Exploring the Implementation of the Balanced Scorecard: A Systematic and Bibliometric Synthesis

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Abstract: This research investigates the application of the Balanced Scorecard (BSC) framework by companies via a systematic literature review (SLR). A comprehensive search utilising the keywords "Balanced Scorecard" and "Implementation" was conducted in the Web of Science (WOS) and JSTOR databases. The inquiry yielded 480 items from WOS and 952 articles from JSTOR. A total of 59 papers were selected for a systematic review following the screening of titles, abstracts, and full texts. The selected papers primarily consisted of research articles and reviews, published between 1992 to 2024. Thematic analysis yielded insights into empirical case studies, pragmatic strategies, and guidelines for BSC implementation. A bibliometric analysis was performed to visualize keyword co-occurrences, bibliographic coupling, and co-citation patterns, revealing the intellectual structure and subject groupings in the BSC implementation literature. The limitations included reliance on self-reported measures and limited sample sizes. Despite its limitations, the synthesis of findings provides organisations seeking to enhance or implement BSC efforts with valuable insights. In conclusion, robust leadership endorsement, adaptability, and dedication are essential for the successful implementation of BSC. Organisations can attain their long-term goals and promote sustainable growth by utilising the Balanced Scorecard as a strategic instrument. The essay underscores the necessity for further examination of BSC implementation methodologies and outcomes, with implications for theory, practice, and future inquiry.

Keywords: Balanced Scorecard, Performance Measurement, Systematic Literature Review, PRISMA, Implementation, Key Performance Indicators

Introduction

In the early 1990s, Kaplan and Norton presented the Balanced Scorecard (BSC) at Harvard Business School. This management technique has garnered significant attention and has been used by various sectors. The BSC is a comprehensive framework that allows organisations to synchronize their strategic goals with key performance indicators (KPIs) across four dimensions: financial, customer, internal business processes, and learning & development. The evaluation of a business's performance is performed by examining both

financial and non-financial dimensions using the BSC. Non-financial indicators are distributed among the Learning & Development, Internal Business Process, and Customer Perspectives, while financial metrics are consolidated under the Financial Perspective. Financial metrics are retrospective, serving as lagging indicators outside the organization's direct influence. Conversely, non-financial measurements function as leading indicators in management, offering proactive insights. The BSC methodology priorities leading indicators and necessitates managerial oversight and evaluation of these prospective metrics (Kaplan & Norton, 1992, 1993, 1996; Siddiqui, 2001).

Academic research has focused on the BSC's implementation to understand its uptake, efficacy, and difficulties in organizational contexts. To answer important questions about the elements that contribute to successful adoption, how they affect organizational performance, and the challenges that arise during implementation, this systematic review of the literature explores the research landscape around BSC implementation. In addition to the systematic review, a bibliometric analysis is conducted to map the intellectual structure and thematic trends in the field, highlighting influential studies, key research clusters, and disciplinary intersections. This overview seeks to give practitioners and scholars significant insights into the difficulties of strategic management in modern commercial enterprise environments by combining findings from a variety of studies.

Methodology

This study employed a systematic literature review (SLR) approach to find relevant literature for investigating the implementation of the BSC within organizational contexts. To conduct this systematic review, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) reporting checklist is followed. In the PRISMA statement, the overall process for selecting and rejecting articles was described. It is used to help the researcher enhance the

reporting of a review paper. The review is restricted to published literature(*PRISMA*, n.d.).

Specification of Research Objectives and Search Protocol

Before we delve into the relevant literature, it's crucial to clearly define the goals of the review (Talwar et al., 2021). In line with this, we have outlined four key objectives for this review: (a) to scrutinize the nature of research conducted in the field, (b) to identify the key research themes, (c) to critically assess the literature to identify research gap, (d) to discuss practice implications, policy and possible avenues for future investigation based on the identified gaps in the literature, and (e) to conduct a bibliometric analysis to uncover the intellectual structure, thematic clusters, and influential sources within BSC implementation research.

To accomplish these objectives, we searched the pertinent literature related to the implementation of BSC using the PRISMA 2020 statement, which provides revised guidelines for reporting systematic reviews and takes into account the advancements in techniques for finding, evaluating, synthesizing, and selecting studies (Page et al., 2021; *PRISMA*, n.d.).

In our search methodology, we established the keywords, data sources, and criteria for inclusion and exclusion. The search was performed utilizing two electronic databases: Web of Science (WOS) and JSTOR. The search approach employed targeted search phrases and Boolean operators, including "Balanced Scorecard" AND "Implementation." The last search was done on 7th January 2025.

The study selection process followed predetermined inclusion and exclusion criteria. Articles were selected based on the following criteria:

• Relevance: Articles focusing on the implementation of the Balanced

Scorecard framework particularly published in the Management discipline.

- Language: Articles written in English.
- Study Type: Exploratory Studies, Empirical studies, Case studies, Conceptual studies, Descriptive studies, or literature reviews providing insights into the implementation of BSC.
- Document Type: Research Article and Review Article.
- Review Period: Articles published during the year 1992 to 2024.

