreted as the magnitude of the influence of the Goal Achievement variable (X1), Integrity (X2); Adaptation (X3) was 70.2%, while other variables outside this research model explained the remaining 29.8%. This means that the R-Square value has a simultaneous or simultaneous effect on the Goal Achievement variable (X1);

Integrity (X2); Adaptation (X3) to the Goods and Services Procurement Process (Y) is 0.702 with a customized R-Square value of 0.687. So, it can be explained that all exogenous constructs (X1, X2 and X3) simultaneously influence Y by 0.687. So, it can be concluded that the influence of all exogenous constructs X1, X2 and X3 on Y is weak and included in the strong category because it is greater than 0.67.

2.5. Limitations

The limitation of this research is identifying the effectiveness or *E-Tendering* towards the process of procuring goods and services to accelerate development by identifying effectiveness or E-Tendering. The Goal Achievement indicator partially influences the process of procuring goods and services. As well as identification of effectiveness E-tendering The Integration indicator partially influences the process of procuring goods and services to accelerate development so that it can provide information on the effectiveness of E- tendering have a simultaneous influence on the process of procuring goods and services to accelerate development.

3. Result

3.1. The Effect of E-Tendering Effectiveness on Goal Achievement Indicators in the Process of Procurement of Goods and Services to Accelerate Development in Enrekang Regency

Based on the results of hypothesis testing for the Goal Achievement indicator (X1), it was found that this variable has a positive influence on the process of procuring goods and services (Y) to accelerate development in Enrekang Regency. The magnitude of the influence value can be seen from the T-Statistics value of 2.938 > T table 1.96 and P-Values 0.003 < 0.05.

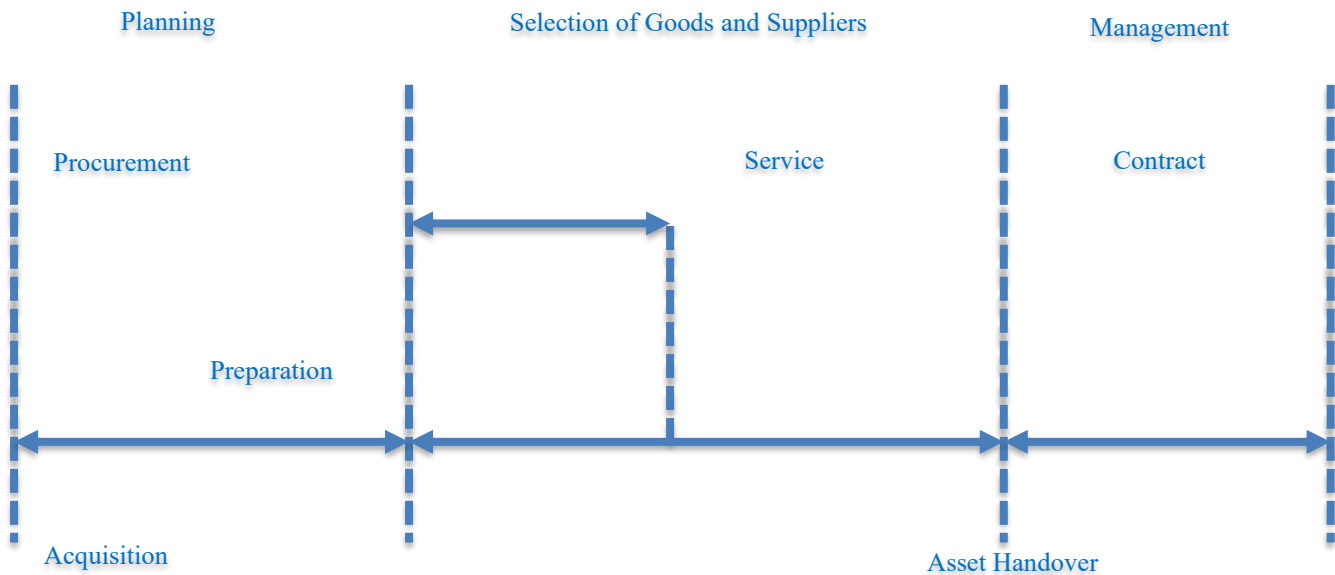


Fig. 1 Process cycle of procurement of goods and services

The interpretation of these findings is that the higher the goal achievement (X1) in using e-tendering, the better the goods and services procurement process (Y) in Enrekang Regency. This means that when efforts to achieve goals related to the effectiveness of e-tendering are increased, the process of procuring goods and services also becomes more efficient, transparent and accountable. Thus, this indicates that focusing on achieving goals using e-tendering is very important to improve the quality and speed of the goods and services procurement process and support accelerated development in Enrekang Regency.

