Optimizing University Finances: Implementation of Performance-Based Budgeting at UPN "Veteran" Yogyakarta

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Abstract: *Budgeting is essential for organizational success, facilitating effective resource allocation, financial planning, and performance evaluation. Public Service Agencies (BLUs), notably higher education institutions, benefit from financial autonomy that allows flexible fund management to support institutional objectives. This study examines the implementation of Performance-Based Budgeting (PBB) at UPN "Veteran" Yogyakarta through a descriptive research design, focusing on processes, the relationship between budget allocation and institutional performance, and identifying challenges and opportunities. Findings reveal a significant increase in budget realization, rising from 78.2% in 2020 to 96.9% in 2023, positively influencing the attainment of several Key Performance Indicators (IKU). However, measuring budget allocations for individual IKU remains challenging due to overlapping activities that contribute to multiple indicators. This highlights the need for improved budgeting tools and tracking systems to strengthen the connection between expenditures and performance outcomes. The study underscores the importance of refining PBB practices to enhance resource utilization and align institutional performance with strategic goals in higher education.*

Keywords: Higher education institutions, Key performance indicators (IKU), Performance based-budgeting

1. Introduction

Budgeting is essential for organizational success, supporting effective resource allocation, financial planning, and performance monitoring. It helps set realistic targets, prioritize resources, and enhance accountability and transparency, fostering better financial discipline (Sivabalan et al., 2014; Becker et al., 2016). In Indonesia, the State Finance Law No. 17 of 2003 emphasizes efficiency and accountability in public finance management, supporting the adoption of Performance-Based Budgeting (PBB). PBB aligns budget allocations with measurable outcomes to improve accountability and service quality (Marsun & Mas'udin, 2020). This approach links spending to performance targets, motivating fiscal policy, and strategic resource management (Prabowo et al., 2017).

In Indonesia, the Public Service Agency (BLU) model provides government entities, including higher education institutions, with greater financial and operational flexibility to improve public services. BLUs allow institutions to generate and utilize revenue directly while remaining accountable to state regulations. This autonomy enables higher education institutions to manage funds better and support institutional goals. To align financial

management with these goals, higher education institutions must adopt Performance-Based Budgeting (PBB), linking budget allocations to measurable performance outcomes. PBB enhances resource allocation efficiency in higher education institutions while emphasizing its role in aligning budget use with institutional objectives and improving public service quality (Surianti & Dalimunte 2017). Key Performance Indicators (IKU) for State Higher education institutions (PTN) are benchmarks set by Indonesia's Ministry of Education to evaluate university performance in areas such as graduate quality, research output, and institutional reputation. These indicators align PTN goals with national priorities to support social and economic development. Under the Performance-Based Budgeting (PBB) framework, higher education institutions allocate budgets based on performance against IKU. For example, funding may depend on outcomes like graduate employability or research impact. This approach enhances accountability by linking budgets to measurable results and drives strategic focus, optimizing educational quality and national impact (Pratolo et al., 2020).

Higher education institutions require budgetary support for various activities like teaching, research, student services, and infrastructure. Without proper budgeting, resource shortages can affect quality and disrupt operations. Performance-based budgeting (PBB) aligns financial resources with measurable outcomes, requiring higher education institutions to allocate budgets based on key performance indicators (KPIs) or strategic goals. This shift from traditional expenditure-based budgeting to a results-driven approach ensures funds are directed toward activities that contribute to institutional objectives, such as graduate success and research impact. However, implementing PBB can face resistance from stakeholders unfamiliar with the framework and budget constraints due to fluctuating government funding and rising costs.

PBB in higher education institutions creates a culture of accountability and continuous improvement, as departments must justify their budget needs based on how well they support the university's goals. Implementing PBB fosters efficient resource management in higher education institutions by aligning expenditures with performance targets (Marzuki & Setiyadi, 2023). Furthermore, PBB enhances financial transparency, allowing stakeholders to track budget allocations and assess whether funds are optimally utilized for maximum impact (Tang et al., 2024). This research is vital to see the implementation of PBB in higher education, especially UPN "Veteran" Yogyakarta. Research on implementing performance-based budgeting (PBB) in higher education institutions is crucial for enhancing accountability, resource allocation, educational quality, and policy development. PBB ties budget allocations to measurable outcomes, fostering transparency in financial management and ensuring funds are directed toward achieving institutional goals (He & Ismail, 2023). Effective PBBs can help higher education institutions prioritize limited resources to maximize impact on core functions like teaching and research, leading to improved educational standards. Additionally, understanding the burdens in PBB implementation, such as imposing financial burdens on low-resource institutions, enables the identification of best practices and solutions for smoother adoption (Hagood, 2019). The findings from

such research can inform policymakers and administrators, ensuring that budget policies support long-term improvements in university performance and accountability.

