

DOI: 10.5281/zenodo.13986614

THE IMPACT OF INFORMATION TECHNOLOGY, BUDGET PARTICIPATION, COMPLIANCE WITH REGULATIONS, AND ACCESSIBILITY TO BUDGET GOAL COMMITMENTS THROUGH BUDGET ACCOUNTABILITY AND PARTICIPATION MODERATED BY TRUSTWORTHY SUPERVISORY BEHAVIOR

# DJUPIANSYAH GANIE 1, MULYANTO NUGROHO 2 and SLAMET RIYADI 3

- <sup>1</sup> Doctorate Student, Universitas 17 Agustus 1945 Surabaya, Indonesia.
- <sup>2,3</sup> Professor, Faculty of Economics, Universitas 17 Agustus 1945 Surabaya, Indonesia. Email: <sup>1</sup>1272100057@email.untag-sby.ac.id, <sup>2</sup>nugroho@untag-sby.ac.id, <sup>3</sup>slametriyadi10@untag-sby.ac.id

#### **Abstract**

This research aims to examine the effects of information technology, budget participation, regulatory compliance, and accessibility on budget goal commitments, with budget accountability and participation moderated by trustworthy supervisory behavior, focusing on village governments in Berau Regency, East Kalimantan. Using a quantitative approach, primary data was collected via interviews and questionnaires from 254 respondents across 100 villages, sampled from a population of 698. Data analysis was conducted using Partial Least Square (PLS) based Structural Equation Modelling (SEM) with SmartPLS software. The results indicate that while information technology and budget participation have minimal influence on budget goal commitments, regulatory compliance, accessibility, budget accountability, and transparency significantly impact budget goal commitments. However, trustworthy supervisory behavior does not moderate these commitments. Policymakers should emphasize that achieving budget objectives relies on responsible commitment, strengthened by confidence in budget regulation, ensuring village budgets are used efficiently and resources are prioritized effectively.

**Keywords:** Information Technology, Budget Participation, Regulatory Compliance, Accessibility, Budget Goal Commitments, Accountability, Budget Transparency, and Trustworthy Supervisory Behavior.

### INTRODUCTION

The Indonesian government has paid great attention to development at the village level, as evidenced by the provision of village funds as a source of funding for village development. These village funds aim to improve the welfare of village communities and accelerate village development. In addition, in Law No. 06/2014 on Villages, the government allocates special funds to improve development in villages. These funds are used to finance governance, development, community development, and community empowerment in the village. This source of funds is expected to improve the economy and welfare of the people in the village.

Unaccountable use of village funds that are not in line with village development goals can hinder the achievement of these goals. Many public policy observers argue that the policy will not benefit village development, but instead will provide an avenue for corruption and inefficiency in the state budget at the village level. This is supported by the many corruption cases that have occurred in many village governments and have cost around IDR 47.56 billion (equivalent to US\$ 3.39 million) in the 2015-2018 period, with a total of 154 cases (Indonesia





DOI: 10.5281/zenodo.13986614

Corruption Watch, 2018). These cases have been argued by many to distrust the village government. Meanwhile, trust in the village community is necessary for effective village development because it can encourage active community participation (Tsang et al., 2009). Working Year Total Budget 2015 IDR 20.67 trillion 2016 IDR 46.98 trillion 2017 IDR 60 trillion 2018 IDR 60 trillion 2019 IDR 70 trillion 2020 IDR 72 trillion Cooperation between village governments and communities can lead to rapid development in villages (Sofyani et al., 2018b).

The existence of the Village Fund Allocation is expected to be able to improve development, increase community empowerment, community development, and community implementation. Wasistiono (2006) states that financing or finance is an essential factor in supporting the implementation of village autonomy, as well as the implementation of regional autonomy. Village funds are specifically given with the hope of increasing the number of independent villages and reducing underdeveloped villages by 2019. In 2015, the realization of village funds has been able to increase the number of independent villages and reduce the number of underdeveloped villages.

