

Reframing Performance Measurement in Hybrid Organizations: A Systematic Review and Framework for Context-Sensitive Evaluation

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ABSTRACT

This study examines the effectiveness of performance measurement in hybrid organizations, where financial sustainability and social impact must be simultaneously achieved under institutional complexity. Despite widespread use of frameworks like the Balanced Scorecard (BSC) and Triple Bottom Line (TBL), current models often fail to adapt to conflicting stakeholder expectations, fragmented accountability systems, and regulatory inconsistencies. Adopting a systematic literature review (SLR) methodology, this research synthesizes findings from 30 peer-reviewed journal articles published between 2020 and 2024, identified through SCOPUS and Web of Science databases. Through a tiered coding analysis, the study classifies key influencing factors into four domains: governance structures, technical challenges, stakeholder engagement, and institutional dynamics. Findings reveal that non-standardized reporting practices, regulatory rigidity, and conflicting institutional logics undermine the reliability, transparency, and adaptability of performance measurement systems in hybrid settings. The study also identifies seven critical performance measures and develops a framework linking them to institutional and stakeholder conditions. The research concludes by emphasizing the need for adaptive, data-driven, and context-sensitive evaluation models. Practical implications suggest that hybrid organizations should integrate stakeholder participation, leverage digital technologies, and adopt flexible frameworks to enhance measurement reliability and strategic alignment. This review provides a foundation for reforming performance evaluation systems and shaping future research in accounting, public policy, and hybrid governance.

Keywords: Performance Measurement, Hybrid Organization, Accountability

INTRODUCTION

The complexity of performance measurement in hybrid organizations arises from the concurrent presence of bureaucratic, market and social responsibility logic (de Lancer Julnes & Holzer, 2014a; De Waele et al., 2021). The varied expectations of multiple stakeholders further complicate the process of defining and evaluating performance (Ahearn & Mai, 2023; Paul et al., 2023). However, current measurement systems often fall short in capturing these complexities, resulting in fragmented assessments, limited reporting transparency, and an uneven emphasis between financial and social performance indicators. These issues underscore the urgent need for a more integrated and adaptive performance measurement framework (Siltaloppi et al., 2021; Vance & Parskey, 2020).

While performance frameworks such as the Balanced Scorecard (BSC) and the Triple Bottom Line (TBL) aim to capture the dual objectives of hybrid organizations, they often fail to fully address the multidimensional nature of performance measurement (Gunarsih et al., 2016). These models frequently lack the flexibility to adapt to regulatory changes and evolving stakeholder priorities (Vakkuri & Johanson, 2020a). In sectors such as healthcare,

performance metrics may even generate ethical tensions among actors with competing interests (Kaila, 2019; Morinière & Georgescu, 2022). Moreover, systems dominated by financial indicators tend to neglect essential social dimensions, reducing their relevance in hybrid contexts (Saeed & Daud, 2023). Despite existing efforts, a comprehensive framework that integrates the key determinants of performance measurement effectiveness remains underdeveloped (Anbumozhi et al., 2022; Minassian et al., 2016).

Despite multiple efforts to improve performance measurement in hybrid organizations, both conceptual and implementation challenges remain. Regulatory compliance often constrains system flexibility, thereby limiting innovation (Agostino & Arnaboldi, 2015; Kosters & Meltzer, 1991; Portz, 2023). While transparency promotes accountability, excessive administrative demands can hinder operational efficiency (Gascón et al., 2017; Grzeszczyk, 2024; Maroun & Cerbone, 2024). Integrating financial and social indicators also proves difficult due to divergent valuation methods (Miyamoto et al., 2018). Moreover, misalignment between performance metrics and strategic objectives persists, as hybrid organizations differ from purely commercial or nonprofit entities in their priorities (Jalalat et al., 2015; Yakubu et al., 2025). Fragmented accountability and the lack of standardized reporting frameworks further intensify measurement inconsistencies, reducing the reliability of stakeholder interpretations (Harrison et al., 2012; Schmitz & Glänzel, 2016).

Limited stakeholder participation in designing performance metrics undermines measurement legitimacy and increases the risk of data manipulation (Morinière & Georgescu, 2022; Redden, 2019). External pressures from regulators and strategic partners further constrain flexibility, hindering hybrid organizations from adapting their performance systems to dynamic environments (Schmitz & Glänzel, 2016). Addressing these issues requires an integrated framework that balances regulatory, operational, and accountability dimensions to improve measurement reliability. Future research should examine governance mechanisms that foster transparency and adaptability, alongside innovative approaches to align performance metrics with the strategic complexities of hybrid organizations (Ebrahim & Rangan, 2014; Kotwal, 2025; Marcao & Santos, 2025).

This study proposes an adaptive conceptual model that integrates regulatory constraints, organizational complexity, and stakeholder engagement. Nonetheless, implementation challenges remain central to determining performance measurement effectiveness. Frequent regulatory changes create tensions between compliance and operational flexibility, reducing the adaptability of measurement systems in hybrid organizations (Weinert, 2016). Evidence-based approaches aiming to reconcile financial and social goals still encounter methodological challenges in defining measurable indicators (Saeed & Daud, 2023). Furthermore, in the absence of strong governance structures, performance measurement often skews toward financial indicators, overlooking the social and environmental dimensions essential to the TBL framework. A more inclusive model is therefore required to balance financial and social objectives, particularly within public and nonprofit sectors characterized by distinct governance arrangements (Allen & Radev, 2006; Teelken, 2015).

This study highlights the vital role of transparency and accountability in strengthening stakeholder trust and legitimacy within performance evaluation (Teelken, 2015). Yet, in the absence of standardized reporting frameworks, transparency alone may intensify accountability fragmentation and weaken measurement effectiveness (Schmitz & Glänzel, 2016). Active stakeholder participation in developing performance indicators is therefore essential to ensure alignment with organizational realities (Morinière & Georgescu, 2022). Future research should design performance measurement models that integrate operational complexity and multi-stakeholder perspectives while maintaining data credibility and reliability (Bromley & Powell, 2012; Mamabolo & Myres, 2020). These insights provide practical implications for policymakers, managers, and scholars seeking to develop more effective and sustainable evaluation systems for complex hybrid organizations (Allen & Radev, 2006; Teelken, 2015).

BACKGROUND

Balancing economic efficiency and social impact presents hybrid organizations with inherent tensions that manifest in conflicting performance indicators (Besharov & Mitzinneck, 2020; Grossi et al., 2020; Vakkuri & Johanson, 2020b). Their performance measurement processes are constrained by regulatory uncertainty, fragmented accountability, and stakeholder tensions, increasing vulnerability to manipulation (Mamabolo & Myres, 2020). Therefore, an adaptive and integrated measurement framework is required to reconcile economic and social objectives (Mukhopadhyay et al., 2024).