Results

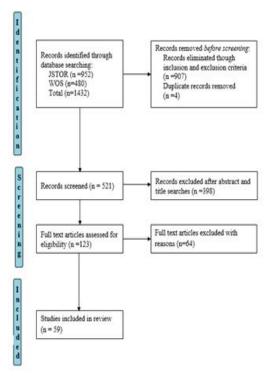
Study Selection

A comprehensive search was conducted in two electronic databases, Web of Science (WOS) and JSTOR, using the search terms "Balanced Scorecard" AND "Implementation." The initial search yielded a total of 1407 articles, 480 articles from the Web of Science, and 952 articles from JSTOR. Following the application of inclusion and exclusion criteria, a total of 598 articles from the management discipline were identified. After further refinement, 589 articles published between 1992 and 2023 were retained for review. These articles were primarily research articles and review articles, totaling 555 documents. The systematic review included a total of 525 papers, all of which were written in English. The chosen articles were then sent to Zotero Software for further evaluation, and four duplicate articles were eliminated using the same software. The titles and abstracts of these publications were carefully examined, leading to the elimination of 398 articles. After thoroughly examining the whole text, a collection of 59 papers was compiled for the purpose of conducting a systematic literature review. The PRISMA flow chart for the study selection process has been summarized in Figure. 1.

Data Collection and Screening of Literature

The articles were identified through a keyword search and were then screened using specific criteria to ensure they fit within the scope of the study. Duplicate articles were removed using Zotero software. The titles and abstracts of the remaining articles were reviewed, and irrelevant studies were excluded. The remaining articles underwent full-text screening and were transferred to Excel sheets. A content analysis was conducted on the relevant studies to extract information such as the publication year, country of publication, source of publication, and methodology used. Following that, three distinct themes were used to categorize the pertinent papers using thematic analysis.

Figure 1: The PRISMA flow chart for the study selection process



Source: Author's Compilation using PRISMA Flow Chart

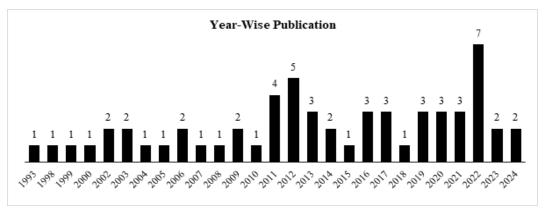
Research Profiling

This section aims to provide a concise summary of the research profile of 59 chosen papers, focusing on the information collected regarding the year of publication, the source of publication, the classification of countries, and the methodological approach taken in the studies related to Balanced Scorecard Implementation.

Year-Wise Publication

A total of 59 studies covering the years 1992 through 2024 were identified. The year-wise publication trend shows that the highest number of papers was published in the year 2022 (Figure. 2).

Figure 2: Year-wise Publication



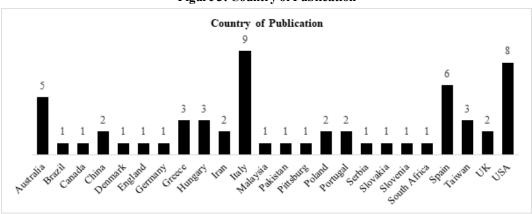
Source: Author's Compilation using Microsoft Excel

Country of Publication

Figure 3 presents a classification of selected studies based on the country in which they were published. It offers insights into the geographic

distribution of research contributions within the

field under review. Figure 3: Country of Publication



Source: Author's Compilation using Microsoft Excel

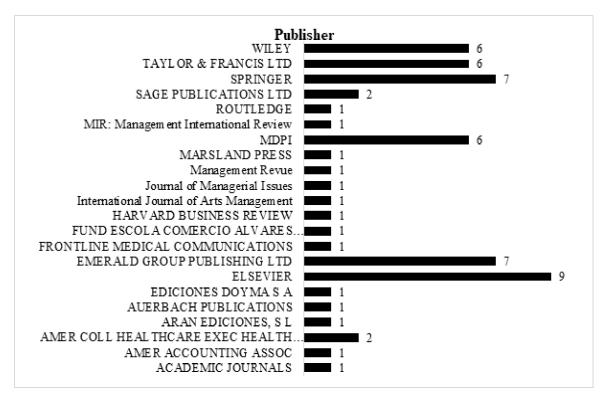
The highest number of papers were published in Italy (n = 9). USA and Spain follow closely with eight and six studies respectively, highlighting the significant research output of the study.

Publisher

Figure 4 presents a classification of selected studies based on their respective publishers. It

provides insight into the distribution of studies across various publishing platforms. Elsevier emerges as the most prominent publisher, with 9 studies in the review. Springer, Wiley, Taylor & Francis, Emerald, and MDPI contribute significantly with 6 to 7 studies.

Figure 4: Publisher



Source: Author's Compilation using Microsoft Excel

Methodology

Figure.5 below presents a classification of selected studies based on the research methodologies employed in their respective studies. It offers insights into the methodological approaches researchers adopt within the field under review.

The above figure shows that Case study is the most prevalent method, with 15 studies providing

detailed analysis of specific cases. Conceptual research, descriptive research, empirical study, experimental design, exploratory research, and literature review are also represented, with 7, 9, 5, 4, 12, and 7 studies, respectively. These methodologies offer diverse approaches to understanding phenomena within the field, from theoretical exploration to empirical testing and synthesis of existing knowledge.

