

Impact of employee competency, budget planning, and ERP on the budget implementation performance

Luk Luatun Yunaniah¹, Amrie Firmansyah²

Trisakti University, Indonesia¹

Universitas Pembangunan Nasional Veteran Jakarta, Indonesia²

amriefirmansyah@upnvj.ac.id



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Abstract

Purpose: This study analyzes the impact of employee competency, budget planning, and enterprise resource planning (ERP)-based information systems on the performance of budget implementation in state financial management.

Method: A quantitative approach was used, with data collected via a survey questionnaire distributed in December 2023. The questionnaire used a Likert scale ranging from 1 to 6. Respondents were selected through purposive sampling, targeting officials or staff managing state finances in the Working Unit of the Bureau for General Affairs and Procurement Goods/Service of the Ministry of Marine Affairs and Fisheries of Indonesia. The final sample consisted of 32 observations and was analyzed using SmartPLS 3.0.

Results: The study found that Employee competency positively impacts budget implementation performance in state financial management. However, budget planning and ERP-based information systems did not significantly influence budget implementation performance.

Limitations: The sample size of the study was limited because of the limited time for data collection. Furthermore, the study focused solely on officials responsible for managing state finances, excluding Budget Planners and Procurement Officers, who also played a vital role in the budget process.

Contribution: This study provides valuable insights for future studies and serves as a reference for improving government performance. It also offers practical recommendations for decision makers.

Novelty: This study introduces new indicators based on current regulations, focusing on ERP-based systems in Indonesia's public sector. The SAKTI system, an ERP-based budget implementation tool, was fully implemented across all Ministries/Agencies in Indonesia by 2022, making this study particularly timely.

Keywords: Competency, Budget Planning, Performance, ERP

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1. Introduction

Budgeting is a crucial undertaking in the public sector, as mandated by Law Number 17 of 2003 regarding the State Budget. This is a means of managing state finances to accomplish the national objectives. It is executed through the State Budget (APBN) for the Central Government and the Regional Budget (APBD) for the Regional Government. State Financial Management includes the formulation and determination of the National Budget (APBN) or Regional Budget (APBD), execution of the APBN/APBD, and responsibility for ensuring its proper implementation. Budget implementation

performance is measured based on work achievements in the form of outputs from an activity or results from a program with measurable quantity and quality.

Since the issuance of Government Regulation Number 6 of 2023 on the Preparation of Work Plans and Budgets, the Performance-Based Budgeting (PBK) approach has been implemented to enhance accountability, efficiency, and effectiveness. This approach emphasizes that every use of state funds must have measurable benefits for improving the lives of the community, and every budget required/expended must generate outputs that support the desired outcomes.

To review, monitor, and evaluate the implementation of budget and expenditure in Ministries and Institutions is regulated by the Minister of Finance Regulation Number 195/PMK.05/2018 regarding Monitoring and Evaluation of Budget Expenditure in Ministries/Institutions, and further regulated by the Director General of Treasury Regulation Number PER-5/PB/2022 regarding Technical Guidelines for Assessing Performance Indicators of Budget Implementation (IKPA) in Ministries/Institutions. The IKPA formula was constructed to measure budget planning quality, budget implementation quality, and budget execution outcomes. The Central Government uses the OMSPAN application from the Ministry of Finance to facilitate units of work in monitoring and evaluating budget implementations.

According to the Minister of Finance Regulation Number 171/PMK.05/2021, regarding the Implementation of the SAKTI System, it is necessary to implement an integrated financial management information system called the SAKTI system or application to achieve orderly, efficient, economical, effective, transparent, and accountable state financial management. The SAKTI system integrates the processes of planning, budgeting, implementation, and accountability for national revenue and expenditure in government agencies, which is part of the state's financial management system. The SAKTI application was fully implemented in 2022.

To develop competency and professionalism in carrying out tasks in the field of financial management of the State Budget and to improve organizational performance, Minister of Administrative and Bureaucratic Reform Regulation Number 53 of 2018 and 54 of 2018 related to the establishment of the Functional Position of Analyst and Financial Officer of the State Budget is issued. The . The functional position is in charge of engaging and settling bills, implementing bills, implementing payment orders and financial reports,zing payment orders, and analyzing financial reports. Based on data from October 2023, 17 employees in charge of Budget Implementation within the Bureau for General Affairs and Procurement Goods/Service Working Unit were appointed to the Functional Position of the Analyst and Financial Officer of the State Budget. However, based on data from the OMSPAN Application, the realization until the third quarter for fiscal years 2020, 2021, 2022, and 2023 in the Bureau for General Affairs and Procurement Goods/Service Working Unit is still low, although it reaches over 94% by the end of the period, as shown in Table 1.

Table 1. Realization

Year	Q-I	Q-II	Q-III	Q-IV
2020	11,57%	31,55%	57,51%	94,96%
2021	11,65%	39,90%	64,76%	99,60%
2022	12,38%	31,96%	55,44%	99,11%
2023	11,41%	29,83%	56,97%	99,21%

Source: OmSpan Application, Minister of Finance of the Republic of Indonesia

Table 1 shows that the budget absorption in the Bureau for General Affairs and Procurement Goods/Service Working Unit has not exceeded 75% in Quarters I to III and remains below 65%, which the realization was 57.51% in the Q-III of 2020, 64,76% in 2021, 55,44% in 2022 and 56,97% in 2023. Low budget realization would result in unproductive cash management that should have been used for

other community needs (Fahlevi & Ananta, 2015). In addition, suboptimal budget execution slows economic growth and reduces organizational performance. Dahiri and Wibowo (2016) concluded that both central and regional government spending and national and regional economic growth significantly and negatively impact poverty rates. The poverty rate decreases if central and regional government spending and national and regional economic growth increase. As the budget absorption level increases, the program's objectives are expected to be more quickly achieved. Therefore, the government always strives to maintain budget implementation as a driver of economic growth and as a catalyst for the government's economic activities.

