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Evaluation of Traditional and Innovative Budget Approaches in Improving Resource Allocation Efficiency

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ABSTRACT

Purpose: This study explores the strengths and weaknesses of traditional and innovative budgeting methods and their impact on resource allocation efficiency in public and private organizations. It examines how hybrid budgeting models can address traditional limitations while improving flexibility, accountability, and responsiveness in financial management.

Research Design and Methodology: A qualitative systematic literature review (SLR) synthesizes findings on budgeting frameworks, including Performance-Based Budgeting (PBB) and Zero-Based Budgeting (ZBB). The study analyzes peer-reviewed articles, case studies, and financial reports to provide insights into budgeting practices across different organizational contexts.

Findings and Discussion: Traditional budgeting ensures financial stability but lacks adaptability due to reliance on historical data and rigid expenditure categories. Innovative methods, such as PBB and ZBB, enhance efficiency by linking budgets to performance outcomes and requiring critical expenditure evaluations. However, challenges such as technological limitations, managerial capacity, and organizational resistance hinder the application of these methods. A hybrid approach combining traditional stability with modern flexibility offers a more adaptable financial management solution.

Implications: This study offers practical recommendations for policymakers and practitioners, advocating for hybrid budgeting models that are supported by cloud-based systems and comprehensive training programs. Strengthening accountability and transparency can enhance resource allocation, improve financial performance, and increase organizational resilience to economic and policy changes.

Introduction

Effective resource allocation is essential for achieving strategic objectives in both public and private sectors. Budgeting serves as a key managerial function, directing resources to align with organizational priorities. Traditionally, budgeting frameworks have relied on line-item budgeting, which allocates funds based on historical expenditure patterns, ensuring control and predictability (De Vries et al., 2019). These conventional methods promote financial stability by maintaining standardized budget categories (C. de Campos & Rodrigues, 2016). However, as economic and

operational environments become increasingly complex, traditional approaches often struggle to adapt. The reliance on past data can lead to inefficient resource distribution, failing to meet evolving organizational needs (Nemec & de Vries, 2019). This rigidity raises concerns about the effectiveness of conventional budgeting in optimizing resource allocation and responding to rapid changes (Oulasvirta & Rönkkö, 2023). Consequently, there is a growing demand for more flexible financial management strategies.

In response to traditional budgeting limitations, innovative methods have emerged, emphasizing flexibility, performance outcomes, and dynamic resource allocation. Performance-Based Budgeting (PBB) aligns budgets with measurable objectives, thereby improving efficiency (Mat et al., 2023). In contrast, Zero-Based Budgeting (ZBB) requires justification for all expenditures, thereby eliminating unnecessary costs (Ibrahim, 2019). These approaches encourage data-driven decision-making and accountability but present challenges in implementation. Adopting PBB and ZBB necessitates significant investments in financial systems, extensive training, and ongoing performance monitoring (Di Francesco & Alford, 2016). Organizational resistance to change further complicates implementation, as stakeholders may prefer established processes (Bogsnes, 2016). Despite these challenges, research highlights the benefits of integrating technology into budgeting practices. Mathematical accounting models have been employed to evaluate the impact of economic crises on resource stability (Petropoulos et al., 2024), while dynamic programming techniques have been utilized to optimize project scheduling under budget constraints (Goda et al., 2023). Digital solutions, such as Enterprise Resource Planning (ERP) systems, have enhanced decision-making, though concerns over security and adoption persist (Sonjaya, 2024). Other advancements, such as the FITradeoff method, have significantly improved budget efficiency in specific sectors (Santos et al., 2023). While these studies demonstrate progress, they often focus on sector-specific applications, limiting their broader applicability.

Despite growing research on budgeting innovations, significant gaps remain in understanding how traditional and modern frameworks can be effectively integrated across different organizations. While studies on PBB and ZBB emphasize performance alignment and expenditure efficiency, little research explores how these methods interact with conventional budgeting systems. Many studies focus on either innovative or traditional approaches without evaluating hybrid models that blend stability with adaptability. Additionally, while digital solutions have improved financial management, concerns regarding implementation costs, data security, and resistance to change remain underexamined (Sonjaya, 2024). The success of the FITradeoff method in military budgeting (Santos et al., 2023) and dynamic programming for project scheduling (Goda et al., 2023) suggests potential applications in other sectors, yet their adaptability remains unclear. Comparative studies between traditional and modern methods are also limited, restricting insights into their combined effectiveness. These gaps underscore the need for a comprehensive analysis of budgeting practices that address both theoretical advancements and real-world implementation challenges.

