# Evaluation of E-Budgeting Implementation in Planning Budget in Maros Regency

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**Abstract**

Several Regional Governments then implemented E-Budgeting in the preparation of the budget. One region that has implemented E-Budgeting in preparing regional budgets is Maros Regency. The research in this paper was conducted by reviewing literature, articles and using secondary data with documentation from observations via the internet. The data was obtained by monitoring the government website and the application used by the Maros Regency Government in conducting the E-Budgeting process and then conducting a descriptive qualitative analysis. The results of the study show that evaluation of the implementation of the E-Budgeting System in Budgeting in Maros Regency can be stated that at this time the electronic-based budgeting system has been implemented well but has not been fully optimal in achieving the results and benefits, this can be seen in 6 (six) criteria in the evaluation, namely effectiveness, efficiency, adequacy, equity, and responsiveness.

## Introduction

The rapid development of technology requires the government to be faster in government administration (Harakan, Nur, Mustari, & Dyussenov, 2020; Stratu-Strelet, Gil-Gómez, Oltra-Badenes, & Oltra-Gutierrez, 2021). The use of technology and information becomes necessary within government and public institutions because it improves the quality of services that become more effective, efficient, responsive, and undoubtedly accountable. (Hamrun, Harakan, Prianto, & Khaerah, 2020; Napitupulu, 2015). Responding to this need, the government then responded positively. It gave a mandate to all elements of government and public institutions as well as government administration services by issuing policies as a legal umbrella so that the government and public institutions were increasingly active in the development and use of ICT (Information, Communication, and Technology) for the benefit of government services. In terms of implementing e-government in several regions in Indonesia, there are still many who have not implemented it optimally, and this is due to many factors such as human resources that have low quality in managing IT, inadequate facilities and infrastructure, and the performance of government officials that has not been maximized.

The utilization of Technology in Government Administration is intriguing, Regional Financial Management does not escape the electronic system, so there is E-Budgeting, an electronic budget preparation system by the government. Through Regulation of the Minister of Domestic Number 64 of 2014 concerning Accrual-Based Financial Accounting, local governments must manage regional finances professionally (Khoirunnisak, 2017). Electronic Budgeting plays a vital role in Budgeting in the public sector carried out by government departments as a tangible form of transparent regional financial management to the public (Jayasinghe, Adhikari, Carmel, & Sopanah, 2020; Prayoga & Yuhertiana,

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2021). The E-Budgeting System is used online, which can be accessed anywhere, so the time needed in the budgeting process can be reduced. This System was deliberately created online to be accessed by anyone in authority and at any location, whether during discussions with the board or supervision (Nugraha & Wibowo, 2020). The public can also access it to know how the government performs and the regional financial circulation. Thus, the system functions appropriately for the community as a medium in monitoring both performance and processes in the formation of the public sector budget (Derbeneva & Starodubets, 2021; Fernandez-Cortez, Valle-Cruz, & Gil-Garcia, 2020).

Several Regional Governments then implemented E-Budgeting in the preparation of the budget. One of the regions that have implemented E-Budgeting in the preparation of regional budgets is Maros Regency, through the Regional Financial Management Information System, a regional financial application developed for its features and performance by PT. Usadi Sistemindo Intermatika. The implementation of the E-Budgeting System is expected to answer the problems that have occurred in the preparation of regional budgets. So it is necessary to see how the results of the application of the E-Budgeting System are. In this article, we will discuss how to evaluate the implementation of the E-Budgeting System in Maros Regency.

## E-Budgeting

The E-Budgeting System is a product that started from the big scenario of e-Government in government, with the concept of Government Resource Management System (GRMS). The E-Budgeting Program is a budgeting system that has a web-based computerized application in it as a facility in the process of preparing Regional Revenue and Expenditure Budgets (APBD), Improvements/Revisions, and Changes to the Activity Budget (PAK) in the Government (Gunawan, Rizki, 2016). Furthermore, other literature states that E-Budgeting is a budgeting system in which a web-based computer application provides budgets for a government agency. In this system, there are several items to support the success of E-Budgeting, including E-project, E-Delivery, and E-Controlling. This System is held online to be accessed by any agency and wherever it is located. It can be used when a budget is discussed with the council, and the public can access it to know its performance and regional financial circulation. (Khoirunnisak, 2017). The government's aspiration in implementing E-Budgeting is for the community's welfare and closing the gap between corruption and budget wastage (Andhayani, 2020; Hakim, Saputra, & Saleh, 2021). The E-Budgeting program aims to assist the government in preparing the Regional Revenue and Expenditure Budget, facilitate revisions to the APBD draft, and make changes to the Activity Budget. This program can also minimize fraudulent acts in Budgeting because it has been integrated online in several government agencies that supervise Budgeting (Khoirunnisak, 2017; Setyawan & Gamayuni, 2020).

