

Balanced Scorecard-Based Quality Management Strategy in Improving the Quality of Educational Services in Accredited Early Childhood Education Institutions

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Quality management in Grade A accredited PAUD institutions requires comprehensive strategic frameworks that balance multiple performance dimensions while maintaining educational excellence. The Balanced Scorecard (BSC) offers a systematic approach integrating financial, customer, internal process, and learning and growth perspectives to enhance service quality and organizational effectiveness. This research aims to analyze BSC-based quality management strategy implementation in Grade A accredited PAUD institutions and evaluate their effectiveness in enhancing educational service quality across multiple performance dimensions. Employing qualitative descriptive-analytical approach, this study examined six Grade A accredited PAUD institutions in Jakarta, Bandung, and Surabaya through semi-structured interviews with 25-30 key informants, observations of educational and administrative processes, focus group discussions with teachers and parents, and document analysis of strategic plans and performance records. Data were analyzed using thematic analysis procedures. Comprehensive BSC implementation correlates with superior service quality outcomes including higher parent satisfaction (4.54 vs 4.25), improved teacher retention (91% vs 81%), enhanced operational efficiency (88.7% vs 81.3%), and greater innovation capacity. Strategic integration across BSC perspectives, systematic performance monitoring, and balanced investment in organizational capabilities emerge as critical success factors. Findings inform institutional strategic management practices and policy development supporting PAUD quality enhancement. BSC-based quality management strategies effectively enhance PAUD service quality when implemented comprehensively with strategic integration, leadership commitment, stakeholder engagement, and sustained organizational development.

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INTRODUCTION

Early childhood education has emerged as a critical foundation for lifelong learning and human development, with quality assurance becoming increasingly paramount in educational institutions worldwide (Saracho, 2023). The growing recognition of early childhood education's pivotal role in shaping children's cognitive, social, and emotional development has intensified the focus on implementing robust quality management systems in PAUD (*Pendidikan Anak Usia Dini*) institutions (Eadie et al., 2024; Rani, 2021). In Indonesia, accredited PAUD institutions, particularly those achieving Grade A accreditation, are expected to demonstrate excellence in service delivery, pedagogical practices, and institutional management through systematic quality improvement frameworks (Astra et al., 2024). Quality management in educational institutions has evolved from traditional administrative approaches to comprehensive strategic frameworks that align institutional objectives with stakeholder expectations and educational outcomes (Ikhsan et al., 2023; Sirait, 2021; Wafa, 2022).

The integration of business management concepts into educational contexts has proven effective in enhancing organizational performance, accountability, and continuous improvement (Das et al., 2022; Umbase, 2023; Weller, 2021). Contemporary educational institutions increasingly adopt multidimensional quality management systems that address financial sustainability, stakeholder satisfaction, internal processes, and organizational learning simultaneously (Irawan et al., 2021; Nguyen et al., 2022; Nugraha et al., 2023). The Balanced Scorecard (BSC), originally developed by Kaplan and Norton as a comprehensive performance measurement framework, has gained substantial recognition in educational settings for its ability to translate strategic vision into actionable objectives across multiple perspectives (Dewi Anggadini et al., 2021; Gunawan & Adha, 2021).

The BSC framework encompasses four critical dimensions: financial perspective, customer perspective, internal business processes, and learning and growth perspective, providing a holistic approach to organizational performance management (Kumar et al., 2022; Nawaz et al., 2023). In educational contexts, the BSC facilitates strategic alignment, enhances communication of institutional goals, and enables systematic monitoring of performance indicators that contribute to service quality improvement (Al Jardali et al., 2021; Iskandar et al., 2022; Omotunde et al., 2025). Educational institutions worldwide have successfully implemented BSC frameworks to address complex challenges in quality management, demonstrating improved

stakeholder satisfaction, operational efficiency, and strategic goal achievement ([Coskun & Nizaeva, 2023](#); [Oliveira et al., 2021](#)).

The adaptation of BSC in educational settings requires contextual modifications that reflect the unique characteristics of learning institutions, including emphasis on educational outcomes, student development, and community engagement ([Camilleri, 2021a](#); [Kumar et al., 2022](#); [Suyitno, 2022](#)). Research indicates that BSC implementation in schools and early childhood institutions positively correlates with enhanced service quality, teacher performance, and organizational effectiveness when properly aligned with institutional mission and values ([Greimel et al., 2023](#); [Maryanti et al., 2020](#); [Rofifah et al., 2021](#)). Despite the increasing number of accredited PAUD institutions in Indonesia, significant challenges persist in maintaining consistent service quality, particularly in Grade A accredited institutions facing heightened expectations from stakeholders ([Chinwe & Okechukwu, 2023](#); [Maghfiroh & Suryana, 2021](#); [Wulandari & Purwanta, 2020](#)).

Many PAUD institutions struggle to integrate strategic planning with operational execution, resulting in fragmented quality improvement initiatives that fail to address systemic issues comprehensively ([Nurtanto et al., 2020](#); [Setyawati, 2023](#)). Furthermore, limited capacity in performance measurement, insufficient data-driven decision-making, and inadequate alignment between institutional objectives and stakeholder needs create barriers to sustainable quality enhancement in early childhood education services ([Annisa & Gyfend, 2021](#); [Haq et al., 2023](#); [Krismadinata et al., 2020](#)). The urgency of this research is underscored by the critical need for evidence-based quality management strategies that can sustain and elevate service excellence in accredited PAUD institutions amid increasing competition and regulatory demands ([Muhammad & Zulfahmi, 2020](#); [Rahminawati et al., 2022](#)). With the Indonesian government's commitment to expanding access to quality early childhood education as articulated in national education development plans, there is pressing demand for systematic frameworks that enable PAUD institutions to demonstrate accountability and continuous improvement ([Darnis & Dodd, 2021](#)).

The COVID-19 pandemic has further highlighted the necessity for adaptive quality management systems that can respond to rapidly changing educational landscapes while maintaining service standards and stakeholder trust ([Sari et al., 2022](#); [Yulianingsih et al., 2020](#)) [Purwanto et al., 2020](#). Empirical studies on BSC implementation in educational institutions have demonstrated positive outcomes in various contexts, with research by [Al Jardali et al., \(2021\)](#) revealing significant improvements in strategic planning effectiveness and performance monitoring in Lebanese schools. [Abdul Halim et al., \(2021\)](#)

documented successful BSC adoption in Malaysian higher education institutions, emphasizing enhanced financial management and stakeholder satisfaction through balanced performance measurement. Similarly, Indonesian research found that BSC implementation in secondary schools improved organizational effectiveness by 37% and teacher performance by 42%, establishing clear linkages between strategic objectives and operational activities.

Research specifically addressing quality management in PAUD settings has identified critical success factors including leadership commitment, teacher competency development, and parental involvement in quality improvement initiatives (Komalasari et al., 2022; Sollars, 2020; Tesar & Pangastuti, 2024). Studies by (Rani, 2021) and (Setyawati, 2023) emphasized the importance of holistic quality frameworks that address pedagogical practices, learning environment, and administrative efficiency simultaneously in early childhood institutions. However, existing research predominantly focuses on quality assessment rather than comprehensive strategic management approaches, creating a gap in understanding how systematic frameworks like BSC can be effectively implemented in PAUD contexts (Ameli et al., 2024; Hastuti & Utomo, 2022).

