

“Quality management research in higher education: Bibliometric mapping and a thematic conceptual synthesis”

AUTHORS	Adina Yessengaliyeva 
	Aknur Zhidebekkyzy 
	 Yuriy Bilan 
	 Timur Buldybayev 
ARTICLE INFO	Adina Yessengaliyeva, Aknur Zhidebekkyzy, Yuriy Bilan and Timur Buldybayev (2026). Quality management research in higher education: Bibliometric mapping and a thematic conceptual synthesis. <i>Knowledge and Performance Management</i> , 10(3), 225-241. doi: 10.21511/kpm.10(3).2026.14
DOI	http://dx.doi.org/10.21511/kpm.10(3).2026.14
RELEASED ON	Tuesday, 22 September 2026
RECEIVED ON	Friday, 03 July 2026
ACCEPTED ON	Wednesday, 09 September 2026
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Knowledge and Performance Management"
ISSN PRINT	2543-5507
ISSN ONLINE	2616-3829
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	Sp. z o.o. Kozmenko Science Publishing



NUMBER OF REFERENCES

54



NUMBER OF FIGURES

5



NUMBER OF TABLES

3

© The author(s) 2026. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine
www.businessperspectives.org

Type of the article: Research Article

Received on: 3rd of July, 2026

Accepted on: 9th of September, 2026

Published on: 22nd of September, 2026

© Adina Yessengaliyeva, Aknur Zhidebekkyzy, Yuriy Bilan, Timur Buldybayev, 2026

Adina Yessengaliyeva, Senior Lecturer,
School of Management, Almaty
Management University, Kazakhstan.

Aknur Zhidebekkyzy, Ph.D., Associate
Professor, School of Management,
Almaty Management University,
Kazakhstan. (Corresponding author)

Yuriy Bilan, Dr. hab., Professor,
Coordination Center for Research in
Social Sciences, Faculty of Economics
and Business, University of Debrecen,
Hungary; European Center for Business
Research, Faculty of Economics and
Entrepreneurship, Pan-European
University, Slovakia.

Timur Buldybayev, Rector, Almaty
Management University, Kazakhstan.



This is an Open Access article,
distributed under the terms of the
[Creative Commons Attribution 4.0
International license](https://creativecommons.org/licenses/by/4.0/), which permits
unrestricted re-use, distribution, and
reproduction in any medium, provided
the original work is properly cited.

Conflict of interest statement:

Author(s) reported no conflict of interest

Adina Yessengaliyeva (Kazakhstan), Aknur Zhidebekkyzy (Kazakhstan),
Yuriy Bilan (Hungary, Slovakia), Timur Buldybayev (Kazakhstan)

QUALITY MANAGEMENT RESEARCH IN HIGHER EDUCATION: BIBLIOMETRIC MAPPING AND A THEMATIC CONCEPTUAL SYNTHESIS

Abstract

Research on quality management in higher education remains conceptually fragmented, with recurrent organizational issues examined across partially disconnected strands of literature. This study analyzes Scopus-indexed higher education research using quality management terminology and organizes its recurrent concerns into an integrated conceptual account. A two-level design combined bibliometric mapping of 1,829 records published between 2004 and 2025 with full-text thematic conceptual synthesis of 159 retained studies. Publication activity increased from 25 records in 2004 to a peak of 157 in 2019, while total quality management terminology remained prominent alongside quality assurance and quality improvement vocabularies. The conceptual synthesis organized recurrent concerns into four higher-order dimensions: strategic leadership and governance, implementation of QM frameworks and digital transformation, quality culture and organizational dynamics, and performance evaluation and external accountability. Studies situated in emerging and developing country contexts additionally highlighted external quality requirements, adaptation of established frameworks, institutional capacity for implementation, and supporting information systems. The four dimensions were integrated into a conceptual model spanning strategic, operational, organizational, and evaluation levels. Overall, the results place framework adoption within a broader organizational context by highlighting the conditions under which quality arrangements are implemented and sustained. For institutional leaders and quality managers, this suggests assessing whether formal arrangements become embedded in organizational practice and inform subsequent decisions.

Keywords

quality management, higher education, quality culture,
institutional governance, digital transformation,
bibliometric mapping, conceptual synthesis

JEL Classification

I23, I28, M10, L15

INTRODUCTION

Quality management (QM) in higher education is examined through multiple, partly overlapping conceptual perspectives. Quality assurance, accreditation, quality culture, educational quality, institutional effectiveness, performance measurement, and continuous improvement address related aspects of institutional quality but differ in scope and function and should not be treated as interchangeable (Elassy, 2015; Manatos et al., 2017; Harvey, 2024). This conceptual heterogeneity complicates the synthesis of how QM has been studied and how its findings relate to the wider institutional quality agenda.

A related issue concerns the relationship between formal quality arrangements and their implementation in higher education institutions. Studies indicate that quality assurance and management procedures can support evaluation, organizational learning, and improve-

ment, but may also become compliance-oriented or remain weakly connected to academic practice, so that formal structures and their substantive implementation are analytically distinct (Newton, 2000; Stensaker, 2003; Cardoso et al., 2019; Seyfried et al., 2019).

The research problem therefore lies in the fragmentation of research on QM and the limited integration of the perspectives through which it has been examined. Different theoretical, organizational, and managerial perspectives have often been studied separately, and their relationships remain only partially synthesized. Clarifying how these perspectives relate to one another within the bounded body of higher education research that explicitly adopts the language of quality management is necessary for a more coherent understanding of how QM is conceptualized and implemented across different institutional contexts.

1. LITERATURE REVIEW

The conceptual fragmentation surrounding QM begins with the contested meaning of quality itself. Harvey and Green (1993) distinguished quality as exceptional, perfection or consistency, fitness for purpose, value for money, and transformation; a later reassessment confirmed the continuing relevance of these formulations while emphasizing that quality, standards, assurance, and culture should not be treated as interchangeable concepts (Harvey, 2024).

In this study, quality management (QM) refers to the coordinated institutional policies, structures, processes, data practices, and cultural arrangements through which a higher education institution sets quality objectives, assures standards, evaluates performance, and supports continuous improvement across its core activities. Educational quality denotes the attribute or judgment being pursued; quality assurance (QA) comprises internal and external processes intended to provide confidence that standards are maintained and enhanced; accreditation is a formal external recognition mechanism; quality culture concerns the shared values and practices that sustain improvement; and institutional effectiveness and performance refer to assessed organizational results. These concepts interact with QM but are not treated as synonymous with, or simply subsumed within, it (Elassy, 2015; Manatos et al., 2017; Sarrico, 2022).

These distinctions also delimit the object of the present review. The analysis focuses on higher education research retrieved through explicit use of quality management terminology, while adjacent

literature on QA, accreditation, quality culture, and institutional effectiveness provides conceptual context for interpreting this bounded body of research. This boundary defines the scope of the review and the interpretation of its findings.

The operational roots of QM in higher education lie partly in the transfer of approaches developed in industrial and commercial settings. Total Quality Management (TQM), ISO 9000/9001, the European Foundation for Quality Management (EFQM) model, the Malcolm Baldrige framework, and related continuous-improvement approaches introduced a vocabulary of process control, stakeholder orientation, leadership commitment, measurement, and iterative improvement (Owlia & Aspinwall, 1997; Tarí & Dick, 2016; Papanthymou & Darra, 2017). Their application to universities, however, has long been contested. Academic organizations combine multiple functions, disciplinary structures, professional autonomy, and academic judgment. Mechanical transfer of industrial models may therefore privilege documentation, procedural consistency, and managerial control over the substantive purposes of teaching, learning, and research (Becket & Brookes, 2008; Manatos et al., 2017). The literature consequently emphasizes adaptation: quality models become meaningful when aligned with institutional missions, governance arrangements, and academic work.

This broader perspective brings internal QA, external review, accreditation, governance, and organizational learning into the same analytical setting. External quality regimes can increase transparency and formalize expectations, while internal systems can connect evaluation evidence to program review, resource allocation, and improvement. Yet the same

procedures can become detached from academic practice. Research on quality monitoring and internal QA identifies a persistent tension between accountability and enhancement: review processes may stimulate reflection and organizational learning, but they may also generate administrative burden and ritualized compliance when staff experience them mainly as externally imposed requirements (Newton, 2000; Stensaker, 2003; Cardoso et al., 2019). Dill (1995) similarly showed that quality assurance arrangements differ in the balance they strike between external control and institutional responsibility. Comparative evidence further indicates that national and institutional contexts influence how common quality assurance standards are interpreted and implemented (Alzafari & Ursin, 2019). The literature therefore frames QM as a context-dependent organizational arrangement whose implementation varies across institutional settings.