Although frameworks such as the Balanced Scorecard (BSC) and Social Return on Investment (SROI) have been widely adopted, their relevance in hybrid organizations remains contested, as they struggle to align financial and non-financial indicators—particularly in capturing social impact and stakeholder satisfaction (T. J. Kallio et al., 2020; Then et al., 2017; Veddeler et al., 2023). Moreover, rigid regulatory pressures often limit the flexibility of measurement systems, widening the gap between expected outcomes and implemented metrics (Dhillon, 2022a; Ge et al., 2024). These limitations highlight the need for an adaptive, integrative, and stakeholder-oriented performance measurement framework (Lavorato, 2025).

Further analysis indicates that existing models overlook a fundamental paradox in hybrid organizations the tension between market-oriented financial goals and mission-driven social objectives. Addressing this complexity requires a performance measurement system that is both data-driven and adaptable to environmental and organizational dynamics. Conventional metrics remain insufficient for capturing the broader systemic impacts that shape hybrid organizations' performance (Alsaid, 2021; Hoffman et al., 2012).

This study seeks to bridge the gap by identifying key factors influencing performance measurement effectiveness in hybrid organizations and proposing a more holistic and adaptive framework. It critiques the inefficiencies of existing models and emphasizes the need for reform that promotes flexibility, transparency, and responsiveness to both external and internal dynamics (Sardi et al., 2024; Wang et al., 2025; (Moura et al., 2020; Vakkuri & Johanson, 2020a). Without reforming outdated measurement systems, hybrid organizations will continue to face distorted reporting and misaligned incentives (de Lancer Julnes & Holzer, 2014b; Epstein et al., 2018).

Addressing these challenges, this study critiques existing models and outlines a future research agenda to guide the development of adaptive, data-driven, multi-stakeholder performance measurement systems. By integrating real-time analytics, stakeholder engagement, and dynamic accountability mechanisms, it seeks to transform performance evaluation in hybrid organizations. Growing institutional complexity calls for governance innovations and measurement frameworks that are both context-sensitive and responsive to the diverse objectives of hybrid organizations (Dhillon, 2022a; Sardi et al., 2024; Vakkuri & Johanson, 2020b).

RESEARCH METHOD

This study employs a systematic literature review (SLR) approach following established guidelines (Durach et al., 2017; Hamdan, 2025; Tranfield et al., 2003) to ensure transparency, rigor, and replicability. Unlike traditional narrative reviews, it systematically synthesizes evidence from multiple sources to provide a comprehensive understanding of performance measurement effectiveness in hybrid organizations. The analysis draws on the SCOPUS and Web of Science databases recognized sources in Accounting and Business research to ensure inclusion of high-quality and relevant studies. By integrating perspectives from business, management, and public policy, the study offers deeper insights into the complexities of performance measurement in hybrid contexts.

Steps 1 to 3 outlined in the PRISMA flowchart represent the systematic process of searching, screening, and selecting literature used as the basis for the study. Beginning with the identification of 253 articles, the review process culminated in a final selection of 30 articles considered suitable for in-depth analysis.

Each stage reflects the principles of scientific traceability, methodological validity, and a commitment to the quality of the sources used.

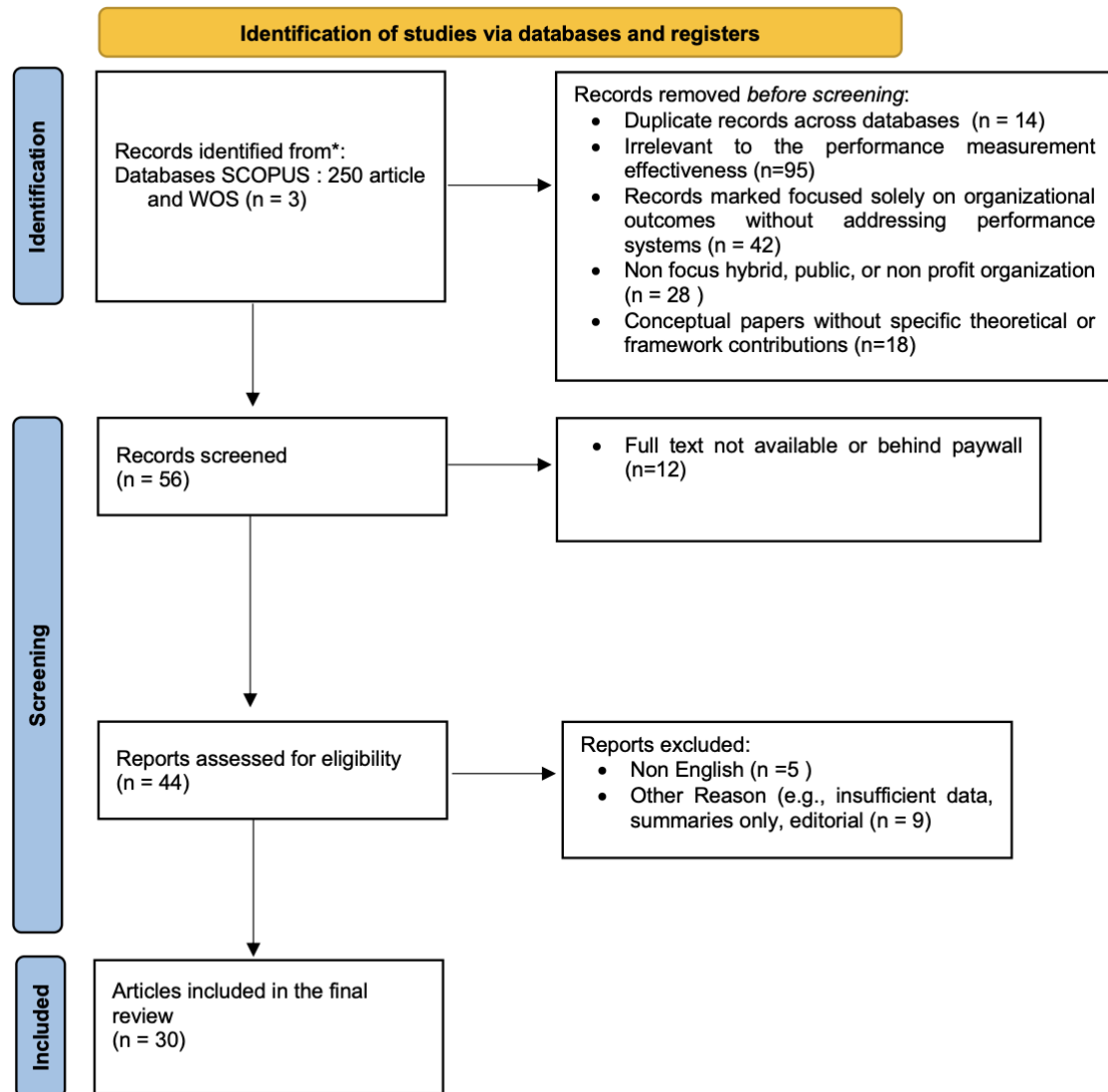


Figure 1.

