



(RESEARCH ARTICLE)



Enhancing procurement efficiency through strategic budgeting: A case study of Benue State Ministries, Departments, and Agencies (MDAs)

Orseer Ama ¹, Aki Tyungu ², Winifred Udende ³ and Michael Toryila Tiza ^{4,*}

¹ *Federal Polytechnic Wannune, Nigeria.*

² *Physical Planning unit, Federal Polytechnic Wannune, Nigeria.*

³ *Department of Procurement Standards, Joseph Sarwuan Tarka University Makurdi, Nigeria.*

⁴ *Civil Engineering Department, University of Nigeria, Nsukka, Nigeria.*

Global Journal of Engineering and Technology Advances, 2023, 16(03), 070–081

Publication history: Received on 11 July 2023; revised on 06 September 2023; accepted on 08 September 2023

Article DOI: <https://doi.org/10.30574/gjeta.2023.16.3.0166>

Abstract

This report explores the significance of procurement planning and budgeting for the Government of Benue State. It highlights the various types of budgets applicable to the procurement of goods, works, and services and emphasizes their role in efficient resource allocation, financial control, transparency, accountability, and risk mitigation. The report outlines the budgeting process for procurements, covering pre-budgeting, budget formulation, budget implementation, and post-budgeting phases. Drawing from successful case studies and best practices from other states and countries, it provides key takeaways and lessons for effective procurement budgeting in Benue State. The report calls for the adoption of integrated e-Procurement systems, strategic budgeting frameworks, and stakeholder engagement to optimize procurement outcomes. Recommendations include centralizing procurement functions, leveraging technology, and fostering a culture of transparency, data-driven decision-making, and continuous improvement. With these measures, Benue State's procurement processes can become more resilient, responsive, and better aligned with strategic goals, ultimately leading to enhanced service delivery for its citizens.

Keywords: Procurement planning; Budgeting; Government of Benue State; Resource allocation; Financial control; Transparency; Accountability; Risk mitigation

1. Introduction

1.1. Importance of Procurement Planning and Budgeting

Procurement planning and budgeting are essential for efficient public financial management, ensuring resources are allocated wisely and transparently to meet the state's needs. It enhances accountability, minimizes wastage, and reduces the risk of corruption (Badanidiyuru et al., 2012).

1.2. Purpose of the Training

This training aims to equip Benue State's procurement staff with the knowledge and skills for effective procurement planning and budgeting. Participants will learn various budgeting approaches to optimize resource allocation, comply with regulations, and improve overall procurement efficiency, transparency, and service delivery.

* Corresponding author: Michael Toryila Tiza

2. Types of Budgets for Procurement of Goods, Works, and Services

2.1. Operating Budgets

Operating budgets are fundamental for the day-to-day functioning of an organization or specific projects. They encompass the essential expenses required to sustain routine operations within various departments (Badanidiyuru et al., 2012). Procurement activities under operating budgets often involve acquiring office supplies, utilities, maintenance services, and other recurring items necessary for smooth operations. These budgets play a crucial role in ensuring that the daily needs of the organization are met and that essential services can be provided without disruption (Burger & Hawkesworth, 2013).

2.2. Capital Budgets

Capital budgets focus on major investments in long-term assets and infrastructure projects. These budgets allocate funds for significant initiatives that have a lasting impact on the organization or the state (Badanidiyuru et al., 2012). Procurement activities under capital budgets include acquiring high-value assets such as construction materials, machinery, vehicles, and other essential resources that contribute to the state's development. Capital budgets are instrumental in promoting growth and modernization within the organization and the state as a whole (Burger & Hawkesworth, 2013).

2.3. Program-Based Budgets

Program-based budgets align funding with specific program objectives or initiatives. These budgets are tailored to support targeted projects that align with the state's strategic priorities (Burger & Hawkesworth, 2013). In procurement, program-based budgets are used to allocate resources for specific programs such as healthcare initiatives, education projects, or poverty alleviation efforts. Such budgets ensure that resources are allocated to projects that directly address critical societal challenges and priorities (Chan & Chen, 2014).

