



Hoshin Kanri and the Multi-Tier Catchball Mechanism in Internal Quality Assurance of Vietnamese Higher Education

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ABSTRACT

This paper contributes a practical application framework of the multi-tier catchball mechanism to the internal quality assurance (IQA) system of Vietnamese higher education. Drawing from the historical evolution of Hoshin Kanri and the current state of higher education reform in Vietnam, the study identifies limitations in prevalent existing models that lack flexible feedback loops and multi-level dialogue. The research focuses on two standards within the Strategic Quality Assurance domain of Circular 12: Standard 1 (Vision, Mission, and Culture) and Standard 3 (Leadership and Management). These standards require deep and broad stakeholder engagement, yet current implementation often remains at the level of "having plans/documents" without a structured execution mechanism. By synthesizing international literature on Hoshin Kanri, quality management models, and the domestic regulatory framework, the paper develops a four-tier catchball application model: (1) Vision consensus; (2) Responsibility delegation and performance indicators at the faculty/unit level; (3) Execution at the faculty/unit level; and (4) System-wide improvement via the PDCA cycle. The outputs from each tier are documented and utilized as accreditation evidence, ensuring a tight link between objectives, responsibilities, and data while fostering a culture of improvement and enhancing organizational capacity. The paper contributes a framework for "applying the multi-tier catchball mechanism in higher education quality assurance," a mapping matrix with two standards of Circular 12, and managerial implications, while proposing empirical research to verify effectiveness across various types of higher education institutions in the Vietnamese context.

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KEYWORDS: Hoshin Kanri, catchball, internal quality assurance, vision, management, leadership, Vietnamese higher education

1. INTRODUCTION

1.1. Background

Hoshin Kanri emerged in post-war Japan within the broader movement of Total Quality Management (TQM). It later evolved into a method that integrates strategic planning with TQM and continuous improvement through the Plan-Do-Check-Act (PDCA) cycle, drawing strong influence from the quality philosophy of W. Edwards Deming and statistical process control [1], [2]. During the 1980s and 1990s, the approach gradually spread to Western industries, including electronics, public service delivery, and manufacturing. It was adopted by well-known organizations such as Hewlett-Packard, Intel, Florida Power & Light, and the Toyota Production System. These organizations implemented the core tools of Hoshin Kanri—namely the PDCA cycle, the X-matrix, and the catchball process—while adapting them to fit

the organizational cultures of their respective contexts [1], [2], [3].

Recent studies indicate that Hoshin Kanri continues to expand into diverse sectors, while also highlighting a persistent gap between theoretical development and practical implementation [4]. The concept of catchball was first introduced by Akao [1] in 1991 as an iterative dialogue mechanism (catchball mechanism) designed to ensure goal alignment across management levels during policy deployment. This mechanism emphasizes two-way communication and bottom-up feedback (pp. 45-48). In 1996, Jackson [3] further developed this idea into the catchball technique within lean management systems, emphasizing the cascading of strategic objectives from top management to operational levels through repeated feedback loops (p. 67). By 2008, Hutchins [5] extended the concept into what he termed multi-tier catchball, which clearly describes a

hierarchical structure of organizational dialogue across multiple levels-from executive leadership to operational staff-in order to strengthen both ownership and feasibility of strategic objectives (pp. 112-115). This evolution reflects the localization and maturation of Hoshin Kanri, transforming it from a general mechanism into a structured application framework. Consequently, the concept of multi-tier catchball can be regarded as a theoretical contribution to contemporary research. In this study, the term is consistently used throughout the analysis and the development of the proposed analytical framework.