Nugroho and Alfarisi (2017) stated that failure to achieve budget absorption targets, especially in the first semester, resulting in a government spending backlog in the last quarter, is one of the issues in government budget absorption. Ani, Mulyadi, and Pratowo (2020) argue that there is often a lack of budget absorption at the beginning of the year, but it is forced to be absorbed by the end of the year, where low budget absorption undoubtedly has a negative impact on performance. According to Iqbal, Rachman, and Rodiah (2021), ineffective and unrealized budget plans have a negative impact on performance and hinder previously formulated programs. The budgeting process should be based on predetermined activity plans and timelines. Budgeting must be promptly performed. Hence, the government must carefully formulate plans to successfully implement activities or programs (Amellya, Jalaluddin, & Batara, 2023). Handayani and Muda (2017) state that several factors contribute to the low absorption of budget, including inadequate, clear, and measurable planning concepts in some institutions and a lack of understanding among officials regarding budget utilization mechanisms and accountability models. Previous studies have shown that the competency of human resources/employees has a positive influence on performance in the public sector (Efdiono, Pane, & Thaha, 2023; Harahap, Taufik, & Azlina, 2020; Mantiri, Rumate, & Kawung, 2021) and has a positive influence on budget absorption (Laka, Sukartha, & Wirama, 2017; Sukarta, Badera, & Ratnadi, 2017; Wandari, Gunawan, & Nugraha, 2021). However, there was no relationship between the competence of human resources and budget absorption, as indicated by the studies conducted by Rahmiati, Samsiah, and Rodiah (2023), Sari and Maria (2023), and Sartika and Roza (2024). Similarly, studies conducted by Anggita and Budi (2023) and Erliyani and Sulastiningsih (2023) found no association between budget planning and budget absorption.

In addition to this gap in previous research, most studies have focused on local governments. This motivates the author to conduct further research to examine the relationship between budget planning and employee competency and performance in implementing public-sector budgets at the central government level. This research differs from previous studies in terms of the indicators used to measure the variables based on applicable regulations corresponding to the variables under study. Irwandi (2019) states that the implementation of a financial information system has a significant influence on the effectiveness of financial management. Therefore, SAKTI, an ERP-based information system, was included in this study as an independent variable. In addition, research incorporating the use of ERP-based information systems in Indonesia's public sector performance is still limited. The SAKTI system, as an ERP-based budget implementation support system, has been fully implemented by all Ministries/Agencies in Indonesia in 2022. This research is expected to contribute as a source of literacy for future studies and provide input and insights for decision making as improvements to enhance and rectify government performance.

2. Literature review

Jensen and Meckling (1976) describe the agency relationship as a contract in which one or more people (principals) engage another person (agent) to perform some service on their behalf, which involves delegating decision-making authority to the agent. Within the context of public sector organizations, agency theory can be understood as an agency relationship between the public as the principal and the government as the agent, where people entrust the government to carry out budget implementation for the best possible welfare of the public.

Performance is the level of achievement of results in the execution of specific tasks, and can be understood as an ongoing work process to achieve work outcomes (Lubis, 2018). Performance reflects the economic, efficient, and effective aspects of public services (Mardiasmo 2009). According to the Minister of Finance Regulation Number 214/PMK.02/2017, performance is defined as work achievement in the form of output from activities or programs and the results of programs with measurable quantity and quality, while budget performance is the achievement of performance in the utilization of the ministry/agency budget, as stated in the budget document.

Evaluation of budget performance is conducted to fulfill the function of accountability, which aims to professionally demonstrate and justify to stakeholders the use of budget, as well as the function of enhancing quality to measure effectiveness and efficiency and identify supporting factors and constraints in the implementation of Budget Realization Reports by government agencies to improve budget performance and provide input for policy formulation.

Lubis (2018) defined competence as the ability to perform a job based on skills, knowledge, and work attitude required by the job, which is characterized by professionalism in a specific field as the most critical aspect. Competency refers to the tasks, skills, attitudes, and appreciation that human resources must support in the execution of functions toward achieving organizational goals (Mantiri et al., 2021). Quality human resources are an important factor in completing work that can be determined from human resources' understanding of the budget management process and the certification of officials and employees who have duties and functions in budget management, which we call human resource/employee competency (Anggita & Budi, 2023). According to Halim (2016), the competency of human resources is a factor that causes low absorption of budgets, as observed in the procurement process of goods and services. Similarly, Laka et al. (2017) discovered that the competency of financial management officials positively affects the absorption of capital expenditure budgets. The efficacy of a government apparatus in budget management, bolstered by a high level of competency, can affect work behavior, thus impacting both individual and organizational performance (Rahmawati, Amir, & Junaidi, 2021). These findings align with the research conducted by Wiansyah and Mulyani (2021), which indicates that human resource competency in budget implementation significantly affects the delay in budget expenditure absorption. Furthermore, poor competency of human resources in budget implementation also contributes to delays in budget absorption.

H₁: competency positively affects budget implementation performance in state financial management

Anandah (2022) defines budget planning as formulating a plan for income, expenditure, and financing for a specific period, focusing on determining the amount of money that needs to be spent. Budget planning is a crucial aspect that needs to be considered to enhance budget absorption, and the ability of the City/Regional Government to absorb budget expenditures is referred to as budget absorption (Lannai & Amin, 2020). The absorption of funds can be significantly and concretely influenced by careful budget planning and availability of competent human resources (Ramadhani & Setiawan, 2019). According to Herriyanto (2012), planning significantly influences budget-absorption delays. The budget for the activity is blocked, resulting in an inability to disburse funds until the block is lifted. Another issue is that the Register of Budget Implementation Form Documents (DIPA) needs to be revised, as it does not align with the requirements. Furthermore, the implementation of the activity did not consider the withdrawal plan on page III of the DIPA. This has an impact on the delay in budget absorption.

According to Purba and Sari (2022), several factors contribute to suboptimal budget absorption in terms of budget planning, including a) inefficient formulation of Fund Withdrawal Plan/Budget Absorption Plan, resulting in the accumulation of budget withdrawals at the end of the year; b) ineffective coordination among activity implementers in determining activity schedules/plans and ideal budget needs; c) The budget planning documents still contain errors, mainly due to operators frequently copying and pasting previous year's requirement proposals; d) The prepared budget activity plans do

not cover all needs and tend to be disproportionate, resulting in frequent budget revisions and hindering budget absorption.