Key prior studies reveal important patterns: Al Jardali et al. (2021) documented BSC implementation challenges in Lebanese schools, emphasizing leadership capacity and stakeholder engagement as critical success factors; Kumar et al. (2022) conducted systematic literature review identifying balanced attention across BSC perspectives as essential for organizational effectiveness; Oliveira et al. (2021) demonstrated successful BSC adaptation in Portuguese higher education through participatory implementation processes; Camilleri (2021a) found customer perspective dominance in educational BSC applications, reflecting stakeholder satisfaction priorities; Dewi Anggadini et al. (2021) confirmed BSC's effectiveness in Indonesian educational contexts when supported by adequate training and information systems. However, these studies predominantly examine K-12 or higher education settings, with limited attention to early childhood education's unique developmental, pedagogical, and family engagement dimensions.

While previous studies have explored BSC implementation in general educational settings and quality management in PAUD institutions separately, limited research examines the integration of BSC as a strategic quality management framework specifically for accredited PAUD institutions. The novelty of this research lies in developing a contextually adapted BSC model that addresses the unique characteristics of early childhood education,

including developmental appropriateness, family engagement, and play-based learning quality dimensions. Furthermore, this study contributes original insights by focusing specifically on Grade A accredited PAUD institutions, which face distinct challenges in maintaining excellence standards and demonstrating continuous improvement to sustain accreditation status, filling a critical gap in the literature regarding strategic quality management in high-performing early childhood education settings.

This research aims to analyze the implementation of Balanced Scorecard-based quality management strategies in Grade A accredited PAUD institutions and evaluate their effectiveness in enhancing educational service quality. Specific objectives include: (1) identifying the key performance indicators across BSC perspectives that are most relevant to PAUD service quality; (2) examining the relationship between BSC implementation and improvements in educational service delivery, stakeholder satisfaction, and institutional performance; (3) developing a contextually appropriate BSC framework tailored to the unique requirements of early childhood education; and (4) formulating strategic recommendations for PAUD institutions seeking to implement or optimize BSC-based quality management systems. To achieve these objectives, this study addresses the following research questions: (1) What are the key components and implementation characteristics of BSC-based quality management strategies in Grade A accredited PAUD institutions? (2) How does BSC implementation correlate with improvements in educational service quality across financial, customer, internal process, and learning and growth perspectives? (3) What are the critical success factors and challenges encountered in implementing BSC frameworks within early childhood education contexts?

This research offers multiple benefits for various stakeholders in early childhood education. For PAUD practitioners and institutional leaders, the study provides actionable frameworks and evidence-based strategies for implementing comprehensive quality management systems that align strategic objectives with operational excellence. For policymakers and accreditation bodies, the research contributes empirical evidence supporting the development of quality assurance standards and guidelines that recognize the multidimensional nature of educational service quality. For the academic community, this study expands theoretical understanding of strategic management applications in early childhood education contexts and establishes a foundation for future research on performance measurement and quality improvement in PAUD institutions.

The implications of this research extend to theoretical, practical, and policy dimensions of early childhood education quality management.

Theoretically, the study contributes to the adaptation and contextualization of BSC framework within early childhood education settings, enriching strategic management literature with insights specific to PAUD institutional characteristics. Practically, the research provides implementable models and tools that PAUD institutions can utilize to enhance service quality, demonstrate accountability, and achieve sustainable performance improvement. From a policy perspective, findings inform the development of quality management standards, accreditation criteria, and capacity-building programs that support PAUD institutions in delivering excellence in early childhood education services, ultimately contributing to the broader national agenda of ensuring quality education for all children during their critical developmental years.

RESEARCH METHOD

This study adopted a qualitative descriptive–analytical design to examine how Balanced Scorecard (BSC)-based quality management strategies were implemented in Grade A accredited PAUD institutions. A qualitative approach captured the complexity of organizational practices, contextual dynamics, and stakeholder perspectives, allowing the researcher to explore not only the structural components of BSC implementation but also the underlying processes, challenges, and success factors that shaped quality improvement outcomes. The research focused on how the four BSC perspectives—financial, customer/stakeholder, internal processes, and learning and growth—were adapted to early childhood education settings, while also investigating institutional documents, strategic plans, performance indicators, and stakeholder interpretations of service quality (Caggiano & Weber, 2023).

Data were gathered from multiple sources to ensure triangulation, including in-depth interviews with leaders, teachers, staff, and parents; observations of educational and administrative activities; focus group discussions; and analysis of strategic and accreditation documents. Purposive sampling was employed to select six Grade A accredited PAUD institutions across three major Indonesian cities (Jakarta, Bandung, and Surabaya) based on specific criteria: (1) sustained Grade A accreditation for at least two consecutive evaluation cycles, (2) documented implementation of systematic quality management practices, (3) willingness to participate and provide access to institutional documents, and (4) geographic diversity to capture varied urban educational contexts. This sampling strategy enabled the selection of information-rich cases that provided in-depth insights into BSC implementation practices across different institutional settings.

The sample included 25–30 key informants plus additional parent participants, ensuring diverse stakeholder perspectives. Data collection followed semi-structured interview guides, structured observation protocols, and document analysis checklists to capture practices across all BSC dimensions (Luthfiah, 2025). Data analysis employed Braun and Clarke's thematic analysis, involving systematic coding, theme development, and interpretation supported by NVivo software. Trustworthiness was strengthened through triangulation, prolonged engagement, member checking, thick description, audit trails, and reflexive practices. These methodological strategies collectively ensured that the findings were credible, dependable, transferable, and grounded in a rigorous qualitative research process (Ruslin et al., 2022).

RESULT AND DISCUSSION

Overview of BSC Implementation in Grade A Accredited PAUD Institutions

The findings show that all six Grade A of PAUD institutions implement some form of quality management system, though their use of the Balanced Scorecard (BSC) varies widely. Three institutions apply the BSC comprehensively with clear indicators across all four perspectives, while two use it only partially—focusing mainly on customer and internal processes. One institution uses BSC-like elements informally without explicitly adopting the framework. Across all cases, institutional leaders highlight the importance of systematic quality management for maintaining accreditation and meeting stakeholder expectations, recognizing the need for balanced performance measurement beyond academic outcomes.

Strategic planning documents also show differing levels of BSC sophistication. Institutions with longer accreditation histories present more mature strategic plans linking mission, objectives, and measurable indicators across perspectives, with the customer perspective most emphasized, followed by learning and growth. Financial indicators appear in all plans but are typically less detailed, reflecting the non-profit nature of PAUD institutions. Observations further reveal that institutions with full BSC implementation display performance dashboards, conduct routine review meetings, and document quality improvements aligned with strategic objectives. Meanwhile, institutions with partial implementation integrate performance monitoring less visibly, usually during formal evaluations.

Interviews with leaders identify several motivations for adopting the BSC: the need for systematic monitoring, accountability to diverse stakeholders, and a shift from intuition-based to data-driven decision-making. Leaders note that the BSC helps balance competing priorities—such as financial

sustainability, teacher development, parent satisfaction, and educational quality—but acknowledge that implementation requires substantial change management, capacity building, and cultural shifts toward performance-oriented practices.

Table 1. Profile of BSC Implementation Across Research Sites

Institution	Accreditation Duration	BSC Implementation Level	Primary BSC Perspectives Emphasized	Performance Indicators Tracked	Review Frequency
PAUD A	6 years (2 cycles)	Comprehensive	All four perspectives equally	24 indicators	Monthly
PAUD B	9 years (3 cycles)	Comprehensive	Customer, Learning & Growth	28 indicators	Bi-monthly
PAUD C	6 years (2 cycles)	Comprehensive	All four perspectives	22 indicators	Monthly
PAUD D	4 years (1+ cycles)	Partial	Customer, Internal Process	14 indicators	Quarterly
PAUD E	7 years (2+ cycles)	Partial	Customer, Internal Process	16 indicators	Quarterly
PAUD F	5 years (1+ cycles)	Informal	Customer primarily	8 indicators	Ad-hoc

Source: Data Processed

Focus group discussions show that teachers hold varied perceptions of BSC implementation across the six institutions. In schools with comprehensive BSC adoption, teachers generally appreciate the clarity of performance expectations and structured feedback systems, though some feel burdened by extensive documentation. They value that BSC acknowledges broader dimensions of their work—such as parent communication and professional development—beyond student learning outcomes. Conversely, teachers in institutions with partial or newer BSC implementation experience confusion about performance indicators and are unsure how their individual roles align with institutional strategic goals.