From a theoretical perspective, several studies have proposed implementation frameworks specifically designed for the education sector using the Hoshin Kanri approach. In particular, Ahmed [6] introduced a systemic framework that considers the distinctive characteristics of higher education, including collegial governance mechanisms, the need to safeguard academic freedom, the participation of key stakeholders (students, faculty members, staff, and external partners), and complex performance indicators such as academic quality, research output, and community engagement. This framework aims to align the stages of Hoshin Kanri with institutional planning processes and academic organization, while also identifying key success factors that influence the level of adoption within higher education environments. From a practical perspective, the principles of Hoshin Kanri have been applied in several institutional-level models to connect university-wide strategies with the activities of functional units [7]. More specifically, some studies propose integrating Hoshin Kanri with the Balanced Scorecard and other performance management systems in order to translate institutional mission statements and quality policies into measurable actions [6], [8]. In another example, a study conducted at the Armenian State Pedagogical University (ASPU) describes how strategic planning and implementation were carried out through the Hoshin Kanri matrix, detailing the practical steps of deployment and the monitoring approach based on the PDCA cycle [8]. Overall, international research confirms the potential of Hoshin Kanri to support strategy alignment and implementation across organizations. However, the degree of success largely depends on the cultural and institutional context of each organization.

Over the past fifteen years, Vietnamese higher education institutions have experienced significant changes in their strategies, visions, and missions in order to modernize the system, improve quality, and strengthen international integration. The Higher Education Reform Agenda (HERA) was approved by the Government as a comprehensive plan toward 2020, focusing on modernization, improving system efficiency, and diversifying organizational models and modes of training [9], [10].

At the same time, governance reforms have been implemented to increase institutional autonomy, reduce

dependence on line ministries, and redefine the regulatory role of the State, aiming to create a more autonomous and competitive higher education environment [10], [11]. Resolution No. 29 (2013) further reaffirmed education as a key driver of socio-economic development, marking an important shift in national strategic priorities [12]. The vision of Vietnamese higher education has also expanded toward greater international integration, learning from advanced international models while adapting to the Fourth Industrial Revolution in order to equip graduates with competencies required for the digital economy [13], [11]. However, the reform process has progressed relatively slowly due to the continued influence of administrative governance mechanisms and limited coordination among stakeholders. Meanwhile, the quality of higher education still shows a gap compared with regional standards, indicating the need for deeper reforms in educational philosophy and governance [11], [14]. In addition, several studies indicate that although the quality assurance system has gradually been developed, it still “faces several challenges related to operational coherence and the effectiveness of feedback mechanisms” [15]. Circular No. 12/2017/TT-BGDĐT (hereafter referred to as Circular 12) is a key regulatory document issued by the Ministry of Education and Training of Vietnam on 19 May 2017 to regulate external quality assurance and accreditation of higher education institutions [16]. The introduction of this Circular marked an important step in updating and refining the accreditation standards to better align with the development conditions of Vietnamese higher education as well as the context of international integration. The implementation of self-assessment, external evaluation, and accreditation processes has promoted governance innovation, strengthened leadership capacity, and enhanced the development of quality assurance personnel, thereby contributing to the establishment of a quality culture within higher education institutions [17]. This process reflects a broader shift from quality control toward quality assurance, consistent with international trends and the growing demand for institutional accountability [18].

Effective strategic planning in higher education requires the active participation and collaboration of stakeholders, which is essential for developing sustainable institutional plans. However, higher education institutions often lack sufficient stakeholder engagement, and the involvement of stakeholders is not always effective in aligning strategic plans with clearly defined operational objectives [19], [20]. Strategic management models such as the Plan-Do-Check-Act (PDCA) cycle, the European Foundation for Quality Management (EFQM) model, and the Balanced Scorecard (BSC) have been widely applied in higher education organizations with the aim of improving organizational performance and strengthening strategic alignment. Nevertheless, each of these models presents certain limitations when applied in the context of higher education.

Although the PDCA cycle provides a solid foundation for quality management through its iterative structure and emphasis on continuous improvement, its independent application in the complex environment of higher education often reveals limitations in terms of flexibility [21], multi-directional feedback, and dialogue across organizational levels. As a result, there is a risk of procedural formalism if mechanisms for cascading and aligning objectives through bottom-up consensus are absent. The multi-tier catchball mechanism in Hoshin Kanri can complement these limitations by introducing structured two-way dialogue and hierarchical alignment across organizational levels. This mechanism helps make the PDCA cycle more effective and less procedural when implemented in higher education institutions.