## Evaluation

In general, evaluation can be interpreted as an appraisal, rating, and assessment, all of these terms express an attempt to provide an analysis of the results of a policy product in the sense of providing a more specific and in-depth unit of value. Evaluation is related to making/producing information related to the value and benefits of the results of a policy product (Dunn, 2003). Policy evaluation can also be said as an activity carried out to assess the level of success of the performance of a policy, and is aimed at looking at the parts that are considered failed in policy products and to explore and analyze the extent to which policies that have been formulated and implemented can have an impact according to its purpose (Lejiu, 2009). Evaluation is the end of the stages of a program. At this stage, it can be seen how the implementation of the policy, the shortcomings, advantages, and results of the policies implemented are positive or negative (Permatasari, 2020). The evaluation has six criteria: Implementation, Efficiency, Effectiveness, Adequacy in Needs, Equitable, Responsiveness, and Accuracy in program implementation (Sutama, 2017).

## Methods

Methods The research in this paper was conducted by reviewing the literature, articles, and secondary data with documentation from observations via the internet (Creswell, 2016). The data was obtained by monitoring the government website and the application used by the Maros Regency Government in conducting the E-Budgeting process and then conducting a descriptive qualitative analysis. Furthermore, this study used a descriptive qualitative method, and data obtained were analyzed using

the help of Nvivo12 Plus software. Also, it analyzes and describes the evaluation of implementing government policies about E-Budgeting. The research data that has been collected through observation on the website is then processed through Nvivo—classifying data as a retranslation process of data coding, classifying process using Nvivo crosstabulation, crosstabulation as a comparison process of each data. The last stage in the Nvivo analysis process is displaying data in the form of graphs and tables, this analysis model in Nvivo is referred to as five steps analysis (Woolf & Silver, 2018).
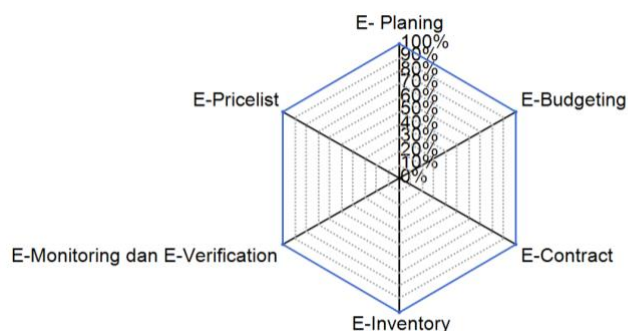
## Result And Discussion

Implementing E-Budgeting in Maros Regency is a strategic step in doing electronic Budgeting. This E-Budgeting Program has been implemented for 6 (six) years from 2014 since the issuance of Regulation of the Minister of Domestic Number 64 of 2014 concerning Accrual-Based Financial Accounting, making local governments required to manage regional finances professionally.

**Figure 1.** Features E-Budgeting Application in Maros Regency



In the E-Budgeting application in Maros Regency, four features are used for regional financial management: planning and Budgeting. Realization and responsibility. These four features are used online to make it easier for all policy actors to prepare budgets for the local government of Maros Regency. This electronic budgeting system is integrated with the SIPKD (Regional Financial Management Information System) application, a regional financial application developed for its features and performance by PT. Usadi Sistemindo Intermatika collaborates with the Maros Regency Government in which there are several features in preparing regional budgets such as E-Planing, E-Budgeting, E-Inventory, E-Monitoring and E-Verification, E-Contract E-Pricelist.