Methodology 15 12 7 7 Empirical Case study Conceptual Descriptive Experimental Exploratory Literature Research Study Review

Figure 5: Methodology

Source: Author's Compilation using Microsoft Excel

Bibliometric Analysis

This section applies bibliometric methods to outline the intellectual framework and thematic progression of research on BSC implementation. Key patterns, important sources, and thematic clusters within the literature are found and visualized by co-occurrence, bibliographic coupling, and co-citation analysis utilising VOSviewer (Van Eck & Waltman, 2010).

Co-occurrence Analysis of Keywords in **BSC** Implementation Literature

A bibliometric keyword co-occurrence analysis was performed using VOSviewer to identify key themes related to the implementation of the BSC within the literature reviewed. Figure 6 visualizes the relationships among key terms extracted from the literature included in the SLR. This map reveals clusters of thematically related keywords, where the size of each node reflects its frequency of occurrence, and the proximity and connections between nodes illustrate their co-occurrence within the same articles (Cancino et al., 2021).

At the center of the map, the term "balanced scorecard" stands out as the most frequently used and thematically central keyword, surrounded by several important clusters. Of particular interest to this study is the term "implementation," which appears prominently and is closely connected to various domains, indicating its significance across different research contexts.

The purple cluster connects implementation with strategic themes, such as health care, challenges, and strategy, highlighting sector-specific concerns. The blue cluster emphasizes structural aspects like framework, performance management, and the public sector. The green cluster relates to governance, financial performance, and case studies, reflecting organizational implementation contexts. Meanwhile, the red cluster focuses on outcomes, with terms like impact, quality, and evaluation particularly in healthcare settings.

performance measurement system
public sector

performance measurement

health care framework

challenges health-care performance sections

strategy performance sector

balanced scorecard improvement evolution

innovation money quality integer hospital knowledge sustainability

systems systems satisfaction

governance information strategic management

public sector

VOSviewer

Figure 6: Co-occurrence Analysis of Keywords

Source: Author created using VOSviewer Software

This network demonstrates that BSC implementation is a multidimensional topic,

Bibliometric Coupling of Documents

To better understand the links in the literature about Balanced Scorecard (BSC) implementation,

bridging strategy, governance, and performance evaluation across diverse sectors.

we used VOSviewer to analyse how documents are connected by their references Figure 7, presents a network of documents grouped based on shared references, highlighting thematic similarities among authors.

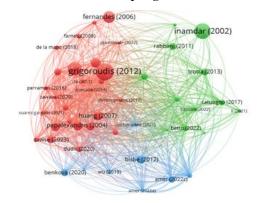


Figure 7: Bibliometric Coupling of Documents

Source: Author created using VOSviewer Software

VOSviewer

Three major clusters emerged:

The red cluster, led by (Grigoroudis et al., 2012) and (Papalexandris et al., 2004), comprises foundational works focusing on performance measurement frameworks and strategic alignment through BSC.

The green cluster, centered around (Inamdar & Kaplan, 2002) and (Rabbani et al., 2011), reflects studies with a strong emphasis on the healthcare applications of BSC, often dealing with quality, efficiency, and service delivery.

The blue cluster, represented by authors such as (Bisbe & Barrubés, 2012) and (Amer et al., 2022a, 2022b), includes more recent studies, often

addressing public sector governance, implementation challenges, and contextual adaptations.

This coupling map illustrates the intellectual structure of the BSC implementation field and shows how clusters of documents are aligned around thematic or methodological orientations.

Co-Citation Analysis of Sources

Figure 8 shows the co-citation network of sources that are referenced together when discussing BSC implementation, created with VOSviewer. The map visualizes how frequently pairs of journals are cited together, indicating thematic and disciplinary alignment.

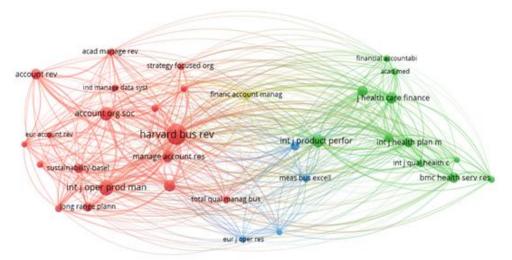


Figure 8: Co-Citation Analysis of Sources

Source: Author created using VOSviewer Software

Three major clusters were identified:

The red cluster, led by Harvard Business Review, Accounting, Organisations and Society, and Management Accounting Research, reflects a strong foundation in accounting, organizational studies, and general management literature.

The green cluster is comprised of journals such as Journal of Health Care Finance, BMC Health Services Research, and International Journal of

Health Planning and Management, indicating a significant body of work focused on BSC applications in healthcare and hospital settings.

The blue cluster, including the International Journal of Production Performance and the European Journal of Operational Research, highlights contributions from the operations management and performance measurement domains.

This co-citation structure underscores the interdisciplinary nature of BSC research, spanning management accounting, strategic performance, and healthcare management.

Thematic Analysis

This analysis enabled us to present the thematic areas of research, identify the existing research gaps, and present potential avenues of future research that provide a useful point of reference for theory and practice. Considering our investigation and assessment, we have categorized BSC articles into three major themes. These themes are i) BSC implementation guidelines, ii) BSC practical implementation, and iii) Case studies on BSC implementation.