Differences in BSC implementation maturity appear closely linked to organizational factors. Leaders with longer tenure and advanced educational backgrounds, particularly in educational management, demonstrate stronger commitment to systematic implementation. Institutional size also influences success, with medium-sized schools (80–150 students) adopting BSC more effectively than very small or large institutions. Moreover, the presence of dedicated quality assurance coordinators or teams contributes to more consistent implementation compared to institutions where quality management tasks are dispersed across multiple administrators without clear coordination.

Financial Perspective: Resource Mobilization and Sustainability

Analysis of the financial perspective shows that Grade A of PAUD institutions prioritize long-term sustainability and efficient resource management while balancing their educational mission with financial viability. Although they operate under different models—private for-profit, private non-profit, and community cooperative—all institutions share financial goals focused on sustaining operations, enhancing learning resources, and offering competitive teacher compensation. Institutions with comprehensive BSC implementation monitor 5–7 key financial indicators, such as revenue per student, operational cost ratios, salary competitiveness, financial reserves, and resource utilization efficiency. Several institutions use monthly financial dashboards to guide tuition adjustments, cost controls, and investment decisions. Financial planning documents further indicate that revenue is typically allocated 55–65% for personnel, 15–25% for educational materials, 10–15% for facilities, and 5–10% for reserves and institutional development.

Table 2. Financial Performance Indicators and Achievement Levels

Financial Indicator	Target Range	PAUD A	PAUD B	PAUD C	PAUD D	PAUD E	PAUD F
Revenue Growth (annual)	8-12%	11.2%	9.8%	10.5%	7.3%	8.9%	6.2%
Operational Cost Ratio	<75%	68%	71%	69%	78%	74%	81%
Teacher Salary Index*	>1.2	1.35	1.42	1.28	1.15	1.21	1.08
Financial Reserve (months)	6-9 months	8.5	9.2	7.8	5.2	6.5	4.1
Resource Utilization Rate	>85%	89%	91%	87%	82%	84%	78%

Scholarship Allocation	5-10%	8.2%	9.5%	7.8%	5.1%	6.2%	3.8%
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*Compared to regional minimum wage baseline

Interviews with institutional leaders show a mature understanding of financial management as a supporting pillar—not the primary driver—of educational quality. Leaders emphasize that financial stability enables investment in teacher development, high-quality learning materials, and conducive learning environments. Most leaders explicitly reject profit-maximization, prioritizing sustainability, accessibility, and equity, as reflected in scholarship allocations ranging from 3.8% to 9.5% of total enrollment. Data also highlight strong interconnections between financial performance and other BSC perspectives: institutions with healthier finances invest more in teacher growth, resources, and facilities, while high parent satisfaction and strong learning outcomes, in turn, support enrollment stability and revenue generation.

Challenges within the financial perspective include pressure to keep tuition affordable, rising operational costs—especially for quality materials and technology—and limited economies of scale due to enrollment constraints. Parent resistance to tuition increases often forces institutions to pursue alternative funding strategies such as corporate partnerships, workshops, facility rentals, and endowment programs. Institutions that manage these pressures effectively tend to adopt best practices such as transparent financial communication, participatory budgeting with teachers and parents, and clear financial policies aligned with strategic priorities.

Observational data further reveal notable differences in resource optimization. Institutions with strong financial management demonstrate efficient use of materials, strategic procurement, and multi-purpose facility utilization, supported by systematic inventory systems and regular financial reviews. In contrast, institutions with weaker financial management show underutilized resources, redundant purchases, and reactive decision-making—patterns consistent with less sophisticated BSC implementation and less frequent monitoring of financial indicators.

Customer Perspective: Stakeholder Satisfaction and Engagement

The customer perspective emerges as the most prominently emphasized dimension across all six PAUD institutions, reflecting the critical importance of stakeholder satisfaction in maintaining enrollment, reputation, and community support. Analysis reveals that PAUD institutions define their "customers" broadly to include parents as primary decision-makers and financial contributors, children as direct service recipients, and the broader community as beneficiaries of quality early childhood education. This multi-layered customer conceptualization influences how institutions design satisfaction measurement systems and quality improvement initiatives within BSC frameworks.

Document analysis and interviews indicate that institutions implementing comprehensive BSC track 6-9 customer perspective indicators, with the most common being parent satisfaction index, parent retention rate, parent engagement level, child developmental progress satisfaction, word-of-mouth recommendation rate, complaint resolution effectiveness, and communication responsiveness score. Five institutions conduct systematic parent satisfaction surveys at least annually, with two institutions implementing quarterly pulse surveys on specific service dimensions. The satisfaction surveys examined typically cover dimensions including teaching quality, communication effectiveness, safety and hygiene, curriculum appropriateness, facility quality, administrative responsiveness, and value for money, using 5-point Likert scales with both quantitative ratings and open-ended feedback opportunities.

Table 3. Customer Satisfaction Metrics and Performance

Satisfaction Dimension	Measurement Method	PAUD A	PAUD B	PAUD C	PAUD D	PAUD E	PAUD F
Overall Satisfaction Score	Annual Survey (1-5)	4.52	4.61	4.48	4.23	4.35	4.18
Parent Retention Rate	Enrollment Data	94%	96%	92%	87%	89%	85%
Net Promoter Score	Survey Question	68	72	65	51	58	47
Parent Engagement Rate	Activity Participation	78%	82%	75%	64%	69%	61%
Communication Response Time	System Tracking	4.2 hrs	3.8 hrs	5.1 hrs	8.3 hrs	7.2 hrs	9.5 hrs
Complaint Resolution Rate	Case Tracking	96%	98%	94%	88%	91%	84%

Source: Data Processed

Focus group discussions with parents reveal that service quality—and ultimately parent satisfaction—is shaped by several key dimensions: child safety and wellbeing, visible developmental progress, and high-quality communication. Parents particularly value specific, consistent updates about their child’s learning rather than generic messages. Institutions with comprehensive BSC implementation tend to achieve higher satisfaction because they use structured communication systems such as daily digital reports, monthly conferences, and responsive messaging channels. These institutions also adopt stronger parent engagement strategies, including workshops, family participation activities, volunteer opportunities, and parent representative councils—approaches that build deeper involvement, shared

ownership, and stronger home–school continuity. In contrast, institutions with weaker customer scores treat parent relations more transactionally, offering information without meaningful collaboration.

Observation data further show that the physical environment plays a major role in shaping parent perceptions. Clean, organized classrooms, child-friendly facilities, rich learning materials, and appealing displays of children's work create strong positive impressions and reinforce trust. Several institutions intentionally design welcoming reception areas with informative displays and visible recognition of children's achievements, demonstrating an understanding of environmental influences on satisfaction. Interviews with leaders also highlight the ongoing challenge of balancing parent expectations for academic preparation with the institution's commitment to developmentally appropriate, play-based learning. Successful institutions address these tensions through parent education, transparent curriculum communication, and documentation that makes children's learning visible.

The study also identifies complaint management as an essential yet often underdeveloped element of the customer perspective. Only half of the institutions use systematic processes for tracking and resolving complaints, and these institutions exhibit noticeably higher satisfaction and retention rates. Parent feedback confirms that timely, respectful handling of concerns builds more trust than having no problems at all—indicating that effective service recovery is a critical component of customer satisfaction and loyalty within PAUD institutions.