The sample retrieval process (Step 1) involved searching for articles published between 2020 and 2024 using the keywords “performance measurement” (Title) and “hybrid organization” (All Fields). The search strategy was refined to include only peer-reviewed, open-access journal articles in English, within the relevant fields of management, business finance, and economics. The identification phase began with a systematic search that yielded a total of 253 articles, 250 from SCOPUS and 3 from Web of Science. However, quantity does not guarantee relevance. An initial screening removed 14 duplicate entries. Of the remaining 239 articles, 95 were excluded for not addressing performance measurement systems, 42 for focusing solely on organizational outcomes without discussing the underlying mechanisms, 28 for lacking relevance to hybrid, public, or nonprofit organizational contexts, and 18 conceptual papers were excluded due to insufficient theoretical grounding. As a result, 56 articles met the preliminary criteria and were selected for further examination. For journal source distribution, see Table 1.

Table 1. Journals where the retrieved papers were published.

No	Journal	Frequency
1	International Journal of Productivity and Performance Management	13
2	International Journal of Operations and Production Management	9
3	Business Strategy and the Environment	7
4	Journal of Public Budgeting, Accounting and Financial Management	7
5	Production Planning and Control	6
6	Accounting, Auditing and Accountability Journal	4
7	Administrative Sciences	4
8	International Journal of Production Economics	4

9	Journal of Financial Data Science	4
10	Measuring Business Excellence	4
11	Qualitative Research in Accounting and Management	4
12	Financial Accountability and Management	3
13	International Journal of Logistics Management	3
14	International Journal of Quality and Reliability Management	3
15	Journal of Risk and Financial Management	3
16	Journal of the Operational Research Society	3
17	Management Accounting Research	3
18	Public Money and Management	3
19	Total Quality Management and Business Excellence	3
20	Abacus	2
21	Accounting and Finance	2
22	Accounting Auditing & Accountability Journal	2
23	Accounting Review	2
24	Accounting, Organizations and Society	2
25	Benchmarking	2
26	BRQ Business Research Quarterly	2
27	Business Systems Research	2
28	Construction Management and Economics	2
29	Corporate Social Responsibility and Environmental Management	2
30	Critical Perspectives on Accounting	2
31	Entrepreneurship And Sustainability Issues	2
32	European Accounting Review	2
33	International Journal of Business Performance Management	2
34	Journal of Accounting in Emerging Economies	2
35	Journal of Asian Finance, Economics and Business	2
36	Journal of Civil Engineering and Management	2
37	Journal of Management and Governance	2
38	Journal of Purchasing and Supply Management	2
39	Management Science	2
40	Revista De Gestao E Secretariado-Gesec	2
41	Academy of Management Journal	1
42	Accounting And Business Research	1
43	Accounting Forum	1
44	Accounting Organizations And Society	1
45	Accounting Perspectives	1
46	ACRN Journal of Finance and Risk Perspectives	1
47	Advances in Science, Technology and Engineering Systems	1
48	Applications of Management Science	1
49	Applied Economics	1
50	Asia Pacific Journal of Tourism Research	1
51	Asian Academy of Management Journal	1
52	Baltic Journal of Management	1
53	BenchCouncil Transactions on Benchmarks, Standards and Evaluations	1
54	Brazilian Journal of Operations and Production Management	1
55	British Accounting Review	1
56	Business Management and Economics Engineering	1
57	Cogent Business and Management	1
58	Contemporary Accounting Research	1
59	Corporate and Business Strategy Review	1
60	Creativity and Innovation Management	1
61	Culture and Organization	1
62	Decision Sciences	1
63	Decision Support Systems	1
64	Economic Research-Ekonomska Istrazivanja	1
65	Economics and Sociology	1
66	Economics Letters	1
67	Economies	1
68	Ege Academic Review	1
69	Etikonomi	1

70	EuroMed Journal of Business	1
71	European Journal of Business Science And Technology	1
72	European Journal of Marketing	1
73	European Management Journal	1
74	Finance: Theory and Practice	1
75	Financial Management	1
76	Foundations of Management	1
77	Frontiers In Sports and Active Living	1
78	Gestao E Producao	1
79	Health Care Management Review	1
80	Human Relations	1
81	Information & Management	1
82	Information and Organization	1
83	International Journal of Business and Society	1
84	International Journal of Construction Management	1
85	International Journal of Economics and Business Administration	1
86	International Journal of Engineering Business Management	1
87	International Journal of Financial Studies	1
88	International Journal of Health Care Quality Assurance	1
89	International Journal of Hospitality Management	1
90	International Journal of Information Systems and Project Management	1
91	International Journal of Innovation and Technology Management	1
92	International Journal of Knowledge Management	1
93	International Journal of Management and Sustainability	1
94	International Journal of Production Research	1
95	International Journal of Productivity and Quality Management	1
96	International Journal of Project Management	1
97	International Journal of Selection And Assessment	1
98	International Journal of Services Operations and Informatics	1
99	International Journal of Strategic Property Management	1
100	International Journal of Technology	1
101	International Journal of Technology, Policy and Management	1
102	International Studies of Management and Organization	1
103	Journal of Accounting Research	1
104	Journal of Business Economics and Management	1
105	Journal of Business Research	1
106	Journal of Business Venturing	1
107	Journal of Cleaner Production	1
108	Journal of Competitiveness	1
109	Journal of Financial Reporting and Accounting	1
110	Journal of Global Responsibility	1
111	Journal of High Technology Management Research	1
112	Journal of Humanitarian Logistics and Supply Chain Management	1
113	Journal of Innovation and Knowledge	1
114	Journal of Innovation Management	1
115	Journal of International Marketing	1
116	Journal of Investing	1
117	Journal of Knowledge Management	1
118	Journal of Management Accounting Research	1
119	Journal of Management Control	1
120	Journal of Organizational Change Management	1
121	Journal of Productivity Analysis	1
122	Journal of Project Management	1
123	Journal of Property Investment and Finance	1
124	Journal of Retailing and Consumer Services	1
125	Journal of Retirement	1
126	Journal of Social Entrepreneurship	1
127	Logforum	1
128	Logistics-Basel	1
129	Management and Accounting Review	1
130	Management Decision	1

131	Managing Sport and Leisure	1
132	Meditari Accountancy Research	1
133	Montenegrin Journal of Economics	1
134	Nonprofit Management and Leadership	1
135	Omega (United Kingdom)	1
136	Operations and Supply Chain Management	1
137	Operations Research and Decisions	1
138	Periodica Polytechnica Social and Management Sciences	1
139	Problems and Perspectives in Management	1
140	Public Finance Quarterly-Hungary	1
141	Public Integrity	1
142	Public Performance and Management Review	1
143	Quantitative Finance and Economics	1
144	Rausp Management Journal	1
145	Revista Contabilidade E Financas	1
146	Risks	1
147	SA Journal of Human Resource Management	1
148	Socio-Economic Planning Sciences	1
149	South African Journal of Economic and Management Sciences	1
150	Sport, Business and Management: An International Journal	1
151	Strategic Management Journal	1
152	Supply Chain Forum	1
153	Supply Chain Management	1
154	Technology Analysis & Strategic Management	1
155	Transport Policy	1
156	Transportation Research Part E: Logistics and Transportation Review	1
157	Triple Helix	1
158	Voluntas	1
	Total	250