BSC Implementation Guidelines

This theme includes articles focusing on BSC implementation guidelines. The BSC implementation, as discussed in the paper "Putting the Balanced Scorecard to Work" by Kaplan and Norton, should be a top-down reflection of the company's mission and strategy. It should be forward-looking, integrating both external and internal measures to ensure future success.

The following Table 1 summarizes key insights and guidelines from various articles on BSC implementation across different sectors and contexts. These summaries highlight strategies, methodologies, and critical success factors discussed in literature.

Table 1: Key Points Covered on BSC Implementation Guidelines

Article	Key Points Covered in the Study	
(Kaplan & Norton, 1993)	Aligns company mission and strategy with performance measures, benchmarks projects, and facilitates organizational focus and change.	
(Martinsons et al., 1999)	Aligns BSC with corporate and IS strategies; step-by-step development process; emphasizes outcome measures and performance drivers.	
(Kanji & E Sá, 2002)	Tailors BSC to organizational needs; integrates with business excellence models; emphasizes stakeholder engagement and leadership commitment.	
(Inamdar & Kaplan, 2002)	Stresses executive involvement, strategic application, and validation through research; emphasizes strategic alignment and leadership.	
(Maiga & Jacobs, 2003)	Integrates BSC with Activity-Based Costing; enhances product quality, customer satisfaction, and sales margins.	
(Reisinger et al., 2003)	Uses Analytic Hierarchy Process for prioritizing BSC measures; emphasizes dynamic and regularly reviewed BSC.	
(Papalexandris et al., 2004)	Details a seven-phase BSC implementation process in a Greek software firm; offers managerial insights and guidelines.	
(Michalska, 2005)	Integrates BSC with ISO 9001:2000 standards; emphasizes strategic alignment and continuous improvement.	
(Fernandes et al., 2006)	Structured approach for SMEs; includes project initiation, strategy clarification, KPI analysis, and formal review; emphasizes top management support.	

(Assiri et al., 2006)	Roadmap for successful BSC implementation; Outlines critical success factors including executive commitment, dedicated team, and KPI identification.
(Bisbe & Barrubés, 2012)	Adapts BSC for healthcare organizations; emphasizes relevant perspectives, causal relationships, and hierarchical implementation.
(Garengo & Biazzo, 2012)	Bottom-up circular methodology for SMEs; aligns performance measurement with strategic vision; addresses challenges in formalizing strategies.
(Trotta et al., 2013)	Customizes BSC for teaching hospitals; includes stakeholder perspectives and relevant performance indicators.
(Quesado et al., 2014)	Analyzes BSC adoption determinants; proposes an integrating model for empirical analysis in Portuguese organizations.
(Lueg & Vu, 2015)	Reviews BSC implementation literature; identifies critical success factors and challenges; highlights top management support.
(De La Mano & Creaser, 2016)	Provides BSC guidelines for libraries; addresses challenges in KPI selection and strategic management alignment.
(Perramon et al., 2016)	Validates BSC cause-and-effect links; emphasizes logical order and value generation through personnel management.
(Dimitropoulos, 2017)	Explores BSC in healthcare; emphasizes strategic alignment, departmental integration, and periodic review of metrics.
(Gonzalez- Sanchez et al., 2018)	Adapts BSC for Southern European healthcare sectors; uses existing indicators and acknowledges cultural influences.
(Wu et al., 2019)	Creates BSC system for integrated care organizations in China; uses data-driven approaches for indicator weighting.
(Lucianetti et al., 2019)	Proposes comprehensive BSC model with 12 attributes; emphasizes continual efforts and adjustments during implementation.
(Dudic et al., 2020)	Explores BSC in SMEs; guidelines include adapting to context, integrating with strategic management, and selecting performance indicators.
(Benková et al., 2020)	Investigates BSC in the engineering sector; emphasizes non-financial indicators and resource constraints.
(Gao & Gurd, 2020)	Studies BSC impact in a Chinese hospital; reveals cultural changes and highlights professional group demands for successful adoption.
(Li et al., 2021)	Investigates single- and double-loop learning during BSC implementation in healthcare; optimizes learning to improve performance.
(Teichgräber et al., 2021)	Develops BSC for clinical radiology; integrates perspectives of referring physicians and patients for optimized management.

Source: Author's compilation.

The literature review reveals several research gaps. These include the necessity for a more comprehensive comprehension of strategic alignment across various industries, the influence of cultural disparities on the implementation of the BSC, the enhancement of learning processes during BSC implementation,

and the incorporation of contemporary technologies such as artificial intelligence (AI) and data analytics into the BSC framework. These shortcomings provide potential for more study to improve the implementation of BSC in different organizational contexts.

BSC Practical Implementation

Table 2 summarizes various studies on the implementation and impact of the BSC across different industries and sectors. Each study highlights unique insights and practical applications of the BSC framework.

The research gap found is the absence of a unified BSC framework across industries. It also

points out the need for research on integrating modern data analytics and digital transformation into BSC practices which could lead to a more robust BSC approach that can be tailored to various organizational needs and keep pace with technological advancements.

Case Studies on BSC Implementation

The following table 3 summarizes various case studies focusing on the application of the BSC in different sectors. The findings highlight

adaptations, challenges, and the effectiveness of BSC in improving performance and strategic alignment.

