International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Factors Influencing Budget Effectiveness With The Utilization Of Information Technology As An *Intervening Variable* (Study At The Jambi City BAPPEDA Office)

Choirunisa Sona Sabila Putri [1] , Wirmie Eka Putra [2] , Fitrini Mansur [3]

[1,2,3]Accounting Study Program, Faculty of Economics and Business, University of Jambi, Jambi, Indonesia.

Email: sonasabila04@gmail.com , wirmie.eka@unja.ac.id , fitrinimansur@unja.ac.id

Abstract

This study aims to examine the influence of government apparatus performance and community participation on the effectiveness of development budgets, as well as the role of information technology utilization as an intervening variable in the Jambi City Regional Development Planning Agency (BAPPEDA). The study used an associative quantitative approach with 52 state civil servants (ASN) who were all sampled through a saturated sampling technique. Data were collected through questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 4. The results showed that government apparatus performance, community participation, and information technology utilization each had a positive and significant effect on budget effectiveness. Apparatus performance did not have a significant effect on information technology utilization, while community participation did not have a significant direct effect but had a significant effect in total. The use of information technology was proven to mediate the influence of apparatus performance and community participation on budget effectiveness. This study concluded that improving apparatus performance, community participation, and information technology utilization is necessary to support the effectiveness of regional development budgets.

Keywords: Government apparatus performance, community participation, utilization of information technology, budget effectiveness.

INTRODUCTION

The effectiveness of regional development budgets remains a crucial issue in governance, particularly in participatory planning through the Development Planning Conference (Musrenbang). Although budget absorption rates in various regions tend to

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

be high administratively, this condition does not fully reflect the accommodation of community aspirations in development programs. In a decentralized system, Law Number 23 of 2014 requires regional governments to involve communities in development decision-making, while Law Number 25 of 2004 positions Musrenbang as a tiered deliberation forum designed from the *bottom up* . The Regional Development Planning Agency (BAPPEDA) plays a strategic role in this process because it is responsible for formulating, coordinating, and evaluating development policies, including integrating Musrenbang results into the Regional Government Work Plan (RKPD).

This phenomenon is evident in Jambi City. The 2025 Regional Development Planning (RKPD) Musrenbang (Regional Development Planning) received 3,134 public proposals, down from 5,897 proposals in 2021 (Jambione.com, 2025). Meanwhile, the 2025 Budget Realization Report shows that the Jambi City Public Works and Housing Agency (PUPR) budget absorption rate reached 98.54%, indicating administrative effectiveness. However, according to the Head of the Regional Development Planning, Control, and Evaluation (PPEPD) Division of the Jambi City Development Planning Agency (BAPPEDA), the public still believes that development outcomes, particularly road improvements, do not fully meet needs on the ground, while feedback on follow-up to proposals remains limited. This situation indicates a gap between high budget realization and the accommodation of public aspirations.

The issue becomes more complex when linked to the use of information technology and the performance of civil servants. According to *the Technology Acceptance Model* (TAM), technology is optimally utilized when users perceive ease of use and tangible benefits from the system (Davis et al., 1989). The Regional Government Information System (SIPD) and e-Planning managed by BAPPEDA are supposed to provide access and transparency for the public, but the implementation of e-Planning and e-Budgeting synchronized with SIPD in Jambi City reportedly still faces technical and non-technical obstacles (Antara News Jambi, 2020). From the civil servant side, the limited number of planners compared to the volume of proposals that must be verified, as well as limited technical capacity in operating the digital system, impact the speed and accuracy of community proposal selection. Thus, civil servant performance and community participation can only be converted into budget effectiveness if supported by adequate use of information technology.

Previous studies generally discussed public participation and digital planning systems separately. Wirawan and Nurpratiwi (2015) found that participation in sub-district Musrenbang (Regional Development Planning Forum) was active but constrained by budget constraints, while Putriani and Fanida (2022) concluded that e-Planning in Tulungagung Regency was effective in terms of regional development and financial information. These studies have not yet considered information technology as an

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

intervening variable between apparatus performance, public participation, and budget effectiveness, and have mostly been conducted in village or district governments in Java and Kalimantan. This article fills this gap by testing a model that integrates these four variables in a city government in Sumatra, using primary data from the Jambi City Development Planning Agency (BAPPEDA) apparatus.

Objective

This article aims to

1. Analyzing the influence of government apparatus performance on the effectiveness of development budgets.
2. Analyzing the influence of community participation on the effectiveness of development budgets.
3. Analyzing the influence of government apparatus performance on the use of information technology.
4. Analyzing the influence of community participation on the use of information technology.
5. Analyzing the influence of the use of information technology on the effectiveness of development budgets.
6. Analyzing the role of information technology utilization in mediating the influence of government apparatus performance on the effectiveness of development budgets.
7. Analyzing the role of information technology utilization in mediating the influence of community participation on the effectiveness of development budgets.

