



Tracing the evolution of the Balanced Scorecard: A bibliometric analysis of organizational applications

Maniso Brendan Tuombale ¹, Asa Romeo Asa ^{*2}, Johanna Pangeiko Nautwima ³, Helvi Nyete
Johannes ⁴

¹ Namibia Business School, University of Namibia, Windhoek 98604, Namibia

^{2,3,4} Namibian-German Institute for Logistics, Namibia University of Science and Technology, Windhoek 13388, Namibia,

Abstract: Tracing the evolution of the balanced scorecard reveals both its enduring influence and the persistent ambiguities surrounding its application in organizational contexts. This bibliometric study examines the past, present, and future trajectory of the balanced scorecard as a performance measurement and strategic management tool. Using secondary data sourced from the SCOPUS database, the analysis retrieved 386 articles, conference papers, and reviews published between 2000 and 2024. Relevant documents were identified through keyword searches including balanced scorecard, strategic scorecard, corporate scorecard, and integrated performance management system. The findings show that while the balanced scorecard has gained global recognition as a multidimensional framework linking financial and non-financial indicators, its conceptualization remains contested, with managers and researchers holding divergent views on what constitutes the tool. The thematic evolution map highlights four clusters of research—niche, motor, basic, and emerging/declining themes, with motor themes such as strategic planning, key performance indicators, and the balanced scorecard itself driving the intellectual development of the field. Overall, the study underscores the balanced scorecard's centrality in organizational performance research while pointing to gaps in consensus and application. It contributes to both managerial practice and academic discourse by clarifying how the concept has evolved over time and by identifying future directions for its more effective implementation.

Keywords: Balanced Scorecard; Integrated performance management system; Strategic Planning; key performance indicators; Organizational performance, Bibliometric analysis; Thematic evolution; Research trends

1. Introduction

It has been noted that today's organisations are operating in VUCA environment which is characterised by volatility, uncertainty, complexity and ambiguity. Hence, the nature of work is constantly changing with the accelerating shift of socio-eco-techno activities. With such condition, in order for the organisation to rise and adapt to the challenges, organisation leaders should give prudence and extreme care to all functional areas, any functional area being ignored may result in survival issues (Agarwal, 2020). Barth and Meirelles (2010) states that Kaplan and Norton (1996, 2001, 2004) studies on balanced scorecard which begins with "What you measure is what you get". That measurement systems in organisations strongly affect the behaviour of managers and employees. However, regardless of how strongly it is believed that financial measures reflect performance of the company, the authors recommend special attention to non-financial measurement. Therefore, organisation must ensure that they develop effective ways to align their strategies with organisational goals to ensure performance and overcome the challenges (Wang et al., 2014).

The balanced scorecard was first developed by Kaplan and Norton (1992) as a technique to measure the organisational performance based on four perspectives, namely, financial, customer, internal business process as well as innovation and learning perspective (also known as learning and growth perspective) (Akinbowale et al., 2023). The study of Akinbowale et al. (2023) states that the traditional measurement system was based mostly on the logging financial indicators to

measure and report on the past activities and present performance outcomes of the entity. Thus, Kaplan and Norton (1996, 2001, 2004) opine that the role of finance is critical in ancient performance management system and this placed more emphasis on financial measure on performance measurement system without regard to non-financial measures. This has been criticised by numerous authors who opined that non-financial measures are crucial in the contribution to the overall organisational performance.

Therefore, a need to develop an effective performance measurement tool considering the business environment dynamics. On that note, non-financial measurement has greater effects on the performance of employees, by making employees more responsive ecological as compared to the financial performance measurement (Asa & Nautwima, 2022). Wu and Hung (2007) states that the balanced scorecard commands the multiple entries of evaluation that effectively measures the performance of various perspectives of the organisation. This helps experts or the organisational leaders to understand better the impact upon the enterprise from the strategies executed so that it can make necessary modification of efforts in future orientation (Asa et al., 2022). The use of balanced scorecard is commonly used in both public and private sector and has been significant in terms of corporate control.

This study is concerned on addressing issues and conflict that exist for managers with regard to the application or the implementation of the balanced scorecard as the organisational performance measurement tool. Hence, the study enhances the understanding to managers on the concept of balanced scorecard and the application of this complex performance management tool through conducting of a comprehensive review of literature. This bibliometric analysis literature review is grounded on achieving the following main objectives, RO1: to conceptualise the term balanced scorecard, RO2: to understand the past, present and future application of balanced scorecard in organisations. The bibliometric analysis highlight on literature review, data collection and methods, presentation of results from SCOPUS database through the use of Vosviewers and Biblioshiny based on balanced scorecard concept. Furthermore, the discussion on the concept of balanced scorecard application, the future research direction, the research implication and lastly the conclusion and the references.

2. Theoretical background

2.1. Conceptualization of a Balanced Scorecard

The balance scorecard is multidimensional and its benefits too are multi-fold justifying its worldwide popularity. The balance scorecard links the performance measures with the business unit or departmental strategy in such a way that may reduce conflict among managers and their subordinates. According to Chiang and Lin (2009), the balanced scorecard integrates the interests of all the key stakeholders including owners/shareholders, customers and employees. The balanced scorecard is a generally accepted management accounting tool which encompasses non-financial performance measurements along with the financial performance measurements so that the performance of an organisation is measured in a multi-dimensional way and can increasingly focus on the organisation's strategies (Nisha, 2017). While the study of Arasli et al. (2019) states that balance scorecard translates a business's mission into objectives and actions that aligns with the goals of individuals and organisations and helps management to evaluate business progress toward the attainment of these objectives. The balance scorecard is considered to promote a more holistic approach to performance evaluation and that business strategies are translated into operations terms through strategy maps which present the cause-and-effect relationship both with and between the four perspectives of the scorecard. Thus, management can decide to attach rewards and incentives to various performance measures and the daily operations can be linked with the strategy (Hegazy & Tawfik, 2015). The balance of the scorecard is reflected in its mix of lagging (outcome measures) and leading (performance drivers) indicators, and of financial and non-financial measures.

Recently, Kaplan and Norton have developed the notion of a strategy map as a complementary concept next to the Balance Scorecard (BSC). A strategy map links measures of process performance or key performance indicators (KPIs) together in a causal chain that leads through all four perspectives: measures of organizational learning and growth influence measures of internal business processes, which, in turn, act upon measures of the customer perspective, which ultimately drive financial measures (Akkermans & Van Oorschot, 2005). The balance scorecard can be defined as a management system inspired by the cycle "Plan-Do-Check-Act" and has generated enormous interest in academic and industrial research communities. The balanced scorecard has three major advantages namely, communication and teamwork, commitment and feedback, and learning (Wang et al., 2014). It enables senior managers to clarify the vision, develop the strategy, setup the teamwork and foster the commitment to more customer focus across the organisations. It

also helps employees and stakeholders better understand how they contribute to the overall achievement of the organisation.

