



Implementation of Total Quality Management (TQM) in Improving Product Quality in Manufacturing Companies

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Abstract

This study examines the implementation of Good Governance principles in the regional budget management of Bali Province, focusing on transparency, accountability, and public participation. By analyzing the effectiveness of these governance reforms, the study reveals significant improvements in the management of public funds, leading to better resource allocation and increased public satisfaction. The research compares the current practices with established frameworks of good governance, showing that the application of these principles in local government operations leads to enhanced fiscal responsibility and public trust. Moreover, the study underscores the importance of participatory budgeting and transparent financial reporting as key mechanisms for fostering accountability. The findings contribute to the broader discourse on governance reforms in regional public administration and offer practical insights for policymakers aiming to strengthen governance in similar contexts.

INTRODUCTION

The implementation of good governance principles in regional budget management has become crucial for Bali Province, where effective financial governance is directly tied to regional development, poverty reduction, and public welfare. Good governance, which includes principles like transparency, accountability, and participation, is seen as an essential framework for improving the allocation and use of local budgets in ways that can more equitably address public needs and support sustainable development goals. In the context of regional budgeting, good governance is not only about the ethical use of public funds but also about aligning budgetary practices with community welfare, economic growth, and equitable service distribution (Amin, 2023; Sutawi, 2019).

The importance of good governance in regional budget management is especially pronounced in Bali Province, where economic disparities exist between wealthier and poorer regencies, such as the contrast between Badung and Bangli. Studies indicate that good governance principles, when applied to regional budgeting, can help address imbalances by promoting resource allocation that prioritizes both efficiency and equity. This, in turn, can help mitigate issues of poverty and social inequality, which persist despite the province's strong tourism-driven economy (Sutawi, 2021;

IOSR Journals, 2024). The integration of good governance into budgeting practices also supports Bali's broader goal of inclusive growth, emphasizing the need for all regencies, including those with limited fiscal resources, to benefit from regional development and investment (Jatmiko, 2023).

One of the primary challenges in implementing these governance principles in Bali lies in ensuring that regional expenditures are not only transparent and accountable but also strategically aligned with long-term economic and social objectives. For instance, regional budget allocations often heavily favor civil servant expenditures over developmental expenditures, which can hinder broader welfare outcomes and the capacity for regional economic growth. This challenge is evident in several regencies, where budget allocations for civil servants exceed 50% of total expenditure, leaving limited resources for capital and developmental expenditures critical to reducing poverty and inequality (Prasetijo, 2009; IOSR Journals, 2024). Implementing good governance principles here could mean prioritizing funds towards capital expenditures that can catalyze more sustainable and inclusive economic growth (Sutrisna et al., 2023).

In Bali's budgeting context, community participation in budget formulation and monitoring has also emerged as a valuable governance tool. Increased involvement of local communities in budget planning and expenditure tracking can improve transparency and accountability, fostering trust in regional authorities. Studies highlight that community engagement in the budget process can reduce corruption risks and enhance alignment with community priorities, ultimately contributing to more effective public spending and service delivery (Kasim & Santoso, 2022). When citizens are included in these processes, not only does it foster a culture of accountability, but it also ensures that budget allocations are more reflective of the actual needs of the population, from infrastructure improvements to social services (Prasetijo, 2009; Sutawi, 2021).

Empirical studies also suggest that Bali Province's implementation of good governance in budget management has a positive correlation with improved welfare indicators such as the Human Development Index (HDI) and poverty reduction. For instance, local financial governance that emphasizes transparency and efficient budget allocation is associated with better social outcomes, especially in education and health sectors, which are pivotal for sustained improvements in public welfare (Mulyati, 2014). Consequently, promoting governance reforms in budget management is likely to enhance not only the efficiency of public spending but also the socio-economic resilience of Bali's communities (Hapsari, 2014).

However, while the integration of good governance principles in regional budget management has shown promising results, the practice still faces systemic obstacles. Inconsistent application of governance principles across regencies and limited administrative capacity remain significant barriers, impacting the consistency and effectiveness of budget reforms. Addressing these barriers may require concerted efforts in capacity building, regulatory harmonization, and support from both central and local governments to achieve uniform and sustainable governance practices across the province (Jha et al., 2000; IOSR Journals, 2024). Furthermore, research emphasizes that governance reform must be an ongoing process, adapting to evolving socio-economic contexts and community needs to ensure that regional budget management continually supports inclusive growth and development in Bali Province (Caleb & Godwins, 2012).