LITERATURE REVIEW

Stewardship Theory

This research is based on Stewardship Theory developed by Donaldson and Davis (1991) as an alternative to agency theory. This theory assumes that organizational managers (*stewards*) are not solely motivated by personal interests, but rather prioritize the interests of the organization and the parties served because the organization's success is seen as their own success (Davis et al., 1997). In the public sector, government officials act as *stewards* oriented towards the public interest: improving performance, encouraging community participation in Musrenbang, and utilizing information technology such as e-Planning and SIPD to increase transparency, accountability, and efficiency.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Government Apparatus Performance

Government apparatus performance is the result of their work in carrying out their duties and responsibilities as government administrators. Good performance is reflected in the apparatus' ability to provide quality public services that meet the needs of the community, as measured by the quality and quantity of work and the success in achieving organizational goals (Mahsun, 2020; Nugraha, 2025). Pasolong (2021) emphasizes individual capabilities, namely the ability to carry out assigned tasks based on skills, experience, sincerity, and timeliness, while Mangkunegara (2017) defines it as work results that align with organizational goals. In this study, apparatus performance (X_1) is measured through four indicators: effectiveness, efficiency, employee growth (ability, motivation, and opportunity to adapt), and customer satisfaction.

From the perspective of Stewardship Theory, high-performing civil servants are *stewards* who manage public trust responsibly, thereby supporting the achievement of program targets and targeted budget utilization. This relationship is supported by Juned and Joniansyah (2026), who linked civil servant performance management to the efficiency of regional budget utilization, and Prayogo et al. (2025), who demonstrated that employee performance is related to the effectiveness of regional financial management. Furthermore, high-performing civil servants tend to be better able to utilize digital systems in their work (Zamrudi & Shaddiq, 2025).

Community Participation

According to Law Number 23 of 2014 concerning Regional Government, community participation is the role of the community in channeling their aspirations, thoughts and interests in regional government. Public participation is defined as the active involvement of citizens in the planning, implementation, and oversight of public policies to ensure that the resulting policies are more democratic, transparent, and aligned with community needs (Ardian et al., 2025). Harsono et al. (2023) define participation as community involvement, from problem identification and decision-making on alternative solutions to implementation and evaluation. According to Nurcholis (2021), true participation stems from community awareness and initiative, not merely a response to government mobilization. Arnstein (1969) emphasized that meaningful participation requires a real distribution of power, not merely the fulfillment of formal procedures. In regional budgeting, a concrete form of this participation is the Development Planning Deliberation (Musrenbang).

In this study, public participation (X_2) is measured through four indicators: involvement in decision-making, budget preparation, budget implementation, and budget monitoring and evaluation. Previous research has shown that active participation in

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

development planning can be limited by budget constraints (Wirawan & Nurpratiwi, 2015), and that the public's role in budget planning is related to accountability and the effective use of public funds (Silvia & Myrna, 2023). With technological advancements, participation has also shifted to e-participation, which accelerates coordination and increases government responsiveness (Sutrisno & Akbar, 2018).

Utilization of Information Technology

The Technology Acceptance Model (TAM) aims to explain the factors that influence the acceptance and use of information technology by users. In this study, information technology utilization is defined as the level of technology use by officials in processing, storing, and presenting information to support development planning and budgeting processes. Based on *the Technology Acceptance Model* (TAM), utilization is determined by perceptions of ease of use and system usefulness (Davis et al., 1989). In this study, information technology utilization (Z) is measured through four indicators: the availability of supporting hardware and software, the availability of an adequate internet network, computerized processes, and utilization in accordance with regulations.

In local government, information technology is implemented, among other things, through the Regional Government Information System (SIPD) and e-Planning. Putriani and Fanida (2022) concluded that e-Planning in Tulungagung Regency has been effective in providing regional development and financial information. However, the benefits of technology are not automatic: the implementation of e-Planning and e-Budgeting synchronized with SIPD in Jambi City reportedly still faces technical and non-technical obstacles (Antara News Jambi, 2020), and other research shows that the impact of information technology on budget management depends on the competence of the apparatus and organizational conditions (Ayutri et al., 2026; Sukarta et al., 2017).

Budget Effectiveness

Budget effectiveness is the degree to which a budget is successfully used to achieve predetermined goals and objectives in a timely and planned manner (Mahmudi, 2021; Mardiasmo, 2021). Jordania et al. (2025) define effectiveness as an agency's success in using resources to achieve planned goals, objectives, and targets, while Embistek et al. (2025) relate it to the local government's ability to manage its budget effectively to improve public service performance. Mardiasmo (2021) emphasizes the relationship between outputs and targets, stating that a program is considered effective if its outputs meet targets.

Financially, the Decree of the Minister of Home Affairs Number 690,900-327 of 1996 categorizes a budget as highly effective if the realization-to-target ratio exceeds 100%, effective in the range of 90%–100%, quite effective at 80%–90%, less effective at

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

60%–80%, and ineffective if below 60%. However, effectiveness is also substantive, namely the extent to which the funded program reflects the needs of the community. This is relevant to the conditions in Jambi City, where the absorption of the PUPR Department budget reached 98.54% but the community still considered the development results not to fully meet the needs in the field.

