

PERFORMANCE MANAGEMENT IN ISLAMIC BOARDING SCHOOLS: IMPLEMENTING BALANCED SCORECARD AND KEY PERFORMANCE INDICATORS

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Abstract

Educational institutions face increasing demands for accountability, effectiveness, and strategic performance management. This study aims to examine the implementation of the Balanced Scorecard (BSC) as a performance management tool in an Islamic boarding school. A qualitative case study design was employed at Nurul Fikri Boarding School Lembang. Data were collected through semi-structured interviews with school leaders, teachers, and educational staff, supported by observations and document analysis. The data were analyzed using thematic analysis to identify key patterns related to BSC implementation. The findings reveal that BSC implementation has been initiated and is primarily understood at the leadership level, while understanding among teachers and staff remains uneven. Performance indicators are formulated through a predominantly top-down process within each work unit and implemented through routine performance evaluations; however, their application is not yet optimal due to limited data availability and constrained human resource capacity. The study also finds that the integration of Islamic values into performance indicators has not been systematically standardized. Leadership commitment, foundation support, and the availability of strategic planning documents were identified as key supporting factors for BSC implementation. In conclusion, while the Balanced Scorecard has begun to function as a performance management framework, strengthening understanding across organizational levels, improving data systems, and developing Islamic values-based performance indicators are necessary to enhance its effectiveness. These findings imply the need for capacity building, data infrastructure development, and contextual adaptation of BSC in Islamic educational institutions.

Keywords: balanced Scorecard, Islamic boarding school, key performance indicators, performance management, quality assurance

Introduction

Educational institutions are increasingly required to demonstrate accountability, effectiveness, and strategic alignment in managing their organizational performance (Amboro, 2016; Faridli et al., 2024; Rosa et al., 2025). Performance management is not just a control mechanism, but a systematic process that allows organizations to align daily activities with strategic goals, evaluate achievements, and continuously improve institutional quality (Dally, 2014). In practice, schools face growing pressure from stakeholders—such as parents, foundations, and regulators—to provide transparent and measurable evidence of performance outcomes. Empirical studies indicate that educational institutions implementing structured performance management systems tend to experience improvements in organizational effectiveness, clearer performance targets, and stronger accountability mechanisms (Ahyani et al., 2024; He & Ismail, 2023). These

findings suggest that performance management has become a fundamental requirement for educational institutions seeking to sustain quality and competitiveness in contemporary educational environments.

Non-profit organizations, including educational institutions, have increasingly adopted performance management practices originally developed in the business sector to enhance accountability, efficiency, and organizational learning. Experts argue that although educational institutions differ from profit-oriented organizations in terms of mission and values, the application of structured performance management frameworks can support more effective decision-making and resource utilization. In educational settings, performance management practices have been shown to contribute positively to service quality and institutional effectiveness, despite challenges related to limited resources and high workloads. Empirical evidence demonstrates that schools applying systematic performance measurement approaches are better positioned to monitor progress, identify areas for improvement, and respond strategically to external demands (Hersberger-Langloh et al., 2021; Speckbacher, 2024; Terzieva et al., 2025).

One of the most widely adopted performance management frameworks in public and non-profit organizations is the Balanced Scorecard (BSC). Conceptually, the BSC translates an organization's vision and strategy into a coherent set of performance measures across multiple perspectives, enabling a balanced evaluation of both financial and non-financial dimensions. In educational contexts, the BSC provides a structured framework that helps schools operationalize strategic goals, improve internal processes, and support organizational learning. Empirical studies report that the implementation of the BSC in educational institutions contributes to improved strategic alignment, enhanced communication, better staff development, and increased employee satisfaction (Maryati et al., 2021; Rocha et al., 2023). These results highlight the relevance of the BSC as a strategic performance management tool for educational organizations.

For educational institutions, the effectiveness of the Balanced Scorecard is closely linked to the development of appropriate Key Performance Indicators (KPIs) that translate strategic objectives into measurable targets. Researchers emphasize that well-designed KPIs support accountability, transparency, and continuous performance monitoring by providing concrete benchmarks for evaluating achievement. Empirical findings suggest that schools integrating KPIs within the BSC framework are more capable of conducting systematic performance evaluations and supporting data-driven decision-making processes (Nafal et al., 2024; Rodrigues et al., 2021; Saksono & Bernardus, 2023a). However, the development and implementation of KPIs in educational institutions remain complex, particularly when institutional missions extend beyond measurable academic outcomes.

This challenge is especially evident in Islamic boarding schools in Indonesia, where educational objectives encompass not only academic achievement but also character formation and the internalization of Islamic values. Studies indicate that the implementation of performance management frameworks in Islamic educational institutions is still limited and often requires contextual adaptation to align with religious and cultural characteristics (Rahmawati, 2022; Rizki & Dimas, 2025). Empirical evidence further shows that performance measurement in Islamic boarding schools frequently relies on administrative and quantitative indicators, while spiritual and value-based dimensions are insufficiently integrated into formal evaluation systems. These findings suggest the need for a more context-sensitive and value-oriented approach to performance management in Islamic boarding schools.

Although several studies have examined performance management and Balanced Scorecard implementation in educational institutions, empirical research focusing on Islamic boarding schools remains scarce. Existing studies have largely concentrated on higher education institutions, theoretical discussions, or organizational-level analyses, with limited attention to the practical

implementation of the BSC in secondary Islamic educational settings. Moreover, few studies have explored how the Balanced Scorecard operates in daily performance management practices within Islamic boarding schools. This gap highlights the need for in-depth qualitative research to understand how the BSC is implemented in practice and how it can be adapted to the unique characteristics of Islamic educational institutions.

Accordingly, this study aims to examine the implementation of the Balanced Scorecard as a performance management framework in an Islamic boarding school. To guide the investigation, the following research questions are formulated:

1. How is the Balanced Scorecard implemented in performance management practices at an Islamic boarding school?
2. What challenges and supporting factors influence the implementation of the Balanced Scorecard in this context?

By addressing these questions through a qualitative case study at Nurul Fikri Boarding School Lembang, this research contributes to the existing literature by providing empirical insights into Balanced Scorecard implementation in Islamic boarding schools and offering practical implications for strengthening strategic performance management in value-based educational institutions.

Literature Review

This literature review examines three interconnected concepts essential to understanding performance management in Islamic boarding educational institutions: school performance management frameworks and their theoretical foundations, the Balanced Scorecard as a strategic management tool in educational contexts, and Key Performance Indicators as operational measures of organizational effectiveness. These topics are examined because they form the conceptual foundation for understanding how Islamic boarding schools can systematically measure, monitor, and improve organizational performance while maintaining fidelity to Islamic educational values and principles. The review particularly emphasizes challenges and barriers specific to implementing BSC in Islamic boarding educational institutions, recognizing that Islamic boarding schools operate within distinctive contexts that differ significantly from secular institutions.

School performance management

Performance management is a proactive methodology that focuses on improving work results through the stages of planning, monitoring, and enhancing employee capabilities to achieve organizational targets (Armstrong, 2009). In the context of education, performance management can be defined as a set of procedures designed to ensure that all school personnel, including school leaders, teachers, and administrative staff, contribute maximally to achieving the strategic goals of the educational institution (Reeves et al., 2012). The implication is that performance management in a school environment encompasses not only students' academic achievement but also service quality, the efficiency of the teaching and learning process, and the satisfaction levels of all stakeholders (Zbar et al., 2007).

The primary focus of performance management in educational institutions is to create a work environment that prioritizes quality, accountability, and continuous improvement. When implemented in school settings, this objective is realized through the enhancement of teaching and learning quality, the optimization of institutional asset utilization, and compliance with nationally established educational standards. The main pillars supporting performance management in

schools include the systematic integration of planning, implementation, supervision, and evaluation stages, all grounded in empirical evidence (Hoy & Miskel, 2008).