Universities in Indonesia, including UPN "Veteran" Yogyakarta, face significant challenges in managing limited financial resources efficiently and transparently. Implementing a performance-based budgeting (PBB) system allows budget allocation that is more based on precise performance and outcome achievements, which in turn can improve accountability and efficiency in financial management. In addition, this research will also provide recommendations for policymakers at UPN "Veteran" Yogyakarta to improve budget planning and evaluation, as well as strengthen the relationship between the budget and the performance outcomes achieved. So, the main question to this research is "How is the implementation of performance-based budgeting (PBB) at UPN "Veteran" Yogyakarta in managing university finances?".

2. Literature Review

2.1. New Public Management Theory

New Public Management (NPM) is a transformative theory in public administration that emerged in the late 20th century, primarily introduced by Christopher & Hood, it represents a paradigm shift from traditional bureaucratic models to more market-oriented, performance-driven approaches. NPM incorporates various business practices into the public sector to enhance efficiency, effectiveness, and responsiveness in public service delivery (Abdullahi, 2024). New Public Management aims to improve the transparency and accountability of public services by applying management and other disciplines to public sector organizations (Indahsari & Raharja, 2020).

The philosophy and concept of NPM are derived from two different sources. The first is from private sector managerial practice known as "managerialism," the second source comes from economic theories, including public choice theory, agency theory, and transaction cost theory. The concept of New Public Management has seven main components: (1) Professional management in the public sector; (2) Existence of performance standards and performance measures; (3) Greater emphasis on output and outcome; (4) Breakdown of work units in the public sector; (5) Creating competition in the public sector; (6) Adoption of business sector management into public sector; (7) Emphasis on discipline and more significant savings in the use of resources (Indahsari & Raharja, 2021).

2.2. Performance Based-Budgeting

From the literature related to the definition of performance-based budgeting (PBB), there is a universal understanding that it is fundamentally a budgeting approach that links financial resources to measurable outcomes and performance results. This methodology aims to enhance the efficiency and effectiveness of public spending by ensuring that funds are allocated based on achieving specific objectives (Suwanda et al., 2021). Performance-based budgeting is the structured application of performance data to support budget decisions. This approach can directly affect the allocation of funds or serve as contextual input during budget planning, promoting greater transparency and accountability throughout the process. It

provides lawmakers and the public with clear information about spending objectives and outcomes (OECD, 2019). Moreover, performance budgeting is best understood as a part of a broader framework of complementary reforms aimed at building a results-oriented and accountable public sector, often called the "performance ecosystem" (OECD, 2019).

Performance-based budgeting aligns the required project costs with the anticipated outcomes of government expenditures, focusing on funded activities and their outputs (Suwanda et al., 2021). It also considers combining these outputs within programs to achieve desired impacts (outcomes). Implementing performance-based budgeting plays a vital role in enhancing the quality of higher education institutions. To successfully adopt this approach, higher education institutions must focus on management competence, organizational commitment, effective reward systems, and overall institutional quality (Lorensius & Tresia, 2021).

2.3. Key Performance Indicators (IKU)

The Key Performance Indicators (IKU) issued by the Minister of Education and Culture through the Decree of the Minister of Education and Culture Number 754/P/2020, 3/M/2021 and 210/M/2023 are new performance measures for higher education institutions to realize adaptive higher education institutions based on more concrete outputs. Higher education institutions are expected to be able to manifest development targets according to the Strategic Plan of the Ministry of Education, Culture, Research, and Technology (Kemdikbudristek) for 2020-2024 by increasing the capacity and quality of the education process and management of their responsibility through IKU-PTN. These indicators are integral to the Merdeka Belajar-Kampus Merdeka (MBKM) initiative, aiming to foster greater autonomy and innovation within Indonesian higher education institutions. Higher education institutions are encouraged to align their educational outcomes with national development goals and global standards by focusing on these performance metrics.

3. Method

The study uses a descriptive research design to examine the current implementation process of PBB, analyze the relationship between budget allocation and institutional performance in implementing PBB. In higher education, descriptive research plays a critical role in evaluating institutional performance, student demographics, and educational outcomes through analyzing existing data, including enrollment statistics, financial reports, and performance evaluations. While this approach offers valuable insights into trends and patterns, it does not seek to identify causal relationships. However, it is a foundational framework for further exploratory or explanatory research to uncover underlying causes. The data has been used are secondary data sources from 2020 until 2023. It involves institutional budget documents, financial reports, and performance evaluation reports. The research employs descriptive analysis to organize and interpret the collected data systematically. This involves a quantitative descriptive analysis that uses numerical data from financial and performance reports.

