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Making the most of multi-site quality management systems: motivational drivers and perceived proximity to headquarters

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Many companies are increasingly focusing on reducing costs and administration connected to quality management systems (QMS), for example by transitioning to multi-site certifications, where one QMS covers multiple sites. Thus, this study aims to develop an empirically based framework with archetypes illustrating how sites' motivational drivers for QMS and perceived proximity to headquarters shape their views on multi-site QMS, as a way to guide the facilitation of a global multi-site QMS and to support organisations that are planning to transition from single- to multi-site QMS. Using a qualitative, embedded, multiple-case study design, the research analyses data from interviews and documentation across four globally dispersed sites within a company group. The study identifies four site archetypes based on QMS motivational drivers and perceived proximity to headquarters: Independent, Sceptical, Convinced, and Individualist. The findings suggest that understanding these archetypes can facilitate a contextualised approach to multi-site QMS, e.g. by implementing multi-site certifications based on clusters of sites with similar characteristics. The research extends previous findings on QMS focusing single-site certification, by offering a framework for facilitation of multi-site QMS in global organisations. It further provides practical implications for companies seeking to transition to a multi-site certified QMS.

Keywords quality management systems; multi-site certification; perceived proximity

Introduction

Elg et al. (2011) show that many quality management (QM) practices are connected to standardised and often certified quality management systems (QMS). The ISO 9001 standard is the most widely used for certified QMS with more than one million valid certificates worldwide (ISO, 2023). Consequently, the benefits and challenges associated with ISO 9001 influence many organisations. Some organisations even discontinue their QMS certification, often for reasons related to implementation challenges: '(the lack of) benefits have a lesser impact on decertification motivations than the barriers that affected implementation' (Cândido & Ferreira, 2023, p. 341). Barriers to implementation can include payments to certification bodies and an unmanageable amount of documentation (Cândido & Ferreira, 2023), lack of top management involvement and unclear links to performance metrics (Chiarini, 2019). For certified organisations, one way to reduce implementation-related challenges is through integrated management systems (IMS) (Bernardo et al., 2015; Karapetrovic & Jonker, 2003; Zeng et al., 2010), or by multi-site QMS certifications (Bashan & Armon, 2019). This paper focus on the latter, with a certified multi-site QMS meaning 'an organisation covered by a single management system comprising an identified central function [...] at which certain processes/activities are planned and controlled and a number of sites [...] at which such processes/ activities are fully or partially carried out' (International Accreditation Forum, 2018, p. 7). Thus, some barriers, such as certification costs, can shift from a site's local budget to central management.

Despite practical interest in multi-site QMS, most research focus on a single company (site) QMS and its impact on, for example finances (Sampaio et al., 2012; Sila, 2020), performance (Chatzoglou et al., 2015; Feng et al., 2007; Khan et al., 2020; Sila, 2020), and net asset value (Ochieng et al., 2015). This study

contributes to a better understanding of multi-site QMS to answer the call for supportive studies when merging single-site QMS into multi-site systems (Bashan & Armon, 2019; Bashan & Kordova, 2021). Moreover, as multi-site certification provides possibilities for investigating intra-organisational aspects, this study focuses on one company in investigating the impact of individual sites' perceived proximity (Wilson et al., 2008) to headquarters. Perceived proximity meaning 'a dyadic and asymmetric construct which reflects one person's perception of how close or how far another person is' (Wilson et al., 2008, p. 976), thus not restricting proximity to geographical closeness.

A further challenge inherent in a multi-site system is that the sites must work according to the same standard quality practices despite having unique features. This can potentially create tensions between the global and local levels in an organisation (Bashan & Kordova, 2021). These tensions and 'challenges become more pronounced and significant at higher levels of global development, when there are more local units, in many environments, and more diverse interrelationships' (Bashan & Kordova, 2022, p. 2010), hence it is arguably even more challenging when not only working in global systems but also choosing to certify the multi-site system (i.e. requiring higher level of global development). As employees' perceptions of the motivational drivers of certification impact QMS outcomes (Poksinska, 2007), it is important to understand whether the motivation for multi-site certification driven by headquarters is perceived as internal or external (Sampaio et al., 2012). Generally, external motivational drivers for QMS often correlate with a coercive view of QMS, whereas internal motivations correlate with an enabling view and focus on improvements (Prajogo, 2011; Sampaio et al., 2009; Zgirskas et al., 2021). However, even within a company, motivational drivers can differ depending on, for example, previous experience or the relationship between a site and headquarters. Thus, the purpose of this study is to develop an empirically based framework with archetypes illustrating how sites' motivational drivers for QMS and perceived proximity to headquarters shape their views on multi-site QMS, as a way to guide the facilitation of a global multi-site QMS and to support organisations that are planning to transition from single- to multi-site QMS. The purpose is decomposed into two research questions:

- (1) How do sites' motivational drivers and perceived proximity to headquarters shape site-level perceptions of multi-site Quality Management Systems (QMS)?
- (2) How can archetypes of sites facilitate a transition to multi-site QMS?

Bashan and Notea (2018) have called for studies that focus on how to plan a global QMS within a multisite organisation, which this study does by addressing the purpose through an embedded multiple-case study of several sites working in the same company. Further, it responds to calls for understanding of influential factors on company-wide programmes that move beyond geographical distance (Netland et al., 2012; da Fonseca et al., 2019), and to calls for integration of other management concepts to support the value of QMS in a global company (Bashan & Ben-Jacob, 2023). The contributions to practice are to support contextualised facilitation of multi-site QMS by developing practice-oriented propositions.

Theoretical background

Multi-site certifications of quality management systems

Naturally, QMS can function well without formal certification, but it is common to certify against the ISO 9001 standard, the International Accreditation Forum (IAF) that oversees accreditation for third-party certifiers introduced the IAFMD1 guideline with ISO 9001:2000, allowing companies to obtain multi-site certification. This enables audits to be conducted through site sampling rather than at every location, assuming non-conformities and corrective actions apply across the entire company. Still, research on multi-site QMS is scarce. However, some rather recent studies have been published focusing on QMS in global companies, sometimes focusing on QMS in general and sometimes on those certified against ISO 9001. Table 1 provides a summary of recent studies on multi-site QMS outlining their purposes as well as key findings. However, the available research remains limited, highlighting the need to better understand multi-site QMS certification.

In Table 1 there are a few themes emerging, one being to study changes and challenges to QMS during an expansion from a local to a global company (Bashan & Ben-Jacob, 2023; Bashan & Notea, 2018) as well as in

Table 1. Focus in current research on multi-site quality management systems (Source: authors own work).

