Open Access

Public Organization Management

Vol. 14(1), (Series 53): 23-44/ 2026

https://doi.org/10.30473/ipom.2025.74863.5206

E-ISSN: 2538-600X P-ISSN: 2322-522X

ORIGINAL ARTICLE

Informational, Communicational, and Systemic Requirements of Performance-Based Budgeting (PBB) in Governmental Organizations

Ali Eskandari [1*], Farrokh Ghouchani [2], Akbar Alam Tabriz[3], Morteza Soltani[4]

1. Ph.D, Department of Information Technology Management, Faculty of Management, University of Tehran, Tehran, Iran.
2. Assistant Professor, Department of Public Organization Management, Faculty of Management and Accounting, Shahid Beheshti University, Tehran, Iran.
3. Professor, Department of Industrial Management, Faculty of Management and Accounting, Shahid Beheshti University, Tehran, Iran.
4. Associate Professor, Department of Business, Faculty of Management and Accounting, Farabi College, University of Tehran, Qom, Iran.

*Correspondence
Ali Eskandari
E-mail: eskandari1007@ut.ac.ir

Receive Date: 08/June/2025
Revise Date: 06/Aug/2025
Accept Date: 20/Sept/2025

How to cite
Eskandari, A., Ghouchani, F., AlamTabriz, A., & Soltani, M (2026). Informational, Communicational, and Systemic Requirements of Performance-Based Budgeting (PBB) in Governmental Organizations. *Public Organization Management*, 14 (1), 23-44.

EXTENDED A B S T R AC T

Introduction

Budgeting is not merely a financial document; it serves as a strategic instrument through which policies at micro, meso, and macro levels are operationalized. At the macro level, resource allocation to sectors such as research and development, healthcare, or defense reflects national priorities and policy decisions. At the meso and micro levels, budgeting enables the practical implementation of strategies within specific sectors and organizations. Annual budgeting in healthcare or higher education exemplifies the execution of policies at the intermediate level, whereas budgeting within executive agencies represents micro-level policy implementation. This is particularly significant in the public sector, where quantifying objectives, measuring outputs, and assessing effectiveness is inherently challenging and, in some cases, nearly impossible.

Over time, various budgeting approaches have been developed and applied, each tailored to the contextual demands of its era. Traditional methods, including centralized, linear, formula-based, programmatic, and zero-based budgeting, primarily focus on tracking how and where resources are spent. In contrast, operational budgeting emphasizes achieving outcomes and objectives rather than merely monitoring resource allocation. It introduces the dimensions of efficiency and effectiveness into traditional budgeting, enabling the systematic monitoring of organizational units and staff performance.

The successful implementation of operational budgeting requires fulfilling specific informational, systemic, and communicational prerequisites. Informational requirements encompass strategic and operational data related to both efficiency and effectiveness. Communicational requirements refer to the necessary linkages and attributions among different elements, such as costs, activities, and outputs. Systemic requirements involve core and subsidiary systems essential for data provision and the execution of budgeting processes.

Despite its potential benefits, many governmental organizations face significant challenges in effectively implementing operational budgeting due to deficiencies in these three domains. These challenges reduce transparency, result in inefficient resource allocation, and hinder accurate performance evaluation. Previous studies have largely focused on the theoretical advantages of operational budgeting, such as enhanced accountability and reduced corruption, while practical operational requirements, particularly in governmental contexts, remain underexplored. Research often addresses these requirements in a fragmented manner, considering informational, systemic, or communicational aspects separately, rather than analyzing their combined impact on successful implementation.

Although operational budgeting can improve financial discipline, service delivery, and organizational efficiency, challenges persist. These include difficulties in selecting and standardizing appropriate performance indicators, inconsistencies in data quality, and resistance to organizational cultural change. Addressing these obstacles requires applied research and practical models tailored to the local context. Accordingly, this study aims to examine the informational, systemic, and communicational requirements for operational budgeting in governmental organizations to facilitate its effective implementation. The central research question is: "What are the informational, systemic, and communicational requirements for operational budgeting in governmental organizations?"

Mothodology

This study employs a pragmatic research philosophy and a mixed-methods design to comprehensively identify and validate the requirements for operational budgeting in government organizations. Following an inductive approach, the research begins with qualitative data collection and analysis to uncover patterns and concepts, which are subsequently tested quantitatively to formulate validated propositions.

The qualitative phase utilizes thematic analysis to systematically identify informational, systemic, and communicational requirements. Data were collected through an extensive review of scholarly literature, organizational reports, and relevant documents, continuing until theoretical saturation was reached. Twelve key documents were analyzed in depth, following a structured eight-step process including extraction, coding, categorization, and synthesis of themes. Themes were classified into three hierarchical levels: basic, organizing, and overarching. To enhance reliability and minimize researcher bias, extracted themes were reviewed by a second expert, resulting in a 90% agreement rate. The outcome of the qualitative phase informed the development of a conceptual model.

In the quantitative phase, a structured questionnaire was administered to a randomly selected sample of 101 experts from governmental organizations with established budgeting mechanisms. Participants were required to have at least ten years of professional experience in budgeting, relevant academic qualifications, and demonstrated expertise in performance-based budgeting systems and financial technologies. The questionnaire assessed informational, communicational, and systemic requirements across 23 items, with content validity confirmed by subject-matter experts. Reliability analysis using Cronbach's alpha yielded a coefficient of0.83 indicating satisfactory internal consistency.

