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Increasing the value of quality management systems

Value of
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management
systems

Ida Gremyr

*Department of Technology Management and Economics,
Chalmers University of Technology, Gothenburg, Sweden*

Jan Lenning

Chalmers University of Technology, Gothenburg, Sweden, and

Mattias Elg and Jason Martin

Linköping University, Linköping, Sweden

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Abstract

Purpose – Over one million organisations have a quality management system (QMS) certified to the ISO 9001 standard; however, the system requires a lot of resources and its value has been questioned. This critique also leads to a questioning of the strategic relevance of quality management. The purpose of this paper is to explore how different types of uses of QMS correlate with management perceptions of quality management in terms of respect, cost and strategic importance.

Design/methodology/approach – The paper is based on a mixed method data collection strategy, quantitative data being collected from a survey in 8 organisations ($n = 108$) and qualitative data being collected from 12 interviews with quality managers in 12 different organisations.

Findings – The paper shows that a compliance-oriented QMS usage will more likely lead to a view of quality management as costly and of little respect, than a business or improvement-oriented QMS usage. Moreover, it nuances the view on compliance-oriented usage, showing that it is mainly documentation that negatively influences how management views quality management, whereas standardisation that is part of the compliance-oriented use is perceived as more value-adding.

Originality/value – This paper suggests three types of QMS use, namely, business management, improvement, and compliance-oriented use, and that a wise selection of how to use the QMS will affect the respect, strategic importance and cost that management associates with quality management.

Keywords ISO 9001, Auditing, Quality management system, Quality Management, Quality audit

Paper type Research paper

Introduction

Today, more than one million companies and organisations globally are certified in accordance with ISO 9001 ([ISO – International Organization for Standardization, 2018](#))

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Survey). In organisations' quality management work, a substantial amount of time and focus is given to the quality management systems (QMS) (Elg *et al.*, 2011). Thus, it is important that QMS adds value to the organisations (Lenning and Gremyr, 2017). The interest in QMS has further grown by its potential to support sustainability efforts through integrated management systems, or by improving environmental management systems based on lessons learned from QMS (Siva *et al.*, 2016). This potential has, however, not yet been fully exploited, and it is suggested that increased formalization and bureaucracy, induced by a certified QMS, is a reason stated for cases in which quality management hinders rather than support implementation of sustainability efforts (Allur *et al.*, 2018; Barouch and Kleinhans, 2015). Even with a focus on QMS *per se*, that is, not as a support for an environmental management system, QMS has been subject to critique for hindering creativity, being detached from actual practice and providing limited support for quality improvement (Poksinska *et al.*, 2006), having negative effects on process compliance (Gray *et al.*, 2015; Karapetrovic *et al.*, 2010) and can limit focus to production and management systems instead of supporting sustainable development and green innovation (Li *et al.*, 2018).

At the same time, evidence suggests that QMS provides a critical and established structure with potential to create value (Rönnbäck *et al.*, 2009), contribute to product quality and operational performance (Iyer *et al.*, 2013; Kafetzopoulos *et al.*, 2015b), increase net asset value (Ochieng *et al.*, 2015) and support continuous improvement (Lenning and Gremyr, 2017). To ensure that the QMS contributes to as much value as possible, it is vital to have support from management and an appreciation of quality management work (Beer, 2003; Dubey *et al.*, 2018; Joiner, 2007; Kaynak, 2003; Kafetzopoulos *et al.*, 2015a; Lakhali *et al.*, 2006), and that management shows and communicates their awareness of the purpose of the QMS (Zelnik *et al.*, 2012).

This paper aims to contribute to the existing body of research on QMS by describing different ways of using a QMS (drawing on Maguad, 2006); detailing and nuancing the understanding of why QMS might be perceived as non-value-adding (Lenning and Gremyr, 2017; Poksinska *et al.*, 2006); and extending research evaluating the impact of QMS beyond a focus on financial performance (Aba *et al.*, 2015; Cândido *et al.*, 2016). For practitioners, this paper aims to support a broadened understanding of how different usage of a QMS impact managements' perception of quality management, which in turn possibly impact their willingness to invest resources in QMS.

Drawing on the various ways of operationalizing quality management proposed by (Maguad, 2006), this study investigates three types of QMS usage: QMS as support for developing the quality of an offering; QMS as a tool for daily management; and QMS as a tool for standardization and documentation. The purpose of this paper is to explore how these three different types of uses of QMS correlate with management perceptions of quality management in terms of respect, cost and strategic importance. This study focuses on certified QMS, and a QMS is defined as a part of a management system regarding quality, based upon a set of interconnected or interacting elements of an organization to establish the organisation, operation, policies, objectives and processes to achieve those objectives (ISO 9000, 2015). Thus, such a system of elements can be viewed as a tool and support to reach an organisations' objectives. In the following section, some background to QMS usage and the three ways of using QMS are provided, after which methods, findings and discussion of the findings are given. Finally, conclusions are drawn.