Table 3: Findings of Case Studies on BSC Practical Implementation

Article	Focus	Findings
(Chow et al., 1998)	BSC in public utility's e- commerce	Adapts BSC to measure intangible assets and non-financial gains in e-commerce.
(Hasan & Tibbits, 2000)	BSC in public utility's e-commerce	Highlights challenges and adaptations needed for measuring e-commerce success with BSC.
(Huang & Hu, 2007)	BSC for IT-Business strategic alignment	Emphasizes continuous alignment, leadership, and integration of IT and business planning.
(Chang et al., 2008)	BSC at Mackay Memorial Hospital	Improves revenue growth, patient satisfaction, and research; highlights continuous process.
(Farneti, 2009)	BSC in Italian local government	Aligns with strategic control reporting and integrates with other planning tools.
(Weinstein & Bukovinsky, 2009)	BSC in not-for-profit arts organizations	Aligns operational activities with strategic objectives and critical success factors.

(Cugini et al., 2011)	BSC in an Italian university department	Uses BSC and strategy map for multidimensional performance measurement and alignment with mission.
(Rabbani et al., 2011)	BSC in a Pakistani hospital	Highlights participatory culture, leadership support, and strategic change challenges.
(Grigoroudis et al., 2012)	BSC in healthcare organizations	Proposes performance measurement system using BSC with financial and non-financial indicators.
(Mendes et al., 2012)	BSC in Urban Hygiene and Solid Waste Division in Portugal	Enhances performance management in waste management, focusing on customer satisfaction.
(Emanuele de Matos Nasser y Stella Regina Reis da Costa, 2013)	BSC in a nutritional therapy company	Improves performance and decision-making processes with BSC indicators.
(Janeš, 2014)	BSC in Ydria Motors LL Company	Supports real-time decision-making and strategic initiative prioritization using BSC.
(Nippak et al., 2016)	BSC in a Canadian hospital's health information department	Emphasizes staff involvement and continuous evaluation for aligning operations with strategies.
(Bobe et al., 2017)	BSC in Ethiopian public- sector health organization	Aligns strategic policy goals with operational objectives, noting integration challenges.
(Catuogno et al., 2017)	BSC in a public research hospital	Customizes BSC for healthcare and research, proving effective for performance evaluation.
(Suárez-Gargallo & Zaragoza-Sáez, 2021)	BSC in the Spanish footwear industry	Highlights the importance of strategy maps and knowledge gaps in strategic planning.
(Bassani et al., 2022)	BSC in an Italian public hospital	Shows BSC evolution from monitoring to legitimization influenced by norms and management.

Source: Author's compilation.

The potential research gaps identified are the need for a comparative analysis of BSC implementation across different sectors and cultures, the long-term impact of BSC on organizational performance, the challenges of integrating BSC with existing management systems, especially in light of e-commerce, digital transformation, and the many stakeholders' contributions to the effective use of BSC. These

voids provide avenues for more investigation into the efficacy of BSC in various settings.

Discussion

The review of literature on BSC implementation reveals its widespread use across sectors, including IS, manufacturing, and healthcare. Here are the key implications:

Practical Implications of BSC

The BSC offers organizations invaluable insights into enhancing strategic alignment and overall performance. By translating vision and mission into actionable goals, the BSC fosters cohesive efforts across departments. With relevant KPIs within financial, customer, internal processes, and learning and growth perspectives, organizations can accurately measure progress. Successful implementation requires active stakeholder engagement and continuous communication to ensure everyone understands the strategic direction. The BSC also emphasizes continuous improvement, requiring ongoing review and adaptation to changing circumstances.

Policy Implications

The BSC aids policymakers in making informed decisions and effectively allocating resources. It offers a comprehensive view of organizational performance beyond financial metrics, highlighting non-financial indicators like customer satisfaction and employee engagement. In the public sector, the BSC is particularly valuable for monitoring service effectiveness and promoting accountability. Adopting the BSC signifies a commitment to strategic decision-making and sustainability.

Future Research Directions

Future studies need to look at sector-specific studies to uncover challenges and best practices in various fields like healthcare and education. Investigating the integration of BSC with other management frameworks, such as Six Sigma and Total Quality Management, can reveal synergies. Understanding organizational factors influencing BSC effectiveness, including culture, leadership, and employee behavior, can inform tailored implementation strategies. Additionally, developing dynamic scorecards responsive to real-time data and external disruptions promises

to maintain the relevance and agility of strategic management practices.

The gist laid down that successful BSC implementation requires commitment, leadership support, and a willingness to adapt. Organizations that embrace the BSC as a strategic tool can drive sustainable growth and achieve their long-term objectives.

References

Alipour, F., Jamshidizadeh, S., Bastani, P., & Mehralian, G. (2022). The balanced scorecard as a strategic management tool in hospital pharmacies: An experimental study. *Journal of Health Organization and Management*, 36(6), 767–780.