Institutional theory helps explain why formal adoption and substantive implementation may diverge. Universities operate under regulatory, normative, and mimetic pressures and may adopt visible quality structures partly to demonstrate legitimacy. Formal conformity, however, does not necessarily mean that these structures become integrated into routine academic work. Evidence from German higher education suggests that institutional pressures were important for adopting QM, whereas leadership and institutional entrepreneurship were more consequential for implementation and perceived effectiveness (Seyfried et al., 2019). Organizational learning perspectives complement this account by focusing on whether evaluation information is interpreted, communicated, and incorporated into institutional decisions. Evidence from universities responding to QA reform shows that institutional change and organizational learning develop through interactions between organizational practices and individual learning processes (Q. Liu & L. Liu, 2018). From this perspective, formal quality arrangements become substantively embedded as centrally defined policies are translated into routines that are meaningful within academic units.

Research on quality culture develops the same problem from a different direction. Quality culture combines structural and managerial arrangements with shared values, commitment, trust, commu-

nication, participation, and collective responsibility for improvement (Harvey & Stensaker, 2008; Bendermacher et al., 2017; Ehlers, 2009). Empirical efforts to operationalize quality culture likewise emphasize institution-specific shared attitudes and commitment to quality alongside formal QA mechanisms (Sattler & Sonntag, 2018). Quality culture complements formal QA by addressing the conditions under which formal arrangements become embedded in everyday academic practice. Leadership matters, but a purely top-down approach may reinforce perceptions of quality work as managerial control. Staff engagement, credible feedback loops, opportunities for participation, and space for professional judgment are therefore central to implementation (Cronemyr et al., 2017). This perspective shifts attention from whether an institution possesses quality instruments to how those instruments are enacted and sustained, and cautions against treating documented procedures as evidence of effectiveness.

Performance measurement adds another layer to this debate. Universities increasingly operate with indicators, rankings, dashboards, student feedback, research metrics, and other forms of performance data. Such information can support diagnosis, benchmarking, and institutional learning, but it can also narrow attention toward what is readily measurable and create reporting burdens when indicators are used mainly for external control (Sarrico, 2022). Beerkens (2022) argues that the expansion of performance data changes not only the amount of information available but also the governance relationships through which academic work is monitored. Accreditation and external QA thus sit within a broader accountability architecture in which evidence can serve both improvement and control. The central issue is whether measurement systems connect evidence to decision-making without reducing quality to what is easily quantified.

Digitalization intensifies both the opportunities and tensions associated with performance-based QM. Web-based quality management systems can support more integrated data management than decentralized arrangements (Zgodavová et al., 2015), while centralized analytics have been explored as a means of coordinating evidence across multiple accreditation and quality requirements (Tran & Kuula, 2023). Quality 4.0 extends this development

through the integration of data analytics, automation, and other Industry 4.0 technologies into institutional quality processes (Lodi et al., 2022; Wawak et al., 2024). Yet digital tools do not remove the organizational problems identified in earlier QA and quality culture research. Their contribution depends on how information systems are connected to institutional processes and decision-making.

Existing reviews have clarified important parts of this knowledge base, but they have addressed distinct segments of the literature. Tarí and Dick (2016) mapped trends in QM research; Manatos et al. (2017) examined the integration of QM principles and practices within higher education institutions; Papanthymou and Darra (2017) reviewed prominent approaches; and Nasim et al. (2020) synthesized two decades of TQM research. Collectively, these reviews address both individual quality approaches and broader organizational and institutional questions, but the relevant perspectives remain dispersed across technical, governance, cultural, performance, and digital strands. Recent work on performance data and Quality 4.0 further extends the literature beyond the main period covered by several earlier syntheses (Beerens, 2022; Wawak et al., 2024).

A further unresolved issue concerns the contextual transferability of QM arrangements across higher education systems. Regulatory structures, institutional capacity, and resource conditions differ across national settings, potentially affecting how common quality approaches are interpreted and implemented. Comparative work on QA agencies shows that autonomy, accountability, and regulatory arrangements vary across regions and national systems (Hou et al., 2015; Juanatey et al., 2021). Country-focused research likewise suggests that QM develops through nationally specific reform trajectories; Hartono (2024), for example, reviews university quality management research in Indonesia. Evidence from Kazakhstan also points to the importance of institutional reform, stakeholder expectations, and organizational capacity in the pursuit of academic excellence (Kudaibergenova et al., 2025; Zhidebekkyzy et al., 2026). Together, these studies indicate that QM implementation in these country contexts is shaped by regulatory pressure, institutional capacity, and local governance.

The literature therefore reveals several unresolved tensions. First, QM is discussed alongside quality assurance, accreditation, quality culture, and institutional effectiveness, yet the conceptual boundaries among these areas remain inconsistent. Second, the literature continues to contrast formal adoption with substantive implementation and external accountability with internally driven improvement. Third, the implementation and operation of common quality frameworks appear to vary with institutional governance, organizational culture, and resource conditions, raising questions about their transferability across higher education systems. Previous reviews have clarified important components of this knowledge base, but these perspectives remain only partially integrated, while the contextual conditions shaping their implementation also remain unevenly synthesized.

Against this background, the study aims to examine the structure of higher education research retrieved through explicit quality management terminology and to conceptually integrate the recurrent organizational issues discussed within this bounded body of literature. It addresses the following research questions:

- RQ1: *What bibliometric patterns characterize Scopus-indexed higher education research retrieved through explicit quality management terminology between 2004 and 2025?*
- RQ2: *How can the recurrent issues discussed in the retained studies be conceptually organized into higher-order dimensions of quality management in higher education?*
- RQ3: *What context-specific implementation patterns are discussed in studies conducted in emerging and developing country contexts?*

2. METHOD

2.1. Review design and analytical scope

This study combines bibliometric mapping with a thematic conceptual synthesis. Literature retrieval and screening followed predefined procedures informed by PRISMA 2020 (Page et al., 2021).

Bibliometric mapping characterized the retrieved Scopus corpus, while the conceptual synthesis examined recurrent organizational issues within the retained Level 2 studies.

The study operationalizes this boundary through a search focused on explicit quality management terminology. Accordingly, Level 1 characterizes the retrieved Scopus corpus and addresses RQ1, while Level 2 addresses RQ2 and RQ3 through conceptual synthesis.

2.2. Search strategy and screening

Bibliographic records were retrieved from Scopus in mid-January 2026. Scopus was used because its structured bibliographic and citation metadata support large-scale bibliometric analysis (Mongeon & Paul-Hus, 2016). The search was applied to titles, abstracts, and keywords using:

TITLE-ABS-KEY (“quality management” AND (“higher education” OR university*))

The exact expression “quality management” was retained deliberately to operationalize the bounded research object defined in this study. The search covered publications from 2004 through 2025 and initially returned 8,460 records.

Records were restricted to English-language articles, reviews, book chapters, books, and conference papers published between 2004 and 2025, leaving 6,318 records. Restriction to Social Sciences; Business, Management and Accounting; and Decision Sciences yielded 1,829 records, which constituted the Level 1 corpus used for bibliometric mapping. Because Scopus assigns subject areas at the source level rather than the article level, some medical-education publications remained in this corpus.

Two reviewers assessed record eligibility using titles, abstracts, and keywords. Publications focused primarily on clinical quality improvement, medical-education pedagogy without a higher education quality management focus, or course-level teaching interventions were excluded, leaving 1,199 records. Studies from medical-education settings were not excluded solely on the basis of context and remained eligible when they addressed quality management at the higher education institution level.

Among the 1,199 records, studies were retained for Level 2 when the title, abstract, and keyword information indicated quality management as the primary analytical focus and sufficient conceptual, theoretical, or empirical relevance for cross-study interpretation. Records in which QM appeared only as descriptive context or a secondary aspect were not retained. This resulted in 159 retained studies. Differences in eligibility judgments were resolved through discussion and consensus. Table 1 summarizes the eligibility criteria and analytical scope.

