The TQM Journal

Decertification from international management standards: a systematic literature review and research agenda

Matteo Podrecca
Department of Economics and Management "Marco Fanno", University of Padua, Padua, Italy, and
Marco Sartor and Guido Nassimbeni
Polytechnic Department of Engineering and Architecture, University of Udine, Udine, Italy

Received 9 January 2025
Revised 10 April 2025
Accepted 3 June 2025

Abstract

Purpose – After 20 years of research on decertification from management system standards, this paper presents the first systematic literature review (SLR) and research agenda on the topic.
Design/methodology/approach – The study is structured as a SLR of articles retrieved from Elsevier's Scopus.
Findings – Evidence is coded and classified to expound emerging themes around four key foci: drivers, performance implications, post-decertification paths, and contextual factors.
Practical implications – The outcomes offer valuable guidance to managers by highlighting relevant issues to consider when adopting, managing, and abandoning management system standards. Furthermore, regulatory bodies such as the International Organization for Standardization, Social Accountability International and B Lab could leverage our findings to gain a deeper understanding of the decertification phenomenon and take appropriate countermeasures to address and reverse it.
Originality/value – Our study identifies significant gaps in the academic body of knowledge and suggests several directions for further investigation, providing a solid foundation for future research.

Keywords International management standards, Management system standards, Certification, Decertification, Withdrawal, Systematic literature review
Paper type Conceptual paper

1. Introduction

Since the late 1980s, International Management Standards (IMSs) have gained significant prominence in the global business landscape. Conceived as "*global regulatory mechanisms*" (Tuczek *et al.*, 2018, p. 399), IMSs provide structured guidance across several key domains, including quality management (International Organization for Standardization - ISO 9001), occupational health and safety (ISO 45001/Occupational Health and Safety Assessment Series - OHSAS 18001), and social and environmental responsibility (United Nations Global Compact - UNGC, B Corp) [1] and have been widely portrayed as instrumental in enhancing organizational efficiency and strengthening market reputation, ultimately improving profitability (Sartor *et al.*, 2016, 2019; Boiral *et al.*, 2018; Culot *et al.*, 2021). In this perspective, certification has often been interpreted as a signal of managerial maturity and strategic orientation, and academic research has largely focused on examining the motivations for IMSs adoption and the associated organizational benefits (Orzes *et al.*, 2020; Podrecca *et al.*, 2024; Corbett *et al.*, 2005; Erauskin-Tolosa *et al.*, 2020; Sá *et al.*, 2022).

The TQM Journal
Vol. 37 No. 9, 2025
pp. 51-80
Emerald Publishing Limited
e-ISSN: 1754-274X
p-ISSN: 1754-2731
DOI 10.1108/TQM-01-2025-0023

Yet this largely positive narrative is increasingly being challenged. A substantial number of firms across different industries and geographies are choosing to abandon their previously adopted IMSs, a phenomenon known as *decertification*. In Europe, for instance, ISO 9001 certifications fell from over 500,000 in 2010 to fewer than 400,000 in 2017 (ISO, 2024a). Likewise, the UNGC currently reports 25,000 certified organizations alongside 16,000 that have withdrawn (United Nations, 2024a, b), and the B Corp system counts 9,500 active and 2,000 decertified companies worldwide (B Lab, 2024). These figures testify the relevance of the issue and indicate that IMSs adoption is not necessarily a stable or long-term condition. In many cases, the anticipated benefits fail to materialize or prove difficult to sustain over time, suggesting a possible misalignment between the expected advantages of IMSs and the actual experiences of adopting organizations (Marcuzzi *et al*., 2023; Ferreira and Cândido, 2021).

Starting from the early contribution of Von Ahsen *et al*. (2004), scholars have started to explore the topic of decertification, producing valuable albeit fragmented insights. On the one hand, some studies emphasize the risks associated with abandoning an IMS, such as worsening of financial performance (Alič, 2012, 2014), reduced collaboration with business partners, and lower levels of employee commitment and discipline (Zimon and Dellana, 2019). On the other hand, other articles portray decertification as a deliberate and potentially beneficial move, enabling firms to cut costs, increase strategic flexibility, and realign internal processes with evolving priorities (Merli *et al*., 2018; Podrecca *et al*., 2021; Marcuzzi *et al*., 2023). While these contributions have significantly advanced our understanding of the phenomenon, the resulting body of knowledge still lacks a coherent conceptual framework to consolidate existing insights and identify cross-cutting patterns.

After two decades of scholarly investigation, the imperative to synthesize available evidence and evaluate the current state of research on decertification from IMSs has become increasingly clear. This would not only help reconcile diverging findings, but also supports a more nuanced understanding of the strategic, organizational, and contextual considerations behind certification abandonment, along with its implications for aspects like firm performance, stakeholder relations, and internal practices (e.g. Heras-Saizarbitoria and Boiral, 2013; Boiral *et al*., 2018). In this perspective, a systematic approach is the starting point for advancing research in a given field, setting a solid groundwork for forthcoming scrutiny and inquiry (Webster and Watson, 2002; Tuczek *et al*., 2018; Dieste *et al*., 2021).

The overarching aim of this paper is, therefore, to present the first [2] systematic literature review (SLR) on decertification from IMSs. Specifically, drawing on 54 peer-reviewed, English-written journal articles, the study sheds light on two research questions (RQs):

RQ1. What is the academic state of knowledge on decertification from international management standards?

RQ2. What future research directions would deepen our understanding of decertification from international management standards?

The review identifies four key dimensions that depict extant research: (1) the drivers that lead organizations to decertify, (2) the performance implications associated with decertification, (3) the post-decertification paths firms adopt, and (4) the contextual factors that shape decertification dynamics. By bringing these dimensions together, the paper develops an integrative framework that reveals how current contributions relate to one another, highlights diverging perspectives, and provides a foundation for future theorization.

The study contributes to theory and practice by reframing decertification as a strategic decision rather than as an anomaly. It invites scholars to consider IMS disengagement as a legitimate response to organizational and institutional misalignments, and equips managers with a structured perspective to assess the risks and opportunities of certification withdrawal. In doing so, the paper opens new avenues for research and informs managerial decision-

making in a context where certification is no longer conceived as a one-way trajectory, but rather as part of an evolving strategic cycle that is subject to periodic re-evaluation, adaptation, and, when necessary, disengagement.

The rest of the manuscript is organized as follows. The next section provides a brief overview of IMSs. Then, Section 3 illustrates the methodology adopted for the review. Thereafter, we present the descriptive characteristics of the contributions included in our analysis (Section 4) and the thematic findings (Section 5). Next, the discussion revolves around the current gaps and the formulation of a research agenda (Section 6). We conclude by outlining the contributions of our study (Section 7).

2. Background: international management standards and decertification

IMSs are formalized guidelines, developed through expert consensus and approved by regulatory bodies (e.g. ISO, Social Accountability International - SAI, B Lab), offering organizations a structured framework for systematically managing and optimizing key operational areas (Tuczek *et al*., 2018; Wiengarten *et al*., 2017). Their adoption entails the development, maintenance, and continuous refinement of management systems designed to standardize both tangible and intangible processes, promote internal coherence, and ensure long-term alignment with best practices (ISO, 2024b). Furthermore, IMSs transform these practices into clear, measurable criteria that organizations must meet to achieve third-party certification, which serves as externally validated proof of compliance (Culot *et al*., 2021; Sartor *et al*., 2019).

IMSs are characterized by their broad applicability, making them relevant across economic sectors, adaptable to organizations of all sizes, and suitable for diverse geographical and institutional contexts (Sartor *et al*., 2016, 2019). Another defining feature is their voluntary nature: although not legally mandated, many organizations adopt them to formalize internal processes, gain competitive advantage, or respond to stakeholder expectations (Castka and Balzarova, 2008).

Initially introduced in the realm of quality management, IMSs have progressively expanded to encompass other domains, such as environmental protection, occupational health and safety, information security, and social responsibility (Tuczek *et al*., 2018). Among the most widely adopted are ISO 9001 (quality), ISO 14001 (environment), OHSAS 18001/ISO 45001 (health and safety), ISO/IEC 27001 (information security), the UNGC and B Corp (sustainability), and SA8000 (social accountability) (ISO, 2024a; United Nations, 2024a; Podrecca *et al*., 2021).

While most academic and professional attention has historically focused on the adoption and implementation of IMSs, an increasingly relevant phenomenon is that of decertification. From a conceptual standpoint, decertification marks the end of a firm's certified status and invites a reassessment of the assumptions that typically underpin IMS engagement, such as continuity, commitment, and institutional alignment (Moroz *et al*., 2018). Rather than being a mere procedural discontinuation, decertification may carry organizational, symbolic, and institutional implications (Camango and Cândido, 2023). It disrupts a codified and externally validated relationship between the company and a globally recognized set of practices, and raises important questions about the reversibility of managerial commitments and the logics that guide their abandonment (Younkin, 2016).

In this sense, decertification can be understood as a deliberate organizational response that signals a reappraisal of the role that certification plays within firms' strategy and operational activities. It reflects how companies reconsider the value of standards over time, reassess their alignment with internal priorities, and respond to evolving institutional and stakeholder demands (Marcuzzi *et al*., 2023; Moroz *et al*., 2018).

However, despite its conceptual significance and practical relevance, the phenomenon of decertification has not yet been the subject of a theoretical consolidation. While interest in the topic has grown, available contributions remain scattered and disconnected, offering only

partial views of the conditions, mechanisms, and consequences involved. This fragmentation makes it difficult to develop a comprehensive understanding of decertification and to draw generalizable insights across standards and contexts.

The present review builds on this premise to systematically examine how decertification has been addressed in the literature and to lay the groundwork for an integrated analytical framework.