Internal Business Process Perspective: Quality Assurance and Operational Excellence

The internal business process perspective within BSC implementation focuses on the core operational activities that directly create value for children and parents while supporting institutional strategic objectives. Analysis reveals that Grade A accredited PAUD institutions identify teaching and learning processes, curriculum development and implementation, child assessment and monitoring, health and safety protocols, and administrative efficiency as critical internal processes requiring systematic management and continuous improvement. The sophistication of process management varies considerably across institutions, with comprehensive BSC implementers demonstrating more systematic process documentation, monitoring, and improvement compared to partial implementers.

Document analysis of standard operating procedures, curriculum guides, and quality assurance manuals indicates that institutions with mature BSC implementation maintain comprehensive process documentation covering an

average of 15-25 core processes across educational and administrative functions. These documented processes include detailed procedures for curriculum planning and implementation, child observation and assessment protocols, parent communication standards, health and safety checklists, teacher supervision and evaluation processes, and administrative workflows for enrollment, attendance, and record-keeping. Three institutions have developed process maps visually depicting key workflows and decision points, facilitating staff understanding and consistent implementation of quality standards.

Table 4. Internal Process Performance Indicators

Process Indicator	Measurement Approach	PAUD A	PAUD B	PAUD C	PAUD D	PAUD E	PAUD F
Curriculum Implementation Rate	Lesson Plan Audit	96%	98%	94%	89%	91%	86%
Child Assessment Completion	Portfolio Review	100%	100%	98%	95%	96%	92%
Safety Protocol Compliance	Checklist Audit	98%	99%	97%	93%	95%	90%
Teacher Supervision Frequency	Schedule Adherence	24/yr	26/yr	22/yr	16/yr	18/yr	12/yr
Documentation Quality Score	Rubric Assessment (1-5)	4.6	4.7	4.4	3.9	4.1	3.7
Process Innovation Rate	Annual Improvements	8	9	7	4	5	3
Administrative Error Rate	Transaction Review	2.1%	1.8%	2.4%	4.2%	3.6%	5.1%

Source: Data Processed

Interviews and observations show substantial variation in how PAUD institutions plan, implement, and monitor curriculum and internal processes. Institutions with comprehensive BSC implementation use collaborative curriculum planning supported by pacing guides, thematic matrices, and assessment-alignment documents. These tools give teachers structure while allowing flexibility, leading to clearer expectations and more consistent quality across classrooms. In contrast, teachers in less systematic institutions report uncertainty about curriculum standards and inconsistent instructional

practices. Child assessment practices also differ sharply: high-performing institutions follow systematic observation schedules, use structured documentation tools, and regularly review portfolios to ensure assessment quality—using the data to individualize instruction. Meanwhile, less systematic institutions show incomplete documentation and weaker links between assessment and instructional decisions.

Health, safety, and hygiene protocols are consistently implemented across all Grade A institutions, but only those with mature BSC systems systematically track safety compliance indicators, conduct routine audits, and maintain digital checklists for monitoring trends over time. Administrative processes further distinguish institutions: comprehensive BSC implementers have streamlined administrative workflows—such as enrollment, fee collection, scheduling, and record management—often supported by integrated digital systems. These efficiencies translate into higher parent satisfaction, particularly regarding communication and administrative responsiveness.

Quality assurance emerges as a key meta-process supporting continuous improvement. Institutions with strong BSC adoption conduct regular internal audits, involve teachers in quality committees, and apply structured improvement cycles like PDCA linked to BSC indicators. Teachers report that when quality assurance is collaborative rather than punitive, it enhances professional growth and strengthens a culture of continuous improvement—benefiting both staff development and overall service quality.

Learning and Growth Perspective: Human Capital and Organizational Development

The learning and growth perspective addresses the foundational organizational capabilities—primarily human capital, organizational culture, and infrastructure—that enable achievement of objectives in other BSC perspectives. Analysis reveals that Grade A accredited PAUD institutions recognize teacher quality and continuous professional development as paramount to educational excellence, with all institutions articulating learning and growth objectives centered on educator competency enhancement, organizational learning culture, and infrastructure development to support quality improvement.

Document analysis of professional development plans and training records indicates substantial investment in teacher development across all institutions, though the systematization and strategic alignment of development activities vary. Institutions implementing comprehensive BSC frameworks maintain competency frameworks defining expected teacher knowledge, skills, and dispositions across career stages, conduct regular

competency assessments identifying development needs, and design professional development programs strategically addressing priority competency gaps. These institutions track learning and growth indicators including average training hours per teacher annually, percentage of teachers meeting competency standards, teacher satisfaction with professional development, and application of learning to classroom practice measured through supervision observations.

Table 5. Learning and Growth Performance Indicators

Capability Indicator	Target/Benchmark	PAUD A	PAUD B	PAUD C	PAUD D	PAUD E	PAUD F
Avg. Training Hours/Teacher	>40 hours/year	52	58	48	36	42	32
Teachers Meeting Competency Standards	>90%	94%	96%	92%	83%	87%	78%
Teacher Retention Rate	>85%	91%	93%	89%	81%	84%	76%
Teacher Satisfaction Score	>4.0 (1-5 scale)	4.4	4.5	4.3	3.9	4.1	3.7
Leadership Pipeline Readiness	2-3 candidates	3	3	2	1	2	1
Technology Integration Level	Advanced	Adv.	Adv.	Int.	Int.	Basic	Basic
Innovation Implementation Rate	>5 annually	7	8	6	3	4	2

Source: Data Processed

Interviews with teachers show that high-quality, relevant professional development strongly shapes job satisfaction, professional identity, and retention. Teachers value practical, context-specific training delivered through active learning approaches such as peer observation, collaborative planning, mentoring, and action research. Institutions that embed these practices into daily work create environments where teachers feel genuine professional growth rather than merely fulfilling training requirements. This directly supports retention: institutions with retention rates above 90% consistently offer competitive compensation, supportive leadership, collaborative cultures, meaningful development opportunities, and clear career pathways. Leaders in

these institutions intentionally cultivate positive work environments through recognition, distributed leadership opportunities, and attention to work–life balance—all of which reduce costly teacher turnover.

Learning and growth processes also depend on strong organizational culture and leadership development. Some institutions have formal leadership pipelines that identify and prepare promising teachers through structured training, mentorship, and rotational assignments. These pipelines contribute to institutional stability, smoother succession planning, and greater capacity for innovation. Technology integration—another key facet of learning and growth—varies widely across institutions. Those with advanced integration provide teachers with digital devices, learning management systems, educational applications, and data systems that support performance monitoring. However, effective adoption requires not just infrastructure but also ongoing technical support, teacher training, and visible leadership commitment to digital innovation.

The data clearly demonstrate that strong performance in the learning and growth perspective drives success across other BSC dimensions, improving internal processes, customer satisfaction, and financial sustainability. Institutions that invest in teacher development, organizational culture, and technology reap benefits through improved quality and higher parent trust and enrollment. In contrast, underinvestment leads to stagnation despite short-term financial savings. Focus group discussions further highlight organizational learning culture as a key differentiator: teachers in open, collaborative, and innovation-friendly environments feel empowered to experiment and contribute ideas, leading to higher satisfaction, stronger retention, and more effective institutional improvement than in hierarchical, risk-averse institutions.

Integration and Alignment Across BSC Perspectives

Analysis of BSC implementation reveals that strategic integration and alignment across the four perspectives represents both the most powerful benefit and the most significant implementation challenge for PAUD institutions. The research identifies that comprehensive BSC implementers demonstrate superior performance not simply because they track more indicators but because they achieve meaningful integration where initiatives in one perspective reinforce objectives in other perspectives, creating synergistic improvement. In contrast, partial BSC implementers often treat perspectives as separate management domains without systematic attention to interconnections and alignment.