Table 1. Eligibility criteria and analytical scope

Criterion	Inclusion / analytical boundary
Publication period	2004–2025
Language	English
Document types	Articles, reviews, book chapters, books, and conference papers
Subject areas	Social Sciences; Business, Management and Accounting; Decision Sciences
Topical scope	Quality management in higher education
Topical exclusions	Clinical quality improvement, medical-education pedagogy, and course-level teaching interventions without a higher education quality management focus
Level 2 eligibility	Quality management as the primary analytical focus and sufficient conceptual, theoretical, or empirical material for cross-study interpretation
Level 1	1,829 records used for bibliometric mapping (RQ1)
Level 2	159 studies used for thematic conceptual synthesis (RQ2 and RQ3)

2.3. Bibliometric mapping

The Level 1 corpus (N = 1,829) was analyzed using Bibliometrix/Biblioshiny (Aria & Cuccurullo, 2017), following established principles of bibliometric analysis (Donthu et al., 2021). The analysis covered annual scientific production, source- and country-level publication patterns, selected keyword frequencies, and strategic thematic mapping. All outputs are interpreted with reference to the retrieved Scopus corpus.

The Level 1 metadata retain some medical-education publications and generic indexed terms such as human, humans, and article. These features are treated as characteristics of the retrieved corpus and were not used in the Level 2 conceptual synthesis. Because the dataset was retrieved in mid-January 2026, the 2025 publication count may also be affected by Scopus indexing lag.

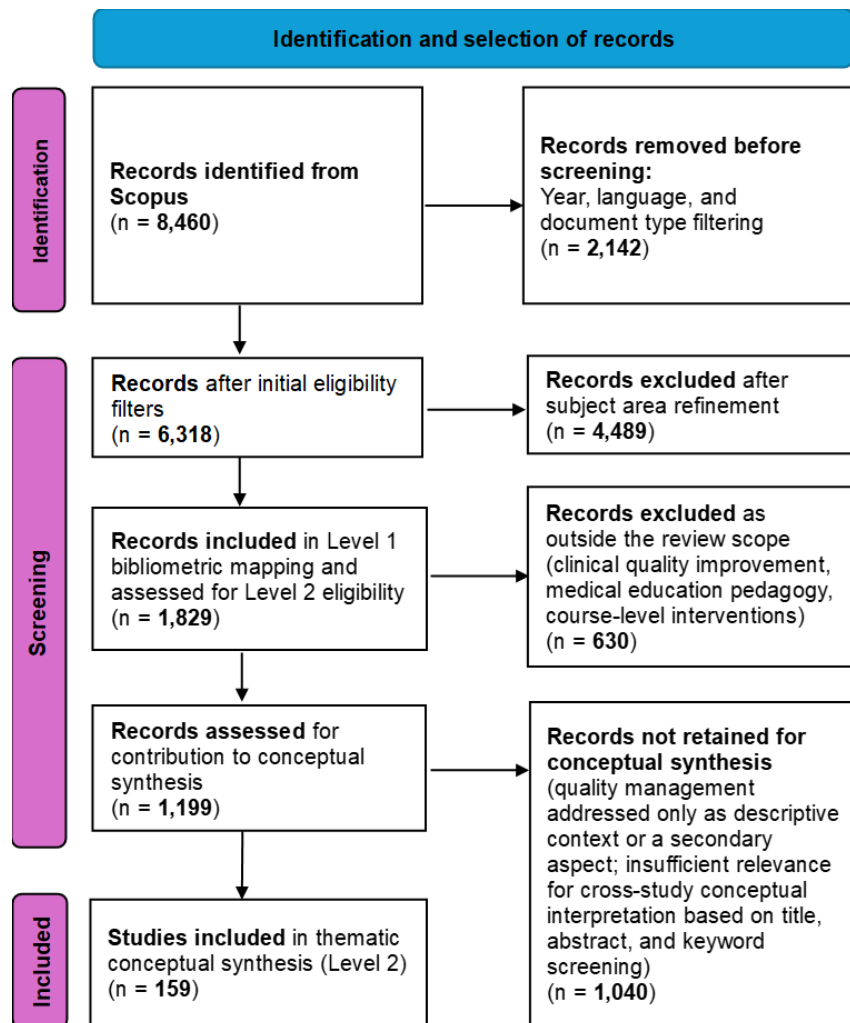


Figure 1. PRISMA-informed flow diagram for bibliometric mapping and thematic conceptual synthesis

2.4. Thematic conceptual synthesis

The 159 retained studies were reviewed in full text using a structured extraction matrix recording each study's primary analytical focus and reason for inclusion. Through iterative comparison, conceptually related study-level analytical focuses were grouped into the four higher-order dimensions presented in Section 3.2. These dimensions represent interpretive and non-exclusive conceptual groupings intended to clarify relationships among organizational issues across heterogeneous studies.

For RQ3, contextual information reported in the retained studies was compared to identify recurrent implementation patterns discussed in studies conducted in emerging and developing country contexts. The expression “emerging and develop-

ing country contexts” is used descriptively for the national settings represented in the RQ3 evidence base and does not denote a separate classification of higher education systems.

Figure 1 presents the complete selection flow and record counts.

3. RESULTS

3.1. Bibliometric characteristics of the retrieved corpus (RQ1)

The bibliometric analysis of the Level 1 corpus ($N = 1,829$) describes publication, source, geographic, keyword, and thematic patterns in Scopus-indexed research retrieved through explicit quality management terminology between 2004 and 2025.

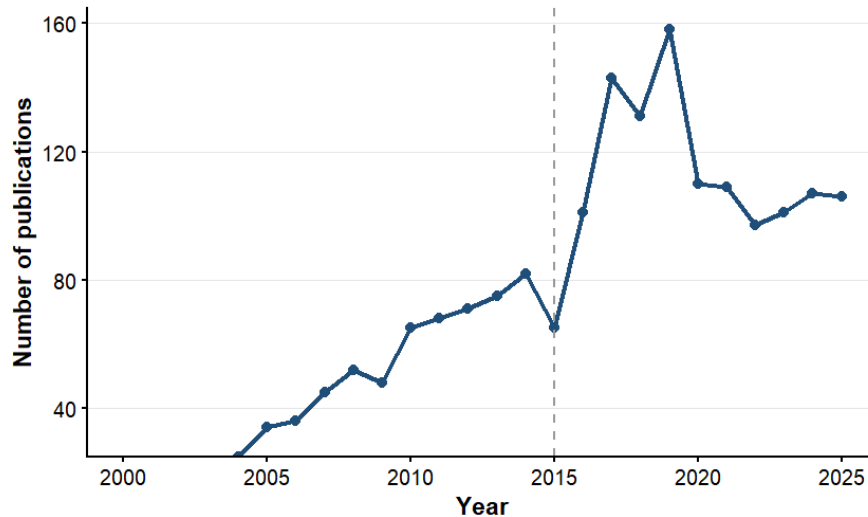


Figure 2. Annual scientific production in the retrieved Scopus corpus, 2004–2025

3.1.1. Publication activity

Annual scientific production increased over the study period (Figure 2). The corpus contains 25 publications in 2004 and 81 in 2014. Annual output increased more strongly during the second half of the period, rising from 65 publications in 2015 to a peak of 157 in 2019. Publication counts subsequently remained at approximately 100–110 records per year. Because the dataset was retrieved in mid-January 2026, the 2025 figure may still be affected by Scopus indexing lag and should be interpreted cautiously.

3.1.2. Publication sources

The most productive sources include journals specializing in quality and quality assurance in education, such as *Quality Assurance in Education*, *Quality in Higher Education*, *The TQM Journal*, and *Total Quality Management and Business Excellence*. Medical-education outlets, including *Academic Medicine* and the *Journal of Surgical Education*, are also represented among productive sources. Their presence reflects the scope of the search strategy and Scopus source-level classification: publications from medical-education settings remained in the Level 1 corpus when they met the bibliographic criteria, whereas clinical quality-improvement, medical-education pedagogy, and course-level studies outside the review scope were subsequently removed during Level 2 screening.