**Figure 2.** Integrated Government System



The analysis results through Nvivo found that all the features of the Integrated Government System can function well with overall getting a perfect percentage. Integrated Government System features to carry out regional Budgeting such as E-Planning (application in the preparation of local government work plans), E-Budgeting (application in Regional Budget Preparation), E-Inventory (all government supplies can be accessed here), E-Monitoring and E-Verification (application used by certain employees

who have access to oversee the process of regional financial management and verify the results of budget preparation), E-Contract (application of the integration system for the procurement of goods and services) and the last is E-Pricelist (System Unit price information that makes it easier to determine the price of goods, assets, rental services, labor services in Budgeting).

Evaluation in the implementation of the E-Budgeting program in Maros Regency will be seen from 6 (six) criteria from policy evaluation, namely Policy Efficiency, Policy Efficiency, Adequacy in Needs, Equitable in Policy Implementation, Responsiveness, and Accuracy in Program Implementation, as a more detailed explanation will be assessed one by one, as follows:

## Effectiveness

In this article, we will look at the effectiveness of the Maros Regency government's E-Budgeting System with several indicators, namely, Employee Productivity as Human Resources, ease of Budgeting, and improving the quality of the Regional Revenue and Expenditure Budget following the RPJMD. The data shows that with the existence of E-Budgeting, employee productivity will undoubtedly increase, following the objectives of E-Budgeting. However, the obstacle experienced by local governments is that employees who have worked before E-Budgeting certainly cannot adapt immediately, so they are still dependent on ICT experts. For assistance to run the E-Budgeting program in Budgeting is still high so that the productivity and performance of employees have not seen a significant increase in Maros Regency, as in the Fajar Daily Report revealing that Performance Accountability in Maros Regency is still ranked C or the lowest among other regions in South Sulawesi. Despite receiving a poor assessment of performance accountability, the efforts made by the district government. Maros, by implementing E-Budgeting, has innovated in increasing the effectiveness of regional Budgeting.

Furthermore, in terms of ease of Budgeting, this is the most desirable aspect of the E-Budgeting System. Referring to the facilities provided by the electronic-based SIKPD (Regional Financial Management Information Management System), the Budgeting makes it easier for the Offices to prepare RKA, which will later be integrated with the Data Team. Then there are many features provided, such as E-Pricelist, which provides information on Standard Basic Unit Prices which provides all prices of goods on the market complete with providers ranging from the cheapest goods to the most expensive goods, Then the Price of the Basic Unit of Activities in which there is manufacture accounting information, such as salary analysis, programmers, and others, then Cost Analysis Standards, and finally, Estimation, which is to collect expenditure components that do not have detailed price standards. All of these features can facilitate the government in Budgeting.

**Figure 3.** E-Pricelist in SIPKD Maros Regency



The next effectiveness indicator is improving the quality of the APBD following the RPJMD, of course with an electronic budgeting system that makes it easier to prepare the APBD because it has been integrated with several agencies then all the themes of the budget work plan have been adjusted to the RPJMD (Regional Medium Term Development Plan). All products of the Maros district budget can be easily accessed by anyone in collaboration with the SITP (Public Transparency Information System) to publish all the results of government activities. Then in line with those in the City of Surabaya, which has implemented the E-Budgeting System first since 2005, it can produce E-Budgeting products in the form of a quality APBD following the RPJMD. (Khoirunnisak, 2017).

## Efficiency

Evaluation of the E-Budgeting System in the Efficiency criteria will focus on analyzing the program's ability to provide efficiency values in terms of resources, time, and of course, in terms of financing. From the results of observations in applying the E-Budgeting System in Maros Regency in terms of resources, of course, it can be streamlined. The number of employees needed in Electronic-based Budgeting is undoubtedly more minor than the conventional method so that the government can make staff more efficient in preparing the budget. (Khoirunnisak, 2017). Furthermore, efficiency in terms of time, looking at the features provided by the Maros district government in E-Budgeting, can save time in operational Budgeting because it no longer uses conventional methods to collect data one by one. However, with this E-Budgeting, the data needed to prepare the budget has been integrated so that the time needed in preparing the budget can, of course, be cut.