Sutono, Respati, and Safrida (2022) argued that effective budget planning in a work unit indicates that the activities to be carried out will also have good targets and can influence the absorption of expenditure budgets. In line with the statements made by Kuntadi and Nugroho (2023), it is crucial to prepare a budget plan following the activities to be carried out and the applicable requirements to ensure efficient and accurate budget absorption.

Based on previous research, the second hypothesis of this study is as follows.

H₂: budget planning positively affects budget implementation performance in state financial management

Enterprise Resource Planning (ERP) is a method of managing a company's resources using information technology. ERP can integrate various 's organizational functions, so it is expected to be more effective and efficient and enable information interaction and collaboration (Schlichter, Klyver, & Haug, 2021). SAKTI is an ERP-based information system used by government agencies to integrate the processes of planning, budgeting, implementation, and accountability for national income and expenditure budgets, which are part of the national financial management system. ERP, equipped with both hardware and software, aims to coordinate and integrate data and information across many business process areas, facilitating prompt decision-making. The primary objective of implementing ERP is to enhance and reinforce the effectiveness of existing resources inside the company, particularly the human resources utilizing the ERP system (Wicaksono, Mulyo, & Riantono, 2015). One of the criteria for successful ERP implementation is improved operational performance of the company, which is supported by the performance of its employees.

Lunardi et al. (2014) discovered a significant difference in profitability between companies adopting information technology governance mechanisms and those without information technology governance. Furthermore, companies adopting information technology governance practices improve their performance, particularly in terms of profitability. In the context of the public sector, performance can be understood as budget absorption. According to Komarasari (2017), the utilization of information technology refers to managing information and electronic transactions to enhance the performance of government organizations/institutions in improving public services and expediting the implementation of e-government. Information technology is expected to facilitate everyone's work, including village government officials, who can utilize information technology to streamline their tasks and enhance the management of village funds.

The development of applications and technical guidance on applications significantly impact the performance of budget implementation (Adnan, 2020). The research conducted by Yuliani (2014) revealed that the local government's financial management information system positively affects the performance of regional governments. Therefore, the better the local financial management information system, the better is the performance of the local government. The local government requires a financial management information system as one of the tools to monitor and evaluate the financial management of each regional work unit (SKPD) within the local government. The results of this monitoring and evaluation can be utilized for decision making regarding budget planning for the following year.

Based on previous research, the third hypothesis of this study is as follows.

H₃: ERP-based information system positively affects budget implementation performance in state financial management

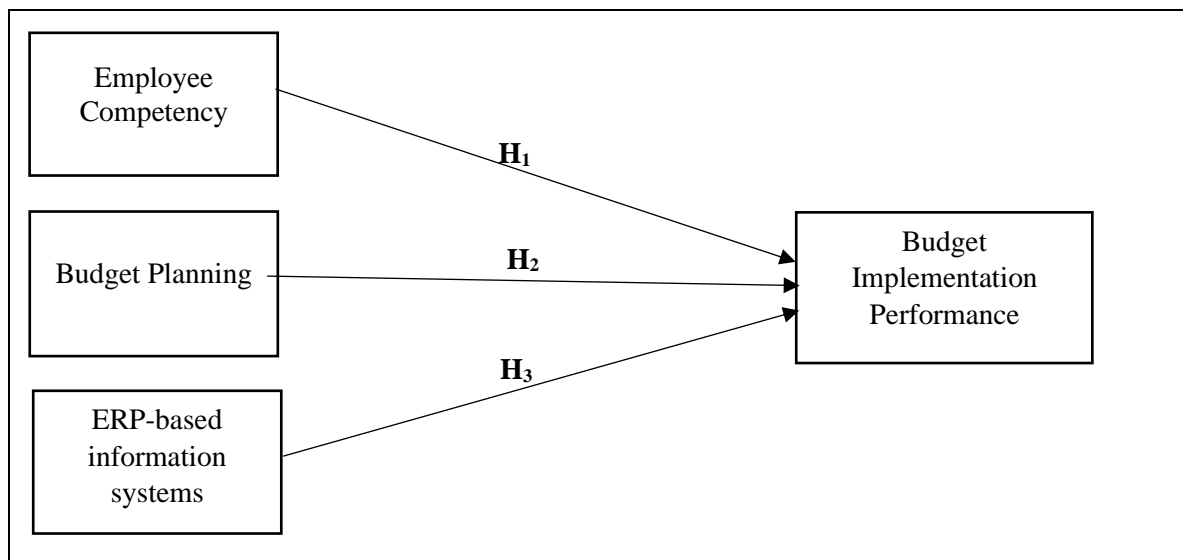


Figure 1. Research Framework

Figure 1 illustrates the research questions concerning the background and phenomena that occur, specifically, whether employee competence, budget planning, and ERP-based information systems impact the performance of budget implementation in state financial management.

3. Research Methodology

This study employs a quantitative methodology that utilizes primary data. The research data were obtained from a survey questionnaire distributed directly to respondents and disseminated through social media using Google Forms from December 22, 2023, to December 31, 2023. Respondents were selected based on purposive sampling, with the criteria being officials or staff responsible for managing the state's finances, aged between 22 and 60 years, with educational backgrounds ranging from high school to doctoral degree, at the Working Unit of the Bureau for General Affairs and Procurement Goods/Service of the Ministry of Marine Affairs and Fisheries of the Republic of Indonesia, which consists of six bureaus and one Center under the Secretariat General. Of the 35 respondents who were sent the questionnaire link, 32 were returned by the respondents. Questionnaires were processed using a Lenovo Yoga 7i notebook with an Intel Evo i7 processor and SmartPLS 3.0 application.