Reference	Purpose	Main findings
Bashan and Notea (2018)*	The focus is on organisations expanding and becoming global, and examines links between the expansion strategies and the structure, needs and challenges in a global QMS.	Models how multinational companies globalise through different levels, and challenges that brings to a QMS. Five levels of development of global QMS are presented: local, single-site organisation with global suppliers/customers; local multi-site organisation with global suppliers/customers; emerging multinational company; complex multinational company; and multinational company with network structure.
Bashan and Armon (2019)*	Focuses challenges related to the QMS in parent and subsidiary companies in a context of mergers, acquisitions and partnerships, and aims to provide guidelines supporting a global quality strategy.	Points to the strategic role of the parent company in establishing one corporate QMS and a global quality strategy. Key findings are to involve quality managers in strategic decisions since they directly affect how the QMS operates, to develop coordination and control mechanisms at global headquarters, and to develop a global identity of local quality systems.
Bashan and Kordova (2022)*	Focuses the challenge in simultaneously meeting needs at local and global levels and describes an approach to develop a coherent strategy to handle this challenge.	Highlights challenges of balancing autonomy and integration in inter-organisational processes, which result in fluctuating behaviours between independence and coordinated initiatives for operational effectiveness. These challenges intensify at higher levels of global development due to increased complexity and diverse interrelationships.
Agmon et al. (2022)**	Aiming to identify key variables in global management, in specific to establish a theoretical model for global QMS in global systems of systems organisations. Focusing principles for definition and modelling.	Identifies factors to be considered in modelling of global QMS, for example global QMS requiring a cooperate management centre, homogeneity and common language, to balance the homogeneity and heterogeneity between organisations in the system, and using audits as a tool to balance between sites and create a common language.
Bashan and Ben-Jacob (2023)*	To understand and describe challenges related to a global QMS in companies that goes through an expansion that eventually result in a multi-national company, e.g. through mergers and acquisitions.	The study identifies five key challenges in global QMS: the dynamics of global expansion, development levels within multi-national companies, complexities in mutual relationships, difficulties in balancing local and global needs, and lack of a strategic integrative management approach. Based on these themes, a model is proposed to further explore these challenges.
Agmon and Kordova (2024)**	To develop a conceptual model for global QMS in sectors of systems of systems organisations. These organisations have independent systems integrated into a	
larger system to deliver capabilities that are unattainable individually.	A systems modelling approach in which a model for system of system projects and their governing organisations is established, focusing how it shapes project structures and quality management effectiveness. Special consideration is given to ensure alignment with organisational and stakeholder needs.	

^{*} Focus on global QMS but not necessarily, or explicitly a multi-site ISO 9001 certified QMS.

established multinational companies (Bashan & Ben-Jacob, 2023). A second theme focuses on relations or links between a parent and subsidiary companies (Bashan & Armon, 2019), and how to balance their global and local needs (Bashan & Kordova, 2022). Finally, a different set of research focus on the modelling of global QMS with a system theory perspective (Agmon et al., 2022; Agmon & Kordova, 2024). Multi-site QMS is of interest to study as there is limited previous research but a rather large practical interest, moreover multi-site certification requires central functions to be established, which could potentially respond to challenges like 'the lack of interconnectedness and coordination between quality systems of subsidiaries' (Bashan & Armon, 2019, p. 1202). Another aspect to consider is to move beyond identified challenges and models to how to transition from a single- to multi-site QMS.

Motivational drivers of management systems certification

Delfino et al. (2024) show that companies decertifying often implemented QMS due to external motivations. An explanation put forth by Sampaio et al. (2012) is that: 'companies that did present internal motivations [for the certified QMS] have perceived higher benefits than the ones that became certified based on external motivations' (p. 906). The potential benefits include increased competitiveness (Han et al., 2007; Prajogo,

^{**} Focus multi-site ISO 9001 certified QMS.

2011; Zgirskas et al., 2021), higher customer satisfaction (Chatzoglou et al., 2015; Zgirskas et al., 2021), and increased overall financial performance (Chatzoglou et al., 2015; Zgirskas et al., 2021). However, there are challenges in realising these benefits, which sometimes lead to a decision to decertify. To overcome such challenges, Chiarini (2019) advises the necessity of top management involvement, to focus on continuous improvement tools, and to link certification with performance measurements. The latter two tightly connect QMS to internal drivers for improvement.

In multi-site QMS, motivational drivers may vary across sites (Bashan & Kordova, 2021). Global QMS must consider regional differences, which introduces challenges in maintaining consistency. Further, multi-site QMS require coordination among autonomous sites, each potentially operating under different local conditions, while striving to align with overarching global standards. Some sites might perceive multi-site QMS drivers as external when initiated from headquarters, while others as internal. This can lead to communication gaps, delays in decision-making, and difficulties ensuring uniform quality across all locations.

Poksinska (2007) establishes two QMS approaches: coercive and enabling. Coercive views QMS as top-down, while enabling involves stakeholders in its development. These approaches reflect QM's control or learning goal (Sitkin et al., 1994), with factors that influence whether a practice is perceived as enabling or coercive including transparency, flexibility, and involvement in decision-making (Adler & Borys, 1996). An enabling approach often relates to internal motivational drivers (Prajogo, 2011), while coercive relates to external drivers (Prajogo, 2011; Sampaio et al., 2012). Sampaio et al. (2012) argues that for QMS to be financially beneficial, its introduction must stem more from internal than external motivation across sites.

Perceived proximity

Bashan and Armon (2019) note that variations in relatedness between units in a multi-site organisation likely affect the view of a global company's aspirations for a multi-site QMS certificate. While national culture is often associated with the degree of geographical closeness between headquarters and global sites, Netland et al. (2012, p. 6) show that in relation to company-wide improvement programmes 'there are other factors [organisational culture, strategic role of plant] in the plants that by far triumph these cultural [national] dimensions.' Thus, it's crucial to look beyond geographical proximity when considering headquarters' influence on various sites. Rapidly evolving digital tools mean that physical distance is no longer the core factor for successful collaboration (Boschma, 2005; Wilson et al., 2008). The concept of perceived proximity addresses this by expanding proximity to a personal perception of distance, making it dyadic and asymmetric (Wilson et al., 2008).

Perceived proximity can be operationalised into cognitive, organisational, social, institutional, and geographical proximity (Boschma, 2005). First, cognitive proximity is important for sharing knowledge so that the recipient of the new knowledge can put it to use (Nooteboom, 2000). Second, organisational proximity is linked to cognitive proximity (Gilly & Torre, 2000) but encompasses a transition from the individual to the organisational level, considering interdependencies between organisations and the balance between the level of autonomy and control for entities within a company (Boschma, 2005). Third, social proximity can be defined through personal relationships based on friendships and relational experiences between coworkers (Boschma, 2005). Fourth, institutional proximity focuses on the macro level within an organisation, including a site's status in a global company (Boschma, 2005; Netland et al., 2012). With social connections and common values, an institution can achieve collectiveness (Boschma, 2005). Fifth, although geographical proximity has a clear definition, and may support other dimensions it is insufficient on its own to capture perceived proximity (Boschma, 2005). In other words, the idea that spatial closeness between coworkers leads to a better understanding and closer relationships needs to be reevaluated and investigated (Wilson et al., 2008).