Theoretical background

Born with the ideas of Deming, Shewart, Juran and Ishikawa nearly four decades ago, quality management has evolved to become an established management philosophy and area of research (Hackman and Wageman, 1995). This philosophy has been presented as being based upon three pillars, namely principles, practices and techniques (Dean and Bowen, 1994). The principles are given as customer focus, continuous improvement and teamwork.

The ISO 9001 management system standard, being a common basis for a QMS, has become universal in its application (ISO Survey, 2018), as well as a central theme in quality management research (Carnerud, 2018). ISO 9001 is claimed to have the potential for contributing to quality improvement (Sousa and Voss, 2002) and improved operational performance (Kaynak, 2003; Psomas and Pantouvakis, 2015). However, the value and the effect of a QMS is argued to depend on different factors, such as management attitudes and purposes (Willar *et al.*, 2015), but also on quality management maturity, implementation strategy and people involvement (Poksinska, 2010).

The type of motivation for implementing a QMS is also said to influence the performance of the system. Organisations focusing on real quality improvements and organisational needs achieve higher benefits from their QMS implementation in areas like quality and operational improvement, compared to those organisations that implement and seek certification of their QMS for external motives, for example, image or customer requirements (Boiral and Amara, 2009; del Castillo-Peces *et al.*, 2018; Poksinska *et al.*, 2002; Sampaio *et al.*, 2009). Thus, a QMS implemented based upon external requirements, tends to focus more on compliance and control and less on organisational efficiency (Alič and Rusjan, 2010).

In the following section, three different ways of working with QMS will be outlined. The three ways draw on Maguad (2006) who argued that quality in the 21st century could be categorised based on orientation in three different directions: business management, improvement and compliance. However, it is said that all three orientations must coincide for an organisation to be successful in their quality work (Maguad, 2006).

Quality management systems as a tool for daily management

Maguad (2006) argued that business management-oriented quality demands an integrated deployment of strategy, and attention to critical success factors, including vision of the business, markets, and core processes. It also requires involvement from top management and every employee in continuous improvement efforts (Maguad, 2006). On an overall level, Sadikoglu and Zehir (2010) studied relationships between quality practices and multiple performance measures and revealed that all practices studied – training, employee management, continuous improvement, information and analysis – were significantly and positively correlated with measures of employee performance, innovation performance, and firm performance. For QMS, it has been shown that they have effects not only on effectivity, product and service quality but also on employees and employers, for example, related to health and safety at the workplace (Levine and Toffel, 2010). Furthermore, Levine and Toffel (2010) show that after being certified, firms experienced a growth in both sales and employment considerably quicker compared to firms that were not certified. Thus, the authors argued that management should consider an ISO 9001 certification as valuable.

Regarding the involvement in various quality initiatives, one aspect that has been in focus is the explicit potential of the initiative to support a perceived and contemporary need. As an example, structured deployment and training in the initiative should be offered just in time so it can be practices directly in response to a current need (Lee, 2004). In other words,

perceived benefits from an initiative (for example a QMS) appears tightly coupled to it being deployed and used in a way that directly supports the daily activities of an organization:

- P1. If QMS is used as a support for managing the organisation, management will likely show respect for quality management and not view it as cost-driving but rather as being of strategic importance.

Quality management systems as a support for developing the quality of the offering

An improvement-oriented view of quality promotes an integrated approach for process improvement, involves the whole organisation, and has a wide range of applications, such as on service and support operations (Maguad, 2006). In a study of service employees who interact with customers, [Coo and Verma \(2002\)](#) found that the employee's perceptions of the implemented QMS had an impact on service quality of the actual offering, in terms of reliability, responsiveness, assurance, empathy and tangibles ([Parasuraman et al., 1988](#)), and in turn of the firm's performance. [Coo and Verma \(2002\)](#) further believe that one success factor of these perceptions were strong leaders who were involved in promoting quality management.