The results of this research are confirmed by previous research conducted by Mangkona et al. (2018), which found that the application of E-tendering has a positive and significant effect on the implementation of procurement of goods and services in government agencies. This means that the better and clearer the goal achievement in implementing e-tendering is observed in terms of efficiency, data accuracy, competitiveness, customer services, improved relationships with work partners, and challenges, the better the implementation of procurement of goods and services starting from the process of identifying needs for goods and services, budget preparation, general procurement policies, technical procurement planning, announcement of general procurement plans, selection of providers, payment processes, and utilization of goods and services.

According to Sukmana (2015) and Taufik et al. (2016), the slow implementation of procurement of goods and services certainly greatly affects budget absorption, which has an impact on the slow development of regional government infrastructure and ultimately harms the community. The World Bank even states that economic support comes from the fiscal sector, which is also hampered by low budget absorption. Therefore, to support the acceleration of development in Enrekang Regency, It is very important for each agency (SKPD/OPD) within Enrekang Regency to carry out effective implementation of e-tendering, especially on indicators of achieving clear goals in the process of procuring goods and services. This is because the effectiveness criteria emphasize the results or achievement of the objectives of implementing e-tendering in terms of achievement value for money.

3.2. The Effect of E-Tendering Effectiveness on Integration Indicators on the Process of Procurement of Goods and Services to Accelerate Development in Enrekang Regency

In simple terms, communication, according to De Vito, can be understood as the process of sending and receiving messages between two people or groups of people with some effect and some instant feedback. Likewise, according to Mulyana, communication is a process of sharing meaning through verbal and non-verbal behavior carried out by two or more people (Suharsono and Dwiantara, 2013). Effect of effectiveness on E-tendering The Integration indicator (X2) in

the process of procuring goods and services to accelerate development in Enrekang Regency can be seen after data analysis. Obtaining statistical data shows that the influence provided by Integration (X2) on the process of procuring goods and services to accelerate development is a positive influence, namely the T-Statistics value of 3.656, exceeding the specified T table value (1.96), and the P-value Values are 0.008, smaller than the predetermined significance level, namely 0.05. The interpretation of these findings is that there is a significant relationship between the effectiveness of E-tendering on integration indicators and the goods and services procurement process in Enrekang Regency. A significant statistical value shows that variable X2 (effectiveness of e-tendering on integration indicators) has a positive influence on variable Y (the process of procurement of goods and services) in supporting accelerated development.

In this context, effective E-tendering integration aspects, such as coordination between related units or departments, system integration, or comprehensive processes, play an important role in improving the quality of the procurement process. With an emphasis on integration, better collaboration between elements involved in the goods and services procurement process can increase efficiency, reduce information gaps, and ensure broader involvement. The integration of e-tendering in the goods and services procurement process has significant benefits, such as increased efficiency and transparency throughout the procurement cycle. As stated by several previous studies, e-tendering has provided progress in the process of procuring government goods and services in Indonesia. Nasution (2012) stated that e-procurement (e-tendering) can increase transparency, accountability, market access and healthy business competition, time and cost efficiency, support monitoring and audit processes, and meet the need for real time access to information.

In Septiawan's research (2018), it is also stated that simultaneously, all determining factors, such as organizational factors, technological factors, supplier factors and user factors, have a positive and significant influence on the success of system implementation. E-Procurement (goods and services procurement system). This means that the effectiveness of e-tendering on integration indicators is closely related to the process of procuring goods and services in order to support government programs to accelerate development.

3.3. The Effect of E-Tendering Effectiveness on Adaptation Indicators for the Procurement of Goods and Services to Accelerate Development in Enrekang Regency

The results of this research illustrate that the E-tendering effectiveness variable in the Adaptation indicator (X3) has a significant positive influence on the process of procuring goods and services to accelerate development in Enrekang Regency. Relevant statistical values support this: The T-Statistics is 3.631, exceeding the specified T table value

(1.96), and the P-Values value is 0.000, smaller than the significance level of 0.05. Interpretation of the results of this research shows that the higher the level of adaptation in implementing e-tendering, the more positive the influence on the process of procuring goods and services. Adaptation, in this case, may refer to the ability of an e-tendering system to adapt to changes, situations and needs that occur over time.

These findings imply that a focus on increasing adaptation in the implementation of e-tendering can have a significant impact on speeding up the process of procuring goods and services in the Enrekang Regency. A system that can quickly adapt to changes will help optimize the efficiency of the procurement process, ensure the availability of accurate information, and provide a faster response to procurement needs. In previous research by Nurchana et al. (2017) on the effectiveness of implementing e-procurement in the procurement of goods/services in Bojonegoro Regency, one of the things that makes the process of procuring goods and services ineffective is because the adoption of e-procurement or e-tendering has not been implemented effectively to optimal and maximum. So, it still provides opportunities for fraud. Thus, the results of this research provide a strong basis for considering increased adaptation in the development and management of e-tendering systems. With a system that is able to adapt well, the process of procuring goods and services in Enrekang Regency can run more efficiently and better support accelerated development.