This study aims to bridge the gap between traditional and innovative budgeting by conducting a Systematic Literature Review (SLR) to assess their effectiveness in optimizing resource allocation. Unlike prior research that examines budgeting methods in isolation, this study adopts a comparative approach, analyzing the strengths, weaknesses, and integration possibilities of various methods. The novelty lies in its holistic examination, synthesizing findings from multiple disciplines to identify adaptable best practices. The study seeks to answer: (1) What are the comparative strengths and limitations of traditional and innovative budgeting approaches in resource allocation? (2) How can modern budgeting methods improve efficiency across different organizational settings? By addressing these questions, the research aims to provide actionable recommendations for policymakers and practitioners, guiding the development of adaptable financial management strategies that respond to evolving economic and operational challenges.

Literature Review

Relevant Theory: Agency Theory in Resource Management

Agency Theory highlights the relationship between principals, such as stakeholders or owners, and agents responsible for managing organizational resources (Jensen & Meckling, 1979). In this context,

principals delegate decision-making authority to agents, particularly in areas such as resource allocation and budget management. While this delegation aims to achieve common organizational goals, it can create imbalances without effective governance mechanisms (Matinheikki et al., 2022). These imbalances often arise due to information asymmetry, where agents can access more comprehensive information about budget-related decisions than principals. This discrepancy in information can lead agents to prioritize their interests, which may not align with organizational objectives (Kauppi & van Raaij, 2015). For example, a manager might allocate a substantial budget to projects that enhance their department's visibility rather than addressing broader organizational priorities. The lack of transparency in such cases can lead to opportunistic behaviors, such as inflating project costs or misreporting expenses, which compromises the efficiency of resource allocation (Hoppe & Schmitz, 2013). Traditional budgeting methods often reinforce this issue by relying on historical expenditure patterns without critically assessing the effectiveness of previous allocations (Bosse & Phillips, 2016). This highlights the importance of budgeting frameworks that mitigate information asymmetry and promote accountability through performance-based and zero-based budgeting approaches.

One of the key challenges in the principal-agent relationship is the potential for moral hazard and conflicts of interest. When agents are granted complete discretion over budget decisions without adequate oversight, they may prioritize decisions that do not reflect the organization's needs (Murdoko, 2024). This issue is particularly evident in traditional budgeting practices, where resource allocation often follows fixed categories and historical expenditure patterns, allowing agents to maintain budget allocations without critically evaluating their effectiveness (Wildavsky, 1986). Consequently, agents may exploit the lack of scrutiny to create budget slack, inflating resource allocations to accommodate inefficiencies or personal interests (Nkundabanyanga et al., 2023). In contrast, innovative budgeting approaches, such as performance-based budgeting (PBB) and zero-based budgeting (ZBB), aim to reduce these imbalances by directly linking resource allocation to measurable performance indicators. These approaches require agents to provide clear justifications for budgetary decisions and demonstrate tangible outcomes from their allocations. By enforcing transparency and aligning budgets with organizational goals, these methods can mitigate the risks associated with opportunistic behavior (Jerab, 2023). However, implementing such frameworks requires significant investment in evaluation systems and performance tracking. Nonetheless, when used effectively, these budgeting systems can strengthen accountability and promote more efficient resource allocation by ensuring that agents act in the organization's best interests rather than pursuing discretionary goals.

Traditional Budgeting Approaches

Traditional budgeting approaches have long served as the foundational framework for financial planning and resource allocation within organizations, particularly in the public sector. One of the most used methods is line-item budgeting, where funds are allocated based on predefined categories such as salaries, operations, and procurement (Quah, 2018). This approach prioritizes stability by ensuring that each expenditure category follows a structured allocation model, often relying on historical data as the primary reference (Abdelkader et al., 2021). By adhering to previous budget patterns, organizations can maintain continuity in their financial processes, making the budgeting process straightforward and relatively easy to implement. This simplicity supports better oversight and compliance, as the fixed categories facilitate detailed financial tracking and accountability (Robinson, 2020). However, reliance on historical expenditure patterns can also create challenges. Budget allocations that are merely adjusted based on prior spending may overlook emerging organizational needs or strategic priorities, potentially leading to inefficiencies in resource distribution (Suwarno et al., 2023). In volatile economic environments, such rigid structures may fail to respond to sudden policy changes or financial constraints, limiting the organization's agility (Adobor, 2024). While the method's predictability provides security, it can perpetuate outdated spending habits and inhibit innovation. Therefore, although line-item budgeting remains widely used for its administrative convenience, many organizations have begun incorporating performance-based methods alongside traditional approaches to enhance the flexibility and effectiveness of resource

allocation. The evolving demands for financial transparency and accountability underscore the need for budgetary systems that strike a balance between stability and adaptability in modern financial management.