In e-commerce, it has been claimed that knowing how to improve loyalty and increase repeat purchases is important to a firm's staying competitive ([Honore Petnji Yaya et al., 2011](#)). The study further showed that service quality was a key forecaster of both satisfaction and loyalty. All dimensions of service quality – reliability, responsiveness, assurance, empathy, and tangibles ([Parasuraman et al., 1988](#)) – had positive effects on loyalty and satisfaction. In addition, [Psomas and Pantouvakis \(2015\)](#) establish that a QMS like ISO 9001 does contribute to service quality. Hence, it can be assumed that if QMS is used in a way that allows it to impact the quality of the product or service, this will be noticed by management and lead to positive views of quality management:

- P2. If QMS is seen as supportive of the development of the quality of the organisation's offering, management will likely show respect for quality management, not viewing it as cost-driving but rather as being of strategic importance.

Quality management systems as a tool for documentation and standardization

A focus on providing documentation, developing procedures and ensuring consistency is said to result in a compliance-oriented approach to quality management ([Maguad, 2006](#)). Implementing a QMS standard like ISO 9000 drives standardization. How standardization impacts an organisation can depend on three variables: what is standardized, how the implementation is done, and to what extent activities and processes are standardized ([Poksinska, 2007](#)). First, if there is a low motivation for implementing a QMS, it is shown to result in that organization only fulfil the minimum requirements of the ISO 9000. Fulfilling only the minimum requirements may result in the implementation of a QMS that focuses only on describing the existing work practices – that is, standardizing present practices instead of practising the standard ([Poksinska, 2007, 2010](#)). Second, if the result of a standardization is positive or negative is also affected by how the standard is implemented. Thus, if the standardization is done with employee involvement (enabling), supporting changes to deficient practices, or if the standard is implemented top-down (coercive), where management wants to discipline work ([Poksinska, 2007](#)). Finally, the level of standardization needs to be right, as too high a level of standardization will reduce employees' work motivation ([Poksinska \(2007\)](#)).

In a study on experiences from the implementation and certification processes in small organizations, [Gustafsson et al. \(2001\)](#) concluded that there is a risk to describing and documenting

everything in detail. Moreover, documentation that is created as part of implementation and certification of a QMS has been reported to be time- and resource-consuming. Poksinska *et al.* (2006) found in a study of ISO 9001 in small organizations that QMSs were perceived as a tool for handling documentation, not a tool for managing processes. Implementation of ISO 9001 was perceived as a bureaucratic initiative that simply increased paperwork, which was a demotivating factor (*ibid.*). It is thus critical to find an ideal level of standardization of work instructions. They should not be too general to be able to provide support for users, nor too detailed to limit employees' freedom in performing their work (Poksinska *et al.*, 2006):

P3. If QMS is used as a tool for documentation and standardization, management will likely show little respect for quality management and view quality management as cost-driving and lacking in strategic importance.

Methodology

Research instrument

The study was based on a concurrent mixed method data collection strategy (Creswell *et al.*, 2007) using both quantitative and qualitative data. Quantitative data were gathered using a survey instrument, developed through a literature review, input from senior practitioners, as well as researchers, and input from previously validated questionnaires. Specifically, this paper draws on a set of items focusing on the main function of the QMS (Poksinska *et al.*, 2006) and management's perceptions of quality (Elg *et al.*, 2011) (Table 1).

Qualitative data were gathered through semi-structured interviews. The interview guide was centred around the following main questions:

- How would you describe the main role or purpose of the QMS?
- How is the QMS used in your organisation?
- How do you think management view/perceive the QMS?

Statements		Scale
To what extent do you agree with the following statements about the function of your QMS?	Our QMS has a significant impact on how our organisation works. (impact on work)	0 = No opinion/ do not know
	Our QMS is a tool that supports efficient management of our organisation. (efficient management)	1 = Do not agree
	Our QMS is a tool that helps us to fulfil our customers' needs. (customer needs)	2 = Partly agree
	Our QMS is a tool for managing our quality work and improving the quality of our products/services. (product/ service quality)	3 = Agree to a large extent
	Our QMS is a tool to handle documentation. (documentation)	4 = Fully agree
	Our QMS is a tool to standardise our processes. (standardisation)	
To what extent do you agree with the following statements: "In our organisation management ..."	... shows little respect for QM in our daily work. (little respect)	0 to 10
	... regards quality management as a costly activity. (costly)	0 = No opinion/ do not know
	... acknowledges the strategic importance of quality management. (strategic)	1 = Do not agree
		10 = Fully agree

Table 1.
Research instrument

Sample

For the survey, respondents from eight large-sized Swedish organisations (>1000 employees each) participated in the study (see [Table 2](#)). Each participating organisation identified 30–50 respondents on different hierarchical levels. The respondents within each organisation were chosen from employees who had dedicated time and responsibility for quality work. The total number of responses was 249 (response rate = 81%), the number of respondents per organisation ranged from 16 to 51. For this paper, the subset of questions used in the analysis focused on management perceptions of quality management and the overall view of the QMS. These questions were only asked of respondents with management responsibilities and resulted in a subset of 108 respondents.