Good management of the village fund budget can increase public trust in government institutions. In achieving the objectives of the budget, budget goal commitment is needed. Locke et. al., (1981) define budget goal commitment as a determination to try to achieve budget goals and continuously try to achieve them over time. Wentzel, (2002) budget goal commitment is the level of individual commitment to achieving certain goals and is also a key aspect in goal-setting theory. Goal commitment indicates the achievement or determination to achieve goals (Locke et al., 1968) that realize goals and the unwillingness to eliminate or reduce goals over time. Based on goal setting theory, participation will increase subordinates' commitment to budget goals (Chong and Chong, 2002). The opportunity to be involved and influence in the budget-making process will increase subordinates' trust, subordinates' feelings of control, ego involvement with the organization, so that together will lead to less resistance to change and more acceptance and commitment to budget decisions.

In improving the commitment of budget goals, accountability and transparency related to management are necessary. Accountability is defined as the government's response to the public about its level of performance (Pina et al., 2010). Accountability as one of the pillars of good governance is very important in implementing village fund management. Government Regulation of the Republic of Indonesia Number 6 of 2014 concerning Villages states that accountability determines every activity. Furthermore, factors of budget accountability and transparency are also examined in this study, namely, information technology, budget participation, regulatory compliance, and accessibility.

Warsita (2011) states that information technology is a means and infrastructure that includes hardware, software and useware to obtain, process, interpret, store, organize, transmit and use data in accordance with the desired objectives. Meanwhile, according to Uno and Lamatenggo (2010), information technology is a technology that is used with the aim of managing data. Processing in this case is processing, obtaining, compiling, storing, manipulating data in various ways with the aim of producing quality information, namely accurate, relevant and





timely information. From the two definitions above, it can be concluded that information technology is a technology in the form of hardware, software and useware where these components are used with the aim of processing data in order to obtain quality information, namely accurate, relevant and timely information.

Thus the authors are interested in conducting research on the mediating role of accountability and transparency on the influence of information technology, budget participation, regulatory compliance and accessibility on budget goal commitment and how the role of supervision moderates the effect of accountability on budget goal commitment in Berau Regency, East Kalimantan Province.

## **Research Hypothesis**

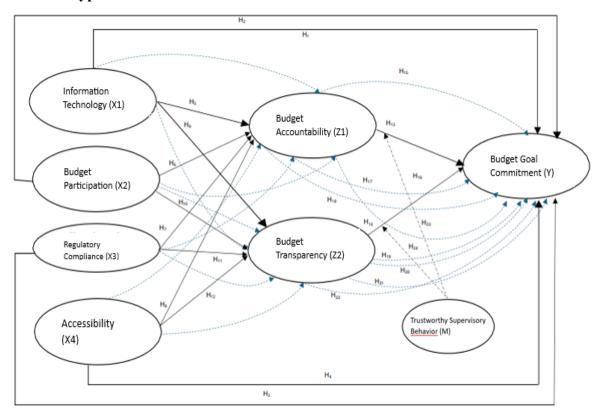


Figure 1: Conceptual Framework

Based on the conceptual framework described above, the hypotheses proposed in the research are:

- H1: Information Technology has a significant effect on Budget Goal Commitment in Berau Regency villages, East Kalimantan
- H2: Budget Participation has a significant effect on Budget Goal Commitment in Berau Regency villages, East Kalimantan