This study employed descriptive analysis and hypothesis testing using structural equation modeling. According to Suriana, Rahmawati, and Ekawati (2022), structural equation modeling may examine cause-and-effect relationships and test latent variables based on their indicators. The partial least squares (PLS) analysis method was employed in this study because of its ability, as Berutu, Hoyyi, and Sugito (2018), not to require a large sample size and to apply to data of all scales. This study employed validity and reliability tests. Validity testing was performed to assess the validity of the questionnaire. Reliability testing was employed to measure the consistency of a questionnaire, which serves as an indicator of a variable or construct. An outer model analysis was conducted to verify the suitability of the measurements, based on their validity and reliability. The measurement of indicators in this study utilized a Likert scale ranging from 1 to 6. Value 1 for strongly disagree, 2 for disagree, 3 for less agree, 4 for somewhat agree, 5 for agree, and 6 for strongly agree. This study employs a quantitative method that utilizes hypothesis testing, which focuses on causality. Consequently, this study incorporates three independent variables: employee competency, budget planning, and an ERP-based information system, specifically the SAKTI application.

The dependent variable is the Performance of State Financial Management Budget Implementation, which is measured by indicators based on the Director General of Treasury Regulation Number PER-5/PB/2022 on the Technical Guidelines for Assessing Performance Indicators of Budget Implementation (IKPA) for Expenditures of Ministries/Institutions. These indicators include absorption targets, timeliness of accountability for Cash Advances (UP) and Additional Cash Advances (TUP),

contract registration, accuracy of settlement of contractual expenditure bills, and timeliness of output achievement delivery.

The independent variables in the study were measured based on several criteria. Three out of five indicators of employee competency were measured based on the Regulation of the Minister Administrative Reform and Bureaucratic Reform Number 53 of 2018 and Number 54 of 2018 regarding the appointment of Functional Analyst and Financial Budget Revenue and Expenditure Administrator positions, as well as the Regulation of the Minister of Finance Number 62 of 2023 concerning Budget Planning, Budget Implementation, Accounting, and Financial Reporting, namely possession of expertise certificates, understanding of regulations and mechanisms, as well as duties and authorities related to financial management tasks. Budget planning is measured by indicators according to Budget Work Plan Preparation principles in Ministry of Finance Regulation No. 62 of 2023 on Budget Planning, Budget Implementation, Accounting, and Financial Reporting. These indicators include alignment with the organization's strategic plan, budgeting principles, principles of quality spending, fulfillment of basic allocation, and alignment with the budgeting policy set for the respective year. The measurement of an ERP-based information system is based on implementing the SAKTI application following Minister of Finance Regulation Number 171/PMK.05/2021 regarding implementing the SAKTI System. This regulation assesses the extent to which the SAKTI application can minimize errors and facilitate and expedite the completion and monitoring of financial management tasks when implementing state financial management. The effectiveness and influence of SAKTI in enhancing the performance of state financial management is directly proportional to the reduction in errors and the speed of completing the work.

4. Results and Discussions

4.1 Results

Respondent information typically includes statistical characteristics such as age, gender, experience, and educational level. Based on the data, the distributed, returned, unreturned, unprocessed, and processed questionnaires were as follows:

Table 2. Distribution of Questionnaires

No.	Description	Number of questionnaires	Percentage
1.	Distributed questionnaires	35	100%
2.	Returned questionnaires	32	91.43%
3.	Unreturned questionnaires	3	8.57%
4.	Unprocessed questionnaires	0	0%
5.	Processed questionnaires	32	91.43%

Source: Processed data by Questionnaire's Forms

The following shows the distribution of average respondents based on age, gender, experience, and educational level:

Table 3. Information of Respondents

Category	Item	Number	Percentage
Range of age	22-25 years old	6	25.00%
	26-30 years old	1	3.12%
	31-40 years old	3	9.38%

	41-50 years old	13	40.62%
	51-60 years old	7	21.88%
Gender	Male	14	43.80%
	Female	18	56.20%
Experience	< 2 years	5	15.6%
	2-5 years	9	28.1%
	5-10 years	9	28.1%
	> 10 years	9	28.1%
Educational level	Senior high school or equal	5	15.62%
	Three year of Diploma	9	28.12%
	Bachelor's Degree or equal	11	34.38%
	Master Program	4	12.5%
	Doctoral Program	3	9.38%

Source: Processed data by Questionnaire's Forms

From Table 2, it can be inferred that 35 questionnaires (32, 32) were returned and all were further processed. The research data, in the form of questionnaire results, were processed using SmartPLS 3.0, to conduct validity and reliability tests to examine the relationship between variables. Noprianto, Winarno, and Najib (2017) found that convergent validity occurs when the scores obtained from two instruments measuring the same construct are highly correlated. If the value of the outer loading is above 0.70, an indicator is considered to have good validity, and the outer loading value can still be tolerated up to 0.50, while values below 0.50 can be dropped from the analysis (Ghozali & Latan, 2015). The research findings indicate that the outer loading is over 0.5; therefore, all indicators are considered valid for the study and further analysis.

Table 4. Validity Test Results

Item	Employee Competency (COM)	Budget Implementation Performance (PFM)	Budget Planning (PLN)	Information System (SIM)
COM1	0.827			
COM2	0.878			
COM3	0.607			
COM4	0.773			
COM5	0.719			
PFM1		0.780		
PFM2		0.880		
PFM3		0.804		
PFM4		0.825		

PFM5	0.769	
PLN1		0.923
PLN2		0.901
PLN3		0.829
PLN4		0.887
PLN5		0.896
SIM1		0.728
SIM2		0.967
SIM3		0.973
SIM4		0.961
SIM5		0.973

Source: Processed data by SmartPLS 3.0 (2024)