In the article screening process (Step 2), the focus shifted to accessibility and content completeness. Out of the 56 eligible articles, 12 were excluded due to lack of full-text access, leaving 44 articles available for detailed review. This stage reflects a methodological commitment to data transparency and the reliability of sources used in scholarly analysis. From the 44 articles evaluated for eligibility, 14 were excluded. Specifically, 5 were not written in English, making them unsuitable for standardized international academic comparison, and 9 were editorial pieces, summaries, or commentaries that lacked empirical data or methodological rigor. Ultimately, 30 articles were included in the final synthesis. These articles were considered both thematically aligned and methodologically rigorous, contributing critical insights into how performance measurement systems function within the hybrid organizational context. As a subsequent stage in the research process, Step 4 focused on coding and analysis was conducted using a structured, data-driven tiered approach. The coding and analysis phase (Step 4) employed a three-tiered, data-driven approach. At Level One, open coding identified key performance indicators, revealing seven primary factors and six performance metrics. At Level Two, a data extraction sheet facilitated coding, achieving an inter-rater reliability of 92.17%, leading to refined classifications and the emergence of three new factors: “Institutional Pressures,” “Conflict of Logics,” and “Measurement Adaptability.” The full set of coding categories is presented in Table 2 for reference. Final validation improved reliability to 95%, consolidating 15 factors into five overarching categories. At Level Three, these factors were mapped onto performance measures, demonstrating relationships such as the influence of “Institutional Pressures” on “Sustainability Performance” and “Dual Goals” on “Operational Efficiency”. A complete mapping of these relationships is provided in Table 3. The findings of this study highlight the imperative for adaptive, context-sensitive performance measurement frameworks tailored to the complexity of hybrid organizational environments.

Table 2. Detailed coding categories.

Classification Scheme	Category
Performance Measurement	- Performance Measurement in Hybrid Organizations - Performance Measurement in the Public Sector - Performance Measurement in the Context of SMEs or Nonprofit Organizations
Factors Influencing Performance Measurement	- Institutional Pressures - Dual Goals (Social and Economic Objectives) - Ambiguities and Conflicting Values

Dynamics and Theoretical Issues	- Institutional Theory - Balanced Scorecard (BSC) in Performance Measurement
Collaboration and Stakeholder Engagement	- University-Industry Collaboration - Stakeholder Engagement in Performance Measurement
Challenges in Performance Measurement	- Challenges in Performance Measurement in Hybrid Organizations - Challenges in Implementing Performance Measurement Frameworks
Role of Technology in Performance Measurement	- Digitalization and Industry 4.0 Transformation - Technology in Managing Distributed Teams
Sustainability and Performance Measurement	- Sustainability in Business and Performance Measurement - Use of the Sustainability Balanced Scorecard (SBSC)
Analysis and Development of Performance Measurement Frameworks	- Development of Performance Measurement Frameworks - Modification and Adaptation of Performance Measurement Frameworks

Table 3. Identifying relationships between influencing factors and performance metrics.

		Social - Economic Balance	Good Governance & Trust Accountability	Accuracy & Reliability of Measurement	Regulation & Performance Alignment	Interaction & Influence of stakeholder	Reliability of Performance evaluation	Reporting & Accountability
Governance and Structure	• Dual Goals, • Governance Issue • Institutional Pressures							
Technical challenge	• Measurement Challenges • Ambiguity in Performance Metrics							
Stakeholder involvement	• Stakeholder Engagement • Accountability Fragmentation							
Institutional Dynamics	• Institutional Pressures • Ambiguity in Performance Metrics							

RESULTS AND DISCUSSION

This section presents findings on the effectiveness of performance measurement and its influencing factors. Table 4 provides a descriptive overview of the performance measurement literature, including research methods and theoretical perspectives employed.

Table 4. Overview of The Performance Measurement Literature.

No	Title	Author	Research methods	Theoretical lenses
1	Performance measurement of hybrid organizations emerging issues and future research perspectives	(Grossi et al., 2017)	literature review	Institutional Theory
2	What is going on in the 'big tent'? Current developments in (new) institutional theory and performance measurement and management research	(Polzer, 2022)	conceptual/Theoretical	Institutional Theory

3	A comprehensive performance measurement framework for business incubation centres: Empirical evidence in an Irish context	(Azadnia et al., 2022)	case study	other
4	A conceptual framework for operational performance measurement in wholesale organisations	(Al Majali, 2023)	Conceptual/theoretical	Performance Measurement theory
5	A performance measurement system for industry 4.0 enabled smart manufacturing system in SMMEs- A review and empirical investigation	(Kamble et al., 2020)	Mixed methods	other
6	A proposed circular-SCOR model for supply chain performance measurement in manufacturing industry during COVID-19	(Ozbiltekin-Pala et al., 2023)	Studi kasus	N/A
7	Accountability fragmented? Exploring disjointed performance measurement in government	(Dhillon, 2022b)	Case study	other (accounting habitus)
8	Aligning Performance Measurement Systems across the Supply Chain: Evidence from Electronic Components Suppliers	(O'connor & Schloetzer, 2022)	Survey	Other: Management Control Systems and Supply Chain Alignment
9	An adaptable end-to-end maintenance performance diagnostic framework	(Ge et al., 2024)	Case study	system thoery
10	Analyzing the circular supply chain management performance measurement framework: the modified balanced scorecard technique	(Saroja et al., 2022)	Modelling	system thoery
11	Factors for performance measurement systems design in nonprofit organizations and public administration	(Moura et al., 2020a)	Literature review	TCE (Transaction Cost Economics)
12	Failed promises-performance measurement ambiguities in hybrid universities	(Vakkuri & Johanson, 2020a)	Conceptual/Theoretical	other: Institutional Theory
13	From professional bureaucracy to competitive bureaucracy- redefining universities' organization principles, performance measurement criteria, and reason for being	(T. J. Kallio et al., 2020)	Case study	N/A
14	Hybridity and the use of performance measurement: facilitating compromises or creating moral struggles? Insights from healthcare organizations	Morinière, A and Georgescu, I (2022)	Case study	Other (Sociology of Worth Theory)