METHODS

Research Design

This study adopted a mixed-methods design, combining both quantitative and qualitative approaches to assess the implementation of Good Governance principles in regional budget management within Bali Province. The research employed a quasi-experimental design, using pre-test/post-test measures to evaluate the impact of Good Governance interventions on the effectiveness of regional budget management. This design allowed for a comparison between the status of regional budget management before and after the introduction of governance reforms aimed at improving transparency, accountability, and public participation. Additionally, a control group, which did not undergo the intervention, was included to better gauge the specific effects of Good Governance practices. By comparing outcomes in governance and budgeting quality between the experimental and control groups, the study aimed to measure both the direct and indirect impacts of the reforms implemented across different regencies in Bali.

Participants

The participants in this study were regional budget managers, policymakers, and civil servants involved in financial governance across various regencies of Bali Province. A total of 100 participants were selected, with 50 individuals drawn from regencies that had implemented Good Governance reforms (experimental group) and 50 from regencies where reforms had not been introduced (control group). The participants were chosen through stratified random sampling, ensuring that each regency's administrative level, population size, and economic significance were taken into account. Participants in the experimental group received targeted training in governance reforms, focusing on transparency, accountability, and public participation in the budgeting process. This was compared with the control group, which continued with traditional budget management practices without the infusion of these specific governance interventions.

Instruments

The primary instruments used in this study included qualitative interviews, surveys, and financial performance data related to the regional budget management. To assess the impact of Good Governance principles on budgeting processes, the study employed a set of structured interviews with key decision-makers involved in the budgeting process, including local government officials, financial managers, and budget analysts. These interviews aimed to explore participants' perceptions of transparency, accountability, and participation in budgeting and their experiences with recent governance reforms. Additionally, participants completed a survey to measure their attitudes towards the implementation of Good Governance principles in regional budget management. The survey was developed based on established frameworks for measuring governance practices (Ritonga et al., 2020), ensuring that it captured key aspects of governance such as accountability, transparency, participation, and efficiency.

Furthermore, data on the financial outcomes of regional budget management, such as budget execution rates, allocation efficiency, and expenditures on public services, were collected from the Bali Provincial Government's financial records. This quantitative data was used to assess whether regions that adopted Good Governance reforms showed improvements in budget management compared to the control group.

Intervention

The intervention in this study consisted of a comprehensive 12-week program aimed at promoting Good Governance principles among local policymakers and budget managers. The experimental group participated in training sessions that included workshops, seminars, and practical exercises on transparency, accountability, and community involvement in budgetary decision-making. A significant component of the intervention was the introduction of new technologies for increasing transparency in the budgeting process, such as the implementation of online platforms for public access to budget information and the use of e-participation tools for community input. Additionally, the training sessions focused on enhancing the skills of participants in communicating budgetary decisions and justifications to the public, encouraging active civic engagement in financial governance.

Throughout the 12-week period, the experimental group was also required to adopt a more participatory approach in their regional budget formulation. This involved consultations with local communities to identify key priority areas for public spending and ensuring that local needs were adequately represented in the budget. The intervention was designed to address both the theoretical aspects of Good Governance principles and their practical applications in the real-world budgeting process.

Data Collection Procedure

The data collection process was carried out in three stages: pre-intervention, during-intervention, and post-intervention. In the pre-intervention stage, baseline data on budget management practices were collected from both the experimental and control groups. This included analyzing existing financial records, conducting pre-surveys, and conducting preliminary interviews with key stakeholders in the budgeting process. The data collected during this stage were used to establish the initial conditions of governance and budgeting in Bali's regencies.

During the intervention stage, both qualitative and quantitative data were collected. Qualitative data were gathered through regular follow-up interviews with participants, monitoring their progress in applying Good Governance principles during the budgeting process. Additionally, the financial records of the regencies were reviewed monthly to assess any changes in budget execution and financial efficiency. This stage allowed the researcher to track the implementation of the intervention and make adjustments as necessary.

In the post-intervention stage, follow-up surveys and interviews were conducted to assess any changes in participants' perceptions of Good Governance principles and the impact on their budgeting practices. Furthermore, post-intervention financial data were collected to compare the post-intervention performance of the experimental group to the control group, focusing on indicators such as budget execution rates, public satisfaction with budgetary decisions, and the overall efficiency of resource allocation.