Efficiency in terms of costs is an aspect that has always been a priority for the government, where efficiency in terms of costs must be seriously considered so that there is no wastage of the budget. The electronic-based budgeting program can significantly reduce the government's total financing in administration, relations, coordination, interactions, and several stakeholders in budget preparation (Nkya, 2019; Sosiawan, 2008). However, in its implementation, the E-Budgeting System in Maros requires a higher cost, itis recorded in the E-Pricelist in the Maros SIPKD to install an internet provider in one government agency only costs IDR. 100,000,000,00 what if it is for the integration of all agencies, of course, it takes The cost is enormous, so the implementation of E-Budgeting does require a reasonably high cost initially. However, after running for several years, the only costs needed are maintenance costs, and of course, the cost of the conventional method can also be eliminated by using technology. So it can be said that the implementation of E-Budgeting in Budgeting can provide benefits in terms of efficiency, but there must be government consistency in maintaining and maximizing technology in government administration.

## Adequacy

The adequacy in question is the extent to which the desired goals have been achieved, then whether the E-Budgeting System has solved the problem of Budgeting which so far there are still games in its preparation. Local governments manage public finances using technology; the main goal is efficiency, effectiveness, and accountability; if we look at effectiveness and efficiency, these goals have certainly been partially achieved as described in the previous evaluation criteria. Furthermore, in terms of accountability, creating an accountable budget is the government's primary concern because with accountability, of course, implementing E-Budgeting can eliminate corrupt practices in Budgeting. After all, on an internet basis, Budgeting can be monitored by many parties who have access to the E-Budgeting System. Unfortunately, the Maros Regency Government has not yet obtained a good accountability score in governance.

E-Budgeting System can solve problems in Budgeting that have been happening so far, namely the practice of "playing in the budget" with various manipulation practices due to the lack of openness and transparency of Budgeting. After implementing E-Budgeting, the government can no longer freely manipulate the budget preparation because it has been opened and integrated with several financial management supervisors such as the Supreme Audit Agency and the Corruption Eradication Commission. So it can be concluded that the government has not maximized the E-Budgeting System in terms of adequacy. However, the integration of the system certainly makes budget preparation more transparent and can be monitored by all parties, including the community.
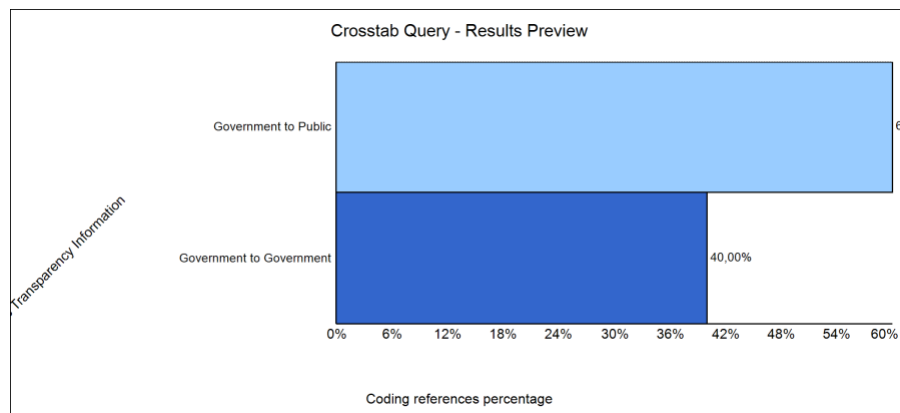
## Equitable

Equity in the discussion of public policy is the same as providing appropriate actions derived from the objectives of a policy (Dunn, 2003). Equalization in the implementation of Budgeting is to see whether the program's implementation can provide an equitable and fair impact to all stakeholders (Kurrohman, 2013). In this case, the regional apparatus integrated into the E-Budgeting System certainly gets the same treatment in Budgeting; the integration of the System makes it easier for budget makers to prepare regional budgets. The application of E-Budgeting does not discriminate in the use of the System in each the regional apparatus Kab. Maros, even if problems arise, the Regional Budget Team

will assist the regional apparatus to use the E-Budgetincorrectly and adequately correctly to minimize violations that usually occur in Budgeting. So it can be concluded that from the aspect of alignment, the E-Budgeting System has been able to provide convenience for all regional work units to make budget preparations.