3.1.3. Geographic distribution

Country-level publication patterns show a geographically concentrated but internationally distributed corpus (Figure 3). The United States accounts for 1,054 publications, followed by the United Kingdom (181), Germany, China, Canada, and Australia. Indonesia (106), India (103), Malaysia (97), Ukraine (82), and South Africa (55) are also among the more productive countries, with Saudi Arabia, Jordan, Pakistan, and Kazakhstan also represented in the dataset. Citation patterns do not correspond directly to publication volume: countries with fewer publications, including the United Kingdom and the Netherlands, show higher average citation levels per publication, while India and the United Arab Emirates also display comparatively strong citation averages. These geographic patterns provide descriptive context for the implementation issues considered in Section 3.3.

3.1.4. Keyword patterns

High-frequency terms reflect the coexistence of several quality-related vocabularies within the retrieved corpus. Total quality management is the most frequent term (614 occurrences), followed by quality management (529), education (373), higher education (364), quality improvement (310), students (211), and quality assurance (178). These frequencies indicate that TQM-derived terminology remains prominent, while quality assurance, im-

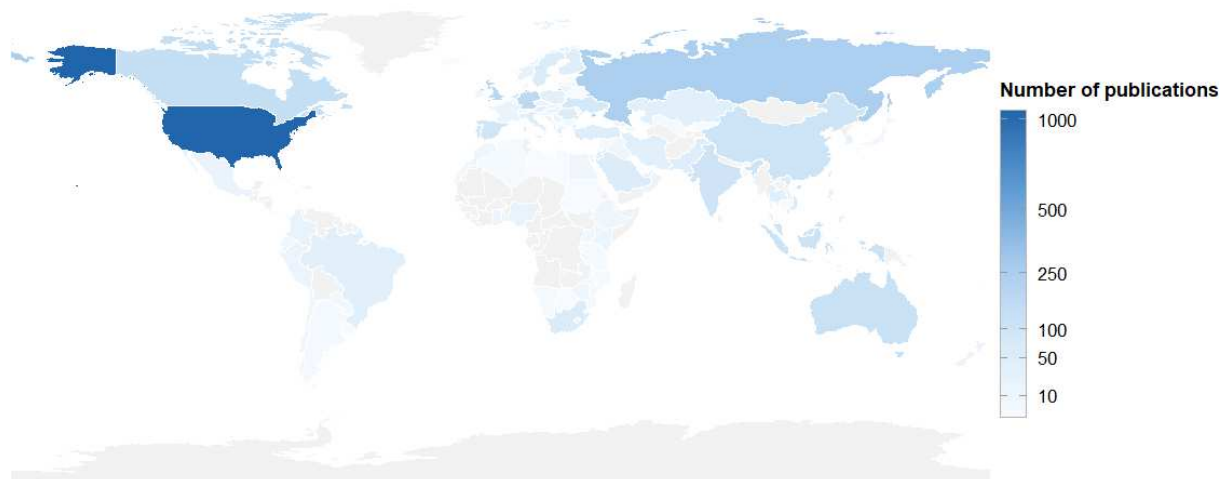


Figure 3. Country scientific production in the retrieved Scopus corpus

provement, and student-related terminology also form a substantial part of the retrieved publication set. Generic Scopus-indexed terms and medically oriented descriptors were treated as metadata features influenced partly by database indexing conventions and were not used as substantive thematic indicators.

Thematic structure. The strategic thematic map generated in Biblioshiny provides a relational view of themes within the retrieved corpus based on centrality and density (Figure 4). Quality assurance and quality management systems occupy the motor-theme quadrant, indicating relatively high centrality and development within the mapped dataset. Quality management and assessment appear as a basic theme, while the TQM and higher

education institutions cluster is positioned closer to the center of the map. Quality improvement, marketing, and medical education form a more specialized cluster. These positions characterize the internal thematic structure of the retrieved corpus.

3.2. Conceptual organization of recurrent research areas (RQ2)

The thematic conceptual synthesis of the 159 retained studies organized recurrent research issues into four higher-order dimensions of quality management in higher education: strategic leadership and governance; implementation of QM frameworks and digital transformation; quality culture and organizational dynamics; and per-

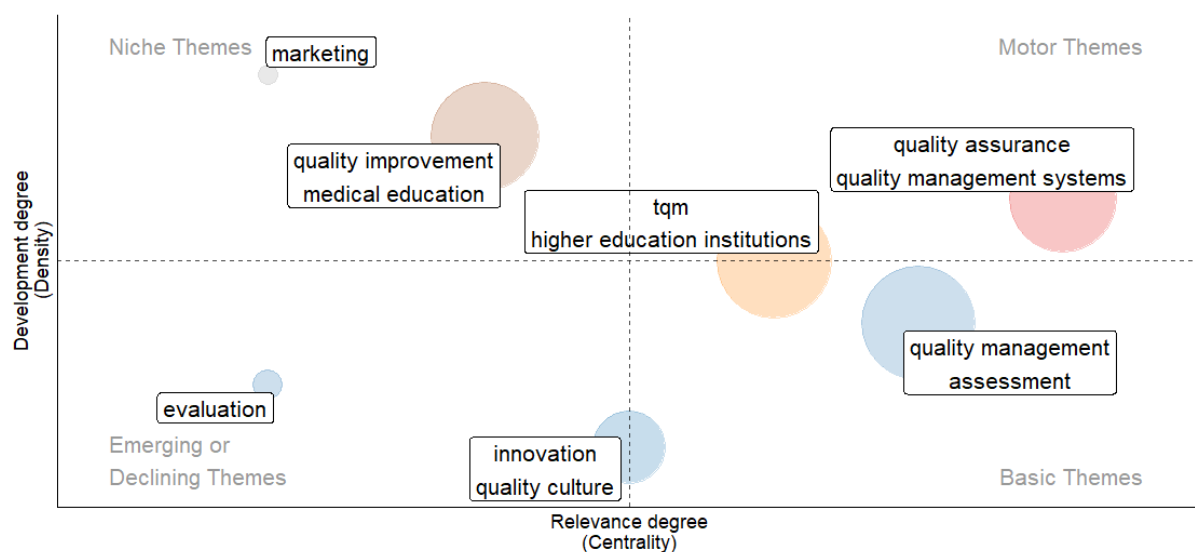


Figure 4. Strategic thematic map of the retrieved Scopus corpus (N = 1,829)

formance evaluation and external accountability. Conceptually related study-level analytical focuses were compared iteratively and grouped at a higher level of abstraction. Table 2 illustrates the relationship between these analytical focuses and the four dimensions, while Figure 5 integrates the dimensions into a conceptual model of quality management in higher education.

The first dimension brings together studies concerned with strategic direction, leadership commitment, governance arrangements, responsibility, and integrating quality management into institutional decision-making. Research on quality management systems emphasizes leadership involvement and strategic alignment in implementation (Burli et al., 2012; Ozsen et al., 2023). Leadership approaches also differ in how they combine vision, participation, empowerment, procedural coordination, and organizational control (Lauer & Wilkesmann, 2017). Osseo-Asare et al. (2005), examining 42 UK higher education institutions, noted that the relationship between leadership practices and sustained quality outcomes was not straightforward. Taken together, the studies grouped within this dimension position leadership and governance at the strategic level, where quality objectives, priorities, responsibilities, and institutional commitment are established.

The second dimension concerns the mechanisms through which quality objectives are translated

into organizational processes and management practices. The retained studies examine a range of approaches, including TQM, ISO-based quality systems, EFQM and other excellence models, process-oriented improvement methods, and integrated quality management systems. Their application varies across higher education contexts. Calvo-Mora et al. (2006), for example, examine EFQM enablers in university management, while Hu et al. (2024) identify the use of ISO 9000, TQM, and EFQM in their review of quality management in Chinese academic libraries.

Digital technologies extend this operational dimension by supporting the collection, integration, and use of quality-related information. Web-based systems can facilitate the management of quality information across institutional processes (Zgodavová et al., 2015), while centralized analytics can help coordinate evidence across multiple accreditation requirements (Tran & Kuula, 2023). Quality 4.0 research further examines how analytics, automation, and other digital technologies can be incorporated into higher education quality processes (Lodi et al., 2022). These studies locate frameworks, standardized processes, digital systems, and data capabilities at the operational level of the model, providing mechanisms through which quality objectives can be implemented and monitored.

