

Comparative Analysis of the Implementation of E-Procurement in the Procurement of Goods and Services

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Abstract : The purpose of research writing is to find out the comparison of the level of effectiveness, efficiency, openness, competitive, transparent, Fair, accountable between before using e-Procurement (manually) and after using e-Procurement (electronically). This research uses descriptive method with a quantitative approach. The data used in this study are primary data in the form of questionnaires. The results of the study show a comparative level of effectiveness, efficiency, openness, competitive, transparent, fair, and accountable that is significant between the implementation of procurement of goods and services before and after using e-procurement. The process of procuring government goods and services is more effective, efficiency, openness, competitive, transparent, fair, and accountable using e-procurement is measured in terms of needs, costs, time, methods, application of principles, determination of own estimated price, quality, and has an optimal impact.

1 INTRODUCTION

The process of procuring government goods and services based on Presidential Regulation number 18 of 2000 provides technical instructions for the procurement of government goods and services in a complete and detailed manner. The process of procuring government goods and services is carried out in a hidden way or pretending to carry out a transparent process with the arrangement of insiders is a practice of corruption, collusion and nepotism. Communities as beneficiaries in the development system will bear all losses, both in terms of funds, time and quality of service. The government as the state organizer should properly carry out its duties professionally and maximally in order to achieve good governance (Martini, Sari, & Wardhani, 2015).

The Government seeks to realize an open and democratic system of government by increasing and optimizing public services through policies and regulations that are effective, efficient and reflect openness/transparency (Martini, Sari, Maria, & Thoyib, 2016). According to Presidential Regulation number 54 of 2010 as contained in Article 5, the implementation of government procurement of goods and services contains the following basic

principles: effectiveness, efficiency, openness, competitiveness, transparent, fair, accountable.

Information technology facilitates human work so that it becomes more effective and efficient. Information technology can reduce the number of leaks in the development budget and improve the implementation of government programs that are less effective and efficient. The process of procuring goods and services that were originally carried out manually has developed into e-procurement more effectively and efficiently. The public has the right to obtain guarantees against freedom of access to public information.

Information technology if utilized properly by the government bureaucracy can reduce budget leakage rates in development and improve the implementation of government programs that are less effective and efficient so as to help achieve the performance of bureaucracy/government agencies that are transparent, effective, efficient and accountable. Information technology in the administration of government towards the creation of good governance. An open process by using e-procurement or the process of procurement electronically (online) through the internet that is transparent and gets supervision from the public. The community has the right to obtain guarantees for access to public information/freedom of

information e-procurement can also improve efficiency and effectiveness in the procurement of public goods and services, reduce costs, increase competition, to guarantee equality of opportunity and treatment. Procedures for the procurement of goods/services generally guarantee integrity, public trust, and transparency in the procedures for procurement of goods/services.

South Sumatra is one of the provinces in Indonesia located in the southern part of the island of Sumatra. The province is rich in natural resources, such as oil, natural gas and coal. South Sumatra Province has a governance structure with 43 Regional Device Organizations (OPD) which have their respective main tasks and functions. The development administration bureau is a procurement service unit (ULP), the entire auction mechanism for the procurement of goods and services carried out by OPD of the province of South Sumatra must go through the ULP development administration bureau of the South Sumatra provincial government.

Formulation of the problem:

1. How is the comparison between the implementation of effectiveness, efficiency, openness, competitive, transparent, fair, accountable for procurement of goods and services before and after e-procurement to the government of the province of South Sumatra?
2. Which basic principle is most dominant in the manual and electronic procurement process (e-procurement) in the procurement of goods and services in the South Sumatra provincial government?

Presidential Regulation number 4 of 2015, E-Procurement is the procurement of goods/services carried out using information technology and electronic transactions in accordance with the provisions of the legislation. According to the Presidential Regulation number 54 of 2010 the procurement of government goods and services electronically aims:

1. Increase transparency and accountability.
2. Increase market access and fair business competition.
3. Improve the efficiency of the procurement process.
4. Support the monitoring and audit process.
5. Meet the need for real time information access.

Presidential Regulation number 70 of 2012 Article 3 concerning the implementation of the

principle of procurement of government goods and services, among others:

1. Effectiveness
2. Efficiency
3. Openness
4. Compete
5. Transparent
6. Fair
7. Accountable

Based on the description above, it will appear in the figure 1.

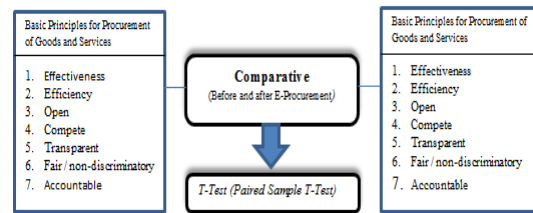


Figure 1: Research paradigm

2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

According to Presidential Regulation number 4 of 2015, the electronic procurement or e-procurement is the procurement goods conducted using information technology and electronic transactions in accordance with statutory provisions.