DOI: 10.5281/zenodo.13986614

- H3: Regulatory Compliance has a significant effect on Budget Goal Commitment in Berau Regency villages, East Kalimantan
- H4: Accessibility has a significant effect on Budget Goal Commitment in Berau Regency villages, East Kalimantan
- H5: Information Technology has a significant effect on Budget Accountability in Berau Regency villages, East Kalimantan
- H6: Budget Participation has a significant effect on Budget Accountability in Berau Regency villages, East Kalimantan
- H7: Regulatory Compliance has a significant effect on Budget Accountability in Berau Regency villages, East Kalimantan.
- H8: Accessibility has a significant effect on Budget Accountability in the village district. Berau, East Kalimantan
- H9: Information Technology has a significant effect on Budget Transparency in Berau Regency villages, East Kalimantan
- H10: Budget Participation has a significant effect on Budget Transparency in Berau Regency villages, East Kalimantan
- H11: Regulatory Compliance has a significant effect on Budget Transparency in Berau Regency villages, East Kalimantan
- H12: Accessibility has a significant effect on Budget Transparency in Berau Regency villages, East Kalimantan
- H13: Budget Accountability has a significant effect on Budget Goal Commitment in Berau Regency villages, East Kalimantan
- H14: Budget Transparency has a significant effect on Budget Goal Commitment in Berau Regency villages, East Kalimantan
- H15: Information technology has a significant effect on budget goal commitment through budget accountability in Berau Regency villages, East Kalimantan
- H16: Budget participation has a significant effect on budget goal commitment through budget accountability in Berau Regency villages, East Kalimantan
- H17: Regulatory compliance has a significant effect on budget goal commitment through budget accountability in Berau Regency villages, East Kalimantan
- H18: Accessibility has a significant effect on budget goal commitment through budget accountability in Berau Regency villages, East Kalimantan
- H19: Information technology has a significant effect on budget goal commitment through budget transparency in Berau Regency villages, East Kalimantan



DOI: 10.5281/zenodo.13986614

- H20: Budget participation has a significant effect on budget goal commitment through budget transparency in Berau Regency villages, East Kalimantan
- H21: Regulatory compliance has a significant effect on budget goal commitment through budget transparency in Berau Regency villages, East Kalimantan
- H22: Accessibility has a significant effect on budget goal commitment through budget transparency in Berau Regency villages, East Kalimantan
- H23: Trustworthy supervisory behavior moderates budget accountability on budget goal commitment in Berau Regency villages, East Kalimantan
- H24: Trustworthy supervisory behavior moderates budget transparency on budget goal commitment in Berau Regency villages, East Kalimantan

### **METHODS**

Based on the background and problem formulation, the research design used is to use a quantitative approach. Quantitative research has special characteristics, the main of which is to describe the problem through the description of trends or the need for an explanation of the relationship between several variables (Creswell, 2015: 23) This research is also a Causal Explanatory Research study used to test independent variables (information technology, budget participation, compliance with regulations, accessibility to budget accountability, and its consequences on budget goal commitment).

### **RESULTS**

### **Characteristics of Respondents Based on Domicile**

In table 1 below, I will show the distribution of respondents based on the domicile of respondents who reside in various villages in 13 sub-districts in Berau Regency in table 1 below:

**Table 1: Respondents by Domicile in Each Sub-district** 

No	Subdistrict Name	Frequency	Percentage	
1	Kelay	8	3%	
2	Talisayan	25	10%	
3	Tabalar	20	8%	
4	Biduk-Biduk	22	9%	
5	Pulau Maratua	15	6%	
6	Sambaliung	35	14%	
7	Tanjung Redeb	0	0%	
8	Gunung Tabur	35	14%	
9	Segah	16	6%	
10	Teluk Bayur	29	11%	
11	Batu Putih	17	7%	
12	Biatan	14	6%	
13	Pulau Derawan	18	7%	
Total		254	100%	





Based on table 1 above, it can be seen that respondents based on Domicile, are dominated by respondents in all sub-districts in Berau Regency, namely 13 sub-districts. In filling out the questionnaire, most of them filled out berada pada Kecamatan Gunung Tabur dan Sambaliung mengisi masing-masing sebanyak 35 responden dengan jumlah persetase 14% dan paling sedikit ada berada pada Kecamatan Kelay sebanyak 8 dengan presentase 3%.