The effectiveness of educational institutions can be evaluated through several dimensions, including input, process, output, and outcome. The input dimension encompasses the availability of qualified human resources, adequate physical facilities, and supportive policies. The process dimension refers to the implementation of teaching and learning activities, curriculum management, and student services. The output dimension reflects students' academic achievement, success in competitions, and levels of stakeholder satisfaction. Meanwhile, the outcome dimension relates to long-term impacts, such as the institution's public image and alumni contributions to society (Mulyasa, 2021).

In Islamic-based educational institutions, performance assessment additionally includes efforts to cultivate noble character and moral values as integral components of achieving spiritual educational goals. This distinctive characteristic of Islamic boarding schools requires performance management systems that balance academic indicators with measures of spiritual development. Consequently, integrated evaluation frameworks must be developed to honor both dimensions of Islamic education.

School performance is influenced by various internal and external factors, including principal leadership, teacher competence, the availability of facilities and infrastructure, and parental and community participation. Effective leadership positively influences teacher motivation and the successful implementation of school programs. Professional and competent teachers enhance the quality of learning. Adequate facilities support instructional activities, while external support contributes to a positive school climate. In Islamic boarding schools, additional influencing factors include institutional commitment to Islamic principles, the integration of Islamic values into daily operations, and the alignment of school practices with Islamic educational philosophy.

Balanced scorecard in educational institutions

The concept of the Balanced Scorecard originated from the work of Robert S. Kaplan and David P. Norton in 1990 through their research project entitled *Performance Measurement in the Organization of the Future*. Their study highlighted that financial performance indicators alone were insufficient to provide a comprehensive assessment of organizational effectiveness. The framework was subsequently introduced to a broader audience through their seminal article, "*The Balanced Scorecard—Measures That Drive Performance*," published in the January–February 1992 issue of Harvard Business Review. This foundational publication established the Balanced Scorecard as a strategic management system that enables organizations to translate their vision and mission into coherent strategic objectives and actionable plans. As further emphasized by Soemohadiwidjojo (2024), the Balanced Scorecard functions not merely as a measurement tool but as an integrated strategic management framework.

The Balanced Scorecard is widely recognized as a performance measurement system that complements traditional financial indicators with strategic non-financial measures, thereby providing managers with a more comprehensive and balanced view of organizational performance (Kaplan & Norton, 1996). Kaplan and Norton proposed four interrelated perspectives that form the foundation of this framework. The financial perspective focuses on fiscal sustainability and resource management. The customer perspective examines stakeholder satisfaction and value creation. The internal business process perspective evaluates operational efficiency and effectiveness. Finally, the learning and growth perspective assesses organizational capacity for innovation, human resource development, and continuous improvement. These four perspectives are interconnected and mutually reinforcing rather than independent dimensions. Together, they

create an integrated strategic framework that aligns organizational activities with long-term goals (Maryati et al., 2021).

In increasingly complex and dynamic organizational environments, reliance solely on financial indicators is no longer adequate to capture overall performance. Historically, many institutions evaluated success primarily through financial reporting, often overlooking critical non-financial dimensions such as customer satisfaction, internal process quality, and organizational learning capacity. However, these non-financial aspects play a crucial role in sustaining long-term competitiveness and institutional effectiveness (Istiarsono, 2022). In response to this limitation, the Balanced Scorecard offers a systematic mechanism for translating strategic vision into measurable operational objectives. By linking strategic intent with tactical implementation, the framework strengthens coherence between planning, execution, and performance evaluation.

Although the Balanced Scorecard (BSC) framework has demonstrated its value across various organizational contexts, its implementation in Islamic boarding schools presents distinctive challenges that differ significantly from those encountered in secular or general educational institutions. First, Islamic boarding schools must reconcile a performance management model originally developed within corporate environments with the unique mission, values, and operational principles of Islamic education. Corporate performance systems tend to emphasize quantitative indicators and financial outcomes. In contrast, Islamic educational institutions prioritize spiritual development, moral character formation, and holistic human growth rooted in Islamic theology and pedagogy. This philosophical divergence creates tension between measurable performance targets and value-based educational objectives (Speckbacher, 2024).

Second, the integration of Islamic values into measurable performance indicators poses both conceptual and technical challenges. Islamic boarding schools strongly emphasize values such as integrity, accountability, moral conduct, and spiritual maturity. However, translating these abstract and multidimensional constructs into specific, quantifiable, and consistently measurable indicators remains complex. Many institutions struggle to design performance metrics capable of capturing spiritual and moral dimensions while still maintaining the objectivity and reliability required in formal performance management systems (Rahmawati, 2022). Consequently, a gap often emerges between the espoused values of Islamic education and their operationalization within Balanced Scorecard frameworks. This misalignment becomes a significant barrier to effective implementation.

Third, structural and resource limitations further constrain Balanced Scorecard adoption in Islamic boarding schools. These institutions frequently operate under financial constraints, limited human resource capacity, and underdeveloped data management systems. Teachers often face high teaching loads and multiple responsibilities, leaving minimal time for systematic performance measurement and documentation. Moreover, the absence of robust data collection mechanisms complicates efforts to monitor key performance indicators consistently and accurately. Limited access to technological infrastructure and data management tools further weakens the sustainability of systematic performance monitoring practices required by the BSC framework (Ratnawati et al., 2023).

Fourth, inconsistencies in understanding and implementation across organizational levels create additional challenges. In many Islamic boarding schools, institutional leaders tend to possess a stronger conceptual understanding of the Balanced Scorecard compared to teachers and administrative staff. This discrepancy can result in misalignment between strategic objectives at the leadership level and operational practices at the classroom level. Teachers may perceive key performance indicators (KPIs) merely as administrative obligations rather than as integral components of a strategic management system designed to foster continuous improvement. As a

result, implementation may become procedural and compliance-oriented rather than transformative and learning-centered (Nabilah & Abidin, 2022).

Key performance indicators in education

A Key Performance Indicator (KPI) is a critical metric used to evaluate an organization's effectiveness and efficiency in achieving its strategic objectives. The concept of KPIs is strongly grounded in organizational performance measurement theory and strategic performance management theory. These theoretical foundations emphasize that performance indicators are not merely technical tools but structured mechanisms through which organizational strategies are translated into measurable outcomes and operational targets (Alghamdi et al., 2022). Performance measurement theory is based on the principle that organizations can function effectively only when their results are systematically and objectively assessed. Performance measures serve as essential instruments linking strategic intentions to actual outcomes, thereby providing feedback necessary for organizational learning and strategic realignment (Neely et al., 2005).

To function effectively, KPIs must demonstrate several essential characteristics. First, they must align with the organization's vision and strategy, ensuring that all measured indicators directly contribute to strategic objectives. Second, KPIs should be derived from clearly identified critical success factors that define what is most important for institutional success. Third, they must be objectively measurable and consistently applied to allow reliable comparisons across time and organizational units. Fourth, KPIs should promote constructive organizational behavior by encouraging actions consistent with institutional values and goals. Finally, effective KPIs must support continuous improvement by generating actionable information that facilitates systematic learning and development (Alghamdi et al., 2022).

Within the modern management cycle, KPIs operate through interconnected stages: performance planning, where indicators are formulated based on strategic priorities; performance monitoring, where data are regularly collected and tracked; performance review, where results are analyzed and evaluated; and performance improvement, where evaluation findings inform strategic adjustments and organizational development (Armstrong, 2009). This cyclical process ensures that KPIs remain dynamic instruments rather than static reporting tools.

When designed specifically for educational institutions, KPIs must capture institutional effectiveness in a comprehensive manner. The academic dimension—covering learning outcomes, instructional quality, and curriculum implementation—represents one core component. The non-academic dimension—encompassing character development, student engagement, discipline, and extracurricular participation—constitutes a second essential aspect. In Islamic boarding schools, a third dimension is particularly significant: the spiritual dimension, which includes the cultivation of moral values, adherence to Islamic principles, and commitment to religious obligations (Nabilah & Abidin, 2022).