Data Analysis

Data analysis was conducted using both qualitative and quantitative methods. Quantitative data, including budget execution rates and financial performance indicators, were analyzed using paired-sample t-tests and independent-sample t-tests to compare the pre- and post-intervention results of the experimental and control groups. The purpose of this analysis was to assess whether the implementation of Good Governance principles led to measurable improvements in regional budget management.

Qualitative data from interviews and surveys were analyzed using thematic analysis, which allowed the researcher to identify recurring themes related to transparency, accountability, and public participation in the budgeting process. A comparative analysis was conducted to identify differences in perceptions and practices between the experimental and control groups. This mixed-methods approach enabled the researcher to gain a comprehensive understanding of how Good Governance reforms influenced regional budget management in Bali.

In addition, a multivariate analysis of variance (MANOVA) was used to examine the interaction between the intervention and key governance outcomes, such as budget efficiency and public satisfaction. This statistical technique allowed the researcher to explore whether the effects of the intervention varied across different regencies, based on their size, economic status, and level of pre-existing governance practices. By using a combination of quantitative and qualitative methods, this study aimed to provide a thorough evaluation of the effectiveness of Good Governance principles in regional budget management in Bali Province.

RESULT AND DISCUSSION

Good governance has emerged as a critical framework for improving regional financial management and promoting sustainable development. In Indonesia, the application of good governance principles particularly transparency, accountability, and public participation has become central to ensuring effective and equitable use of public funds. This study situates itself within that national context, focusing specifically on the regional budget management practices in Bali Province. The province, known for its economic dependence on tourism, faces persistent disparities between wealthier and less developed regencies. Addressing these gaps requires governance reforms that ensure fair resource distribution and improved public service delivery.

In this setting, the study explores how good governance principles influence the efficiency, transparency, and public satisfaction with regional budget management. It emphasizes the transformative role of participatory budgeting, transparent reporting, and accountability mechanisms in fostering public trust. By combining quantitative and qualitative analyses, the research assesses both procedural and perceptual changes resulting from governance reforms. The findings aim to contribute to the ongoing discourse on governance reform in regional administration, offering empirical insights for policymakers seeking to enhance fiscal responsibility and community engagement in local development.

Table 1. Pre-Test vs. Post-Test Comparison of Budget Management Performance Indicators

Indicator	Experimental Group (Pre-Test)	Experimental Group (Post-Test)	Control Group (Pre-Test)	Control Group (Post-Test)
Budget Execution Rate (%)	75%	85%	78%	77%
Resource Allocation Efficiency (%)	70%	80%	72%	73%
Public Satisfaction with Budget Decisions (%)	68%	80%	70%	72%
Transparency in Budget Reporting (Scale 1-5)	3.2	4.5	3.4	3.6

The data show improvements in all key budget performance indicators in the experimental group after the implementation of Good Governance principles. The budget execution rate increased by 10%, resource allocation efficiency improved by

10%, and public satisfaction with budget decisions also saw a significant rise of 12%. These improvements suggest that the introduction of transparency, accountability, and participatory budgeting mechanisms had a positive impact.

In contrast, the control group exhibited little to no improvement in their key performance indicators. The slight increase in satisfaction (2%) and budget reporting transparency (0.2) is likely due to natural fluctuations or external factors unrelated to the intervention.

Table 2. Perception of Good Governance Principles (Survey Results)

Governance Principle	Experimental Group (Pre-Test)	Experimental Group (Post-Test)	Control Group (Pre-Test)	Control Group (Post-Test)
Transparency	3.0 (Moderate)	4.5 (High)	3.2 (Moderate)	3.5 (Moderate)
Accountability	3.3 (Moderate)	4.6 (High)	3.5 (Moderate)	3.6 (Moderate)
Public Participation	3.1 (Moderate)	4.4 (High)	3.3 (Moderate)	3.4 (Moderate)
Effectiveness in Budget Use	3.5 (Moderate)	4.7 (High)	3.4 (Moderate)	3.5 (Moderate)

The experimental group showed a marked improvement in perceptions of Good Governance principles, with increases in transparency, accountability, public participation, and budget effectiveness scores all moving from moderate to high. The post-intervention improvements indicate that the participants recognized the benefits of implementing governance reforms in the budgeting process.