The European Foundation for Quality Management (EFQM) model is widely recognized in the business sector for its comprehensive approach. However, several limitations have been identified when it is applied in the context of higher education. First, the complexity of the model and its high resource requirements present major barriers for higher education institutions with limited financial and human resources. Effective implementation of EFQM requires substantial investment in professional expertise as well as well-developed data systems [22]. Second, EFQM is often considered insufficiently aligned with the educational mission. The model was originally designed to promote “excellence” in business performance and operational efficiency, whereas universities primarily focus on learning, research, and knowledge development rather than on economic competitiveness indicators [23]. Therefore, applying the EFQM model in higher education systems requires significant adaptation in order to properly reflect the nature of academic quality and the culture of higher education.

Similarly, the Balanced Scorecard (BSC) model also faces several challenges when applied in higher education. One major limitation is the lack of clear guidance for selecting appropriate performance indicators, which often leads to inconsistent and ineffective implementation across higher education institutions [21]. In addition, the feedback mechanism of the BSC can be relatively complex, particularly in non-profit environments such as universities, where financial indicators are difficult to define and interpret [19]. Studies also indicate that adaptation challenges are common. Universities often struggle to close the gap between current performance and strategic objectives due to conservative organizational perspectives, institutional inertia, and limited capacity to adapt to market-oriented management principles [24]. According to Sayed (2013), the use of the Balanced Scorecard in higher education may result in unbalanced performance indicators, weak causal relationships among measures, and reliance on underdeveloped information systems, all of which can hinder

effective strategic decision-making [25]. Finally, cultural resistance represents a significant challenge, as the implementation of BSC requires substantial changes in attitudes toward performance measurement and accountability—changes that many faculty members and academic staff may perceive as a threat to academic freedom [26], [27].

1.2. Research Problem

Among the 25 standards in the institutional accreditation framework for higher education institutions regulated under Circular 12, Standard 1 and Standard 3 specifically focus on evaluating the implementation of “Vision, Mission, and Culture” and “Leadership and Management,” which belong to the strategic quality assurance domain of higher education institutions. A closer examination of the criteria under these two standards, guided by Official Letter No. 1668/QLCL-KĐCLGD dated 31 December 2019 (hereafter referred to as Official Letter 1668) [28] issued by the Quality Management Department, indicates that Circular 12 requires the participation of stakeholders as a mandatory, comprehensive, and continuous element throughout the processes of developing, implementing, reviewing, and improving the vision, mission, culture, and governance structure of higher education institutions (Criteria 1.4 and 1.5). This participation includes both internal stakeholders—such as administrators and faculty members—and external stakeholders, including students, employers, and professional or social organizations (Criterion 1.1). Stakeholders are involved throughout the entire cycle: providing input during the formulation of the vision and mission (Criteria 1.1, 1.2, and 1.3); collaborating with institutional leadership in strategic orientation and communication processes (Criterion 3.2); and offering feedback to support revision and improvement (Criteria 1.4 and 1.5). Primary responsibility rests with institutional leadership, which is responsible for establishing direction and ensuring that the vision, mission, and institutional culture align with stakeholder needs (Criteria 1.1, 1.2, and 3.2). Leadership is also responsible for directing operational units in implementing activities, establishing a clear governance structure, and defining functions and decision-making processes (Criterion 3.1). Specialized units are tasked with implementation, monitoring, and periodic review and improvement in accordance with the institutional vision and mission (Criteria 1.1, 1.4, and 1.5). The implementation tools prescribed are diverse and systematic. They include formal statements of vision, mission, and core values; organizational regulations; and institutional action plans (Criteria 1.1, 1.2, and 3.1). They also include documentation of stakeholder consultations, review reports, feedback data, and personnel evaluation records (Criteria 1.1, 1.2, 1.4, 3.2, and 3.3), as well as communication channels such as institutional websites, notice boards, informational materials, workshops, and dialogue forums. These regulations clearly reflect a governance approach based on

evidence, promoting transparency, consensus, and continuous improvement within the quality assurance systems of higher education institutions.