For the interviews, the interviewee sample consisted of twelve quality managers (IP 1–12) with dedicated time and responsibility for quality work. Sample selection was based on organisations offering both products and services, and having established quality management work structures. The sampled organisations covered the following industries: forestry industry, equipment manufacturers, electronics industry, mechanical industry, med-tech industry, logistics industry, and aviation engineering. The interviewees in these organisations focused both product and service quality. Selection was also based on each interviewee having broad areas of responsibility for quality work and also unmediated access to higher management levels, thereby ensuring a relevant knowledge base concerning management perceptions of quality management in general, and the QMS in particular.

Data collection

The survey was administered by e-mail, including a customized invitation letter for each organization and a link to the survey (using the Web-based tool SurveyMonkey). The survey was open for one month per organization, including two rounds of reminders. The interviews were recorded and then transcribed verbatim.

Data analysis

Since the analysed statements in the quantitative data are jointly exhaustive, answers for which no alternative was chosen were considered to be missing values. After excluding rows containing missing values, 108 of the original 249 observations remained. Of these, nine had rows containing the answer “no opinion”. Since this answer cannot be interpreted as an ordinal value, these observations were excluded as well, resulting in a sample of 99 observations. Spearman’s rank correlation coefficient was used to evaluate the monotonic

Table 2.
Overview of
organisations in the
survey

Organisation	No. of respondents in survey
Life-science company	51
Component manufacturing company	20
Government body	41
Energy supply company	25
Telecommunications company	18
Regional hospital	16
Manufacturing company A	38
Manufacturing company B	40
	<i>n</i> = 249

relationships between the ordinal variables. To depend the understanding of the correlations, the mixed method design was exploited as qualitative interview data was used to further the comprehension of the correlations. Hence, focus was on understanding the relevance and meaning of the correlations.

For the analysis of the qualitative data, the transcriptions of the interviews were uploaded into the QSR NVivo 12 software program. A coding scheme was devised using the theory of grounded propositions (see above). The interviews were then subjected to a thematic text analysis using a deductive cross-case analysis strategy (Miles and Huberman, 1994). Data analysis was done by first reading through all the interviews. By using the theoretically derived coding scheme, coding can be described as influenced by the theoretical underpinnings of the propositions and as descriptive by “attributing a class of phenomena to a segment of text” (Miles and Huberman, 1994, p.57), based on the grounded propositions. The content of the coded data was thematically analysed whereby general similarities (or discrepancies) between the interviewees could be identified. Finally, the thematic content was evaluated against the conceptual and theoretical underpinnings to further understand the data and draw conclusions. An overview of the coding scheme with quotes illustrating how the data analysis was performed is featured in Table 3. The results *per se* will be further elaborated on in the findings section.

Each code category was labelled either to signify a positive view – the use of QMS is viewed with respect in daily work, QMS is viewed as cost reducing, and the use QMS is viewed as strategically important – or to signify a negative view – the use of QMS is *not* viewed with

Propositions (P)	Coding categorization	Illustrative examples
P1: QMS for business management	Perceived impact on work	“I’d like to think the more and more we get people involved, the more and more they can see why they need to have it, so, I’d like to think we’re alright”. (IP11)
	Perceived management efficiency	“... but otherwise we are heading in the direction of an integrated management system that covers an energy environment health and safety and quality, um, and it’s called for in our business, everybody knows that, everybody works for that, um, we have established documented processes that we want to make sure are lean and also effective”. (IP2)
P2: QMS for improvement	Perceived customer need fulfilment	“But to, to sum it up also so that I’ve understood it, the way that you get information about like different types of issues and customer complaints is both from your customers, the big customers who are Skyping you or sending you whatever issues that might be, it’s from the end customers and from your field engineers”. (IP3)
	Perceived effect on product/service quality	“Um, what the quality management system should do for us is it should set standards for operation and objectives for continuing improvement in whichever discipline you’re talking about”. (IP2)
P3: QMS for compliance (P3)	Perception as a tool for documentation	“There are many, many documents that are apparently only written for the occasions when an auditor comes to see them. I would say that this is not very useful”. (IP1)
	Perception as a standardizing process	“The updated ISO9001-standard of 2015 has as well eased this transition, since the new standard is more business-oriented than the previous one”. (IP7)

Note: IP = Interviewee

Table 3.
Coding scheme with illustrative examples

respect in daily work, QMS is viewed as cost *increasing* and the use of QMS is *not* viewed as strategically important.