The third dimension addresses the organizational conditions under which formal quality

Table 2. Conceptual organization of representative study-level analytical focuses within four higher-order dimensions

Higher-order dimension	Representative analytical focuses in the retained studies	Illustrative studies
Strategic leadership and governance	Strategic quality management; institutional leadership; leadership and quality management; governance and accreditation; leadership and TQM	Osseo-Asare et al. (2005); Burli et al. (2012); Lauer and Wilkesmann (2017); Ozsen et al. (2023)
Implementation of QM frameworks and digital transformation	TQM implementation; ISO-based quality management; EFQM and excellence models; digital quality management; Quality 4.0; quality analytics and accreditation	Calvo-Mora et al. (2006); Zgodavová et al. (2015); Lodi et al. (2022); Tran and Kuula (2023); Hu et al. (2024)
Quality culture and organizational dynamics	Quality culture; quality culture and accreditation; academic staff and quality culture; TQM and quality culture; organizational engagement and change	Cronemyr et al. (2017); Bendermacher et al. (2017); Iqbal et al. (2024)
Performance evaluation and external accountability	Performance measurement; accreditation outcomes; benchmarking and performance excellence; internal and external quality audits; accreditation and rankings	Van Kemenade and Hardjono (2010); Dumond and Johnson (2013); Sarrico (2022)

Note: The analytical aspects listed in the table reflect study-level information recorded during full-text review. The cited studies are illustrative rather than exhaustive.

arrangements become embedded in academic practice. Research on quality culture emphasizes shared values, staff commitment, communication, participation, ownership, and organizational learning as complements to formal procedures (Bendermacher et al., 2017). This perspective draws attention to how quality arrangements are interpreted and enacted by organizational members and to the potential influence of professional and disciplinary subcultures.

Empirical studies illustrate different aspects of these relationships. Iqbal et al. (2024), for example, found that quality culture mediated the relationship between accreditation and higher education performance in their study of Pakistani universities. Other work emphasizes the behavioral expression of quality values and the importance of translating general principles into organizational practice (Cronemyr et al., 2017). Resistance to change and difficulties in staff engagement also appear as implementation challenges in particular settings, including the academic-library context

examined by Hu et al. (2024). The studies grouped within this dimension therefore position quality culture and organizational dynamics at the organizational level, concerned with how formal quality arrangements are accepted, interpreted, and sustained in everyday practice.

The fourth dimension encompasses mechanisms through which quality-related performance is assessed, compared, and subject to external scrutiny. The retained studies address accreditation, internal and external quality review, performance measurement, indicators, benchmarking, rankings, student feedback, and related evaluation arrangements. Dumond and Johnson (2013), for example, examine alternative quality and accreditation approaches in university business education, while Iqbal et al. (2024) investigate relationships among accreditation, quality culture, and institutional performance.

The literature also highlights tensions associated with evaluation and accountability. Performance

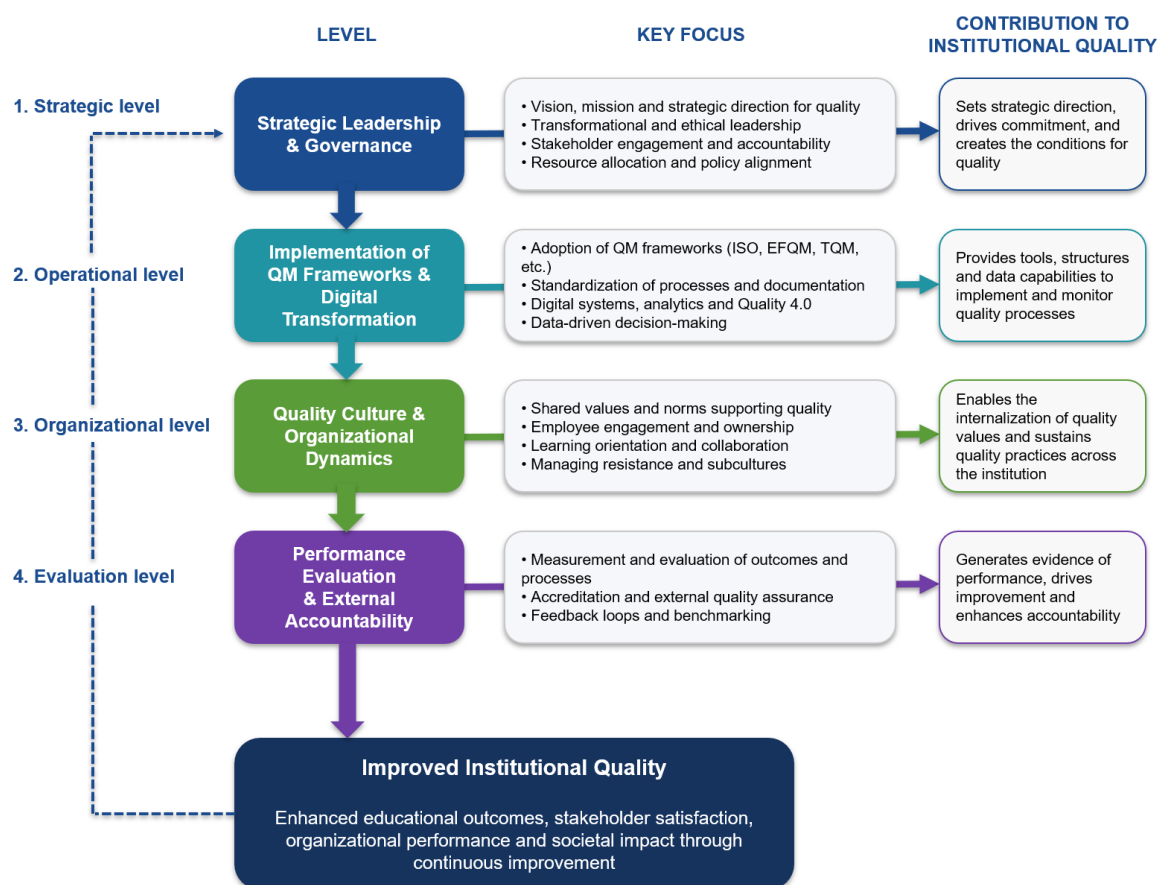


Figure 5. Conceptual model of quality management in higher education

information can support diagnosis, benchmarking, and improvement, but indicators may become fragmented across institutional systems or generate additional reporting demands when weakly connected to decision-making (Sarrico, 2022). Research on external quality arrangements likewise points to tensions between control-oriented approaches and approaches intended to encourage organizational commitment and improvement (Van Kemenade & Hardjono, 2010). This dimension therefore represents the evaluation level, where evidence is generated to assess performance, demonstrate accountability, and inform subsequent quality management decisions.

Figure 5 integrates the four dimensions into a conceptual model organized across four levels. Strategic leadership and governance operate at the strategic level, establishing direction and responsibility for quality. Implementation of QM frameworks and digital transformation represents the operational level, providing structures, processes, and data capabilities. Quality culture and organizational dynamics represent the organizational level through which formal arrangements are interpreted and embedded in practice. Performance evaluation and external accountability operate at the evaluation level, generating evidence for assessment, accountability, and improvement.

The ordering of these levels provides an integrative sequence linking strategic direction, operational implementation, organizational embedding, and evaluation. Improved institutional quality is positioned as the intended outcome, while the feedback loop represents the use of evaluation and performance information in subsequent cycles of strategic and operational decision-making. The model therefore provides an integrative structure for examining these relationships empirically across different institutional settings.

3.3. Quality management in emerging and developing country contexts (RQ3)

The Level 1 bibliometric results show that several emerging and developing countries are represented among the more productive countries in the retrieved Scopus corpus. The retained Level 2 studies situated in these contexts provide a more

differentiated picture of how quality management arrangements are implemented. Across these studies, implementation is discussed through four recurrent context-sensitive issues: external quality requirements, adaptation of established frameworks, institutional capacity for implementation, and supporting information systems.

Accreditation and formal quality assurance requirements constitute important reference points in several of these settings. In Vietnam, accreditation was reported to affect multiple areas of university management, including academic programs, teaching, staff, learners, facilities, and the use of accreditation results for improvement (Nguyen & Ta, 2018). In Pakistan, Iqbal et al. (2024) identified relationships between accreditation, quality culture, and institutional performance, with quality culture mediating the association between accreditation and performance. Evidence from Uzbekistan provides another Central Asian example: Magrupov et al. (2015) describe implementing a quality management system alongside program accreditation at Tashkent State Technical University. These studies suggest that external quality requirements can structure institutional quality processes, but their implications depend on how they are translated into internal organizational arrangements.