3.4. The Effect of Simultaneous E-Tendering on the Process of Procuring Goods and Services to Accelerate Development in Enrekang Regency

In order to speed up the implementation of development programs, on January 16 2015, the President issued Presidential Instruction Number 1 of 2015 concerning the Acceleration of Implementation of Government Procurement of Goods/Services. The President's instructions include completing the General Plan for Procurement of Government Goods/Services for the next Fiscal Year before the end of the current Fiscal Year in a transparent, careful and accountable manner and carrying out all Procurement of Government Goods/Services through an Electronic Procurement System such as e-Tendering (auction process via electronics) and e-Purchasing (procurement through electronic catalogs) (Syukriy and Halim, 2016). To see the effect of simultaneous E-tendering on the process of procuring goods and services to accelerate development in Enrekang Regency, you can see the results of the R-Square value in the regression model from the analysis results. R-Square shows that the variables Achievement of Goals (X1), Integrity (X2), and Adaptation (X3) together or simultaneously are able to explain around 70.2% of the variations contained in the process of procuring goods and services (Y). The adjusted R-Square value adjusted for the number of variables and sample size is 0.687. The interpretation of the R-Square value is that the Goal Achievement, Integrity and Adaptation variables, in

combination, provide a strong explanation of the variations or changes that occur in the process of procuring goods and services in Enrekang Regency. Most of the variations or changes in the goods and services procurement process (around 70.2%) can be explained by these three variables. Although 70.2% of the variation is explained, there is still about 29.8% of the variation in the procurement process that is not captured in the model. This can be caused by other factors outside the variables examined in the research or the presence of complex and dynamic factors that may not be included in the analysis.

However, these results show that Goal Achievement, Integrity, and Adaptation all have a significant role in influencing and explaining changes in the goods and services procurement process in Enrekang Regency. This indicates that a focus on these variables is important in efforts to improve the quality and efficiency of procurement processes in the region. Emphasis on these variables can provide a stronger basis for policy development, system improvements, and better strategies in ensuring that the goods and services procurement process in Enrekang Regency can run more efficiently, transparently, and measurably in accordance with the stated goals of accelerating development desired. This condition is an empirical fact that has occurred and is related to the procurement of goods and services. This is reinforced by the results of research conducted by Damayanti et al. (2012) and Taufik et al. (2016), who found that there was a positive and significant influence of the implementation of eProcurement on the process of implementing the procurement of goods and services. Likewise, Retnowulan (2014) stated that there was a positive and significant influence on the implementation of e-procurement in the implementation of procurement of goods and services.

4. Conclusion

Based on the research results, the author concludes that:

- The effectiveness of E-tendering on the Goal Achievement indicator (X1) has a positive influence on the process of procuring goods and services (Y) to accelerate development in Enrekang Regency. The interpretation of these findings is that the higher the goal achievement, the better the goods and services procurement process in Enrekang Regency.
- There is a positive influence between the E-tendering effectiveness variable and the Integration indicator (X2) in the process of procuring goods and services to accelerate development in Enrekang Regency. So, it can be interpreted that the better the integration, the better the procurement process in Enrekang Regency.
- The E-tender effectiveness variable on the Adaptation indicator (X3) has a positive influence. This means that the higher the adaptation, the greater the influence on the process of procuring goods and services to accelerate development in Enrekang Regency.

- Achievement of Goals (X1), Integrity (X2), and Adaptation (X3) together or simultaneously are able to explain around 70.2% of the variations contained in the process of procuring goods and services (Y). Achievement of Goals, Integrity and Adaptation have a significant role in influencing and explaining changes in the procurement process for goods and services in Enrekang Regency. This shows that focusing on these variables is important in efforts to improve the quality and efficiency of regional procurement processes.

Acknowledgments

The author would like to thank the supervisory board of this thesis research for their assistance and guidance in completing the research process for this thesis, which started from the planning stage until the implementation of the research thesis. The author also thanks all parties who have been involved in this research and provided support in the form of services and finances. The author would like to thank the academic staff and staff at the Hasanuddin University Postgraduate School who have contributed and supported this research.

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Author Contributions

Conceptualization: Jaelani
Data curation: Jaelani
Formal analysis: Jaelani, Achmad Ruslan, Palmarudi Mappigau
Funding acquisition: Jaelani
Research: Jaelani
Methodology: Jaelani, Achmad Ruslan, Palmarudi Mappigau
Project administration: Jaelani
Resource: Jaelani
Supervision: Jaelani, Achmad Ruslan, Palmarudi Mappigau
Validation: Jaelani
Writing—original draft: Jaelani
Writing—reviewing & editing: Jaelani

Funding

Funding for this research was fully borne by the researchers involved in this research.