2.4. Performance-Based Budgets

Performance-based budgets link funding to predetermined performance targets and outcomes (Estache & Atsushi Iimi, 2008). These budgets emphasize accountability and results, as funds are allocated based on the achievement of specific milestones or deliverables. Procurement activities under performance-based budgets involve allocating resources to projects that must meet predefined performance indicators to receive further funding. (Estache & Atsushi Iimi, 2008) This approach encourages efficiency and ensures that resources are utilized effectively to achieve desired results (Burger & Hawkesworth, 2013).

2.5. Zero-Based Budgeting

Zero-based budgeting requires a fresh justification of expenses, regardless of previous budget periods. In this approach, each budget line item is evaluated independently, ensuring that expenses are justified based on their necessity and contribution to organizational objectives (Estache & Atsushi Iimi, 2008). Procurement activities under zero-based budgeting involve a thorough assessment of goods, works, or services needed, leading to a more critical and strategic allocation of resources (Hessami, 2014).

2.6. Flexible Budgeting

Flexible budgets allow for adjustments in response to varying levels of activity or funding changes (Burger & Hawkesworth, 2013). These budgets provide adaptability, making them particularly useful when dealing with supplies that may have fluctuating demand throughout the year. In procurement, flexible budgets enable adjustments in procurement plans based on changing needs or unforeseen events, ensuring that resources are used efficiently and effectively (Hessami, 2014).

2.7. Incremental Budgeting

Incremental budgets build on the previous budget period, with incremental changes made for the current period (Hu et al., 2018). They offer stability and continuity, with minor adjustments in procurement plans from one period to another. Incremental budgeting is commonly employed when there are no significant changes in requirements or priorities, allowing for a consistent approach to resource allocation (Burger & Hawkesworth, 2013).

2.8. Activity-Based Budgeting

Activity-based budgets allocate resources based on specific activities or tasks. These budgets ensure that funding is aligned with the various operational activities or projects that need to be carried out (Liebman & Mahoney, 2017). Procurement activities under activity-based budgets involve allocating resources for specific projects or operational tasks, optimizing resource usage for various activities (Hu et al., 2018).

2.9. Hybrid Budgeting Approach

The hybrid budgeting approach combines elements of different budget types to suit specific needs. This flexible approach allows for tailored budgeting that considers various factors, such as project complexity, risk, and resource availability (Liebman & Mahoney, 2017). In procurement, the hybrid budgeting approach may involve integrating program-based, performance-based, and activity-based budgets to meet the unique requirements of complex procurement projects, ensuring the best allocation of resources (Mccue & Johnson, 2010). See table 1 below for a comprehensive summary.

Table 1 Type of Budgets for Procurement of Goods, Works, and Services

Budget Type	Description	Reference
Operating Budgets	Budgets for day-to-day expenses necessary to sustain routine operations within departments.	(Badanidiyuru et al., 2012)
Capital Budgets	Budgets for major long-term investments in assets and infrastructure projects.	(Badanidiyuru et al., 2012)
Program-Based Budgets	Budgets aligned with specific program objectives or initiatives.	(Burger & Hawkesworth, 2013)
Performance-Based Budgets	Budgets linked to predetermined performance targets and outcomes.	(Estache & Atsushi Iimi, 2008)
Zero-Based Budgeting	Budgets requiring fresh justification for expenses without considering previous budgets.	(Estache & Atsushi Iimi, 2008)
Flexible Budgeting	Budgets allowing adjustments in response to varying levels of activity or funding changes.	(Burger & Hawkesworth, 2013)
Incremental Budgeting	Budgets building on the previous period with minor changes for the current period.	(Hu et al., 2018)
Activity-Based Budgeting	Budgets allocating resources based on specific activities or tasks.	(Liebman & Mahoney, 2017)
Hybrid Budgeting Approach	Budgets combining elements of different types to suit specific needs.	(Mccue & Johnson, 2010)

3. Importance of Budgeting in Procurements

3.1. Resource Allocation

Budgeting in procurements plays a crucial role in resource allocation. By setting aside funds for specific procurement needs, organizations can ensure that adequate resources are available to acquire goods, works, and services essential for their operations. Budgeting enables a systematic and well-planned approach to allocate financial resources efficiently, avoiding overspending or underspending on procurement activities (Mccue & Johnson, 2010).