Therefore, it is crucial to demonstrate the links between the measures by displaying how the performance indicators in one area affect those in another. The balanced scorecard added non-financial strategic performance measures to traditional financial metrics and gave managers and executives a more “balanced” view of the organisational performance. The balanced scorecard has evolved from a tool of performance measurement to the one of implementing strategies, and to a framework for building the alignment of human, information and organisation capitals with the strategies. While strategy maps are the causal maps that depict the relations between balance scorecard performance measures and overriding strategic objectives. They help managers understand the relative importance of the measures for the accomplishment of strategic goals (i.e. linking to strategy). Therefore, they provide clues to weight and aggregate balance scorecard measures when formulating the overall decisions (Wang et al., 2014). The study of Lin and Cheng (2020) defines balance scorecard as a strategic planning and management system that is used extensively in business and industry, government and nonprofit organizations worldwide to align business activities to the vision and strategy of the organization, improve internal and external communications and monitor organization performance against strategic goals. the BSC views the organization from four perspectives to develop metrics and collect and analyse data. Naimi et al. (2020) balance scorecard is a widely used system to measure the performance of the organisation across four different perspectives which includes:

a) Financial perspective

The financial perspective includes traditional financial performance measures which are related to the organisation’s profitability. The financial measures are likely to occur in one of the three stages: rapid growth (early cycle stage of business), sustain (focus on attracting investment and reinvestment), or harvest (mature phase of the life cycle). The three stages can be combined with three financial themes such as revenue growth and mix (expanding products and service offerings), cost reduction/productivity improvement (lowering the direct costs of products and services) and asset utilization (reduce working and physical capital levels).

b) Customer perspective

The customer perspective focus on customer satisfaction and market segments. Managers monitor the performance of operational units in satisfying target segments (Naimi et al., 2020). The generic measures such as customer satisfaction, retention, acquisition, and profitability could be understood by measuring product/service attributes (Nautwima & Asa., 2022a, 2022b). Customer relationship and image and reputation could be customized to target customer groups. Kang and Juanmei (2010) states that In order to obtain the long-term financial performance, it is necessary that organisation provide products and services to satisfy the customers.

c) Internal process perspective

The internal process perspective emphasizes identifying new processes for some of the operational activities responsible for satisfying target customers. The activities, such as value chain activities, help the business to meet current and future needs of stakeholders (Milezi et al., 2023; Naimi et al., 2020). Common measures of value chain activity may include new products, new processes, productivity per business unit, product turnover and after-sales activity.

d) Learning and innovation perspective

The learning and innovation perspective focuses on the infrastructure (people, systems and organizational procedures) required to create long-term growth and improvement. The measures are related to employee satisfaction, investment in training and career growth of employees, investment in information systems or technology, employee capability, managerial efficiency, innovation management, number of complaints and risk management (Naimi et al., 2020). According to Nisha (2017) states that this perspective focuses on human capital, measured by employee skills; information capital, measured by accessibility of information and knowledge management capabilities and organizational capital, measured by sharing of workers knowledge, vision and objectives.

It should be noted that the study of Jackson & Qu (2008) states that the balanced scorecard as proposed by Kaplan and Norton, proposes the above mentioned four performance measures to manage and assess performance of the organisation’s brand and expanded to include one element on the vitality and sustainability of the brand. The final fifth and final element of the framework is maintenance and enhancement, this elements relates to ensuring the vitality and sustainability of the brand (the fifth elements measures includes environment scanning, brand reinforcement and brand

revitalisation). While the study of (Kang & Juanmei, 2010) incorporates the environmental perspective as the fifth element, like other businesses, this perspective cannot separate organisational performance from the social environment and independent existence. The problem of environmental pollution in the process of production and circulation will closely affect the community development.

2.2. The Past, Present and Future Application of Balanced Scorecard

The study of Akkermans & Van Oorschot (2005) states that decades ago, Harvard Professors Johnson and Kaplan renounced the traditional financial measures as the rightful way to measure the corporate performance in their book titled *Relevance Lost: The Rise and Fall of Management Accounting*. Hence, they introduced an integrated set of financial and non-financial measures, which is known as the balance scorecard. Since then, performance management in general and the balance scorecard has gained prominence in both business world and in academia. The same study states that in the past, all Managers were to ensure that relevant inputs and reports from different functional areas were to be translated into financial data. Some functions, such as marketing could have been significantly better suited to do this than other department such as R&D or operations. But, regardless of how successful this translation was in the past, it remained a conversation in a 'foreign language' for non-financial managers. According to Akinbowale et al. (2023) stated that balance scorecard is a recognised and important management tool with the prospective to enhance an organisation's performance.

As a management tool, the balance scorecard can provide an improvement to the traditional management planning and control system via the integration of financial and non-financial measures. A well-developed BSC may promote the reduction in the cost incurred in the organisation. Hence, the financial perspective is critical as it determines the financial long run objective and shareholder's value of an organisation. However, the non-financial measures are also considered important as the integration of both measures will promote effective performance measurement. The application of balance scorecard has a direct impact on the organisation's control systems. Akinbowale et al. (2023) stated that the incorporation of balance scorecard into the control system can help the effective implementation of the organisation's strategies. This incorporation drives the organisation towards the achievement of the identified goals and performance objectives. The flexibility of in the application of the balance scorecard permits the organisation to structure their target, implementation strategies and performance measures to suit the organisation's need.

The study by Irfani et al. (2020) suggests that matching the traditional balance scorecard architecture and system dynamics can offer better support strategic management decision. It was found that balance scorecard based on system dynamics allows for exploration and understanding of complexity and dynamics of the system. Furthermore, by combining the two tools will facilitate the organisational learning, policy, design and managerial strategic analysis. For the purpose of providing understanding in this study, Irfani et al. (2020) highlights that system dynamics permits simulations to demonstrate the potential impact of a particular policy on system behaviour. However, the study to integrate balance scorecard with system dynamics approach does not show how to address risks of local objectives problems and short-term solutions as well as to enhance the alignment between strategic performance, tactics and operations. Hence, a performance management system in multiple role companies is expected not only to evaluate actual performance but to support decision making, especially when the decision is related to performance improvement, for example, the decision made by management to decide as what percentage of the capital budget to inject in order to increase infrastructure capacity, which in turn can improve system performance (Irfani et al., 2020).

Organisation should consider the balance scorecard as the culmination of a process which starts from top management's strategic vision of the firm, which is then used to develop performance measures used to communicate strategy down the organisation to achieve success in its implementation. The developer of the balance scorecard warns top management not to force strategy on lower-level management but rather engage within the organisation (Hegazy & Tawfik, 2015). Hence, it was suggested that a system of strategic dialogue through which performance measures are formulated through continued dialogue within the company about the nature of leading and lagging indicator. The continued strategic dialogue will result in organisational learning and strategic development. Therefore, divisional managers are likely to ignore the balance scorecard if they believe that its totally subjective, not fair or irrelevant to their performance evaluation (Hegazy & Tawfik, 2015). To support the above, Darmin et al. (2023) states that after creating the company's mission statement, the company's board of directors needs to set up a clear corporate scorecard. The study noted this as the operationalisation of a company mission statement. However, problems occurs when the company scorecard and business targets are not communicated, understood and internalized by every employee.

The study of Wang et al. (2014) suggests that the strategy map enables the organisation to clarify its vision and strategy. It also enables the supervisor to explore the cause and effects of the strategy. Furthermore, the balance scorecard provides about both the internal organization processes and external outcomes to continuously improve the strategic performance and the results. When fully deployed, the balance scorecard transforms the strategic planning from an academic exercise into the nerve center of the organisation. Therefore, a well-constructed strategy map can eloquently describe the strategy of an organisation, while a well-constructed balance scorecard can make the vague and imprecise world of visions and strategies come alive through clear and objective performance measures. Although, the balance scorecard has some limitations, it serves as a basis for resource deployment and improving internal process. In addition, the balance scorecard enhances the quality of the organisation's controlling system in various ways (Chiang & Lin, 2009).