3. Review approach

The RQs were explored through a SLR to ensure objectivity and transparency while minimizing researcher bias (Webster and Watson, 2002). Specifically, we considered the methodological framework outlined by Tranfield *et al*. (2003), Rousseau *et al*. (2008), Seuring and Gold (2012), and Sauer and Seuring (2023), which are widely recognized in the study of standards, management systems, and certifications (e.g. Culot *et al*., 2021; Boiral *et al*., 2018; Orzes *et al*., 2018). The review process is detailed below and summarized in Figure 1.

The first step consisted in the identification of the preliminary set of articles. This phase began with the *selection of the database* for conducting the review. Following the approach of previous SLRs on IMSs (e.g. Orzes *et al*., 2018; Turzo *et al*., 2024), we selected Elsevier's Scopus, as it is the largest and most comprehensive repository of academic knowledge (Kumar *et al*., 2021; Bretas and Alon, 2021). Subsequently, regarding the *search query definition*, and in line with Rowley and Slack (2004), we meticulously formulated the search string to guarantee it accurately captured the full scope of our investigation while excluding irrelevant elements. To achieve this, we referred to previous studies on IMSs (e.g. Marcuzzi *et al*., 2023; Nawaz and Koç, 2018; Tröster and Hiete, 2018) and conducted some pilot searches to refine the query. The resulting string was: ("decert*" OR "delist*" OR "discontinu*" OR "withdraw*" OR "termin*" OR "cancel*" OR "abandon*" OR "resign*" OR "drop* out" OR "laps*" OR "revocat*") AND ("standard*" OR "certificat*" OR "management syst*" OR "initativ*"). To secure an appropriate trade-off between precision and recall, we adhered to the recommendations of Seuring and Gold (2012), Snyder (2019), and Boell and Cecez-Kecmanovic (2015) and *defined the research fields* as title, abstract, and keywords, maximizing relevance while maintaining a broad yet focused scope. Regarding the *reference timeframe specification*, scholars suggest that, in the absence of specific constraints, adopting a broad timeframe is preferable to allow for a comprehensive review of the topic (Snyder, 2019; Webster and Watson, 2002; Okoli and Schabram, 2015). Given that the earliest

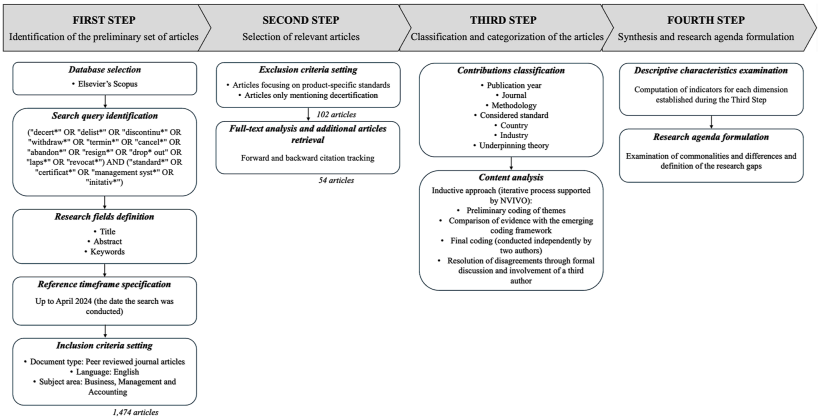

Figure 1. Overview of the review process. Source: Authors' own work

standards date back to the 1980s (e.g. ISO 9001–1987), no restrictions were set; the search extended up to April 2024 (the date the review was conducted), capturing both foundational studies and recent advancements. Finally, concerning the *inclusion criteria setting*, we followed established methodological guidelines (e.g. Johnsen, 2009; Orzes *et al*., 2018; Sartor *et al*., 2019) and focused on English-written, peer-reviewed journal articles within the Business, Management, and Accounting domain to ensure the quality and relevance of the considered sources. A total of 1,474 unique records were identified.

The second step consisted in the selection of relevant articles. Two researchers independently examined the titles, abstracts, and keywords to determine which studies were aligned with the scope of the SLR (Tranfield *et al*., 2003; Sauer and Seuring, 2023). To ensure a careful screening, we *set* specific *exclusion criteria*, discarding papers on *product-specific standards* (e.g. Forest Stewardship Council and Ecolabel) and those that merely mentioned *decertification* without offering a structured analysis or reasoning. This process led to the pre-selection of 102 contributions, which underwent *full-text analysis and additional article retrieval* through forward and backward citation tracking, following Webster and Watson (2002). As a result, 54 articles were included in the final review, covering the following standards: ISO 9001, ISO 14001, OHSAS 18001 [3], B Corp, UNGC, and Eco-Management and Audit Scheme (EMAS) (see Table A1 in the Online Appendix for an overview of their characteristics).

The third step consisted of the classification and categorization of the articles. Each *contribution* was *classified* by publication year, journal, methodology, considered standard, country/industry focus, and underpinning theory (Culot *et al*., 2021; Sartor *et al*., 2016). As for the *content analysis*, an inductive approach was followed (Seuring and Gold, 2012; Culot *et al*., 2024; Durach *et al*., 2017): after a preliminary coding of themes, specific categories were defined through a recurring process of comparison between the evidence and the emerging coding framework. Following the recommendations of Duriau *et al*. (2007), a second round of coding was performed independently by two authors. The few cases of inter-coder disagreement were resolved through formal discussion and the involvement of a third author. To facilitate the comparison and retrieval of text passages and support manual coding, the software NVIVO was used. The resulting framework consists of the following categories: drivers (i.e. the reasons that lead companies to abandon an IMS), performance implications (i.e. the effect of decertification on a company's performance), post-decertification paths (i.e. the alternatives that companies select after the decertification), and contextual factors (i.e. contingent aspects that might affect decertification dynamics) (Figure 2).

In the final phase, synthesis and research agenda formulation, we *examined the descriptive characteristics*, computing the resulting indicators and assessing the distribution of studies across each dimension. Furthermore, the analysis of commonalities and differences informed the *formulation of a research agenda* to guide future contributions on the topic of decertification (Boiral *et al*., 2018; Tranfield *et al*., 2003; Rousseau *et al*., 2008).

4. Descriptive findings

The characteristics of the 54 journal articles included in the review have been analyzed and summarized to clarify the evolution of the decertification research (Figure 3).

The first article was published in 2004, while the second one appeared three years later in 2007. Subsequently, from 2008 to 2013, an average of 1.67 contributions per year was recorded. This figure significantly increased to 3.81 from 2014 onwards, reaching peaks of 6 and 8 papers in 2018 and 2021, respectively. The depicted trend was clearly correlated with the rising relevance of the phenomenon, which initially mainly concerned EMAS (e.g. Merli *et al*., 2018) but then expanded to other standards, with ISO ones being the foremost among them (ISO, 2024b). Consistently, most of the studies focused on ISO-based standards (i.e. ISO 9001, ISO 14001) and EMAS. A relevant body of literature has also explored issues related to B Corp, whereas UNGC and SA8000 have received comparatively less attention. Authors also