3.2. Financial Control

Budgeting provides a mechanism for financial control in procurements. It establishes spending limits and guides procurement staff in adhering to approved budgets. With well-defined budgets, organizations can monitor expenses and identify any deviations promptly. Financial control prevents wasteful spending, unauthorized purchases, and helps maintain overall fiscal discipline within the organization (Mccue & Johnson, 2010).

3.3. Transparency and Accountability

Incorporating budgeting in procurements fosters transparency and accountability (Badanidiyuru et al., 2012). A clear budget lays out the planned expenses, allowing stakeholders to understand how funds are allocated and used (Imoni et al., 2023). Transparent budgeting practices build trust among stakeholders, including citizens, donors, and regulatory bodies, demonstrating responsible financial management and reducing the potential for mismanagement or corruption (Milosavljević et al., 2018).

3.4. Improved Decision-Making

Budgeting facilitates informed decision-making in procurements. When making procurement choices, having a budget in place enables procurement professionals to prioritize needs, evaluate alternatives, and select the most cost-effective options (Estache & Atsushi Iimi, 2008). Budgets provide valuable financial information to support decision-making, leading to better outcomes in terms of value for money and achieving organizational objectives (Badanidiyuru et al., 2012).

3.5. Risk Mitigation

Effective budgeting aids in risk mitigation during the procurement process. By anticipating financial requirements and allocating appropriate funds, organizations can reduce the risk of running out of resources or facing unexpected financial challenges during the procurement cycle. Budgets also allow for the inclusion of contingency funds to address unforeseen events, ensuring that procurement activities remain on track even in uncertain situations (Estache & Atsushi Iimi, 2008).

3.6. Stakeholder Engagement

Budgeting enhances stakeholder engagement in procurements (Burger & Hawkesworth, 2013). When stakeholders are involved in the budgeting process, they gain insight into the organization's financial priorities and constraints (Imoni et al., 2023). This involvement fosters cooperation, support, and understanding from stakeholders, leading to smoother procurement processes and greater alignment between procurement activities and organizational goals (Estache & Atsushi Iimi, 2008).

3.7. Project Performance Evaluation

Budgeting enables effective project performance evaluation in procurements (Hu et al., 2018). By comparing actual expenditures against the approved budgets, organizations can assess the efficiency and effectiveness of their procurement processes. Monitoring project performance against budgeted figures helps identify areas for improvement, cost overruns, and potential inefficiencies, allowing for corrective actions to be taken as needed (Burger & Hawkesworth, 2013). See table 2 below for a comprehensive summary.

Table 2 Importance of Budgeting in Procurements

Importance	Description	Reference
Resource Allocation	Ensures adequate funds are allocated for procurement needs, avoiding overspending or underspending.	(Mccue & Johnson, 2010)
Financial Control	Establishes spending limits and promotes fiscal discipline in procurement activities.	(Mccue & Johnson, 2010)
Transparency and Accountability	Fosters transparency by clearly outlining planned expenses and promotes accountability in financial management.	(Badanidiyuru et al., 2012)
Improved Decision-Making	Supports informed decision-making by providing valuable financial information for procurement choices.	(Estache & Atsushi Iimi, 2008)
Risk Mitigation	Aids in risk mitigation by anticipating financial requirements and allocating contingency funds.	(Estache & Atsushi Iimi, 2008)
Stakeholder Engagement	Enhances stakeholder engagement by involving them in the budgeting process.	(Burger & Hawkesworth, 2013)
Project Performance Evaluation	Enables effective evaluation of procurement process efficiency and identifies areas for improvement.	(Hu et al., 2018)

4. Conditions for Successful Procurement Budgeting

4.1. Clear Objectives and Scope

Successful procurement budgeting requires clearly defined objectives and a well-defined scope of the procurement activities. The budget should align with the organization's strategic goals and take into account the specific needs of the procurement projects (Hu et al., 2018). When objectives and scope are clear, it becomes easier to allocate resources appropriately and avoid unnecessary expenses (Liebman & Mahoney, 2017).