15	Institutional logic and scholars' reactions to performance measurement in universities	Kallio K.-M.; Kallio T.J.; Grossi G.; Engblom J. (2021)	Mixed method	other: Institutional Logic and Institutional Work
16	Key performance measurement capabilities for managing distributed teams	Ferreira P.G.S.; Pinheiro de Lima E.; Eduardo Gouvea da Costa S.; Monteiro N.J.; de Castro e Silva A. (2023)	Survei	N/A
17	Modelling performance measurement barriers of humanitarian supply chain	Patil A.; Shardeo V.; Madaan J. (2021)	Modelling	Grey system theory
18	Performance measurement and critical success factors: a case study of a national health service	Sardi A.; Sorano E.; Tradori V.; Ceruzzi P. (2024)	Case study	Performance measurement and management framework
19	Performance Measurement in Emerging Market Social Enterprises using a Balanced Scorecard	Mamabolo A.; Myres K. (2020)	Survey dan Secondary Data Analysis (SDA)	Stakeholder Theory
20	Performance measurement in non-profit fourth party reverse logistics: an application in a foundation specialised in packaging waste	Öz H.H.; Özyörük B. (2023)	Case study	other: PM theory
21	Performance measurement in SMEs: systematic literature review and research directions	Rojas-Lema X.; Alfaro-Saiz J.-J.; Rodríguez-Rodríguez R.; Verdecho M.-J. (2021)	Literature review	other: PM theory
22	Performance measurement in urban development: unfolding a case of sustainability KPIs reporting	Alsaid, L.A.Z.A., Ambilichu, C.A. (2023)	Case study	Other - Contingency Theory, Institutional Theory, and Social Cognitive Theory.
23	Performance measurement in-fourth party reverse logistics	Öz H.H.; Özyörük B. (2023)	Conceptual/Theoretical	N/A
24	Performance measurement tools for sustainable business: A systematic literature review on the sustainability balanced scorecard use	Mio C.; Costantini A.; Panfilo S. (2022)	Systematic Literature Review	other: sustainability balanced scorecard framework
25	Performance Measurement with Lean, Agile and Green Considerations: An Interval-Valued Fuzzy TOPSIS Approach in Healthcare Industry	Rahmani F.; Galankashi M.R.; Rahmani A.; Amiri A.B.; Imani D.M. (2024)	Modelling	Other: Fuzzy Logic and Multiple-Criteria Decision Making (MCDM)
26	PMM and beyond – reflections on the paper “new developments in institutional research on performance measurement and	Vakkuri J. (2022)	Conceptual/theoretical	Institutional Theory

	management in the public sector”			
27	The Impact of Competing Institutional Pressures and Logics on the Use of Performance Measurement in Hybrid Universities	Grossi G.; Dobija D.; Strzelczyk W. (2020)	Case study	Institutional Theory
28	The influence of institutional pressures on the implementation of a performance measurement system in an Egyptian social enterprise	Alsaid, LAZA and Ambilichu, CA (2021)	Case study	other: Institutional Logics Multiplicity Framework
29	The Role of Performance Measurement in University-Industry Collaboration Projects as a Part of Managing Triple Helix Operations	Rantala T.; Ukko J.; Saunila M. (2021)	Mixed methods	Triple Helix Model
30	Understanding the Diverse Performance Measures of Nonprofits: A Quantitative Study of Performance Measurement Adoption	Lee C. (2021)	Survey dan SDA	Agency theory dan Resource dependence theory dan Neo-institutional theory

Essential Performance Measures within Hybrid Organizational Contexts

The literature review identifies seven principal performance measures in hybrid organizations, as presented in table 5: Socio-Economic Balance; Good Governance & Trust; Measurement Accuracy & Reliability; Regulation & Performance Alignment; Stakeholder Interaction & Influence, Performance Evaluation Reliability, and Reporting & Accountability (Greer et al., 2021; Grossi et al., 2017; T. J. Kallio et al., 2020; Rantala et al., 2021; Vakkuri & Johanson, 2020a; Zhao et al., 2024). While some of these indicators parallel those used in other institutional settings, performance measurement in hybrid organizations encompasses a broader scope. The principle of Socio-Economic Balance underscores the need to pursue social and economic objectives concurrently for example, linking the success of social programs with financial performance outcomes (Grossi et al., 2017; T. J. Kallio et al., 2020; Rakauskienė et al., 2022). Measurement Accuracy & Reliability emphasizes the need for consistent and transparent documentation and reporting of performance, ensuring adherence to both public and private sector regulatory standards. Meanwhile, Reporting and Accountability pertains to maintaining transparency and active engagement with stakeholders, which constitutes a defining characteristic of hybrid organizations (Vakkuri & Johanson, 2020a). Stakeholder Interaction & Influence serves as a KPI to assess the balance of social and economic interests and the system’s adaptability. These metrics play a strategic role, widely used by international organizations and donor agencies to evaluate the effectiveness of public programs (Grossi et al., 2017; T. J. Kallio et al., 2020; Rantala et al., 2021). Overall, performance metrics in hybrid organizations have unique characteristics that differentiate them from those used in purely commercial entities.

Table 5. Operational Definitions of the Performance Measures Used in This Study.

No.	Performance Measures	Definitions
1	Good Governance & Trust Accountability	Transparent, ethical, accountable, and stakeholder trust.
2	Performance Measurement Integrity	Consistent measurement transparency and assessment accuracy.
3	Socio-Economic Alignment	Social-financial integration.
4	Stakeholder Engagement and Influence	Collaborative stakeholder engagement.
5	Reporting & Accountability	Transparent stakeholder disclosure
6	Regulation & Performance Alignment	Compliance-guided performance

Source: Processed data.

Note: Table created by authors.

Factors Influencing the Effectiveness of Performance Measurement

Through a systematic literature review, this study identifies nine core determinants that influence the effectiveness of performance measurement in hybrid organizations. The identified factors fall into four principal categories: Organizational Governance and Structural Dynamics, Technological and Methodological Challenges, Participatory Stakeholder Engagement, and Institutional Complexity and Change. These categories encompass key dimensions of performance evaluation, connecting them to specific metrics that assess organizational effectiveness. Table 3 presents the classification framework that organizes these factors into four thematic categories, each discussed in detail below.

Governance and Structure plays a pivotal role in shaping performance measurement outcomes within hybrid organizations, where economic and social objectives must be effectively integrated. Balancing these dual goals requires performance measurement systems that reflect both governance dynamics and institutional pressures. This category comprises three interrelated dimensions (1) Dual Mission Objectives, (2) Governance Challenges, and (3) Institutional and Regulatory Pressures that collectively shape the reliability of performance measurement.

Fragmented accountability structures give rise to governance challenges in hybrid organizations, undermining both the legitimacy and reliability of performance measurement, especially in public and nonprofit domains (Dhillon, 2022a; Savignon et al., 2018; Vakkuri & Johanson, 2020a). Stakeholder trust is fundamental to maintaining organizational legitimacy; however, bureaucratic and regulatory complexities often impede the adoption of standardized performance evaluation metrics (Moura et al., 2020b; Stern & Dietz, 2008). Balanced Scorecard (BSC) frameworks are widely employed to integrate financial and non-financial assessments; however, inconsistencies in implementation persist (Grossi et al., 2017; Mamabolo & Myres, 2020). Non-standardized reporting practices and limited transparency continue to weaken the reliability of performance measurement, underscoring the importance of adopting data-driven evaluation systems (Baldin et al., 2025; Dhillon, 2022a; Ekaristi et al., 2025).

Table 6. A Classification Framework of Research on Factors Influencing Performance Measurement Effectiveness.