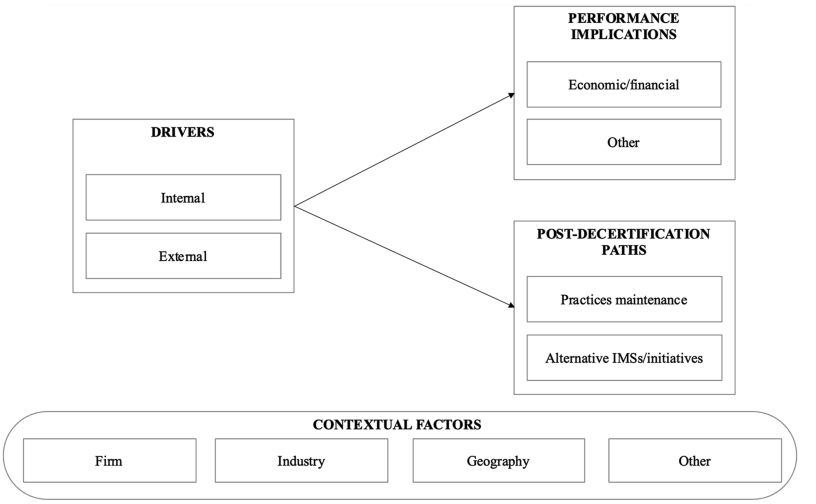

Figure 2. Coding framework. Source: Authors' own work

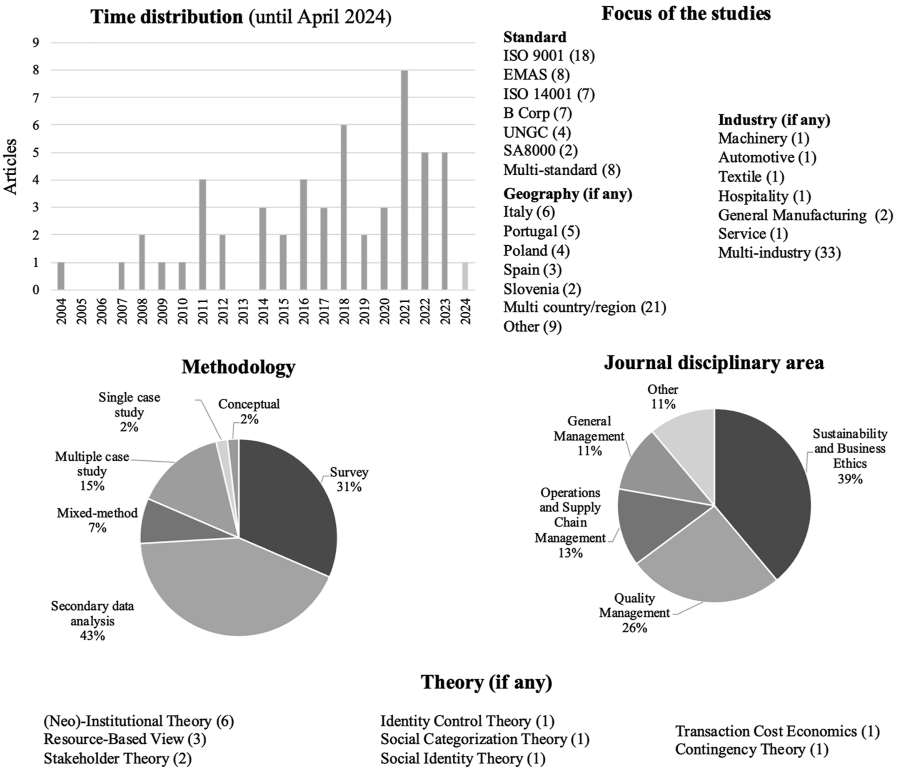

Figure 3. Characteristics of the literature. Source: Authors' own work

examined various combinations of IMSs; for example, the contributions of Casadesús *et al.* (2008), Franceschini *et al.* (2008), Kafel and Nowicki (2014), and Marimon *et al.* (2009) investigated aspects connected to ISO 9001 and ISO 14001, Neugebauer (2012) shed light on issues related to ISO 14001 and EMAS, while Hernandez-Vivanco and Bernardo (2023) took into account ISO 9001, ISO 14001, and OHSAS 18001.

As for the context of investigation, articles either sampled companies from single nations like Italy, Portugal, and Poland, or more often focused on two or more countries (e.g. Italy, Germany, Spain, Bulgaria, Estonia–Daddi *et al.*, 2018) or broader geographical areas (e.g. Europe – Mastrogiacomo *et al.*, 2021; North and South America – Hikichi *et al.*, 2017a, b; Africa, Asia, Oceania – Lira *et al.*, 2021). A minority of papers took into account the whole population of decertified organizations (e.g. Podrecca *et al.*, 2021; Knudsen, 2011). In terms of industry, studies delved into the dynamics of single domains (i.e. machinery, automotive, textile, hospitality), generally considered manufacturing or service sectors, or most of the times resorted to multi-industry samples. For instance, authors combined manufacturing, service, and utilities (Marcuzzi *et al.*, 2023), manufacturing, wholesale, retail, construction, services, and transportation (Cândido *et al.*, 2016), or the whole set of sectors to which the population of decertified firms belonged (Amer, 2018).

Moving to the adopted methodological approaches, the majority of the articles resorted to secondary data sources to perform event studies (e.g. Cândido *et al.*, 2016, 2021), regressions (e.g. Lucas *et al.*, 2022; Rasche *et al.*, 2022), diffusive investigations (e.g. Lira *et al.*, 2020; Marimon *et al.*, 2009), or provide an overview of the characteristics of certified and decertified companies and decertification trends (Kim, 2021; Lira *et al.*, 2019). Several contributions also relied on surveys and multiple case studies (Simon and Kafel, 2018; Conger *et al.*, 2018). A small number of papers adopted mixed (i.e. qualitative/quantitative) methods (e.g. Podrecca *et al.*, 2021) while only one article was conceptual in nature (Cândido, 2023).

Many of the manuscripts were published in Sustainability and Business Ethics journals (e.g. *Journal of Cleaner Production; Journal of Business Ethics; Corporate Social Responsibility and Environmental Management*) and outlets devoted to Quality Management (e.g. *Total Quality Management and Business Excellence; International Journal of Quality and Reliability Management; The TQM Journal*). A significant number of papers were also found in sources belonging to Operations and Supply Chain Management (e.g. *Production Planning and Control; International Journal of Operations and Production Management; International Journal of Production Economics*) and General Management (e.g. *Administrative Science Quarterly; Academy of Management Journal; Journal of Business Research*) fields. The rest of the contributions were distributed in outlets related to Tourism, Innovation, Entrepreneurship, Accounting, Regulatory Governance, and Performance Management.

To conclude, approximately 30% of articles resorted to established theoretical underpinnings. Among them, the most used were the Institutional and (Neo)-Institutional Theory, the Resource-Based View, and the Stakeholder Theory. Most of the times, these theories were used alone (e.g. Cândido *et al.*, 2021; Podrecca *et al.*, 2021), while in few instances they were used in combination (e.g. Marcuzzi *et al.*, 2023; Kim and Schifeling, 2022).

5. Thematic findings

This section presents the results of the coding process and the key messages from the papers. Each subsection corresponds to a theme, as described in the coding framework (Figure 2).

5.1 Drivers

One of the main aspects investigated in the IMSs literature is related to the reasons leading firms to join them (e.g. Orzes *et al.*, 2018; Culot *et al.*, 2021). Similarly, when considering

decertification, significant attention has been given to the drivers of IMSs abandonment (33 articles – 61%). Consistently with previous studies (Simon and Kafel, 2018; Neugebauer, 2012; Cândido and Ferreira, 2022), we categorized them as internal (arising within the organization) and external (involving factors outside the organization). In turn, based on the specific areas they are related to (e.g. Sartor *et al*., 2016; Ab Wahid and Corner, 2009), internal drivers are further classified into "process", "people," or "other", while external drivers in "market", "policy and certification body" or "other". The results are presented in Table 1 and described below.

Starting with the internal ones and in particular with those related to "process", many scholars highlight issues connected to *onerous certification maintenance (25 articles – 46%)*. These aspects relate to the financial/bureaucratic hurdles encountered in maintaining IMSs such as the significant administrative workload and the necessity of hiring dedicated personnel (Gianni and Gotzamani, 2015; Chiarini, 2019). According to Zimon and Dellana (2019), there is a wide concern that these burdens may translate into price increases, potentially misaligning with customer needs and expectations. IMSs are also criticized for emphasizing procedural compliance over substantive process improvements (Ferreira and Cândido, 2021; Mosgaard and Kristensen, 2020). This perception is especially pronounced when the IMS maintenance demands constant updates and adherence to evolving aspects, leading to a cycle of never-ending efforts (Marcuzzi *et al*., 2023).

Moving forward, authors point out the *lack of operational improvements (10 articles – 19%) attributing it to three main causes.* First, organizations with a well-rooted "*quality culture*" may see limited internal benefits from adopting IMSs, as they already have efficient practices (e.g. Franceschini *et al*., 2011). Second, the considerable amount of time and resources devoted to meeting certification requirements (e.g. system updates and documentation), often diverts attention from process improvement and IMSs principles internalization, resulting in a lack of operational gains (Mosgaard and Kristensen, 2020). Third, some companies may engage in symbolic implementation without really embracing IMSs dictates. This approach often fails to yield substantive internal benefits and makes the standard more of a checkbox than a tool for achieving operational excellence (e.g. Podrecca *et al*., 2021).

In cases when the principles of IMSs have been fully internalized and integrated into a company's operations, the decision to decertify might be related to *requirements assimilation (7 articles – 13%)*. This happens because improvements often occur in the initial years of IMSs implementation. After this period, the benefits tend to plateau, suggesting that organizations have maximized the "*low-hanging fruits*" available through practices standardization (Mosgaard and Kristensen, 2020).

Also, the literature unveils complexities related to the *unmeasurable operational impact (2 articles – 4%)*. Challenges in quantifying improvements attributed to IMSs may lead companies to doubt about their actual benefits, potentially resulting in decertification (Gianni and Gotzamani, 2015). Chiarini (2019) suggests that this problem mainly occurs because most IMSs do not require day-by-day performance indicators, which are crucial for measuring the full spectrum of impacts.

In terms of decertification drivers concerning "people", *10 articles (19%)* describe issues connected with *uncommitted management*. On the one hand, this situation arises when management is inadequately trained to handle the intricacies of IMSs requirements or is not sufficiently informed about the value that IMSs bring to the organization (Gianni and Gotzamani, 2015; Mosgaard and Kristensen, 2020). On the other hand, IMSs frequently serve as tools for providing feedback on managers' behavior: receptive ones typically respond positively, intensifying their commitment to IMSs requirements; those with a defensive attitude are more inclined to react negatively and may choose to decertify (Conger *et al*., 2018).

In turn, managers lacking commitment may fail to adequately communicate the relevance of IMSs to employees. This can discredit the importance of IMSs within the company culture and lead to decertification due to *limited staff engagement (4 articles – 7%).*