## **Hypothesis Testing**

Hypothesis testing of the direct influence of each research variable can be explained as follows:

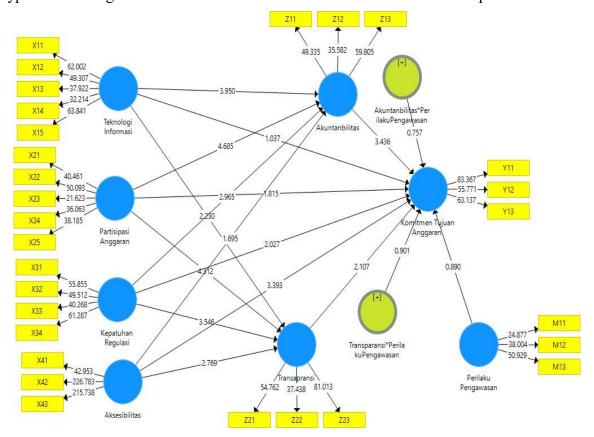


Figure 2: Inner Model Results

No	Hipotesis	Original Sample (O)	Sample Mean (M)	Stnadard Deviation (STDEV)	T Statistic ( O/STD EV )	P Values	Result
1	Information technology- >Budget goal commitment	0.090	0.073	0.086	1.037	0.300	Rejected
2	Budget participation->Budget goal commitment	0.164	0.172	0.090	1.815	0.060	Rejected
3	Regulatory compliance->Budget goal commitment	0.139	0.130	0.068	2.027	0.043	Accepted
4	Accessibility->Budget goal commitment	0.186	0.182	0.055	3.393	0.001	Accepted





DOI: 10.5281/zenodo.13986614

5	Information Technology- >Budget Accountability	0.308	0.302	0.078	3.950	0.000	Accepted
6	Budget participation->Budget Accountability	0.348	0.350	0.074	4.685	0.000	Accepted
7	Regulatory compliance-> Accountability	0.232	0.239	0.078	2.965	0.003	Accepted
8	Accessibility->Budget Accountability	0.092	0.088	0.054	1.695	0.091	Rejected
9	Information Technology- >Budget Transparency	0.196	0.199	0.088	2.230	0.026	Accepted
10	Budget participation- >Budget Transparency	0.360	0.370	0.083	4.312	0.000	Accepted
11	Regulatory compliance->Budget Transparency	0.292	0.279	0.082	3.546	0.000	Accepted
12	Accessibility->Budget Transparency	0.134	0.134	0.048	2.769	0.006	Accepted
13	Budget Accountability- >Budget goal commitment	0.233	0.228	0.068	3.436	0.001	Accepted
14	Budget Transparency->Budget goal commitment	0.157	0.172	0.075	2.107	0.036	Accepted

Based on the hypothesis testing results, the impact of information technology and budget participation on budget goal commitments was not supported, as both hypotheses were rejected with p-values of 0.300 and 0.060, respectively.

However, compliance with regulations and accessibility significantly influenced budget goal commitments, with both hypotheses being accepted due to p-values below 0.05. This highlights the importance of regulatory compliance and accessibility in achieving budget goals.

The results also showed that information technology and budget participation positively affected budget accountability, as both hypotheses were accepted. Likewise, compliance with regulations and accessibility also had significant positive effects on budget accountability, though the hypothesis related to accessibility's effect on accountability was rejected due to a higher p-value. This suggests that while accessibility is crucial for goal commitments, its influence on accountability may be limited.

Lastly, information technology, budget participation, and regulatory compliance significantly impacted budget transparency, with all related hypotheses being accepted. Furthermore, both budget accountability and transparency were found to positively influence budget goal commitments. This indicates that strong accountability and transparency mechanisms are key to ensuring that budgetary objectives are effectively met.

## **DISCUSSION**

Hypothesis testing results show that information technology has a positive but insignificant effect on budget goal commitment, with an original sample estimate (O) value of 0.090 and a p-value of 0.300 (>0.05), so the hypothesis that information technology has a significant effect on budget goal commitment is rejected.





DOI: 10.5281/zenodo.13986614

The use of information technology is considered to increase the confidence of village officials in budget objectives, but implementation in Berau Regency is not optimal due to limited infrastructure, human resources, and internet access.

This research is in line with several previous studies, such as Frintrup et al. (2022) and Laka (2020), but differs from the research of Darussalam et al. (2023), Audia Ulfa (2023), and Oktaviani et al. (2019).

The results of hypothesis testing show that budget participation has a positive but insignificant effect on budget goal commitment, with an original sample estimate (O) value of 0.164 and a p-value of 0.060 (>0.05), so the hypothesis that budget participation has a significant effect on budget goal commitment is rejected.