Turning to multi-site QMS, there is a need to understand how the adoption of the joint standard way of working is affected by a site's perceived proximity to headquarters and/or other sites. Drawing on institutional theory, one explanation for why organisations in the same sector, or market, often display similar characteristics is mimetic pressure. This pressure makes organisations take actions to influence their perception among other stakeholders (Rogers et al., 2007) and mimic organisations that are perceived as successful (Dimaggio & Powell, 1983). Yang and Kang (2020) show that mimetic pressure is significant in the diffusion of environmental management systems (EMS) but not in the diffusion of QM practices. This might be due to more uncertainties related to EMS as compared to the already established QMS and its

acknowledged importance for a company's operation (Santos et al., 2016), as mimetic pressure is a stronger driving force under uncertainty (Yang & Kang, 2020).

Conceptual framework

In multi-site certified QMS, the headquarters with its central functions play a central role in controlling and ensuring that the QMS of various sites are integrated (Agmon et al., 2022; IAF, 2018). In other words, the headquarters plays a strategic role in multi-site QMS (Bashan & Armon, 2019). To further understand how site differences influence views on a multi-site QMS within one company group, two aspects are considered in the conceptual framework: motivational drivers and perceived proximity to headquarters. The framework will be used to understand differences between sites in the same company group in their view on multi-site QMS, to support the facilitation of an existing multi-site QMS or a transition to multi-site certification that best accommodates site differences and enhances the likelihood of learning, or even mimicking (Dimaggio & Powell, 1983; Rogers et al., 2007) between sites.

First, motivational drivers of introducing a QMS have been proven to be critical for the realised benefits of a QMS (Boiral & Amara, 2009; Poksinska, 2007; Prajogo, 2011; Sampaio et al., 2012). An enabling approach to QMS is related to internal motivational drivers such as productivity challenges, product defect rates, and/or production quality (Sampaio et al., 2012). Underlying the coercive approach are external motivational drivers such as corporate image, customer relationships, and customer communication (Sampaio et al., 2012). In a company group with diverse sites (geographically, culturally, etcetera), these motivational drivers are unlikely to be homogeneous across all sites and challenges inherent in such differences increase at higher levels of global development (Bashan & Kordova, 2022).

Second, the introduction of a multi-site QMS certification is most often driven by headquarters. Whether this is viewed as an external or internal driver depends on the relationship between the local site and global headquarters. In this study, perceived proximity (Boschma, 2005; Wilson et al., 2008) is used to understand this relationship and how it can facilitate a transition to multi-site QMS.

Materials and methods

As the purpose centres on the exploration of a contemporary issue in its natural setting, a qualitative research approach (Meredith, 1998) with a case study design is well suited (Voss et al., 2002). The use of multiple sites within a single company context makes an embedded multiple-case study design suitable (Miles & Huberman, 1994). The empirical case category (Dumez, 2015) focuses on perceived QMS value in one global company, while the theoretical case categories (Dumez, 2015) examine perceived proximity (Wilson et al., 2008) and coercive versus enabling motivational drivers of QMS (Poksinska, 2007). Figure 1 provides an overview of the study design.

Sampling

The unit of analysis (Patton, 2015) is a global company's sites and their views on certified QMS. The sampling criteria of the case company were: (1) globally spread sites; (2) a certified multi-site QMS covering some, but not necessarily all, sites; and (3) all sites having a certified QMS. The sampled global company operates in the chemical process industry with headquarters in a central European country. It only has B2B customers and have high regulations on raw materials, for example the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) framework. The characteristics of the products allow presence in many different markets spanning from automotive, wind, marine, heavy machinery to industries like textile and food production. The company has 13 sites across 12 countries and has been certified to ISO 9001 for 34 years, and has had their QMS being multi-site certified for ten years. At the time of the study eight of the 13 sites were included in multi-site QMS. The remaining five sites had their own, local single-site certified QMS.

Four sites (Sites A–D) were selected based on four key informant interviews with headquarters employees, using a key informant sampling strategy (Patton, 2015). The key informants (n = 4), Quality and HSE Managers, were chosen based on their experience with certified QMS and sites' QMS usage. All four informants mapped all the company sites (n = 13) in two dimensions, as in the conceptual framework (see Figure 1): high or low perceived proximity, and external or internal motivational drivers of QMS. The sites were



Figure 1. Research design (Source: authors own work).

selected to ensure maximum variation sampling (Patton, 2015), in other words the key informants agreed on four sites with different characteristics in respect to perceived proximity and motivational drivers. This resulted in a sample of four sites

Data collection

The data was collected from interviews (n = 12) and internal company documents. Three interviews were conducted at each of the four sites (Table 2). The interviewees at each site were sampled to (1) have responsibility for the QMS (Quality Manager), (2) be involved in the daily operational tasks of the QMS (Quality Practitioner), and (3) have responsibility for production/logistics operations at the site (Operations Practitioner). The interviews were based on a thematic, semi-structured interview guide (see Appendix A). Examples of interview questions are as follows: 'Where does change or improvement of the quality management system start at your site, and who drives it?', 'What are the motivations at your site to extend the MS [management system] and include a new standard?', and 'Can you describe what role you think headquarters have in relation to your QMS work?' Two of the authors conducted the interviews online. Although traditional in-person interviews are often seen as standard in qualitative research, recent studies suggest that video-based interviews can yield data of comparable depth and quality. Empirical comparisons have shown no significant differences between in-person and videobased interviews in terms of conversational involvement or breadth of themes identified (Anthony et al., 2025; Roberts et al., 2025). Each interview lasted 45-60 min and was recorded and transcribed.

Table 2. Interviewees (Source: authors own work)

Site position	Identifier	Role	Site characteristic
Independent	l1	Quality manager	External-Low perceived proximity
•	12	Health, safety and environment, operational role	,
	13	Production manager	
Sceptical	14	Quality manager	External -High perceived proximity
•	15	Quality Operational role	- , , ,
	16	Production manager	
Convinced	17	Quality manager	Internal-High perceived proximity
	18	Quality Operational role	
	19	Production manager	
Individualist	l10	Quality manager	Internal -Low perceived proximity
	l11	Quality Operational role	
	l12	Logistics manager	

Table 3. Internal documentation checked for occurrence, conformity to guidelines, and language.

Internal documentation	2020	2021	2022	2023
Site A	Missing	Missing	Missing	Missing
Site B	In English and according to headquarters' guidelines, but with additional local versions.	In English and according to headquarters' guidelines, but with additional local versions.	In English and according to headquarters' guidelines, but with additional local versions.	In English and according to headquarters' guidelines, but with additional local versions
Site C	In English and according to headquarters' guidelines	In English according and according to headquarters' guidelines.	In English and according to headquarters' guidelines.	In English and according to headquarters' guidelines.
Site D	In local language and in their own format.	In local language and in their own format.	In local language and in their own format.	In local language and in their own format.