The interests in the implementation of the balanced scorecard in the public sector originally emerged from the context of Hoque's public sector (Gębczyńska & Brajer-Marczak, 2020). The balanced scorecard is a multidimensional concept oriented towards the interests of all stakeholders which, when applied in public administration, makes it possible to formulate and measure the degree to which objectives are fulfilled both from the political and administrative points of view as well as from the citizens' perspective. On the one hand, using it may serve to increase internal efficiency, and on the other hand, it may provide the foundation for outward reporting and accounting for execution of the tasks at hand before local communities and politicians. According to the study of Gębczyńska and Brajer-Marczak (2020) states that the balance scorecard is a managerial method aimed at strategy implementation by translating it into a consistent set of objectives, measures of their fulfilment as well as the planned actions.

In the public sector as opposed to the private sector, the implementation ensures that management is oriented not so much towards the financial dimension but mainly towards the one where development takes place. Hence, it is important to adjust and modify the balance scorecard model when it is intended for implementation in the public sector. According to Jensen (2001) states that the balance scorecard expands the set of business unit objectives beyond financial measures. With the balance scorecard, corporate executive can measure how their business units create value for current and future customers and how they must enhance internal capabilities and the investment in people, systems and procedures necessary to future performance. In addition, the study of Jensen (2001) argues that ultimately for an organisation's strategy to be implemented in a powerful way, each employee in the organisation must know what he/she is expected to do differently, how their performance measures will be constructed and how their rewards and punishment will be related to the measures. For current and future operationalisation of the balance scorecard in the organisation, Soderberg et al. (2011) states that organisation that have a balanced scorecard containing each of the three structural elements and the two use elements are considered to have a fully developed balanced scorecard. The balanced scorecard's three key structural features include:

- a) Measures derived from strategy: Given that the primary purpose of the balance scorecard is to help the organisation implement strategy, it is argued that its metrics must measure those activities which lead to strategy implementation.
- b) Balance among measures: The second element of "structure" is balance in terms of the number of perspectives of performance, the number and type of measures in each perspective (e.g. each perspective should have a similar number of indicators and there should be a balance between driver and outcome indicators and financial and non-financial measures).
- c) Measures are casually linked: The third element of "structure" pertains to the linkages between the different measures within each performance dimension as well as across the four performance dimensions, perspectives. The measures should be linked together in a series of driver (leading indicators) and the outcome (lagging indicators) relationships, which ultimately culminate in the financial dimension.

Soderberg et al. (2011) states that Kaplan and Norton argue that the balance scorecard should be used as a device for gathering feedback on the organisation's progress which enhance organisational learning, communicating organisation's strategy and motivating its employees. In order to achieve these goals, two "use" elements that a firm's balance scorecard must possess are as follows:

- a) Double-loop learning: Double-loop learning is at the heart of a dynamic process that updates the firm's strategy as its external environment changes. Double-loop learning is the process of questioning the assumptions underlying the organisation's strategy as reflected in the linkages and measures of the balance scorecard, this happens when the organisation's actual results differ from the expected results. If its performance is lower than expected, the organisation's managers should consider if they should revise the organisation's strategy and/or revise its scorecard.

- b) Tie-in to compensation: Tying compensation to the balance scorecard increases employee’s awareness of the activities they need to execute in order to implement the organization’s strategy and enhances their motivation to complete them effectively.

3. Methodology

3.1. Search Criteria and Document Selection

The document search and selection process followed a systematic approach using the Scopus database, chosen for its broad coverage of peer-reviewed literature. As hown in Table 1, the search was conducted on 10 November 2024 with the terms “Balanced Scorecard,” “Strategic Scorecard,” “Corporate Scorecard,” and “Integrated Performance Management System,” which initially yielded 386 records. After filtering by subject area (Business, Management and Accounting), document type (articles, conference papers, and reviews), language (English), and removing duplicates or erroneous records, a total of 122 documents were retained for bibliometric analysis.

Table 1: Document search criteria

Filtering criteria	Exclude	Include
Search engine: Scopus Search date: 10-11-2024 Search term: (“Balance scorecard” OR “strategic scorecard” OR “corporate scorecard” OR “integrated performance management system”)	221	386
Subject area: Business, Management and Accounting;	38	165
Document type: Articles, Conference papers, and Reviews	5	127
Language screening: English only	0	122
Erroneous records screening: Include documents with valid author information only, and delete duplicates	0	122
Total Selected Documents		122

Source: Author’ computation (2024)

3.3. Data Extraction and Synthesis

A structured data extraction sheet was designed to capture key information from the selected documents, including author(s), publication year, research theme, methodology, and major findings. The extracted data were then synthesised and categorised to trace the historical evolution of Balanced Scorecard research, assess its current state of application in organisations, and explore its future directions as a performance management tool. The documents were thematically analysed to identify recurring patterns, conceptual gaps, and emerging themes such as strategic planning, key performance indicators, and performance evaluation, which continue to shape the discourse on the Balanced Scorecard.

4. Results and Discussions

4.1. Year-wise Publication Trend

Figure 1 shows the documents publication trend on balance scorecard concept from the year 1996 to 2024. It can be noted that the concept of balance scorecard gained attention from academics in the year 1996. This is supported by the study of Hegazy and Tawfik (2015) which states that the balance scorecard was developed by Kaplan and Norton and it attracted attention from academics and practitioner with recent development of organisational world. Additionally, this can be supported by the study Akkermans & Van Oorschot (2005) which states that decades ago, Havard Professors Johnson and Kaplan renounced the traditional financial measures as the rightful way to measure the corporate performance and developed the balance scorecard, including measurement on both financial and non-financial.

However, in the year between 2005 to 2008, the concept of balance scored card received more attention from researchers, this can be attributed to the world economic crises of 2006 to 2009 which resulted in closure of most entities in the world, hence, it can be construed that more researcher developed the need to research more about the concept to ascertain the impact of the crises. In the year 2020, a significant rise in the research on balance scorecard concept. This is the year Covid 19 was at the peak, hence, it could be construed that more studies were conducted during this period to assess the impact of Covid 19 on the performance of organization. The impact of Covid 19 can be supported by the study of Obrenovic et al. (2024) which investigated the effects of the Covid 19 pandemic on global financial and economic activities, which resulted in adverse financial outcomes for businesses, industries and countries. Hence, the impact of

Covid 19 resulted or sparked the interest of academic researchers to research more on the pandemic with the aim of understanding the impact of Covid 19. The study of (Hegazy and Tawfik (2015) states that despite the popularity of the balance scorecard in other parts of the world, the French have shown less interest in the concept due to the implementation of the French Tableau de Board, while only 26% of the most important publicly traded firms in Switzerland, Germany and Austria adopt it with the majority applying only a partial version of it.