A recurring pattern is adapting established quality frameworks to local institutional conditions. Hu et al. (2024), for example, document the use of ISO 9000, TQM, and EFQM in Chinese academic libraries alongside challenges related to staff engagement, organizational change, resources, and external requirements. In Indonesia, Universitas Terbuka adapted an external quality assurance framework to its institutional setting through staff participation, internal assessment, external review, benchmarking, and integration into institutional planning (Belawati & Zuhairi, 2007). Randa (2020) likewise discusses internationally established approaches, including EFQM, the Baldrige framework, and ISO-based systems, in relation to quality management needs in Sub-Saharan African business schools. Across these settings, recognized frameworks are interpreted, adjusted, and embedded in different ways within particular institutional environments.

Institutional capacity is closely connected to this process. Research on the private university sector in Bangladesh examines the transition from quality policy formulation to institutional implementation, illustrating the organizational work required to move from formal arrangements to institutional practice (Blanco Ramírez & Jahirul Haque, 2016). In Indonesia, Farida et al. (2019) examine a national program designed to accelerate implementation of internal quality assurance systems in private universities where implementation remained limited. In Tanzania, Mgaiwa (2021) examines leadership strategies for addressing institutional quality assurance challenges in private universities. Taken together, these studies give empirical substance to the distinction between formal quality requirements and their substantive implementation. Formal adoption alone does not determine the extent to which quality arrangements become embedded in organizational practice; implementation also depends on leadership, staff engagement, organizational capacity, and institutional routines.

Several of these implementation studies are situated specifically within private higher education, including research from Bangladesh, Indonesia, and Tanzania (Blanco Ramírez & Jahirul Haque, 2016; Farida et al., 2019; Mgaiwa, 2021). These studies illustrate private higher education as one context in which implementation challenges are examined, particularly in relation to governance and expanding private provision.

Information and digital capabilities form another part of the implementation environment. In South Africa, Mlangeni and Ruhode (2017) identify challenges involving data access, quality, integration, metadata, and lifecycle management in merged and collaborating institutions, illustrating the organizational requirements of data-informed management. In Peru, Aguilar-Alonso et al. (2020) examine digital platforms in connection with accreditation-oriented quality management processes. These studies indicate that digital infrastructure can support quality management, but its contribution depends on the institutional capacity to integrate information systems with governance and quality processes.

Across the retained studies, the implementation of quality management in these settings is repeat-

edly discussed in relation to four conditions: external quality requirements that structure institutional processes, adaptation of established frameworks to local conditions, institutional capacity for implementation, and supporting information systems. Together, these findings point to context-specific variation in how broadly recognizable quality management arrangements are interpreted and enacted across regulatory, organizational, resource, and technological conditions.

4. DISCUSSION

The two components of this review provide complementary views of quality management research in higher education. The bibliometric mapping shows an expanding and internationally distributed Scopus corpus in which TQM-derived terminology remains prominent alongside quality assurance, quality improvement, and other quality-related vocabularies. The conceptual synthesis complements this bibliometric picture by showing that the retained studies address organizational concerns extending beyond the application of individual tools or frameworks. Previous reviews have examined the integration of quality management principles into higher education institutions, the development of TQM research, prominent quality approaches, and broader trends in the literature (Tari & Dick, 2016; Manatos et al., 2017; Papanthymou & Darra, 2017; Nasim et al., 2020). The present review differs primarily in analytical integration: it combines mapping of a bounded corpus with a conceptual organization of recurrent concerns across strategic governance, implementation mechanisms, organizational dynamics, and evaluation. This makes visible the relationships among strands of research that have often been examined separately.

A central issue connecting these strands is the distinction between formal quality arrangements and their substantive implementation. Earlier research has shown that quality systems can support evaluation, organizational learning, and improvement, but can also become compliance-oriented or weakly connected to academic practice (Newton, 2000; Stensaker, 2003; Cardoso et al., 2019). The findings of this review offer a

broader organizational interpretation of this distinction. Leadership and strategic commitment can establish direction, while formal frameworks, accreditation requirements, and digital systems provide structures through which quality processes are organized; however, their institutional significance depends on how they are interpreted, enacted, and incorporated into routine practice. This is consistent with the relatively loose relationship between leadership practices and quality outcomes reported by Osseo-Asare et al. (2005) and with the evidence from emerging and developing country contexts in Section 3.3, where external quality requirements and framework adaptation interact with institutional capacity, leadership, staff engagement, organizational routines, and supporting information systems. The findings therefore shift attention from framework adoption alone to the organizational conditions under which quality arrangements are implemented and sustained. They also reinforce the distinction between accountability and improvement: accreditation, measurement, and external review may generate useful evidence, but their contribution to institutional learning depends on whether that evidence is subsequently connected to organizational decision-making.

Figure 5 brings these observations together across the four levels of the conceptual model, providing an organizational view of how the dimensions are connected. Strategic leadership and governance establish direction and responsibility; implementation of QM frameworks and digital transformation provides operational mechanisms; quality culture and organizational dynamics concern how formal arrangements are interpreted and embedded in practice; and performance evaluation and external accountability generate evidence for assessment and subsequent decisions. The feedback relationship highlights the organizational use of evaluation evidence as a mechanism supporting continuous improvement. Digitalization may strengthen this connection by improving the integration and availability of quality-related information, but the reviewed literature does not yet establish whether increasingly data-enabled quality systems produce substantive changes in institutional practice or primarily improve information management and reporting. For institutional leaders and quality managers, this implies that investment in accreditation, formal frameworks, or digital infrastructure should be accompanied by attention to governance responsibilities, staff engagement, organizational routines, and the use of evidence after formal evaluation.

Table 3. Directions for future research derived from the review

Dimension	Gap identified in the review	Suggested research question
Strategic leadership and governance	Leadership is repeatedly associated with QM implementation, yet its relationship with quality outcomes is not straightforward, and leadership alone does not appear sufficient to embed quality arrangements in practice.	Under what governance conditions does leadership commitment translate into substantive and sustained changes in academic practice beyond formal compliance?
Implementation of QM frameworks and digital transformation	Digital systems and analytics are used to integrate quality-related information and support quality and accreditation processes, but the reviewed studies provide limited evidence on how these capabilities affect institutional practice and decision-making.	To what extent do analytics-enabled and Quality 4.0 systems transform quality management practices beyond improving information management and process efficiency?
Quality culture and organizational dynamics	Quality culture is linked to staff engagement, shared values, and the enactment of formal arrangements, while professional and disciplinary subcultures may complicate institution-wide quality practices.	What enables formal quality arrangements to become embedded in everyday academic practice?
Performance evaluation and external accountability	Performance information can support evaluation and improvement but may remain fragmented across institutional systems, while external quality processes can emphasize control as well as organizational learning.	Under what conditions do accreditation and performance evaluation contribute to substantive improvement beyond procedural compliance?
Cross-cutting: institutional context	The retained studies describe framework adaptation across diverse national and institutional settings, but evidence is largely context-specific rather than directly comparative across systems.	How does the adaptation of common QM arrangements differ across comparable higher education systems and institutional contexts?
Cross-cutting: conceptual boundaries	Research explicitly framed as QM coexists with adjacent literatures on quality assurance, accreditation, quality culture, and institutional effectiveness, but their conceptual and empirical overlap remains insufficiently mapped.	How do these adjacent research literatures relate structurally, and to what extent do they examine the same institutional phenomena under different conceptual vocabularies?

The findings and analytical boundaries of this review suggest several directions for future research. Table 3 organizes these around the four dimensions of the conceptual model and two cross-cutting issues concerning contextual transferability and conceptual boundaries.

This study has several limitations. The review was based on English-language publications indexed in Scopus and restricted to selected subject areas. In addition, the search required explicit use of quality management terminology; consequently, relevant studies framed exclusively through adjacent concepts such as quality assurance, accreditation, quality culture, or institutional effectiveness may fall outside the retrieved corpus. Accordingly,

the bibliometric findings characterize this bounded corpus. The 2025 publication count may also be affected by Scopus indexing lag because the data were retrieved in mid-January 2026.

The thematic conceptual synthesis integrates studies with heterogeneous designs, settings, and outcomes and yields four non-exclusive conceptual groupings; their relative importance and causal ordering were not estimated. The RQ3 evidence base prioritizes analytical relevance over geographic representation, so cross-context comparison remains an important direction for future research. Figure 5 provides an integrative conceptual structure for empirical examination across institutional and national contexts.