A multifaceted research methodology is employed to comprehensively evaluate the implementation of Performance-Based Budgeting (PBB) at UPN "Veteran" Yogyakarta and its alignment with Key Performance Indicators (IKU).

Table 1. List of Key Performance Indicators (IKU) of Higher Education Institutions

IKU Number	Description
IKU 1.1	**Percentage of Graduates Employed, Pursuing Further Studies, or Engaged in Entrepreneurship**
	This indicator measures the proportion of graduates who secure employment within a certain period after graduation, enroll in further education, or start their own businesses.
IKU 1.2	**Percentage of Students Participating in Off-Campus Experiences**
	This metric assesses the percentage of students involved in activities outside the campus environment, such as internships, research projects, or community service programs.
IKU 2.1	**Percentage of Lecturers Engaged in Off-Campus Activities**
	This indicator evaluates the proportion of faculty members participating in activities beyond the university, including industry partnerships, professional practices, or community engagement.
IKU 2.2	**Percentage of Lecturers Holding Professional Certifications or Recognized Expertise**
	This metric measures the percentage of lecturers who possess professional certifications or are acknowledged as experts in their respective fields.
IKU 2.3	**Number of Research and Community Service Outputs Recognized Internationally or Implemented by the Community per Number of Lecturers**
	This indicator assesses the ratio of research and community service outputs that have received international recognition or have been applied by the community to the total number of lecturers.
IKU 3.1	**Percentage of Study Programs Collaborating with Partners**
	This indicator assesses the proportion of academic programs that have established partnerships with external entities, such as industry, government, or other educational institutions.
IKU 3.2	**Percentage of Courses Implementing Case-Based or Project-Based Learning**
	This metric evaluates the percentage of courses that utilize case studies or project-based methods as part of their instructional approach.
IKU 3.3	**Percentage of Study Programs with International Accreditation**
	This indicator measures the proportion of study programs that have achieved international accreditation, reflecting global recognition of their quality.
IKU 4.1	**SAKIP Rankings**
	This indicator measures the performance of the institution's Government Performance Accountability System (SAKIP) rating.
IKU 4.2	**Budget Performance Value for Implementation of RKA-K/L**
	This metric assesses the budget performance score based on implementing the institution's Work Plan and Budget of Ministries/Agencies (RKA-K/L).

This approach integrates descriptive, contextual, implementation, performance, and financial analyses to ensure a holistic understanding of the topic.

a. Descriptive Data Analysis

This method involves collecting and analyzing quantitative data to realize IKU and budget over time. Key components include:

1) IKU Achievement Year-on-Year: Tracking the university's performance in meeting specific IKU across multiple years to identify trends, improvements, or areas of stagnation.
2) Budget Realization Year-on-Year: Analyzing annual budget utilization to assess whether financial allocations align with performance outcomes and identify patterns of underutilization or overspending. This descriptive analysis provides a foundation for understanding the current performance and financial management state, offering insights into whether resources effectively drive IKU achievement.

b. Contextual Analysis

Contextual analysis explores the internal and external factors that influence the implementation of PBB at UPN "Veteran" Yogyakarta. This involves examining the university's mission, strategic goals, and government regulations to align PBB with institutional priorities.

c. Implementation Process Analysis

This component focuses on the practical application of PBB at the university, investigating the steps taken to implement PBB, including policy formulation, stakeholder involvement, the cascading of performance agreements related to IKU, and the system used in the institution.

d. Key Performance Indicator (IKU) Analysis

This analysis evaluates the university's performance on specific IKU using the SMART criteria (Specific, Measurable, Achievable, Relevant, Time-Bound). Key areas include highlighting correlations between budget allocations and IKU outcomes. This step ensures that performance metrics are critically assessed to provide actionable insights into how PBB influences outcomes.

e. Financial Analysis

Financial analysis examines the relationship between budget allocation, realization, and performance outcomes to evaluate the efficiency and accountability of PBB. This involves assessing budget alignment with IKU and determining whether resources are allocated to high-priority areas that directly support performance goals.

4. Result

Higher education institutions (PTN) must achieve the Key Performance Indicator (IKU) target yearly as a performance benchmark in education, research, community service, and governance. IKU aims to improve the quality and relevance of higher education, support national development, and strengthen global competitiveness. Through continuous planning and evaluation, PTN is expected to meet the IKU target to encourage progress in the quality of education and its contribution to society.

Table 2 shows the performance of Key Performance Indicators (IKU) from 2020 to 2023, divided into three categories: IKU that underperformed (<100%), met their targets (100%), and exceeded their targets (>100%). Over the years, there have been clear trends in

both achievements and challenges. In 2020, 8 IKU exceeded their targets, showing strong overall performance, while only one underperformed. However, this high performance started to decline in 2021, with fewer IKU (5) exceeding targets and more (3) underperforming. While 2 IKU met their targets precisely in 2021, this was the best year for precise goal achievement. By 2022, there was no improvement in underperforming IKU, which remained at 3, but the number of IKU exceeding targets rose to 7, showing some recovery. However, the IKU still needs to achieve its targets, suggesting challenges in goal alignment. In 2023, performance declined further, with 4 IKU underperforming—the highest across the four years—and only 5 IKU exceeding targets.