Second, the companies' internal documentation on the evaluation and control of management system activities were collected to analyse site differences, see Table 3. These documents are part of fulfilling the requirements regarding yearly performance evaluation and improvement in ISO9001:2015. For the independent site, there were no internal company documents uploaded in the central system; thus, they were not accessible to the central quality function at headquarters.

Data analysis

Interview data were analysed using QSR NVivo, and analysis began with an open reading of the transcripts, followed by an iterative approach using both deductive and inductive coding. Deductive coding was centred on concepts such as perceived proximity and motivational drivers (see Table 4). Deductive coding was accompanied by inductive coding to allow for the identification of new variables contributing to the generation of new concepts (Miles & Huberman, 1994), such stated advantages and scepticism towards multisite QMS. Overall, iterative coding allowed for both the amendment of predefined codes and the addition of new codes (Eisenhardt, 1989).

Research quality

For data collection, a triangulation approach was applied to augment the quality and reliability of the study, as recommended by Yin (2014). The analysis integrated primary data from semi-structured interviews with secondary data collected from company documents. Despite potential biases and the absence of unbiased control of secondary data provided by companies (Ellram & Tate, 2016), documentation aligned with a certified QMS were assumed to be somewhat objective as they are subject to standard requirements and auditing. This triangulation of data sources allowed us to develop a more comprehensive and holistic understanding of the phenomena under investigation (Calantone & Vickery, 2009). To enhance the trustworthiness of our study, the co-authors collaboratively analysed the interview data (Meredith, 1998). Furthermore, one co-author was not involved in data collection and thus assumed the role of an external investigator.

Results

Across the dimensions of the conceptual framework, four empirically derived site archetypes (Figure 2) are proposed and elaborated on in the following: the Independent, the Sceptical, the Convinced, and the **Individualists**

The independent: external drivers of QMS and low perceived proximity to headquarters

For this site, with low perceived proximity to headquarters, employees emphasise the need for improved communication to strengthen relationships. There is a lack of understanding, trust, and transparency, leading to limited common ground and objectives. This distrust is e.g. evident in not providing internal documentation to headquarters' central quality function. Moreover, some reported QMS metrics are unused;

Table 4. Main codes and exemplary quotes for each site (L = low perceived proximity, H = high perceived proximity) (Source: authors own work).

	Motivational driver (Poksir	Motivational driver (Poksinska, 2007; Sampaio et al., 2012)		Perc	Perceived proximity (Boschma, 2005)	(50)	
	External	Internal	Cognitive proximity	Organisational proximity	Social proximity	Institutional proximity	Geographical proximity
Independent	'that comes as a separate thing and you start working with it' (12)		L: 'you probably may not understand or have the ability to see what's happening at a higher level' (11)	L: 'heading down a path not knowing what a level, or two, above us do, or had already some decisions been made' (11)	L: 'have to work with a lot of people overseas and it's just difficult because they're way over there and I think they're trying to make a lot of decisions from now.' (I3)	L: There there's there's so much out there in the corporate [level] There's so many standards and things like that - that I know here -we're not really aware of: (12)	L: 'It's also hard to breakthrough some of those cultural barriers.' (13)
Sceptical	'My impression would be that we need to work for headquarters [in the multi-site certification]. At the same time that we need to work for our sites.' (14)		H: 'When I need something, I only need to write a short chat [message] in Teams' (14)	H: 'I'm very comfortable to count on a group of people that can help me or can support this is the stronger point of being a part of the global group.' ((6)	H: 'most of the time you have more fast answers in this non-formal relationships than the formal hierarchy.' (16)	H: 'You are sure that the work is well-implemented [] being more secure about the system or about your daily work ' (!5)	H: Fortunately the company allows us to meet a lot of people, not only in Teams, even in person.' (16)
Convinced		I also think that quality systems can still play a very important role in this continuous improvement' (I7)	H: 'I think for headquarters, it is easy to communicate.' (I7)	H: 'I think that the global [company] will support us and .[] give guidance to us.' (18)	H: 'If you have a problem [] you will get support from all the sites, from all the people who can help you. I think this is the biggest benefit.' (!9)	H: 1 prefer to work in a company because this means [] a lot of new things we can exchange to learn.' (17)	H: 'We'll have close communication with the headquarter.' (18)
Individualist		'involving all related functions and we are talking with them, exchange ideas and show our expectations, like the timeline, like the final target. And then we make the change implementation plan.' (110)	L: 'What can I do to adjust to us and adapt [the practices in QMS] then.' (I11)	L.'integration among the global sites, I think this is my big expectation for this now.' (110)	L: 'how can I do to have time to do? How can I do to put it in our culture, in our normal routine?' (112)	L: 'What is the risk that I have when I complain [on a] requirement for this specific certification?' (112)	L: 'if you were here we have opportunity [] to show you our management system manual.' (110)

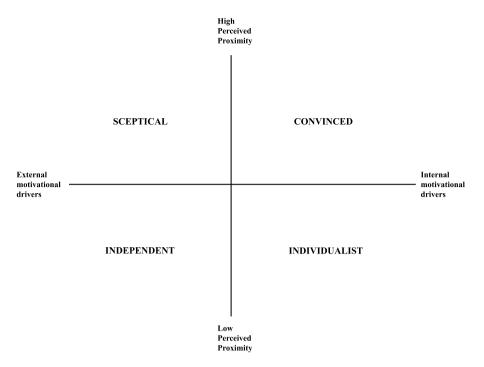


Figure 2. Sampled sites relating to the conceptual framework (Source: authors own work).

'headquarters wants us to report the data [key performance indicators for the operations] and I'm going to but that's an after-the-fact metric right. We can't run our business by looking at it here.' (I1) In addition, some reported non-conformities are ignored due to perceived irrelevance in local contexts.

A common critique of the QMS is its lack of contextualisation, crucial for perceived value. This ranges from explicating links between multi-site and single-site QMS to understanding shop floor operations. Questions arise about adapting the multi-site QMS to existing systems as there is a perception that contextualisation is hindered by lack of operational knowledge:

they're way over there and I think they're trying to make a lot of decisions from now. I mean, it's a bad way from behind the computer, and they've never really been here to see what is happening on the floor and what's actually happening throughout the plant. (I3)

The quality manager (I1) summarises this as headquarters needing to 'recognize your internal customer.' Few benefits of certified multi-site QMS are envisioned in these sites, with some activities seen as token-ism: 'utilizing the audit process for one to identify areas for opportunity for improvement right. And we can get us some details around that because we shouldn't be auditing just for the sake of auditing right. It needs to be purposeful and intentional.' (I1) However, there's potential for a positive view if value is made explicit, such as reduced documentation and audit preparation efforts. This could foster closer cooperation between headquarters and sites.