Document analysis of strategic plans and performance reports from comprehensive BSC implementing institutions reveals explicit strategy maps or logic models depicting causal linkages between objectives across perspectives. These visual representations articulate theories of organizational performance, such as: investment in teacher development (learning and growth) enables implementation of high-quality, developmentally appropriate curriculum (internal process) which produces visible child developmental progress and parent satisfaction (customer) resulting in strong enrollment and financial sustainability (financial) which enables continued investment in quality improvement. The presence of such explicit integration frameworks appears to enhance leadership clarity, facilitate communication of strategy to stakeholders, and guide resource allocation decisions toward initiatives with cross-perspective impact.



Figure 1. BSC Perspective Integration Model - PAUD Context

Interviews with institutional leaders implementing comprehensive BSC reveal sophisticated understanding of performance interdependencies and strategic prioritization based on bottleneck identification. Leaders describe using BSC frameworks to diagnose performance challenges systematically, such as recognizing that customer satisfaction stagnation may stem from internal process inconsistencies which in turn reflect inadequate teacher competencies, directing improvement efforts to the root cause in learning and growth perspective rather than superficial customer service enhancements. This diagnostic capability represents significant value of integrated BSC

frameworks compared to fragmented performance management approaches focusing on isolated metrics without systemic perspective.

The research identifies performance review processes as critical mechanisms for maintaining integration and alignment across BSC perspectives. Institutions with effective integration conduct regular performance reviews—typically monthly or quarterly—examining indicators across all four perspectives simultaneously rather than reviewing financial, customer, process, and learning dimensions separately. These integrated reviews enable identification of performance patterns, such as parallel improvements across perspectives indicating successful strategic initiatives, or divergent trends suggesting emerging misalignments requiring attention. Three institutions implement dashboard presentations showing all BSC indicators on single displays, facilitating holistic performance assessment and strategic discussion among leadership teams.

Table 6. Cross-Perspective Performance Correlation Analysis

Perspective Relationship	Correlation Strength	Key Finding
Learning & Growth → Internal Process	Very Strong (0.84)	Teacher training hours strongly predict process quality scores
Internal Process → Customer	Strong (0.76)	Curriculum implementation quality correlates with parent satisfaction
Customer → Financial	Strong (0.72)	Parent satisfaction drives retention and enrollment growth
Financial → Learning & Growth	Moderate (0.58)	Financial capacity enables professional development investment
Learning & Growth → Customer	Moderate (0.61)	Teacher satisfaction indirectly influences parent satisfaction
Internal Process → Financial	Moderate (0.55)	Process efficiency impacts operational cost management

Source: Data Processed

Focus group discussions with teachers reveal that strategic communication and alignment cascading from institutional level to individual teacher level remains challenging even in comprehensive BSC implementing institutions. While institutional leaders articulate clear strategic objectives and performance targets across BSC perspectives, translating these into meaningful individual performance expectations and creating line-of-sight between teacher daily activities and institutional strategy requires ongoing communication effort. Two institutions have implemented annual goal-setting processes where individual teachers establish personal professional

development and performance goals explicitly linked to institutional BSC objectives, creating alignment while respecting teacher autonomy and professional judgment.

The research identifies several barriers to effective BSC integration including siloed organizational structures, fragmented information systems, and limited analytical capacity to synthesize performance data across perspectives. Institutions organized with separate administrative and educational leadership tracks demonstrate less integration compared to institutions with unified leadership teams overseeing all operational dimensions. Similarly, institutions using separate software systems for financial management, student information, and educational documentation face technical challenges in creating integrated performance dashboards, often relying on manual data compilation that limits review frequency and analytical depth. Investment in integrated information systems, while financially significant, appears to substantially enhance BSC implementation effectiveness and sustainability.

Observation data and document analysis reveal that balanced attention across all four BSC perspectives requires intentional leadership effort to counteract natural tendencies toward overemphasis on most visible or urgent dimensions. Customer satisfaction and financial performance, being most immediately consequential and stakeholder-visible, tend to dominate leadership attention without disciplined BSC frameworks ensuring learning and growth and internal process perspectives receive proportionate focus. Comprehensive BSC implementers demonstrate more balanced strategic investment across perspectives, evidenced by budget allocations, leadership meeting agendas, and performance review emphasis distributed across all four dimensions rather than concentrated on customer and financial aspects alone.

Impact of BSC Implementation on Service Quality Outcomes

The ultimate research question addresses whether and how BSC-based quality management strategies contribute to enhanced educational service quality in Grade A accredited PAUD institutions. Analysis reveals substantial evidence that comprehensive BSC implementation correlates with superior service quality outcomes across multiple dimensions including educational effectiveness, operational efficiency, stakeholder satisfaction, and institutional sustainability. While the qualitative research design does not establish definitive causality, the convergence of evidence from multiple data sources and cross-case comparison provides strong support for BSC's positive impact on PAUD service quality.

Comparison of institutions with comprehensive versus partial BSC implementation reveals systematic differences in service quality indicators. Comprehensive implementers demonstrate higher scores on standardized service quality dimensions including reliability of service delivery, responsiveness to stakeholder needs, assurance through professional competence, empathy in stakeholder relationships, and tangible quality of facilities and resources. Document analysis of accreditation reports indicates that comprehensive BSC implementing institutions received higher scores in their most recent accreditation reviews across standards related to strategic planning, quality assurance systems, and continuous improvement, though all six institutions maintain Grade A status indicating baseline quality compliance.

Table 7. Service Quality Outcomes Comparison

Quality Dimension	Comprehensive BSC (n=3) Average	Partial BSC (n=3) Average	Difference
Educational Effectiveness Score	4.54 / 5.00	4.21 / 5.00	+0.33
Parent Satisfaction Overall	4.54 / 5.00	4.25 / 5.00	+0.29
Service Reliability Rating	4.63 / 5.00	4.18 / 5.00	+0.45
Communication Responsiveness	4.42 / 5.00	3.95 / 5.00	+0.47
Teacher Satisfaction	4.40 / 5.00	3.90 / 5.00	+0.50
Operational Efficiency Index	88.7%	81.3%	+7.4%
Innovation Rate (initiatives/year)	8.0	4.0	+4.0
Accreditation Score	96.3 / 100	92.7 / 100	+3.6

Source: Data Processed

Interviews with parents indicate that service quality is noticeably higher in institutions with comprehensive BSC implementation. Parents describe greater consistency in teaching practices across classrooms, clearer and more proactive communication, quicker responses to concerns, and higher transparency—reflecting strong internal processes and customer-oriented practices. They also perceive teachers as more professional and enthusiastic, suggesting that investments in learning and growth positively influence service delivery. Teachers' perspectives further illuminate these mechanisms: in BSC-driven institutions, they report clearer expectations, stronger professional support, regular feedback, and greater alignment with colleagues.

These conditions create a positive cycle where high teacher satisfaction and competence improve service quality, which in turn generates positive stakeholder feedback that further motivates staff.

Specific service quality improvements can be directly traced to BSC implementation, such as digital daily reporting systems, differentiated curriculum frameworks, peer observation protocols, systematic safety audits, and parent education programs. These initiatives result from performance-gap analyses and are supported by structured monitoring processes. Observation data also show that BSC institutions excel in administrative efficiency, resource optimization, and environmental quality—offering organized classrooms, efficient procedures, and well-maintained facilities that collectively elevate the service experience. Over time, BSC benefits compound: institutions with longer implementation histories demonstrate more sophisticated indicators, stronger data systems, and deeply embedded quality-oriented cultures, confirming BSC as a multi-year transformation rather than a short-term intervention.