4.2. Adequate Market Research and Needs Assessment

Thorough market research and needs assessment are essential for successful procurement budgeting. Understanding market conditions, pricing trends, and the availability of goods, works, or services helps in creating realistic budgets (Milosavljević et al., 2018). Adequate needs assessment ensures that the budget accounts for all necessary requirements, preventing oversights and unexpected costs during the procurement process (Liebman & Mahoney, 2017).

4.3. Involvement of Stakeholders

Involving stakeholders in the budgeting process is crucial for success. Different stakeholders may have unique insights and perspectives that can influence budget decisions (Badanidiyuru et al., 2012). Engaging key stakeholders, including end-users, finance officers, and procurement specialists, ensures that the budget reflects the needs and priorities of all parties involved (Milosavljević et al., 2018).

4.4. Procurement Regulations and Compliance

Successful procurement budgeting necessitates compliance with applicable procurement regulations and policies. Adhering to legal requirements and ethical standards in budgeting ensures transparency, fairness, and accountability in the procurement process. Non-compliance can lead to legal issues, delays, and potential project disruptions (Estache & Atsushi Iimi, 2008).

4.5. Reliable Data and Information

Budgeting relies on accurate and reliable data and information. Procurement professionals must base budget decisions on credible data, such as historical expenditure patterns, market data, and demand forecasts (Mccue & Johnson, 2010). Using accurate data minimizes the risk of errors and supports better decision-making throughout the procurement cycle (Liebman & Mahoney, 2017).

4.6. Risk Assessment and Management

Effective procurement budgeting involves identifying and assessing potential risks that may impact the procurement process (Hessami, 2014). These risks could include price fluctuations, supply chain disruptions, or changes in project requirements. Integrating risk management strategies into the budgeting process allows for the inclusion of contingency funds to address unforeseen events and mitigate potential risks (Mccue & Johnson, 2010).

4.7. Flexibility and Contingency Planning

Building flexibility into the budget and having contingency plans is essential for successful procurement budgeting (Liebman & Mahoney, 2017). Unexpected changes in project scope or market conditions may require adjustments to the budget. A flexible budget allows for adaptation without compromising the overall project objectives (Hessami, 2014).

4.8. Review and Feedback Mechanism

Implementing a robust review and feedback mechanism is crucial for successful procurement budgeting. Regularly monitoring budget performance and comparing actual expenditures against budgeted figures help identify variances and areas for improvement. Feedback from stakeholders and project teams allows for continuous refinement and optimization of future procurement budgets (Hessami, 2014).

4.9. Capacity Building and Training

Investing in the capacity building and training of procurement staff is vital for successful budgeting. Equipping staff with the necessary skills and knowledge in budget preparation, financial analysis, and procurement regulations ensures that the budgeting process is carried out effectively and efficiently (Estache & Atsushi Iimi, 2008). See table 3 below for a comprehensive summary.

Table 3 Conditions for Successful Procurement Budgeting

Condition	Description	Reference
Clear Objectives and Scope	Clearly defined objectives and scope of procurement activities aligned with organizational goals.	(Hu et al., 2018)
Adequate Market Research and Needs Assessment	Thorough market research and needs assessment to create realistic budgets.	(Milosavljević et al., 2018)
Involvement of Stakeholders	Engagement of stakeholders to reflect needs and priorities in the budgeting process.	(Badanidiyuru et al., 2012)
Procurement Regulations and Compliance	Adherence to procurement regulations and policies to ensure transparency and accountability.	(Estache & Atsushi Iimi, 2008)
Reliable Data and Information	Utilization of accurate and reliable data for informed budget decisions.	(Mccue & Johnson, 2010)
Risk Assessment and Management	Identification and mitigation of potential risks in the procurement process.	(Hessami, 2014)
Flexibility and Contingency Planning	Building flexibility and contingency plans to adapt to unexpected changes.	(Liebman & Mahoney, 2017)
Review and Feedback Mechanism	Regular monitoring and feedback for continuous improvement of budgeting practices.	(Hessami, 2014)
Capacity Building and Training	Investing in staff training to enhance budgeting skills and knowledge.	(Estache & Atsushi Iimi, 2008)

5. Budgeting Process for Procurements

5.1. Pre-Budgeting Phase

5.1.1. Identifying Procurement Needs

The budgeting process for procurements begins with identifying the organization's procurement needs. This involves conducting a comprehensive analysis of the goods, works, or services required to fulfill the organization's objectives (Imoni et al., 2023). Input from various departments, end-users, and stakeholders is gathered to ensure that all essential procurement needs are taken into account (Vitaly Kikavets & Tsaregradskaya, 2020).