CONCLUSION

The study aimed to examine the structure of Scopus-indexed quality management research in higher education and to conceptually integrate recurrent organizational issues within the retrieved body of literature. To address this aim, bibliometric mapping of 1,829 records published between 2004 and 2025 was combined with a thematic conceptual synthesis of 159 retained studies. Publication activity expanded over the period, while TQM-derived terminology remained prominent alongside quality assurance and quality improvement vocabularies. The synthesis organized recurrent research concerns into four interconnected dimensions: strategic leadership and governance, implementation of QM frameworks and digital transformation, quality culture and organizational dynamics, and performance evaluation and external accountability. Together, these dimensions provide an integrated organizational perspective on quality management across strategic, operational, organizational, and evaluation levels.

Taken together, the findings shift attention from framework adoption alone to the organizational conditions under which quality arrangements are implemented and sustained. Evidence from emerging and developing country contexts further highlights external quality requirements, adaptation of established frameworks, institutional capacity for implementation, and supporting information systems. For institutional leaders and quality managers, this suggests that quality management initiatives should be assessed not only by whether formal arrangements are in place, but also by whether they become embedded in organizational practice and inform subsequent decisions. The conceptual model provides an integrative structure for understanding how the main dimensions of quality management are connected and offers a basis for future comparative and longitudinal research.

AUTHOR CONTRIBUTIONS

Conceptualization: Adina Yessengaliyeva, Aknur Zhidebekkyzy, Timur Buldybayev.

Data curation: Adina Yessengaliyeva, Aknur Zhidebekkyzy.

Formal analysis: Adina Yessengaliyeva, Yuriy Bilan, Timur Buldybayev.

Investigation: Adina Yessengaliyeva, Aknur Zhidebekkyzy.

Methodology: Aknur Zhidebekkyzy, Yuriy Bilan.

Resources: Yuriy Bilan, Timur Buldybayev.

Software: Adina Yessengaliyeva, Timur Buldybayev.

Supervision: Aknur Zhidebekkyzy, Yuriy Bilan.

Validation: Aknur Zhidebekkyzy, Yuriy Bilan.

Visualization: Adina Yessengaliyeva, Timur Buldybayev.

Writing – original draft: Adina Yessengaliyeva, Aknur Zhidebekkyzy.

Writing – review & editing: Aknur Zhidebekkyzy, Yuriy Bilan, Timur Buldybayev.

ACKNOWLEDGMENT

This research was funded by the Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan (Grant No. BR28712521).

REFERENCES

1. Aguilar-Alonso, I., Escobedo, F., Manco, M., & Amasifuen, M. (2020). Accreditation models and digital platforms used for university academic programs in Peru. *2020 2nd International Conference on Advances in Computing, Communication Control and Networking (ICACCCN)* (pp. 95-100). <https://doi.org/10.1109/icacccn51052.2020.9362887>
2. Alzafari, K., & Ursin, J. (2019). Implementation of quality assurance standards in European higher education: Does context matter? *Quality in Higher Education*, 25(1), 58-75. <https://doi.org/10.1080/13538322.2019.1578069>
3. Aria, M., & Cuccurullo, C. (2017). Bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959-975. <https://doi.org/10.1016/j.joi.2017.08.007>
4. Becket, N., & Brookes, M. (2008). Quality management practice in higher education - What quality are we actually enhancing? *Journal of Hospitality Leisure Sport & Tourism Education*, 7(1), 40-54. <https://www.semanticscholar.org/paper/Quality-Management-Practice-in-Higher-Education-Are-Becket-Brookes/e3b62ee0f6bc18f8ca8034b03c0b94834b83de42>
5. Beerkens, M. (2022). An evolution of performance data in higher education governance: A path towards a 'big data' era? *Quality in Higher Education*, 28(1), 29-49. <https://doi.org/10.1080/13538322.2021.1951451>
6. Belawati, T., & Zuhairi, A. (2007). The practice of a quality assurance system in open and distance learning: A case study at Universitas Terbuka Indonesia (The Indonesia Open University). *The International Review of Research in Open and Distributed Learning*, 8(1). <https://doi.org/10.19173/irrodl.v8i1.340>
7. Bendermacher, G. W. G., Egbrink, M. G. A. O., Wolfhagen, I. H. A. P., & Dolmans, D. H. J. M. (2017). Unravelling quality culture in higher education: A realist review. *Higher Education*, 73(1), 39-60. <https://doi.org/10.1007/s10734-015-9979-2>
8. Blanco Ramírez, G., & Jahurul Haque, H. M. (2016). Addressing quality challenges in the private university sector in Bangladesh: From policy formulation to institutional implementation. *Quality in Higher Education*, 22(2), 139-151. <https://doi.org/10.1080/13538322.2016.1198177>
9. Burli, S., Bagodi, V., & Kotturshettar, B. (2012). TQM dimensions and their inter-relationships in ISO certified engineering institutes of India. *Benchmarking: An International Journal*, 19(2), 177-192. <https://doi.org/10.1108/14635771211224527>
10. Calvo-Mora, A., Leal, A., & Roldán, J. L. (2006). Using enablers of the EFQM model to manage institutions of higher education. *Quality Assurance in Education*, 14(2), 99-122. <https://doi.org/10.1108/09684880610662006>
11. Cardoso, S., Rosa, M. J., Videira, P., & Amaral, A. (2019). Internal quality assurance: A new culture or added bureaucracy? *Assessment & Evaluation in Higher Education*, 44(2), 249-262. <https://doi.org/10.1080/02602938.2018.1494818>
12. Cronemyr, P., Bäckström, I., & Rönnbäck, Å. (2017). Quality culture deployment – using behaviours to explain, diagnose and improve a quality culture. *International Journal of Quality and Service Sciences*, 9(3-4), 498-518. <https://doi.org/10.1108/IJQSS-02-2017-0008>
13. Dill, D. D. (1995). Through Deming's eyes: A cross-national analysis of quality assurance policies in higher education. *Quality in Higher Education*, 1(2), 95-110. <https://doi.org/10.1080/1353832950010202>
14. Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285-296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
15. Dumond, E. J., & Johnson, T. W. (2013). Managing university business educational quality: ISO or AACSB? *Quality Assurance in Education*, 21(2), 127-144. <https://doi.org/10.1108/09684881311310674>
16. Ehlers, U. D. (2009). Understanding quality culture. *Quality Assurance in Education*, 17(4), 343-363. <https://doi.org/10.1108/09684880910992322>
17. Elassy, N. (2015). The concepts of quality, quality assurance and quality enhancement. *Quality Assurance in Education*, 23(3), 250-261. <https://doi.org/10.1108/qa-11-2012-0046>