Table 1. Drivers

Main themes/research results	Relevant articles
Internal	
Process	
Onerous certification maintenance (25)	**ISO 9001**: Lo and Chang (2007), Franceschini *et al*. (2010), Franceschini *et al*. (2011), Gianni and Gotzamani (2015), Kafel and Simon (2017), Simon and Kafel (2018), Chiarini (2019), Zimon and Dellana (2019), Ferreira and Cândido (2021), Cândido and Ferreira (2023), Cândido (2023) **ISO 14001:** Mariotti *et al*. (2014), Mosgaard and Kristensen (2020) **ISO 9001 and ISO 14001**: Alič (2012), Kafel and Nowicki (2014) **EMAS**: Von Ahsen *et al*. (2004), Bonilla-Priego *et al*. (2011), Neugebauer (2012), Preziosi *et al*. (2016), Daddi *et al*. (2018), Merli *et al*. (2018) **SA 8000**: Podrecca *et al*. (2021), Marcuzzi *et al*. (2023) **B Corp**: Moroz and Gamble (2021), Xiang *et al*. (2024)
Lack of operational improvements (10)	**ISO 9001**: Lo and Chang (2007), Franceschini *et al*. (2011), Simon and Kafel (2018), Zimon and Dellana (2019), Cândido and Ferreira (2023) **ISO 14001**: Mosgaard and Kristensen (2020) **ISO 9001 and ISO 14001:** Alič (2012), Kafel and Nowicki (2014) **EMAS**: Von Ahsen *et al*. (2004) **SA 8000**: Podrecca *et al*. (2021)
Requirements assimilation (7)	**ISO 9001**: Kafel and Simon (2017), Simon and Kafel (2018), Cândido and Ferreira (2023), Cândido (2023) **ISO 14001:** Mosgaard and Kristensen (2020) **ISO 9001 and ISO 14001**: Marimon *et al*. (2009) **EMAS:** Merli and Preziosi (2018)
Unmeasurable operational impact (2)	**ISO 9001:** Gianni and Gotzamani (2015), Chiarini (2019)
People	
Uncommitted managers (10)	**ISO 9001**: Gianni and Gotzamani (2015), Kafel and Simon (2017), Simon and Kafel (2018), Chiarini (2019), Zimon and Dellana (2019) **ISO 14001**: Mosgaard and Kristensen (2020) **EMAS**: Bonilla-Priego *et al*. (2011), Merli *et al*. (2018) **SA 8000**: Marcuzzi *et al*. (2023) **B Corp:** Conger *et al*. (2018)
Limited staff engagement (4)	**ISO 9001**: Zimon and Dellana (2019) **ISO 14001:** Mosgaard and Kristensen (2020) **SA 8000**: Podrecca *et al*. (2021), Marcuzzi *et al*. (2023)
Other	
Company reorganization (6)	**ISO 9001**: Kafel and Simon (2017), Simon and Kafel (2018) **ISO 9001 and ISO 14001**: Alič (2012), Kafel and Nowicki (2014) **EMAS**: Bonilla-Priego *et al*. (2011) **B Corp**: Moroz and Gamble (2021)
External	
Market	
Lack of business benefits and commercial advantages (23)	**ISO 9001**: Lo and Chang (2007), Casadesús *et al*. (2008), Franceschini *et al*. (2010), Kafel and Simon (2017), Simon and Kafel (2018), Chiarini (2019), Ferreira and Cândido (2021), Cândido and Ferreira (2023), Cândido (2023) **ISO 14001**: Hikichi *et al*. (2017b), Mosgaard and Kristensen (2020) **ISO 9001 and ISO 14001**: Marimon *et al*. (2009), Alič (2012), Kafel and Nowicki (2014) **EMAS**: Von Ahsen *et al*. (2004), Bonilla-Priego *et al*. (2011), Preziosi *et al*. (2016), Daddi *et al*. (2018), Merli *et al*. (2018) **SA 8000**: Podrecca *et al*. (2021), Marcuzzi *et al*. (2023) **B Corp**: Moroz and Gamble (2021), Xiang *et al*. (2024)

(*continued*)

Table 1. Continued

Main themes/research results	Relevant articles
Interruption of commercial ties (3)	**ISO 9001**: Simon and Kafel (2018), Cândido (2023) **SA 8000**: Marcuzzi *et al.* (2023)
Policy and Certification Body	
Competing IMSs/initiatives with a different sphere of influence (15)	**ISO 9001**: Simon and Kafel (2018), Zimon and Dellana (2019), Ferreira and Cândido (2021), Cândido and Ferreira (2023), Cândido (2023) **ISO 14001**: Neugebauer (2012), Mosgaard and Kristensen (2020) **ISO 9001 and ISO 14001**: Marimon *et al*. (2009) **EMAS**: Von Ahsen *et al*. (2004), Bonilla-Priego *et al*. (2011), Neugebauer (2012), Preziosi *et al*. (2016), Merli and Preziosi (2018) **SA 8000**: Marcuzzi *et al.* (2023) **B Corp**: Moroz and Gamble (2021), Xiang *et al*. (2024)
Law and regulation challenges (14)	**ISO 9001**: Casadesús *et al*. (2008) **ISO 9001 and ISO 14001**: Marimon *et al*. (2009), Kafel and Nowicki (2014) **EMAS**: Von Ahsen *et al*. (2004), Bonilla-Priego *et al*. (2011), Neugebauer (2012), Heras-Saizarbitoria *et al*. (2016), Preziosi *et al*. (2016), Daddi *et al*. (2018), Merli *et al*. (2018) **SA 8000**: Marcuzzi *et al.* (2023) **B Corp**: Moroz and Gamble (2021), Kim and Schifeling (2022), Xiang *et al*. (2024)
Audit or certifying/regulatory body-related complications (4)	**ISO 9001:** Cândido (2023) **SA 8000:** Podrecca *et al.* (2021), Marcuzzi *et al.* (2023) **B Corp**: Moroz and Gamble (2021)
Other	
Mimicking behavior (2)	**ISO 9001:** Clougherty and Grajek (2023) **SA 8000**: Marcuzzi *et al.* (2023)

Source(s): Authors' own work

To conclude, "other" internal drivers stem from *company reorganization (6 articles – 11%)*. Evidence highlights that firms undergoing substantial transformations, such as mergers, acquisitions, or restructurings, may see certified branches/business units closed, leading to the loss of certification (Simon and Kafel, 2018). Similarly, in the wake of such transformations, it may happen that the new parent company prioritizes specific IMSs (Bonilla-Priego *et al*., 2011; Moroz and Gamble, 2021).

Moving to the external drivers, particularly those related to the "market", many articles *(23–43%)* argue that decertification is linked to a *lack of business benefits and commercial advantages*. According to Marcuzzi *et al*. (2023), as companies develop trust relationships with customers, certification may be perceived as unnecessary. Similarly, some firms find that their brand reputation offers more value than the IMS, rendering it redundant and not cost-effective in the long term (Moroz and Gamble, 2021). Podrecca *et al*. (2021) also suggest that, over time, clients may become less willing to pay a price premium for products/services from a company with a certified IMS, leading to a reduction in the IMS perceived value. This tendency is related to the diffusion patterns of the various IMSs; when the number of certificates becomes too high, the differentiation power decreases (Franceschini *et al*., 2010). Lastly, companies sometimes respond by adopting a similar IMS to their competitors, thus undermining the initial competitive advantage (Marimon *et al*., 2009).

As for the *interruption of commercial ties (3 articles – 6%)*, authors point out that in many cases the IMS was initially requested by specific customers. Once the commercial relationship ends, the company might decide to decertify (Simon and Kafel, 2018).

Moving to "policy and certification body" domain, the most relevant aspect is related to the presence of *competing IMSs/initiatives with a different sphere of influence (15 articles – 28%)*.

This happens for three main reasons. First, organizations deeply committed to continuous improvement and excellence appear to be attracted by more rigorous IMSs that promise further improvements to internal practices and activities (Ferreira and Cândido, 2021; Simon and Kafel, 2018). Second, companies prioritizing the external impacts of IMSs may be fascinated by broader yet less demanding standards/initiatives. These frameworks offer comprehensive coverage/scope and reduced obligations (e.g. no reporting and audit requirements), enabling firms to meet diverse stakeholder needs with less effort (Marcuzzi *et al*., 2023). Finally, ventures with unique product features may find value in product-specific standards. This interest arises from the desire to move away from generic IMSs, which typically certify aspects related to overall business practices, to embrace tools that can more effectively showcase the specific attributes of the products/services offered (Moroz and Gamble, 2021).

Extant research also highlights that decertification may be the result of *law and regulation challenges (14 articles – 26%)*. On the one hand, this occurs because local/national regulations may have similar but distinct requirements from IMSs, exacerbating compliance efforts (Marcuzzi *et al*., 2023). On the other hand, IMSs may enforce adherence to legislative aspects that prove difficult for companies to fulfill (Kim and Schifeling, 2022; Moroz and Gamble, 2021). Another related aspect is identified by Heras-Saizarbitoia *et al*. (2016), who suggest that companies maintain IMSs only as long as they receive incentives from local/national governments.

4 articles (7%) argue that decertified companies complain about *audit or certifying/ regulatory body-related complications*. This appears to be caused by registrars that conduct superficial inspections without adequate oversight (Cândido, 2023), or conversely, burdensome requests imposed by the third-party auditors (Podrecca *et al*., 2021). Furthermore, organizations report instances of insufficient support from regulatory bodies (Moroz and Gamble, 2021) and a lack of available auditors (Marcuzzi *et al*., 2023).

Lastly, "other" external drivers stem from *mimicking behavior (2 articles – 4%)*. This phenomenon occurs when companies observe their peers or industry counterparts opting out of an IMS, with a consequent domino effect (Marcuzzi *et al*., 2023).

5.2 Performance implications

As highlighted in Table 2, 11 articles (20%) have investigated the performance implications resulting from IMSs decertification. These can be broadly classified as related to the economic/financial sphere or other aspects.

Starting with economic/financial outcomes, some studies associate decertification with a *worsening of performance (6 articles – 11%)* like revenue and income (Aličˇ, 2012, 2014), net present value (Sansalvador and Brotons, 2015), return on asset (ROA) (Kafel and Simon, 2017), market value (Amer, 2018), and productivity (Hernandez-Vivanco and Bernardo, 2023).

Conversely, other research notes *an improvement of performance (3 articles – 6%)* in ROA (Kafel and Simon, 2017; Podrecca *et al*., 2021) and productivity (Podrecca *et al*., 2021; Hernandez-Vivanco and Bernardo, 2023).

Authors also depict *no effect (5 articles – 9%)* on performance indicators such as ROA and return on sales (ROS) (Cândido *et al*., 2016, 2021), productivity (Hernandez-Vivanco and Bernardo, 2023), and sales growth (Cândido *et al*., 2016, 2021; Podrecca *et al*., 2021; Zimon and Dellana, 2019).

