Analysis of the budget realization system in higher education: A case study

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Abstract

The budget realization system in an institution is crucial in the success of the institution. State Polytechnic of Malang (Polinema) is one of the vocational higher education institutions in Indonesia that implements the system as a form of compliance with existing laws and regulations and still has several problems with its implementation. This study aims to analyze the problem of the budget realization system at the State Polytechnic of Malang. This study uses a qualitative research method and uses a fishbone diagram for the process of classifying the data. This paper explains that 5 points cause problems in the budget realization system, namely machines, methods, people, management, and time. The study makes recommendations for a successful implementation of the budget realization system and also makes recommendations for future researchers.

Keywords: Budget, budget realization system, higher education, problem analysis;
1. Introduction

The rapid development of technology in the era of the Industrial Revolution 4.0 makes information systems based on digital and electronic technology increase both in the private sector and the public sector or government (Mauro et al., 2021). Based on Presidential Regulation Number, 95 of 2018 concerning Electronic-Based Government Systems (EBGS) are government administrations that utilize information and communication technology to provide services to EBGS users. EBGS governance is a framework that ensures the implementation of regulation, direction, and control in the integrated implementation of EBGS. Of course, the regulation was made with the aim that services in the government environment, as well as state higher education institutions, must also implement EBGS to be effective, efficient, and integrated. Not only that, the global issue of the corona outbreak (COVID-19) has become a global pandemic (WHO, 2019) also made all agencies, especially higher education institutions, to work from home. Hence, conditions like this require that the service system be done digitally (online) to support social distancing policies.

Changes to the integrated service system can be done by digitizing the implementation of its performance. The management structure of modern higher education should reflect the goals and objectives of the organization taking into account the current digitalization trend and innovative business model (Vinogradova, 2022). Economic digitalization factors lead to a stronger competitive advantage for education and play an important role in sustainable development (Koroleva & Kuratova, 2020). Thus, the acceleration of digitization is needed as a whole, especially in the financial system for higher education to support the achievement of indicators of success from higher education.

1.1. Conceptual background

State Polytechnic of Malang (Polinema) is one of the vocational higher education Institutions in Indonesia that Public Service Agency (PSA) status which also carries out financial management based on applicable laws and regulations. This status makes that the Polinema have a higher level of complexity in terms of budget management. In its implementation, financial management at the Polinema must be guided by the rules of state financial management, which focuses on compliance with the basic rules, namely, Law Number 17 of 2003 concerning State Finance (Number, 2003), Law Number 1 of 2004 concerning State Treasury, and Law Number 15 of 2004 concerning Audit of State Finance Management and Responsibility (Number, 2004).

The budget realization system is the most important part of financial management in Polinema. In budget realization, it is a system in which the treasurer of the expenditure of Polinema issues realizes money and submits it to the implementers of activities within the Polinema which is divided into several work units according to the amount budgeted at the time of planning through activity proposals. Given that, the number of work units at the Polinema is very large the complexity of the budget realization process also increases. So far, the Polinema Treasurer still uses a manual procedure system (not yet using an integrated system) in the budget realization process. With a large number of work units and limited treasury staff, there will be an overload in the realization process. The realization of the existing budget at the Polinema is still manual and only uses Excel to record realization by the Polinema treasurer.

Coupled with the staff of the Expenditure Treasurer and the Assistant Expenditure Treasurer, there are only a few/limited while the number of work units served consists of 62 work units, causing definite time problems in approving activity proposals to the treasury, the deadline for collecting SPJ (letters of accountability) is not punctual, lacks timeliness in budget realization, and lacks budget realization systems in several work units that have not been monitored properly. This is also the same as several problems related to budget implementation, including bureaucratic constraints (Yafiz &
Lesmono, 2020). At present, the content of SIMKeu is not complete and is still used in budget planning activities for each work unit in Polinema. Meanwhile, financial management does not stop at planning alone, there are stages of budget realization to state financial accountability. Because all processes related to budget realization must run and be integrated (Kamil & Lathifah, 2017). With these problems, the budget realization system included in SIMKeu is one solution to help solve these problems and it is hoped that work will be more effective and efficient and can facilitate the monitoring process of budget implementation.

1.2. Purpose of study

Given that budget implementation still tends to accumulate at the end of the year, the performance of budget implementation at the Work Unit level is still not optimal. The purpose of this study is to analyze the problem of the budget realization system at Polinema.

2. Materials and Methods

The descriptive research model employs research with a qualitative approach. This method was chosen by the researcher to describe or analyze a research result but was not used to make broader conclusions. The qualitative research method is a research method used to examine the condition of natural objects, where the researcher is the key instrument, triangulation (combined) data collection techniques, inductive data analysis, and qualitative research results emphasize meaning rather than generalization (Sugiyono, 2012). In the qualitative approach used in this study, the data and information obtained were then organized and analyzed to get an overview of the research (Moleoong, 2004). Data triangulation analysis tools include the triangulation of data collection methods, triangulation of data sources, and triangulation of theories (Denzin & Lincoln, 2009).