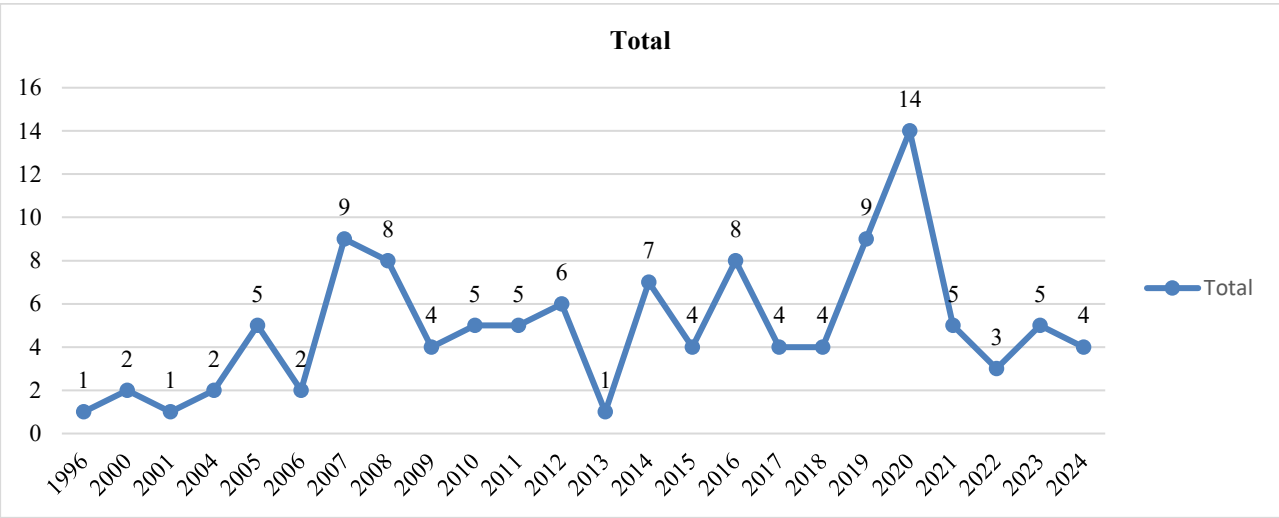


Figure 1: Balanced scorecard year publication trend
Source: Authors’ computation from Scopus extracts (2024)

4.2. Bibliometric Citation Analysis of Top Influential Authors

Table 2 presents the top ten most influential authors in the balanced scorecard field, highlighting their contributions through publication output and citation impact. These authors have demonstrated significant scholarly interest in advancing both the theoretical underpinnings and practical applications of the balanced scorecard. The ranking is based on the total number of publications (TP) and the frequency with which their works have been cited (TC), which serve as indicators of visibility and influence within the academic community. Among them, Jensen, Michael emerges as the most cited author, with 537 citations, reflecting his central role in shaping the discourse on performance measurement and strategic management. He is followed by Kraslawski, Andrzej, Mujkić, Zlatan, and Qorri, Ardian, each recording 152 citations, indicating their notable but relatively more specialized contributions. Other authors, including Akkermans, H.A., Van Oorschot, K.E., Bukh, P.N., and Mouritsen, J., also feature prominently, each with more than 90 citations, demonstrating the breadth of scholarly engagement with the topic. Although many of these authors contributed a single publication, their works have achieved considerable citation impact, underlining the importance and influence of their research within the field. Overall, the citation distribution suggests that while the balanced scorecard has attracted contributions from a wide range of scholars, a few highly cited works have been particularly instrumental in establishing its academic and practical relevancer.

Table 2: Most prominent authors in the field

Rank	Author	TP	TC	TLS
1	Jensen, Michael	1	537	1
2	Kraslawski, Andrzej	1	152	0
3	Mujkić, Zlatan	1	152	0
4	Qorri, Ardian	1	152	0
5	Akkermans, H.A.	1	106	0
6	Van Oorschot, K.E.	1	106	0
7	Bukh, P.N.	1	99	0
8	Mouritsen, J.	1	99	0
9	Thorsgaard Larsen, H.	1	99	0
10	Bui, Tat-Dat	2	92	0

Note(s): TP: Total publications; TC: Total Citations; TLS: Total Link Strength

Source: Authors’ computation (2024)

4.3. Bibliometric of Top Influential Countries/Territories

Table 3 highlights the leading countries contributing to balanced scorecard research, measured by both total publications (TP) and total citations (TC). The analysis shows that the United States dominates the field, producing 10 publications and accumulating 723 citations, underscoring its position as the intellectual hub of balanced scorecard research. India ranks second in terms of output, with nine publications and 184 citations, while Taiwan follows closely with eight publications and 208 citations, demonstrating both productivity and impact. Other notable contributors include Indonesia, Poland, the United Kingdom, Thailand, China, Iran, and South Africa, all of which feature among the top ten most productive countries. Interestingly, when the ranking is based on citations rather than publication count, Poland, Finland, the Netherlands, and the Philippines emerge as highly impactful contributors, despite having fewer total publications. For instance, Finland recorded only three publications yet achieved 153 citations, reflecting the significant influence of its scholarly contributions. Similarly, the Netherlands and Denmark produced just a single publication each but attained over 99 citations, suggesting that certain seminal works originating from these countries have shaped the global discourse on the balanced scorecard. Briefly, the findings demonstrate that while the United States is both the most prolific and most cited, the global spread of impactful contributions illustrates the balance scorecard’s relevance across diverse regions. The combination of high-output countries and those producing fewer but highly cited works reflects a dynamic research landscape, providing both theoretical depth and practical insights for academics and practitioners seeking to understand and apply the balanced scorecard in organizational contexts.

Table 3: Bibliometric analysis of top ten impactful countries

Top 10 based on Documents				Top 10 based on Citations			
Rank	Country	TP	TC	Rank	Country	TP	TC
1	United States	10	723	1	United States	10	723
2	India	9	184	2	Taiwan	8	208
3	Taiwan	8	208	3	India	9	184
4	Indonesia	7	19	4	Poland	7	180
5	Poland	7	180	5	Finland	3	153
6	United Kingdom	7	92	6	Netherlands	1	106
7	Thailand	6	10	7	Philippines	2	99
8	China	5	90	8	Denmark	1	99
9	Iran	4	19	9	United Kingdom	7	92
10	South Africa	4	6	10	China	5	90

Note(s): TP: Total Publications; TC: Total Citations

Source: Authors’ computation (2024)

4.4. Bibliometric Analysis of Top Impactful Publishing Institutions

Table 4 presents the top ten institutions that have made notable contributions to balanced scorecard research. The Department of Shipping and Transportation Management at the National Taiwan Ocean University emerges as the leading institution, with two publications and 92 citations. This performance not only demonstrates the institution’s influence in the field but also signals its role in positioning Taiwan as a key player in performance management scholarship. Other institutions appearing in the ranking include ‘Alexandru Ioan Cuza’ University of Iasi (Romania), Abdul Wali Khan University (Pakistan), ABV–Indian Institute of Information Technology and Management (India), and the Academy of Finance (Vietnam). Although most of these institutions contributed only a single publication, their inclusion in the list highlights the global diffusion of balanced scorecard research across both developed and developing contexts. Of particular note is the Alberta Union of Public Employees in Canada, whose single publication generated 47 citations, reflecting the significant impact of select studies even when output is modest. Similarly, institutions such as Aligarh Muslim University (India) and Administração de Empresas de São Paulo at Fundação Getulio Vargas (Brazil) show that scholarly engagement with the balanced scorecard concept is geographically diverse and spans different

sectors. The presence of universities and research institutes across Asia, Europe, North America, and South America illustrates the international reach of the balanced scorecard framework. These contributions not only enhance the academic reputation of the institutions involved but also feed into the knowledge economies of their respective countries, strengthening capacity for managerial innovation and organizational performance improvement.