5.1.2. Gathering Data and Information

In this phase, relevant data and information are collected to support the budgeting process. This includes historical expenditure data, market research, price trends, supplier information, and any other relevant financial and procurement-related data. Gathering accurate and up-to-date data is critical for making informed budgetary decisions (Vitaly Kikavets & Tsaregradskaya, 2020).

5.1.3. Analyzing Procurement Requirements

The gathered data and information are carefully analyzed to assess the procurement requirements. This analysis includes evaluating different procurement options, considering potential risks, and identifying cost-saving opportunities. The aim is to align procurement activities with the organization's strategic goals while optimizing resource allocation (Milosavljević et al., 2018).

5.1.4. *Engaging Stakeholders*

During the pre-budgeting phase, engaging stakeholders is essential to understand their perspectives and gain their support for the budgeting process. Stakeholder involvement fosters collaboration and ensures that the budget reflects the needs and priorities of all parties involved. Feedback from stakeholders helps refine the budgeting approach and enhances the chances of successful implementation (Mccue & Johnson, 2010). See table 4 below for a comprehensive summary.

Table 4 Budgeting Process for Procurements - Pre-Budgeting Phase

	Step	Description	Reference
1.	Identifying Procurement Needs	Comprehensive analysis to identify the organization's procurement needs.	(Vitaly Kikavets & Tsaregradskaya, 2020)
2.	Gathering Data and Information	Collection of relevant data and information, including historical expenditure data and market research.	(Vitaly Kikavets & Tsaregradskaya, 2020)
3.	Analyzing Procurement Requirements	Careful evaluation of procurement options, risks, and cost-saving opportunities.	(Milosavljević et al., 2018)
4.	Engaging Stakeholders	Involvement of stakeholders to understand perspectives and gain support for the budgeting process.	(Mccue & Johnson, 2010)

5.2. Budget Formulation Phase

5.2.1. *Setting Budgetary Goals and Targets*

Based on the analysis of procurement requirements and stakeholder input, clear budgetary goals and targets are set. These goals should align with the organization's overall objectives and provide a framework for effective resource allocation (Liebman & Mahoney, 2017).

5.2.2. *Allocating Funds Appropriately:*

In this phase, funds are allocated to various procurement activities based on their importance and priority. The budget should ensure that adequate resources are available for critical procurement needs while considering any financial constraints (Hu et al., 2018).

5.2.3. *Developing a Realistic Budget*

The budget formulation process aims to create a realistic and achievable financial plan for procurements. It should consider market conditions, inflation rates, and any other factors that may impact costs. A realistic budget helps prevent overestimation or underestimation of funds required and facilitates effective financial planning (Hu et al., 2018). See table 5 below for a comprehensive summary.

Table 5 Budgeting Process for Procurements - Budget Formulation Phase

	Step	Description	Reference
1.	Setting Budgetary Goals and Targets	Establishing clear budgetary goals and targets aligned with the organization's overall objectives.	(Liebman & Mahoney, 2017)
2.	Allocating Funds Appropriately	Appropriately allocating funds to various procurement activities based on priority and importance.	(Hu et al., 2018)
3.	Developing a Realistic Budget	Creating a realistic and achievable financial plan considering market conditions and potential costs.	(Hu et al., 2018)

5.3. Budget Implementation Phase

5.3.1. Monitoring Expenditure

Once the budget is in place, diligent monitoring of expenditure is essential. Regularly tracking actual spending against the budget allows for early detection of any discrepancies or deviations. Monitoring helps identify potential cost overruns or savings opportunities and enables timely corrective actions (Hessami, 2014).

5.3.2. Addressing Variances and Deviations

In the budget implementation phase, if any variances or deviations from the planned budget arise, they need to be addressed promptly (Hessami, 2014). This may involve adjusting spending plans, revisiting procurement priorities, or implementing cost-saving measures. Addressing deviations ensures that the procurement process remains on track and aligned with the organization's financial goals (Chan & Chen, 2014).