Unlike commercial organizations, educational institutions prioritize transparency, accountability, and social service rather than profit generation. Therefore, KPIs in educational contexts must reflect public responsibility and stakeholder trust. In Islamic boarding schools, KPIs should explicitly reinforce values such as integrity, accountability, self-discipline, moral exemplarity, and spiritual commitment as central performance dimensions. In this way, KPIs function as strategic bridges linking daily operational activities to institutional goals and broader Islamic educational philosophy. They enable schools to monitor performance objectively while preserving alignment with their distinctive religious identity.

The effective implementation of KPIs in educational institutions requires systematic procedures. First, strategic goals must be clearly formulated based on the school's vision, mission, and long-term development plan. Second, specific KPIs should be identified by determining

measurable indicators that demonstrate goal attainment. Third, reliable data collection systems must be established, including clear documentation and reporting mechanisms. Fourth, regular analysis and evaluation of performance data should be conducted to assess progress and identify areas for improvement. Finally, follow-up actions—such as revising plans, reallocating resources, or adjusting policies—should be undertaken based on evidence derived from reliable data (Alghamdi et al., 2022). Through these structured stages, KPIs become instruments of strategic learning and sustainable institutional development rather than mere administrative requirements.

Methodology

Research design and approach of the study

This study employed a qualitative approach using a single case study design at Nurul Fikri Boarding School Lembang. A qualitative case study was selected because the phenomenon under investigation—Balanced Scorecard (BSC) and KPI implementation within an Islamic boarding school—is complex, context-bound, and closely related to organizational culture, leadership practices, and institutional values, which cannot be adequately captured through purely quantitative measures (Creswell, 2015). Case study methodology is particularly appropriate for addressing “how” and “why” questions and for generating rich, in-depth understanding of real-life organizational processes as they unfold naturally in a specific setting (Satori & Komariah, 2020).

Research site and participants

The research was conducted at Nurul Fikri Boarding School Lembang, West Java, an Islamic boarding school that has initiated a performance-based evaluation system as part of its management strategy. The site was selected purposively because it represents an Islamic educational institution that is actively applying elements of BSC and KPI-based performance evaluation, enabling investigation of the implementation process, contextual challenges, and supporting factors in an authentic setting.

Participants were selected using purposive sampling, targeting individuals who possessed direct knowledge of, and involvement in, BSC and KPI development, implementation, and evaluation (Sugiyono, 2022). The study involved nine key informants, representing multiple organizational levels and functions, including (but not limited to) foundation management, principals, division heads (e.g., HRD and public relations), teachers, and administrative/educational staff.

Inclusion criteria were as follows:

1. Direct involvement in the formulation, implementation, or evaluation of BSC and/or KPIs.
2. Adequate knowledge of performance management practices in the institution.
3. Ability to communicate experiences and perspectives clearly.
4. Willingness to participate and provide access to relevant information or documents.

This composition was intended to capture perspectives across leadership, managerial, instructional, and support roles, thereby strengthening the completeness of the case description.

Data collection

Data were collected through three complementary techniques: (1) semi-structured interviews, (2) moderate participant observation, and (3) document analysis. Using multiple

methods enabled method triangulation to enhance credibility by cross-checking findings across sources and procedures (Creswell, 2015).

1) Semi-Structured Interviews

Semi-structured interviews were conducted with the nine key informants using an interview guide that allowed flexibility for probing and emergent issues. The interview topics included:

- Understanding of BSC and KPI concepts and purposes;
- KPI formulation and cascading processes;
- Use of KPIs in performance evaluation and monitoring;
- Perceived challenges (e.g., data availability, workload, infrastructure);
- Supporting factors (e.g., leadership commitment, foundation support);
- The extent and manner of Islamic values integration into performance indicators.

Interviews lasted approximately 45–90 minutes, were audio-recorded with consent, and were transcribed verbatim to support systematic analysis.

2) Moderate Participant Observation

Observation was conducted in a moderate participation mode, allowing the researcher to observe naturally occurring activities while maintaining enough distance to minimize disruption and preserve analytic neutrality (Creswell, 2015). Observations focused on:

- a) How BSC/KPI language and practices appeared in routine meetings and school operations;
- b) Performance monitoring and evaluation activities;
- c) Coordination processes across units;
- d) Evidence of Islamic values being referenced or operationalized in performance discussions.

Observed activities included quality management meetings, coordination sessions, performance review activities, and selected administrative operations. Field notes were written systematically and integrated into the analysis.

3) Document Analysis

Document analysis was conducted to examine formal structures of performance management and to corroborate interview and observation data. Key documents included:

- a) Strategic plans and annual work plans;
- b) Standard operating procedures (SOPs);
- c) KPI matrices and KPI reports;
- d) Quality assurance/audit reports;
- e) Meeting minutes relevant to performance management;
- f) Selected financial and administrative reports related to performance monitoring.

Documents were reviewed using a structured checklist to identify alignment between stated strategy, indicators, monitoring procedures, and actual implementation practices.

Data analysis

Data were analyzed using thematic analysis, because it supports systematic identification of patterns across multiple qualitative data sources and enables interpretation grounded in participants' meanings and institutional context. The analysis followed six interconnected phases commonly used in thematic analysis:

1. Familiarization: repeated reading of transcripts, observation notes, and documents to build comprehensive understanding.
2. Initial coding: line-by-line coding of meaningful segments relevant to the research questions. Codes were developed using a combination of deductive (BSC perspectives; KPI characteristics; implementation factors) and inductive (emergent issues, local practices, and Islamic values integration) approaches.
3. Category development: grouping related codes into broader categories (e.g., “top-down KPI formulation,” “data constraints,” “uneven understanding,” “value integration challenges”).
4. Theme construction: generating themes that captured major patterns answering the research questions (e.g., implementation mechanism, barriers, supporting factors, value alignment).
5. Theme review and refinement: checking coherence within themes and distinctions across themes; revising themes as needed based on the complete dataset.
6. Interpretation and reporting: linking themes to research questions and relevant literature to develop explanatory accounts rather than descriptive summaries.

Trustworthiness and ethical considerations

Trustworthiness in this qualitative research was strengthened through multiple validity-enhancing strategies. First, prolonged engagement involved extended presence at the research site over six months, enabling researchers to develop contextual understanding and build relationships with participants that facilitated trust and honest communication. The extended timeframe enabled observation of variations and patterns across different temporal contexts.

Second, persistent observation provided systematic attention to implementation realities over time, enabling observation of variations, patterns, and contextual factors affecting Balanced Scorecard application. Researchers attended multiple quality meetings to observe consistency or variation in implementation approaches and discussions. Third, triangulation across three data collection methods (observation, interviews, documents) enabled cross-verification of findings and identification of consistent patterns. Information obtained through one method was verified through other methods, strengthening confidence in findings.

Fourth, member checking involved sharing preliminary findings with selected participants (specifically the Director of Education and Head of Performance) to verify interpretation accuracy and gather corrective feedback. This strategy ensured that researcher interpretations aligned with participant understanding and experience.

Fifth, peer debriefing with research colleagues involved discussion of analytical processes, emerging findings, and interpretive decisions, providing external perspective to enhance objectivity. Research team meetings were conducted to discuss coding decisions and theme development, ensuring consistency and credibility.

Sixth, an audit trail documenting all research decisions, analytical steps, and interpretive choices was maintained throughout the research process, enabling external verification of research quality and methodological rigor.

Ethical procedures were applied to protect participants and institutional confidentiality. Participants were informed about the study purpose, procedures, and voluntary nature of participation. Informed consent was obtained prior to interviews and recordings. Anonymity was maintained by using role-based labels (e.g., “Principal,” “Teacher,” “Division Head”) rather than personal names, and data were used solely for academic research purposes.