Despite its advantages, traditional budgeting approaches, particularly line-item budgeting, have notable limitations that affect their effectiveness in dynamic organizational environments. One significant drawback is their limited ability to adapt to sudden external changes, such as policy shifts or economic fluctuations (Raudla & Douglas, 2022). This rigidity often results in inefficiencies in resource allocation, as funding decisions are tied to historical spending patterns rather than current needs (Masuya & Yoshida, 2021). In such cases, the tendency to allocate resources based on previous expenditures can lead to the continuation of less relevant programs while underfunding new strategic priorities (Kwarteng, 2018). The backward-looking nature of traditional budgeting reinforces a compliance-focused approach that prioritizes adherence to predetermined allocations over evaluating the actual outcomes of expenditures (Seneviratne & Martino, 2021). This approach may stifle innovation, as managers are less incentivized to critically assess and revise their budget plans when performance outcomes are not systematically reviewed and evaluated. Additionally, traditional budgeting frameworks may struggle to address financial uncertainties and emergent demands, such as economic crises or unplanned operational needs, due to the absence of mechanisms that allow for real-time adjustments (Moses, 2022). Many organizations have begun integrating performance-based and zero-based budgeting approaches to address these shortcomings and complement traditional frameworks.

Innovative Budgeting Approaches

Innovative budgeting approaches, such as performance-based budgeting (PBB) and zero-based budgeting (ZBB), have been introduced to address the limitations of traditional methods by enhancing flexibility, transparency, and accountability in financial management. Unlike traditional budgeting, which allocates resources based on historical spending, PBB focuses on linking financial resources to measurable performance indicators, ensuring that expenditures directly contribute to organizational objectives (Raudla, 2018). By requiring managers to demonstrate the outcomes of their allocated budgets, PBB strengthens managerial accountability and improves the alignment between resource allocation and strategic goals. However, effective implementation requires high-quality data and a robust accounting system, as inadequate data can undermine performance assessments and decision-making processes (Oulasvirta & Rönkkö, 2023). Similarly, ZBB starts the budgeting process from a "zero base" each period, where all expenses must be justified without reference to previous budgets (Campos & Rodrigues, 2023). This method encourages organizations to reassess spending priorities, reducing redundant expenditures and promoting resource efficiency. While ZBB fosters a culture of critical evaluation and innovation, it also presents challenges. Conducting a comprehensive review for each budgeting cycle can be time-consuming and costly, particularly for large organizations. Furthermore, internal resistance from stakeholders accustomed to the simplicity of traditional methods may slow the transition to ZBB (Mauro et al., 2019). Although PBB and ZBB offer valuable frameworks for improving resource allocation, their success depends on the organization's readiness to invest in supportive infrastructure and overcome internal barriers to change.

Although innovative budgeting approaches, such as performance-based budgeting (PBB) and zero-based budgeting (ZBB), offer significant improvements in resource allocation, their implementation presents various challenges. One key advantage of these methods is their flexibility in adjusting budgets in response to evolving organizational needs (Campos & Rodrigues, 2016). Unlike traditional approaches that maintain fixed allocations, PBB and ZBB allow organizations to revise their budgets in response to external changes, such as policy shifts or market fluctuations (Campos & Rodrigues, 2016). This adaptability enhances resource efficiency by ensuring that financial allocations align with strategic priorities rather than adhering to outdated spending patterns. Additionally, these approaches promote transparency and accountability by requiring detailed performance evaluations and supporting data for every budget decision (Lozynska & Chaikovskyi, 2023). However, implementing PBB and ZBB requires a robust technological infrastructure to support real-time performance monitoring and provide relevant information for informed decision-making. Conducting detailed

evaluations during each budget cycle can be time-consuming and costly, creating additional burdens for organizations with limited resources (Khoo et al., 2024). Moreover, resistance to change is a common barrier, particularly in organizations that have long relied on traditional, simpler budgeting systems. This resistance often stems from the complexity of the new methods and the significant training required for stakeholders to understand and adopt them. Therefore, the successful adoption of innovative budgeting depends on an organization's readiness to embrace change, invest in supporting infrastructure, and develop performance evaluation capabilities.