I think global approaches are great. I think we still need to acknowledge and recognize and respect there are individual things that happen at a plant where a global approach may not be one solution. [One] can't meet all the requirements right. [...] like not one size fits all you know, and I know that that's a struggle sometimes when I think about the company and, historically, the culture. (I1)

The sceptical: external drivers of QMS and high perceived proximity to headquarters

For the sceptical site, documentation is central to QMS, ensuring compliance with customer requirements and standards. The shift to multi-site certification does not appear to change the compliance-oriented view: 'I don't have the impression [that] I'm having extra benefits or less work because I am in a corporate management system.' (I4) In these sites, management is highly involved in QMS, with top-down dissemination of improvements and changes. This approach leads to QMS being viewed as separate from daily work, with limited employee involvement. QMS tasks are often seen as add-ons

to established operations, resulting in redundancies. For example, a new process review standard led to duplication: 'now we have to introduce it [a process review advised from headquarters] with the system. But it's different if we do it on internally or externally [for headquarters] because they have another tool.' (I5) The redundant work and perceived lack of benefits raise concerns about increased administration: 'the documentation worries them [shop floor personnel], it's not a daily tool. Maybe we can work to win more, be more efficient.' (I5)

Despite these challenges, the site has established collaborations with headquarters employees in specific operational areas, building confidence and trust: '[we] have this transparency; we don't need to hide anything. There is nothing to hide.' (I4) This trust may lead to acceptance of headquarters initiatives and a belief that 'a global quality management system has to be established from the top and not adapted.' (16) Overall, the multi-site QMS is seen as having both simplifying and complicating effects on operations:

to become a global company, for me it's easier to handle some processes because it does not depend only on us but in some cases, it can also be a stopper where we want to implement some fast activities or some fast solutions, to be honest. (I6)

The convinced: internal drivers of QMS and high perceived proximity to headquarters

The convinced site views multi-site QMS positively, emphasising guidance from headquarters and recognising strategic and operational benefits. A multi-site QMS is seen as part of 'the strategic alignment under the unified standard. So, the headquarters, I think they should ensure that and show the interest of the entire group instead of each site.' (I7) Thus, there is a perceived supportive link between multisite QMS and daily operations. A production manager (I9) states:

My feeling is it works [well] in a global company. It's better in terms of the process because I see that it's clearer to the operation, to the process what you need to do, how you need to do, why you need to do ... The base is more robust.

The site values improvements deployed from headquarters, with the quality manager actively seeking 'changes across all of the functions and the entire company.' (I7) This collaborative view extends across the quality department, as an operative quality practitioner notes: 'Yeah, we need to work together and to support each other.' (18) When needed, these sites utilise the option to escalate topics to headquarters for support, input, or expertise. They appreciate the diversity and learning opportunities in a global company: 'I prefer to work in a global company because this means a lot of the different cultures, a lot of the new things we can exchange to learn.' (I7) Despite potential challenges, differences are seen as opportunities for learning and inspiration. In sum, good communication and personal relationships foster closeness to headquarters and other sites: 'If you have a problem, you have a question, you will get support from all the sites [...] I think this is the biggest benefit, at least for me.' (I6) This closeness is reflected in that the documentations submitted to headquarters cover both strengths and weaknesses of sites' operations and are done according to headquarter guidelines.

The individualist: internal drivers of QMS and low perceived proximity to headquarters

The individualist site values their already established single-site QMS in supporting systematic improvement, e.g. with practices addressing root causes and organising training on improvement work. Autonomy is crucial, with dedicated process owners responsible for the site's procedures based on their experience and operational knowledge. The site tends to perceive headquarters as inconsiderate of local needs when introducing new systems or processes. This leads to low buy-in for headquarters initiatives, such as the multi-site QMS certification.

The local narrative suggests multi-site certification aims to save money and time while bridging local and global QMS, but it is met with scepticism:

There are a lot of people in each area, and for example here, we're responsible for quality certification, health and safety certification, environmental certification, ethical certification, and so on. [...] It's not so easy for us to follow all of the things. (I10)

While acknowledging that multi-site QMS should complement single-site QMS, this site demands proof of benefits from new systems to avoid 'double work, for example, some stuff that I'm asked about: scorecards or other activities. In the beginning, I was thinking that this would be everything managed by headquarters, but no, we have to keep doing this.' (I12) This perception complicates the multi-site QMS implementation.

Finally, the site's internal QMS documentation use local templates in the local language, deviating from headquarters' template. However, these reports appear effective, with detailed QMS requirement assessments referencing various routines and providing evidence e.g. through photos. To maintain operational value in a multi-site QMS, the site expects involvement in the rollout and the ability to adapt to local context: 'sometimes it's not so easy for us to implement something that they have at headquarters because of the capacity of the site.' (I11)

Discussion

Aiming to develop an empirically based framework with archetypes illustrating how sites' motivational drivers for QMS and perceived proximity to headquarters shape their views on multi-site QMS, the result of this study moves beyond the traditional external-internal motivational driver dichotomy (Delfino et al., 2024; Poksinska, 2007; Sampaio et al., 2012) on perceptions of QMS. By incorporating the concept of perceived proximity (Boschma, 2005; Wilson et al., 2008), it offers an understanding of additional factors influencing perceptions of multi-site QMS in globally dispersed organisations, see Figure 3.

The study demonstrates that sites with high perceived proximity to headquarters tend to value operating within a multi-site QMS, recognising learning opportunities from both headquarters and other sites. Conversely, sites with low perceived proximity view inter-site differences as problematic for multi-site certifications and cooperation. To address this resistance, enhancing cognitive, organisational and social proximity through improved understanding of each other's competencies is crucial and supportive of knowledge sharing (Nooteboom, 2000). These findings resonate with broader themes identified in the literature (see Table 1), particularly regarding challenges faced during the transition from local to global QMS structures (Bashan & BenJacob, 2023; Bashan & Notea, 2018). The struggle to coordinate quality systems across dispersed subsidiaries reflects not only operational hurdles but also perceptual and relational ones, as evidenced by the role of proximity in this study. Moreover, the tension between global standardisation and local adaptation, as discussed in

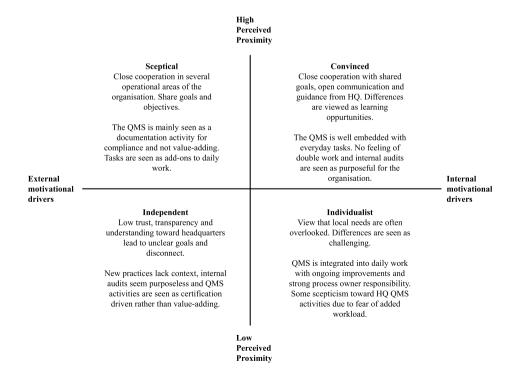


Figure 3. Conceptual framework with site characteristics per archetype (Source: authors own work).



the context of parent-subsidiary relationships (Bashan & Armon, 2019; Bashan & Kordova, 2022) is visible in the different opinions and views on top-down driven multi-site QMS certification.