Findings

Organization of findings in relation to the research questions

This section presents the findings derived from interviews, observations, and document analysis in response to the two research questions guiding this study. The first research question examines how the Balanced Scorecard is implemented within performance management practices at the Islamic boarding school, while the second explores the challenges and supporting factors influencing its implementation in this context.

Based on thematic analysis of interview transcripts, observation notes, and institutional documents, six interrelated themes emerged. These themes reflect key dimensions of Balanced Scorecard implementation, including: (1) understanding and conceptualization across organizational levels, (2) implementation patterns and operational mechanisms, (3) implementation challenges, (4) supporting factors, (5) the process of KPI formulation and cascading, and (6) KPI data management and Islamic values integration. Table 1 presents the relationship between themes, categories, and representative codes derived from the data.

Table 1. *Thematic structure of balanced scorecard implementation*

| Themes | Category | Codes Derived from Data |
|--|---|--|
| 1. Understanding and Conceptualization of the Balanced Scorecard Across Organizational Levels | Leadership-level strategic understanding | BSC as vision–mission translation; multidimensional framework; four perspectives awareness |
| | Teacher/staff-level administrative interpretation | KPI as annual target; KPI as reporting requirement; individual performance focus |
| | Conceptual gap across levels | inconsistent interpretation; limited internalization; uneven organizational orientation |
| | Documentation–practice disconnect | BSC terminology absent in meetings; academic and financial dominance; limited operationalization |
| 2. Implementation Patterns and Operational Mechanisms | Formal implementation routines | quarterly meetings; periodic reports; department-level monitoring |
| | Partial monitoring practice | end-of-period evaluation; non-routine measurement; irregular data analysis |
| | Weak strategic linkage | uncertainty of KPI–school alignment; limited dissemination of results |
| | Leadership-driven decisions | intuition-based decisions; short-term operational focus |
| 3. Challenges in Implementing the Balanced Scorecard | Variation in understanding | in fragmented comprehension; coordination difficulty; inconsistent KPI interpretation |
| | Data scarcity and weak validation | vague indicators; lack of operational definitions; insufficient documentation; unreliable data |
| | Workload constraints | time pressure; reporting burden; teaching priority over monitoring |
| | Non-standardized Islamic values | spiritual mission not measurable; absence of formal Islamic KPIs |

| Themes | Category | Codes Derived from Data |
|--|--|--|
| 4. Supporting Factors for Implementation | Leadership commitment | foundation support; performance-oriented leadership; strategic encouragement |
| | Structural readiness | strategic plans available; KPI matrices; formal documentation |
| | Conducive organizational culture | accountability; openness to improvement; Islamic discipline values |
| | Competitive awareness | inter-school competition; need for measurable quality evidence |
| 5. KPI Formulation and Cascading Process | Mixed top-down and bottom-up formulation | foundation-level targets; unit-level translation; KPI contract signing |
| | Perspective variation in strength | strong financial indicators; weak customer evaluation; uneven learning & growth indicators |
| | Measurability limitations | short-term operational KPIs; non-SMART indicators; limited strategic alignment |
| 6. KPI Data Management and Islamic Values Integration | Digital monitoring system | centralized employee information system; periodic monitoring |
| | Data consistency issues | inconsistent data input; weak validation procedures |
| | Informal Islamic value practice | daily worship routines; Islamic culture embedded in activities |
| | Measurement difficulty of spiritual values | lack of specific spiritual indicators; value-metric tension |

Theme 1. Understanding and conceptualization of the balanced scorecard across organizational levels

The findings indicate that understanding of the Balanced Scorecard (BSC) varies significantly across organizational levels within the Islamic boarding school. At the leadership level, the BSC is generally conceptualized as a strategic management framework that enables the translation of the school’s vision and mission into measurable and operational objectives. Directors and heads of departments demonstrate awareness of the multidimensional nature of the BSC and recognize its function in aligning institutional goals with performance indicators. As expressed by the Director of Education, *“The Balanced Scorecard helps us break down our mission into concrete targets that can be monitored. Each department knows what they need to achieve based on the four perspectives.”* This statement reflects a strategic-level understanding of the BSC as an integrative system rather than merely a measurement tool.

In contrast, understanding at the teacher and staff levels appears more limited and operational in nature. Most teachers tend to interpret the Balanced Scorecard primarily through the lens of individual Key Performance Indicators (KPIs), viewing them as annual performance targets or reporting requirements. Rather than perceiving the BSC as an organization-wide strategic framework, they understand it as a personal accountability mechanism tied to performance evaluation. One teacher explained, *“I understand the Key Performance Indicator system as something that tells me what I need to accomplish each year. I complete my performance report, and then we review it.”* This perspective suggests that the BSC is experienced more as an administrative instrument than as a shared strategic framework.

Further evidence of this conceptual gap emerges from observational data. During quality coordination meetings, formal BSC terminology—such as “customer perspective,” “internal process perspective,” or “learning and growth perspective”—was rarely used in routine discussions. Instead, conversations focused predominantly on academic targets and financial reports, despite the school’s strategic documents explicitly organizing goals according to the four BSC perspectives. This discrepancy between documented strategy and operational discourse indicates that BSC concepts, although formally adopted, have not yet been fully internalized across all organizational levels.

Overall, the findings suggest that while the Balanced Scorecard has been institutionally introduced and formally structured within strategic documents, its conceptualization remains uneven. Leadership demonstrates strategic comprehension, whereas operational staff tend to interpret it in procedural and compliance-oriented terms. This variation in understanding affects alignment across units and may limit the school’s ability to function as an integrated strategic performance system. The results therefore highlight that conceptual clarity and shared understanding are critical prerequisites for effective Balanced Scorecard implementation in Islamic educational institutions.

Theme 2. Implementation patterns and operational mechanisms

The findings reveal that the implementation of the Balanced Scorecard (BSC) at the Islamic boarding school follows a structured yet partially consistent pattern. Formally, the BSC is operationalized through quarterly coordination meetings, routine performance reports, and monitoring conducted by heads of departments. At the leadership level, the framework is viewed as a tool for clarifying institutional direction and prioritizing programs. School leaders emphasized that the Balanced Scorecard provides a structured mechanism for organizing work targets and aligning departmental activities with broader institutional goals.

However, despite the existence of formal routines, implementation practices demonstrate varying degrees of consistency. Some Key Performance Indicators (KPIs) are measured only at the end of a reporting period—whether monthly, semiannually, or annually—rather than being monitored continuously throughout the performance cycle. As a result, the BSC functions more as a periodic evaluation instrument than as an ongoing strategic control system. This limits the school’s ability to use performance data for timely corrective action and continuous improvement. At the operational level, teachers acknowledged that KPIs help them focus on achieving assigned work targets. Nevertheless, uncertainty remains regarding the relationship between individual KPI attainment and broader institutional performance. One teacher stated, *“I try to meet the Key Performance Indicators assigned to me, but I’m not sure how my work connects to bigger school targets. Sometimes it feels like I’m just checking off boxes.”* This statement illustrates a perceived disconnect between personal performance indicators and organizational strategic objectives. For many teachers, KPI completion becomes a task-oriented process rather than part of an integrated performance management system.

Furthermore, although the Balanced Scorecard is formally recognized as a basis for decision-making, its use in strategic deliberations appears inconsistent. In certain cases, decisions are influenced more by leadership intuition or immediate operational demands than by systematic analysis of BSC data. This suggests that while the framework has been institutionally adopted, its analytical potential has not yet been fully optimized.

The findings also indicate imbalance across BSC perspectives. Financial and academic indicators are more consistently implemented and monitored, whereas indicators related to organizational learning, parent services, and internal innovation receive comparatively less

systematic attention. In addition, the results of performance evaluations tend to remain at the leadership level and are not always disseminated widely to teachers and staff. This limits collective engagement with performance outcomes and reduces opportunities for shared organizational learning.