Moving to other dimensions that might be affected by IMSs decertification, *worsening of performance (1 article – 2%)* has been identified in aspects like cooperation with business partners as well as employee commitment and discipline (Zimon and Dellana, 2019).

On the contrary, an *improvement of performance (1 article – 2%)* has been detected in terms of service level (Zimon and Dellana, 2019).

No effect (2 articles – 4%) emerges for customer satisfaction (Zimon and Dellana, 2019) and relationships with local authorities (Mosgaard and Kristensen, 2020).

Table 2. Performance implications

Main themes/research results	Relevant articles
Economic/financial	
Worsening of performance (6)	**ISO 9001:** Ališ (2014), Sansalvador and Brotons (2015), Kafel and Simon (2017) **ISO 9001 and ISO 14001:** Ališ (2012), Hernandez-Vivanco and Bernardo (2023) **UNGC:** Amer (2018)
Improvement of performance (3)	**ISO 9001:** Kafel and Simon (2017) **OHSAS 18001:** Hernandez-Vivanco and Bernardo (2023) **SA 8000:** Podrecca *et al*. (2021)
No effect (5)	**ISO 9001:** Cândido *et al*. (2016), Cândido *et al*. (2021), Zimon and Dellana (2019), Hernandez-Vivanco and Bernardo (2023) **ISO 14001:** Hernandez-Vivanco and Bernardo (2023) **ISO 9001, ISO 14001, and OHSAS 18001:** Hernandez-Vivanco and Bernardo (2023) **SA 8000:** Podrecca *et al*. (2021)
Other	
Worsening of performance (1)	**ISO 9001:** Zimon and Dellana (2019)
Improvement of performance (1)	**ISO 9001:** Zimon and Dellana (2019)
No effect (2)	**ISO 9001:** Zimon and Dellana (2019) **ISO 14001:** Mosgaard and Kristensen (2020)

Source(s): Authors' own work

While this picture appears varied and inconsistent, some efforts have been made to elucidate the diversity of results. Cândido and Ferreira (2022) contend that there is a link between decertification drivers and the outcomes of this decision; for instance, firms that decertify due to diminishing/lack of commercial benefits may not experience substantial changes in sales growth or ROS, while those who abandoned due to the effort required to maintain an IMS could see a tangible impact on ROA and productivity. Podrecca *et al*. (2021) suggest that the discrepancies may stem from the adopted methodological approach: case studies vs surveys vs secondary data analyses. They also point out that while some articles have examined the period immediately following decertification (Simon and Kafel, 2018), others have explored alternative timeframes (Ališ, 2014).

5.3 Post-decertification paths

Table 3 highlights the post-decertification paths (14 articles – 26%). Two different approaches emerge: (1) practice maintenance and (2) the embracement of alternative IMSs/initiatives.

Starting with practice maintenance, firms may opt for *full maintenance*, *partial maintenance*, *or complete abandonment* of the procedures/activities related to the previously adopted IMS.

Full maintenance (5 articles – 9%) typically arises when the organization has realized the internal benefits of an IMS but perceives that the certification provides no external advantages. According to Kafel and Simon (2017) and Moroz and Gamble (2021), in such instances, IMSs routines are deeply ingrained in companies' operations and business models, and the main objective of the organizations is to reduce the costs associated with maintaining the "certified" status (e.g. third-party audits and renewal fees – Cândido, 2023; Hernandez-Vivanco and Bernardo, 2023). Companies, therefore, keep their internal processes unchanged and only abandon the formal certification (Kafel and Nowicki, 2014).

Table 3. Post-decertification paths

Main themes/research results	Relevant articles
Practices maintenance	
Full maintenance (5)	**ISO 9001**: Cândido (2023), Kafel and Simon (2017), Hernandez-Vivanco and Bernardo (2023) **ISO 14001:** Hernandez-Vivanco and Bernardo (2023) **ISO 9001 and ISO 14001**: Kafel and Nowicki (2014) **B Corp**: Moroz and Gamble (2021)
Partial maintenance (8)	**ISO 9001**: Gianni and Gotzamani (2015), Zimon and Dellana (2019), Cândido (2023) **ISO 14001**: Mosgaard and Kristensen (2020) **ISO 9001 and ISO 14001**: Kafel and Nowicki (2014) **SA8000:** Podrecca *et al*. (2021), Marcuzzi *et al.* (2023) **B Corp:** Moroz and Gamble (2021)
Complete abandonment (4)	**ISO 9001:** Cândido (2023) **ISO 14001:** Mosgaard and Kristensen (2020) **ISO 9001 and ISO 14001:** Kafel and Nowicki (2014) **SA 8000**: Marcuzzi *et al.* (2023)
Embracement of alternative IMSs/initiatives	
Another IMS (5)	**ISO 9001:** Simon and Kafel (2018), Cândido (2023) **ISO 9001 and ISO 14001**: Marimon *et al*. (2009) **EMAS:** Bonilla-Priego *et al*. (2011) **SA8000**: Marcuzzi *et al*. (2023)
Non-certified report (3)	**ISO 14001**: Mosgaard and Kristensen (2020) **EMAS**: Von Ahsen *et al*. (2004) **SA8000:** Marcuzzi *et al*. (2023)

Source(s): Authors' own work

Partial maintenance (8 articles – 15%) occurs when firms aim to uphold the operational advantages of standardization, such as enhanced efficiency, risk management, and process optimization, while avoiding elements that are excessively burdensome and resource-intensive (Gianni and Gotzamani, 2015; Marcuzzi *et al*., 2023). Retained practices are those directly contributing to core processes/functions and daily activities; relevant examples include business continuity planning, competence/awareness training, and specific communication tools between employees and top management (Marcuzzi *et al*., 2023; Kafel and Nowicki, 2014). Additionally, Gianni and Gotzamani (2015) highlight that companies may maintain customer-specific requirements (e.g. product control systems). Discontinued practices relate to internal audits, exhaustive record-keeping, continuous improvement plans, and supply chain/supplier monitoring (e.g. Mosgaard and Kristensen, 2020).

Complete abandonment (4 articles – 8%) stems from a strongly negative perception of the IMS; companies opting for this path view their IMS as a "sinker" that impedes both the internal operations and the alignment with market/customer needs (Marcuzzi *et al*., 2023). This prompts a strategic shift back to a "business-as-usual approach" (Mosgaard and Kristensen, 2020), which prioritizes immediate operational needs over systematic IMSs compliance Kafel and Nowicki (2014).

Moving to the embracement of alternative IMSs/initiatives, firm may opt either to adopt *another IMS* or to resort to a *non-certified report.*

The decision to adopt *another IMS (5 articles – 9%)* is due to the company commitment or the desire to attain external benefits. When firms demonstrate a strong dedication to IMSs, they often transition towards more demanding standards: this is driven by the aspiration to further

refine internal processes and operational activities (Simon and Kafel, 2018). These ventures perceive the adoption of a more rigorous IMS as an opportunity to capitalize on additional benefits beyond those offered by the previously adopted one (Cândido, 2023). Conversely, organizations aiming for external effects, such as enhancing market performance or meeting customer expectations, tend to prefer IMSs that are broader in scope and less stringent in their compliance requirements (e.g. not necessitating formal audits) (Marcuzzi *et al*., 2023). This choice provides companies with versatile reporting frameworks, enabling them to address a diverse array of operational and strategic facets, with reduced burdens and lower costs (Bonilla-Priego *et al*., 2011).

In conclusion, *non-certified reports (3 articles – 6%)* are preferred in scenarios where they suffice for participation in public bids (Marcuzzi *et al*., 2023), parent companies demand them for the controlled subsidiaries (Von Ahsen *et al*., 2004), or to meet legal compliance obligations (Mosgaard and Kristensen, 2020).

5.4 Contextual factors

Several studies (35 articles – 65%) suggest that the decertification phenomenon must be contextualized within the operating environment of the company, as depicted in Table 4.

Most of the papers stress firm-specific aspects, especially the *size (16 articles – 30%)*. Small and medium-sized enterprises (SMEs) are more likely to decertify from IMSs (e.g. Alič, 2014; Merli *et al*., 2018). This trend can be attributed to two main aspects. On the one hand, SMEs often have limited financial and human resources to allocate to the maintenance of IMSs, which makes certification retention particularly burdensome (e.g. Zimon and Dellana, 2019). On the other hand, SMEs typically experience limited room for improvement upon adopting an IMS: the gains realized through standardization and process optimization can be minimal compared to larger organizations, where the scale and complexity of operations provide greater intervention opportunities (Mosgaard and Kristensen, 2020).

In terms of *ownership status (4 articles – 7%)*, Rasche *et al*. (2022) emphasize that publicly listed companies are less inclined to decertify than private organizations, attributing this trend to the heightened reputational risk they face. Merli *et al*. (2016) add to this discussion by pointing out that state administrations generally report higher satisfaction with IMSs in comparison to private organizations and are, therefore, characterized by lower abandonment rates.

As for *age (2 articles – 4%)*, older organizations are less likely to decertify (Clougherty and Grajek, 2023). Moroz and Gamble (2021) explain that younger ventures often engage in experimentation without detailed planning, making them prone to impulsive decisions and consequently susceptible to decertification. On the contrary, mature companies usually adopt more reflective approaches, including those related to IMSs.

Aspects related to *pre-adoption performance*, *international presence*, *innovation tendency*, *labor intensity*, and *business model specificities* have been identified in *1 article (2%)* each. In particular, greater decertification propensity has been found in companies with poorer pre-IMS adoption performance, lower international presence, higher radical innovation tendency, lower labor intensity, and less defined business models (e.g. Clougherty and Grajek, 2023; Podrecca *et al*., 2021).