2.1. Data Collection Instrument

To support the process of classifying the data, the researcher uses Fishbone Diagram. Primary data were conducted through interviews. Secondary data through documentation technique is also used to collect secondary data, namely, several technical regulations on budget realization in Polinema, and evidence of budget realization such as SPJ Activities and supporting data.

2.2. Participants

Primary data were conducted through interviews with the Head of Subdivision of Administration, Head of Planning, Head of Reporting and Accounting, Treasurer of Polinema Expenditures, and Assistant Expenditure Treasurer as a sample of respondents. Ethical consent was sought from the authorities in Polinema before proceeding with the study and also before using secondary data collected from the institution. Before interviews were conducted, oral consent was sought from the participants. The procedure or the results of this study was not meant to harm or disrepute the participants and institution under study. The study poses no harm.

3. Results

The effectiveness of government performance in the community will be reflected in a good government budget, so the government must develop a mature and realistic budget to be realized to achieve public welfare (Yafiz & Lesmono, 2020). Budget absorption is a form of optimization of spending budget funds and of course, it must be measured by success in achieving performance indicators (Mirgorodskaya et al., 2017; Weiskirchner-Merten, 2020). Budget realization is a process of planning, distributing, and reporting a budget (Kamil & Lathifah, 2017; Ejumudo & Ejumudo, 2020). Budget realization at the Malang State Polytechnic is carried out by adjusting the reference to existing laws and regulations. Several regulations related to budget realization include Law Number 17 of 2003 concerning
State Finance, Law Number 1 of 2004 concerning State Treasury, and Law Number 15 of 2004 concerning Audit of State Finance Management and Responsibility (Number, 2003). This budget realization system runs where the Polinema expenditure treasurer issues run and submit it to the Person in Charge (PIC) of each activity within the Polinema. There are several work units according to the amount budgeted at the time of planning through activity proposals. The parts involved in this financial system include

1. Assistant Director II approves the activities based on the proposal to be implemented/realized.
2. Commitment Making Officer who authorizes all evidence of expenditure through financial receipts of the Polinema BLU.
3. The Head of Treasury verifies the proposals that have been approved by Pudir II.
4. Expenditure Treasurer who distributes and distributes activity proposals according to their respective fields to each Assistant Expenditure Treasurer.
5. Assistant Expenditure Treasurer was assigned the task of assisting the Expenditure Treasurer in carrying out treasury duties and carrying out budget realization in accordance with BP’s directions.
6. The Chief Executive is the person who proposes funding through a proposal and uses the funds for an activity based on the institution’s work plan.

The problems faced by the financial department of the Malang State Polytechnic in the budget realization system are the problem of definite time in approving activity proposals to the treasury, limited time for collecting SPJ (letter of accountability), and timeliness in budget realization.

The finance department, especially the treasury section, has made technical instructions regarding this budget realization system which is socialized to all Work Units, but in practice, it still cannot be implemented optimally, and even some provisions are not implemented by either the treasurer or the work unit, in this case, represented by the chairman executor. This is indicated by the provisions that have been regulated related to the deadline for disbursement of phase I funds, the deadline for reporting funds to the Treasurer, the deadline for receipt of proof of payment from the treasurer to the chief executive, the deadline for reporting, until the time limit for disbursing data for phase II but not implemented. According to the criteria. So that, there is no timeliness in the series of budget realizations at the Polinema.

The bureaucracy for submitting activities through temporary proposals is still adual system, which means that although it has been implemented online through SIMKeu, it also continues to run the proposal bureaucracy offline (physically). As a result of this, it becomes a problem for the chief executive in monitoring the movement of the proposal until it reaches the treasurer in this case the Assistant Expenditure Treasurer (BPP). This is certainly difficult for the chief executive who will disburse the funds used to fund the proposed activities, so there will be delays in payments to third parties/providers of goods or services, and parties who are given a certain amount of honorarium. So far, the Polinema Treasurer is still in terms of budget realization using a manual procedure system (not yet using an integrated system) in the budget realization process. With a large number of work units and only a few treasury staff, there will be an overload in the realization process. The realization of the existing budget at the Polinema is still manual and only uses Excel to record realization by the Polinema treasurer. Coupled with the staff of the Expenditure Treasurer and the Assistant Expenditure Treasurer, there are only a limited while number of work units served consisting of 62 work units, causing definite time problems in approving activity proposals to the treasury, the deadline for collecting SPJ (letters of accountability) is not punctual, lacks timeliness in budget realization, and lacks budget realization systems in several work units that have not been monitored properly. This shows that the budget realization system in the Polinema is still weak.
The budget realization process is inseparable from the taxation aspect. Based on Government Regulation No. 45 of 2013 Article 23 paragraph (2) letter “e,” the treasurer is assigned to make deductions/collections from payments made for obligations to the State. The Expenditure Treasurer is not a tax subject but is given the responsibility to withhold, collect and deposit and report the withholding and collection of taxes he does. In this case, the calculation of taxation is still calculated manually (besides the honorarium expenditure). This can occur human error or errors in tax calculations. This tax calculation must be carried out systematically by the tax object rates for the applicable expenditure transactions.