		Socio-Economic Alignment	Good Governance & Trust Accountability	Performance Measurement Integrity	Regulation & Performance Alignment	Stakeholder Engagement and Influence	Reporting & accountability
Organizational Governance and Structural Dynamics	Dual Missions Objectives	The multidimensional nature of performance measurement requires integrated frameworks such as the Triple Bottom Line (TBL) to balance financial, social, and environmental objectives (De Waele et al., 2021; Grossi et al., 2017; Mamabolo & Myres, 2020; Pandey, 2020; Vakkuri & Johanson, 2020b)		Data uncertainty and conflicting interests weaken performance measurement reliability, highlighting the need for objective, data-driven frameworks to strengthen credibility Reliable performance evaluation depends on structured tools like the BSC, yet hybrid universities struggle to reconcile academic and commercial metrics, limiting measurement consistency. (De Waele et al., 2021; Ge et al., 2024; Moura et al., 2020b; Vakkuri & Johanson, 2020a; Grossi et al., 2020; Mamabolo & Myres, 2020)	Regulatory and bureaucratic constraints hinder performance measurement in hybrid organizations, particularly in higher education, where audit reforms disrupt alignment with institutional goals (Alsaid, 2021; De Waele et al., 2021; T. J. Kallio et al., 2020; Vakkuri & Johanson, 2020a)	Stakeholder engagement enhances performance measurement in hybrid organizations by fostering collaboration and improving metric alignment. (De Waele et al., 2021; Moura et al., 2020b; O'Connor & Schloetzer, 2023; Vakkuri & Johanson, 2020a).	Fragmented public sector accountability and insufficient transparency standards undermine reporting effectiveness, highlighting the need for performance evaluations that incorporate stakeholder satisfaction alongside financial metrics. (De Waele et al., 2021; Dhillon, 2022a; Sardi et al., 2024; Vakkuri & Johanson, 2020a)
	Governance Challenges		Fragmented accountability weakens measurement reliability, while transparency and trust enhance organizational legitimacy (De Waele et al., 2021; Dhillon, 2022a; Moura et al., 2020b; Vakkuri & Johanson, 2020a)	Although hybrid organizations use the BSC to integrate financial and non-financial performance, hybrid universities face inconsistencies as academic and commercial objectives create tension in defining common indicators. (De Waele et al., 2021; Grossi et al., 2020; Mamabolo & Myres, 2020; Vakkuri & Johanson, 2020a)		Stakeholder collaboration enhances performance measurement in nonprofit and public hybrids, while integrating stakeholders into supply chain metrics strengthens evaluation reliability. (De Waele et al., 2021; Gningue et al., 2024; Moura et al., 2020b; Vakkuri & Johanson, 2020b)	The lack of standardized reporting and transparency weakens performance measurement accuracy in hybrid organizations, underscoring the need to incorporate stakeholder satisfaction alongside financial indicators for a more holistic evaluation (De Waele et al., 2021; Dhillon, 2022a; Moura et al., 2020b; Sardi et al., 2024; Vakkuri & Johanson, 2020a, 2020b)

	Institutional and Regulatory Pressures		Regulatory pressure and public expectations underscore the need for transparency and stakeholder trust, which enhance performance effectiveness by reducing bureaucratic dependence (De Waele et al., 2021; Dhillon, 2022a; Moura et al., 2020b; Vakkuri & Johanson, 2020a)	Conflicting profit and social standards cause measurement inconsistencies in hybrid organizations, highlighting the need for robust, data-driven reporting for reliable evaluation (De Waele et al., 2021; Dhillon, 2022a; Sardi et al., 2024a; Ge et al., 2024; Moura et al., 2020b; Vakkuri & Johanson, 2020a) Inconsistent reporting weakens stakeholder trust in hybrid organizations, while stronger transparency enhances institutional legitimacy and regulatory responsiveness. (De Waele et al., 2021; Dhillon, 2022a; Sardi et al., 2024a; Ge et al., 2024; Moura et al., 2020b; Vakkuri & Johanson, 2020a)		High stakeholder engagement compels hybrid organizations to adapt performance metrics to stakeholder expectations, while balancing public and private sector demands complicates the development of universally accepted performance indicators (De Waele et al., 2021; Gningue et al., 2024; Moura et al., 2020b; Vakkuri & Johanson, 2020b)	Fragmented accountability and inconsistent reporting erode stakeholder trust in performance measurement, whereas greater transparency reinforces organizational legitimacy and confidence in evaluation results (Baud et al., 2021; De Waele et al., 2021; Dhillon, 2022a; Ge et al., 2024; Moura et al., 2020b; Sardi et al., 2024; Vakkuri & Johanson, 2020b)
Technological Methodological Challenges	Measurement Challenges	Hybrid organizations face challenges in designing indicators that balance financial sustainability with social impact, as integrating economic, social, and environmental dimensions into standardized performance systems remains highly complex (De Waele et al., 2021; Grossi et al., 2017; Mamabolo & Myres, 2020; Mio et al., 2022; Vakkuri & Johanson, 2020a)	Fragmented accountability and inconsistent reporting reduce stakeholder trust, while the absence of standardized transparency further undermines confidence in performance data.(De Waele et al., 2021; Dhillon, 2022a; Moura et al., 2020b; Vakkuri & Johanson, 2020a)	Performance measurement in hybrid organizations is often compromised by data uncertainty and conflicts of interest, as inconsistent data collection standards lead to bias and inaccuracies in performance evaluation (De Waele et al., 2021; Ge et al., 2024; Moura et al., 2020b; Vakkuri & Johanson, 2020a; Zhu et al., 2021)		Limited stakeholder participation in metric design widens the gap between expectations and outcomes, while conflicting interests hinder metric alignment across stakeholder groups (Grossi et al., 2017; Mamabolo & Myres, 2020)	The absence of standardized reporting frameworks causes inconsistent data interpretation, while limited real-time data access weakens decision-making and accountability (De Waele et al., 2021; Dhillon, 2022a; Sardi et al., 2024; Vakkuri & Johanson, 2020a)

	Ambiguity in Performance Metrics		The absence of standardized accountability frameworks undermines objective measurement and stakeholder trust, increasing the risk of indicator manipulation and weakening governance effectiveness. Moreover, hybrid organizations face difficulties in developing indicators that balance financial sustainability with social impact, as integrating economic, social, and environmental dimensions into standardized systems remains highly complex (De Waele et al., 2021; Grossi et al., 2017; Mamabolo & Myres, 2020; Mio et al., 2022; Vakkuri & Johanson, 2020a)	Ambiguities in defining performance success in hybrid organizations lead to inconsistencies in evaluation, while non-standardized data undermines measurement accuracy, increasing the risk of bias in performance interpretation (De Waele et al., 2021; Ge et al., 2024; Moura et al., 2020b; Vakkuri & Johanson, 2020a)	Regulatory ambiguities create inconsistent performance interpretations in hybrid organizations, and continuing public sector reforms further hinder alignment with evolving standards. (Alsaid, 2021; De Waele et al., 2021; Dhillon, 2022a; T. J. Kallio et al., 2020; Vakkuri & Johanson, 2020b)		The absence of standardized reporting frameworks in hybrid organizations causes inconsistent performance interpretations, while limited real-time data access undermines transparency and accountability effectiveness (De Waele et al., 2021; Dhillon, 2022a; Sardi et al., 2024; Vakkuri & Johanson, 2020b)
Stakeholder Participation and Involvement	Participatory Stakeholder Engagement		Insufficient stakeholder involvement in metric development leads to data misalignment with organizational realities, while contrasting stakeholder expectations contribute to ambiguity in performance evaluation standards. (De Waele et al., 2021; Ge et al., 2024; Moura et al., 2020b; Vakkuri & Johanson, 2020b)	Limited stakeholder engagement in developing performance indicators leads to misaligned data, while divergent institutional and stakeholder perspectives blur the boundaries of measurement standards. (De Waele et al., 2021; Ge et al., 2024; Moura et al., 2020b; Vakkuri & Johanson, 2020b)	Regulatory requirements for stakeholder participation in performance measurement are often constrained by administrative rigidity and misalignment with stakeholder expectations, limiting the inclusiveness and responsiveness of evaluation systems (Alsaid, 2021; De Waele et al., 2021; K. M. Kallio et al., 2021; Vakkuri & Johanson, 2020a)		Limited stakeholder involvement in performance reporting weakens accountability effectiveness, whereas inclusive reporting frameworks enhance transparency and organizational credibility (De Waele et al., 2021; Dhillon, 2022a; Sardi et al., 2024; Vakkuri & Johanson, 2020a)