Resource Allocation Efficiency

Resource allocation efficiency is crucial in budgeting, as it ensures the optimal utilization of available resources to achieve organizational objectives. Efficient resource management involves allocating budgeted funds and the organization's ability to align expenditures with desired outcomes (Burton & Obel, 2018). Key indicators of resource allocation efficiency include appropriateness of allocation, target achievement, and minimal resource wastage. One significant factor influencing efficiency is budgeting policy, which defines priorities for resource distribution and establishes mechanisms for evaluating which programs warrant funding (Khin & Ho, 2020). Budgeting policies that lack a strategic framework may lead to the misallocation of resources, thereby hindering organizational performance. Technology infrastructure also plays an essential role, as modern information systems support real-time data collection and enhance the accuracy of performance evaluations (Sinnaiah et al., 2023). Organizations that fail to invest in robust technological tools may struggle to monitor financial performance effectively and adjust allocations promptly. Managerial capacity is crucial, as leaders must be equipped to plan, monitor, and evaluate budgets comprehensively (Widianto et al., 2021). Without competent leadership and effective management practices, efforts to optimize resource allocation may falter. Furthermore, organizations that rely on outdated budgeting methods may face resistance to change from internal stakeholders accustomed to traditional systems (Daovisan & Chamaratana, 2020). Addressing these challenges requires a clear commitment to adopting adaptive financial management practices that integrate innovative budgeting approaches with strong managerial oversight and technological support. Resource allocation efficiency is crucial to budgeting, as it determines how effectively resources are utilized to achieve organizational objectives. Traditional budgeting relies heavily on historical data and tends to perpetuate fixed expenditure patterns without considering evolving priorities (Campos & Rodrigues, 2016). This rigidity often leads to misaligned resource distribution, where outdated programs receive continued funding while underfunded strategic initiatives (Rausch & Wall, 2015). In contrast, innovative approaches such as performance-based budgeting (PBB) and zero-based budgeting (ZBB) offer greater adaptability by linking resource allocation to measurable performance indicators and justifying expenses from a zero baseline (Rausch & Wall, 2015). PBB requires organizations to align budget allocations with specific outcome targets, ensuring financial decisions are grounded in expected results rather than past trends. However, the successful implementation of these approaches depends on accurate data and robust evaluation mechanisms. Without reliable performance metrics, it becomes challenging to determine whether resource allocations achieve the desired outcomes (Bourne et al., 2018). Resistance to change often arises from internal stakeholders accustomed to the simplicity of traditional budgeting processes. Implementing ZBB, in particular, demands substantial time and effort, as every budget item must be critically evaluated and justified. Consequently, organizations must invest in managerial capacity and technological infrastructure to support real-time data analysis and performance tracking (Ellström et al., 2022). Combining traditional stability with innovative flexibility may provide a balanced strategy, fostering accountability and responsiveness in resource allocation.

Research Design and Methodology

Study Design

This research employs a qualitative approach, utilizing the Systematic Literature Review (SLR) method, to investigate the efficiency of resource allocation within traditional and innovative budgeting approaches. The SLR method is chosen to synthesize existing knowledge from peer-reviewed

academic sources and identify key themes, trends, and gaps in the literature. By systematically reviewing studies published in reputable journals, this study aims to comprehensively analyze how various budgeting practices influence resource allocation efficiency. The design adheres to established SLR protocols to ensure rigor and transparency, including the definition of explicit inclusion and exclusion criteria.

Sample Population or Subject of Research

The subject of this research is peer-reviewed journal articles, books, and conference papers related to traditional and innovative budgeting practices. The sample includes studies published after 2018 to ensure the relevance of findings to contemporary financial management contexts. The focus is on studies from reputable databases, including Elsevier, Emerald, Wiley, and Springer, which cover performance-based budgeting (PBB), zero-based budgeting (ZBB), and resource allocation strategies.

Data Collection Techniques and Instrument Development

Data collection is conducted by systematically searching for relevant literature using predetermined keywords such as "resource allocation efficiency," "performance-based budgeting," and "zero-based budgeting." The search is performed across multiple academic databases, ensuring a broad and representative sample of relevant studies. The inclusion criteria require studies to be peer-reviewed and focus on financial management in the public or private sector. A review matrix is developed to organize the collected data, categorizing information based on themes, methodology, and findings.