Based on the analysis of problems regarding the budget realization system at the Polinema, the causes that cause these problems can be explained. Analysis of the problem using the fishbone diagram in Figure 1 below.

**Figure 1. Fishbone diagram**

The fishbone diagram above shows that several factors cause budget realization problems that have occurred at the Malang State Polytechnic, including:

**People/Humans:** In the human aspect, the problem is human resources (HR) in the financial section of the Malang State Polytechnic. The existence of limited staff, especially in the expenditure assistant treasurer, causes work overload. This causes the realization process cannot be carried out promptly, the issuance of payment receipts from the finance department, and reporting cannot be carried out following the Technical Guidelines for the Polinema. As a result of much-unfinished work at the end of the budget period.

**Time:** Based on the analysis of the problems above, work that is not real-time/on time is a problem in the budget realization system. The cause of this problem is the lack of certainty in approving the proposal from the treasurer to the Assistant Expenditure Treasurer, the SPJ (letter of accountability) deadline, and the realization time.

**Method:** The reason is that the bureaucratic process is carried out in a dual system (online and offline), resulting in proposals not being monitored properly. The Chief Executive cannot monitor the track of proposals that have been submitted and the budget realization process is hampered. In addition, tax calculations that are still manual (calculated) also cause the length of the realization process, both in the first and final stages, as well as taxes that are included in the receipt which will be the basis for making
activity reports.

Machine/Equipment/Tools

This budget realization process has not been integrated with the SIMKeu of the Polinema which can directly serve the realization to the Chief Executive of the activity. This causes the process of the proposal submission system to be cut short with its realization. In the initial system, the process of making payment receipts was manually typed using a Microsoft Excel spreadsheet and had not been automated.

Management

Technical guidelines that have been designed and published by the finance department to provide information on the implementation of budget realization cannot be fully implemented. Even some of the provisions were not implemented either by the treasurer or the work unit in this case represented by the chief executive.

4. Discussion

Figure 1 in explaining the relationship between the causes of the problem of budget realization in the Polinema. There needs to be a solution that is directly applied to it. A system can run seamlessly if the system is integrated. One system is connected to other systems that support each other. If the budget realization system has not been integrated with the existing system (SIKMeu), it is necessary to design a budget realization system and implement the system to be integrated with SIMKeu. This integration is useful for switching from a manual system to an online-based system.

The old method used in budget realization, where the bureaucracy is still a dual system, makes it difficult to track submissions to certainty in the implementation of budget realization. The most important aspect of implementing the budget realization is the calculation of taxes in each transaction. Tax regulations do not give consent to make errors in tax calculations and transactions, so automated tax calculations can make it easier to comply with the regulation.

Based on the aspect of human resources, the problems that occur are limited staff and work overload, so the work cannot be completed on time. The solution that can be given is the integration of the budget realization system on SIMKeu and meeting all the needs of the treasury work on the system will make it easier for the treasurer to serve the budget users in the budget realization process effectively and efficiently. This is also related to the management process that must carry out work in accordance with the provisions in the technical guidelines designed for the budget realization system. The management structure should reflect the goals and objectives of the organization, fall under the core processes of the organization, and change with it (Vinogradova, 2022; Riyadh et al., 2023). The management aspect is an important aspect to provide changes to digital-based services. A good system design and integration in SIMKeu can be the right solution to overcome the problem of time in budget realization. By doing this, all jobs can be run in real-time. The system is also made to identify and monitor step by step the budget realization process. The notification of budget realization from the treasurer to budget users can also facilitate the delivery of information so that the budget realization process runs according to the scheduled time. So that the SPJ deadline, time certainty in approving proposals, and timeliness of realization are well resolved.

5. Conclusion

In this paper, we have analyzed the causes of the problem of budget realization in one of the vocational higher education in Indonesia with Public Service Agency (PSA) status. We have also provided solutions to solve current problems. A good system design and system integration on a system that is
already owned by Polinema (SIMKeu) is one solution to overcome some of the problems faced. Utilization of technology by human resources to carry out the budget realization process can accelerate work in real-time, and be monitored clearly, to make everything more transparent and accountable.

In the future, it is necessary to study how to design the ideal system for budget realization system at higher education institutions with PSA status. Furthermore, it can be investigated whether there is an appropriate solution to overcome the problems in this budget realization system.

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