5.3.3. Controlling Procurement Costs

During budget implementation, controlling procurement costs is critical to ensure that spending stays within approved limits. Implementing cost control measures, negotiating favorable terms with suppliers, and optimizing procurement processes contribute to efficient cost management (Burger & Hawkesworth, 2013). See table 6 below for a comprehensive summary.

Table 6 Budgeting Process for Procurements - Budget Implementation Phase

	Step	Description	Reference
1.	Monitoring Expenditure	Diligently tracking actual spending against the budget to detect discrepancies and deviations.	(Hessami, 2014)
2.	Addressing Variances and Deviations	Promptly addressing any deviations or variances from the planned budget through corrective actions.	(Hessami, 2014)
3.	Controlling Procurement Costs	Implementing cost control measures to ensure procurement spending stays within approved limits.	(Burger & Hawkesworth, 2013)

5.4. Post-Budgeting Phase

5.4.1. Evaluating Budget Performance

In the post-budgeting phase, a thorough evaluation of budget performance is conducted. This involves comparing actual results against budgeted figures and analyzing the reasons for any variances. The evaluation provides valuable insights into the effectiveness of the budgeting process and informs future improvements (Burger & Hawkesworth, 2013).

5.4.2. Learning from Budgeting Experience

Organizations can learn valuable lessons from the budgeting experience. Identifying strengths and weaknesses in the budgeting process helps in refining future budgeting approaches. Learning from previous experiences contributes to continuous improvement in procurement budgeting practices (Burger & Hawkesworth, 2013).

5.4.3. Continuously Improving Procurement Budgeting

The budgeting process for procurements should be a dynamic and iterative process. Continuous improvement is achieved by incorporating lessons learned, feedback from stakeholders, and market insights into the next budget cycle. This approach ensures that procurement budgeting becomes increasingly efficient, responsive, and aligned with the organization's evolving needs (Burger & Hawkesworth, 2013). See table 7 below for a comprehensive summary.

Table 7 Budgeting Process for Procurements - Post-Budgeting Phase

	Step	Description	Reference
1.	Evaluating Budget Performance	Thorough evaluation of budget performance by comparing actual results against budgeted figures.	(Burger & Hawkesworth, 2013)
2.	Learning from Budgeting Experience	Identifying strengths and weaknesses in the budgeting process to refine future budgeting approaches.	(Burger & Hawkesworth, 2013)
3.	Continuously Improving Procurement Budgeting	Incorporating lessons learned and feedback to enhance procurement budgeting practices.	(Burger & Hawkesworth, 2013)

5.5. Case Studies and Best Practices

5.5.1. Successful Examples from Other Countries

Several states and countries have implemented successful procurement budgeting practices that serve as valuable examples for Benue State. One such example is South Korea's e-Procurement System. South Korea established a comprehensive e-Procurement platform that streamlined the entire procurement process, including budgeting. The system integrated budgeting with procurement planning, allowing government agencies to allocate funds efficiently and transparently. As a result, South Korea experienced increased procurement efficiency, reduced costs, and enhanced accountability (Cho & Hee Seok Byeon, 2012).

Another successful example comes from the United Kingdom's Government Procurement Service (GPS). The GPS adopted a category-based approach to procurement budgeting, focusing on key spend areas and centralizing procurement functions (Britain: 2013). By pooling resources and consolidating purchasing power, the UK government achieved significant cost savings and improved contract management. This approach exemplifies how strategic budgeting can lead to economies of scale and better value for money (Britain: 2013). See table 8 below for a comprehensive summary.

Table 8 Case Studies and Best Practices in Procurement Budgeting - Successful Examples from Countries

Case Study	Description	Reference
South Korea's e-Procurement System	Comprehensive e-Procurement platform integrating budgeting with procurement planning, leading to increased efficiency, reduced costs, and enhanced accountability (Cho & Hee Seok Byeon, 2012).	(Cho & Hee Seok Byeon, 2012)
United Kingdom's Government Procurement Service (GPS)	Category-based approach, centralizing procurement functions, and focusing on key spend areas, resulting in cost savings and improved contract management (Britain:, 2013).	(Britain:, 2013)

6. Lessons Learned and Key Takeaways: From these successful case studies, several key lessons and takeaways emerge

6.1. Integration and Automation

Integrating budgeting with procurement processes through technology and automation leads to more efficient resource allocation and reduced administrative burden.