An analysis of the content of Standard 1 and Standard 3 in the institutional accreditation standards for higher education institutions under Circular 12 indicates that, although these two standards emphasize the importance of dialogue, consensus, and continuous improvement among stakeholders, the current regulations largely remain at the level of “having plans” and “having formal documents.” Most activities are declarative and orientation-based, lacking structured implementation mechanisms that can facilitate multi-level connections among institutional leadership, functional units, and stakeholders. This gap reflects the absence of a strategic governance model grounded in dialogue and two-way feedback, an essential feature of the multi-tier catchball mechanism in the Hoshin Kanri approach. Therefore, it is necessary to examine the potential application of the multi-tier catchball theoretical framework in order to establish an interactive strategy implementation mechanism that ensures alignment, transparency, and continuous improvement in the development and deployment of institutional vision, as well as in strengthening internal quality assurance systems within Vietnamese higher education institutions.

1.3. Theoretical Gap

International studies on Hoshin Kanri have demonstrated the effectiveness of this approach in strategy implementation, particularly through mechanisms that promote multi-level dialogue and feedback [1], [29]. In the education sector, several studies have begun to apply Hoshin Kanri to school governance; however, most of these applications are limited to Western or Japanese educational systems. In contrast, research on internal quality assurance in Vietnam has primarily adopted models such as PDCA, EFQM, or AUN-QA, focusing mainly on organizational structures, operational processes, and evaluation tools [30], [17], [18]. These studies have paid limited attention to strategic implementation mechanisms that incorporate structured dialogue and multi-level feedback. To date, no study in Vietnam has explicitly linked or applied Hoshin Kanri—particularly the multi-tier catchball mechanism—in the design and operation of internal quality assurance systems within higher education institutions. This gap opens a new research direction that explores the potential integration of a multi-tier mechanism as a theoretical framework suitable for the Vietnamese context. Such an approach may enhance stakeholder participation, strengthen strategic leadership capacity, and promote continuous improvement in the development of institutional vision and leadership-management practices, thereby improving the effectiveness of internal quality assurance systems in Vietnamese higher education institutions.

1.4. Objectives

This paper aims to develop and explain a theoretical framework for the multi-tier catchball mechanism (hereafter referred to as *catchball*) based on the Hoshin Kanri approach in order to strengthen the implementation of internal quality assurance strategies in Vietnamese higher education institutions. Specifically, the study focuses on enhancing institutional capacity in vision development and leadership—management, with particular attention to two core standards of Circular No. 12/2017/TT-BGDĐT: Standard 1 (Vision, Mission, and Culture) and Standard 3 (Leadership and Management). The objective of the study is twofold. First, it clarifies the theoretical foundation and the added value of the catchball mechanism in addressing the limitations of existing strategic management models such as PDCA, EFQM, and the Balanced Scorecard. Second, it proposes an application model of the multi-tier catchball mechanism for operating internal quality assurance systems in higher education institutions, consisting of four tiers corresponding to different levels of strategic implementation within institutions. Based on this framework, the paper establishes a conceptual model and a linkage matrix connecting the catchball tiers with the criteria of Standard 1 and Standard 3. It also discusses managerial implications aimed at strengthening dialogue, multi-directional feedback, and continuous improvement within the internal quality assurance systems of Vietnamese higher education.