Moving to contingencies related to the industry, most of the papers *(12–22%)* provide evidence of the existence of *sector-specific dynamics*. Authors highlight how companies operating in the manufacturing, wholesale and retail, and construction fields (e.g. Alič, 2012, 2014; Heras-Saizarbitoria *et al*., 2016) decertify more often, while domains such as oil and gas show a lower decertification propensity (Knudsen, 2011). These behaviors can be explained considering the number of certificates circulating within these contexts (i.e. saturation phenomenon – Lira *et al*., 2021) and the fact that IMSs adoption motivations change when different industries are taken into account (Merli *et al*., 2018).

Table 4. Contextual factors

Main themes/research results	Relevant articles
Firm	
Size (16)	**ISO 9001**: Alič (2014), Zimon and Dellana (2019), Clougherty and Grajek (2023) **ISO 14001:** Mosgaard and Kristensen (2020) **ISO 9001 and ISO 14001:** Alič (2012) **EMAS**: Merli *et al*. (2016), Preziosi *et al*. (2016), Daddi *et al*. (2018), Merli *et al*. (2018), Merli and Preziosi (2018) **B Corp:** Kim (2021), Moroz and Gamble (2021), Patel and Chan (2022) **UNGC:** Kimbro and Cao (2011), Knudsen (2011), Rasche *et al*. (2022)
Ownership status (4)	**UNGC:** Rasche *et al*. (2022) **EMAS:** Merli *et al*. (2016), Preziosi *et al*. (2016), Merli *et al*. (2018)
Age (2)	**ISO 9001:** Clougherty and Grajek (2023) **B Corp:** Moroz and Gamble (2021)
Pre-adoption performance (1)	**UNGC:** Kimbro and Cao (2011)
International presence (1)	**ISO 9001:** Clougherty and Grajek (2023)
Innovation tendency (1)	**ISO 9001:** Clougherty and Grajek (2023)
Labor intensity (1)	**SA 8000:** Podrecca *et al*. (2021)
Business model specificities (1)	**B Corp:** Moroz and Gamble (2021)
Industry	
Sector-specific dynamics (12)	**ISO 9001**: Alič (2014) **ISO 14001**: Lira *et al*. (2019), Lira *et al*. (2021) **ISO 9001 and ISO 14001**: Franceschini *et al*. (2008), Alič (2012) **EMAS**: Heras-Saizarbitoria *et al*. (2016), Merli *et al*. (2016), Preziosi *et al*. (2016), Merli *et al*. (2018), Merli and Preziosi (2018) **B Corp**: Patel and Chan (2022) **UNGC:** Knudsen (2011)
Number of certified peers (1)	**ISO 9001**: Clougherty and Grajek (2023)
Dynamism (1)	**SA 8000**: Podrecca *et al*. (2021)
Competition (1)	**SA 8000**: Podrecca *et al*. (2021)
Geography	
Region/country/state-specific dynamics (15)	**ISO 9001**: Casadesús *et al*. (2008), Franceschini *et al*. (2010), Franceschini *et al*. (2011), Mastrogiacomo *et al*. (2021) **ISO 14001**: Hikichi *et al*. (2017a), Hikichi *et al*. (2017b), Lira *et al*. (2019), Lira *et al*. (2020), Lira *et al*. (2021) **ISO 9001 and ISO 14001**: Marimon *et al*. (2009) **EMAS**: Preziosi *et al*. (2016), Merli and Preziosi (2018) **B Corp:** Kim (2021), Patel and Chan (2022), **UNGC**: Knudsen (2011)
Political situation and governance quality (3)	**ISO 9001:** Aamer *et al*. (2020), Mastrogiacomo *et al*. (2021) **UNGC**: Knudsen (2011)
Development level (1)	**SA 8000:** Podrecca *et al*. (2021)
International competitiveness (1)	**UNGC**: Knudsen (2011)
Number of controversies (1)	**B Corp:** Lucas *et al*. (2022)
Number of business establishments (1)	**B Corp:** Lucas *et al*. (2022)
Other	
Economic crises (8)	**ISO 9001**: Simon and Kafel (2018), Alič (2014) **ISO 14001**: Hikichi *et al*. (2017a), Hikichi *et al*. (2017b) **ISO 9001 and ISO 14001:** Alič (2012) **EMAS**: Heras-Saizarbitoia *et al*., 2016, Preziosi *et al*. (2016), Daddi *et al*. (2018)

(*continued*)

Table 4. Continued

Main themes/research results	Relevant articles
Adoption timing (5)	**ISO 9001**: Lo and Chang (2007), Chiarini (2019) **SA8000:** Podrecca *et al*. (2021) **B Corp**: Kim (2021) **UNGC**: Rasche *et al*. (2022)
Number of abandoned IMSs (1)	**ISO 9001, ISO 14001, and OHSAS 18001:** Hernandez-Vivanco and Bernardo (2023)

Source(s): Authors' own work

The contributions by Clougherty and Grajek (2023) and Podrecca *et al*. (2021) show how decertification is dependent on the *number of certified peers* (i.e. similar companies), and the *dynamism* and *competition* levels, *1 article (2%)* each. Organizations operating in contexts with more certified peers exhibit a reduced likelihood of decertification. Conversely, higher dynamism and competitiveness are associated with a greater tendency toward decertification.

As for the geography, *15 articles (28%)* emphasize that decertification might depend on *region/country/state-specific dynamics*. For example, a higher amount of IMSs abandonments is documented in Western countries. Also in this case, Casadesús *et al*. (2008) and Marimon *et al*. (2009) depict the existence of a potential saturation effect.

Another contingency relates to the *political situation and governance quality (3 articles – 6%)*. Authors (e.g. Aamer *et al*., 2020; Knudsen, 2011) note that the decertification propensity is higher in unstable or poorly governed contexts. These conditions might lead to a landscape characterized by fluctuating regulations and policies as well as a lack of support for businesses, with consequent negative effects on IMSs maintenance.

Podrecca *et al*. (2021), Knudsen (2011), and Lucas *et al*. (2022) point out the role of *development level*, *international competitiveness*, *number of controversies*, and *number of business establishments, 1 article (2%)* each. On the one hand, organizations from developed and internationally competitive countries are more prone to decertification, as they perceive a lesser need to adopt and maintain IMSs to validate their operations. On the other, companies operating in states with fewer controversies and a higher amount of establishments are characterized by reduced decertification tendency (Lucas *et al*., 2022).

For what concerns the other factors that might relate to decertification, *8 articles (15%)* depict issues connected with *economic crises*; these foster an environment fraught with financial uncertainty, compelling organizations to implement budget cuts and, consequently, this increases the decertification likelihood (Simon and Kafel, 2018; Preziosi *et al*., 2016; Daddi *et al*., 2018).

In terms of *adoption timing (5 articles – 9%)*, studies indicate that early adopters exhibit a lower inclination towards decertification, as they are genuinely committed to the IMSs they have implemented. Conversely, late adopters tend to be primarily motivated by isomorphism and mimetic pressures (Rasche *et al*., 2022).

Concluding with the *number of abandoned IMSs (1 article – 2%)*, Hernandez-Vivanco and Bernardo (2023) state that simultaneous decertification from multiple IMSs can cause "cumulative effects", which could magnify or negate each other.

6. Discussion and future research agenda

6.1 Discussion

The findings of this review yield four major takeaways that reshape our understanding of decertification from IMSs. First, decertification emerges as a widespread and multidimensional phenomenon that challenges assumptions of permanence and success

typically associated with standard adoption (e.g. Sartor *et al*., 2016; Culot *et al*., 2021; Orzes *et al*., 2018). The evidence suggests that disengagement is neither accidental nor peripheral, nor is it necessarily a symptom of failure. Instead, it often reflects a deliberate managerial decision, shaped by a range of aspects. In many cases, firms withdraw from IMSs to streamline operations, reduce bureaucratic burden, or redirect resources toward evolving priorities, suggesting a form of adaptive reasoning in response to changing internal or external conditions.

Second, decertification involves multiple organizational actors and unfolds through situated processes. Decisions to disengage from IMSs are not always top-down; they may involve negotiation, resistance, or reinterpretation within different levels of the organization. This highlights the importance of internal dynamics, power relations, and meaning-making processes in shaping how decertification is initiated, justified, and managed in practice over time.

Third, the post-decertification takes multiple forms. Organizations differ significantly in how they manage the aftermath of withdrawal: some preserve internal routines developed during certification, others adopt new frameworks, and others disengage entirely from formal systems. These divergent paths are shaped by institutional pressures, resource endowments, and differing interpretations of what it means to operate legitimately and effectively. Rather than being seen as an endpoint, decertification may represent a transition toward a reconfigured system of practices–formal or informal–that continues to support organizational objectives.

Fourth, contextual factors play a critical role in shaping both the drivers and consequences of decertification. What counts as valuable, burdensome, or legitimate varies significantly across industries, regulatory environments, and geographical settings. In some sectors, maintaining certification may be essential for market access or stakeholder trust; in others, standards may lose relevance as new initiatives and expectations emerge. The usefulness and durability of IMSs are thus not universal, but contingent, shaped by local institutions, competitive forces, and the availability of credible alternatives.