Table 2. Number of IKU Achievements per Category

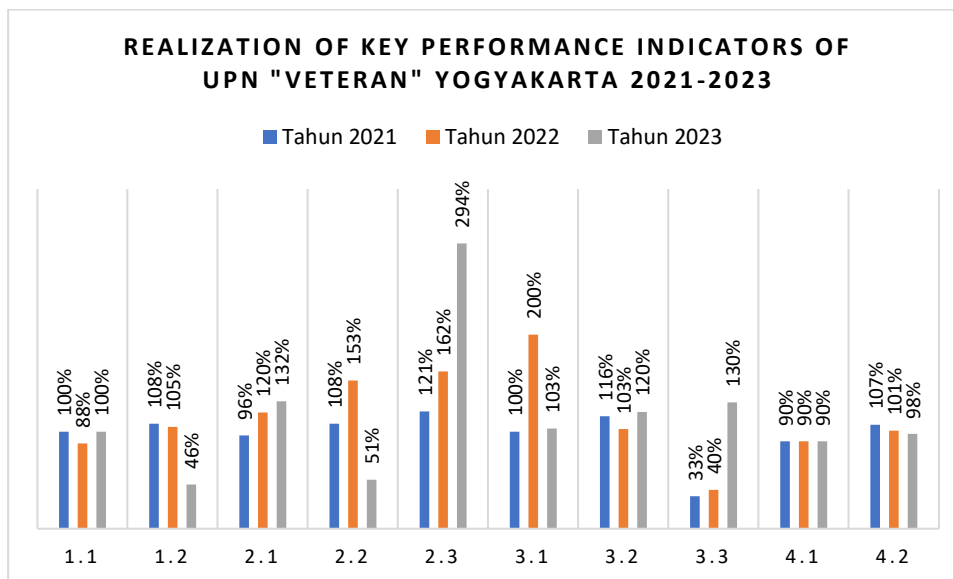| Year	IKU < 100%	IKU = 100%	IKU > 100%
2020	1	1	8
2021	3	2	5
2022	3	0	7
2023	4	1	5

Figure 1. Realization of Key Performance Indicators of UPN "Veteran" Yogyakarta 2021-2023

The chart illustrates the performance achievements of UPN "Veteran" Yogyakarta's Key Performance Indicators (IKU) from 2021 to 2023, highlighting variations in percentage attainment across the indicators. It provides a clear view of fluctuations in performance for each IKU over the three years. Several notable trends emerge. IKU 1.1 (Graduate Outcomes) shows steady progress, increasing achievement from 88% in 2021 to 100% in 2023, indicating improved employability and related metrics. Conversely, IKU 1.2 (Off-Campus Experiences) exhibits a decline, dropping from 108% in 2021 to 105% in 2022 and further to 46% in 2023, highlighting a significant underperformance. IKU 2.2 (Certified Lecturers) improved significantly from 108% in 2021 to 159% in 2023, reflecting successful efforts to enhance faculty qualifications. Meanwhile, IKU 2.3 (Research Outputs) achieved

exceptional progress, surging from 121% in 2021 to 294% in 2023, showcasing intense research and community impact performance.

However, some indicators, such as IKU 3.3 (International Collaboration), show stagnation, maintaining 33%-40% across the years, signaling a need for increased focus on partnerships and global engagement. Similarly, IKU 4.2 (Budget Utilization) slightly declined from 107% in 2021 to 98% in 2023, indicating potential challenges in aligning budgets with institutional goals. Overall, the data highlights areas of success, such as research outputs, but also reveals critical underperformance in student experiential learning and international collaboration, which require strategic intervention to improve outcomes in the coming years.
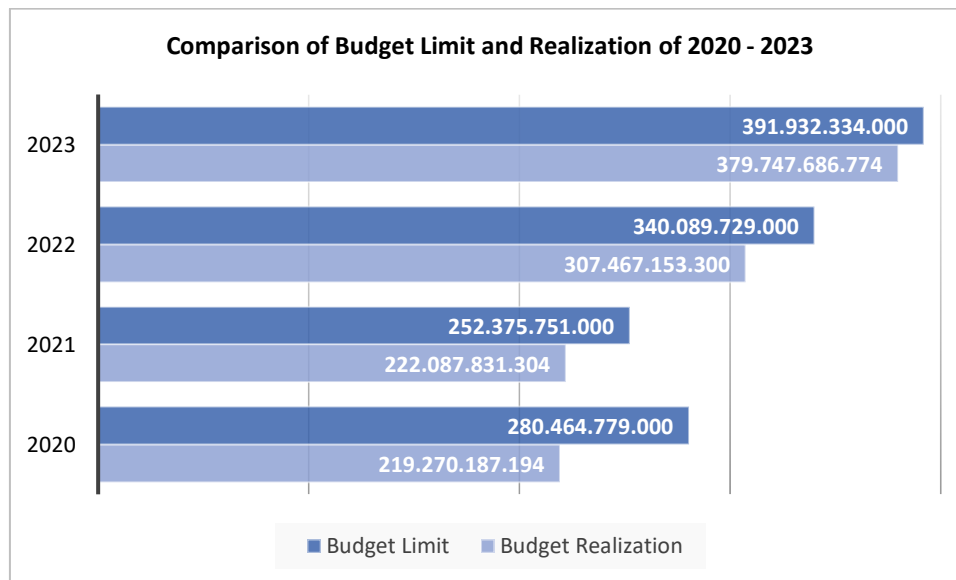