Efficiency of the procurement of goods and services means that the procurement of goods and services must use limited funds and power to achieve the targets set and can be accounted for. The effectiveness of the procurement of goods and services means that the procurement of goods/services must be in accordance with predetermined needs and provide maximum benefits, through the best quality, timely delivery, fulfilled quantities and being able to optimize work/programs.

Open, means that the procurement of goods/services can be followed by all suppliers of goods/services that meet certain requirements/criteria based on clear provisions and procedures. Competing means that the procurement of goods/services must be carried out through fair competition among goods/services providers that are equal and meet the requirements, no intervention.

Transparent, which means all the provisions and information on the procurement of goods/services are clear and widely known by the provider of the

goods/services that are interested and society in general (Martini, Sari, Maria, & Thoyib, 2016). Fair/not discriminatory, means giving equal treatment to all prospective providers of goods/services and does not lead to providing benefits to certain parties while still observing national interests. Accountable, means that it must be in accordance with the rules and provisions related to the procurement of goods/services, so that it can be accounted for.

3 RESEARCH METHODOLOGY

This study uses a quantitative research approach with explanatory research methods. Unit of analysis selected by the Regional Device Organization (OPD) in provincial government of South Sumatra. Primary data in the form of direct interviews and questionnaires distributed throughout the sample regarding the implementation of the basic principles of the implementation of e-procurement process for the procurement of goods and services in OPD in the South Sumatra provincial government.

The population in this study OPD of the South Sumatra provincial government totaled 43. The sampling technique of this study uses purposive sampling technique, with the following criteria:

1. Using E-Procurement from 2013 to 2017
2. Procurement Service Unit (ULP) with an auction process above Rp 200,000,000.00.
3. Having the most value of procurement of goods and services compared to other Regional Device Organizations.
4. Status as Electronic Procurement Service (LPSE).

Based on the criteria obtained 5 samples from 43 OPD in the province of South Sumatra, namely:

1. Development Administration Bureau of the South Sumatra Provincial Government as a ULP,
2. Government Communications and Information Agency of South Sumatra Province as LPSE,
3. Public Works Department of Bina Marga and Spatial South Sumatra Provincial Government,
4. Department of Irrigation Public Works Government of South Sumatra Province, and
5. Department of Public Works of Cipta Karya of the Government of South Sumatra Province whose value of procurement of goods and services highest compared to other services.

Paired sample t-test is a test method used to assess the effectiveness of treatment, marked

differences in the average before and on average after given treatment. Paired sample t-test was used when data is normally distributed, the H_0/H_a in the paired sample t-test is:

1. If probability (Asymp.Sig) < 0.05 then H_0 is rejected and H_a is accepted. That is, if the value of Sig Asymp under 0:05 are significant changes between the before (pretest) and after (Post test).
2. If probability (Asymp.Sig) > 0.05 then H_0 is accepted and H_a is rejected. That is, if the Asymp value Sig above 0.05 there is no significant change between before (pretest) and after (Postest).

The respondents in this study consisted of:

1. Commitment Making Officer (PPK)
2. Budget User (PA) / Budget User Proxy (KPA)
3. Work Results Recipient Official (PPHP)
4. Electronic Procurement Services (LPSE)
5. Procurement Service Unit (ULP)

Characteristics of respondents based on the position of KDP amounted to 10 people (32%), PA/KPA amounted to 5 people (17%), PPHP amounted to 5 people (17%), LPSE numbered 5 people (17%), and ULP amounted to 5 people (17%), Meaning that most respondents are PPK.

Respondents who filled out questionnaires were S2 (Strata 2) educated 25 people (83%) and respondents who filled the questionnaire had S1 (Strata 1) 5 people (17%), meaning that the majority of respondents who filled out questionnaires had S2 (Strata 2) education. The working period of respondents between 10-20 years is 20 people (67%), and respondents who work between 5-10 years are 10 people (33%). This means that the majority of respondents working above 10 years amount to 20 people.

Characteristics of age range, number of committees, and period using e-procurement, the age range of respondents ranged from 30 to 51 years, the number of respondent committee as much as 2 to 10 times for each OPD, and for the use of e-procurement starting in 2012 throughout OPD in the province of South Sumatra.

4 RESULTS AND DISCUSSION

4.1 Result

Test results of the validity of effectiveness, efficiency, open, competitive, transparent, fair,

accountable after and before e-procurement, out of a total of 10 questions stated valid with a greater calculated r value from r table the average is 0.3494 (significance level 0.05 for $df (n-2) = 30$). So, it was concluded that the data in the (valid) research effective reliability test.