	Fragmentation of Accountability Structures	Hybrid organizations often experience fragmented accountability due to the absence of clear standards for integrating financial, social, and environmental metrics within the Triple Bottom Line (TBL) framework. This lack of integration leads to inconsistent and imbalanced performance evaluations, weakening the overall reliability of measurement systems (De Waele et al., 2021; Grossi et al., 2017; Mamabolo & Myres, 2020; Mio et al., 2022; Vakkuri & Johanson, 2020a)	The lack of integrated accountability weakens governance and trust, while the multi-stakeholder nature of hybrid organizations amplifies reporting and accountability tensions. (De Waele et al., 2021; Dhillon, 2022a; Moura et al., 2020b; Vakkuri & Johanson, 2020a)	Inconsistent accountability standards create stakeholder misinterpretations, while unverified and non-standardized data compromise the accuracy and reliability of performance measurement. (De Waele et al., 2021; Ge et al., 2024; Moura et al., 2020b; Vakkuri & Johanson, 2020a)			
Institutional Complexity and Change	Institutional Regulatory Pressures	Hybrid organizations encounter persistent tensions between financial sustainability and social responsibility, as institutional pressures and stakeholder diversity complicate the design of effective performance measurement systems (De Waele et al., 2021; Grossi et al., 2017; Mamabolo & Myres, 2020; Mio et al., 2022; Vakkuri & Johanson, 2020b)	Maintaining public trust amid intensifying regulatory demands requires hybrid organizations to reinforce transparent governance structures and foster active stakeholder engagement to strengthen accountability and institutional legitimacy (De Waele et al., 2021; Dhillon, 2022a; Moura et al., 2020b; Vakkuri & Johanson, 2020a)				Fragmented accountability frameworks in hybrid organizations compromise performance reporting accuracy, while enhanced transparency in operational disclosure fosters institutional legitimacy and reinforces stakeholder confidence under increasing regulatory oversight (De Waele et al., 2021; Dhillon, 2022a; Sardi et al., 2024; Vakkuri & Johanson, 2020a)
	Ambiguity in Performance Metrics	The absence of standardized Triple Bottom Line (TBL) frameworks hinders hybrid organizations from balancing social impact and financial sustainability, leading to ambiguities in performance evaluation (De Waele et al., 2021; Grossi et al., 2017; Mamabolo & Myres, 2020; Mio et al., 2022; Vakkuri & Johanson, 2020b)	Ambiguous metrics weaken transparency and credibility in hybrid accountability systems, while inconsistent interpretations erode stakeholder trust (De Waele et al., 2021; Dhillon, 2022a; Moura et al., 2020b; Vakkuri & Johanson, 2020a)			Divergent stakeholder expectations obscure universal performance standards and weaken the reliability of evaluation systems in mission-driven hybrids (De Waele et al., 2021; Grossi et al., 2020; Mamabolo & Myres, 2020; Vakkuri & Johanson, 2020a)	Variations in reporting standards impede performance comparability, while restricted access to reliable data undermines transparency and accountability. (De Waele et al., 2021; Dhillon, 2022a; Sardi et al., 2024; Vakkuri & Johanson, 2020a)

Institutional and technical complexities continue to shape the effectiveness of performance measurement in hybrid organizations. Institutional pressures from regulators, investors, and the public create tension between financial accountability and social value creation, often constrained by inconsistent reporting standards and regulatory rigidity (Grossi et al., 2017; Mohieldin et al., 2023; Vakkuri & Johanson, 2020b). These inconsistencies are compounded by technical challenges in integrating economic, social, and environmental dimensions within standardized frameworks, increasing the risk of bias and data manipulation that undermines governance integrity (Mamabolo & Myres, 2020). Stakeholder engagement further adds to this complexity, as misaligned expectations and the absence of shared evaluation criteria hinder consensus on performance priorities (Moura et al., 2020b; Stern & Dietz, 2008). While stakeholder trust and regulatory flexibility have been shown to enhance measurement reliability (T. J. Kallio et al., 2020; Moura et al., 2020b), persistent conflicts between profit-driven and socially oriented standards continue to generate fragmentation (Ge et al., 2024; Vakkuri & Johanson, 2020a). Addressing these tensions requires participatory, data-driven evaluation systems that can align stakeholder interests, ensure accountability, and reflect both social and economic objectives. At the institutional level, variability in governance and regulatory environments exacerbates uncertainty in measurement reliability, highlighting the need for harmonized policy frameworks and adaptive tools such as the Balanced Scorecard (BSC) to align expectations and strengthen coherence in performance reporting (Gningue et al., 2024; Mamabolo & Myres, 2020). Collectively, these insights underscore that performance measurement in hybrid organizations must evolve beyond rigid compliance systems toward more integrative, context-sensitive, and evidence-based evaluation approaches.

Directions for Future Research on Performance Measurement

This study develops a classification framework that identifies key factors influencing performance measurement effectiveness in hybrid organizations and highlights existing knowledge gaps that warrant further investigation across accounting, performance management, and public policy domains. To strengthen this framework (Table 6), four targeted recommendations are proposed, emphasizing underexplored dimensions and their implications for improving the validity and adaptability of performance measurement systems. Sustainability and measurement reliability should be recognized as integral dimensions in assessing performance measurement effectiveness and accountability within hybrid organizations. A more in-depth examination of regulatory and institutional pressures such as fragmented accountability systems, inconsistent reporting standards, and divergent performance priorities across public and private sectors may provide valuable insights into how hybrid organizations adapt and refine their performance measurement frameworks over time. Such exploration can deepen the understanding of how institutional dynamics shape the evolution of hybrid governance and the pursuit of balanced performance accountability.

First Recommendation: Identifying Unexplored Determinants of Performance Measurement Effectiveness

Effective performance measurement in hybrid organizations hinges on their ability to balance economic and social aims while safeguarding efficiency and accountability mechanisms (Grossi et al., 2017). Governance plays a central role in promoting transparency and reducing information asymmetry (Okunzi et al., 2025; Vakkuri & Johanson, 2020a), yet existing research has largely focused on governance alignment in business and public sector contexts, with comparatively limited attention to hybrid organizations (Koppenjan et al., 2019; Vakkuri & Johanson, 2020b). Inconsistencies between governance, regulation, and accountability frameworks can disrupt the coherence of performance measurement systems and inhibit innovative practices (Callahan, 2006; De Waal & De Waal, 2012).