Taken together, these aspects suggest the need for a broader and more dynamic understanding of IMSs. In this respect, our review invites a re-examination of the dominant lifecycle model used to frame standard diffusion. Traditionally, the spread of IMSs has been portrayed as an S-shaped curve, encompassing phases of rapid adoption, stabilization, and eventual saturation (Podrecca *et al*., 2022; Franceschini *et al*., 2004; Franceschini *et al*., 2008; Llach *et al*., 2015). However, the growing relevance of decertification suggests the emergence of a fourth phase–decline–during which the number of certified organizations may decrease, whether due to strategic reconsiderations, shifting institutional pressures, or the perceived obsolescence of specific standards. Acknowledging this potential fourth stage requires scholars to reconceptualize IMSs as tools that are continuously interpreted, reconfigured, and, at times, deliberately abandoned. It also calls for a fundamental rethinking of how certification is understood, not merely as a technical or symbolic asset, but as part of an organizational trajectory framed by learning, negotiation, and changing perceptions of fit. From this perspective, decertification does not always represent a clear-cut discontinuity, but can instead mark a turning point within a broader cycle of adoption, adjustment, and rethinking. These moments of redefinition occur when initial expectations fade, external conditions evolve, or the standard is perceived less as a source of value and more as a constraint.

6.2 Future research agenda

The SLR has highlighted the surprisingly limited extent of academic contributions dedicated to IMSs decertification, especially when compared with the literature surrounding IMSs adoption (e.g. Orzes *et al*., 2018; Boiral *et al*., 2018; Tarì *et al*., 2012). This imbalance points to a broader gap in both conceptual and empirical understanding of how and why organizations disengage from formalized management systems.

To help address this gap and foster progress in the field, we propose a research agenda designed to support a more structured investigation of IMSs decertification. Specifically, a research agenda serves two key functions: first, it helps define and articulate unresolved issues that require further scholarly attention (Sartor *et al.*, 2016, 2019), second, it provides a clear and actionable pathway for future studies, assisting scholars in framing their inquiries and positioning their work within the broader academic conversation on IMSs decertification (Culot *et al.*, 2021).

In what follows, we first highlight key methodological limitations in extant literature along with the identification of a set of theoretical perspectives that may help illuminate the phenomenon of decertification. Then, in line with recent literature reviews (e.g. Dieste *et al.*, 2021; Culot *et al.*, 2024), we structure our research agenda around the four dimensions emerging from our framework–drivers, performance implications, post-decertification paths, and contextual factors–formulating a set of focused RQs for each. These questions are directly grounded in the gaps identified through our analysis and are intended to support future studies seeking to advance conceptual clarity, theoretical development, and empirical insight into the phenomenon of IMSs decertification (Tranfield *et al.*, 2003; Snyder, 2019).

6.3 Considered standards, research approaches, and theoretical lenses

Starting with the standards considered in the studies, the literature has predominantly focused on widely adopted frameworks such as ISO 9001, ISO 14001, and EMAS: established standards that have long shaped organizational practices across quality and environmental domains (e.g. Camango and Cândido, 2023; Mosgaard and Kristensen, 2020; Merli *et al.*, 2018). To these, a relatively recent addition is the B Corp certification, which has begun to attract growing scholarly interest (Moroz and Gamble, 2021; Kim, 2021). Notably absent from current investigations are other widely adopted management system standards, such as ISO/IEC 27001 for information security, ISO 50001 for energy management, and ISO 37001 for anti-bribery. The same holds true for sector-specific standards like ISO 13485 for medical devices, International Automotive Task Force - IATF 16949 for the automotive industry, and ISO 22000 for food safety. These frameworks play a critical role in stringent environments, yet their potential decertification trajectories remain largely unexplored. Broadening the scope of investigation to include these standards could help identify context-specific patterns, constraints, and outcomes associated with IMS disengagement, and shed light on whether the dynamics observed for general-purpose standards hold true across different regulatory and operational settings.

As for the adopted approaches, the majority of articles (74%) have explored issues connected to IMSs decertification using secondary data analyses and surveys. However, other methods could significantly enhance the existing knowledge base. For instance, qualitative techniques such as case studies could provide deeper insights into the intricacies and nuances of the phenomenon under examination (Yin, 2017; Kvale and Brinkmann, 2009). This seems especially suitable for the areas with less available research like the post-decertification paths. Building on the discussion above regarding the cycles of adoption, adjustment, and possible disengagement, which calls for a more dynamic understanding of IMSs within organizations, we also see considerable potential in longitudinal and process-oriented research designs. Ethnographic methods, in-depth organizational narratives, and process tracing can illuminate how certification practices are enacted, questioned, and ultimately revised over time. These approaches are particularly well-suited to capturing how decertification decisions unfold gradually, shaped by evolving perceptions of value, legitimacy, and strategic fit. An additional avenue worth exploring involves mixed methods designs, by combining qualitative and quantitative approaches, scholars can harness the complementary strengths of each technique to gain a more comprehensive understanding of the decertification phenomenon (Morgan, 2013; Sanders and Wagner, 2011). While quantitative methodologies offer objective and measurable results, qualitative ones allow for a deeper exploration and interpretation of the

findings; this approach could help explain the controversial outcomes that emerge when performance implications are taken into account.

Furthermore, only approximately 30% of the studies build on established theories, indicating a significant opportunity for deeper theoretical integration. Engaging more extensively with theoretical frameworks could guide the definition of RQs, as well as assist in making methodological choices and interpreting results (Post *et al*., 2020; Breslin *et al*., 2020). Drawing on insights from the review by Tuczek *et al*. (2018), several theories widely used to illuminate IMSs adoption may also prove useful for understanding decertification dynamics. Among them, Transaction Cost Theory, Resource-Based View, Institutional Theory, Signaling Theory, and Stakeholder Theory stand out as the most promising. Specifically,

(1) *Transaction cost theory* (Williamson, 1985; Coase, 1937): this theory can explain why firms abandon an IMS by highlighting the economic burdens and inefficiencies of maintaining their certified status. It can also provide valuable insights into the decision-making process associated with the adoption of alternative IMSs, illustrating how companies navigate these choices to optimize economic-financial outcomes.

(2) *Resource-based view* (Barney, 1991; Penrose, 1959): by viewing an IMS as a unique, rare, and inimitable resource, this lens can be leveraged to analyze the performance implications of decertification. Similarly, it can be used to explore post-decertification strategies, helping to understand what alternative approaches an organization might pursue to maintain or enhance its competitive advantage.

(3) *Institutional theory* (DiMaggio and Powell, 1983; Meyer and Rowan, 1977): IMSs abandonment can be seen as a response to changing norms and pressures within the institutional environment of the company. This may lead firms to seek legitimacy through alternative tools, thereby influencing their post-decertification decisions.

(4) *Signaling theory* (Akerlof, 1970; Spence, 1973): this framework helps to understand how decertification can impact aspects related to a company's reputation. The absence of certification could indeed alter the credibility of the company, influencing market standing, investor confidence, and customer and supplier relationships.

(5) *Stakeholder theory* (Donaldson and Preston, 1995; Freeman, 1984): from this viewpoint, the decision to abandon an IMS might be driven by stakeholder pressures and expectations. Similarly, the adoption of an alternative IMS/initiative may be the result of stakeholder requests.

6.4 Drivers

Although extant research has identified a range of reasons for IMSs decertification, the underlying dynamics behind these decisions remain fragmented. In this perspective, two aspects deserve further inquiry.

First, the relationship between the initial certification drivers and subsequent decertification ones is far from being clear; the few contributions on the topic (e.g. Marcuzzi *et al*., 2023) only provide anecdotical and speculative evidence. Investigating this link could illuminate whether the factors driving decertification directly contradict the initial motivations for adopting an IMS, or whether unforeseen aspects are at play. For instance, decertification may stem from unmet benefits expectations: an organization might embrace an IMS for marketing purposes but later decertify due to a lack of commercial advantages. Conversely, a firm could join an IMS in response to customer demands but then decertify due to unexpectedly high maintenance costs. Given these considerations, the following RQ is posed:

What is the relationship between IMSs certification and decertification drivers?

Second, another area requiring attention concerns how different drivers combine and influence each other over time. Instead of viewing these factors as isolated or static, it may be more accurate to consider them as part of a cumulative process in which certain drivers tend to precede and reinforce others, gradually shaping a trajectory toward disengagement. For example, initial dissatisfaction with operational improvements may reduce top management commitment, which in turn weakens employee engagement and ultimately leads to the decision to decertify (Chiarini, 2019). In this sense, disengagement may not stem from a single motivation, but from an accumulation of tensions and misalignments that progressively erode the perceived value of certification. Investigating and acknowledging these facets can offer a deeper comprehension of the decertification process and help detect early signs that may precede such a decision. This leads to the following RQ:

What is the relationship among IMSs decertification drivers and how do they evolve over time?

6.5 Performance implications

From the thematic findings, it emerged that the performance implications of decertification are not fully understood yet, with studies presenting varied and conflicting results. In this regard, a series of aspects call for further investigation.

First, while Cândido and Ferreira (2022) suggest a possible link between decertification drivers and subsequent performance outcomes, the nature of this relationship is still poorly understood. As noted in Section 5.2, organizations withdrawing due to unmet commercial expectations may experience little to no impact on indicators such as ROS or sales growth, whereas those reacting to internal burdens might see a tangible impact on ROA or productivity. Clarifying how specific decertification drivers influence different dimensions of firm performance could offer targeted insights for firms evaluating the consequences of disengagement; it can explore the potential outcomes of this decision, giving companies a clear picture of what lies ahead after IMSs abandonment. This results in the following RQ:

What is the relationship between IMSs decertification drivers and performance implications?

Second, distinct IMSs possess unique characteristics that significantly influence the requirements and effort needed for their maintenance. This can have a profound impact on the decision to decertify and the subsequent performance implications. For example, a standard may extend its requirements across the entire supply chain (e.g. SA8000), necessitating broad oversight and coordination. On the contrary, an IMS focused on internal process optimization (e.g. ISO 9001), might be more related to operational dimensions. Understanding how the characteristics of an IMS influence post-decertification performances could help companies to better tailor their strategies and take appropriate countermeasures to avoid negative effects. Moreover, such insight enables proactive planning for potential IMS-specific challenges that may arise post-decertification, ensuring smoother transitions. These aspects guide us in formulating the following RQ:

How do the characteristics of the abandoned IMS influence a company's performance after decertification?