## Responsiveness

Responsiveness in a policy product means the responsiveness of the target of a policy on its implementation as a public policy (Adam, Hurka, Knill, & Steinebach, 2019). William N. Dunn argued that responsiveness is related to how a policy can satisfy preferences, needs, or values in certain groups of people (Dunn, 2003). In the E-Budgeting Program, the responsiveness is unquestionable; relying on electronics can make it easier for the public to respond to the government in supervising regional financial management. The public's response is created when there is easy access to government financial information; the Maros Regency Government discloses public information, especially finance, using the Public Transparency Information System (SITP).

**Figure 4.** Public Transparency Information System



The Public Transparency Information System has two features: Government to Public and Government to Government. So both the Community and Regional Apparatus have easy access to oversee the budget preparation electronically. Then in the public transparency information system, the government provides all information related to the use of the budget for government administration, such as the Regional Revenue and Expenditure Budget each year to the details of the budget changes. Figure 4 shows that the use of government to the public is more significant because the community has easy access to information about the government administration budget. So that in terms of responsiveness to the implementation of E-Budgeting in Maros Regency, it can be said that it already has these elements.

## Accuracy

Accuracy refers to the suitability or compatibility between the indicators to be achieved in a policy with the values and results that have n a policy implementation performance to indicate whether the program's implementation is appropriate (Dunn, 2003). Evaluation with Accuracy Criteria is the evaluation stage of the evaluation, namely by looking at the extent to which the results of a program are following the indicators to be achieved in the preparation of the budget. To measure the accuracy of the E-Budgeting program, of course, it will be seen how the impact of this E-Budgeting System will be. Electronic-based Budgeting in Maros Regency can make it easier for the Supreme Audit Agency to conduct audits. The budget team has also been given excellent and correct budget preparation procedures using E-Budgeting to eliminate mistakes in Budgeting.

Electronic-based Budgeting can also be problematic if officials misuse the budget because everything has been integrated so that there are no hidden projects that can manipulate budget preparation. The Corruption Eradication Commission also has the same view, where the E-Budgeting System is beneficial to make it difficult for elements in playing the budget so that they hope that all regions can implement E-Budgeting in the preparation of regional budgets. So that the implementation of E-Budgeting in Maros Regency, of course, meets the criteria of accuracy because the electronic-based budgeting system

makes it easier for the budget drafting team to prepare the budget, then with the integration of the online System, fraudulent fraud generated by people playing budget can be reduced, and the last one in the community. As the primary goal in improving Budgeting, can easily and quickly monitor the process to the results of Budgeting.

## Conclusion

Evaluation of the implementation of the E-Budgeting System in Budgeting in Maros Regency can be stated that at this time, the electronic-based budgeting system has been implemented well but has not been fully optimal in achieving the results and benefits, this can be seen in 6 (six) criteria in the evaluation, namely: First, on the criteria for effectiveness, the results from the implementation of the E-Budgeting System are less than optimal in achieving the desired results because of the low accountability of employee performance, but the E-Budgeting System has been carried out following procedures. Second, on the E-Budgeting System's efficiency, the effort to achieve goals can be pretty off pretty, but starting an E-Budgeting system requires a high cost. Third, the government has not been able to maximize the value of the adequacy of the E-Budgeting program, but the integration of the System will undoubtedly make budget preparation more transparent and can be monitored by all parties, including the community. Fourth, the E-Budgeting system alignment has provided convenience for all Regional Apparatus Work Units (SKPD) in making budget preparations and providing easy access for the public in supervising the use of the budget.

The fifth criterion, namely responsiveness in the E-Budgeting System, its application in Maros Regency can be said to have an element of responsiveness. Because all stakeholders, both from government agencies and the community, can easily access information about the preparation of regional budgets. Furthermore, the sixth, the Accuracy Criteria for the application of the E-Budgeting System, has met the accuracy criteria because the electronic-based budgeting system makes it easier for SKPDs in preparing the budget, then with the integration of the online System, the fraudulent fraud generated by people who play budget can be reduced. The last one, of course, the public as the primary goal in improving Budgeting can easily and quickly monitor the process to the results of Budgeting.

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