In this study, budget effectiveness (Y) is measured through six indicators: budget compliance with performance budgeting principles, clarity of objectives and performance measures, compliance with program priorities, appropriate budget classification, follow-up on proposals, and evaluation of budget changes. These six indicators encompass aspects of planning, clarity of objectives, and accommodating community proposals as measures of effectiveness that are not merely administrative in nature.

Hypothesis

H_1 : The performance of government apparatus has a positive and significant impact on the effectiveness of the development budget at the Jambi City BAPPEDA.

H_2 : Community Participation has a positive and significant impact on the Effectiveness of the Development Budget at the Jambi City BAPPEDA.

H_3 : The performance of government officials has a positive and significant impact on the use of information technology at the Jambi City BAPPEDA.

H_4 : Community Participation has a positive and significant influence on the Utilization of Information Technology at the Jambi City BAPPEDA.

H_5 The use of Information Technology has a positive and significant impact on the Effectiveness of the Development Budget at the Jambi City BAPPEDA.

H_6 The use of Information Technology mediates the influence of Government Apparatus Performance on the Effectiveness of the Development Budget at the Jambi City BAPPEDA.

H_7 The use of Information Technology mediates the influence of Community Participation on the Effectiveness of the Development Budget at the Jambi City BAPPEDA.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

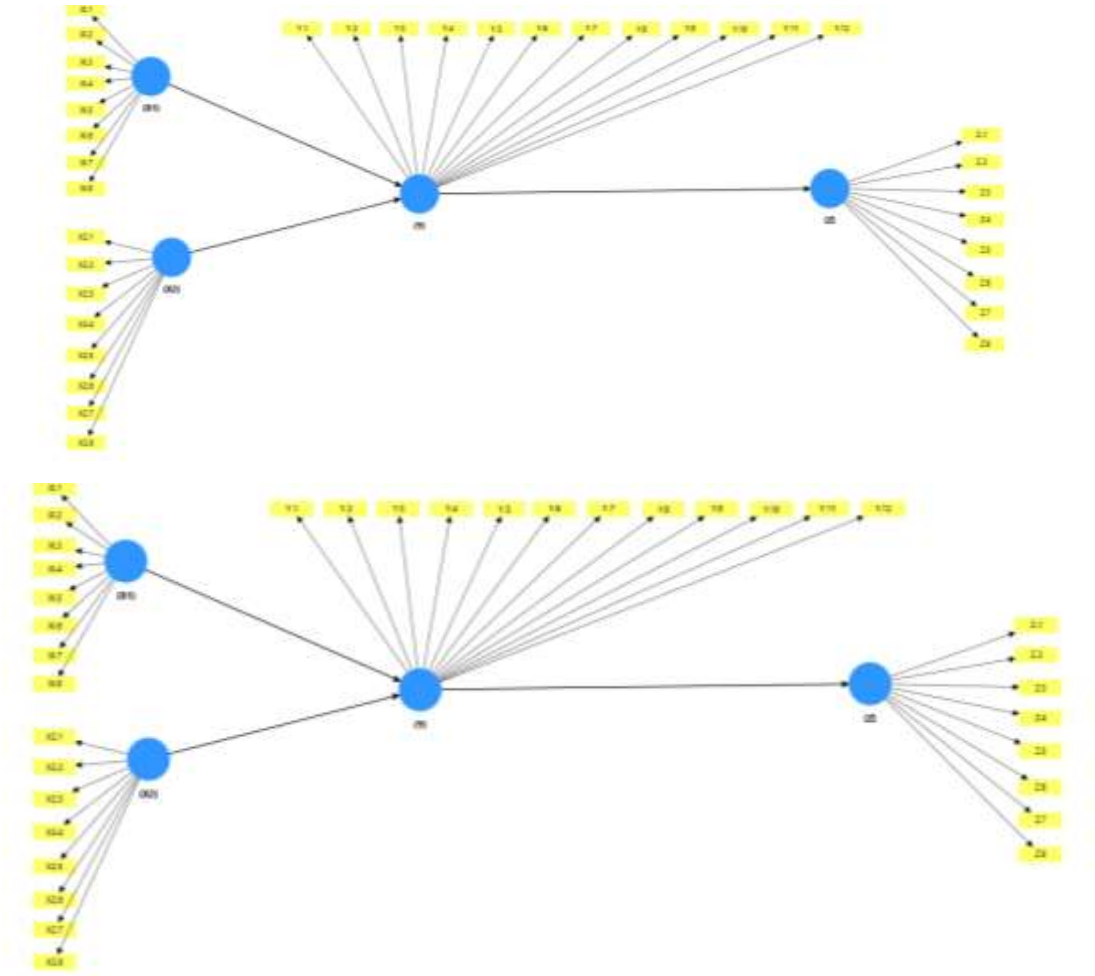


Figure 1 Research Model

RESEARCH METHODS

This study uses a quantitative approach with an associative method to examine the relationship between variables in the Jambi City Regional Development Planning Agency (BAPPEDA). Primary data were collected through a closed-ended questionnaire distributed via Google Form with a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Secondary data were obtained from official documents such as the Budget Realization Report, RKPD documents, and the implementation report of the Jambi City Musrenbang, as well as from Home Affairs Ministerial Regulation Number 70 of 2019 concerning SIPD and Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE).