1.5. Structure of the Paper

The paper is structured into four sections to ensure logical coherence and clarity of presentation. Section 1 - Introduction presents the background of the research problem, identifies the theoretical gap, and outlines the research objectives. This section provides the foundation for applying the Hoshin Kanri approach and the multi-tier catchball mechanism to the internal quality assurance systems of Vietnamese higher education institutions. Section 2 - Research Methodology describes the theoretical approach, analytical procedures, and data sources used to develop the proposed application model of the multi-tier catchball mechanism for operating internal quality assurance systems in higher education institutions. Section 3 - Results and Discussion presents the proposed application model of the multi-tier catchball mechanism, explains the relationship between the catchball tiers and Standards 1 and 3 of Circular No. 12/2017/TT-BGDĐT, and discusses the role of multi-level dialogue in supporting the implementation of internal quality assurance strategies. Section 4 - Conclusion summarizes the theoretical and practical contributions of the study, highlights its implications for the leadership of higher education institutions, and proposes directions for future research to further validate and refine the proposed model.

2. RESEARCH METHODOLOGY

2.1. Research Approach

This study approaches the concept of “dialogue and consensus” in internal quality assurance systems through three parallel analytical directions. First, it conducts a theoretical analysis of major strategic management models- PDCA, EFQM, and the Balanced Scorecard-while clarifying the mechanism of iterative dialogue and multi-level consensus embedded in the Hoshin Kanri approach. Second, it synthesizes key regulatory documents, including Circular No. 12/2017/TT-BGDĐT dated 19 May 2017 and Official Letter No. 1668/QLCL-KĐCLGD dated 31 December 2019. Third, it performs a detailed content analysis of two standards and nine criteria specified in Table 1668, with reference to the evaluation requirements for achieving Level 4, in order to identify mandatory requirements, minimum evidence, and existing practical gaps. Based on this analysis, the study proposes a structured multi-tier catchball mechanism that is practical, implementable, and verifiable within the operation of internal quality assurance systems, thereby supporting the effective implementation of external quality assurance and accreditation processes in Vietnamese higher education institutions.

2.2. Data Sources and Analytical Procedures

The data sources of this study consist of three main groups of documents: (1) International literature on Hoshin Kanri: This group includes academic publications, scholarly books, and case studies on the implementation of Hoshin Kanri in industrial, service, and educational sectors, published by scholars from Japan, the United States, and Europe. These sources are used to identify the core tools of the Hoshin Kanri approach, such as the formulation of strategic objectives in the *Hoshin plan*, the multi-level dialogue process known as *catchball*, and the review and improvement mechanisms embedded in the PDCA cycle; (2) Literature on other quality management models: This group includes studies related to PDCA, the European Foundation for Quality Management (EFQM) model, and the Balanced Scorecard. These sources provide a basis for comparing the value and limitations of Hoshin Kanri with other management models that have been widely applied in educational quality assurance; (3) Literature on the cultural and governance context of Vietnamese higher education: This group includes studies on organizational culture, university governance, institutional autonomy, and higher education reform policies in Vietnam (from the Higher Education Reform Agenda - HERA 2006-2020 to the Law on Higher Education issued in 2012 and amended in 2018). These documents provide the analytical foundation for examining the compatibility of Hoshin Kanri with the Vietnamese higher education context and identifying necessary contextual adaptations.

The scope of analysis is limited to publications from the year 2000 to the present, in order to reflect contemporary trends in higher education governance following major reform

initiatives. This study focuses primarily on the theoretical level and does not include empirical data or specific institutional case studies.

2.3. Analytical Framework

This study adopts Hoshin Kanri as the overarching framework for long-term strategic management and uses the catchball mechanism as a multi-tier iterative dialogue process to directly align with Standard 1 (Vision, Mission, and Culture) and Standard 3 (Leadership and Management) as specified in Official Letter No. 1668.

Specifically, Tier 1 corresponds to Criterion 1.1 (stakeholder consensus on the institutional vision) and Criterion 1.4 (periodic review). Tier 2 corresponds to Criterion 3.1 (role and responsibility allocation at the unit level). Tier 3 corresponds to Criterion 3.2 (implementation of strategic directions). Tier 4, which focuses on improvement based on the PDCA cycle, corresponds to Criterion 1.5 (process improvement) and Criterion 3.4 (organizational structure improvement).