On the other hand, the control group's perception scores remained fairly stable, with only slight increases in the areas of accountability and participation. This indicates that without targeted interventions, perceptions of governance practices do not change significantly over a short period.

Table 3. Budget Execution Efficiency and Resource Allocation

Regency	Budget Allocation Efficiency (Pre-Test)	Budget Allocation Efficiency (Post-Test)	Budget Execution Rate (Pre-Test)	Budget Execution Rate (Post-Test)
Denpasar	72%	84%	76%	85%
Gianyar	68%	79%	74%	82%
Badung	73%	85%	80%	88%
Tabanan	69%	78%	75%	83%

Across all regencies that implemented the Good Governance reforms (experimental group), budget execution rates and allocation efficiency significantly improved. Badung Regency saw the highest improvements, with an increase of 12% in budget allocation efficiency and 8% in budget execution rates. Denpasar and Gianyar also showed noticeable improvements, with Denpasar's budget execution rate rising from 76% to 85%.

This trend suggests that the local governments, after adopting Good Governance principles, were more successful in executing their budgets efficiently, likely due to better planning, transparency, and the involvement of community feedback in decision-making.

Table 4. Community Feedback and Public Satisfaction

Regency	Public Awareness of Budgeting (Pre-Test)	Public Awareness of Budgeting (Post-Test)	Public Satisfaction with Budget (Pre-Test)	Public Satisfaction with Budget (Post-Test)
Denpasar	60%	85%	62%	80%
Gianyar	55%	72%	58%	74%
Badung	63%	87%	66%	82%
Tabanan	59%	70%	61%	75%

The feedback data reveals that public awareness and satisfaction regarding the budgeting process improved significantly in all regions that participated in the governance reforms. Denpasar saw a 25% increase in public awareness, while Badung had the most notable improvement in satisfaction, with an increase of 16%. These results indicate that increasing transparency and involving the community in the budget process effectively raised public engagement and trust in local governance.

Table 5. Financial Performance Comparison (Experimental vs. Control Group)

Financial Metric	Experimental Group (Post-Test)	Control Group (Post-Test)
Budget Surplus (%)	10%	3%
Debt-to-Income Ratio (%)	12%	16%
Unspent Allocations (%)	5%	10%

The financial performance of the experimental group shows notable improvements compared to the control group. The experimental group managed to reduce unspent allocations and had a much lower debt-to-income ratio, highlighting the effectiveness of adopting Good Governance principles. In contrast, the control group struggled with higher unspent allocations, suggesting less efficient budget execution.

This table supports the claim that applying Good Governance principles, especially in terms of accountability and participation, can lead to better financial health and resource allocation in regional governments.

Improvement in Budget Execution and Resource Allocation

One of the key findings of this study is the significant increase in budget execution rates and resource allocation efficiency in the experimental group. The experimental group's budget execution rate improved from 75% to 85%, and resource allocation efficiency rose from 70% to 80%. This is in line with findings from previous research that suggest that implementing Good Governance principles such as transparency and accountability can lead to more efficient and effective public resource management (Schick, 2003; Robinson, 2015).

Studies such as those by Kaufmann et al. (2010) and Faguet (2015) have found that improving transparency in local government budgeting processes can increase the accuracy of budget execution by reducing mismanagement and corruption. These studies highlight that when citizens have access to information about how public funds are being allocated and spent, governments are held more accountable, which in turn improves financial performance. Similarly, in the context of Bali, the introduction of transparent budgeting practices likely contributed to the improved budget execution rates observed in the experimental group.

Moreover, the improvement in resource allocation efficiency observed in Bali aligns with the findings of research on participatory budgeting. Participation by citizens in budget processes leads to more efficient allocation of resources because it ensures

that public spending is more aligned with the actual needs of the community (Fox, 2015; Sintomer et al., 2008). The increased public participation in Bali's budget process, as indicated by the survey results, likely led to more targeted and effective use of financial resources.

Public Satisfaction and Perception of Governance

The study also reveals that public satisfaction with budget management improved significantly in the experimental group, with satisfaction rising from 62% to 80%. This finding is consistent with previous studies that demonstrate how good governance practices especially those focused on transparency, accountability, and public participation can foster greater public trust in government and improve citizen satisfaction with governance (Fukuyama, 2013; Meagher, 2014).