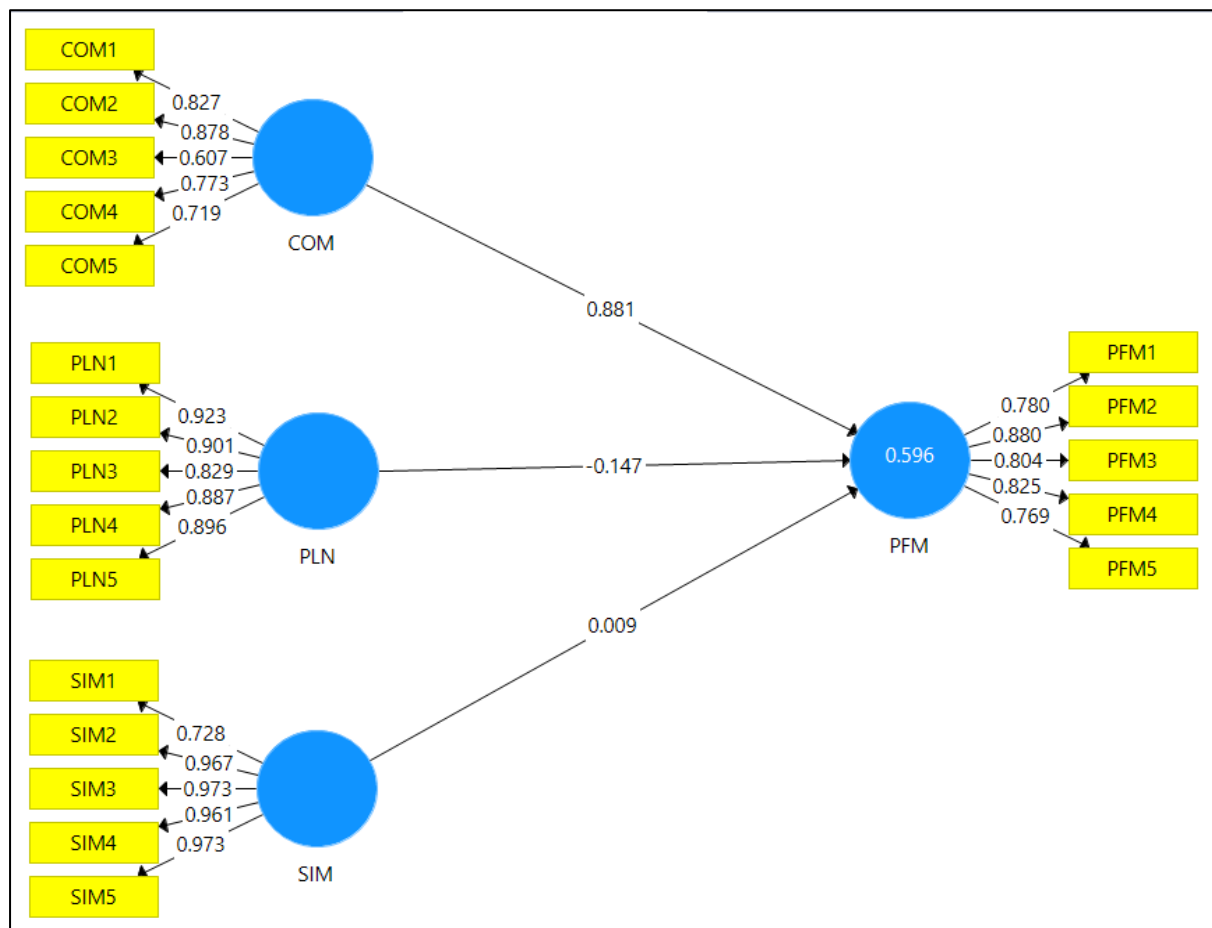


Figure 2. Smart PLS result (loading factor)

Next, a Construct Reliability and Validity test was conducted, where if the value of Cronbach's Alpha or Composite Reliability was more than 0.7, each variable was considered reliable (Hussein, 2015). The results of the reliability tests conducted on the tested variables are as follows.

Table 5. Reliability Test Results

Variable	Cronbach's Alpha	Composite Reliability
Employee Competency (COM)	0.825	0.875
Budget Implementation Performance (PFM)	0.873	0.907
Budge Planning (PLN)	0.933	0.949
Information Systems (SIM)	0.956	0.967

Source: Processed data by SmartPLS 3.0 (2024)

The Construct Reliability and Validity test results indicate that all research variables have a value of 0.7 or thus, they have met the criteria set. Furthermore, bootstrapping was carried out to obtain the results of the hypothesis testing in this study as follows:

Table 6. Hypothesis Test Results

Correlation	Original Sample	Sample Mean	Standard Deviation	T Statistic	P Values
COM→PFM	0.881	0.850	0.357	2.468	0.007
SIM→PFM	0.009	0.037	0.236	0.037	0.485
PLN→PFM	-0.147	-0.121	0.278	0.530	0.298

Source: Processed data by SmartPLS 3.0 (2024)

4.2 Discussion

4.2.1 Effect of Employee Competency on Budget Implementation Performance

The test results show that the p-value was 0.007, which is less than 0.005. Thus, H_1 is accepted. Employee competency significantly affected budget execution performance, with a coefficient of 0.881. This means that increasing one unit of employee competency improves budget execution performance by 88.1%. It shows that the competency of officials and staff responsible for managing the state's finances, as stipulated by the Minister of Administrative Reform and Bureaucratic Reform Regulations Number 53 of 2018 and 54 of 2018 related to the establishment of Functional Positions for Analysts and Financial Officers of the State Budget and Minister of Finance Regulation Number 62 of 2023 concerning Budget Planning, Budget Implementation, and Accounting and Financial Reporting, support the implementation of budgets in state financial management and can be applied.

The results of this study do not conflict with those of Efdiono et al. (2023), Suleni and Masdjojo (2023), Delia, Djaddang, and Mulyadi (2021); Hartono and Pohan (2023); Renoat and Latupeirissa (2020); Saragih, Simanjuntak, Sembiring, and Purba (2022), which found that Human Resource Competency has a positive and significant effect on budget execution performance. This result is also consistent with the findings of Lannai and Amin (2020), who conclude that competence positively and significantly influences budget absorption. They further explained that employees' abilities play a crucial role in enhancing budget absorption. budget absorption is expedited.