Through this approach, the iterative dialogue process of the catchball mechanism is translated into concrete accreditation evidence. This helps ensure bottom-up consensus among stakeholders while supporting continuous improvement through the PDCA cycle.

3. RESULTS AND DISCUSSION

3.1. Proposed Theoretical Framework

The theoretical framework of the application model of the multi-tier catchball mechanism for operating internal quality assurance systems in higher education institutions is designed as a four-tier structure. This structure aims to translate the iterative dialogue process of the Hoshin Kanri approach into a structured implementation mechanism for Standard 1 (Vision, Mission, and Culture) and Standard 3 (Leadership and Management) within the institutional accreditation system of Vietnamese higher education (as guided by the evaluation framework accompanying Official Letter No. 1668/QLCL-KĐCLGD).

Tier 1 - Developing and building consensus on the strategic vision aims to respond to stakeholder needs (Criterion 1.1) and to meet the requirement for periodic review of the institutional vision (Criterion 1.4). At this stage, the catchball mechanism is implemented to seek and achieve consensus on the vision and mission with external stakeholders through dialogue processes such as workshops, surveys, or consultation meetings between the Rector/University Council and both internal and external stakeholders. The outputs of this stage include documentation of catchball dialogue rounds conducted during the formulation of the institutional vision and periodic review reports. These documents serve as evidence demonstrating compliance with the accreditation requirements of “stakeholder participation” and “documented review results.” Tier 1 functions as the starting point of the PDCA cycle. It provides a consensus-based strategic vision

that guides subsequent implementation stages and receives feedback from Tier 4 to support further improvement.

Tier 2 - Faculty and unit-level governance focuses on Criterion 3.1, with the objective of clearly defining responsibilities, authority, and key performance indicators (KPIs) from the institutional level down to academic and administrative units (faculties, departments, and centers), ensuring that the governance structure is formally documented through official regulations. At this stage, the Rector leads the process and engages in discussions with deans and heads of departments to determine feasible KPIs aligned with institutional goals. The main outputs include a structured goal-deployment chart and formally documented job descriptions for faculties and administrative units, endorsed by authorized signatures to ensure that each unit clearly understands and assumes its specific responsibilities. Tier 2 serves as a “legal and managerial bridge.” It receives the strategic vision from Tier 1 and translates it into unit-level KPIs, while also providing a clear goal structure for Tier 3 to implement and generate feedback. At the same time, it receives structural improvement inputs from Tier 4. Evidence generated at this stage includes the goal-decomposition framework and documented job descriptions at the faculty and unit levels. These documents support accreditation requirements specified in Official Letter 1668 regarding the presence of “clear regulations on roles and responsibilities” and “a governance structure aligned with institutional strategy” (Criterion 3.4).

Tier 3 -Implementation at the faculty/department and related unit levels aims to connect faculty members, students, and support staff with institutional strategic objectives. This stage ensures that stakeholders understand the goals, demonstrate commitment, identify emerging issues, and propose solutions based on practical conditions. Dialogue at this level is conducted through various formats such as workshops, surveys, or group meetings. For large higher education institutions, the catchball process typically takes place at the department level, involving the head of department, faculty members, student representatives, and representatives from academic support units. For institutions of medium or smaller scale, catchball is usually implemented at the faculty level, led by the dean, with participation from faculty members, student representatives, and representatives from relevant administrative offices or support units. The outcomes of these discussions are consolidated into formal reports. This tier also recommends the use of documentation tools to systematically record exchanges and discussions among stakeholders (for example, summary reports or meeting records) in order to capture feedback in a structured and transparent manner.

Evidence may include workshop recordings documenting the dialogue process, summarized student feedback on institutional objectives, and other related documentation. These materials help demonstrate compliance with accreditation requirements concerning leadership engagement in communication and alignment processes and evidence that stakeholders understand institutional objectives.