Figure 2. Comparison of Budget Limit and Realization of 2020-2023

The chart compares UPN "Veteran" Yogyakarta's budget limit and realization from 2020 to 2023, highlighting trends in financial allocation and utilization. In 2020, the budget limit was IDR 280.5 billion, but the realization fell significantly to 78.2% (IDR 219.3 billion), indicating notable underutilization. By 2021, the gap narrowed, with a budget limit of IDR 252.4 billion and realization improving to 88.0% (IDR 222.1 billion). In 2022, the budget limit and realization increased significantly, reaching IDR 340.1 billion and 90.4% (IDR 307.5 billion), reflecting higher alignment and better execution. By 2023, the budget limit peaked at IDR 391.9 billion, and realization reached its highest at 96.9% (IDR 379.7 billion), showing substantial progress in budget execution. This percentage-based comparison highlights consistent improvement in budget utilization over the four years, with a significant increase from 78.2% in 2020 to 96.9% in 2023, reflecting enhanced financial management and resource optimization. While this trend demonstrates the institution's growing capacity to manage resources effectively, the persistent gap between allocation and realization suggests room for further improvement in planning and execution. Overall, it shows UPN "Veteran" Yogyakarta's efforts to align expenditures with institutional priorities, ensuring better financial performance over time.

5. Discussion

5.1. Contextual Analysis

Implementing Performance-Based Budgeting (PBB) in higher education institutions enhances efficiency, accountability, and alignment with strategic goals. By linking financial allocations to measurable outcomes, PBB ensures that resources are directed toward programs and activities that demonstrate effectiveness and contribute to institutional objectives. This approach also promotes transparency in financial management, enabling stakeholders to assess how funds are utilized to achieve specific educational and research outcomes (Wang, 2019). A primary goal of PBB is to improve resource allocation efficiency. By focusing on performance metrics, institutions can identify and fund programs that deliver the highest impact, optimizing the use of limited resources. This method encourages continuous improvement and innovation as departments strive to meet or exceed performance targets to secure funding. Additionally, PBB fosters accountability by requiring institutions to demonstrate the results of their expenditures, aligning financial decisions with institutional missions and strategic plans (Mauro et al., 2016).

PBB aligns institutional activities with broader strategic priorities, including national development goals. Higher education institutions are incentivized to contribute to societal needs by tying funding to specific performance indicators, such as producing a skilled workforce, advancing research, and fostering community engagement. This alignment ensures that higher education institutions focus on internal objectives and address external expectations and responsibilities (Ahmad et al., 2019). The implementation of Performance-Based Budgeting (PBB) in Indonesia's public higher education institutions, including UPN "Veteran" Yogyakarta, is supported by various legal and policy frameworks. Law No. 17 of 2003 on State Finance introduced performance-based principles in budgeting, emphasizing outcomes and outputs rather than inputs.

Additionally, Law No. 12 of 2012 on Higher Education mandates financial autonomy for public higher education institutions, provided they adhere to performance-based financial accountability. The Government Performance Accountability System (SAKIP), established under Presidential Regulation No. 29 of 2014, integrates performance planning, measurement, and evaluation across government institutions, including higher education. These frameworks ensure that higher education budgeting with measurable performance indicators fosters efficiency, transparency, and alignment with national educational priorities (Jongbloed et al., 2018; Sulila, 2022; Amalia, 2023).