4.2.2 Effect of Budget Planning on Budget Implementation Performance

The test results indicated that the p-value was 0.298, which was greater than 0.005. This means that budget planning does not significantly affect budget performance. The findings of this study contradict those reported by Sutono et al. (2022), Mantiri et al. (2021), Suleni and Masdjojo (2023), Hartono and Pohan (2023), Renoat and Latupeirissa (2020), Saragih et al. (2022) and also Lannai and Amin (2020), which found that budget planning has a positive and significant impact on budget absorption. Specifically, improved budget planning is associated with increased performance levels.

Based on interviews with several officials and staff responsible for managing the state's finances, it was explained that although budget planning has been prepared by the principles of Budget Work Plan Preparation, it often faces obstacles in implementation due to government policies implemented after the Budget Execution Plan is approved. For example, in the implementation of the 2020 budget, there were constraints due to policy changes caused by budget blockages allocated to COVID-19-related activities. In addition, other factors might affect budget implementation performance, such as the assignment of leaders to officials or staff responsible for managing the state's finances outside their financial management duties, which often impacts budget implementation performance. The implementation of activities is frequently delayed because of the need for coordination and agreement with the relevant parties.

4.2.3 Effect of ERP-based Information System on Budget Implementation Performance

In contrast to Fitriyani's (2022) finding that increasing the implementation of management control systems will enhance organizational performance, Sukarta et al. (2017) conclude that utilizing information technology influences the effectiveness of budget management. Based on the test results, this study showed that the p-value was 0.485, which was greater than 0.005. This means that SAKTI, an ERP-based information system, does not impact budget performance. This finding is consistent with the research findings of Mantiri et al. (2021), who state that information technology does not significantly impact budget performance. Based on research findings, not all officials or staff responsible for managing a state's finances use the SAKTI application as a tool for financial management to enhance performance. The SAKTI application can only be accessed by officials/staff who have access. Meanwhile, it is suspected that advance payment holders and operators without access also influenced the research results because of their lack of direct experience with the impact of using the SAKTI Application in improving the performance of budget implementation in state financial management.

5. Conclusion

5.1 Conclusion

Employee competency has a significant and favorable influence on budget implementation performance. The analysis reveals that the more competent officials or staff responsible for managing the state's finances, the better the budget implementation performance in state financial management. Meanwhile, budget planning does not significantly impact budget implementation performance. It is suspected that government policies implemented after the budget execution plan were approved, such as the budget blockage allocated for COVID-19-related activities in the implementation of the 2020 budget. Furthermore, based on the test results, it was found that the SAKTI ERP-based information system did not significantly affect budget implementation performance. It is suspected that not all officials or staff responsible for managing the state's finances use and have access to the SAKTI application, which results in certain officials or staff responsible for managing the state's finances not directly experiencing the impact of its use in improving the performance of budget implementation in state financial management.

5.2 Limitation

This study has limitations regarding the sample used because of time constraints in the collection of questionnaires. Furthermore, the respondents were limited to officials or staff responsible for managing the state's finances and did not involve budget planners and procurement officers despite their equally important role in the state's budget implementation and financial management.

5.3 Suggestion

It is recommended that budget planners and procurement officers be involved, and that the number of respondents from other work units/ministries should be increased in future research. It is also recommended that the government carefully consider policies throughout the mid-year budget period after approval of the budget execution plan to maintain reasonable budget implementation performance.

References

- Adnan, A. A. (2020). *Pengaruh perkembangan teknologi informasi terhadap kinerja pelaksanaan anggaran pada satuan kerja lingkup KPPN Poso*. UNIVERSITAS SINTUWU MAROSO.
- Amellya, S., Jalaluddin, J., & Batara, G. (2023). What determines budget absorption in local government? Evidence from Aceh Province, Indonesia. *Journal of Accounting Research, Organization and Economics*, 6(1), 73-83.
- Anandah, N. A. (2022). *Pengaruh perencanaan anggaran dan kualitas sumber daya manusia terhadap efektivitas kinerja pemerintah daerah kabupaten gresik*. Universitas Muhammadiyah Gresik.
- Anggita, M. S., & Budi, Y. A. B. (2023). Analisis faktor faktor yang mempengaruhi penyerapan anggaran pada Direktorat Jenderal Anggaran. *Jurnal Ekonomi Trisakti*, 3(1), 1339-1350.
- Ani, L., Mulyadi, J., & Pratowo, D. (2020). Analisis faktor-faktor yang mempengaruhi penyerapan anggaran belanja dengan perencanaan anggaran sebagai pemoderasi pada pemerintah Kota Depok tahun 2013-2017. *Ekobisman: Jurnal Ekonomi Bisnis Manajemen*, 5(1), 1-16.
- Berutu, T. G., Hoyyi, A., & Sugito, S. (2018). Analisis kepuasan dan loyalitas pelanggan dalam pemesanan tiket pesawat secara online menggunakan pendekatan partial least square (PLS). *Jurnal Gaussian*, 7(4), 361-372.
- Dahiri, D., & Wibowo, A. (2016). Analisis pengaruh belanja pemerintah dan pertumbuhan ekonomi terhadap kemiskinan di Indonesia. *Jurnal Budget : Isu dan Masalah Keuangan Negara*, 1(2), 169-183.
- Delia, T., Djaddang, S., & Mulyadi, J. (2021). Analisis determinasi penyerapan anggaran dengan perencanaan anggaran dan politik anggaran sebagai pemoderasi. *Akurasi: Jurnal Studi Akuntansi dan Keuangan*, 4(1), 116-131.
- Efdiono, E., Pane, S. G., & Thaha, R. (2023). Pengaruh kompetensi SDM, lingkungan kerja, dan motivasi terhadap kinerja pelaksanaan anggaran satuan kerja lingkup Kantor Pelayanan Perbendaharaan Negara (KPPN) Samarinda. *SEIKO: Journal of Management & Business*, 6(2), 328-342.
- Erliyani, E., & Sulastiningsih, S. (2023). Pengaruh regulasi, perencanaan anggaran, pelaksanaan anggaran, kualitas sumber daya manusia, dan penerapan aplikasi sipd terhadap penyerapan anggaran belanja pada satuan kerja perangkat daerah di Kabupaten Magelang. *Jurnal Riset Akuntansi dan Bisnis Indonesia*, 3(4), 1279-1303-1279-1303.
- Fahlevi, H., & Ananta, M. R. (2015). Analisis efisiensi dan efektifitas anggaran belanja langsung-Studi pada SKPD di Pemerintah Kota Banda Aceh. *Jurnal Ilmiah Administrasi Publik*, 1(2), 37-44.
- Fitriyani, F. Y. (2022). Efektivitas penerapan sistem informasi akuntansi dan sistem pengendalian manajemen terhadap kinerja organisasi dengan manajerial skill sebagai variable moderasi (studi empiris pada Universitas Sains Al Qur'an). *Jurnal Riset Keuangan dan Akuntansi*, 8(1).
- Ghozali, I., & Latan, H. (2015). Konsep, teknik, dan aplikasi menggunakan program SmartPLS 3.0 untuk penelitian empiris. *Semarang: Badan Penerbit Universitas Diponegoro*.
- Halim, A. (2016). *Manajemen keuangan sektor publik: problematika penerimaan dan pengeluaran pemerintah (anggaran pendapatan dan belanja negara atau daerah)*: Salemba Empat.
- Handayani, C. H., & Muda, I. (2017). Analisis faktor-faktor yang mempengaruhi serapan anggaran skpd di provinsi sumatera utara tahun 2014-2015 dengan SiLPA sebagai Variabel moderating. *Simposium Nasional Akuntansi XX, Jember*.
- Harahap, S. A. S., Taufik, T., & Azlina, N. (2020). Pengaruh perencanaan anggaran, pelaksanaan anggaran, pencatatan administrasi dan kompetensi sumber daya manusia terhadap tingkat penyerapan anggaran (studi empiris pada OPD Kota Dumai). *Jurnal Akuntansi Keuangan dan Bisnis*, 13(1), 1-10.
- Hartono, D. A., & Pohan, H. T. (2023). Evaluasi penyerapan anggaran pada kantor badan penghubung daerah provinsi Jawa Timur di Jakarta tahun anggaran 2021. *Jurnal Ekonomi Trisakti*, 3(1), 1267-1276.
- Herriyanto, H. (2012). Faktor-faktor yang mempengaruhi keterlambatan penyerapan anggaran belanja pada satuan kerja kementerian. *Universitas Indonesia*.
- Hussein, A. S. (2015). Penelitian bisnis dan manajemen menggunakan Partial Least Squares (PLS) dengan SmartPLS 3.0. *Universitas Brawijaya*, 1, 1-19.