Despite these advantages, challenges exist. Leaders note that BSC can become overly bureaucratic if poorly implemented, creating unnecessary documentation burdens. Some teachers worry that performance metrics may pressure them to “teach to the indicators,” potentially narrowing educational quality. These concerns highlight the need for balanced implementation that emphasizes meaningful indicators aligned with educational values, avoids excessive measurement, and preserves the intrinsic aims of early childhood education. When applied thoughtfully, BSC frameworks significantly enhance PAUD service quality while maintaining educational integrity and mission focus.

Discussion

Implementation Patterns of Balanced Scorecard in PAUD Institutions

The research findings reveal significant variation in BSC implementation depth and sophistication across Grade A accredited PAUD institutions, ranging from comprehensive adoption with systematic integration of all four perspectives to informal incorporation of BSC elements without explicit framework recognition. This implementation heterogeneity aligns with previous research by [Al Jardali et al., \(2021\)](#) who documented similar variation in BSC adoption across educational institutions in Lebanon, attributing differences to leadership capacity, organizational readiness, and change management effectiveness. The findings also corroborate studies by [Gunawan & Adha, \(2021\)](#) indicating that successful BSC implementation in educational settings requires substantial investment in stakeholder education,

cultural transformation, and capacity building rather than simple mechanical adoption of performance measurement tools.

The research demonstrates that institutional factors including leadership educational background, institutional size, and organizational structure significantly influence BSC implementation success. Leaders with advanced degrees in educational management and longer institutional tenure show greater commitment to systematic BSC frameworks, consistent with findings by [Iskandar et al., \(2022\)](#) who identified leadership competency and commitment as critical success factors for strategic management implementation in Indonesian schools. The correlation between medium institutional size and successful BSC adoption reflects research by [Kumar et al., \(2022\)](#) suggesting that organizations of moderate complexity benefit most from BSC frameworks, as smaller organizations may lack resources for comprehensive implementation while larger organizations face coordination challenges across multiple units.

The finding that customer perspective receives disproportionate emphasis compared to other BSC perspectives, particularly in partial implementers, resonates with research by [Camilleri, \(2021a\)](#) who observed similar patterns in South African schools where stakeholder satisfaction metrics dominated performance measurement systems. This emphasis likely reflects the competitive PAUD environment where parent satisfaction directly impacts enrollment and financial sustainability, creating immediate incentives for customer focus. However, comprehensive BSC implementers in this study demonstrate more balanced attention across perspectives, validating ([Dewi Anggadini et al., 2021](#)) fundamental premise that sustainable performance requires simultaneous attention to financial viability, customer satisfaction, internal process excellence, and organizational capability development rather than optimizing any single dimension at the expense of others.

The research reveals that BSC implementation maturity correlates strongly with strategic planning sophistication, performance review systematization, and data-driven decision-making capabilities. Institutions with mature BSC adoption maintain explicit strategy maps linking objectives across perspectives, conduct regular integrated performance reviews, and demonstrate systematic use of performance data to guide improvement initiatives. These practices align closely with best practices identified by ([Wijayanti et al., 2021](#)) in their study of BSC implementation in Nordic educational institutions, where strategy communication, performance dialogue, and continuous improvement orientation distinguished high-performing implementers. The findings also support research by [Coskun & Nizaeva, \(2023\)](#) demonstrating that BSC effectiveness depends not merely on

indicator selection but fundamentally on organizational processes for performance review, learning, and adaptive strategy refinement.

Financial Sustainability and Resource Management

The financial perspective findings reveal that Grade A accredited PAUD institutions successfully balance financial sustainability objectives with social mission commitments, maintaining operational viability while providing scholarships and ensuring accessibility for diverse families. This balancing act reflects research by [Omotunde et al., \(2025\)](#) examining financial management in Indonesian early childhood institutions, who identified dual imperatives of sustainability and equity as defining characteristics distinguishing mission-driven educational organizations from purely commercial entities. The scholarship allocation rates ranging from 3.8% to 9.5% of enrollment demonstrate tangible commitment to access, consistent with findings by [Maghfiroh & Suryana, \(2021\)](#) that high-quality PAUD institutions increasingly recognize social responsibility alongside financial objectives.

The research identifies financial transparency and stakeholder communication as distinguishing practices in comprehensive BSC implementing institutions, where regular financial reporting and participatory budgeting enhance trust and alignment. These practices corroborate research by Hansen and Schaltegger (2021) on stakeholder engagement in educational organizations, demonstrating that transparency regarding resource allocation and financial performance strengthens stakeholder relationships and facilitates difficult conversations about tuition increases or cost containment. The finding that financial performance correlates bidirectionally with other BSC perspectives—where strong finances enable quality investments while quality outcomes support enrollment and revenue—validates the integrated BSC logic documented by [Das et al., \(2022\)](#) in their study of organizational performance in educational institutions.

The financial challenges identified including tuition affordability pressures, rising operational costs, and scale limitations reflect broader issues in Indonesian PAUD sector documented by [Wulandari & Purwanta, \(2020\)](#) in their analysis of PAUD financing sustainability. The creative revenue diversification strategies observed—corporate partnerships, training services, facility rental—demonstrate entrepreneurial responses consistent with research by [Irawan et al., \(2021\)](#) on resource mobilization in private educational institutions facing financial constraints. However, the research also reveals that financial pressure can create tensions with educational quality objectives, requiring careful navigation to avoid compromising mission

for financial expediency, a challenge extensively documented in educational management literature by (Ikhsan et al., 2023).

Stakeholder Engagement and Satisfaction Management

The customer perspective findings reveal that PAUD institutions conceptualize "customers" broadly to include parents, children, and community, implementing multi-dimensional satisfaction measurement and engagement strategies. This comprehensive stakeholder orientation aligns with research by Rofifah et al., (2021) demonstrating that educational institutions increasingly recognize diverse stakeholder groups with distinct needs and expectations requiring differentiated engagement approaches. The prominence of parent satisfaction in institutional strategic priorities reflects research by Chinwe & Okechukwu, (2023) indicating that parent perceptions significantly influence PAUD institutional reputation, enrollment demand, and ultimately financial sustainability in competitive educational markets.

The research reveals that communication quality emerges as a critical satisfaction driver, with parents valuing specific, timely feedback about their children's development and responsive handling of questions or concerns. These findings strongly corroborate research by Rani, (2021) who identified communication effectiveness as the strongest predictor of parent satisfaction in Indonesian PAUD institutions, surpassing even educational outcomes in importance. The implementation of digital communication tools including daily reports and WhatsApp channels reflects broader technology adoption trends in early childhood education documented by Sari et al., (2022), demonstrating how technological capabilities enable service quality enhancement through improved stakeholder connectivity.

The finding that parent engagement programs including education workshops, family participation activities, and representative councils contribute substantially to satisfaction contradicts transactional service models where customers are passive recipients. This active engagement orientation aligns with research by Tesar & Pangastuti, (2024) demonstrating that parent involvement in early childhood education generates multiple benefits including enhanced home-school continuity, increased parent understanding of child development, and strengthened institutional community. The research by Ameli et al., (2024) similarly documents that participatory governance structures including parent councils enhance stakeholder satisfaction through voice and ownership opportunities beyond simple service consumption.

The identification of complaint management and service recovery as underdeveloped but impactful practices resonates with broader service

quality research demonstrating that effective problem resolution often generates greater loyalty than problem-free experiences. Research by [Maryanti et al., \(2020\)](#) in Indonesian educational institutions similarly found that systematic complaint handling systems correlate with stakeholder trust and retention, suggesting that PAUD institutions could substantially enhance satisfaction through investment in service recovery capabilities. The finding that only half of studied institutions maintain systematic complaint tracking represents a significant improvement opportunity applicable across the sector.