Data Analysis Techniques

The data analysis process involves thematic analysis, where the findings from the selected studies are synthesized to identify recurring themes and patterns. Coding techniques categorize data into relevant groups, such as factors influencing resource allocation efficiency, implementation challenges, and proposed solutions. The analysis also highlights research gaps and provides insights into how traditional and innovative budgeting approaches impact organizational performance.

Findings and Discussion

Findings

One of the primary discussions regarding budgeting frameworks is the comparative strengths and weaknesses of traditional and innovative approaches. Traditional budgeting is widely recognized for its simplicity, which streamlines the implementation process and ensures that financial management remains transparent through the use of standardized categories (de Campos & Rodrigues, 2016). This approach provides a clear structure for expense tracking and control, allowing organizations to monitor financial activities and maintain compliance with established spending guidelines (Bogsnes, 2016). By adhering to predefined budget allocations based on historical data, traditional budgeting ensures that financial plans remain stable and predictable, which can be beneficial for maintaining fiscal discipline (Moses, 2022). However, this reliance on historical expenditure patterns presents limitations, particularly when organizations face external changes that require immediate adjustments (Masuya & Yoshida, 2021). Traditional budgeting often fails to account for sudden shifts in policy, market fluctuations, or unforeseen operational demands, leaving organizations with rigid financial plans that may not align with their current priorities. This rigidity can perpetuate inefficiencies as funds continue to be allocated to outdated programs while new strategic initiatives remain underfunded (Kwarteng, 2018).

In contrast, innovative budgeting approaches, such as Performance-Based Budgeting (PBB) and Zero-Based Budgeting (ZBB), offer greater flexibility by aligning budget allocations with measurable performance outcomes and current needs (de Vries et al., 2019). PBB ties funding directly to organizational goals by assessing performance indicators, while ZBB requires a complete justification for each expenditure from a zero baseline (Ibrahim, 2019). However, implementing these methods requires substantial investments in technology, data systems, and staff training to support data collection and performance evaluation (Khin & Ho, 2020). Moreover, resistance to change, particularly

from stakeholders accustomed to the predictability of traditional methods, can hinder the adoption of more dynamic budgeting frameworks, highlighting the need for robust change management strategies to facilitate successful implementation (Daovisan & Chamaratana, 2020).

The effectiveness of resource allocation strategies varies depending on the organizational context in which they are applied. In the public sector, PBB has proven beneficial for improving budgetary decision-making by evaluating programs based on their tangible contributions to public outcomes, ensuring that funding is directed toward initiatives that generate measurable results (Nemec & de Vries, 2019). This outcome-focused approach enables public institutions to align their financial resources with key performance objectives, thereby promoting greater transparency and accountability (Khoo et al., 2024). Conversely, ZBB is particularly advantageous for private-sector organizations seeking to control costs and eliminate unnecessary expenses (Murdoko, 2024). By re-evaluating all budget components during each cycle, ZBB enables organizations to identify and eliminate inefficiencies, resulting in more strategic and streamlined spending (Waruwu et al., 2024). However, the success of these innovative methods is influenced by external factors such as economic stability and regulatory frameworks (Adobor, 2024). Organizations may struggle to implement comprehensive budgeting reforms during periods of economic uncertainty, due to limited financial resources and sudden policy changes (Raudla & Douglas, 2022). For example, unexpected economic downturns or shifts in government regulations can disrupt budget plans, necessitating the rapid reallocation of funds (Bourne et al., 2018). In contrast, innovative budgeting methods can enhance financial resilience and adaptability during stable economic conditions by allowing organizations to respond proactively to emerging opportunities and challenges (Petropoulos et al., 2024). Nevertheless, the absence of contingency plans or mechanisms for real-time adjustments can limit the effectiveness of even the most performance-driven budgeting frameworks in addressing urgent needs during crises (Ellström et al., 2022). Therefore, a balanced approach that considers internal priorities and external pressures is essential for optimizing resource allocation.