- Iqbal, M., Rachman, D., & Rodiah, S. (2021). Pengaruh rencana anggaran dan realisasi anggaran pendapatan dan belanja daerah (APBD) terhadap kinerja keuangan pemerintah daerah pada badan keuangan dan aset daerah. *Akurat/ Jurnal Ilmiah Akuntansi Fe Unibba*, 12(2), 18-34.
- Irwandi, I. (2019). Implementasi sistem informasi keuangan, kompetensi pegawai dan evaluasi manajemen terhadap efektifitas pengelolaan keuangan. *Jurnal Manajemen (Edisi Elektronik)*, 10(1), 35-43.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Komarasari, W. (2017). Pengaruh kapasitas sumber daya manusia, pemanfaatan teknologi informasi dan pengendalian intern akuntansi terhadap keterandalan pelaporan keuangan daerah (Pada SKPD Kabupaten Bantul Bagian Akuntansi dan Keuangan). *Prodi Akuntansi UPY*.
- Kuntadi, C., & Nugroho, D. A. (2023). Faktor-faktor yang mempengaruhi penyerapan anggaran: perencanaan anggaran, pengadaan barang dan jasa serta partisipasi anggaran. *Jurnal Ilmu Manajemen Terapan*, 4(3), 332-337.
- Laka, E. I., Sukartha, I. M., & Wirama, D. G. (2017). Pengaruh Kompetensi dan motivasi pada penyerapan anggaran belanja modal dengan komitmen organisasi pejabat pengelola keuangan sebagai variabel pemoderasi. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 6(2017), 4167-4196.
- Lannai, D., & Amin, A. (2020). Factors affect budget absorption in government institutions of South Sulawesi. *ATESTASI: Jurnal Ilmiah Akuntansi*, 3(2), 113-119.
- Lubis, I. S. L. (2018). Analisis kompetensi sumber daya manusia terhadap kinerja karyawan pada pt. janeeta dki jaya kota medan. *Jurnal Manajemen dan Bisnis*, 6(2), 1-55.
- Lunardi, G. L., Becker, J. L., Maçada, A. C. G., & Dolci, P. C. (2014). The impact of adopting IT governance on financial performance: An empirical analysis among Brazilian firms. *International Journal of Accounting Information Systems*, 15(1), 66-81.
- Mantiri, R., Rumat, V. A., & Kawung, G. M. (2021). Pengaruh perencanaan anggaran, kompetensi pegawai dan teknologi informasi terhadap kinerja anggaran pada Universitas Sam Ratulangi Manado. *Jurnal Pembangunan Ekonomi Dan Keuangan Daerah*, 19(3), 67-85.
- Mardiasmo, M. (2009). Akuntansi sektor publik. *Yogyakarta: Andi*.
- Noprianto, R., Winarno, W. W., & Najib, W. (2017). Evaluasi kesiapan pengguna dalam adopsi sistem informasi manajemen SEIP menggunakan metode technology readiness index. *Jurnal Buana Informatika*, 8(2).
- Nugroho, R., & Alfari, S. (2017). Faktor-faktor Yang mempengaruhi melonjaknya penyerapan anggaran quartal IV instansi pemerintah (studi pada Badan Pendidikan dan Pelatihan Keuangan). *Jurnal BPPK*, 10(1), 22-37.
- Peraturan Menteri Keuangan Nomor 62 Tahun 2023 tentang Perencanaan Anggaran, Pelaksanaan Anggaran, serta Akuntansi dan Pelaporan Keuangan.
- Peraturan Menteri Keuangan Nomor 171/PMK.05/2021 Tahun 2021 tentang Pelaksanaan Sistem Sakti.
- Peraturan Menteri Keuangan Nomor 195/PMK.05/2018 Tahun 2018 tentang Monitoring Dan Evaluasi Pelaksanaan Anggaran Belanja Kementerian Negara/Lembaga.
- Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Nomor 53 Tahun 2018 tentang Jabatan Fungsional Analisis Pengelolaan Keuangan Anggaran Pendapatan Dan Belanja Negara.
- Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Nomor 54 Tahun 2018 tentang Jabatan Fungsional Prantara Keuangan Anggaran Pendapatan Dan Belanja Negara.
- Peraturan Pemerintah (PP) Nomor 6 Tahun 2023 tentang Penyusunan Rencana Kerja dan Anggaran.
- Perdirjen Perbendaharaan No. PER-5/PB/2022 tentang petunjuk teknis penilaian indikator kinerja pelaksanaan anggaran (IKPA) belanja kementerian negara/lembaga.
- Purba, D. S., & Sari, E. N. (2022). The effect of budget planning, human resource competence and organizational commitment on budget absorption in the North Sumatera Regional Police Satker. *Kajian Akuntansi*, 23(1), 67-89.
- Rahmawati, R., Amir, A., & Junaidi, J. (2021). Evaluasi perencanaan anggaran dan kompetensi sumber daya manusia terhadap penyerapan anggaran dengan komitmen manajemen sebagai