Interestingly, the study also finds that sites with internal motivational drivers (which directly impact QMS benefits; Sampaio et al., 2012) show greater acceptance of top-down multi-site QMS implementation. For individualist sites already recognising QMS's internal operational benefits, however, the key shift involves moving from emphasising internal drivers to alignment and strengthening the proximity to the headquarters. This responds to calls for research that move beyond describing challenges of transitioning from single- to multi-site QMS, toward understanding the dynamics of such transitions (Agmon et al., 2022; Agmon & Kordova, 2024). The findings suggest that perceived proximity, cognitive, organisational, and social could be mechanisms supporting such transitions.

Theoretical implications

First, previous research on certified QMS focuses on motivational drivers and their impact on the benefits of QMS (Murmura et al., 2024; Poksinska, 2007; Sampaio et al., 2012; Zgirskas et al., 2021) assumes that these drivers have a critical impact. However, when moving toward multi-site certification, this study points to differences in perceived benefits that move beyond depending solely on external or internal motivational drivers. Thus, drawing on the concept of perceived proximity (Boschma, 2005; Wilson et al., 2008), this study provides a more complex view of what influences the perceived benefits of multi-site QMS. For sites with external motivational drivers of QMS, the assumption might be that a multi-site QMS would also be met with scepticism. However, this study points to a somewhat positive view of multi-site QMS in Sceptical and Independent sites, counter to what might intuitively be expected. Perhaps not in the sense of a value-adding QMS but rather a QMS that does not entail extra work and as such should be clearly 'established from the top and not adapted.' (I6)

On the other hand, sites characterised by low perceived proximity view differences between sites as a main problem and are sceptical toward multi-site certifications as 'not one size fits all' and doubt headquarters' knowledge and insights into their specific operations. To overcome such resistance, the understanding of each other's competencies should be strengthened to support enhanced cognitive proximity, which is a critical basis for sharing knowledge (Nooteboom, 2000). This study further shows that a convinced site that already has internal motivational drivers for QMS, which directly impacts the benefits of a QMS (Sampaio et al., 2012), shows acceptance of the top-down design of a multi-site QMS. However, moving beyond motivational drivers, respondents from this site expressed concern over the potential beyond their single-site QMS; thus, there is a need to point to learning goals (Sitkin et al., 1994). The individualist site also shares the view of QMS as beneficial for internal operations; in other words, there is no urgency in emphasising the internal drivers and enabling characteristics of QMS when moving into a multi-site certificate. Rather, there is a need to strengthen proximity to headquarters and other sites.

Proposition: To strengthen perceived proximity between sites and headquarters through mutual understanding of competencies and shared learning goals enhances acceptance and perceived value of multi-site QMS.

Second, drawing on institutional theory (Dimaggio & Powell, 1983), particularly regarding how mimetic pressure influences sites' acceptance of multi-site QMS, this study suggests that mimetic pressure (Rogers et al., 2007) can facilitate the transition from a single- to multi-site QMS, and also support transition from one site archetype to another. To enhance mimetic pressure, certain sites can be communicated as best practices and have been successful (Dimaggio & Powell, 1983). For example, the Convinced site with internal and enabling motivational drivers of QMS and high perceived proximity to headquarters could be used as a bestpractice example to learn from the case company's transition to a multi-site QMS. However, to complicate matters, as Yang and Kang (2020) show, mimetic pressure is not as influential on QMS as it is on EMS, depending on the lesser degree of uncertainty related to QMS. However, contrary to a single-site QMS, the perceived results from a multi-site QMS are highly uncertain for the included sites, especially those with low perceived proximity to the headquarters. Thus, mimetic pressure may increase and drive actions toward the joint practices required in a multi-site QMS.

Proposition: Mimetic pressure increases the likelihood of site-level acceptance of multi-site QMS, particularly when best-practice examples with strong internal motivation and high perceived proximity to headquarters are made visible.

Practical implications

To effectively facilitate a multi-site QMS and address the different characteristics of the proposed archetypes the following practical strategies are recommended. For sites identified as *Independent*, it is essential to enhance all dimensions of perceived proximity, starting with social proximity to build trust and transparency. This should be followed by strengthening cognitive proximity and organisational proximity to establish a shared understanding of, and common goals for the multi-site QMS. For sites identified as *Sceptical* there is a need to improve the view on QMS activities overall. Here it is important to have a better understanding of local ways of working to avoid introducing double work. For the sites identified as *Convinced* it is advised to keep involving practitioners at the site to maintain good relationships and the shared common ground in the views of QMS. These sites could be used as best practice to create mimetic pressure for sites of other archetypes. Regarding sites identified as *Individualists* perceived proximity need to be focused. For headquarters it is important to understand the local QMS, since it is viewed as enabling by the site, not to risk the multi-site QMS being seen as a coercive and external system which can lead to the site developing into a *Sceptical* site even after enhancing the perceived proximity.

In summary, this study has two areas of practical implications: how to enhance a multi-site QMS to enhance transparency and involvement of the sites, and how to operationalise transitions into the multi-site by understanding and perhaps even influencing the site archetypes. First, in multi-site certification, QMS motivational drivers become multi-faceted. Local QMS is hopefully seen as enabling of daily operations (Poksinska, 2007), while globally induced multi-site QMS, where headquarters play a strategic role (Bashan & Armon, 2019), may be seen as coercive. For sites valuing established single-site QMS, communicating and providing added value in daily operations and cross-site learning opportunities is crucial, thus similar to a situation when integrating multiple management systems (e.g. ISO 9001 and ISO 14001) (Bernardo et al., 2015; Karapetrovic & Jonker, 2003; Zeng et al., 2010). Low-proximity sites can enhance enabling views of multi-site QMS through increased involvement in decision-making and internal transparency (Adler & Borys, 1996). As a support, establishing forums for sharing best practices and addressing quality issues can be a way to create institutional pressure and mimicking (Dimaggio & Powell, 1983; Rogers et al., 2007), making the multi-site QMS a communication platform within the company to create a common ground with frequent communication and thereby increasing cognitive, organisational and social proximity.

Proposition: When shifting to multi-site certification, or including new sites in an existing multi-site QMS, local sites should be involved early, with a focus on identifying daily operational benefits at the sites, and setting up forums with extensive communication for sharing practices as a way to build buy-in.

Second, when transitioning to, or facilitating, a large multi-site QMS, a stepwise process using site clusters might be a way forward. Moving from external to internal motivational drivers can be supported by creating multi-site certifications based on technological similarities, strengthening cognitive proximity and knowledge sharing (Boschma, 2005; Nooteboom, 2000). Further, highlighting certain sites' strategic roles (Netland et al., 2012) can create mimetic pressure (Dimaggio & Powell, 1983; Rogers et al., 2007). Clustering sites with high-proximity to each other, meaning not only focusing on geographical closeness but sites with similar products, facilities, or processes could lead to value-adding practice sharing and acceptance for standardisation in a QMS (Bashan & Armon, 2019). This approach builds on cognitive and institutional proximity (Boschma, 2005) and enhances the likelihood of multi-site QMS being viewed as enabling daily operations (Chiarini, 2019). While clustering sites into more than one multi-site certificates may limit initial cost reductions (Cândido & Ferreira, 2023), further merging into fewer multi-site certificates can occur later.