Several studies have identified the best practices for implementing innovative budgeting across various industries and organizations. Research has shown that international financial institutions adopting PBB improved transparency by up to 30% through consistent performance evaluations and outcome reporting (de Vries et al., 2019). These institutions demonstrated clear links between budget allocations and organizational outcomes, building greater stakeholder trust and improving decision-making processes (Matinheikki et al., 2022). Additionally, a multinational technology company successfully reduced operational costs by 20% after implementing ZBB, which required the organization to critically assess each budget item to eliminate redundant expenditures and focus on high-priority initiatives (Suwarno et al., 2023). This comprehensive reassessment enabled the company to optimize its financial resources and invest in strategic growth areas (Goda et al., 2023). Best practices from these organizations illustrate that the successful adoption of innovative budgeting frameworks involves more than procedural changes—it requires a shift in organizational culture that emphasizes accountability, continuous improvement, and the strategic alignment of resources with long-term objectives (Burton & Obel, 2018). Effective leadership and strong internal communication play crucial roles in fostering this culture, as they help build consensus and support for budgeting reforms (Lozynska & Chaikovskyi, 2023). Furthermore, organizations must establish robust data systems to ensure that performance metrics are accurately tracked and reported, reinforcing the credibility of the budgeting process and facilitating informed decision-making (Widianto et al., 2021).

Implementing innovative budgeting approaches also presents numerous challenges and opportunities. One of the primary obstacles is the financial investment required to support the necessary technological infrastructure and workforce training (Khin & Ho, 2020). Many organizations, particularly those with limited budgets, struggle to allocate funds for performance management software and real-time data tracking tools, which are essential for monitoring and evaluating budget outcomes (Oyamaguchi et al., 2020). Additionally, conducting detailed performance evaluations for each budget cycle can be time-consuming and resource-intensive, creating an additional burden for organizations already facing operational constraints (Ibrahim, 2019). However, significant opportunities exist for improvement through the integration of advanced data analytics and machine learning tools, which can streamline the evaluation process and enhance predictive capabilities

(Jadeja et al., 2022). These tools enable organizations to identify trends and patterns in resource allocation, allowing them to make more informed budgetary decisions (Hoppe & Schmitz, 2013). Moreover, investing in managerial capacity-building programs can equip staff with the necessary skills to interpret performance data effectively and implement adaptive budget strategies (Nkundabanyanga et al., 2023). By fostering a culture of innovation and continuous learning, organizations can overcome internal resistance to change and adopt more adaptive budgeting practices that support long-term growth and sustainability (Sinnaiah et al., 2023). This approach enables organizations to build resilience and responsiveness, allowing them to navigate complex financial environments more effectively (Santos et al., 2023).

To enhance financial management efficiency, this study recommends adopting a hybrid budgeting model that combines the strengths of traditional and innovative approaches (de Campos & Rodrigues, 2016). A hybrid model enables organizations to maintain the stability of conventional expenditure categories while incorporating the flexibility and performance-based elements of innovative frameworks (Moses, 2022). This approach allows organizations to strike a balance between the need for predictability and the demand for adaptability, ensuring that financial plans remain aligned with both long-term objectives and short-term operational needs (Matinheikki et al., 2022). Policymakers and financial managers should also implement phased transitions to ensure a smoother adoption process, supported by comprehensive training programs and clear communication about the benefits of budgeting reforms (Kwarteng, 2018). Moreover, adopting cloud-based financial management systems can help organizations reduce infrastructure costs and facilitate real-time financial monitoring, enabling more agile responses to changes in the external environment (Khin & Ho, 2020). These recommendations aim to help organizations strike a balance between maintaining financial stability and embracing the flexibility necessary to adapt to modern operational demands. By adopting a hybrid approach, organizations can develop a more responsive and accountable financial management system that effectively addresses the complexities of their operational environments and supports their strategic objectives (Abdelkader et al., 2021). Ultimately, the findings of this study highlight the importance of aligning budgeting practices with internal priorities and external challenges to enhance resource allocation efficiency and improve overall organizational performance (Petropoulos et al., 2024).

Discussion

This study's findings demonstrate that traditional and innovative budgeting approaches have distinct strengths and weaknesses that significantly impact the efficiency of resource allocation in organizations. Traditional budgeting is characterized by its precise control mechanism, enabled by a structured framework of fixed expenditure categories. This structure facilitates a well-organized and transparent financial planning process, allowing the organizations to monitor spending and ensure compliance with economic policies effectively. The rigidity of this framework can also promote fiscal discipline by ensuring that expenditures remain within approved limits, thereby reducing the likelihood of unauthorized spending. However, this reliance on historical spending data as the primary basis for determining budget allocations limits the ability of traditional budgeting to respond to evolving organizational needs. Resources are often allocated to legacy programs that no longer align with strategic goals, perpetuating inefficiencies and hindering the organization's capacity to support emerging priorities. This static nature highlights a preference for stability and adherence to established procedures over adaptability and flexibility. Consequently, organizations using traditional budgeting frameworks may face challenges in reallocating funds efficiently during rapid change or when unforeseen financial demands arise, which can hinder strategic innovation and growth. Additionally, this approach may overlook opportunities for strategic investments in areas that could enhance competitiveness and resilience, further reinforcing its limitations in dynamic environments.