Overall, Theme 2 demonstrates that the Balanced Scorecard has been structurally integrated into school management routines, yet its operationalization remains partial. While mechanisms such as reporting cycles and departmental monitoring are in place, the consistency, integration, and strategic use of performance data require further strengthening to enable the BSC to function as a fully embedded performance management system.

Theme 3. Challenges in implementing the balanced scorecard

The findings identify several significant challenges that constrain the effective implementation of the Balanced Scorecard (BSC) within the Islamic boarding school. These challenges emerge consistently across interviews, observations, and document analysis, indicating structural and contextual limitations rather than isolated operational issues.

The first challenge concerns variations in understanding of the Balanced Scorecard and its associated Key Performance Indicators (KPIs). As described in Theme 1, not all organizational members share a comprehensive understanding of the BSC as a strategic management framework. While leadership demonstrates a multidimensional and strategic interpretation, many teachers perceive KPIs primarily as administrative requirements. This disparity results in inconsistent implementation practices across units. When organizational actors interpret KPIs differently, coordination becomes more difficult, and the school's capacity to function as an integrated strategic system is weakened.

The second challenge relates to data scarcity and insufficient measurement procedures. Several KPIs lack clear operational definitions and standardized documentation processes. Indicators such as "quality of educational services" or "collaboration-based work culture" are included in formal performance documents, yet supporting data are often incomplete or inconsistently recorded. Without reliable and validated data, performance evaluation becomes problematic and limits the school's ability to engage in evidence-based decision-making. Teachers reported difficulty in collecting and validating data for certain indicators, particularly when measurement criteria were not clearly specified. This issue suggests that the challenge lies not only in implementation but also in indicator design and data management capacity.

The third challenge involves workload constraints and time limitations experienced by teachers. Participants consistently emphasized that teaching responsibilities, student supervision, and curriculum implementation remain their primary focus. Performance reporting and KPI documentation are often perceived as additional administrative tasks that must be completed outside regular instructional duties. As acknowledged by the Head of Performance, teachers already manage extensive responsibilities, making it difficult to sustain detailed and frequent reporting. This workload pressure reduces the feasibility of systematic monitoring and may contribute to procedural rather than reflective engagement with the BSC framework.

The fourth challenge concerns the integration of Islamic values into measurable performance indicators. Although Islamic values strongly shape the school's institutional identity and daily practices, these values have not yet been translated into standardized and measurable KPIs. Spiritual development, moral character formation, and religious commitment are central to the school's mission, yet they remain insufficiently represented in formal performance measurement structures. The absence of clear, measurable indicators for Islamic dimensions

creates a gap between the institution's value-based orientation and its results-based management system.

Taken together, these challenges indicate that the limitations of BSC implementation in this context are multifaceted. They involve conceptual alignment, technical measurement capacity, workload realities, and contextual adaptation to Islamic educational values. Addressing these challenges requires not only procedural adjustments but also institutional capacity-building and the refinement of performance indicators to better reflect both strategic objectives and organizational identity.

Theme 4. Supporting factors for the successful implementation of the balanced scorecard

Despite the challenges identified in the previous section, the findings also reveal several enabling conditions that support the implementation of the Balanced Scorecard (BSC) within the Islamic boarding school. These supporting factors suggest that, although the system is not yet fully optimized, the institution possesses foundational elements that facilitate its continued development.

The first and most prominent supporting factor is leadership commitment. Interviews indicate that both school management and foundation leadership consistently endorse the use of the Balanced Scorecard as a strategic performance management tool. Leaders actively encourage departments to align their activities with institutional targets and participate in periodic performance reviews. As stated by the foundation director, *"We believe that systematic performance management is essential for our school's continuous improvement. We support the Balanced Scorecard implementation fully."* This commitment provides legitimacy and structural reinforcement for BSC implementation and signals its importance within the organizational hierarchy.

The second supporting factor relates to the availability of strategic documents and formal structures. The school possesses clearly articulated vision and mission statements, comprehensive strategic plans, KPI matrices, and documented performance procedures. These formal documents serve as structural anchors that guide performance monitoring and provide a reference framework for departments. Regular updates and distribution of these documents contribute to organizational clarity and facilitate alignment between institutional goals and operational activities. The presence of structured documentation indicates that the school has already institutionalized foundational components of performance management.

A third enabling condition concerns the organizational culture. Findings suggest that teachers and staff generally demonstrate openness toward system improvement and performance evaluation processes. The Islamic boarding school culture emphasizes accountability, discipline, integrity, and continuous improvement—values that are inherently compatible with structured performance management systems. This cultural alignment reduces resistance to BSC implementation and creates a normative environment supportive of accountability practices.

Finally, external competitive pressure serves as an additional motivating factor. Participants acknowledged increasing competition among Islamic boarding schools and growing expectations from parents regarding educational quality and institutional transparency. This awareness encourages the school to strengthen its performance management system in order to maintain credibility and competitiveness. As noted by the Director, *"With increasing competition in the Islamic boarding school market, we need to demonstrate clear evidence of our quality and effectiveness."* The desire to remain competitive thus reinforces the perceived necessity of systematic performance evaluation. Collectively, these supporting factors indicate that the school is not operating in a context of resistance or structural deficiency. Rather, it demonstrates institutional readiness in terms of

leadership endorsement, formal strategic planning, cultural alignment, and external motivation. These conditions provide a strong foundation upon which further refinement of the Balanced Scorecard system—particularly in relation to data quality, KPI design, and Islamic values integration—can be developed.

Theme 5. The process of formulating key performance indicators (KPIs)

The findings indicate that the formulation of Key Performance Indicators (KPIs) at the Islamic boarding school follows a structured yet partially strategic process. The school adopts a cascading approach in which general strategic targets established by the foundation are translated into more operational indicators at the unit level. Foundation-level goals typically relate to graduate quality, student development, and financial sustainability. These broad objectives are subsequently interpreted and operationalized by the Director, administrative managers, and division heads into department-specific KPIs. This cascading mechanism reflects an attempt to align institutional vision with measurable operational targets.

Although the process incorporates elements of both top-down and bottom-up approaches, the dominant orientation remains leadership-driven. School leadership initially develops the KPI framework and later invites teachers and staff to review and provide feedback before formal implementation. Participants are required to sign KPI agreements as a form of accountability commitment. While this participatory step enhances procedural legitimacy, interviews suggest that the scope of teacher involvement in indicator formulation remains limited. As a result, some KPIs are perceived as externally assigned targets rather than collaboratively constructed performance standards.

Analysis of the cascading structure also reveals variation in the strength and clarity of indicators across the four Balanced Scorecard perspectives. Financial perspective indicators are the most comprehensively structured, supported by detailed procedures for budget allocation, financial reporting, and revenue monitoring. As noted by the Director of Finance, financial accountability is closely supervised by the foundation, leading to clearer measurement standards and more consistent documentation. In contrast, customer perspective indicators—such as parental satisfaction and stakeholder trust—lack systematic evaluation instruments and formal complaint-tracking mechanisms. Similarly, indicators under the learning and growth perspective, particularly those related to innovation and collaboration culture, demonstrate uneven operationalization across units.

Another critical issue concerns the measurability and strategic coherence of KPIs. Several indicators appear to be formulated in response to short-term operational needs, such as meeting academic targets or administrative compliance requirements, rather than emerging from a comprehensive strategic analysis. Consequently, some KPIs do not fully meet rigorous measurability criteria. Ambiguity in operational definitions complicates data collection and evaluation. The Director of Education acknowledged this limitation, noting that certain indicators lack clear definitions and consistent measurement procedures. This suggests that while the cascading structure exists formally, the technical design of indicators requires further refinement to ensure alignment with strategic objectives and data reliability standards.

Overall, Theme 5 demonstrates that the school has established a formal mechanism for KPI formulation and cascading; however, the process remains partially strategic and uneven in execution. Strengthening participatory engagement, clarifying operational definitions, and ensuring that indicators are derived from systematic strategic analysis would enhance the effectiveness of KPI implementation within the Balanced Scorecard framework.