Proposition: Start the multi-site QMS transition with clusters of similar sites to facilitate knowledge sharing and local relevance, not only focusing on geographical closeness, before gradually scaling up as alignment and engagement grow.



Limitations and future research directions

Naturally, this study has its limitations. One limitation is the case-study design of one company, although four different sites were embedded. An avenue for future research could be to move toward a more quantitative approach and study the drivers as well as the realised benefits of multi-site certification across several companies. Another limitation is that this study focused on how sites perceived a multi-site QMS in relation to their headquarters while future research could further explore the headquarters' views on multi-site QMS. Finally, the framework in Figure 3 is based on empirical findings that can provide guidance for the facilitation of a multi-site QMS but has not yet been further tested or validated, thus future research is recommended.

Conclusions

First, in response to the research question on how the interplay between perceived proximity and motivational drivers shape how multi-site Quality Management Systems (QMS) are perceived, this study offers a framework of archetypes for implementation and facilitation of multi-site QMS in global companies. It identifies four distinct site archetypes within a multi-site certificate: the Individualist, the Convinced, the *Independent*, and the *Sceptical*. By introducing the concept of perceived proximity, the study emphasises the importance of the relationship between a site and headquarters during the transition to a multi-site QMS. Second, in response to the research question on how understanding various site archetypes can facilitate a transition to multi-site QMS, the findings suggest that building positive perceptions of multi-site QMS requires active site involvement and transparent decision-making processes. To increase the likelihood of a successful transition, organisations should adopt a stepwise implementation strategy; beginning with clusters of sites with high perceived proximity before expanding to the entire company. In conclusion, the study offers both a theoretical lens and practical guidance for organisations aiming to implement a multi-site QMS, or expand and improve their current multi-site QMS, e.g. by emphasising the importance of alignment between headquarters and sites.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Data availability

Data will be made available to readers upon request sent to the corresponding author.

Supplemental data

Supplemental data for this article can be accessed online at https://doi.org/10.1080/14783363.2025.2547179.

References

- Adler, P., & Borys, B. (1996). Two types of bureaucracy: Enabling and coercive. Administrative Science Quarterly, 41(1), 61-89. https://doi.org/10.2307/2393986
- Agmon, N., & Kordova, S. (2024). Model for global quality management system in system of systems: Quality management in system of systems project. Applied System Innovation, 8(3), 1-34. https://doi.org/10.3390/asi8010003
- Agmon, N., Kordova, S., & Shoval, S. (2022). Global quality management system (G-QMS) in systems of systems (SoS)—aspects of definition, structure and model. Systems, 10(4), 1-24. https://doi.org/10.3390/systems10040099
- Anthony, K., Miller-Day, M., Dupuy, M., Ventura, J., Hodges, A. L., Alonso-Pecora, D., & Dimas, H. (2025). Is there really a difference? A comparison of In-person and online qualitative interviews. International Journal of Qualitative Methods, 24, 1–13. https://doi.org/10.1177/16094069251349580
- Bashan, A., & Armon, D. (2019). Quality management challenges in a dynamic reality of mergers, acquisitions and global expansion. International Journal of Quality & Reliability Management, 36(7), 1192-1211. https://doi.org/ 10.1108/IJQRM-06-2018-0161
- Bashan, A., & Ben-Jacob, A. (2023). New challenges for the global quality management systems in a dynamic environment-development of theoretical framework. American Journal of Management Science and Engineering, 8(1), 19-34.



- Bashan, A., & Kordova, S. (2021). Globalization, quality and systems thinking: Integrating global quality management and a systems view. *Heliyon*, 7(2), e06161. https://doi.org/10.1016/j.heliyon.2021.e06161
- Bashan, A., & Kordova, S. (2022). Challenges in regulating the local and global needs of quality management systems. International Journal of Quality & Reliability Management, 39(8), 1996–2019. https://doi.org/10.1108/IJQRM-04-2021-0106
- Bashan, A., & Notea, A. (2018). A hierarchical model for quality management systems in global organizations. International Journal of Quality & Reliability Management, 35(7), 1380–1398. https://doi.org/10.1108/IJQRM-03-2017-0055
- Bernardo, M., Simon, A., Tarí, J. J., & Molina-Azorín, J. F. (2015). Benefits of management systems integration: A literature review. *Journal of Cleaner Production*, 94, 260–267. https://doi.org/10.1016/j.jclepro.2015.01.075
- Boiral, O., & Amara, N. (2009). Paradoxes of ISO 9000 performance: A configurational approach. *Quality Management Journal*, 16(3), 36–60. https://doi.org/10.1080/10686967.2009.11918240
- Boschma, R. (2005). Proximity and innovation: A critical assessment. *Regional Studies*, 39(1), 61–74. https://doi.org/10. 1080/0034340052000320887
- Calantone, R., & Vickery, S. K. (2009). Special topic forum on using archival and secondary data sources in supply chain management research. *Journal of Supply Chain Management*, 45(3), 53–54. https://doi.org/10.1111/j.1745-493X.2009.03160.x
- Cândido, C., & Ferreira, L. (2023). ISO 9001 internal decertification motivations: Exploring barriers and benefits of certification as withdrawal antecedents. *Production Planning & Control*, 34(4), 330–344. https://doi.org/10.1080/09537287.2021.1916638
- Chatzoglou, P., Chatzoudes, D., & Kipraios, N. (2015). The impact of ISO 9000 certification on firms' financial performance. *International Journal of Operations & Production Management*, 35(1), 145–174. https://doi.org/10.1108/IJOPM-07-2012-0387
- Chiarini, A. (2019). Why are manufacturing SMEs cancelling their ISO 9001 certification? Research from Italy. *Production Planning & Control*, 30(8), 639–649. https://doi.org/10.1080/09537287.2019.1566840
- Delfino, P. M. V., Peixinho, R. M. T., Cândido, C. J. F., & Serra Coelho, L. M. (2024). A survey on ISO 9001 decertified companies: The three stages leading to withdrawal. *Total Quality Management & Business Excellence*, 35(15-16), 1788–1815. https://doi.org/10.1080/14783363.2024.2399699
- Dimaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160. https://doi.org/10.2307/2095101
- Dumez, H. (2015). What is a case, and what is a case study? Bulletin de Méthodologie Sociologique, 127(1), 43-57. https://doi.org/10.1177/0759106315582200
- Eisenhardt, K. (1989). Building theories from case study research. *The Academy of Management Review*, 14(4), 532–550. https://doi.org/10.2307/258557
- Elg, M., Gremyr, I., Hellström, A., & Witell, L. (2011). The role of quality managers in contemporary organisations. Total Quality Management & Business Excellence, 22(8), 795–806. https://doi.org/10.1080/14783363.2011.593899
- Ellram, L. M., & Tate, W. L. (2016). The use of secondary data in purchasing and supply management (P/SM) research". *Journal of Purchasing and Supply Management*, 22(4), 250–254. https://doi.org/10.1016/j.pursup.2016.08.005
- Feng, M., Terziovski, M., & Samson, D. (2007). Relationship of ISO 9001: 2000 quality system certification with operational and business performance: A survey in Australia and New Zealand-based manufacturing and service companies. *Journal of Manufacturing Technology Management*, 19(1), 22–37. https://doi.org/10.1108/17410380810843435
- Fonseca, L. M. C. M., Domingues, J. P., Machado, P. B., & Harder, D. (2019). ISO 9001: 2015 adoption: A multi-country empirical research. *Journal of Industrial Engineering and Management (JIEM)*, 12(1), 27–50. https://doi.org/10.3926/jiem.2745
- Gilly, J.-P., and Torre, A. (2000) Proximity relations: Elements for an analytical framework. In M. B. Green & R. B. McNaughton (Eds.), *Industrial networks and proximity*. Aldershot: Ashgate Publishing.
- Han, S. B., Chen, S. K., & Ebrahimpour, M. (2007). The impact of ISO 9000 on TQM and business performance. *The Journal of Business and Economic Studies*, 13(2), 1–23.
- International Accreditation Forum. (2018). IAF mandatory document for the audit and certification of a management system operated by a multi-site organization (IAF MD 1:2018), International Accreditation Forum, available at: https://iaf.nu/en/iaf-documents/?cat_id = 7
- ISO, International Organization for Standardization. (2023). *ISO survey*. https://www.iso.org/the-iso-survey.html Karapetrovic, S., & Jonker, J. (2003). Integration of standardized management systems: Searching for a recipe and ingredients. *Total Quality Management & Business Excellence*, 14(4), 451–459. https://doi.org/10.1080/1478336032000047264
- Khan, R. A., Mirza, A., & Khushnood, M. (2020). The role of total quality management practices on operational performance of the service industry. *International Journal for Quality Research*, 14(2), 439–454. https://doi.org/10.24874/IJQR14.02-07
- Meredith, J. (1998). Building operations management theory through case and field research. *Journal of Operations Management*, 16(4), 441–454. https://doi.org/10.1016/S0272-6963(98)00023-0
- Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. SAGE Publications Ltd.