5.2. Implementation Process Analysis

By implementing PBB, UPN "Veteran," Yogyakarta can optimize resource utilization, support continuous improvement in teaching and research, and contribute effectively to national development goals, positioning itself as a competitive and accountable higher education institution. Implementation Performance Based-Budgeting in UPN "Veteran" Yogyakarta using four stages as shown below:

a. Planning: Formulating 5-year performance targets that are documented into a Strategic and Business Plan. The Strategic and Business Plan formulation is adjusted to the University's Business and Budget Plan and Budget Performance Plan, which aligns with the Ministry of Education, Culture, Research, and Technology-carrying out a priority scale for budget preparation for activities in the current year.

b. Budgeting: The work unit will prepare an initial budget one year before the current period is adjusted to the performance target. The budget committee team validates and reviews the budget proposal to ensure compliance with applicable regulations, volume rationality, suitability of units, and priority of proposed activities. The Planning Unit will compile the results of the review of all units and review them by Echelon I of the Planning Bureau, Inspectorate General, and Directorate General of Budget.

c. Executing: The budget for each unit will be given according to the POK ceiling and managed independently according to the proposed allocation. According to the proposal, the related unit will carry out the realization and must fulfill all administrative processes. If a change in policy or price adjustment impacts activities with budget usage, the unit will coordinate with the Planning Unit to make a budget revision.

d. Monitoring: The Planning Unit and Internal Supervisory Unit conduct quarterly periodic monitoring to see the absorption achievement and the evaluation process of program and budget implementation. This activity is used to know the budget absorbed by what has been submitted in the form of a Fund Withdrawal Plan following the achievement of the IKU target.

At UPN "Veteran" Yogyakarta, several key actors are involved in implementing Performance-Based Budgeting (PBB). The Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) sets the framework for Key Performance Indicators (KPIs) like graduate employability and research outputs. The Rector and Planning Unit designed the university's budget to align with these KPIs. Faculties and departments submit budget proposals for specific goals, such as improving research or student outcomes. The Internal Supervisory Unit monitors budget implementation while the Planning Unit measures progress. External bodies like the Supreme Audit Board (BPK) ensure transparency and accountability in financial management.

The system used is an information system that contains a cost plan or money spent in a certain period to implement a program owned by UPN "Veteran" Yogyakarta, namely Pergiwa. The use of this system positively impacts performance in several ways. First, it facilitates budget planning and reporting from various funding sources. It also ensures accuracy and timeliness in collecting, processing, and reporting data related to budget funds within a specified period. The system helps increase transparency in how funds (budgets) are planned and provides comprehensive audit records related to the budget plan. Additionally, it supports better decision-making in future budget planning, ensuring more efficient and informed financial management for the upcoming periods.

5.3. Key Performance Indicator (IKU) Analysis

IKU	Analysis SMART					SMART Status
	Specific	**Measurable**	**Achievable**	**Relevant**	**Time-Bound**	
IKU 1.1	Focused on graduates' employability, further studies, or entrepreneurship.	Percentage of graduates meeting criteria.	Realistic with career services and alumni tracking systems.	Aligns with workforce readiness and educational quality goals.	Evaluated within 6 months of graduation.	Fully SMART
IKU 1.2	Targets student participation in off-campus experiences.	Percentage of students involved in internships, research, etc.	Feasible with institutional partnerships and support.	Relevant to employability and practical skill development.	Linked to academic years or program schedules.	Fully SMART
IKU 2.1	Targets lecturers' involvement in off-campus activities.	Percentage of faculty engaged in external activities.	Achievable with adequate incentives and industry partnerships.	Enhances teaching and research quality with real-world expertise.	Evaluated annually.	Fully SMART
IKU 2.2	Tracks lecturers with professional certifications or recognized expertise.	Percentage of certified or recognized faculty.	Requires institutional support for certifications and training.	Improves teaching credibility and academic standards.	Assessed annually.	Fully SMART
IKU 2.3	Evaluates research and community service outputs recognized internationally or implemented locally.	The ratio of outputs to total faculty members.	It is challenging due to reliance on research funding and external collaborations.	Strengthens societal impact and research reputation.	Tracked annually or per project cycle.	Mostly SMART
IKU 3.1	Measures study programs collaborating with external partners.	Percentage of programs with partnerships.	Feasible with strong industry or government partnerships.	Relevant to collaboration and societal relevance goals.	Evaluated annually.	Mostly SMART
IKU 3.2	It focuses on courses that implement case-based or project-based learning.	Percentage of courses adopting these methods.	Achievable with curriculum updates and faculty training.	Relevant to active learning and problem-solving skills.	Linked to semester schedules or curriculum revisions.	Fully SMART
IKU 3.3	Tracks study programs achieving international accreditation.	Percentage of internationally accredited programs.	It is challenging due to resource intensity and global standards.	Relevant to improving global recognition and academic standards.	Accreditation timelines provide clear deadlines.	Mostly SMART
IKU 4.1	Measures performance through SAKIP ratings.	Achievement of SAKIP rating levels.	Feasible with effective performance management systems.	Aligns with institutional accountability and transparency goals.	Reviewed annually.	Fully SMART
IKU 4.2	Tracks budget performance based on Work Plan and Budget implementation (RKA-K/L).	Budget performance score.	Requires effective budget planning and execution.	Ensures financial accountability and resource alignment.	Evaluated annually.	Fully SMART