This research is in line with Batubara et al. (2022) and Deliana (2015), which state that budget participation affects budget management and managerial performance. In Berau Regency, budget participation has not fully improved budget goal commitment, mainly due to limited human resource knowledge in the budgeting process.

A budgeting process that combines top-down and bottom-up approaches is considered more effective for encouraging the responsibility of village officials and improving budget efficiency.

The results of hypothesis testing show that compliance with regulations has a positive and significant effect on budget goal commitment, with an original sample estimate (O) value of 0.139 and a p-value of 0.043 (<0.05), so this hypothesis is accepted. This study shows that the higher the understanding and compliance of village officials with regulations, the better the budget absorption is realized. This is in line with previous research such as Ramadhani and Setiawan (2019), which emphasizes the importance of understanding regulations in increasing budget goal commitment and maximizing budget absorption in Berau Regency.

## **CONCLUSIONS**

This study aims to examine the effect of information technology, budget participation, regulatory compliance, and accessibility on budget goal commitment through accountability and transparency, moderated by trustworthy supervisory behavior, in Berau Regency. With a sample of 254 respondents from 100 villages, the results showed that information technology and budget participation had no significant effect on budget goal commitment. In contrast, regulatory compliance and accessibility have a significant effect on budget goal commitment.

In addition, information technology, budget participation, and regulatory compliance also have a positive and significant influence on budget accountability and transparency, which in turn can increase budget goal commitment. However, trust supervisory behavior did not succeed in moderating the relationship between accountability and transparency with budget goal commitment. The results of this study are in line with stewardship theory which emphasizes the importance of the best service to stakeholders to increase accountability in the management of village funds, so that budget management can run more efficiently and transparently.





DOI: 10.5281/zenodo.13986614

#### References

- 1) Abidin, N., & Singaravelloo, K. (2018). The effects of loyalty to accountability and public trust in local government service delivery. International Journal of Business and Management, 2(1), 1–6.
- 2) Abidin, N. Z. Z., Singaravello, K., & Zakaria, Z. (2015). Diminishing obligations of local government: Effect on accountability and public trust. Procedia-Social and Behavioral Sciences, 211, 255–259.
- 3) Aleksovska, M. (2021). Accountable for what? The effect of accountability stsayard specification on decision-making behavior in the public sector. Public Performance & Management Review, 44(4), 707–734.
- 4) Boonlertvanich, K. (2019). Service quality, satisfaction, trust, and loyalty: the moderating role of main-bank and wealth status. International Journal of Bank Marketing, 37(1), 278–302. https://doi.org/10.1108/IJBM-02-2018-0021
- 5) Brunk, J., Mattern, J., & Riehle, D. M. (2019). Effect of transparency and trust on acceptance of automatic online comment moderation systems. 2019 IEEE 21st Conference on Business Informatics (CBI), 1, 429–435.
- 6) Cho, J. E., & Hu, H. (2009). The effect of service quality on trust and commitment varying across generations. International Journal of Consumer Studies, 33(4), 468–476.
- 7) Cramer, H., Evers, V., Ramlal, S., Van Someren, M., Rutledge, L., Stash, N., Aroyo, L., & Wielinga, B. (2008). The effects of transparency on trust in and acceptance of a content-based art recommender. User Modeling and User-Adapted Interaction, 18, 455–496.
- 8) Danaee Fard, H., & Anvary Rostamy, A. A. (2007). Promoting public trust in public organizations: Explaining the role of public accountability. Public Organization Review, 7, 331–344.
- 9) Dewi, N., Azam, S., & Yusoff, S. (2019). Factors influencing the information quality of local government financial statement and financial accountability. Management Science Letters, 9(9), 1373–1384.
- 10) Farwell, M. M., Shier, M. L., & Handy, F. (2019). Explaining trust in Canadian charities: The influence of public perceptions of accountability, transparency, familiarity and institutional trust. VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations, 30, 768–782.
- 11) Ferdinand, A. (2006). Struktural Equation Modelling: dalam Penelitian Manajemen. Semarang: Badan Penerbit Universitas Diponegoro.
- 12) Garoupa, N., & Magalhães, P. C. (2020). Public trust in the European legal systems: independence, accountability and awareness. West European Politics, 44(3), 690–713.
- 13) Ghozali, I. (2016). Multivariete Analysis Application with IBM SPSS 23 Program. BP Universitas Diponegoro.
- 14) Grimmelikhuijsen, S. (2012). Linking transparency, knowledge and citizen trust in government: An experiment. International Review of Administrative Sciences, 78(1), 50–73.
- 15) Hartanto, D., & Siregar, S. M. (2021). Determinants of overall public trust in local government: Meditation of government response to COVID-19 in Indonesian context. Transforming Government: People, Process and Policy.
- 16) Indriasih Dewi, D. (2022). The role of commitment, competence, internal control system, transparency and accessibility in predicting the accountability of village fund management. The Indonesian Accounting Review, 12(1).
- 17) Kim, H., & Lee, T. H. (2018). Strategic CSR communication: A moderating role of transparency in trust building. International Journal of Strategic Communication, 12(2), 107–124.