Amer, F., Hammoud, S., Khatatbeh, H., Lohner, S., Boncz, I., & Endrei, D. (2022a). A systematic review: The dimensions to evaluate health care performance and an implication during the pandemic. *BMC Health Services Research*, 22(1), 621. https://doi.org/10.1186/s12913-022-07863-0

Amer, F., Hammoud, S., Khatatbeh, H., Lohner, S., Boncz, I., & Endrei, D. (2022b). The deployment of balanced scorecard in health care organizations: Is it beneficial? A systematic review. *BMC Health Services Research*, 22(1), 65. https://doi.org/10.1186/s12913-021-07452-7

Assiri, A., Zairi, M., & Eid, R. (2006). How to profit from the balanced scorecard: An implementation roadmap. *Industrial Management & Data Systems*, 106(7), 937–952. https://doi.org/10.1108/02635570610688869

Bassani, G., Leardini, C., Campedelli, B., & Moggi, S. (2022). The dynamic use of a balanced scorecard in an Italian public hospital. *The International Journal of Health Planning and Management*, 37(3), 1781–1798. https://doi.org/10.1002/hpm.3440

Benková, E., Gallo, P., Balogová, B., & Nemec, J. (2020). Factors Affecting the Use of Balanced Scorecard in Measuring Company Performance.

Sustainability, 12(3), Article 3. https://doi.org/10.3390/su12031178

Betto, F., Sardi, A., Garengo, P., & Sorano, E. (2022). The Evolution of Balanced Scorecard in Healthcare: A Systematic Review of Its Design, Implementation, Use, and Review. *International Journal of Environmental Research and Public Health*, 19(16), Article 16. https://doi.org/10.3390/ijerph191610291

Bisbe, J., & Barrubés, J. (2012). The Balanced Scorecard as a Management Tool for Assessing and Monitoring Strategy Implementation in Health Care Organizations. *Revista Española de Cardiología (English Edition)*, 65(10), 919–927. https://doi.org/10.1016/j.rec.2012.05.011

Bobe, B. J., Mihret, D. G., & Obo, D. D. (2017). Public-sector reforms and balanced scorecard adoption: An Ethiopian case study. *Accounting, Auditing & Accountability Journal*, 30(6), 1230–1256. https://doi.org/10.1108/AAAJ-03-2016-2484

Brimelow, R. E., Amalathas, A., Beattie, E., Byrne, G., & Dissanayaka, N. N. (2023). The Use of Balanced Scorecards in Mental Health Services: An Integrative Review and Thematic Analysis. *The Journal of Behavioral Health Services & Research*, 50(1), 128–146. https://doi.org/10.1007/s11414-022-09806-3

Cancino, C. A., Merigó, J. M., & Palacios Marqués, D. (2021). *A bibliometric analysis of innovation research*. http://repositorio.altecasociacion.org:8080/handle/20.500.13048/1312

Catuogno, S., Arena, C., Saggese, S., & Sarto, F. (2017). Balanced performance measurement in research hospitals: The participative case study of a haematology department. *BMC Health Services Research*, 17(1), 522. https://doi.org/10.1186/s12913-017-2479-6

Chang, W.-C., Tung, Y.-C., Huang, C.-H., & Yang, M.-C. (2008). Performance improvement after implementing the Balanced Scorecard: A large hospital's experience in Taiwan. *Total*

Quality Management & Business Excellence, 19(11), 1143–1154. https://doi.org/10.1080/14783360802323560

Chi, D.-J., & Hung, H.-F. (2011). Is the balanced scorecard really helpful for improving performance? Evidence from software companies in China and Taiwan. *African Journal of Business Management*, 5(1), 224.

Chow, C. W., Ganulin, D., Teknika, O., Haddad, K., & Williamson, J. (1998). The balanced scorecard: A potent tool for energizing and focusing healthcare organization management. *Journal of Healthcare Management / American College of Healthcare Executives*, 43(3), 263–280.

Cugini, A., Michelon, G., & Pilonato, S. (2011). Performance measurement in academic departments: The strategy map approach. *Public Money & Management*, 31(4), 271–278. https://doi.org/10.1080/09540962.2011.586240

De La Mano, M., & Creaser, C. (2016). The impact of the Balanced Scorecard in libraries: From performance measurement to strategic management. *Journal of Librarianship and Information Science*, 48(2), 191–208. https://doi.org/10.1177/0961000614558078

Dimitropoulos, P. E. (2017). Performance Management in Healthcare Organizations: Concept and Practicum. In P. Vlamos (Ed.), *GeNeDis 2016* (Vol. 989, pp. 11–19). Springer International Publishing. https://doi.org/10.1007/978-3-319-57348-9_2

Dudic, Z., Dudic, B., Gregus, M., Novackova, D., & Djakovic, I. (2020). The Innovativeness and Usage of the Balanced Scorecard Model in SMEs. *Sustainability*, *12*(8), Article 8. https://doi.org/10.3390/su12083221

Emanuele de Matos Nasser y Stella Regina Reis da Costa, -. (2013). APLICACIÓN DE INDICADORES A TRAVÉS DEL BALANCED SCORECARD EN UNA. *NUTRICION*

HOSPITALARIA, 3, 884–895. https://doi.org/10.3305/nh.2013.28.3.6171

Esther Akinbowale, O., Eckart Klingelhöfer, H., & Fekadu Zerihun, M. (2022). The use of the Balanced Scorecard as a strategic management tool to mitigate cyberfraud in the South African banking industry. *Heliyon*, 8(12), e12054. https://doi.org/10.1016/j.heliyon.2022.e12054