6.2. Strategic Focus

Adopting a strategic approach to budgeting that aligns with the organization's goals and focuses on high-priority areas ensures optimal resource allocation.

6.3. Centralization and Collaboration

Centralizing procurement functions and fostering collaboration between various departments and stakeholders can lead to enhanced procurement efficiency and cost savings.

6.4. Transparency and Accountability

Ensuring transparency and accountability in the budgeting process builds trust among stakeholders and reduces the risk of mismanagement.

6.5. Continuous Improvement

Learning from past experiences and continuously improving budgeting practices contribute to more effective procurement outcomes over time.

6.6. Flexibility and Adaptability

Incorporating flexibility and contingency planning in the budgeting process allows for adjustments in response to changing circumstances and unforeseen events.

6.7. Market Research and Data-Driven Decisions

Conducting thorough market research and relying on reliable data support informed decision-making and lead to better budgeting outcomes.

6.8. Training and Capacity Building

Investing in training and capacity building for procurement staff enhances their skills in budget preparation and financial analysis, improving the overall budgeting process.

7. Recommendations for Benue State MDAs to enhance their procurement budgeting practices

7.1. Develop Standardized Budgeting Guidelines

Establish standardized budgeting guidelines for all MDAs to follow. These guidelines should align with the state's overall financial policies and ensure consistency and uniformity in the budgeting process across all departments.

7.2. Implement Procurement Training Programs

Conduct specialized training programs for procurement staff in MDAs to enhance their budgeting skills. These programs should focus on financial analysis, market research, risk management, and compliance with procurement regulations.

7.3. Enhance Collaboration and Information Sharing

Encourage collaboration and information sharing among different MDAs during the budgeting process. This will facilitate a comprehensive understanding of procurement needs and foster a more coordinated and efficient budgeting approach.

7.4. Utilize Data Analytics and Technology

Invest in data analytics tools and technology to support data-driven budgeting decisions. By harnessing data effectively, MDAs can optimize resource allocation and make informed procurement choices.

7.5. Establish a Budget Review Committee

Form a budget review committee comprising representatives from various MDAs and financial experts. This committee can assess budget proposals, provide feedback, and ensure that budgets are aligned with strategic objectives.

7.6. Integrate Budgeting with Performance Management

Link procurement budgeting with performance management metrics. This will encourage MDAs to focus on achieving measurable outcomes and align budgetary allocations with project deliverables.

7.7. Conduct Periodic Budget Reviews

Conduct periodic reviews of procurement budgets to assess their effectiveness and identify areas for improvement. Regular evaluations will enable MDAs to adjust budgets based on changing priorities and lessons learned.

7.8. Promote Transparency and Accountability

Foster a culture of transparency and accountability in the budgeting process. Make budget information accessible to the public and encourage MDAs to be accountable for their spending decisions.

7.9. Monitor Budget Execution

Implement a robust monitoring system to track budget execution and expenditures in real-time. This will help identify any budget deviations or potential overspending and allow for timely corrective actions.

7.10. Emphasize Risk Management

Integrate risk management practices into the budgeting process to identify and mitigate potential risks that may impact procurement activities. This proactive approach will enhance budget reliability and project success.

8. Conclusion

8.1. Recap of Key Points

In this report, we explored the importance of procurement planning and budgeting for the Government of Benue State. We discussed various types of budgets applicable to the procurement of goods, works, and services, such as operating budgets, capital budgets, program-based budgets, and more. Budgeting in procurements plays a vital role in resource allocation, financial control, transparency, accountability, and risk mitigation. We also outlined the budgeting process for procurements, covering pre-budgeting, budget formulation, budget implementation, and post-budgeting phases. Additionally, we examined successful case studies and best practices from other states and countries, drawing valuable lessons and takeaways to apply in Benue State's procurement context.