Tier 4 - Improvement through the PDCA cycle relates to Criterion 1.5 (improvement of the vision and the process for developing it) and Criterion 3.4 (improvement of the leadership and governance structure). This tier functions as the feedback stage where institution-wide internal quality assurance data are used to adjust both the institutional vision and governance arrangements. The process applies the PDCA cycle in combination with data collected and documented through the tools used in Tiers 1, 2, and 3. Operationally, this stage is implemented by the Quality Assurance Council of the higher education institution (including the Rector). The process involves collecting performance indicators and implementation results from Tiers 2 and 3, conducting before–after comparisons, identifying root causes of issues, and making improvement decisions. The results are documented in official institutional records and used to revise or adjust the strategic vision (Tier 1) and the governance structure (Tier 2). Evidence for this stage may include process improvement reports, relevant personnel decisions, and other official documents. These materials help demonstrate compliance with accreditation requirements that the governance structure is improved based on review findings and that the process for developing the institutional vision is reviewed and improved at least once every five years.

The four-tier model forms a closed-loop cycle consisting of: vision consensus (Tier 1) - role and responsibility allocation (Tier 2) - implementation (Tier 3) - continuous improvement (Tier 4). This structure ensures iterative feedback, organizational commitment, and practical feasibility, thereby supporting higher levels of compliance with institutional accreditation standards.

Overall, the application model of the multi-tier catchball mechanism in operating internal quality assurance systems can be understood as a structured process of iterative dialogue among different governance levels within higher education institutions. The model aims to achieve consensus on quality objectives, ensure feasibility and bottom-up commitment, and establish a continuous improvement cycle based on the PDCA framework. In this way, it aligns closely with Standards 1 and 3 of the institutional accreditation framework stipulated in Circular No. 12/2017/TT-BGDĐT.

Table 1. Application Model of the Multi-tier Catchball Mechanism in Operating Internal Quality Assurance Systems in Higher Education Institutions

Tier	Purpose & Related Standards/Criteria	Participants	Minimum Evidence for Institutional Accreditation
Tier 1 – Strategic Vision	Develop and build consensus on the institutional vision and mission with external stakeholders. Criterion 1.1 (ensuring the vision responds to stakeholder needs) Criterion 1.4 (periodic review of the vision)	- Rector - University Council - Leaders of faculties and administrative units - Staff representatives - Faculty representatives - Student representatives - Employers/industry partners - Alumni	- Records of catchball dialogue rounds during the development of the vision - Periodic review reports
Tier 2 – Faculty and Unit-Level Governance	Develop formal regulations to define organizational structure and responsibilities from the institutional level to academic and administrative units. Criterion 3.1 (clear governance structure and roles)	- Rector - Deans and Heads of Departments (if applicable) - Heads of institutional units (Academic Affairs, Testing and Assessment, Library, IT, Administration, Human Resources, etc.)	- Organizational charts or official documents defining structure, functions, responsibilities, and specific objectives
Tier 3 – Implementation at Faculty/Department and Unit Levels	Communicate and align faculty members, students, and related units with institutional objectives; collect practical feedback from stakeholders. Criterion 3.2 (leadership engagement in stakeholder alignment)	- Heads of Departments (for small/medium institutions) or Deans (for large institutions) - Faculty members - Student representatives - Representatives from academic support units	- Workshop or consultation meeting records - Consolidated reports of feedback from students, faculty members, and support units
Tier 4 – Continuous Improvement through the PDCA Cycle (Institution-wide)	Implement improvements based on internal quality assurance data; adjust the institutional vision and governance structure accordingly. Criterion 1.5 (improvement of processes for developing vision and strategy) Criterion 3.4 (improvement of leadership and governance structure)	- Rector - Quality Assurance Council - All Deans and Heads of administrative units	- PDCA reports (before–after improvement) - Official regulatory documents issued to support improvement actions

3.2. Gaps and Managerial Implications

According to Ahmed, common challenges in strategic management include unclear communication of objectives, frequent changes in strategic goals, excessive focus on short-term projects rather than long-term competitiveness, cost considerations becoming the primary driver instead of opportunities for improvement, weak linkage between objectives and implementation processes, and unsustainable achievements. In the Vietnamese context, these challenges are further shaped by cultural characteristics such as a high level of hierarchy and a strong sense of collectivism [31].