DOI: 10.5281/zenodo.13986614

- 18) Kizilcec, R. F. (2016). How much information? Effects of transparency on trust in an algorithmic interface. Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, 2390–2395.
- 19) Lanin, D., & Hermanto, N. (2019). The effect of service quality toward public satisfaction and public trust on local government in Indonesia. International Journal of Social Economics, 46(3), 377–392. https://doi.org/10.1108/IJSE-04-2017-0151
- 20) Majeed, S., Zhou, Z., & Ramkissoon, H. (2020). Beauty and elegance: value cocreation in cosmetic surgery tourism. SAGE Open, 10(2), 2158244020932538.
- 21) Malhotra, N. K., Ulgado, F. M., Wu, L., Agarwal, J., & Shainesh, G. (2005). Dimensions of Service Quality in Developed and Developing Economies: MultiCountry Cross-Cultural Comparisons. International Marketing Review, 22(3), 256–278. https://doi.org/10.1108/02651330510602204
- 22) Nofianti, L., & Suseno, N. S. (2014). Factors affecting implementation of good government governance (GGG) and their implications towards performance accountability. Procedia-Social and Behavioral Sciences, 164, 98–105.
- 23) Roostika, R. (2011). The effect of perceived service quality and trust on loyalty: Customer's perspectives on mobile internet adoption. International Journal of Innovation, Management and Technology, 2(4), 286.
- 24) Shafieizadeh, K., & Tao, C.-W. W. (2020). How does a menu's information about local food affect restaurant selection? The roles of corporate social responsibility, transparency, and trust. Journal of Hospitality and Tourism Management, 43, 232–240.
- 25) Sofyani, H., Pratolo, S., & Saleh, Z. (2022). Do accountability and transparency promote community trust? Evidence from village government in Indonesia. Journal of Accounting & Organizational Change, 18(3), 397–418.
- 26) Thaichon, P., & Quach, T. N. (2015). The relationship between service quality, satisfaction, trust, value, commitment and loyalty of Internet service providers' customers. Journal of Global Scholars of Marketing Science, 25(4), 295–313.
- 27) Wanner, J., Herm, L.-V., Heinrich, K., & Janiesch, C. (2022). The effect of transparency and trust on intelligent system acceptance: Evidence from a userbased study. Electronic Markets, 1–24.
- 28) Wilis, R. A., & Nurwulsayari, A. (2020). The effect of E-Service Quality, E-Trust, Price and Brand Image Towards E-Satisfaction and Its Impact on E-Loyalty of Traveloka's Customer. Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi), 4(3), 1061–1099.
- 29) Yulisa, F., Ratnawati, V., & Taufik, T. (2020). The Factors Affecting Regional Financial Accountability: Organizational Commitment as Moderating Variables (Study on Rokan Hilir District Government OPD). IJEBA (International Journal Of Economics, Business And Applications), 4(2), 61–73.