Table 4: Top ten impactful publishing institution

Rank	Institution	TP	TC
1	Department Of Shipping and Transportation Management, National Taiwan Ocean University, Taiwan	2	92
2	'Alexandru Ioan Cuza' University of Iasi, Romania	1	0
3	Abdul Wali Khan University, Mardan, Kp, Pakistan	1	1
4	Abv-Indian Institute of Information Technology and Management Gwalior, Gwalior, 474 015, India	1	17
5	Academy Of Finance, Vietnam	1	1
6	Administração De Empresas De São Paulo, Fundação Getulio Vargas, São Paulo, Sp, Brazil	1	2
7	Alberta Union Of Public Employees, Edmonton, Canada	1	47
8	Aligarh Muslim University, Aligarh, India	1	17
9	Australian Graduate School of Management, University of Nsw, Sydney, Nsw, Australia	1	4
10	College Of Accounting, Hebei University of Economic and Business, China	1	0

Note(s): TP: Total Publications; TC: Total Citations

Source: Authors’ computation (2024)

4.5. Bibliometric of Top Prolific Journals

Table 5 presents the leading journals publishing research on the balanced scorecard, ranked by total publications. The Total Quality Management and Business Excellence journal leads with three publications and 114 citations, followed closely by Measuring Business Excellence and the Journal of Asian Finance, Economics and Business, each also contributing three articles but with lower citation counts (44 and 10, respectively). Conference proceedings, such as the *Proceedings of the International Conference on Industrial Engineering and Operations Management*, also appear among the top sources, though with relatively modest citation impact. Other high-impact outlets include the Journal of Cleaner Production (2 publications, 232 citations) and the Journal of Intellectual Capital (2 publications, 147 citations), both of which demonstrate strong scholarly influence despite having fewer articles. Similarly, the International Journal of Productivity and Performance Management and Management Decision each feature two publications, suggesting that balanced scorecard research has found a place in both specialized and general management journals. The spread of publications across diverse journals highlights the interdisciplinary appeal of the balanced scorecard framework, linking quality management, intellectual capital, sustainability, and performance measurement.

Table 5: Top ten prolific journals by total publications

Rank	Source	TP	TC
1	Total Quality Management and Business Excellence	3	114
2	Measuring Business Excellence	3	44
3	Journal of Asian Finance, Economics and Business	3	10
4	Proceedings of the International Conference on Industrial Eng. & Om	3	2
5	Journal of Cleaner Production	2	232
6	Journal of Intellectual Capital	2	147
7	International Journal of Productivity and Performance Management	2	101
8	Journal Of Advances in Management Research	2	68
9	International Journal of Management and Enterprise Development	2	26
10	Management Decision	2	24

Note(s): TP: Total Publications; TC: Total Citations

Source: Authors’ computation (2024)

When ranked by total citations (Table 6), a different picture emerges. European Financial Management stands out as the single most influential journal with 537 citations from a single publication, underscoring the seminal nature of that contribution. The Journal of Cleaner Production (232 citations) and the Journal of Intellectual Capital (147 citations) also feature prominently, suggesting that balanced scorecard research resonates strongly within sustainability and knowledge management literatures. Total Quality Management and Business Excellence (114 citations) retains a strong position, reflecting both productivity and impact. Other journals achieving significant influence with fewer publications include the Journal of the Operational Research Society (106 citations from one article) and the Journal of Management, Spirituality and Religion (62 citations from one article). These results show that, while some journals consistently publish balanced scorecard research, much of the field’s citation impact is driven by a handful of highly influential papers disseminated in broader management and finance outlets. Overall, the dual perspective of publications and citations indicates that the balanced scorecard has developed as a cross-cutting research theme. While certain specialized journals serve as recurring outlets, landmark contributions in general management, operations, and finance journals have driven the field’s global visibility and academic influence.

Table 6: Top ten prolific journals by total citations

Rank	Source	TP	TC
1	European Financial Management	1	537
2	Journal of Cleaner Production	2	232
3	Journal of Intellectual Capital	2	147
4	Total Quality Management and Business Excellence	3	114
5	Journal of the Operational Research Society	1	106
6	International Journal of Productivity and Performance Management	2	101
7	Journal of Advances in Management Research	2	68
8	Journal of Management, Spirituality and Religion	1	62
9	Benchmarking	1	57
10	Measuring Business Excellence	3	44

Note(s): TP: Total Publications; TC: Total Citations

Source: Authors’ computation (2024)

4.6. Top Impactful Articles on Balanced Scorecard

Table 7 identifies the ten most influential articles in the balanced scorecard literature, ranked by citation frequency. The analysis shows that the field is overwhelmingly shaped by the foundational works of Kaplan and Norton, the originators of the balanced scorecard framework. Their landmark book, *The Balanced Scorecard: Translating Strategy into Action* (1996), tops the list with 13 citations, establishing itself as the seminal reference point for both scholars and practitioners. This is followed by their influential article, *Using the Balanced Scorecard as a Strategic Management System* (1996, *Harvard Business Review*), which has garnered nine citations. Other key contributions by Kaplan and Norton, such as *Linking the Balanced Scorecard to Strategy* (1996), *The Strategy-Focused Organization* (2001), and *Transforming the Balanced Scorecard from Performance Measurement to Strategic Management* (2001), each attract between five and six citations, reflecting their collective role in advancing the framework from a performance measurement tool to a comprehensive strategic management system. Later works, including *Strategy Maps* (2004) and *The Execution Premium* (2008), continue this trajectory by linking intangible assets and operational execution to strategic outcomes.

Interestingly, the list also includes Michael Porter’s (1985) *Competitive Advantage*, which, although not a balanced scorecard publication per se, is conceptually aligned in emphasizing strategic positioning and value creation. Its inclusion highlights the broader intellectual foundations upon which balanced scorecard research is built. In a nutshell, the dominance of Kaplan and Norton’s publications within the top ten confirms their pivotal influence in shaping both the academic discourse and managerial adoption of the balanced scorecard. Their works remain the cornerstone of citation and reference in the field, underscoring how a single stream of scholarship has defined the contours of research and practice for over three decades.

Table 7: Top ten impactful articles in terms of citations on the balance scorecard topic

Rank	Author	Title	TC
1	Kaplan R.S & Torton	The balanced scorecard: translating strategy into action, (1996)	13
2	Kaplan R.S & Norton	Using the balanced scorecard as a strategic management system, harvard business review, 74, 1, pp. 75-85, (1996)	9
3	Kaplan R.S & Norton	Linking the balanced scorecard to strategy, california management review, 39, 1, pp. 53-79, (1996)	6
4	Kaplan R.S Norton	The strategy-focused organization: how balanced scorecard companies thrive in the new business environment, (2001)	6
5	Kaplan R.S & Norton	Transforming the balanced scorecard from performance measurement to strategic management: part i, accounting horizons, 15, 1, pp. 87-104, (2001)	5
6	Kaplan R.S & Norton	Strategy maps: converting intangible assets into tangible outcomes, (2004)	4
7	Porter M.E	competitive advantage: creating and sustaining superior performance, (1985)	4
8	Kaplan R.S & Norton	Measuring the strategic readiness of intangible assets, harvard business review, 82, 2, pp. 52-63, (2004)	3
9	Kaplan R.S & Norton	d.p., the balanced scorecard-measures that Drive performance, harvard business review, 70, 1, pp. 71-79, (1992)	3
10	Kaplan R.S & Norton	The execution premium: linking strategy to operations for competitive advantage, (2008)	3

Note(s): TP: Total Publications; TC: Total Citations
Source: Authors' computation (2024)