8.2. Call to Action for Effective Procurement Budgeting

Effective procurement budgeting is essential for optimizing resource allocation, reducing costs, and achieving better procurement outcomes. To improve procurement budgeting practices, Benue State must adopt integrated e-Procurement systems, develop strategic budgeting frameworks, centralize procurement functions, and enhance stakeholder engagement. Emphasizing transparency, data-driven decisions, flexibility, and continuous improvement are critical steps for successful procurement budgeting. Training and capacity building for procurement staff will enhance their skills and contribute to efficient budget preparation and financial analysis.

8.3. Future Outlook for Benue State's Procurement Processes

The future outlook for Benue State's procurement processes is promising. By implementing the recommended practices and lessons learned, the state's MDAs can enhance their procurement budgeting practices, aligning resource allocation with strategic goals and achieving better value for money. Technology-driven approaches, such as e-Procurement systems, will facilitate more efficient and transparent procurement processes. With a focus on continuous improvement and risk management, Benue State's procurement processes can become more resilient and responsive to changing circumstances.

In conclusion, effective procurement planning and budgeting are integral to the successful delivery of goods, works, and services in Benue State. By embracing best practices, fostering transparency, and investing in staff capacity, Benue State can enhance its procurement processes, increase accountability, and ultimately deliver improved public services to the citizens. A proactive and strategic approach to procurement budgeting will pave the way for a more sustainable and efficient future in procurement practices within the state.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Badanidiyuru, A., Kleinberg, R. D., & Singer, Y. (2012). Learning on a budget: posted price mechanisms for online procurement. Semantic Scholar. <https://doi.org/10.1145/2229012.2229026>
- [2] Britain, G. (2013). Improving Government Procurement. The Stationery Office.
- [3] Burger, P., & Hawkesworth, I. (2013). Capital budgeting and procurement practices. *OECD Journal on Budgeting*, 13(1), 57–104. <https://doi.org/10.1787/budget-13-5k3w580lh1q7>
- [4] Chan, H., & Chen, J. (2014). Truthful Multi-unit Procurements with Budgets. 89–105. https://doi.org/10.1007/978-3-319-13129-0_7
- [5] Cho, J., & Hee Seok Byeon. (2012). Korea's Move to E-Procurement.
- [6] Estache, A., & Atsushi Iimi. (2008). Procurement Efficiency For Infrastructure Development And Financial Needs Reassessed. <https://doi.org/10.1596/1813-9450-4662>
- [7] Hessami, Z. (2014). Political corruption, public procurement, and budget composition: Theory and evidence from OECD countries. *European Journal of Political Economy*, 34, 372–389. <https://doi.org/10.1016/j.ejpoleco.2014.02.005>
- [8] Hu, B., Chen, X., T. S. Chan, F., & Meng, C. (2018). Portfolio procurement policies for budget-constrained supply chains with option contracts and external financing. *Journal of Industrial & Management Optimization*, 14(3), 1105–1122. <https://doi.org/10.3934/jimo.2018001>
- [9] Imoni, S., Ama, O., Akande, E.O., Jiya, V.H., Onuzulike, C., Sesugh, T. and Tiza, M. (2023). A Comprehensive Review of Engineering, Procurement, and Construction in Nigeria. *Journal of Management Studies and Development*, 2(3), pp.202–222.
- [10] Liebman, J. B., & Mahoney, N. (2017). Do Expiring Budgets Lead to Wasteful Year-End Spending? Evidence from Federal Procurement. *ProQuest*, 3510–3549. <https://doi.org/10.1257/aer.20131296>
- [11] Mccue, C. P., & Johnson, B. R. (2010). Strategic procurement planning in the public sector. National Institute Of Government Purchasing.
- [12] Milosavljević, M., Dobrota, M., & Milanović, N. (2018). A New Approach to the Evaluation of Public Procurement Efficiency among European Countries. *European Review*, 27(02), 246–259. <https://doi.org/10.1017/s1062798718000777>
- [13] Vitaly Kikavets, & Tsaregradskaya, Y. K. (2020). The Implementation of Principles of the Budget Process in the Financing of Public Procurement in the Digital Economy. 28–35. https://doi.org/10.1007/978-3-030-39319-9_4