The study population was all 52 civil servants (ASN) of the Jambi City Regional Development Planning Agency (BAPPEDA) in 2026, consisting of 29 civil servants (PNS) and 23 PPPK (Regional Employee Recipients). Due to the relatively small number, the

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

entire population was sampled using a saturated sampling technique, resulting in 52 respondents. The study variables and indicators are presented in Table 1.

Table 1 Research Variables and Indicators

Variables	Definition operational	Indicator	Scale
(X_1) Government Apparatus Performance	Performance apparatus Regional government is the level of achievement of the work results of the apparatus in carrying out government duties and functions in order to realize organizational goals, which is measured through indicators of effectiveness, efficiency, employee growth (ability, motivation, and opportunity to adapt), and customer (community) satisfaction.	1. Effectiveness	Scale (1–5)
		2. Efficiency	
		3. Employee Growth (Capabilities, Motivation, and Opportunities) Adapt)	
		4. Customer satisfaction	
Variables	**Definition operational**	**Indicator**	**Scale**
(X_2) Community Participation	Community participation is the level of involvement and active participation of the community in the development budget management process, both as individuals and as citizens. and groups, which are carried out on the basis of awareness Alone start from the decision making stage, preparation budget, to implementation budget.	1. Decision -making	Scale (1–5)
		2. Budget Preparation	
		3. Budget Implementation	
		4. Supervision and Budget Evaluation	
Variables	**Definition operational**	**Indicator**	**Scale**

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

(Z) Utilization of Information Technology	Utilization of information technology is the level of use and integration of information technology by the apparatus in carrying out work tasks, especially in processing, storage and presentation of information to support the development planning and budgeting process.	1. Availability of Hardware and Software Supporters	Scale Likert (1–5)
		2. Network Availability Adequate Internet	
		3. Process Computerized	
		4. Utilized In accordance under the condition	
Variables	**Definition operational**	**Indicator**	**Scale**
(Y) Budget Effectiveness	Effectiveness budget is the level of success of budget use in achieve the goals and objectives that have been set in a timely manner and according to plan, through optimal use of allocated resources .	1. Budget Conformity with the Principle Performance Budget	Scale (1–5)
		2. Clarity Objectives and Performance Measures	
		3. Compliance in Priority Program	
		4. Budget Classification right	
		5. Follow-up on Proposal	
		6. Evaluation to Budget Changes	

Source: Operationalization of research variables, 2026.

Descriptive statistics were used to describe the scores of each variable classified into five categories (very low to very high) based on class intervals, namely the difference

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

between the highest and lowest scores divided by the number of classes. Hypothesis testing used *Partial Least Squares Structural Equation Modeling* (PLS-SEM) with SmartPLS 4, which was chosen because it is able to handle complex models with intervening variables and does not require normally distributed data (Hair et al., 2019; Latan & Ghozali, 2015). The measurement model (*outer model*) was evaluated through convergent validity (*outer loading* > 0.70), discriminant validity (*cross loading*), and construct reliability (*composite reliability* and *Cronbach's alpha* > 0.70). The structural model (*inner model*) was evaluated through the coefficient of determination (R^2, with criteria ≥ 0.67 strong, 0.33–0.67 moderate, and < 0.33 weak), path coefficients, total effects , and specific indirect effects *through* bootstrapping *with* 5,000 subsamples. The hypothesis was accepted if the t-statistic > 1.96 and p-value < 0.05.

RESULTS AND DISCUSSION

Respondent Characteristics

Table 2 shows that respondents were predominantly female (51.92%), aged 40–49 (40.38%), had a bachelor's degree (46.15%), and had less than five years of service (48.08%). This composition indicates that respondents were relatively highly educated, but nearly half were short-tenured employees.

Table 2 Respondent Characteristics (n = 52)

Characteristics	Frequency	Percentage (%)
Gender		
Man	25	48.08
Woman	27	51.92
Age		
< 30 years	10	19.23
30–39 years	8	15.38
40–49 years	21	40.38
≥ 50 years	13	25.00
last education		
SENIOR HIGH SCHOOL	8	15.38
D3	9	17.31
S1	24	46.15
S2	11	21.15
Years of service		
< 5 years	25	48.08
5–10 years	1	1.92

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Characteristics	Frequency	Percentage (%)
11–20 years	15	28.85
> 20 years	11	21.15

Source: Processed data, 2026.

Descriptive Statistics

All four variables are in the sufficient category. Apparatus performance, community participation, information technology utilization, and budget effectiveness at the Jambi City Regional Development Planning Agency (BAPPEDA) have been quite good, but still need improvement, particularly in employee capacity development, community involvement in budget preparation and oversight, and optimization of information technology devices and systems.