4.7. Top Global Research Country Collaboration Networks

Table 8 and Figure 2 illustrate the international collaboration networks in balanced scorecard research, highlighting the extent of cross-country linkages. The analysis shows that the United States leads in global collaboration, producing 10 publications with a total of 723 citations. This reflects both its central position in the research network and the broad reach of its scholarship. Taiwan follows with eight publications and a total link strength (TLS) of 6, suggesting strong international connections and co-authorship patterns. India ranks third with nine publications and 184 citations, underscoring its growing role in the global discourse, particularly in applying the balanced scorecard within emerging economy contexts. Other countries contributing significantly to international collaboration include Poland, Finland, the Netherlands, the Philippines, Denmark, the United Kingdom, and China, which collectively make up the top ten. Notably, countries such as Finland and the Netherlands, despite having fewer publications, register high citation counts (153 and 106 respectively), reflecting the influence of key seminal works produced through collaborative efforts. Similarly, the Philippines and Denmark, with relatively modest output, are recognized for impactful contributions achieved through international partnerships. The findings emphasize that collaboration enhances the visibility and quality of balanced scorecard research by enabling scholars to share expertise, diversify methodological approaches, and address broader management challenges across contexts. The global spread of contributions, from North America and Europe to Asia, demonstrates the wide applicability of the balanced scorecard framework. At the same time, the relatively modest total link strengths (TLS) across many countries suggest that while collaboration is present, the global research network remains fragmented and offers opportunities for stronger partnerships, particularly between developed and developing regions.

Table 8: Top ten countries in global research collaborations

Rank	Country	TP	TC	TLS
1	United States	10	723	2
2	Taiwan	8	208	6
3	India	9	184	2
4	Poland	7	180	3
5	Finland	3	153	1
6	Netherlands	1	106	0
7	Philippines	2	99	3
8	Denmark	1	99	0
9	United Kingdom	7	92	4
10	China	5	90	2

Note(s): TP: Total publications; TC: Total Citations; TLS: Total Link Strength
Source: Authors’ computation (2024)



Figure 2: Top countries in global research collaborations
Source: Authors’ computation (2024)

4.8. Bibliometric Analysis of Keyword Occurrences

Table 9 and Figures 3 and 4 present the results of the bibliometric keyword analysis, highlighting the most frequently used terms associated with balanced scorecard research. The findings show that “balanced scorecard” and its variation “balance scorecard” dominate the field, appearing 28 and 27 times respectively, with total link strengths (TLS) of 112 and 117. These results confirm the centrality of the balanced scorecard as both a conceptual and methodological anchor in management research. Beyond these core terms, “performance measurement” emerges as the third most common keyword (12 occurrences, TLS = 55), reflecting the tool’s enduring role in evaluating organizational effectiveness. Other recurring terms include “strategic management” (9 occurrences), “BSC” (7), and “intellectual capital” (6), which highlight the conceptual expansion of the balanced scorecard into strategy execution, organizational learning, and intangible resource management. Keywords such as “corporate governance” and “firm performance”, each with four occurrences, further emphasize its application in assessing accountability and value creation.

Table 9: Summary of top 10 keyword occurrences and total links strength

Rank	Author Keywords	Occurrences	TLS
1	Balanced scorecard	28	112
2	Balance scorecard	27	117
3	Performance measurement	12	55
4	Strategic management	9	38
5	BSC	7	30
6	Intellectual capital	6	21
7	Performance	6	33
8	Performance evaluation	5	26
9	Corporate governance	4	24
10	firm performance	4	14

Source: Authors’ computation (2024)

The keyword co-occurrence map in Figure 3 illustrates the interconnectedness of these concepts, showing distinct clusters where balanced scorecard research overlaps with domains such as risk management, corporate governance, supply chain performance, and strategic planning. This suggests that the balanced scorecard functions not only as a performance tool but also as a bridge linking diverse areas of organizational research.



Figure 4: Word cloud
Source: Authors' computation (2024)

4.9. Bibliometric Analysis of the Thematic Evolution Map

Figure 5 presents the thematic evolution map, which visualizes the intellectual structure of balanced scorecard research by clustering related keywords into themes. The two axes of the map, centrality (relevance to the field) and density (level of development), help to categorize themes into four quadrants: niche themes, motor themes, basic themes, and emerging or declining themes. The motor themes, located in the upper-right quadrant, represent well-developed and highly relevant areas that drive the field forward. In this analysis, *balanced scorecard*, *balanced scorecards*, and *strategic planning* emerge as core drivers, supported by related concepts such as *societies and institutions*, *benchmarking*, *complex networks*, and *key performance indicators*. These themes form the intellectual backbone of balanced scorecard research, reflecting their centrality in both academic inquiry and managerial practice. The basic themes, found in the lower-right quadrant, are highly relevant but less developed, serving as foundational areas that connect across multiple research domains. Terms such as *competition*, *knowledge management*, and *strategic management* appear here, highlighting their importance as underpinning concepts that shape the application of the balanced scorecard but require deeper scholarly development.

The niche themes in the upper-left quadrant are specialized, well-developed areas with limited centrality. Keywords such as *fuzzy decision-making*, *sustainable systems*, and *financial systems* suggest targeted research streams where the balanced scorecard has been applied to specialized methodological or sectoral contexts. While impactful within their niches, these themes remain peripheral to the broader discourse. Finally, the emerging or declining themes, located in the lower-left quadrant, include *enterprise resource planning*, *financial aspects*, and *innovation*. Their position indicates either nascent areas of inquiry that have yet to gain momentum or declining streams where academic attention has shifted elsewhere. For instance, innovation appears underexplored in the balanced scorecard literature, suggesting opportunities for future integration with strategic performance measurement. Overall, the thematic evolution map demonstrates that while the balanced scorecard remains the central and driving theme, its intellectual ecosystem extends into governance, knowledge management, and specialized applications. The presence of emerging and underdeveloped themes signals potential pathways for future research, particularly in linking the balanced scorecard with innovation, digital transformation, and sustainable development.