Third, while extant research has primarily focused on the economic-financial performance associated with decertification, exploring other dimensions could represent an intriguing avenue for future studies. Specifically, given that standards are often adopted in response to stakeholder demands (e.g. Orzes *et al.*, 2018), shedding light on how decertification affects these relationships appears crucial; potential aspects might be community relations, investor confidence, and employee satisfaction. This could offer a more holistic understanding of the

performance implications of decertification, also considering that organizational success extends beyond mere financial metrics (e.g. Molinaro *et al.*, 2024). The related RQ is as follows:

What is the impact of IMSs decertification on stakeholder relationships?

6.6 Post-decertification paths

As highlighted by our findings, decertification does not necessarily mark the end of a firm's engagement with structured management practices. Rather, it opens a new phase in which organizations may pursue different strategic trajectories: retaining certain routines, shifting toward alternative frameworks, or fully disengaging from formal systems. Understanding these post-decertification paths is essential to grasp the long-term implications of IMSs withdrawal and the ways in which firms reinterpret or transform the organizational practices once codified by certification. In this perspective, two aspects warrant further exploration.

First, while the literature has described various paths, the specific effects of each of them on a firm's activities remain unclear. This ambiguity represents a significant knowledge gap; the choice between decertifying but maintaining (some) practices, embracing alternative standards/initiatives, or completely abandoning the structured approach of IMSs is likely to have different implications. For instance, practice maintenance might ensure operational continuity, but it could also limit an organization's ability to innovate and adapt. On the other hand, adopting a new IMS might disrupt internal processes in the short-term but could enhance efficiency in the long-term. Also, the complete abandonment of an IMS might offer higher levels of operational flexibility but at the risk of losing the benefits of standardization. The decision among these paths thus involves complex trade-offs. In light of these aspects, the following RQ arises:

What are the implications of the various post-decertification paths?

Second, the potential link between the characteristics of the previously adopted IMS and the resulting post-decertification path remains an unexplored area of the literature. This gap is particularly relevant, as the specifics of the abandoned IMS (e.g. focus area, presence of third-party audits, recertification interval/renewal frequency) could deeply affect the strategy of the company. For example, organizations moving away from a rigorous environmental IMS (e.g. ISO 14001) might lean toward alternative initiatives that still emphasize sustainability but allow for greater adaptability (e.g. Global Reporting Initiative). On the other hand, companies stepping back from an IMS aimed at optimizing internal activities (e.g. ISO 9001) may decide to maintain the practices aimed at enhancing process efficiency, even without a formal certification. Investigating the relationship between the characteristics of the previously adopted IMS and post-decertification paths could depict the strategic considerations that guide organizations in moving through decertification, highlighting the influence of past commitments. Hence, the following RQ is posed:

How do the characteristics of the abandoned IMS affect post-decertification paths?

6.7 Contextual factors

When it comes to contextual factors, the literature has mainly explored which aspects foster decertification propensity. However, the contingent situation of the company can have relevant implications on decertification drivers, performance implications, and post-decertification paths.

Different contexts are characterized by diverse legal frameworks, stakeholder demands, market dynamics, and cultural norms (e.g. Kim, 2021; Parmigiani and Rivera-Santos, 2015; Lo *et al.*, 2013). For example, decertification drivers related to regulatory challenges may be more

prominent in industries or regions with a higher number of laws and legal requirements. At the same time, decertification drivers can vary along different levels of the supply chain: upstream companies may pay more attention to the internal aspects of IMSs, whereas downstream firms may focus on external issues (e.g. Schmidt *et al*., 2017). In terms of performance implications, the company size may moderate the effects of IMSs abandonment, with larger organizations that might be better equipped to manage decertification fallout. As for the post-decertification paths, traditional sectors might prioritize maintaining existing practices for operational consistency, while technology-driven firms are more likely to engage in experimenting with new standards, tools, and initiatives (Manders *et al*., 2016; Terziovski and Guerrero, 2014). Taken together, these considerations inform the formulation of the following RQ:

> *How do IMSs decertification drivers, performance implications, and post-decertification paths differ when different contexts are taken into account?*

7. Conclusions

Based on the considerations outlined above, this paper contributes to both theory and practice. From a theoretical point of view, our study delivers the first comprehensive SLR of the decertification phenomenon within the context of IMSs, thereby addressing a critical blind spot. While most existing studies have concentrated on the implementation of IMSs–often under the implicit assumption that certification is universally beneficial–our review problematizes this view by demonstrating that decertification is a widespread, heterogeneous, and strategically relevant phenomenon.

In addition to addressing this imbalance, this work contributes conceptually by offering a structured and integrative framework that maps existing knowledge across four key dimensions: drivers, performance implications, post-decertification trajectories, and contextual factors. This classification effort brings conceptual clarity to a previously disjointed body of research, enabling the identification of both common elements and underexplored relationships. The resulting framework provides a reference point for positioning future studies and facilitates theoretical accumulation around the still-emerging domain of IMSs withdrawal.

Furthermore, the study opens up space for theoretical pluralism. Specifically, we identify a set of underutilized but promising theoretical lenses–ranging from institutional theory to the resource-based view–that can support the development of richer, multi-level explanations of IMSs withdrawal. This invites future research to explore how different theoretical perspectives–individually or in combination–can illuminate the multifaceted nature of decertification processes.

Finally, the research agenda offers a clear roadmap for advancing the field, articulating eight key questions that can guide future investigation and help scholars explore overlooked mechanisms, boundary conditions, and consequences of decertification.

From a practical standpoint, the findings offer guidance for ventures considering the decision to decertify and equip managers with a robust analytical framework to support decision-making in the context of IMSs. First, the categorization of the drivers of decertification helps organizations diagnose potential sources of dissatisfaction and understand their underlying nature and consequences. For example, firms can identify whether administrative burden, lack of commercial benefits, or strategic misalignment are pushing them toward decertification and respond accordingly (e.g. by streamlining certification-related procedures to reduce inefficiencies, revisiting how the standard is integrated into core business operations, or engaging more actively with key stakeholders to clarify the value and relevance of the certification).

Second, the findings highlights that decertification does not necessarily imply a deterioration in performance. On the contrary, it may enable firms to reallocate resources, reduce bureaucracy, or regain strategic agility. For instance, companies that no longer derive

competitive advantage from certification may benefit from shifting managerial attention and financial resources toward innovation, process improvement, or customer-centric initiatives. This challenges the often-assumed narrative that certification is inherently beneficial, and encourages managers to periodically reassess whether the standard continues to create value or whether it has become a symbolic practice with limited operational relevance.

Third, the identification of multiple post-decertification paths offers a practical taxonomy of strategic responses, ranging from the full abandonment of practices to their partial retention or substitution with alternative standards. This provides decision-makers with concrete options when exiting a certification scheme and supports the design of exit strategies that minimize disruption while maintaining operational continuity or reputational credibility. For example, some firms may opt to retain internal routines and procedures that were originally developed to comply with the standard, thereby preserving the organizational learning and efficiency gains achieved during certification. Others may transition to less resource-intensive schemes, voluntary initiatives, or client-specific standards that offer more flexibility while still meeting stakeholder expectations. The existence of these differentiated paths challenges the binary view of certification as either present or absent and highlights the possibility of reconfiguring assurance mechanisms in ways that better align with firms' evolving strategic priorities.

Finally, by highlighting how contextual factors shape decertification dynamics, the study encourages managers to avoid one-size-fits-all solutions and instead tailor their decisions to the specific characteristics of their organization and environment.

This study also provides insights to regulatory bodies and standard-setting organizations such as ISO, SAI, and B Lab. Specifically, these organizations can leverage our findings to identify critical areas within IMSs that tend to generate dissatisfaction or disengagement among certified firms. By addressing these issues through targeted revisions, simplification efforts, or more flexible implementation frameworks, these bodies can enhance the relevance and accessibility of IMSs and potentially reduce the decertification tendency. Moreover, our synthesis offers insight into how different types of organizations perceive and experience certification, which could inform the design of more tailored and sector-sensitive standards.

Notes

1. While B Corp and UNGC differ from traditional management standards (e.g. ISO 9001, ISO 14001, ISO 45001, SA8000) in certain governance- and structure-related aspects, they also share several key characteristics. These include a clear focus, the presence of a formal certification label, an emphasis on continuous improvemen, and a requirement for long-term commitment with periodic renewal (see Table AI in the Online Appendix). Moreover, in terms of global recognition, B Corp (~9,500 certified companies) and UNGC (~24,000 certified organizations) each surpass well-established standards like EMAS (~4,000 certified organizations) and SA8000 (~5,500 organizations). Given these aspects, various scholars have placed B Corp and UNGC under the broader umbrella of international management standards and have regarded decertification from these frameworks as analogous to that from ISO-based ones (e.g., Orzes *et al*., 2020; Marcuzzi *et al*., 2023; Kim, 2021; Fonseca *et al*., 2022).
2. It's worth noting that a prior review by Camango and Cândido (2023) has partially touched on the issue. However, it mainly focuses on the certification life cycle, exclusively considers ISO 9001 and does not take into account aspects like contingencies or the alternative trajectories firms undertake after the decertification.
3. Despite the official replacement of OHSAS 18001 by ISO 45001 in 2018 (ISO, 2025; Podrecca *et al*., 2024), academic research has yet to explore decertification from the newer standard. As existing studies focus exclusively on OHSAS 18001, we refer to this earlier standard throughout the paper.

Supplementary material

The supplementary material for this article can be found online.

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Corresponding author
Matteo Podrecca can be contacted at: matteo.podrecca@unipd.it