Table 3 Results of Descriptive Analysis of Research Variables

Variables	Total score	The category range is sufficient	Category
Government Apparatus Performance (X_1)	1,285	1,081.7–1,414.4	Enough
Community Participation (X_2)	1,257	1,081.7–1,414.4	Enough
Utilization of Information Technology (Z)	1,278	1,081.7–1,414.4	Enough
Budget Effectiveness (Y)	1,918	1,622.5–2,121.6	Enough

Source: Processed data, 2026.

Evaluation of Measurement Model

All indicators of apparatus performance (0.706–0.854), information technology utilization (0.714–0.948), and budget effectiveness (0.723–0.912) had *outer loadings* above 0.70. For community participation, indicator X2.2 (0.689) was slightly below the 0.70 limit, but was maintained considering theoretical suitability and construct testing results, while other indicators ranged from 0.724–0.895. The *cross-loading test* showed that most indicators had the highest loadings on the constructs they measured, so that the discriminant validity criteria were generally met. All constructs also had *composite reliability* and *Cronbach's alpha* above 0.70 (Table 4).

Table 4 Results of Validity and Reliability Tests

Variables	Outer loading range	Composite reliability	Cronbach's alpha
X_1 Government Apparatus Performance	0.699–0.858	0.935	0.929

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Variables	Outer loading range	Composite reliability	Cronbach's alpha
X $_2$ Community Participation	0.694–0.891	0.939	0.934
Y Budget Effectiveness	0.715–0.948	0.953	0.950
Z Utilization of Information Technology	0.724–0.912	0.940	0.933

Source: SmartPLS data processing, 2026.

Structural Model Evaluation and Hypothesis Testing

The adjusted R-square value for the Budget Effectiveness (Y) variable was 0.982 or 98.2%, while the value for Information Technology Utilization (Z) was 0.918 or 91.8%. These results indicate that the independent variables' ability to explain the dependent variable is categorized as very strong, while the remainder is explained by other factors outside the research model. Furthermore, the results of the bootstrapping test in Table 4.14 show that all relationships between variables have a t-statistic value greater than 1.96 and a p-value less than 0.05. Thus, the direct influence of Government Apparatus Performance (X1) and Community Participation (X2) on Budget Effectiveness (Y), the influence of both on Information Technology Utilization (Z), and the influence of Information Technology Utilization (Z) on Budget Effectiveness (Y) are stated to be positive and significant. In addition, the results of the indirect influence test show that the Utilization of Information Technology (Z) is able to mediate the influence of Government Apparatus Performance (X1) and Community Participation (X2) on Budget Effectiveness (Y). Both indirect influences are significant, so that hypotheses H1 to H7 are declared accepted.

Table 5 Hypothesis Testing Results

Hypothesis	Connection	Path Coefficient	T-statistic	P-value	Decision
H1	X1 → Y	0.203	2,968	0.003	Accepted
H2	X1 → Z	0.278	2,500	0.012	Accepted
H3	X2 → Y	0.796	12,000	0,000	Accepted
H4	X2 → Z	1,093	4,172	0,000	Accepted
H5	Z → Y	1,373	4,519	0,000	Accepted
H6	X1 → Z → Y	0.278	2,500	0.012	Accepted
H7	X2 → Z → Y	1,093	4,172	0,000	Accepted

Source: SmartPLS data processing, 2026.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Based on the results of hypothesis testing, all hypotheses H1 to H7 show a T-statistic value greater than 1.96 and a P-value less than 0.05. Thus, all hypotheses are declared accepted based on the test results presented. These results indicate that Government Apparatus Performance and Community Participation have a positive and significant effect on Budget Effectiveness and Information Technology Utilization. In addition, Information Technology Utilization also shows a positive and significant effect on Budget Effectiveness and is suspected to play a role as an intervening variable in the relationship between the two independent variables on Budget Effectiveness.

DISCUSSION

This research discussion is based on the results of structural model testing using SmartPLS 4 through a bootstrapping procedure. The test was conducted to determine the effect of Government Apparatus Performance and Public Participation on Budget Effectiveness, both directly and through the Utilization of Information Technology as an intervening variable.

1. The Influence of Government Apparatus Performance on Budget Effectiveness
   The results of the study indicate that Government Apparatus Performance has a positive and significant effect on Budget Effectiveness at the Jambi City BAPPEDA, with a path coefficient of 0.203, a T-Statistic of 2.968, and a P-Value of 0.003. This means that the better the apparatus performance, the higher the budget effectiveness. This finding is in line with Stewardship Theory, which explains that government apparatus are responsible for managing organizational resources to achieve goals and public interests. This result is supported by Juned and Joniansyah (2026), Simanjuntak, Safitri, and Yuniarti (2026), and Ramadani, Rahayu, and Gowon (2021). However, it differs from Tarigan, Engka, and Lapian (2023), who found that human resource competency did not significantly influence the effectiveness of budget implementation.
2. The Influence of Community Participation on Budget Effectiveness
   The results of the study indicate that Community Participation has a positive and significant effect on Budget Effectiveness, with a path coefficient of 0.796, a T-Statistic of 12.000, and a P-Value of 0.000. This indicates that community involvement in the planning and budgeting process can support the achievement of budget effectiveness. This finding is in line with Stewardship Theory, because the government needs to pay attention to community aspirations and needs in determining development priorities. This result is supported by Larisu and Jopang (2022), Silvia and Myrna (2024), and Mukti, Suharti, and Sobari (2026). However,

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Saraswati (2017) found that community participation did not have a partial effect on the implementation of performance-based budgeting.