Murmura, F., Musso, F., Bravi, L., & Pierli, G. (2024). The role of quality management systems in fostering the international competitiveness of companies. *International Journal of Quality & Reliability Management*, 41(7), 1979–1999. https://doi.org/10.1108/IJQRM-02-2023-0040

Netland, T., Mediavilla, M., & Errasti, A. (2012), The insignificant role of national culture in global lean programmes, 19th Advances in Production Management Systems (APMS), Sep 2012, Rhodes, Greece, 454-462. https://doi.org/10.1007/978-3-642-40361-3 58.

Nooteboom, B. (2000). Learning and innovation in organizations and economies. Oxford University Press.

Ochieng, J., Muturi, D., & Njihia, S. N. (2015). The impact of ISO 9001 implementation on organizational performance in Kenya. *The TQM Journal*, 27(6), 761–771. https://doi.org/10.1108/TQM-06-2015-0071

Patton, M. Q. (2015). Qualitative research & evaluation methods. SAGE Publications Ltd.

Poksinska, B. (2007). Does standardization have a negative impact on working conditions? *Human Factors and Ergonomics in Manufacturing & Service Industries*, 17(4), 383–394. https://doi.org/10.1002/hfm.20080

Prajogo, D. I. (2011). The roles of firms' motives in affecting the outcomes of ISO 9000 adoption. *International Journal of Operations & Production Management*, 31(1), 78–100. https://doi.org/10.1108/01443571111098753

Roberts, J., Onuegbu, C., Harris, B., Clark, C., Griffiths, F., Seers, K., & Boardman, F. (2025). Comparing In-person and remote qualitative data collection methods for data quality and inclusion: A scoping review. *International Journal of Qualitative Methods*, 24, 1–14. https://doi.org/10.1177/16094069251316745

Rogers, K., Purdy, L., Safayeni, F., & Duimering, P. (2007). A supplier development program: Rational process or institutional image construction? *Journal of Operations Management*, 25(2), 556–572. https://doi.org/10.1016/j.jom.2006. 05.009

Sampaio, P., Saraiva, P., & Guimarães Rodrigues, A. (2009). ISO 9001 certification research: Questions, answers and approaches. *International Journal of Quality & Reliability Management*, 26(1), 38–58. https://doi.org/10.1108/02656710910924161

Sampaio, P., Saraiva, P., & Monteiro, A. (2012). ISO 9001 certification pay-off: Myth versus reality. *International Journal of Quality & Reliability Management*, 29(8), 891–914. https://doi.org/10.1108/02656711211270351

Santos, G., Rebelo, M., Lopes, N., Alves, M. R., & Silva, R. (2016). Implementing and certifying ISO 14001 in Portugal: Motives, difficulties and benefits after ISO 9001 certification. *Total Quality Management & Business Excellence*, 27(11-12), 1211–1223. https://doi.org/10.1080/14783363.2015.1065176

Sila, I. (2020). Investigating changes in TQM's effects on corporate social performance and financial performance over time. *Total Quality Management & Business Excellence*, 31(1-2), 210-229. https://doi.org/10.1080/14783363.2018. 1458609

Sitkin, S., Sutcliffe, K., & Schroeder, R. (1994). Distinguishing control from learning in total quality management: A contingency perspective. *The Academy of Management Review*, 19(3), 537–564. https://doi.org/10.2307/258938

Voss, C., Tsikriktsis, N., & Frohlich, M. (2002). Case research in operations management. *International Journal of Operations and Production Management*, 22(2), 195–219. https://doi.org/10.1108/01443570210414329

Wilson, J. M., Boyer O'Leary, M., Metiu, A., & Jett, Q. R. (2008). Perceived proximity in virtual work: Explaining the paradox of far-but-close. *Organization Studies*, 29(7), 979–1002. https://doi.org/10.1177/0170840607083105

Yang, M. G., & Kang, M. (2020). An integrated framework of mimetic pressures, quality and environmental management, and firm performances. *Production Planning & Control*, 31(9), 709–722. https://doi.org/10.1080/09537287. 2019.1681533

Yin, R. K. (2014). Case study research: Design and methods (5th ed.). Vancouver: SAGE.

Zeng, S. X., Tam, V. W., & Le, K. N. (2010). Towards effectiveness of integrated management systems for enterprises. Engineering Economics, 21(2), 175–179.

Zgirskas, A., Ruževičius, J., & Ruželė, D. (2021). Benefits of quality management standards in organizations. *Standards*, 1(2), 154–166. https://doi.org/10.3390/standards1020013