The research will be carried out using a second measurement of reliability, One Shot or just one measurement, with the Cronbach's Alpha method ≥ 0.70 . Cronbach's alpha reliability test results for variables Effectiveness 0.929, Efficiency 0.925, Open 0.763, Competing 0.749, Transparent 0.713, Fair 0.719, Accountable 0.741 so based on the reliability test results of Cronbach's alpha > 0.70 the data is reliable and the reliability classification is very high, because the value of cronbach's alpha is between 0.8 - 0.9 $rh < 1$, meaning before and after e-procurement is reliable, so that all data can be used as research material.

A data is declared to be normally distributed if the Asymp Sig (2-tailed) value is calculated by Kolmogorov-Smirnov ≥ 0.05 . Tests for normality for effectiveness, efficiency, openness, competitiveness, transparency, fairness/non-discriminatory, accountable with normal distribution because based on the normality theory a data is declared to be normally distributed if the Asymp Sig (2-tailed) results from Kolmogorov-Smirnov calculation ≥ 0.05 so that all data it is declared normal and can be used as research material.

The results of paired sample t-test effectiveness after and before e-procurement as follows:

1. Correlation of 0.903 or its relationship is strong and positive, the results of paired sample t-test after and before e-procurement, that the calculated t value is -5.681 with a significance value of 0.000 because the value is below 0.05 means the level of effectiveness after and before e-procurement is strong and significant.
2. Correlation of 0.986 or its relationship is strong and positive, the results of paired sample t-test after and before e-procurement, that the value of t count is -6.113 with a significance value of 0.000, means the level of effectiveness after and before e-procurement is strong and significant.
3. The correlation between 0.953 and its relationship is strong and positive, a summary of the results of paired sample t-test after and before e-procurement, that the calculated t value is -5.884 with a significance value of 0.000, meaning the level of opening after and before e-procurement is strong and significant.
4. Correlation of 0.905 is that the relationship is strong and positive, a summary of the results of paired sample t-test after and before e-procurement, that the calculated value is -5.884 with a significance value of 0.000, that the level of competing after and before e-procurement is strong and significant
5. Correlation 0.865 or the relationship is strong and positive, a summary of the results of paired sample t-test after and before e-procurement, that the calculated t value is -51.150 with a significance value of 0.000 is below 0.05 meaning the level of transaran after and before e-procurement is strong and significant.
6. Correlation of 0.757 or the relationship is strong and positive, a summary of the results of paired sample t-test after and before e-procurement, that the calculated value is equal to -60.217 with a significance value of 0.000, means the level of opening after and before e-procurement is strong and significant.
7. The correlation of 0.943 is strong and positive, a summary of the paired sample results after and before e-procurement test, that the calculated t value is -5,884 with a significance value of 0.000 meaning the level of opening after and before e-procurement is strong and significant.

4.2 Discussion

Score effectiveness, efficiency, openness, competitive, transparent, fair, accountable after using e-procurement is greater than before using e-procurement. That is, the implementation of procurement of goods and services using e-procurement is more effectiveness, efficiency, openness, competitive, transparent, fair, accountable compared manually or before using e-procurement measured by the best quality question indicators, it can be seen that when implementing before using e-procurement is smaller than after using e-procurement, meaning that there is a significant change in the best quality question indicator.

Indicators of timely questions, optimal impact, it can be seen that filling out questionnaires after using dominant e-procurement has a score greater than before using e-procurement, meaning that there is a significant change in the question indicator on time, for quantity indicators fulfilled, can It is seen that filling out the questionnaire when after using dominant e-procurement has a score greater than before using e-procurement, meaning that the

quantity question indicator is fulfilled also has increased after using e-procurement

The presence of information technology ideally facilitates various human jobs so that the work done can be more effective and efficient. E-Procurement can also increase effectiveness, efficiency, open, competitive, transparent, fair, accountable in procuring goods and services, reducing costs, increasing competition, to guarantee equal opportunities and treatment. In general, the aim is to ensure integrity, public trust and transparency in the procedures for procuring general goods/services.

5 CONCLUSION

Implementation of electronic procurement (e-procurement) more effectiveness, efficiency, openness, competitive, transparent, fair, accountable in terms of cost, time, risk, quality, quantity and energy compared to manually or before using e-procurement is evident from the results of filling out questionnaires by respondents in this study. Theories that support these results, and conformity in accordance with the principles set out in Presidential Regulation number 54 of 2010 concerning procurement of government goods and services. The most dominant efficiency in the process of procurement manually and electronically (e-procurement) in the process of procurement of goods and services in the provincial government of South Sumatra.

In this study there are also limitations that not all populations in the study are sampled due to lack of data availability so that they do not become a sample of research and research is limited to the governments in South Sumatra Province.

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