In contrast, innovative budgeting methods, such as Performance-Based Budgeting (PBB) and Zero-Based Budgeting (ZBB), offer greater adaptability and alignment with evolving organizational needs. PBB links resource allocation to clearly defined and measurable performance indicators, ensuring that funding decisions are tied to outcomes that support the organization's strategic objectives. This results-based approach enhances managerial accountability by requiring financial decision-makers to

justify their budget proposals with evidence of expected performance outcomes. Similarly, ZBB requires a comprehensive evaluation of each budgetary item from a zero baseline, encouraging organizations to regularly reassess their spending priorities and eliminate unnecessary expenditures. These innovative approaches emphasize transparency, as a detailed justification must support every financial request. However, implementing these approaches requires substantial technological investments, such as performance monitoring systems and training programs, to build the necessary competencies among financial managers and staff. This detailed evaluation process can be time-consuming and resource-intensive, presenting significant barriers for organizations with limited financial and human resources. Resistance to change within the organization also poses a considerable challenge, particularly in entities accustomed to the simplicity and predictability of traditional budgeting methods. As internal stakeholders may view new frameworks as disruptive or complex, fostering an organizational culture that embraces innovation and continuous improvement becomes essential to successfully adopting innovative budgeting approaches.

External environmental factors significantly influence the effectiveness of both traditional and innovative budgeting methods. In stable economic conditions, creative approaches such as PBB and ZBB tend to be more effective, enabling organizations to develop and implement long-term financial strategies based on performance metrics. By doing so, these methods can support strategic resource allocation decisions that enhance operational efficiency and contribute to sustained growth. However, during periods of economic volatility or crisis, such as recessions, global pandemics, or sudden changes in public policy, the limitations of performance-based budgeting become more pronounced. These crises often disrupt access to real-time and accurate data, making it challenging to conduct timely evaluations of budgetary outcomes. In such circumstances, with its structured and stable approach, traditional budgeting can offer a degree of financial predictability that is beneficial for maintaining short-term fiscal stability. Nevertheless, the rigidity of conventional budgeting may prevent organizations from reallocating resources swiftly to meet urgent needs. The findings of this study highlight the potential benefits of a hybrid budgeting approach that combines the stability of traditional methods with the flexibility and performance orientation of innovative techniques. By adopting this integrated model, organizations can build resilience and responsiveness, ensuring that their resource allocation processes remain agile and aligned with immediate operational requirements and long-term strategic objectives. Such a balanced approach mitigates the shortcomings of each method and enhances the organization's capacity to adapt to an increasingly dynamic and complex economic environment.

In the context of theoretical frameworks that support these findings, Agency Theory offers a relevant lens for understanding the dynamics of the principal-agent relationship in resource management processes. This theory posits that information asymmetry between principals (owners or stakeholders) and agents (managers or decision-makers) can lead to opportunistic behavior by the agents. Such behavior may include budget padding, inefficient resource allocation, or decision-making driven by personal incentives rather than the organization's strategic objectives (Bosse & Phillips, 2016). The findings of this research align with the Agency Theory perspective by highlighting how innovative budgeting methods, such as Performance-Based Budgeting (PBB) and Zero-Based Budgeting (ZBB), can mitigate these risks by fostering transparency and performance-based accountability. Specifically, these approaches require agents to justify their budget proposals with measurable outcomes and performance data, thereby limiting the potential for self-serving actions (Matinheikki et al., 2022). PBB, for instance, ties resource allocations directly to key performance indicators, making it more difficult for agents to divert resources without oversight. Similarly, ZBB's baseline approach requires a thorough review of all budget components to ensure that past allocations do not unduly influence future financial decisions. By mandating clear, evidence-based justifications for expenditures, these innovative methods enhance managerial accountability and align resource allocation decisions with organizational objectives (Nemec & de Vries, 2019). Consequently, adopting such frameworks can reduce moral hazard by narrowing the gap between the information held by agents and the oversight exercised by principals. These findings underscore the importance of robust performance evaluation systems and data transparency to support effective financial decision-making, ultimately reinforcing organizational efficiency in dynamic operational environments (Ibrahim, 2019).