Public satisfaction is often linked to the perceived effectiveness of local government, which in turn depends on how well government institutions manage public resources and engage with citizens (Hossain, 2013; O'Neill, 2017). In Bali, the improvements in satisfaction can likely be attributed to the enhanced transparency in budget processes and the active involvement of the public in decision-making. According to the findings of Baiocchi et al. (2011), participatory budgeting processes tend to increase public satisfaction because they give citizens a sense of ownership over government decisions and policies. The significant increase in satisfaction observed in Bali further supports this view.

Additionally, the positive shift in public perception regarding the effectiveness of budgeting aligns with the work of Zakaria et al. (2017), who found that the implementation of accountability mechanisms at the local level led to improvements in the perceived quality of public services. In Bali, the increased perception of accountability in budgeting likely contributed to the heightened public confidence in government decision-making and financial management.

Transparency in Budget Reporting

The study also reveals that transparency in budget reporting significantly improved, with the transparency score rising from 3.2 to 4.5. This improvement is notable and aligns with the findings of several studies on the role of transparency in local government (Bardhan & Mookherjee, 2014; Olken, 2007). Research has shown that transparency is a key factor in ensuring that public funds are used efficiently and that public officials are held accountable for their actions. When government budgeting processes are transparent, it is easier for citizens and oversight bodies to track public spending, which reduces opportunities for corruption (Devarajan et al., 2011). The improvement in transparency in Bali suggests that the government took significant steps to make budgeting processes more open and accessible to the public, which aligns with the principles of good governance. This is also consistent with previous research, which indicates that transparency in budget management is often linked to higher levels of citizen engagement and better outcomes in terms of financial accountability (Grindle, 2004; Weingast, 2009).

Contrasting with the Control Group

The results from the control group, in which budget management practices remained unchanged, offer further insights into the impact of governance reforms. While the control group showed minor improvements, such as a slight increase in public satisfaction and budget transparency, these changes were not as pronounced as in the experimental group. This contrast suggests that the introduction of Good Governance principles has a tangible and measurable impact on budget management, as opposed to the more incremental and less structured improvements that occurred in the control group.

The lack of significant change in the control group is consistent with the findings of Oates (1999), who argued that without specific interventions aimed at improving governance, budgetary performance tends to remain stagnant. This highlights the necessity of implementing structured governance reforms, such as participatory budgeting and transparency measures, to see substantial improvements in local government financial management.

Challenges and Areas for Future Research

While the results of this study are promising, there are several challenges that need to be addressed in future research. First, the study focused primarily on the short-term effects of the governance reforms. Longitudinal studies are needed to determine whether the improvements observed in this study are sustainable over time (Heald, 2006). Future research should also consider the impact of local political dynamics on the success of Good Governance initiatives. Political will and the level of commitment from local government officials can play a critical role in the successful implementation of governance reforms (Evans, 2004).

Moreover, the study could benefit from exploring the qualitative aspects of citizen participation in budgeting processes. While quantitative data showed improvements in satisfaction and perceptions of transparency, understanding the specific experiences of citizens and how they engage with the budgeting process could provide more nuanced insights into the effectiveness of the reforms (Michaels & Sato, 2015).

CONCLUSION

This study highlights the significant impact of implementing Good Governance principles in the regional budget management of Bali Province. By focusing on transparency, accountability, and public participation, the study demonstrates improvements in budget execution, resource allocation, and public satisfaction. These results align with prior research indicating that effective governance practices not only optimize financial management but also strengthen public trust and engagement (Fukuyama, 2013; Bardhan & Mookherjee, 2014). The findings suggest that local governments can achieve better financial outcomes and greater public confidence through the adoption of participatory budgeting, transparent reporting, and accountability mechanisms.

Moreover, while the improvements observed in Bali are promising, further research is needed to explore the long-term effects of these governance reforms and the role of local political dynamics. The study's findings provide a valuable contribution to understanding how regional governance reforms can enhance public sector performance. Future studies could build on these results by examining the sustainability of these improvements over time and investigating other factors, such as political will and institutional capacity, that may influence the success of such reforms (Grindle, 2004; Kaufmann et al., 2010). The ongoing commitment to transparency and citizen participation will be crucial for ensuring that the positive effects of these reforms continue to be realized in Bali and other regions.

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