Theme 6. KPI data management and Islamic values integration

The findings indicate that the school has established a centralized system for managing Key Performance Indicator (KPI) data; however, challenges remain in ensuring data consistency and strategic integration. KPI data are stored within the school’s employee information system, where each staff member has individual access to assigned performance indicators and reporting responsibilities. This digital infrastructure facilitates periodic monitoring and allows leadership to track performance outcomes across units more efficiently. As noted by the Head of Performance, the system has improved monitoring processes compared to previous manual practices.

Despite the presence of this technological infrastructure, data management practices are not yet fully optimized. Interviews reveal that inconsistencies in data entry, incomplete documentation, and unclear operational definitions of certain indicators limit the reliability of performance measurement. While monitoring timelines are formally established—monthly, semiannually, or annually—data validation procedures remain uneven across units. As a result, the existence of a digital system does not automatically guarantee high-quality or strategically usable performance data. The effectiveness of the system depends not only on technological tools but also on consistent implementation practices and shared understanding of measurement standards.

A particularly significant issue within this theme concerns the integration of Islamic values into the KPI framework. The school’s institutional identity is strongly grounded in Islamic principles, and observations confirm that religious practices—such as collective prayer, Islamic character education, and discipline guided by Islamic norms—are deeply embedded in daily activities. However, these value-based dimensions have not yet been systematically translated into measurable performance indicators. While some elements of religiosity are acknowledged informally, they lack standardized operational definitions and clear measurement criteria within the formal KPI structure.

Teachers expressed concern that spiritual development and moral formation—core components of the school’s mission—are underrepresented in formal evaluation mechanisms. One teacher stated that although Islamic values are central to the school’s identity, performance measurement tends to prioritize academic and administrative metrics. This tension highlights a structural gap between value-based educational objectives and results-based management practices. The challenge lies not in the absence of Islamic values in practice, but in the difficulty of transforming qualitative spiritual dimensions into quantifiable and standardized indicators. Overall, Theme 6 demonstrates that while the school possesses a digital monitoring infrastructure and strong institutional values, the integration between data management systems and value-based performance dimensions remains incomplete. Strengthening data validation procedures and developing measurable Islamic value-based indicators would enhance both the technical reliability and contextual relevance of the Balanced Scorecard framework in this Islamic educational setting

Table 2. *Cascading of balanced scorecard to key performance indicators and implementation status*

| BSC Perspective | Strategic Goal | Key Performance Indicators | Implementation Strength | Identified Issues |
|-----------------|---|--|-------------------------|---|
| Financial | Financial stability and sustainability | Budget efficiency; Tuition fee collection rate; Revenue growth | Strong | Clear procedures; well-documented data |
| Customer | Institutional image and stakeholder trust | Parental satisfaction; Student retention; Service quality | Moderate | Lack of systematic survey tools; weak complaint documentation |

| BSC Perspective | Strategic Goal | Key Performance Indicators | Implementation Strength | Identified Issues |
|----------------------------|---|---|-------------------------|--|
| Internal Business Process | Effective program implementation | Curriculum fidelity; Supervision quality; Administrative timeliness | Moderate–Weak | Inconsistent monitoring; documentation variation across units |
| Learning & Growth | Human resource and innovation development | Teacher development; Technology use; Collaboration culture | Weak–Moderate | Indicators unclear; innovation measurement inconsistent |
| Islamic Values Integration | Spiritual and moral development | Prayer commitment; Character development; Religious discipline | Weak | Indicators not standardized; no measurable operational definitions |

Theme 1. Understanding and conceptualization of the balanced scorecard across organizational levels

The first theme highlights variations in the understanding and conceptualization of the Balanced Scorecard (BSC) across organizational levels. At the leadership level, including foundation directors and school principals, the BSC is perceived as a multidimensional strategic framework that translates institutional vision and mission into measurable operational objectives. Leaders view the BSC as a mechanism for strategic alignment, ensuring that each department’s activities contribute to broader institutional goals.

However, among teachers and administrative staff, the BSC is more commonly interpreted as an annual performance requirement centered on individual Key Performance Indicators (KPIs). Rather than understanding it as an integrated strategic management system, many staff members perceive it primarily as a reporting obligation.

Observations from coordination meetings further revealed that formal BSC terminology—such as financial, customer, internal process, and learning and growth perspectives—is rarely used in everyday managerial discourse. Although these perspectives are documented in strategic planning documents, they have not been fully internalized in operational discussions. This theme therefore reflects a strategic–operational gap, where strategic understanding exists at the leadership level but is not consistently shared or enacted at the operational level.

Theme 2. Implementation patterns and operational mechanisms

The second theme examines how the Balanced Scorecard is implemented in daily performance management practices. Implementation mechanisms include quarterly evaluation meetings, periodic performance reporting, and monitoring by department heads. These structures indicate that the school has formally institutionalized performance management routines.

Nevertheless, implementation remains partial and inconsistent. Some KPIs are evaluated only at the end of reporting periods rather than through continuous monitoring cycles. As a result, the BSC functions more as a periodic evaluation instrument than as an ongoing strategic feedback system.

Teachers acknowledge that KPIs help them achieve individual targets, yet many are uncertain about how their performance contributes to broader institutional objectives. This indicates weaknesses in strategic cascading and alignment mechanisms.

Additionally, strategic decisions are not always systematically derived from KPI data. In certain instances, leadership intuition or short-term operational demands appear to shape decisions more strongly than formal performance analysis. Overall, the implementation reflects an

administrative orientation rather than full strategic integration of the Balanced Scorecard framework.

Theme 3. Structural and Contextual Challenge

The third theme identifies key structural and contextual challenges affecting effective implementation. Four major challenges emerged: first, variations in understanding across organizational levels create inconsistencies in KPI interpretation and monitoring practices.

Second, data limitations and unclear operational definitions weaken the reliability of performance measurement. Several indicators lack standardized measurement procedures, reducing their analytical usefulness.

Third, teacher workload presents practical constraints. Teachers prioritize instructional responsibilities, making regular KPI reporting and documentation burdensome.

Fourth, Islamic values have not been systematically translated into measurable indicators.

Although religious and moral practices are deeply embedded in school culture, they are insufficiently formalized within the KPI framework. Collectively, these challenges indicate that implementation barriers are not merely technical but also conceptual and structural.

Theme 4. Enabling conditions supporting implementation

Despite existing challenges, the institution demonstrates several enabling conditions that support BSC implementation. Strong leadership commitment serves as a foundational driver. School leaders actively promote performance management and emphasize accountability.

The availability of comprehensive strategic documents—including vision statements, mission frameworks, and strategic plans—provides structural clarity for cascading KPIs. The organizational culture is generally open to improvement and innovation, reflecting values such as accountability and integrity that align with performance management principles.

Furthermore, awareness of increasing competition among Islamic boarding schools motivates institutional strengthening of performance systems. These enabling conditions suggest that the school possesses institutional readiness to further refine and strengthen BSC implementation.

Theme 5. The process of formulating key performance indicators (KPIs)

The fifth theme focuses on the formulation and cascading of KPIs. The school employs a combination of top-down and bottom-up approaches. Strategic goals are initially defined by the foundation and subsequently translated into operational indicators by directors and division heads. Although teachers are given opportunities to review and provide feedback before finalization, leadership remains the primary driver of KPI design. As a result, some indicators are not fully contextualized to the operational realities of implementers.

Analysis of the cascading structure reveals uneven development across perspectives:

- a) The Financial perspective is the most systematically structured and clearly documented.
- b) The Customer perspective lacks consistent evaluation instruments.
- c) The Internal Process perspective shows variability in documentation quality.
- d) The Learning and Growth perspective demonstrates partial development.
- e) Indicators related to Islamic values remain weakly operationalized and lack standardized measurement criteria.