3. The Influence of Government Apparatus Performance on the Utilization of Information Technology
   The results of the study indicate that Government Apparatus Performance has a positive and significant effect on the Utilization of Information Technology, with a path coefficient of 0.278, a T-Statistic of 2.500, and a P-Value of 0.012. This means that good apparatus performance can support the utilization of information technology in carrying out government duties. In Stewardship Theory, apparatus has the responsibility to manage organizational resources optimally. The use of information technology assists apparatus in data processing, report preparation, and work implementation. This finding is relevant to the research of Ufairah (2017), Prayogo, Tan, and Bahri (2025), and Khairani, Wancik, and Oktarida (2024).
4. The Influence of Community Participation on the Utilization of Information Technology
   The results of the study indicate that Community Participation has a positive and significant effect on the Utilization of Information Technology, with a path coefficient of 1.093, a T-Statistic of 4.172, and a P-Value of 0.000. This indicates that community involvement is related to the utilization of information technology in supporting government management processes. This finding is in line with Stewardship Theory, which emphasizes the government's responsibility to pay attention to community interests. Information technology can help convey aspirations and provide information in decision-making. These results are supported by Mukti, Suharti, and Sobari (2026), Paramita and Dewi (2024), and Sabdosih and Sarwono (2023).
5. The Influence of Information Technology Utilization on Budget Effectiveness
   The results of the study indicate that the Utilization of Information Technology has a positive and significant effect on Budget Effectiveness, with a path coefficient of 1.373, T-Statistics of 4.519, and P-Values of 0.000. This means that the utilization of information technology can help increase budget effectiveness through data processing, information provision, coordination, and monitoring of budget implementation. These results align with Stewardship Theory, which emphasizes the responsibility of civil servants to optimally manage organizational resources.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

This finding is supported by Sukarta, Badera, and Ratnadi (2017), Mukti, Suharti, and Sobari (2026), and Putri, Afrizal, and Wahyudi (2023).

6. The Influence of Government Apparatus Performance on Budget Effectiveness through the Utilization of Information Technology
   The indirect influence of government apparatus performance on budget effectiveness through the use of information technology demonstrates that information technology plays a role in linking apparatus performance with budget effectiveness. Stewardship theory holds that apparatus are responsible for optimally managing public resources. Apparatus performance supported by information technology can assist in the planning, data processing, monitoring, and evaluation of budgets.
7. The Influence of Community Participation on Budget Effectiveness through the Utilization of Information Technology
   The indirect influence of public participation on budget effectiveness through the use of information technology demonstrates the importance of technological support in connecting public aspirations with budget management. Based on Stewardship Theory, the government, as the manager of the public mandate, must address public needs. The use of information technology can support the delivery of aspirations, information processing, and decision-making, thus ensuring budget implementation is more aligned with development needs.

CONCLUSION

Based on the results of a study of 52 respondents at the Jambi City Regional Development Planning Agency (BAPPEDA) using SmartPLS 4, it can be concluded that Government Apparatus Performance and Community Participation have a positive and significant effect on Development Budget Effectiveness. These two variables also have a positive and significant effect on Information Technology Utilization. Furthermore, Information Technology Utilization has a positive and significant effect on Development Budget Effectiveness. The results of the indirect effect test indicate that the use of information technology can mediate the influence of government apparatus performance and public participation on development budget effectiveness. This finding aligns with Stewardship Theory, which emphasizes the responsibility of officials in managing public resources to achieve organizational goals and public interests.

SUGGESTION

For the Jambi City BAPPEDA, it is hoped that it can improve the performance of its apparatus through regular training and evaluation, strengthen community involvement in development planning, and optimize the use of information technology to support

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

effective and targeted budget management. For the community, it is hoped that they will be more active in conveying aspirations and participating in monitoring the implementation of development programs so that the allocated budget is in accordance with community needs. Meanwhile, for future researchers, it is recommended to add other variables, such as transparency, accountability, apparatus competence, and supervision, as well as expand the research object to obtain more comprehensive results.

REFERENCE

Adawiyah, R., Lestari, D., Syafirah, W., & Dewi, RAP (2025). The influence of public participation on the accountability of government budget management in the digitalization era: A literature study with a descriptive qualitative approach. *Management Accounting Balance of Economics, 21* (8).

Antara News Jambi. (2020, January 28). Jambi City synchronizes e-planning and e-budgeting with SIPD. *Jambi.Antaranews.com* .

Ardian, M., Azmi, M., & Yamani, AZ (2025). The role of public participation in the formation of laws (impact and benefit analysis). *Interdisciplinary Explorations in Research Journal (IERJ), 3* .

Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners, 35* (4), 216–224.