IKU indicators generally align well with PTN goals, as they address essential aspects of higher education performance such as employability, research, teaching quality, and global engagement. However, specific alignment depends on each PTN's mission, vision, and strategic priorities. A thorough gap analysis can help PTN optimize its strategies to

leverage IKU as a performance measurement tool. The table outlines Key Performance Indicators (IKU) that universities use to assess their performance in graduate employability, faculty engagement, research output, and financial management. These KPIs are analyzed using the SMART criteria (Specific, Measurable, Achievable, Relevant, Time-Bound), ensuring they are clear, measurable, and aligned with institutional goals. The relationship with Performance-Based Budgeting (PBB) is significant, as PBB links budget allocation to achieving these specific performance outcomes.

Through PBB, universities can allocate resources efficiently to areas that directly contribute to achieving their goals, such as funding for career services, research facilities, or faculty development programs. KPIs like employability, faculty certifications, and research outputs help ensure financial resources are used to improve university performance. Additionally, PBB fosters transparency and accountability by tying budget decisions to measurable results, enabling universities to adjust performance-based funding. Integrating PBB with these SMART KPIs allows universities to optimize resource allocation, enhance institutional performance, and ensure that financial investments contribute directly to strategic goals such as academic excellence, societal impact, and global recognition.

5.4. Financial Analysis

The linkage between budget realization and achieving Key Performance Indicators (IKU) at UPN "Veteran" Yogyakarta from 2020 to 2023 shows a clear relationship between resource utilization and performance outcomes. As the budget realization improved over the years, from 78.2% in 2020 to 96.9% in 2023, there was a noticeable enhancement in the achievement of certain IKU, particularly those related to research outputs (IKU 2.3) and collaboration programs (IKU 3.1). For example, in 2023, with nearly full budget utilization, IKU 2.3 achieved 294%, and IKU 3.1 reached 200%, demonstrating how increased funding and effective use of resources can lead to exceptional performance in specific areas.

However, the linkage also highlights disparities in performance. Despite higher budget realization, IKU, off-campus experiences (IKU 1.2), and international collaborations (IKU 3.3) consistently underperformed across all years. This suggests that improved budget utilization is only sufficient with strategic planning and targeted resource allocation. While a higher budget supports better overall performance, its impact varies depending on how effectively resources are directed toward achieving specific IKU. Thus, aligning budget priorities with underperforming indicators is crucial to ensuring balanced progress across all performance metrics.

Measuring the budget allocation for each Key Performance Indicator (IKU) at UPN "Veteran," Yogyakarta, is challenging due to overlapping activities contributing to multiple indicators. This is a common issue in Performance-Based Budgeting (PBB) at higher education institutions, where programs have interrelated goals. The difficulty reflects the shared use of resources across activities. More detailed tracking, improved costing methods, and integrated financial performance management systems are needed to address this. While perfect allocation is challenging, optimizing PBB implementation can enhance transparency and better align budgets with institutional goals.

6. Limitation and Suggestion

This research on implementing Performance-Based Budgeting (PBB) in higher education faces several limitations. Data availability and accuracy are significant challenges, as institutions often need systems to link spending with outcomes or provide consistent information. The complexity of budget allocation makes it hard to assign costs to specific Key Performance Indicators (KPIs), significantly when activities contribute to multiple goals. Stakeholder resistance and limited capacity for measuring performance can reduce PBB's effectiveness, often favoring quantitative over qualitative metrics. Additionally, resource constraints and external factors like policy changes or economic conditions affect implementation. These challenges highlight the need for tailored analyses, better data systems, and balanced evaluations to fully understand PBB's impact, particularly at UPN "Veteran" Yogyakarta. Future research on Performance-Based Budgeting (PBB) in higher education should focus on practical improvements and long-term impacts. It should explore best practices, the use of technology for performance tracking, and ways to ensure fair resource allocation. Understanding stakeholder perspectives and improving performance indicators to include outcomes like innovation is also essential. Additionally, studies should examine the balance between government policies and university autonomy and the role of leadership in implementation. These efforts can help refine PBB and make it more effective for higher education institutions.

Reference

Abdullahi, F. M. (2024). Introduction to new public management (NPM). *Global Scientific Journal, 12*(5), 1404-1417.