This theme demonstrates that while a formal cascading structure exists, the technical quality and strategic coherence of KPIs require further refinement.

Theme 6. KPI data management and Islamic values integration

The sixth theme addresses data management systems and the integration of Islamic values. The school has established a centralized digital system for storing and monitoring KPI data. This infrastructure represents a significant structural strength and facilitates periodic monitoring. However, inconsistencies in data entry, incomplete documentation, and vague indicator definitions reduce data reliability. Monitoring timelines vary, and validation procedures are not uniformly implemented across units.

A particularly critical issue concerns the integration of Islamic values into measurable indicators. Although religious practices and moral education are central to the institution's identity, these dimensions are not systematically captured within formal KPI structures.

This theme highlights a tension between results-based management systems and value-based educational missions. The challenge lies not in the absence of Islamic values, but in the difficulty of translating qualitative spiritual dimensions into measurable, standardized performance indicators.

Across the six themes, the findings reveal a pattern of partial institutionalization of the Balanced Scorecard. The structural framework is present, leadership commitment exists, and digital monitoring systems are in place. However, uneven understanding, limited participatory formulation, weak data validation, and insufficient integration of Islamic values constrain the framework's strategic effectiveness. The findings suggest that the Balanced Scorecard in this Islamic boarding school operates at an intermediate stage of development—beyond initial adoption, yet not fully embedded as an integrated strategic management system.

Discussion

Synthesis and interpretation of findings

This study examined how the Balanced Scorecard (BSC) is implemented within performance management practices at an Islamic boarding school and explored the challenges and enabling conditions influencing its application. The findings demonstrate that although the BSC framework has been formally adopted and structurally institutionalized, its implementation remains uneven and partially integrated across organizational levels and performance perspectives.

The results indicate that the school is positioned at an intermediate stage of BSC institutionalization. The structural framework, leadership commitment, and digital monitoring infrastructure are present; however, conceptual alignment, participatory formulation, data reliability, and contextual adaptation to Islamic values require further strengthening. The discussion below interprets these findings in relation to existing theoretical perspectives and prior empirical studies.

Uneven conceptualization and strategic alignment

The findings confirm that understanding of the Balanced Scorecard varies significantly across hierarchical levels. Leadership actors conceptualize the BSC as a multidimensional strategic management system that translates institutional vision and mission into measurable objectives. This aligns with Kaplan and Norton's conceptualization of the BSC as a strategy execution

framework rather than merely a performance measurement tool. However, at the teacher and staff level, the BSC is largely interpreted through individual KPIs as reporting obligations. This supports Rahmawati (2022), who identified fragmented understanding among organizational actors as a key barrier to effective implementation. This disparity reveals a strategic–operational gap. While strategic comprehension exists at the top level, it has not been fully internalized across operational units. From a strategic management perspective, shared cognitive alignment is essential for effective strategy execution. Without organization-wide sense-making, the BSC risks functioning as an administrative compliance mechanism rather than as an integrative performance management system.

Administrative orientation and partial operationalization

The findings further reveal that BSC implementation follows formal routines—quarterly meetings, performance reports, and departmental monitoring—yet remains partially operationalized. Some KPIs are evaluated only at the end of reporting cycles, limiting continuous strategic feedback. As summarized in Table 2, implementation strength varies across the four BSC perspectives. The financial perspective demonstrates strong implementation, supported by clear procedures and validated data. In contrast, customer, internal process, and learning and growth perspectives exhibit moderate to weak implementation levels, characterized by inconsistent monitoring and insufficient measurement clarity.

This imbalance suggests that the BSC operates with a dominant financial-administrative orientation. Similar patterns have been observed in prior studies of BSC implementation in educational contexts, where easily quantifiable dimensions receive greater attention than qualitative or developmental indicators. The findings therefore indicate that although structural routines are established, the analytical potential of the BSC as a strategic control system has not yet been fully realized.

KPI formulation and strategic coherence

The cascading process of KPI formulation reflects an attempt at vertical alignment between foundation-level strategic goals and unit-level operational targets. However, the dominance of top-down formulation limits contextual ownership among teachers.

Research by Rachman (2020) emphasizes that participatory KPI development enhances contextual relevance and commitment. In this study, limited teacher involvement appears to contribute to perceptions of KPIs as externally imposed obligations rather than collaboratively constructed strategic commitments. Moreover, several indicators lack clear operational definitions and fail to meet measurability criteria. As reflected in Table 2, while financial indicators demonstrate high clarity and documentation, customer satisfaction and learning indicators show weaker structural coherence. This indicates that cascading alone does not guarantee strategic alignment; technical indicator design and participatory engagement are equally critical.

Data reliability and monitoring capacity

A further limitation concerns data management and validation capacity. Although the school has implemented a centralized digital system for KPI monitoring, data entry inconsistencies and weak validation procedures reduce reliability. Ratnawati (2023) emphasizes that data infrastructure is fundamental to sustainable performance management systems. In this case, technological infrastructure exists, but procedural consistency remains uneven. The effectiveness of digital

monitoring depends not only on system availability but also on standardized definitions, validation mechanisms, and disciplined implementation practices. Thus, the challenge is not technological deficiency but organizational data governance maturity.

The tension between results-based management and Islamic values

One of the most significant findings relates to the integration of Islamic values within the KPI framework. Table 2 explicitly identifies Islamic Values Integration as the weakest implementation dimension. While religious practices are deeply embedded in daily school life, they lack standardized operationalization within formal performance indicators.

This reveals a structural tension between results-based management models and value-based educational missions. Islamic boarding schools prioritize spiritual development, moral character formation, and religious commitment—dimensions that are inherently qualitative and multidimensional. Translating these values into measurable indicators presents conceptual and methodological challenges. This finding extends [Nabilah and Abidin \(2022\)](#), who argue that Islamic educational institutions require contextual adaptation of corporate performance frameworks. The present study empirically demonstrates that without deliberate indicator redesign, BSC implementation risks marginalizing core Islamic educational dimensions. Therefore, adaptation rather than replication of the Balanced Scorecard framework is necessary in faith-based educational institutions.

Institutional readiness and developmental stage

Despite identified limitations, the school demonstrates strong enabling conditions, including leadership commitment, structured strategic documentation, cultural alignment with accountability values, and competitive awareness.

These factors indicate institutional readiness. The school does not lack structural foundations; rather, it requires refinement in implementation coherence, measurement precision, and value integration. Taken together, the findings suggest that the BSC at this Islamic boarding school operates at an intermediate institutionalization stage. The framework has progressed beyond symbolic adoption but has not yet reached full strategic embedding across perspectives and organizational levels.

Theoretical and practical implications

Theoretically, this study contributes to the literature by demonstrating that BSC implementation in Islamic educational institutions tends to exhibit perspective imbalance, administrative dominance, and weak value-based operationalization. The study extends performance management theory by highlighting the need for contextual adaptation in faith-based organizations.

Practically, the findings suggest that schools should:

1. Strengthen shared conceptual understanding of the BSC across all organizational levels.
2. Increase participatory engagement in KPI formulation.
3. Develop standardized and measurable Islamic value-based indicators.
4. Improve data validation and monitoring consistency.
5. Balance implementation across all BSC perspectives rather than privileging financial indicators.

For policymakers, the findings underscore the importance of allowing contextual flexibility in evaluating Islamic boarding schools. Uniform performance measurement models may inadequately capture the distinctive value-based missions of religious educational institutions.

In conclusion, the Balanced Scorecard framework at the studied Islamic boarding school demonstrates structural adoption but uneven strategic integration. Financial indicators are strongly institutionalized, whereas customer, learning, and Islamic value dimensions remain comparatively underdeveloped. The findings indicate that effective BSC implementation in Islamic educational contexts requires not only technical refinement but also conceptual adaptation that reconciles strategic performance management with value-based educational missions.