Ayutri, N., Sriwidharmanely, S., & Fadli, F. (2026). The effect of information technology utilization and budget revision on budget management effectiveness with internal control as a mediating variable. *Scientific Journal of Management, Economics, & Accounting (MEA), 10* (2), 954–970. https://doi.org/10.31955/mea.v10i2.7573

Davis, F.D., Bagozzi, R.P., & Warshaw, P.R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science, 35* (8), 982–1003. https://doi.org/10.1287/mnsc.35.8.982

Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review, 22* (1), 20–47. https://doi.org/10.5465/amr.1997.9707180258

Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management, 16* (1), 49–64. https://doi.org/10.1177/031289629101600103

Embistek, J., Hayati, Z., Abdullah, S., & Yulia, A. (2025). Evaluation and effectiveness of budget use in improving the performance of local government organizations in Indonesia. https://embistek.org/jurnal/index.php/embistekvolume4

Hair, J.F., Risher, J.J., Sarstedt, M., & Ringle, C.M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review, 31* (1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Harsono, I. (2023). The impact of community participation in the process of preparing the Village Government Work Plan (RPKDes) on the level of development in Gerung District, West Lombok Regency. *1* (4).

Ice, MN, Ardini, L., & Kurnia. (2023). Determinants of village financial management accountability with the use of information technology as a moderating variable. *Owner: Research and Accounting Journal, 7* (4), 3207–3219. https://doi.org/10.33395/owner.v7i4.1831

Jambione.com. (2025). High level of engagement: 3,134 proposals obtained in the 2025 Musrenbang RKPD of Jambi City. *Jambione.com* .

Jordania, K., Hasan, AN, & Fitrijanti, T. (2025). Analysis of the efficiency and effectiveness of budget implementation at the Bekasi City BPBD in 2020–2024. https://doi.org/10.8734/mnmae.v1i2.359

Juned, V., & Joniansyah, R. (2026). The impact of civil servant performance management on the efficiency of regional budget utilization. *Jurnal Bina Praja, 18* (1), 227–244. https://doi.org/10.21787/jbp.18.2026.3077

Juniarti, U., Inapty, BA, & Rakhmawati, I. (2022). The influence of apparatus competence and community participation on the effectiveness of village fund management in Labuhan Haji District with the use of information technology as an intervening variable. *Journal of Accounting Student Research, 2* (3), 608–620. https://doi.org/10.29303/risma.v2i3.298

Khairani, A., Wancik, Z., & Oktarida, A. (2024). The importance of supervision, regulatory compliance, clarity of budget targets, and the use of information technology in government agency performance accountability. *CURRENT: Journal of Current Accounting and Business Studies, 5* (3), 516–533. https://doi.org/10.31258/current.5.3.516-533

Larisu, Z., & Jopang. (2022). Community participation in supporting the optimization of village development planning and budgeting in Muna Regency. *Sebatik, 26* (2), 622–629. https://doi.org/10.46984/sebatik.v26i2.2050

Latan, H., & Ghozali, I. (2015). *Partial least squares: Concepts, techniques and applications using SmartPLS 3.*

Mahmudi. (2021). *Analysis of regional government financial reports.* UPP STIM YKPN.

Mahsun. (2020). *Measuring public sector performance.*

Mangkunegara, AP (2017). *Human resource management.*

Mardiasmo. (2021). *Regional autonomy & financial management: Latest edition.* Andi Offset.

Mukti, FA, Suharti, S., & Sobari. (2026). The influence of budget preparation participation, information technology utilization, and budget revision on the effectiveness of budget management in the Cianjur Regency Government. *Jurnal Semesta Ilmu*

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Manajemen dan Ekonomi, 2 (4), 192–201. https://doi.org/10.71417/j-sime.v2i4.858

Nugraha, H. (2025). *Strategy for increasing the capacity of government apparatus resources in Jati Village, West Bandung.*

Nurcholis, H. (2021). *Theory & practice of governance & regional autonomy* (Rev.). Grasindo.

Paramita, KD, & Dewi, NAWT (2024). The influence of village fund management officials' competence, community participation, and the use of information technology on optimizing village fund management in Buleleng Regency. *Journal of Professional Accounting, 15* (3), 690–701. https://doi.org/10.23887/jap.v15i03.52299

Pasolong, H. (2021). *Public administration theory.*

Prayogo, GD, Tan, S., & Bahri, Z. (2025). The effect of the implementation of the Regional Government Information System and employee performance on the effectiveness of regional financial management at the Regional Financial and Revenue Management Agency of Jambi Province. *Jambi Accounting Review, 6* (1), 58–70. https://doi.org/10.22437/jar.v6i1.48944

Putra, WE (2018). Analysis of the influence of functional supervision, public accountability, and improved public services on local government performance (Empirical study of regional government agencies in Jambi Province). Journal of Accounting and Taxation, 18(2), 181–187. https://doi.org/10.29040/jap.v18i2.143

Putra, WE (2018). Analysis of the influence of functional supervision, public accountability, and improved public services on local government performance (Empirical study of regional government agencies in Jambi Province). Journal of Accounting and Taxation, 18(2), 181–187. https://doi.org/10.29040/jap.v18i2.143