18. Farida, F., Prabowo, H. A., & Vidayanti, D. (2019). Evaluation of the foster program as an effort to accelerate the implementation of the quality assurance system in Indonesian private university. *Academia*, (16-17), 145-167. <https://doi.org/10.26220/aca.3175>
19. García Juanatey, A., Jordana, J., Pérez Durán, I., & Sancho, D. (2021). Independence, accountability and responsibilities of quality assurance agencies in higher education: European and Latin American countries compared. *European Journal of Higher Education*, 11(2), 175-196. <https://doi.org/10.1080/21568235.2020.1850309>
20. Hartono, H. (2024). Research developments in quality management at universities in Indonesia: A systematic literature review. *AL-ISHLAH: Jurnal Pendidikan*, 16(2), 661-669. Retrieved from <https://alishlah.ahfpublishing.id/alishlah/article/view/4737/2241>
21. Harvey, L. (2024). Extended editorial: Defining quality thirty years on: Quality, standards, assurance, culture and epistemology. *Quality in Higher Education*, 30(2), 145-184. <https://doi.org/10.1080/13538322.2024.2355026>
22. Harvey, L., & Green, D. (1993). Defining quality. *Assessment & Evaluation in Higher Education*, 18(1), 9-34. <https://doi.org/10.1080/0260293930180102>
23. Harvey, L., & Stensaker, B. (2008). Quality culture: Understandings, boundaries and linkages. *European Journal of Education*, 43(4), 427-442. <https://doi.org/10.1111/j.1465-3435.2008.00367.x>
24. Hou, A. Y., Ince, M., Tsai, S., & Chiang, C. L. (2015). Quality assurance of quality assurance agencies from an Asian perspective: Regulation, autonomy and accountability. *Asia Pacific Education Review*, 16(1), 95-106. <https://doi.org/10.1007/s12564-015-9358-9>
25. Hu, B., Moro-Cabero, M.-M., & De-La-Mano, M. (2024). Quality management in Chinese academic libraries: A systematic review. *Sustainability*, 16(7), 2700. <https://doi.org/10.3390/su16072700>
26. Iqbal, S., Bin Taib, C. A., & Razalli, M. R. (2024). The effect of accreditation on higher education performance through quality culture mediation: The perceptions of administrative and quality managers. *The TQM Journal*, 36(2), 572-592. <https://doi.org/10.1108/TQM-11-2022-0322>
27. Kudaibergenova, R., Zhidebekkyzy, A., Buldybayev, T., Utepka-lyeva, B., & Bilan, S. (2025). Perceptions and practices of academic excellence: Insights from university stakeholders. *Knowledge and Performance Management*, 9(2), 246-261. [https://doi.org/10.21511/kpm.09\(2\).2025.17](https://doi.org/10.21511/kpm.09(2).2025.17)
28. Lauer, S., & Wilkesmann, U. (2017). The governance of organizational learning: Empirical evidence from best-practice universities in Germany. *The Learning Organization*, 24(5), 266-277. <https://doi.org/10.1108/TLO-02-2017-0012>
29. Liu, Q., & Liu, L. (2018). Exploring organisational learning in universities' responses to a quality assurance reform: Experiences from Ontario, Canada. *Quality in Higher Education*, 24(1), 29-42. <https://doi.org/10.1080/13538322.2018.1429077>
30. Lodi, S. H., Shaikh, A. A., Tufail, M., Wasif, M., & Butt, F. A. (2022). A quality 4.0 assurance framework for the higher education institutes. In *Proceedings of the 8th International Conference on Higher Education Advances (HEAd'22)* (pp. 725-732). <https://doi.org/10.4995/HEAd22.2022.14032>
31. Magrupov, T., Karimov, M., & Vasileva, S. (2015). Implementation of the system quality management education and accreditation of educational programs in Tashkent State Technical University. In *2015 International Conference on Interactive Collaborative Learning (ICL)* (pp. 63-68). IEEE. <https://doi.org/10.1109/ICL.2015.7318227>
32. Manatos, M. J., Sarrico, C. S., & Rosa, M. J. (2017). The integration of quality management in higher education institutions: A systematic literature review. *Total Quality Management & Business Excellence*, 28(1-2), 159-175. <https://doi.org/10.1080/14783363.2015.1050180>
33. Mgaiwa, S. J. (2021). Leadership initiatives in response to institutional quality assurance challenges in Tanzania's private universities. *Journal of Further and Higher Education*, 45(9), 1206-1223. <https://doi.org/10.1080/0309877X.2020.1860203>
34. Mlangeni, T. C., & Ruhode, E. (2017). Data governance: A challenge for merged and collaborating institutions in developing countries. In J. Choudrie, M. S. Islam, F. Wahid, J. M. Bass, & J. E. Priyatma (Eds.), *Information and communication technologies for development: 14th IFIP WG 9.4 International Conference on Social Implications of Computers in Developing Countries, ICT4D 2017* (pp. 242-253). Springer. https://doi.org/10.1007/978-3-319-59111-7_21
35. Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: A comparative analysis. *Scientometrics*, 106(1), 213-228. <https://doi.org/10.1007/s11192-015-1765-5>
36. Nasim, K., Sikander, A., & Tian, X. (2020). Twenty years of research on total quality management in higher education: A systematic literature review. *Higher Education Quarterly*, 74(1), 75-97. <https://doi.org/10.1111/hequ.12227>
37. Newton, J. (2000). Feeding the beast or improving quality? Academics' perceptions of quality assurance and quality monitoring. *Quality in Higher Education*, 6(2), 153-163. <https://doi.org/10.1080/713692740>
38. Nguyen, H. C., & Ta, T. T. H. (2018). Exploring impact of accreditation on higher education in developing countries: A Vietnamese view. *Tertiary Education and Management*, 24(2), 154-167. <https://doi.org/10.1080/13583883.2017.1406001>
39. Osseo-Asare, A. E., Longbottom, D., & Murphy, W. D. (2005). Leadership best practices for sustaining quality in UK higher education from the perspective of the EFQM Excellence Model.

- Quality Assurance in Education*, 13(2), 148-170. <https://doi.org/10.1108/09684880510594391>
40. Owlia, M. S., & Aspinwall, E. M. (1997). TQM in higher education: A review. *International Journal of Quality & Reliability Management*, 14(5), 527-543. <https://doi.org/10.1108/02656719710170747>
 41. Ozsen, T., Uslu, B., & Aypay, A. (2023). Strategy adaptation for sustainable quality management in universities: A systematic literature review. *Tertiary Education and Management*, 29(4), 447-469. <https://doi.org/10.1007/s11233-022-09098-4>
 42. Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., Stewart, L. A., Thomas, J., Tricco, A. C., ... & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 71, 372. <https://doi.org/10.1136/bmj.n71>
 43. Papanthymou, A., & Darra, M. (2017). Quality management in higher education: Review and perspectives. *Higher Education Studies*, 7(3), 132-147. <https://doi.org/10.5539/hes.v7n3p132>
 44. Randa, I. O. (2020). Quality management systems in sub-Saharan Africa business schools. In *Quality management implementation in higher education* (pp. 24-47). IGI Global. <https://doi.org/10.4018/978-1-5225-9829-9.ch002>
 45. Sarrico, C. S. (2022). Quality management, performance measurement and indicators in higher education institutions: Between burden, inspiration and innovation. *Quality in Higher Education*, 28(1), 11-28. <https://doi.org/10.1080/13538322.2021.1951445>
 46. Sattler, C., & Sonntag, K. (2018). Quality cultures in higher education institutions—Development of the Quality Culture Inventory. In P. Meusburger, M. Heffernan, & L. Suarsana (Eds.), *Geographies of the university (Knowledge and Space, Vol. 12)*. Springer. https://doi.org/10.1007/978-3-319-75593-9_9
 47. Seyfried, M., Ansmann, M., & Pohlenz, P. (2019). Institutional isomorphism, entrepreneurship and effectiveness: The adoption and implementation of quality management in teaching and learning in Germany. *Tertiary Education and Management*, 25(2), 115-129. <https://doi.org/10.1007/s11233-019-09022-3>
 48. Stensaker, B. (2003). Trance, transparency and transformation: The impact of external quality monitoring on higher education. *Quality in Higher Education*, 9(2), 151-159. <https://doi.org/10.1080/13538320308158>
 49. Tarí, J. J., & Dick, G. P. M. (2016). Trends in quality management research in higher education institutions. *Journal of Service Theory and Practice*, 26(3), 273-296. <https://doi.org/10.1108/JSTP-10-2014-0230>
 50. Tran, T., & Kuula, M. (2023). Juggling quality labels with centralised analytics: How the first Nordic triple-crowned business school does it. *Studies in Higher Education*, 48(6), 845-863. <https://doi.org/10.1080/03075079.2023.2172153>
 51. Van Kemenade, E., & Hardjono, T. W. (2010). A critique of the use of self-evaluation in a compulsory accreditation system. *Quality in Higher Education*, 16(3), 257-268. <https://doi.org/10.1080/13538322.2010.506715>
 52. Wawak, S., Domingues, J. P. T., & Sampaio, P. (2024). Quality 4.0 in higher education: Reinventing academic-industry-government collaboration during disruptive times. *The TQM Journal*, 36(6), 1569-1590. <https://doi.org/10.1108/tqm-07-2023-0219>
 53. Zgodavová, K., Urbančíková, N., & Kisela, M. (2015). Enhancement of the quality assurance model at the Slovak university: Case study. *Quality Innovation Prosperity*, 19(2), 1-18. <https://doi.org/10.12776/qip.v19i2.610>
 54. Zhidebekkyzy, A., Kudaibergenova, R., Buldybayev, T., & Serikkaliyeva, A. (2026). Pursuing academic excellence in Kazakhstan: Stakeholder perspectives and reform challenges. *International Journal of Educational Development*, 122, 103552. <https://doi.org/10.1016/j.ijedudev.2026.103552>