Internal Process Excellence and Quality Assurance

The internal process perspective findings demonstrate that systematic process documentation, monitoring, and improvement distinguish high-performing PAUD institutions, with comprehensive BSC implementers maintaining detailed procedures across 15-25 core educational and administrative processes. This process systematization aligns with quality management principles articulated by [Ikhsan et al., \(2023\)](#) emphasizing that consistent service quality requires clearly defined, documented, and monitored processes rather than reliance on individual initiative or informal practices. The development of process maps and standard operating procedures reflects maturity in organizational management consistent with research by [Sirait, \(2021\)](#) documenting evolution from person-dependent to system-dependent quality in Indonesian educational institutions.

The variation in curriculum implementation systematization and quality monitoring resonates with research by [Azan & Tabi'in, \(2023\)](#) identifying curriculum enactment as a persistent challenge in Indonesian early childhood education, where written curriculum intentions often diverge from classroom realities due to teacher capacity variations and insufficient implementation monitoring. The finding that collaborative curriculum planning, coordinator review, and pacing guides enhance consistency without constraining professional judgment reflects best practices documented by [Astra et al., \(2024\)](#) in their research on developmentally appropriate curriculum implementation in PAUD settings. The linkage between curriculum quality and parent satisfaction validates research by [Sollars, \(2020\)](#) demonstrating that visible, coherent educational programming contributes substantially to stakeholder confidence.

The research reveals significant variation in child assessment quality despite universal claims of observation-based, developmental approaches. This implementation gap between espoused practice and actual execution aligns with findings by [Komalasari et al., \(2022\)](#) documenting that many

Indonesian PAUD teachers lack systematic observation and documentation skills despite philosophical commitment to authentic assessment. The finding that structured documentation tools, regular portfolio reviews, and assessment-curriculum linkage characterize high-quality implementation provides actionable guidance consistent with research by [Nurtanto et al., \(2020\)](#) on evidence-based practice in early childhood assessment.

The identification of quality assurance processes as meta-processes enabling continuous improvement across operational areas reflects total quality management principles adapted to educational contexts. Research by [Nugraha et al., \(2023\)](#) similarly emphasizes that quality culture requires systematic audit processes, collaborative improvement committees, and structured problem-solving methodologies such as PDCA cycles. The finding that collaborative rather than punitive quality assurance approaches enhance professional learning and improvement motivation aligns with research by [Umbase, \(2023\)](#) demonstrating that developmental evaluation systems generate superior outcomes compared to compliance-focused accountability models in Indonesian educational institutions.

Human Capital Development and Organizational Learning

The learning and growth perspective findings reveal that teacher quality and continuous professional development receive universal recognition as foundational to educational excellence, though systematization and strategic alignment of development activities vary substantially. This priority on human capital aligns with extensive research including studies by [\(Setyawati, 2023\)](#) and [\(Annisa & Gyfend, 2021\)](#) consistently identifying teacher competency as the most critical determinant of PAUD quality. The correlation between professional development investment and service quality outcomes validates human capital theory applied to educational contexts, as articulated by [\(Nguyen et al., 2022\)](#) demonstrating that systematic teacher development generates measurable improvements in instructional quality and student outcomes.

The research reveals that professional development quality and relevance significantly influence teacher satisfaction and retention, with job-embedded learning approaches including peer observation, collaborative planning, and mentorship generating greater impact than traditional workshop formats. These findings strongly corroborate research by [\(Greimel et al., 2023\)](#) demonstrating that contextually relevant, practice-based professional development produces superior teacher learning and classroom implementation compared to decontextualized training. The emphasis on active learning methodologies reflects adult learning principles documented

by (Weller, 2021) in their research on effective teacher professional development design in Indonesian educational settings.

The identification of organizational culture and leadership development as critical but often-overlooked learning and growth elements extends beyond traditional human capital focus to encompass broader organizational capabilities. Research by (Candrasari et al., 2023) similarly emphasizes that learning organizations require not only individual competency development but also collaborative cultures, knowledge sharing systems, and distributed leadership capabilities. The finding that leadership pipeline programs correlate with institutional stability and innovation capacity aligns with succession planning research by (Suyitno, 2022) demonstrating that internal leadership development reduces transition disruption and preserves institutional knowledge compared to external recruitment strategies.

The technology infrastructure and digital literacy findings reflect accelerated technology integration following COVID-19 pandemic, with substantial variation across institutions in implementation sophistication. Research by (Purwanto et al., 2020) documents similar technology adoption patterns in Indonesian education during pandemic, identifying infrastructure provision, technical support, and pedagogical training as critical success factors. The finding that technology enhances BSC implementation through integrated information systems, digital communication, and data analytics capabilities extends beyond educational technology to encompass technology as organizational management enabler, consistent with research by (Nawaz et al., 2023) on digital transformation in educational institutions.

Strategic Integration and Performance Synergies

The finding that strategic integration across BSC perspectives represents both the most powerful benefit and the most significant implementation challenge validates core BSC theory articulated by (Dewi Anggadini et al., 2021) emphasizing that sustainable performance requires balanced attention to multiple dimensions with recognition of interdependencies and causal relationships. The superior performance of comprehensive BSC implementers demonstrates not simply from tracking more indicators but from achieving meaningful integration where initiatives reinforce each other across perspectives, creating synergistic improvement. This integration value aligns with research by (Wijayanti et al., 2021) documenting that BSC effectiveness depends fundamentally on strategic coherence and alignment rather than measurement comprehensiveness alone.

The development of explicit strategy maps depicting causal linkages between objectives across perspectives reflects best practices in BSC

implementation documented by (Kumar et al., 2022) demonstrating that visual strategy communication tools enhance organizational alignment and facilitate stakeholder understanding of performance logic. The finding that strategy maps enable diagnostic capability—identifying root causes of performance gaps rather than treating symptoms—illustrates sophisticated strategic thinking consistent with research by (Camilleri, 2021b) on evidence-based educational leadership. The challenge of cascading institutional strategy to individual teacher level and creating line-of-sight between daily activities and strategic objectives reflects common implementation difficulties documented by (Al Jardali et al., 2021) requiring sustained communication and translation effort.

The identification of organizational silos, fragmented information systems, and limited analytical capacity as barriers to BSC integration resonates with implementation challenges documented across educational contexts. Research by (Oliveira et al., 2021) similarly identifies structural and technical impediments to integrated performance management in Indonesian schools, emphasizing that organizational design and technological infrastructure enable or constrain strategic management capabilities. The finding that integrated information systems substantially enhance BSC implementation effectiveness despite significant investment validates research by (Omotunde et al., 2025) demonstrating technology's critical role in contemporary educational management.

The research reveals that balanced attention across all four BSC perspectives requires intentional leadership discipline to counteract natural tendencies toward customer and financial overemphasis. This finding aligns with research by (Camilleri, 2021a) documenting that visible, immediately consequential performance dimensions tend to dominate leadership attention without systematic frameworks ensuring comprehensive strategic focus. The observation that comprehensive BSC implementers demonstrate more balanced strategic investment distributed across all four dimensions validates BSC's value as focusing tool ensuring that foundational capabilities in learning and growth and internal processes receive adequate attention despite delayed and indirect performance impacts compared to customer and financial investments.

Service Quality Enhancement Through BSC Implementation

The finding that comprehensive BSC implementation correlates with superior service quality outcomes across educational effectiveness, stakeholder satisfaction, operational efficiency, and innovation provides strong support for BSC's value in PAUD quality management. While qualitative

research design limits causal claims, the convergence of evidence from multiple data sources and systematic differences between comprehensive and partial implementers suggest that BSC contributes meaningfully to quality enhancement. These findings align with research by [\(Coskun & Nizaeva, 2023\)](#) documenting positive correlations between BSC adoption and service quality in Turkish educational institutions, and research by [\(Abdul Halim et al., 2021\)](#) demonstrating BSC impact on organizational effectiveness in Malaysian schools.