Farneti, F. (2009). Balanced scorecard implementation in an Italian local government organization. *Public Money & Management*, 29(5), 313–320. https://doi.org/10.1080/09540960903205964

Fernandes, K. J., Raja, V., & Whalley, A. (2006). Lessons from implementing the balanced scorecard in a small and medium size manufacturing organization. *Technovation*, 26(5-6), 623-634. https://doi.org/10.1016/j.technovation.2005.03.006

Gao, T., & Gurd, B. (2020). Impact of a management innovation on professional subcultures – the case of a balanced scorecard implementation in a Chinese hospital. *Chinese Management Studies, ahead-of-print*. https://doi.org/10.1108/CMS-11-2019-0408

Garengo, P., & Biazzo, S. (2012). Unveiling strategy in SMEs through balanced scorecard implementation: A circular methodology. *Total Quality Management & Business Excellence*, 23(1), 79–102. https://doi.org/10.1080/14783363.2011.637800

Gonzalez-Sanchez, M. B., Broccardo, L., & Martins Pires, A. M. (2018). The use and design of the BSC in the health care sector: A systematic literature review for Italy, Spain, and Portugal. *The International Journal of Health Planning and Management*, 33(1), 6–30. https://doi.org/10.1002/hpm.2415

Grigoroudis, E., Orfanoudaki, E., & Zopounidis, C. (2012). Strategic performance measurement in a healthcare organisation: A multiple criteria approach based on balanced scorecard. *Omega*,

40(1), 104–119. https://doi.org/10.1016/j.omega.2011.04.001

Hasan, H., & Tibbits, H. (Rita). (2000). Strategic management of electronic commerce: An adaptation of the balanced scorecard. *Internet Research*, 10(5), 439–450. https://doi.org/10.1108/10662240010349453

Huang, C. D., & Hu, Q. (2007). Achieving IT-Business Strategic Alignment via Enterprise-Wide Implementation of Balanced Scorecards. *Information Systems Management*, 24(2), 173–184. https://doi.org/10.1080/10580530701239314

Hwa, M., Sharpe, B. A., & Wachter, R. M. (2013). Development and implementation of a balanced scorecard in an academic hospitalist group. *Journal of Hospital Medicine*, 8(3), 148–153. https://doi.org/10.1002/jhm.2006

Inamdar, N., & Kaplan, R. S. (2002). Applying the balanced scorecard in healthcare provider organizations. *Journal of Healthcare Management*, 47(3), 179–195.

Janeš, A. (2014). Empirical verification of the balanced scorecard. *Industrial Management & Data Systems*, 114(2), 203–219. https://doi.org/10.1108/IMDS-04-2013-0195

Kanji, G. K., & E. Sá, P. M. (2002). Kanji's Business Scorecard. *Total Quality Management*, *13*(1), 13–27. https://doi.org/10.1080/ 09544120120098537

Kaplan, R. S., & Norton, D. P. (1992). The Balanced Scorecard—Measures That Drive Performance. *Harvard Business Review*, 71–79.

Kaplan, R. S., & Norton, D. P. (1993). Putting the Balanced Scorecard to Work. *Harvard Business School Publishing*, pp.132-148. https://doi.org/10.1016/B978-0-7506-7009-8.50023-9

Kaplan, R. S., & Norton, D. P. (1996). Using the Balanced Scorecard as a Strategic Management System. *Harvard Business School Publishing*.

Li, C.-H., Yang, W.-G., & Shih, I.-T. (2021). Exploration on the gap of single- and double-loop learning of balanced scorecard and organizational performance in a health organization. *Heliyon*, 7(12), e08553. https://doi.org/10.1016/j.heliyon.2021.e08553

Lucianetti, L., Battista, V., & Koufteros, X. (2019). Comprehensive performance measurement systems design and organizational effectiveness. *International Journal of Operations & Production Management*, 39(2), 326–356. https://doi.org/10.1108/IJOPM-07-2017-0412

Lueg, R., & Vu, L. (2015). Success factors in Balanced Scorecard implementations – A literature review. *Management Revue*, 26(4), 306–327.

Maiga, A. S., & Jacobs, F. A. (2003). Balanced Scorecard, Activity-Based Costing And Company Performance: An Empirical Analysis. *Journal of Managerial Issues*, 15(3), 283–301.

Martinsons, M., Davison, R., & Tse, D. (1999). The balanced scorecard: A foundation for the strategic management of information systems. *Decision Support Systems*, *25*(1), 71–88. https://doi.org/10.1016/S0167-9236(98)00086-4

Mendes, P., Santos, A. C., Perna, F., & Ribau Teixeira, M. (2012). The balanced scorecard as an integrated model applied to the Portuguese public service: A case study in the waste sector. *Journal of Cleaner Production*, 24, 20–29. https://doi.org/10.1016/j.jclepro.2011.11.007

Michalska, J. (2005). The usage of The Balanced Scorecard for the estimation of the enterprise's effectiveness. *Journal of Materials Processing Technology*, 162, 751–758.

Michalski, D. (2024). Operationalization of ESG-Integrated Strategy Through the Balanced Scorecard in FMCG Companies. Sustainability 2024, 16, 9174. https://www.researchgate.net/profile/Dariusz-Michalski-4/publication/385165530

Moghaddam, T. (2012). The role of balanced scorecard implementation on financial performance transparency. *Life Science Journal*, 9(4), 3963–3970.