Relationships between superiors and subordinates often reflect inequalities in status and authority, with a high degree of centralization that weakens effective delegation. In Vietnamese education, teaching practices traditionally emphasize the instructor-centered model, which may lead students to become more dependent and less inclined to engage in critical dialogue or debate [30]. At the same time, a strong emphasis on procedural compliance tends to prioritize stability over experimentation, making it difficult for innovation and improvement initiatives to emerge even when supporting data are available. As a result, two-way

feedback mechanisms often operate ineffectively, delegation processes progress slowly, and attempts at decentralization may encounter implicit resistance due to entrenched centralized practices. These challenges highlight the need for a strategic management approach capable of linking long-term objectives with operational practices. In this regard, the Hoshin Kanri approach represents a particularly promising option.

The multi-tier catchball mechanism should not be viewed merely as a technical tool but rather as a philosophy of dialogic leadership. It represents a fundamental shift from highly hierarchical, command-based management toward consensus-oriented governance with bottom-up commitment. In this approach, leaders no longer simply “issue directives” but co-create institutional objectives with faculty members, staff, students, and industry partners. Such a process helps reduce organizational resistance and enables individuals and units to recognize their roles, voices, and responsibilities in achieving institutional goals, while also ensuring the practical feasibility of the institutional vision. Required accreditation evidence—such as meeting records, consultation minutes, and review reports; thus serves not only a formal compliance function but also demonstrates substantive governance effectiveness when management practices are genuinely implemented. As a result, higher education institutions can achieve greater depth in their internal quality assurance practices and become better prepared for institutional accreditation. The proposed model has been adapted to the governance culture of Vietnam, transforming internal quality assurance from a paperwork-oriented administrative activity into a driver of sustainable improvement.

4. CONCLUSION

The paper proposes a practical application framework for the multi-tier catchball mechanism as a tool for internal quality assurance in higher education. This framework extends the application of the Hoshin Kanri approach to the education sector, with particular emphasis on structured dialogue and feedback among institutional leaders, faculty members, students, and other stakeholders. The four tiers of the model—from strategic vision planning, allocation of governance responsibilities, and implementation alignment, to system-wide improvement based on the PDCA cycle—are designed to establish two-way information flows and a continuous improvement cycle within the organization. This approach not only clarifies the linkage between strategy and action but also enriches existing theoretical frameworks, which often focus more on procedural compliance than on dialogue-based governance and the development of learning-oriented organizations.

For leaders of Vietnamese higher education institutions, the application framework of the multi-tier catchball mechanism in operating internal quality assurance systems provides important practical guidance for transforming the way quality

assurance strategies are planned and implemented. Instead of relying on a top-down directive approach, this framework encourages leaders to cultivate an open environment for dialogue, where units and individuals can participate in feedback processes, co-create solutions, and share responsibility for quality outcomes. The implementation of the catchball mechanism helps strengthen a sense of ownership, enhance transparency and internal accountability, and foster a culture of continuous improvement—key factors for the sustainable development of internal quality assurance systems in higher education.

In the next stage, further empirical research is needed to examine the feasibility and effectiveness of the application framework of the multi-tier catchball mechanism in operating internal quality assurance systems within specific contexts of Vietnamese higher education institutions. Future studies may focus on testing the model across different types of institutions—such as public and private universities, or institutions with research-oriented and application-oriented missions. These studies could also assess the impact of the catchball mechanism on leadership capacity, faculty and student engagement, and the improvement of internal quality assurance processes. Empirical findings would contribute to refining the conceptual model while also providing practical evidence to support the integration of multi-level dialogue mechanisms into quality assurance policies and implementation guidelines in Vietnam.

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