Quantitative data analysis involved descriptive statistics to evaluate central tendencies and dispersion, and inferential statistics, specifically one-sample mean tests, to assess the adequacy of identified requirements. Scores above three were considered favorable, while scores at or below three indicated insufficiencies. This mixed-methods approach allowed for the systematic identification, validation, and modeling of the practical requirements for effective operational budgeting in government institutions.

Findings

Informational requirements for operational budgeting are broadly categorized into effectiveness-oriented and efficiency-oriented requirements. Effectiveness-oriented information is top-down in nature and primarily applied within performance evaluation systems, whereas efficiency-oriented information is bottom-up, closely related to cost accounting and expenditure tracking.

Effectiveness-oriented informational requirements include developing the organization's mission statement and vision. The mission statement defines the organization's unique purpose, addressing key questions: what is provided (product or service), who the beneficiaries are, where the organization operates, why the organization exists, and how it distinguishes itself through unique competencies. The vision statement, built upon the mission and organizational values, outlines the desired future state, translating static mission directives into dynamic strategic objectives. Subsequently, long-term (typically five-year) and short-term (annual) goals are formulated to ensure alignment with the mission and vision. Operational or quantitative goals specify the anticipated level of outputs necessary to achieve overarching organizational objectives. Performance indicators, defined as measurable standards, facilitate monitoring progress toward these goals. In addition, current organizational performance data must be documented and accessible to management as a baseline for comparison with planned outputs.

Efficiency-oriented informational requirements focus on identifying cost resources and activity centers. Accurate classification of organizational costs and activity centers allows for precise resource allocation. Organizational activities, whether directly contributing to output production or serving as support functions, are identified and analyzed. Furthermore, activities forming organizational processes are mapped to reveal interdependencies and allow performance improvement using cost drivers and performance metrics. Additional relevant data, such as inflation rates and unused workforce capacity, inform budgeting projections and optimize resource utilization.

Communicational requirements emphasize the interconnections among resources, activities, outputs, and objectives. Cost drivers link resources to activities, defining the share of each activity in total resource consumption. Activity drivers subsequently allocate activities to outputs, specifying the contribution of each activity to the delivered outputs. This layered linkage ensures that budget allocations are strategically aligned, enables process improvement, and supports performance monitoring, thereby enhancing decision-making and the operationalization of organizational objectives.

Systemic requirements highlight the technological and infrastructural prerequisites for effective operational budgeting. Core components include performance evaluation systems based on balanced scorecards, activity-based costing (ABC) systems, integrated budgeting platforms, and subsystems for budget allocation, process improvement, human resource assessment and deployment, procurement and logistics, and management dashboards. Accrual accounting and contract management systems facilitate accurate reporting and connect outputs to performance measurement. Integration across organizational systems and a shared database reduce redundancy, ensuring consistent access to timely and reliable

information for all operational budgeting processes.

The informational, communicational, and systemic requirements identified through thematic analysis were subsequently evaluated through a structured questionnaire administered to 101 experts and practitioners in government budgeting. Statistical analysis confirmed that all 23 identified requirements were validated, with significance levels below 0.05, indicating consensus among specialists regarding the criticality of these requirements for effective operational budgeting in government institutions.

Discussion and Conclusion

The implementation of operational budgeting systems in government institutions requires the existence of robust infrastructural foundations; in their absence, such systems either cannot be established or result in superficial, one-off implementations lacking sustainability and repeatability. Successful adoption of operational budgeting necessitates the provision of these foundational elements prior to system deployment. This study systematically identifies the essential infrastructural requirements for effective operational budgeting from three perspectives: informational, communicational, and systemic. It is emphasized, however, that these requirements alone are insufficient, and complementary resources—such as human and financial capital—must also be available to support the system's effective establishment.

In response to the primary research question, this study examined the requirements for implementing operational budgeting in public-sector organizations and ultimately identified 23 key factors categorized under three overarching domains: informational, communicational, and systemic requirements, based on literature review and expert consultation. The informational requirements encompass effectiveness-oriented information—including organizational mission and vision, long-term and short-term plans, quantifiable operational objectives, performance indicators, and the current performance status of the organization—and efficiency-oriented information, such as the identification of cost resources and activity centers, mapping of organizational activities, determination of activity-influencing factors, and other critical data for operational budgeting.

Communicational requirements involve establishing linkages among resources, activities, outputs, and organizational objectives. Specifically, cost drivers allocate resources to activities, while activity drivers distribute activities to outputs, thereby creating structured connections that enable process improvement, performance monitoring, and strategic alignment within the budgeting framework.

Systemic requirements are further divided into primary and secondary system components. Primary system requirements include performance evaluation systems based on balanced scorecards (BSC), activity-based costing (ABC) systems, and the operational budgeting system itself. Secondary system requirements comprise budget allocation and fund disbursement subsystems, process improvement subsystems, human resource evaluation and recruitment subsystems, procurement and support subsystems, and managerial dashboards. Additionally, critical systemic elements that influence operational budgeting establishment include accrual accounting, contract management systems, and integration across organizational systems and shared databases.

This study adopts a comprehensive and integrative perspective to identify the informational, communicational, and systemic requirements essential for the implementation of operational budgeting in government organizations. Unlike previous studies that have addressed isolated aspects such as information technology infrastructure, real-time performance monitoring, intelligent decision-support systems, managerial performance evaluation, or cost accounting, this research systematically identifies all these requirements. Consequently, it provides a holistic understanding of the informational, communicational, and systemic needs necessary for the effective execution of operational budgeting.

K E Y W O R D S

Performance-Based Budgeting (PBB), Efficiency, Effectiveness, Informational Requirements, Communicational Requirements, Systemic Requirements.