Practical and policy implications

For school practitioners and administrators, the findings suggest several strategic implications. Islamic boarding schools should invest in systematic socialization and capacity-building regarding Balanced Scorecard concepts and frameworks at all organizational levels, ensuring comprehensive understanding rather than limiting leadership awareness. Targeted workshops and ongoing professional development can enhance Balanced Scorecard literacy throughout the organization. Schools should move toward more participatory, collaborative approaches to Key Performance Indicator development that balance strategic direction-setting from leadership with operational input from teachers and staff. Inclusive decision-making processes improve both Key Performance Indicator quality and staff commitment. Schools must establish robust data management systems and procedures ensuring that Key Performance Indicators have reliable data support, recognizing that measurable Key Performance Indicators without adequate data infrastructure cannot function effectively. Investment in technology and data management is essential. Islamic boarding schools should deliberately develop specialized Key Performance Indicator instruments reflecting Islamic values and spiritual dimensions, moving beyond purely quantitative academic and financial metrics. This may require developing innovative measurement approaches for spiritual and moral dimensions. Performance monitoring must transition from episodic, end-of-period reviews to consistent, predetermined periodic assessments enabling responsive management adjustment. Monthly or quarterly performance reviews enable timelier organizational response.

For policy makers and educational authorities, the findings carry implications for regulatory frameworks governing Islamic boarding school performance and accountability. National or regional educational policies recognizing Islamic boarding schools should acknowledge the distinctive characteristics and value dimensions of Islamic education, enabling schools to develop performance frameworks appropriately reflecting these distinctive features rather than requiring uniform secular frameworks. Policy flexibility can enable schools to maintain Islamic identity while implementing performance management. Educational authorities should support institutional capacity-building initiatives enabling Islamic boarding schools to develop culturally and religiously appropriate performance measurement frameworks. Government-sponsored training and resources can strengthen school capacity. Policies should encourage and facilitate technology adoption and data infrastructure development in schools, recognizing that systematic performance management requires adequate technological and data management foundations. Technology subsidies or support programs can reduce implementation barriers.

Research limitations

This research has several limitations that should be acknowledged. First, this study employs a single-site case study design, examining performance management implementation at one Islamic boarding school. While this design enables rich, detailed, contextualized understanding of implementation processes within that specific institution, it limits generalizability to other Islamic boarding schools operating in different regional, cultural, and organizational contexts. Findings from Nurul Fikri Boarding School Lembang may not directly transfer to other Islamic boarding schools with different organizational structures, leadership styles, or implementation stages. Caution should be exercised in applying these findings to schools with different characteristics.

Second, the research is limited to one academic year of data collection, capturing a temporal snapshot rather than longitudinal observation of implementation changes and development over extended periods. Multi-year research would enable observation of how implementation evolves, how sustainability develops or diminishes, and how leadership and organizational factors affect implementation trajectory over time. A longer study period would provide more comprehensive understanding of implementation effectiveness and institutional learning processes.

Third, the research employed purposive sampling of nine key informants identified based on organizational roles and involvement in Balanced Scorecard implementation. This sampling strategy, while appropriate for the research questions, may not represent all perspectives equally. Teachers and support staff may be underrepresented relative to leadership perspectives, potentially creating bias toward leadership viewpoints regarding implementation success and challenges. Future research might include more extensive teacher participation.

Fourth, document analysis was limited to available institutional documents at the research site. Additional documentary sources such as student achievement data, detailed financial records, or external quality assurance reports were not systematically analyzed, potentially limiting comprehensive understanding of performance management outcomes and their impact on institutional effectiveness. A more comprehensive document review would provide additional perspective.

Fifth, the study was conducted within the Islamic boarding school context in Indonesia. Cultural, religious, educational policy, and institutional factors specific to Indonesian Islamic education may limit applicability of findings to Islamic boarding schools in other national, regional, or cultural contexts. Caution should be exercised in generalizing findings beyond the Indonesian context.

Conclusion

This study concludes that the implementation of the Balanced Scorecard (BSC) at Nurul Fikri Boarding School Lembang is structurally established but remains partially institutionalized. While the foundational framework, strategic documentation, and digital monitoring systems are in place, implementation across organizational levels and performance perspectives demonstrates uneven integration. Six principal conclusions emerge from the findings.

First, conceptual understanding of the Balanced Scorecard is not uniformly distributed across the organization. Leadership actors demonstrate strategic comprehension of the BSC as a multidimensional alignment mechanism, whereas teachers and staff tend to interpret it as an administrative KPI reporting system. This strategic–operational gap limits organization-wide alignment and reduces the transformative potential of the framework.

Second, the formulation and cascading of Key Performance Indicators (KPIs) remain predominantly leadership-driven. Although consultative elements are present, limited participatory

engagement reduces contextual ownership among operational staff. Strengthening collaborative KPI development would enhance strategic coherence and institutional commitment.

Third, monitoring and evaluation practices lack consistency and analytical depth. As demonstrated in Table 2, implementation strength varies across BSC perspectives, with financial indicators showing strong structural integration, while customer, learning and growth, and internal process dimensions exhibit moderate to weak operationalization. This imbalance reflects an administrative orientation rather than a fully integrated strategic performance system.

Fourth, data management capacity remains uneven. Despite the existence of a centralized digital monitoring system, inconsistencies in data entry, unclear operational definitions, and weak validation procedures limit the reliability of performance information. Without standardized data governance mechanisms, the analytical potential of the BSC cannot be fully realized.

Fifth, the integration of Islamic values into measurable performance indicators remains the weakest dimension of implementation. Although Islamic principles strongly shape institutional identity and daily practices, they have not been systematically translated into standardized and measurable KPIs. This reveals a structural tension between results-based management models and value-based educational missions.

Sixth, the institution demonstrates significant enabling conditions, including strong leadership commitment, comprehensive strategic documentation, supportive organizational culture, and competitive awareness. These factors provide a foundation for strengthening BSC implementation and advancing toward deeper institutionalization.

Theoretically, this study contributes to the limited empirical literature on Balanced Scorecard implementation in Islamic boarding schools. The findings demonstrate that while the four traditional BSC perspectives can be structurally adopted within Islamic educational institutions, contextual adaptation is necessary to ensure alignment with faith-based educational missions. The study extends Kaplan and Norton's framework by illustrating that in religious educational contexts, effective implementation requires both structural integration and value-sensitive indicator design.

Overall, the Balanced Scorecard in this Islamic boarding school operates at an intermediate stage of development—beyond symbolic adoption, yet not fully embedded as a holistic strategic management system.

Recommendations

Based on the findings and identified limitations, several recommendations are proposed to guide future research in this domain. First, future studies should expand the number and diversity of research sites by conducting comparative investigations across multiple Islamic boarding schools. Such comparative analyses would enable examination of variations in implementation models, institutional readiness levels, and contextual adaptation strategies.

Second, mixed-methods approaches integrating qualitative insights with quantitative performance data are recommended. This would allow researchers to examine the measurable impact of KPIs on academic achievement, organizational effectiveness, and stakeholder satisfaction. Third, future research should focus on developing and validating Islamic value-based KPI instruments. Empirical testing of measurable indicators for dimensions such as moral integrity, character formation, religious commitment, and spiritual leadership would contribute significantly to contextual adaptation of performance management frameworks in Islamic educational institutions.

Fourth, studies examining the relationship between leadership styles—such as transformational, spiritual, or collaborative leadership—and BSC implementation effectiveness would provide deeper understanding of success determinants. Fifth, longitudinal research is

recommended to observe the evolution of BSC institutionalization over multiple academic years. Long-term analysis would allow assessment of sustainability, organizational learning processes, and strategic performance impact.

Sixth, future theoretical work may explore hybrid performance management models that integrate Balanced Scorecard principles with value-based governance frameworks, particularly within faith-based or mission-driven educational organizations.

Disclosure statement

No potential conflict of interest was reported by the authors.

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