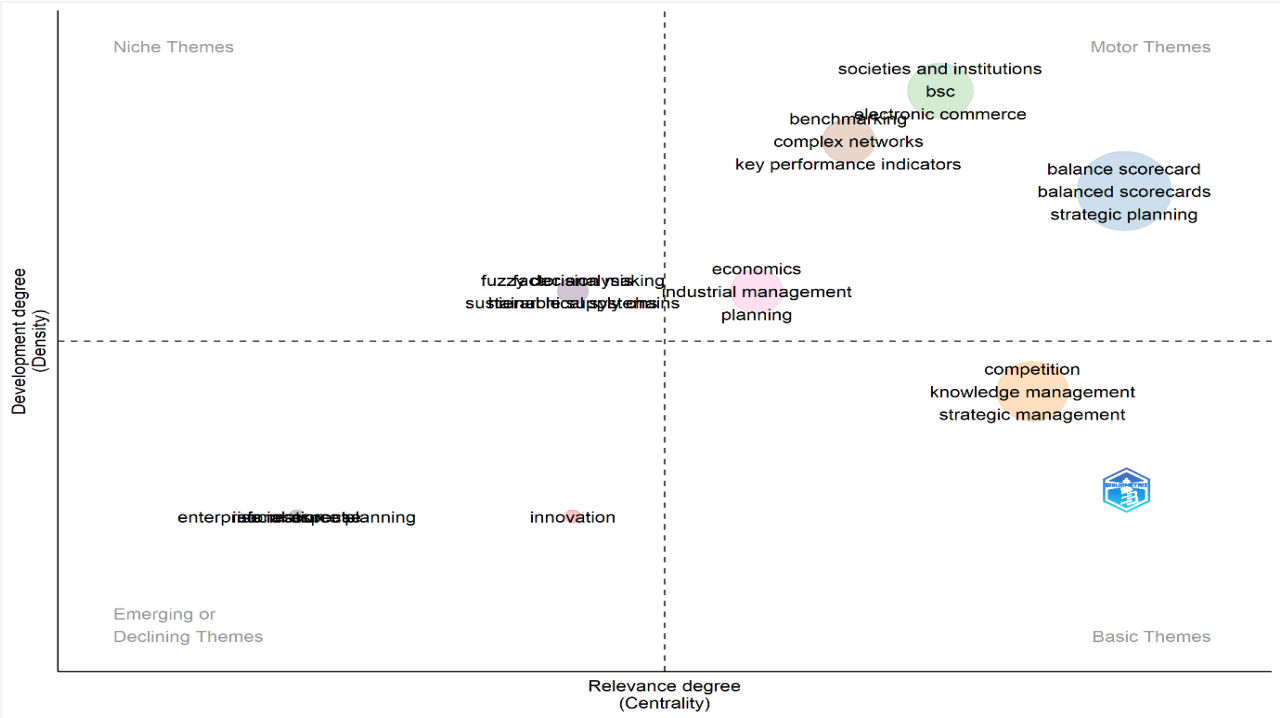


Figure 5: Thematic Evolution Map

Source: Authors’ computation (2024)

5. Discussions

The balanced scorecard has emerged as one of the most significant performance management tools for both private and public sector organizations, offering a systematic approach to evaluating processes while broadening strategic options that enhance organizational viability. The bibliometric evidence in this study reinforces the idea that the balanced scorecard, through its four perspectives, financial, customer, internal processes, and learning and growth, provides a holistic framework for measuring organizational performance. This aligns with Arasli et al. (2019), who argue that the effectiveness of the tool lies in its capacity to integrate diverse performance indicators into a balanced and coherent system of assessment. The bibliometric trends further reveal the trajectory of research on the balanced scorecard, which first gained scholarly attention in the early 1990s and peaked around 2020. This surge reflects growing efforts to deepen understanding of the tool’s applications across different organizational contexts. Yet, as Jensen (2001) observed, despite the volume of scholarship, there remains limited consensus regarding the definition and boundaries of the balanced scorecard. The persistence of conceptual ambiguities has resulted in varied interpretations among managers and researchers, with some perceiving it strictly as a performance measurement tool, while others view it as a comprehensive strategic management framework. This lack of uniformity underscores an ongoing need for clearer conceptualization and standardized application in practice.

Beyond conceptual clarity, the bibliometric analysis highlights the structural dimensions of the research landscape. The findings point to a concentration of impactful publications, led by influential authors such as Kaplan and Norton, whose seminal works continue to dominate the field. Similarly, the analysis identifies leading journals, including Total Quality Management and Business Excellence and Journal of Cleaner Production, as critical platforms for disseminating balanced scorecard research. At the institutional and country levels, the United States, Taiwan, India, and Poland emerge as leading contributors to both publication output and international collaboration, reinforcing their roles as intellectual hubs in shaping the discourse. Keyword analysis further reveals the thematic depth of the literature. Terms such as intellectual capital, strategic management, strategic planning, and performance evaluation appear consistently, demonstrating the balance scorecard’s integration into broader debates on governance, competitiveness, and organizational learning. The visualizations generated from co-occurrence analysis (keyword maps and word clouds) confirm the conceptual centrality of the balanced scorecard, while simultaneously highlighting its intersections with related fields.

Finally, the thematic evolution map underscores how the research has developed around four clusters of themes: niche, motor, basic, and emerging or declining. Among these, the motor themes, including strategic planning, key performance indicators, and the balanced scorecard itself, stand out as the intellectual drivers of the field, shaping both theoretical inquiry and managerial application. By contrast, the presence of emerging or underdeveloped themes, such as innovation and enterprise systems, signals new avenues for future exploration, particularly as organizations adapt to digital transformation and sustainability imperatives. In brief, the discussion confirms that the balanced scorecard is both a foundational and evolving concept in performance management research. While its core contributions are well established, the field continues to grapple with conceptual ambiguities and practical adaptations. The bibliometric insights generated here provide a roadmap for consolidating existing knowledge while pointing toward future opportunities for refinement and innovation.

6. Conclusion and Implications

This research sought to deepen the conceptualization of the balanced scorecard and to provide insights into its past, present, and future applications as a tool for measuring organizational performance. By integrating financial and non-financial indicators, the balanced scorecard, first introduced by Kaplan and Norton, offered a multidimensional approach to performance evaluation based on four perspectives: financial, customer, internal processes, and learning and growth. Over time, it has evolved from a measurement tool into a strategic management framework, helping organizations translate strategy into clear objectives, measurable outcomes, and actionable initiatives. The findings highlight the importance of contextual adaptation in applying the balanced scorecard. In private sector organizations, the financial dimension often takes precedence, whereas in the public sector, implementation emphasizes developmental outcomes and service delivery. This distinction reinforces the need to tailor the balanced scorecard model to organizational type and context, rather than applying it as a uniform template.

From a scholarly perspective, the study contributes to ongoing debates by clarifying the role of the balanced scorecard in bridging financial and non-financial performance dimensions. Through a bibliometric analysis of SCOPUS-indexed literature, the research identified recurring themes such as strategic planning, performance evaluation, intellectual capital, and strategic management, which signal both the breadth and interdisciplinary relevance of the concept. At the same time, the persistence of contradictions in practice demonstrates that further empirical research is required to refine its application and resolve tensions between theory and practice. In terms of managerial implications, the study underscores the balanced scorecard's potential as a powerful tool for strategy execution. Managers can leverage it to align day-to-day operations with long-term objectives, enhance accountability, and create a shared language for performance improvement. However, successful implementation depends on the careful selection of indicators, strong leadership commitment, and adaptability to organizational realities. Finally, researchers and practitioners alike must focus on advancing the balanced scorecard beyond its current limitations by addressing implementation challenges, harmonizing theory with practice, and exploring its role in responding to contemporary pressures such as digital transformation, innovation, and sustainability. Doing so will not only strengthen its relevance across diverse organizational settings but also ensure its continued evolution as a cornerstone of performance management.

7. Future Research Directions

This study set out to conceptualize the term balanced scorecard and to examine its past, present, and potential future applications as a performance measurement and management tool. The bibliometric findings highlight not only the tool's widespread influence but also a persistent practice-knowledge conflict gap between theoretical research and managerial application. As Ullah Shah et al. (2021) observe, tensions remain over the acceptance and effective use of the balanced scorecard in practice, with researchers often emphasizing its strategic management potential while many managers struggle to operationalize it. Jensen (2001) similarly underscores this gap, noting that organizations frequently fail to realize the full value of their balanced scorecards because of poor implementation. A central challenge lies in the complexity of integrating both financial and non-financial measures into coherent systems. While firms that successfully link non-financial indicators to financial outcomes can demonstrate measurable returns, many practitioners remain uncertain about which non-financial measures are most relevant. This ambiguity, coupled with the criticism that traditional financial indicators are historically oriented and fail to capture forward-looking performance, has limited the balanced scorecard's effectiveness in some contexts. Given these unresolved issues, future research should focus on clarifying and bridging the gap between conceptual frameworks and practical applications. Specifically, scholars could:

- Explore frameworks for selecting and prioritizing non-financial measures, ensuring they are contextually relevant and directly linked to financial performance.
- Investigate the operationalization challenges faced by managers across sectors, with particular attention to how organizational culture, resources, and institutional contexts affect implementation.
- Examine the role of digital transformation and analytics in improving the usability and adaptability of the balanced scorecard, especially in dynamic and data-rich environments.
- Conduct comparative studies across regions and industries to identify best practices and innovative adaptations that can inform both academic theory and managerial practice.