Ahmad, A. R., Yee, K. S., & Farley, A. (2019). Exploring the rationale of performance-based funding for Malaysian public universities. *Journal of Education and e-Learning Research*, *7*(1), 15–21. https://doi.org/10.20448/journal.509.2020.71.15.21

Amalia, M. M. (2023). Enhancing accountability and transparency in the public sector: A comprehensive review of public sector accounting practices. *The ES Accounting And Finance*, *1*(03), 160-168. https://doi.org/10.58812/esaf.v1.i03

Becker, S. D., Mahlendorf, M. D., Schäffer, U., & Thaten, M. (2016). Budgeting in times of economic crisis. *Contemporary Accounting Research, 33*(4), 1489-1517. https://doi.org/10.1111/1911-3846.12155

He, L., & Ismail, K. (2023). Do staff capacity and performance-based budgeting improve organizational performance? empirical evidence from Chinese public universities. *Humanities and Social Sciences Communications (10:29, 15*(2), 1-16. https://doi.org/10.1057/s41599-023-01523-2

Hagood, L. P. (2019). The Financial benefits and burdens of performance funding in higher education. *Educational Evaluation and Policy Analysis, 41*(2), 189-213. https://doi.org/0.3102/0162373719837318

Indahsari, C. L., & Raharja, S. J. (2002). New public management (NPM) as an effort in governance. *Jurnal Manajemen Pelayanan Publik, 3*(2), 73-129. https://doi.org/10.24198/jmpp.v3i2.25342

Jongbloed, B., Vossensteyn, H., van Vught, F., & Westerheijden, D. F. (2018). Transparency in higher education: The emergence of a new perspective on higher education governance. *European higher education area: The impact of past and future policies*, 441-454. https://doi.org/10.1007/978-3-319-77407-7_27

Lorensius, W., & Tresia, Y. (2021). Kajian literatur: Implementasi performance-based budgeting pada institusi pendidikan tinggi di Indonesia. *Jurnal Pendidikan dan Kewirausahaan, 9*(1), 118–131. https://doi.org/10.12345/jpku.v9i1.1234

Marsun & Mas'udin, S. M. (2020). Does the performance-based budgeting work in Indonesia? *International Journal of Scientific & Technology Research, 9*(2), 3207-3214.

Mauro, S. G., Cinquini, L., & Grossi, G. (2016). Insights into performance-based budgeting in the public sector: A literature review and a research agenda, *Public Management Review*, 19:7, 911-931. https://doi.org/10.1080/14719037.2016.1243810

Marzuki., & Setiyadi, D. (2023). Implementation of performance-based budgeting in higher education institutions in Indonesia. *Journal of Islamic Business Management Studies, 4*(2), 30-42. https://doi.org/10.51875/jibms.v4i2.251

OECD. (2019). *OECD good practices for performance budgeting*. OECD Publishing.

Pratolo, S., Sofyani, H., & Anwar, M. (2020). Performance-based budgeting implementation in higher education institutions: Determinants and impact on quality. *Cogent Business & Management*, *7*(1). 1786315. https://doi.org/10.1080/23311975.2020.1786315

Prabowo, T., Leung P., & Guthrie, J. (2017). Reforms in public sector accounting and budgeting in Indonesia (2003-2015): Confusions in Implementation. *Journal of Public Budgeting, 29*(1), 104-147. https://doi.org/10.1108/JPBAFM-29-01-2017-B005

Sivabalan, P., Booth, P., Malmi, T., & Brown, D. A. (2014). An exploratory study of operational reasons to budget. *Accounting & Finance, 54*(3), 723-752. https://doi.org/10.1111/acfi.12007

Sulila, I. (2022). The Effect Transparency, Accountability, responsibility, independency and fairness on the governance performance of State Universities in Indonesia. *Journal of Public Administration and Governance*, *12*(1), 142152-142152. https://doi.org/10.5296/jpag.v12i1.19493

Surianti, M., & Dalimuthe, A.R. (2017). The Implementation of performance based budgeting in public sector (Indonesia case: A Literature review). *International Journal of Developing and Emerging Economies, 5*(2), 52-67. https://doi.org/10.37745/ijdee.13.

Suwanda, D., Moenek, R., Lukman, S., & Syaifullah, M. (2021). The implementation of performance-based budgeting through a money follow program in impressing budget corruption. *Jurnal Ilmiah Universitas Batanghari Jambi, 21*(2), 871–878. http://dx.doi.org/10.33087/jiubj.v21i2.1576

Tang, W., Song, Q., & Huang, X. (2024). Implementation status and optimization strategy of the integration of budget and performance management in colleges and universities. *Accounting and Corporate Management, 6(3), 91-99. https://doi.org/10.23977/acccm.2024.060312*

Wang, D. (2019). Performance-based resource allocation for higher education institutions in China. *Socio-Economic Planning Sciences, 65*, 66-75. https://doi.org/10.1016/j.seps.2018.01.004