Theoretical Assertion 1: Governance as a Key Driver of Performance Measurement Effectiveness in Hybrid Organizations

Governance in hybrid organizations ensures operational sustainability and resource efficiency while balancing financial and social objectives (Grossi et al., 2017). A well-structured governance system facilitates the formulation of reliable performance indicators (Vakkuri & Johanson, 2020b). However, Hybrid governance models remain insufficiently explored, particularly regarding their capacity to balance accountability and flexibility within complex institutional environments. Enhancing stakeholder participation in governance processes could foster greater transparency and mitigate imbalances in performance measurement (Ekaristi et al., 2025; Gningue et al., 2024).

Theoretical Assertion 2: Reliable Performance Measurement Requires Consistent and Adaptive Regulatory Frameworks

Regulations establish the legal framework for hybrid organizations, yet rigid policies can constrain adaptability in designing effective measurement systems (Moura et al., 2020b). Frequent regulatory changes create uncertainty in evaluation standards, undermining measurement effectiveness (Pérez-Durán, 2024). Inconsistencies between public and private sector regulations further hinder standardization (T. J. Kallio et al., 2020). Outcome-based

regulatory approaches have the potential to improve measurement reliability, warranting further research on how hybrid organizations adapt to shifting regulatory contexts.

Theoretical Assertion 3: Transparency in Accountability is Fundamental to Strengthening Trust and Performance Measurement Effectiveness

Accountability is central to stakeholder trust and transparency (Eswaran et al., 2024; Zaman et al., 2014), yet hybrid organizations struggle to establish objective accountability indicators (Bajaj et al., 2025; Eguzo, 2020). Weak accountability mechanisms can erode public confidence, hindering access to funding and policy support (Erturk et al., 2024). Future research should examine stakeholder-driven, technology-enabled accountability systems that leverage real-time data for performance evaluation. (von Rosing et al., 2025)

Second Recommendation: Strengthening Performance Measurement Quality and Reliability

Hybrid organizations face challenges in ensuring reliable performance evaluations due to the need to balance social and financial objectives, which complicates the selection of appropriate indicators (Behl & Nayak, 2018; Grossi et al., 2017). Their diverse stakeholder base further demands flexible, data-driven evaluation systems that can adapt to strategic changes (Vakkuri & Johanson, 2020a). Consequently, technology-based measurement models are required to improve reliability and support informed decision-making (Dahanayake & Rabindrakumar, 2025; Mangla et al., 2025; Moura et al., 2020b).

Theoretical Assertion: Enhancing Performance Measurement Reliability through Data-Driven Models

Traditional performance measurement systems tend to be static and insufficiently responsive to operational change (Mio et al., 2022). A more flexible, multi-dimensional framework is needed to integrate sustainability and social impact indicators (Canteloup et al., 2021). However, many hybrid organizations continue to use non-data-driven evaluation methods, which increases the risk of biased assessments (Pérez-Durán, 2024). The adoption of AI and big data analytics offers the potential to improve accuracy and credibility in performance measurement (T. J. Kallio et al., 2020).

Third Recommendation: Stakeholder Integration and Transparency in Reporting

Hybrid organizations require active stakeholder engagement and standardized reporting frameworks to support accountability and trust (Grossi et al., 2017; Hwang, 2023). Yet, variations in reporting practices and data interpretation create challenges in ensuring consistency and comparability (Vakkuri & Johanson, 2020a). Implementing standardized frameworks and participatory approaches can improve transparency and help balance social and economic performance indicators (Moura et al., 2020a).

Theoretical Assertion: Stakeholder Integration and Transparency Enhance Performance Measurement Effectiveness

Diverse stakeholder expectations contribute to the complexity of performance measurement in hybrid organizations (Mio et al., 2022). Without meaningful stakeholder involvement, reports may fail to represent both economic and social performance accurately (Gningue et al., 2024). The use of standardized frameworks such as Integrated Reporting (IR) and TBL can strengthen reporting credibility and consistency (Johnsson et al., 2021), while technologies such as blockchain and real-time reporting systems may further enhance transparency and reduce data manipulation risks (Erturk et al., 2024).

Fourth Recommendation: Aligning Social and Economic Goals in Performance Measurement

Hybrid organizations face continued difficulty in assessing both social impact and financial sustainability, as conventional measurement models tend to prioritize financial indicators and underrepresent social outcomes (Flam, 2018; Grossi et al., 2017). Overemphasis on efficiency may weaken social value, while focusing solely on social goals risks reducing competitiveness (Vakkuri & Johanson, 2020a). Future research should therefore advance multi-dimensional measurement approaches that balance and integrate social and economic objectives

Theoretical Assertion 4: Social-Economic Alignment Strengthens Hybrid Organizational Effectiveness

Hybrid organizations must reconcile market-oriented objectives with social missions. Yet, existing models remain predominantly financially driven, often overlooking social impact dimensions (Pérez-Durán, 2024). Holistic frameworks such as the TBL and BSC offer more comprehensive evaluation methods (Kallio et al., 2020). Given the dynamic nature of hybrid organizations, flexible and adaptive, data-driven performance systems are required to enable real-time alignment of social and economic goals (Erturk et al., 2024). Future studies should explore the integration of technological tools such as AI and big data analytics to enhance transparency, accuracy, and long-term sustainability in performance evaluation across diverse hybrid sectors.

CONCLUSION

This study examines the effectiveness of performance measurement in hybrid organizations, which are required to balance social mission objectives with economic sustainability while navigating diverse stakeholder interests and regulatory expectations. The analysis identifies four key dimensions shaping performance measurement effectiveness: governance and organizational structure, technical challenges in measurement, stakeholder engagement, and broader institutional dynamics. The primary contribution of this research lies in developing a classification framework that links these dimensions to the effectiveness of performance measurement systems. This highlights the need for a flexible, data-informed approach that accommodates multiple stakeholder interests while upholding accountability and transparency. Models such as the Triple Bottom Line (TBL) and the Balanced Scorecard (BSC) are favored over conventional financial indicators because they more accurately reflect the interplay between social value and economic performance.

Despite its contributions, this study has certain limitations. The data set is limited to peer-reviewed journal articles, excluding policy reports and industry documents that could provide a broader contextual understanding. Moreover, although key influencing factors are identified, their interrelationships are not examined in depth for example, how governance practices may reinforce reporting accountability, or how regulatory frameworks shape performance standards within hybrid organizations. Consequently, the findings underscore the need for more adaptive performance measurement models that integrate operational efficiency with the preservation of organizational legitimacy. Future research should explore the interconnections among these factors and consider technology-oriented approaches, such as artificial intelligence and big data analytics, to improve accuracy and transparency in performance evaluation. Further studies could also tailor performance measurement systems to specific hybrid sectors such as education, healthcare, and community-based organizations to support more inclusive, accountable, and evidence-based evaluation practices.

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