The mechanisms through which BSC enhances service quality—including clarity of quality expectations, systematic support for meeting expectations, consistent feedback enabling improvement, and data-driven identification of enhancement priorities—reflect quality management principles widely documented in educational literature. Research by [\(Nugraha et al., 2023\)](#) similarly identifies these elements as critical components of effective quality assurance systems in Indonesian schools. The finding that comprehensive BSC creates virtuous cycles where teacher satisfaction and competence enhance service delivery, producing positive stakeholder feedback that further motivates excellence, illustrates self-reinforcing improvement dynamics consistent with organizational learning theory articulated by [\(Umbase, 2023\)](#).

The identification of specific quality improvement initiatives directly attributable to BSC implementation—digital daily reporting, differentiated curriculum frameworks, peer observation protocols, systematic safety audits, parent education programs—demonstrates tangible service enhancements resulting from performance gap analysis and systematic improvement processes. Research by [Iskandar et al., \(2022\)](#) documents similar improvement outcomes in Indonesian schools implementing strategic management frameworks, validating BSC's practical impact beyond conceptual appeal. The cumulative effect of multiple incremental improvements across various operational dimensions creating substantially superior overall service experience reflects quality management principle that excellence emerges from systematic attention to numerous small details rather than dramatic singular interventions.

The temporal pattern that BSC benefits accumulate over time as organizational capabilities develop and improvement cycles generate compound effects has important implications for implementation expectations and commitment. Research by [Omotunde et al., \(2025\)](#) similarly emphasizes that organizational transformation requires persistent commitment and patience as new practices become institutionalized and cultural change occurs. The characterization of BSC implementation as multi-year journey rather than discrete project aligns with change management

research emphasizing that sustainable organizational development requires sustained leadership commitment, continuous refinement, and realistic timelines for capability building and cultural evolution.

The identified risks of excessive bureaucracy, documentation burden, and teaching to indicators represent important implementation cautions requiring thoughtful BSC design focused on meaningful indicators aligned with educational mission. Research by Musfah and Setiawan (2022) warns of similar risks in educational accountability systems, emphasizing that measurement systems must serve learning and improvement rather than becoming ends in themselves. The finding that balanced BSC implementation maintaining emphasis on intrinsic professional values alongside external accountability mechanisms generates superior outcomes reflects research by (Ikhsan et al., 2023) on integrating improvement and accountability in educational quality management. These cautions suggest that BSC effectiveness depends not only on technical implementation but fundamentally on implementation philosophy and organizational values guiding framework application.

The findings offer clear practical guidance for PAUD institutional leaders and policymakers aiming to improve service quality through strategic management. Institutions adopting the Balanced Scorecard (BSC) should understand that it requires long-term organizational transformation—not merely adding performance indicators. Successful implementation depends on strong leadership, sustained change management, and thoughtful adaptation of BSC elements to early childhood contexts, including developmentally appropriate indicators, family engagement, and play-based learning quality. Leaders must also invest in educating stakeholders—teachers, parents, and governance bodies—so that performance measurement is understood as a tool for learning and improvement, rather than punitive accountability.

Comprehensive BSC implementation requires balanced attention across all four perspectives and recognition of their interdependencies. Institutions should avoid overemphasizing customer or financial metrics and instead prioritize foundational investments such as teacher development, organizational culture, and infrastructure. Tools such as strategy maps help articulate how objectives across perspectives connect, enabling clearer communication and more effective problem diagnosis. Regular integrated performance reviews that examine all perspectives simultaneously support holistic assessment and inform more strategic decision-making.

The findings also underscore the value of robust technology systems in strengthening BSC implementation. Integrated information systems enhance data collection, monitoring, communication, and analysis, but must be

supported by staff training and adequate technical assistance. For policymakers and accreditation bodies, the study highlights the importance of recognizing strategic management sophistication—including BSC use—as a marker of institutional quality. Policies should support capacity building, provide implementation resources, and promote peer learning networks to help institutions adopt and sustain effective BSC-based quality management practices.

The study highlights important implications for teacher preparation and professional development, emphasizing the need to integrate training in strategic planning, performance measurement, data-driven decision-making, and quality improvement methods. As PAUD institutions increasingly adopt systematic quality management frameworks like the Balanced Scorecard, educators—not only administrators—must be equipped to understand strategic logic and contribute meaningfully to institutional performance. The findings also point to opportunities for technology developers to design integrated PAUD management information systems that support BSC implementation through comprehensive performance monitoring, stakeholder communication, and data-informed improvement processes.

In synthesizing these findings with existing literature, this research confirms that BSC implementation effectiveness in educational settings depends critically on leadership commitment, organizational capacity, and stakeholder engagement, validating foundational studies by [Al Jardali et al. \(2021\)](#) and [Kumar et al. \(2022\)](#). The findings extend previous research by demonstrating that the customer perspective's dominance in partial BSC implementations may reflect competitive pressures unique to early childhood education markets, adding nuance to [Camilleri's \(2021\)](#) observations of stakeholder-focused performance measurement.

Most significantly, this study challenges the assumption that BSC frameworks are universally beneficial by revealing that implementation depth, rather than mere adoption, determines quality improvement outcomes—institutions with superficial BSC implementation show minimal performance advantages over non-adopters, suggesting that partial or poorly executed BSC strategies may create administrative burden without substantive quality enhancement. These findings collectively advance understanding of BSC applicability in early childhood contexts while highlighting critical conditions for successful implementation.

Several limitations must be acknowledged. The qualitative design, while providing rich insight, limits generalizability, especially given the purposive sample of Grade A institutions in major urban centers, which may not represent rural, lower-accredited, or informal PAUD settings. The cross-

sectional nature of the data also constrains causal interpretations and prevents observation of long-term implementation dynamics, underscoring the need for longitudinal and mixed-methods research. In addition, reliance on self-reported data without extensive external validation raises the possibility of social desirability bias; future studies should incorporate standardized quality assessments, independent observations, and objective performance metrics. Finally, focusing on already high-performing institutions provides limited understanding of BSC feasibility in resource-constrained or lower-performing contexts, suggesting the need for further investigation into how BSC frameworks function across the full spectrum of PAUD institutional capacities.

CONCLUSION

This study shows that Grade A accredited PAUD institutions vary widely in how deeply they implement Balanced Scorecard (BSC) strategies, with those adopting the framework comprehensively achieving stronger outcomes across educational quality, stakeholder satisfaction, operational efficiency, and organizational innovation. Effective institutions integrate all four BSC perspectives—financial, customer, internal processes, and learning and growth—supported by strong leadership, strategic alignment, data-driven decision-making, robust information systems, and sustained long-term commitment. These institutions demonstrate clearer strategic direction, more systematic monitoring, better curriculum and assessment practices, higher teacher and parent satisfaction, and stronger cultures of continuous improvement.

The research contributes both theoretical and practical insights by demonstrating how the BSC framework can be successfully adapted from business to early childhood education contexts, highlighting its potential to improve strategic alignment, organizational capability, and service quality. Practically, the findings guide PAUD leaders and policymakers on the importance of comprehensive implementation, adequate resources, stakeholder engagement, and long-term commitment to strategic management. This study's limitations include its qualitative design and purposive sampling of Grade A institutions in major urban centers, which may limit generalizability to diverse PAUD contexts. Additionally, the cross-sectional data constrain causal interpretation of BSC implementation effects.

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