Nippak, P. M., Veracion, J. I., Muia, M., Ikeda-Douglas, C. J., & Isaac, W. W. (2016). Designing and evaluating a balanced scorecard for a health information management department in a Canadian urban non-teaching hospital. *Health Informatics Journal*, 22(2), 120–139. https://doi.org/10.1177/1460458214537005

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., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *International Journal of Surgery*, 88, 105906. https://doi.org/10.1016/j.ijsu.2021.105906

Papalexandris, A., Ioannou, G., & Prastacos, G. P. (2004). Implementing the Balanced Scorecard in Greece: A Software Firm's Experience. *Long Range Planning*, 37(4), 351–366. https://doi.org/10.1016/j.lrp.2004.05.002

Perramon, J., Rocafort, A., Bagur-Femenias, L., & Llach, J. (2016). Learning to create value through the 'balanced scorecard' model: An empirical study. *Total Quality Management & Business Excellence*, 27(9–10), 1121–1139. https://doi.org/10.1080/14783363.2015.1060853

Prenestini, A., Calciolari, S., & Rota, A. (2024). Keep-or-drop multidimensional control systems in professional organisations: Evidence on the use of the balanced scorecard in healthcare. *Journal of Health Organization and Management*, 38(9), 157–174. https://doi.org/10.1108/JHOM-09-2023-0287

PRISMA. (n.d.). Retrieved February 13, 2024, from http://www.prisma-statement.org/PRISMAStatement/FlowDiagram

Quesado, P. R., Guzmán, B. A., & Rodrigues, L. L. (2014). Fatores Determinantes da Implementação do Balanced Scorecard em Portugal: Evidência empírica em organizações públicas e privadas. *Review of Business Management*, 199–222. https://doi.org/10.7819/rbgn.v16i51.1335

Rabbani, F., Lalji, S. N., Abbas, F., Jafri, S. W., Razzak, J. A., Nabi, N., Jahan, F., Ajmal, A., Petzold, M., Brommels, M., & Tomson, G. (2011). Understanding the context of balanced scorecard implementation: A hospital-based case study in Pakistan. *Implementation Science*, 6(1), 31. https://doi.org/10.1186/1748-5908-6-31

Reisinger, H., Cravens, K. S., & Tell, N. (2003). Prioritizing Performance Measures Within the Balanced Scorecard Framework. *MIR: Management International Review*, 43(4), 429–437.

Sharma, B., & Gadenne, D. (2011). Balanced Scorecard Implementation in a Local Government Authority: Issues and Challenges. *Australian Journal of Public Administration*, 70(2), 167–184. https://doi.org/10.1111/j.1467-8500.2011.00718.x

Siddiqui, M. (2001). Book Reviews: Robert S. Kaplan and David P. Norton, Beyond Balanced Scorecard: The Strategic-Focused Organization. Boston: Harvard Business School Press, 2001, 400 p., Rs 1434. *Global Business Review*, 2(2), 309–313. https://doi.org/10.1177/097215090100200211

Suárez-Gargallo, C., & Zaragoza-Sáez, P. (2021). How the Balanced Scorecard Is Implemented in the Spanish Footwear Industry. *Sustainability*, 13(10), 5641. https://doi.org/10.3390/su13105641

Talwar, S., Kaur, P., Fosso Wamba, S., & Dhir, A. (2021). Big Data in operations and supply chain management: A systematic literature review and future research agenda. *International Journal of Production Research*, *59*(11), 3509–3534. https://doi.org/10.1080/00207543.2020.1868599

Tawse, A., & Tabesh, P. (2023). Thirty years with the balanced scorecard: What we have learned. *Business Horizons*, 66(1), 123–132. https://doi.org/10.1016/j.bushor.2022.03.005

Tayler, W. B. (2010). The Balanced Scorecard as a Strategy-Evaluation Tool: The Effects of Implementation Involvement and a Causal-Chain Focus. *The Accounting Review*, 85(3), 1095–1117. https://doi.org/10.2308/accr.2010.85.3.1095

Teichgräber, U., Sibbel, R., Heinrich, A., & Güttler, F. (2021). Development of a balanced scorecard as a strategic performance measurement system for clinical radiology as a cost center. *Insights into Imaging*, 12(1), 69. https://doi.org/10.1186/s13244-021-01009-2

Trotta, A., Cardamone, E., Cavallaro, G., & Mauro, M. (2013). Applying the Balanced Scorecard approach in teaching hospitals: A literature review and conceptual framework. *The International Journal of Health Planning and Management*, 28(2), 181–201. https://doi.org/10.1002/hpm.2132

Van Eck, N., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, *84*(2), 523–538.

Weinstein, L., & Bukovinsky, D. (2009). Use of the Balanced Scorecard and Performance Metrics to Achieve Operational and Strategic Alignment in Arts and Culture Not-for-Profits. *International Journal of Arts Management*, 11(2), 42–55.

Wu, X., Li, S., Xu, N., Wu, D., & Zhang, X. (2019). Establishing a balanced scorecard measurement system for integrated care organizations in China. *The International Journal of Health Planning and Management*, 34(2), 672–692. https://doi.org/10.1002/hpm.2726