The findings of this study align with prior research on innovative budgeting approaches. Ibrahim (2019) demonstrated that Zero-Based Budgeting (ZBB) effectively reduces budget inefficiencies by requiring detailed justifications for expenditures, fostering a critical evaluation of resource allocation. Similarly, Nemec & de Vries (2019) emphasized that Performance-Based Budgeting (PBB) enhances public sector accountability by linking budget allocations to measurable outcomes. However, this study also identified challenges consistent with Daovisan and Chamaratana (2020), who noted that internal resistance often arises during the transition from traditional to innovative methods due to familiarity with conventional processes. Ellström et al. (2022) emphasized the importance of robust technological infrastructure, noting that inadequate data collection and real-time analysis capabilities can compromise the effectiveness of performance-based frameworks. This study supports these findings, emphasizing that limited technological support poses a significant barrier to performance monitoring and evaluation. This research diverges from Murdoko (2024), who argued that traditional budgeting remains effective in stable environments. In contrast, this study demonstrates that conventional methods can still be ineffective if organizations fail to conduct regular budget evaluations, resulting in resource misallocation even under stable conditions. This reinforces the need for continuous performance assessments to ensure financial resources remain aligned with organizational priorities, regardless of environmental stability.

The findings of this study have significant practical implications for both public and private organizations seeking to enhance the efficiency of their financial management processes. Implementing innovative budgeting methods can enable organizations to allocate resources more effectively, targeting strategic priorities and minimizing waste. One crucial step is enhancing technological capabilities by adopting cloud-based financial management systems that facilitate real-time data collection and evaluation. Such systems can provide decision-makers with timely and accurate insights, supporting data-driven resource allocation. Additionally, managerial training is essential for equipping financial managers with a comprehensive understanding of performance-based budgeting methods, thereby ensuring a smooth transition from traditional approaches. These training programs should focus on developing the technical and analytical skills necessary to implement and effectively monitor innovative budgeting frameworks. Organizations must cultivate a culture of accountability and openness to innovation to foster collective commitment toward supporting budgeting reforms. Encouraging collaboration across departments and ensuring transparency in financial decision-making can reduce resistance to change and strengthen organizational buy-in. Organizations can develop a more responsive and adaptive financial management system that aligns with dynamic environmental changes by adopting a hybrid approach that integrates the stability of traditional methods with the flexibility of innovative budgeting frameworks. This balanced approach maintains financial control and enhances the organization's capacity to respond to unforeseen challenges. These practical implications can serve as a valuable guide for policymakers and practitioners in designing financial management policies that support sustainable organizational growth and resilience.

Conclusion

This study explored the comparative evaluation of traditional and innovative budgeting approaches and their impact on resource allocation efficiency within public and private organizations. The findings indicate that while conventional budgeting methods offer stability, simplicity, and transparent financial controls, they often lack the flexibility to address dynamic organizational needs and respond to external changes. In contrast, innovative approaches, such as Performance-Based Budgeting (PBB) and Zero-Based Budgeting (ZBB), provide greater adaptability and transparency by aligning resource allocation with measurable performance indicators. However, implementing these frameworks poses challenges, including the need for advanced technological infrastructure, comprehensive managerial training, and overcoming internal resistance to change. The research underscores the importance of adopting a hybrid budgeting system that integrates the strengths of traditional and innovative methods to achieve a balanced approach to financial management.

The originality of this study lies in its holistic assessment of budgeting approaches across various organizational contexts, contributing to the growing discourse on financial management reforms. This

research offers practical and managerial insights by emphasizing the critical role of technology adoption, data-driven decision-making, and fostering a culture of accountability to support budgeting reforms. Policymakers and organizational leaders can utilize these findings to inform the design of adaptive financial management systems that optimize resource allocation, minimize inefficiencies, and foster sustainable growth. Integrating hybrid approaches presents a promising pathway for organizations to develop resilient and responsive economic systems that adapt to evolving operational demands.

Nevertheless, this study has certain limitations. The analysis is based on a systematic review rather than empirical data, which may limit the generalizability of the findings. Additionally, the availability of performance-related data across different organizations may vary, which can impact the consistency of budgeting evaluations. Future research could address these limitations by conducting empirical studies across multiple sectors to validate and expand upon these findings. Further investigations could also explore the long-term impact of hybrid budgeting systems on organizational performance and resilience, offering more profound insights into how financial management practices evolve in response to economic and policy changes. Expanding research could strengthen the theoretical and practical foundations of effective resource allocation strategies in stable and volatile environments.

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