Putra, WE, Mirdah, A., & Siregar, PY (2020). Determinants of factors influencing taxpayer interest in using e-filing. SIKAP Journal (Information Systems, Finance, Auditing and Taxation), 4(2), 173–187. https://doi.org/10.32897/jsikap.v4i2.20

Putra, WE, Mirdah, A., & Siregar, PY (2020). Determinants of factors influencing taxpayer interest in using e-filing. SIKAP Journal (Information Systems, Finance, Auditing and Taxation), 4(2), 173–187. https://doi.org/10.32897/jsikap.v4i2.204

Putri, EN, & Hasbi, K. (2025). Community participation and transparency in the management of village funds in the preparation of the Village Revenue and Expenditure Budget (APBG) of Ujung Kampung Village. *Journal of Administrative Transformation, 15* (1), 112–124.

Putri, N., Afrizal, & Wahyudi, I. (2023). The influence of budget target clarity, human resource capacity, and information technology utilization on regional financial management with an internal control system as an intervening variable. *Journal of*

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Accounting & Finance, Unja, 8 (3), 224–240. https://doi.org/10.22437/jaku.v8i3.36369

Putriani, F., & Fanida, EH (2022). *Effectiveness of the e-planning system in regional development planning (a study at the Regional Development Planning Agency of Tulungagung Regency).*

Rizqi, MD, & Murahman, M. (2023). Effectiveness of using the Village Financial System (SISKEUDES) in managing village funds. *Journal of Government Science, UM Lampung, 3* (1).

Sabdosih, WN, & Sarwono, AE (2023). Analysis of community participation factors, village official competence, utilization of information technology and internal control systems on accountability in village fund management. *Journal of Contemporary Accounting and Finance (JAKK), 6* (2).

Safitri, F. (2022). The effect of implementing performance-based budgeting on the effectiveness of budget realization at the Population and Civil Registration Service of South Tangerang City. *Journal of Research Innovation, 2* (12), 4083–4088.

Safrizal, & Arini. (2023). Strengthening community participation in realizing good financial governance in villages by utilizing information technology in Indragiri Hilir Regency, Riau. *IPTEKIN: Journal of Development Policy and Innovation, 6* (1), 13–22.

Saraswati, D. (2017). Analysis of factors influencing the implementation of performance-based budgeting with inspectorate supervision as a moderating variable (a study of Regional Work Units of Jambi Province). *Journal of Accounting & Finance, Unja, 2* (2), 22–32. https://doi.org/10.22437/jaku.v2i2.4712

Septiani, S., Putra, WE, & Mansur, F. (2025). Factors influencing accountability in village fund management through the implementation of the Village Financial System (Siskeudes). J-MACC: Journal of Management and Accounting, 8(1), 103–117. https://doi.org/10.52166/j-macc.v8i1.8797

Septiani, S., Putra, WE, & Mansur, F. (2025). Factors influencing accountability in village fund management through the implementation of the Village Financial System (Siskeudes). J-MACC: Journal of Management and Accounting, 8(1), 103–117. https://doi.org/10.52166/j-macc.v8i1.8797

Silvia, AN, & Myrna, R. (2023). The role of the community in the public budget planning process to improve accountability and effectiveness of public fund use. *Jurnal Ilmiah Edunomika, 8* (1). https://doi.org/10.29040/jie.v8i1.11145

Simanjuntak, EBT, Safitri, J., & Yuniarti, R. (2026). Analysis of the determinants of government agency budget performance. *EKOMA: Journal of Economics, Management, and Accounting, 5* (4), 5827–5842. https://doi.org/10.56799/ekoma.v5i4.17371

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Sukarta, IW, Badera, IDN, & Ratnadi, NMD (2017). The influence of competence, utilization of information technology, commitment and budget revision on the effectiveness of budget management at Udayana University. *E-Journal of Economics and Business, Udayana University, 6* (11), 3917–3950.

Sutrisno, B., & Akbar, I. (2018). E-participation in local development (study of smart city implementation in Bandung City). *Journal of Sociotechnology, 17* (2), 191–198.

Tarigan, II, Engka, DSM, & Lapian, ALC (2023). Analysis of the effectiveness of budget implementation within the scope of the Regional Office of the Directorate General of State Assets for North, Central Sulawesi, Gorontalo and North Maluku (Kanwil DJKN Suluttenggomalut), Ministry of Finance. *Journal of Regional Economic Development and Finance, 24* (1), 64–79.

Ufairah, AN (2017). The influence of budget target clarity, budget evaluation, and information technology utilization on managerial performance (case study of the Jambi Provincial Government). *Unja Journal of Accounting & Finance, 2* (2), 1–11. https://doi.org/10.22437/jaku.v2i2.4708

Wirawan, R., & Nurpratiwi, R. (2015). *Community participation in regional development planning.* 4(2), 301.

Zamrudi, Z., & Shaddiq, S. (2025). Evaluation of the performance of digital technology-based apparatus to improve the effectiveness of modern public administration services. *Indonesia Economic Journal, 1* (2), 1721–1734. https://doi.org/10.63822/dn9cvp47

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.