- pemoderasi pada satuan kerja kementerian agama Republik Indonesia di Kota Jambi. *Jurnal Paradigma Ekonomika*.
- Rahmiati, R., Samsiah, S., & Rodiah, S. (2023). Pengaruh kompetensi sumber daya manusia, komitmen organisasi dan penyusunan anggaran terhadap penyerapan anggaran. *Research in Accounting Journal (RAJ)*, 3(3), 398-405.
- Ramadhani, R., & Setiawan, M. A. (2019). Pengaruh regulasi, politik anggaran, perencanaan anggaran, sumber daya manusia dan pengadaan barang/jasa terhadap penyerapan anggaran belanja pada opd provinsi sumatera barat. *Jurnal Eksplorasi Akuntansi*, 1(2), 710-726.
- Renoat, R. E., & Latupeirissa, D. S. (2020). Pengaruh variabel perencanaan anggaran, administrasi dan kompetensi sumber daya manusia terhadap penyerapan anggaran. *Bisman-Jurnal Bisnis & Manajemen*, 4(02), 23-32.
- Saragih, R. J. P., Simanjuntak, A., Sembiring, Y. N., & Purba, D. H. (2022). Peran motivasi dan komitmen organisasi sebagai variabel moderating faktor-faktor yang mempengaruhi penyerapan anggaran belanja organisasi perangkat daerah Kota Pematangsiantar. *Jurnal Ilmiah Accusi*, 4(1), 80-109.
- Sari, N. D., & Maria, M. (2023). Faktor-faktor yang mempengaruhi penyerapan anggaran belanja organisasi perangkat daerah Pemerintah Kota Palembang. *Journal of Economic, Business and Accounting (COSTING)*, 6(2), 1896-1915.
- Sartika, D., & Roza, S. J. (2024). Faktor-faktor yang mempengaruhi penyerapan anggaran pada Kabupaten Aceh Jaya. *Jurnal Akuntansi, Keuangan dan Perpajakan*, 7(1), 46-55.
- Schlichter, J., Klyver, K., & Haug, A. (2021). The moderating effect of ERP system complexity on the growth–profitability relationship in young SMEs. *Journal of small business management*, 59(4), 601-626.
- Sukarta, I. W., Badera, I. D. N., & Ratnadi, N. M. D. (2017). Pengaruh kompetensi, pemanfaatan teknologi informasi, komitmen dan revisi anggaran pada efektivitas pengelolaan anggaran Universitas Udayana. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 6(11), 3917-3950.
- Suleni, I., & Masdjojo, G. N. (2023). Studi kasus penyerapan anggaran di pemerintah daerah Kota Pekalongan. *SEIKO: Journal of Management & Business*, 6(2), 236-246.
- Suriana, S., Rahmawati, R., & Ekawati, D. (2022). Partial least square-structural equation modeling pada tingkat kepuasan dan persepsi mahasiswa terhadap perkuliahan online. *SAINTIFIK: Jurnal Matematika, Sains, dan Pembelajarannya*, 8(1), 10-19.
- Sutono, D. P. S., Respati, N. W., & Safrida, L. (2022). Faktor-faktor yang mempengaruhi tingkat penyerapan anggaran belanja satker pusat di daerah lingkup KemenLHK. *Jurnal Akuntansi dan Ekonomika*, 12(1), 135-144.
- Undang-undang (UU) Nomor 17 Tahun 2003 tentang Keuangan Negara.
- Wandari, R. S., Gunawan, A., & Nugraha, D. S. (2021). Pengaruh perencanaan dan kompetensi sumber daya manusia terhadap tingkat penyerapan anggaran. *Indonesian Accounting Research Journal*, 1(3), 551-563.
- Wiansyah, D. R., & Mulyani, S. (2021). Faktor-faktor yang mempengaruhi keterlambatan penyerapan anggaran belanja daerah. *Jurnal SIKAP (Sistem Informasi, Keuangan, Auditing Dan Perpajakan)*, 5(2), 212-228.
- Wicaksono, A., Mulyo, H. H., & Riantono, I. E. (2015). Analisis dampak penerapan sistem ERP terhadap kinerja pengguna. *Binus Business Review*, 6(1), 25-34.
- Yuliani, N. L. (2014). Pengaruh sistem informasi pengelolaan keuangan daerah dan penerapan anggaran berbasis kinerja terhadap kinerja pemerintah daerah. *Jurnal Manajemen Bisnis*, 5(2), 128-157.