Addressing these areas would help harmonize research insights with managerial realities, thereby closing the practice–knowledge conflict gap identified in this study. In doing so, future research could enhance the balanced scorecard’s relevance as a tool that not only measures past performance but also supports forward-looking strategy, innovation, and sustainable organizational growth.

References

- Agarwal, A. (2020). Investigating design targets for effective performance management system: an application of balance scorecard using QFD. *Journal of Advances in Management Research*, 18(3), 353–367. <https://doi.org/10.1108/JAMR-05-2020-0075>
- Akinbowale, O. E., Mashigo, P., & Zerihun, M. F. (2023). Application of Balance Scorecard as a Strategic Management and Performance Measurement Tool for Cyberfraud Mitigation. 7th International Conference on Business and Information Management, ICBIM 2023, 60–69. <https://doi.org/10.1109/ICBIM59872.2023.10303219>
- Akkermans, H. A., & Van Oorschot, K. E. (2005). Relevance assumed: A case study of balanced scorecard development using system dynamics. *Journal of the Operational Research Society*, 56(8), 931–941. <https://doi.org/10.1057/palgrave.jors.2601923>
- Arasli, H., Alphon, C., & Arici, H. E. (2019). Can balanced scorecard adoption mediate the impacts of environmental uncertainty on hotel performance? The moderating role of organizational decision-making structure. *Journal of Hospitality Marketing and Management*, 28(8), 981–1009. <https://doi.org/10.1080/19368623.2019.1578716>
- Asa, A. R., Campbell, H., & Nautwima, J. P. (2022). A critical review of organizing knowledge management for innovation. *International Journal of Management Science and Business Administration*, 8(2), 7–15. doi: <https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.82.1001>
- Asa, A. R., & Nautwima, J. P. (2022). Determinants of financial capability: A situational analysis for Namibia. *International Journal of Innovation and Economic Development*, 7(6), 7–13. doi: <https://doi.org/10.18775/ijied.1849-7551-7020.2015.76.2001>
- Barth, N. B., & Meirelles, F. D. S. (2010). download. Access to Information: Assessment of the Use of Automated Interaction Technologies in Call Centers, 51(1), 27–42.
- Chiang, C. Y., & Lin, B. (2009). An integration of balanced scorecards and data envelopment analysis for firm’s benchmarking management. *Total Quality Management and Business Excellence*, 20(11), 1153–1172. <https://doi.org/10.1080/14783360903248286>
- Darmin Ahmad Pella, M., Sumarwan, U., & Daryanto, A. (2023). Factors Affecting Poor Strategy Implementation. *Gadjah Mada International Journal of Business*, 15(2), 183–204.
- Gębczyńska, A., & Brajer-Marczak, R. (2020). Review of selected performance measurement models used in public administration. *Administrative Sciences*, 10(4). <https://doi.org/10.3390/admsci10040099>
- Hegazy, M., & Tawfik, M. (2015). Performance measurement systems in auditing firms: Challenges and other behavioural aspects. *Journal of Accounting in Emerging Economies*, 5(4), 395–423. <https://doi.org/10.1108/JAEE-04-2012-0014>
- Irfani, D. P., Wibisono, D., & Basri, M. H. (2020). Integrating performance measurement, system dynamics, and problem-solving methods. *International Journal of Productivity and Performance Management*, 69(5), 939–961. <https://doi.org/10.1108/IJPPM-12-2018-0456>
- Jackson, L. A., & Qu, H. (2008). A conceptual framework for managing lodging brands: A balanced-scorecard approach. *Journal of Quality Assurance in Hospitality and Tourism*, 9(2), 108–134. <https://doi.org/10.1080/15280080802235458>

- Jensen, M. (2001). Value maximisation, stakeholder theory, and the corporate objective function. *European Financial Management*, 7(3), 297–317. <https://doi.org/10.1111/1468-036X.00158>
- Kang, S., & Juanmei, Y. (2010). 2010 2nd IEEE International Conference on Information Management and Engineering. I E E E.
- Lin, W. C., & Cheng, H. H. (2020). Improving maritime safety through enhancing marine process management: the application of balanced scorecard. *Management Decision*, 59(3), 604–615. <https://doi.org/10.1108/MD-08-2019-1044>
- Milezi, J., Asa, A. R., Nautwima, J. P., & Obrenovic, B. (2023). Assessing the impact of management practices on organisational growth at a multinational company in Namibia. *International Journal of Operations Management*, 3(2), 22–34. <https://doi.org/10.18775/ijom.2757-0509.2020.32.4002>
- Nautwima, J. P., & Asa, A. R. (2022a). Exploring the challenges and factors impeding effective public service delivery at a municipality in Namibia. *International Journal of Innovation and Economic Development*, 8(5), 15 – 24. doi: <https://doi.org/10.18775/ijied.1849-7551-7020.2015.85.2002>
- Nautwima, J. P., & Asa, A. R. (2022b). The impact of quality service on customer satisfaction in the banking sector amidst the Covid-19 Pandemic: A literature review for the state of current knowledge. *International Journal of Management Science and Business Administration*, 8(3), 31-38. doi: 10.18775/ijmsba.1849-5664-5419.2014.83.1004
- Naimi, M. Al, Faisal, M. N., & Sobh, R. (2020). Prioritization of supply chain reconfiguration variables using balanced score card and analytic network process. *International Journal of Operations and Quantitative Management*, 26(2), 95–119. <https://doi.org/10.46970/2020.26.2.2>
- Nisha, N. (2017). International editorial review Board editor-In-Chief International advisory Board aSSoCiate EditorS An official publication of the *Information Resources Management Association International Journal of Information Systems in the Service Sector*. 9(1). <http://www.igi-global.com/IJISSS>
- Obrenovic, B., Oblakovic, G., & Asa, A. R. (2024). Bibliometric Analysis of Financial and Economic Implications during the COVID-19 Pandemic Crisis. *Sustainability (Switzerland)* , 16(7). <https://doi.org/10.3390/su16072897>
- Soderberg, M., Kalagnanam, S., Sheehan, N. T., & Vaidyanathan, G. (2011). When is a balanced scorecard a balanced scorecard? *International Journal of Productivity and Performance Management*, 60(7), 688–708. <https://doi.org/10.1108/17410401111167780>
- Ullah Shah, A., Khan Durrani, S., & Rehman, S. (2021). R S S Identification and Categorization of Research Gaps: An Overview of Theoretical Gaps. *International Review of Social Sciences*, 9, 4. www.irss.academyirmbr.com
- Wang, G., Wan, J., & Zhao, L. (2014). Strategy map for Chinese science parks with KPIs of BSC. *Journal of Science and Technology Policy Management*, 5(2), 82–105. <https://doi.org/10.1108/JSTPM-01-2014-0003>
- Wu, S. I., & Hung, J. M. (2007). The performance measurement of cause-related marketing by balance scorecard. *Total Quality Management and Business Excellence*, 18(7), 771–791. <https://doi.org/10.1080/14783360701349831>