The study took several steps to achieve acceptable research quality, for example all questions in the survey were based on established instruments, and triangulation of data with questionnaire data and interview data was used to corroborate the findings.

Findings

On an overall level, the data shows that the respondents to a large extent agree with all the statements regarding the function and use of the QMS in their organisation (Table 4).

It appears that QMS as a “tool to handle documentation”, “tool for standardisation”, and as having a “significant impact on how the organisation works” are the three statements where most respondents to some extent agree and in other words recognise their way of working with QMS. For statements where a group of respondents do not agree at all, the three other statements stand out. The statement for which most respondents do not agree is that QMS is “a tool that supports efficient management of our organisation”, followed by QMS is “a tool that helps us to fulfil our customers’ needs”, and QMS is “a tool for managing our quality work and improve the quality of our products/services”. As QMS and activities

Table 4.
Distribution of
quantitative data

Statement	1 = Do not agree	2 = Partly agree	3 = Agree to a large extent	4 = Fully agree
Impact on work	5	0	78	16
Efficient management	19	0	69	11
Customer needs	13	0	66	20
Product/service quality	12	0	73	14
Documentation	4	0	77	18
Standardisation	5	0	73	21

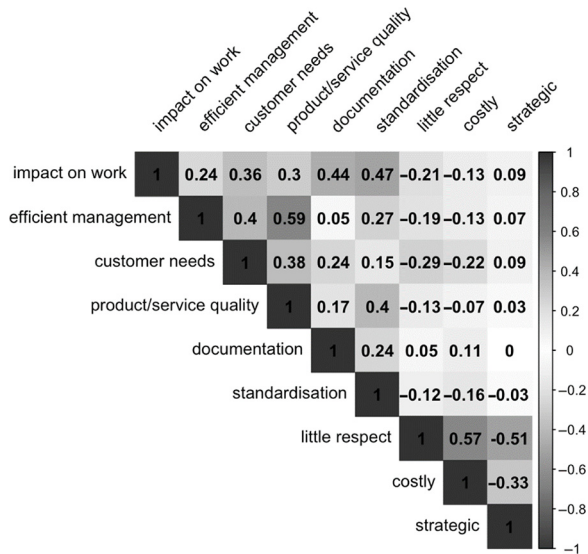


Figure 1.
Correlation matrix

related to designing, implementing, and maintaining the system is a large part of what a quality function does, it arguably will influence how managers view quality management overall. Figure 1 shows the correlations between the level of agreement on the statements related to the function of QMS, and management's view on quality management in terms of respect, cost and strategic importance.

First, *P1*'s focus on a business management-oriented use of QMS relates to two functions of QMS: impact on work and efficient management (Table 1). These two functions of QMS correlate negatively to management viewing quality management as with a lack of respect and as being costly. On the other hand, there is a positive correlation to viewing quality management as being of strategic importance. Hence, the data points in the same directions as outlined in proposition 1. The findings from the interviews partly support proposition 1 in that management views the impact of QMS on efficient management as positive (e.g. IP8, IP10, IP12). For example, IP7 states that: "The current management at [...] has a clear quality aware mentality that benefits everybody [...] that works with quality". However, management can also be perceived as showing a "lack of interest to QMS as to the purpose of quality management work" (IP1).

Second, *P2* encompasses the statements on QMS as a tool focused on customer needs and a tool impacting product/service quality; these two concepts constitute what this paper refers to as an improvement-oriented use of QMS. In the same way as the statements underlying *P1*, the statements of "customer needs" and "product/service quality" correlate positively to management acknowledging the strategic importance of quality management. Moreover, there are negative correlations with quality being viewed with little respect and as a costly activity. Looking at the correlation values, these are largest for the statement regarding "customer needs", which might depend on a larger variation in the responses. The findings from the interviews are mostly in favour of *P2* (e.g. IP4, IP8, IP12). Key customer requirements such as sustainability (IP4), and also the function of collecting customer information and understanding customer needs (IP3) is perceived by the management as being directly facilitated by QMS. As an example, IP12 states that: "Auditing is still a big part, because that's one way you can tell how you're adhering to what your customers want". IP4 described the benefit of QMS supporting organizational success like this: "And we have this in order, it will be a competitive advantage, and it's coming globally; it's coming in all areas." However, there are also perceptions of management only perceiving the use of QMS for improvement as a "tick in the box". The interviews show various degrees of understanding QMS as a tool for improvement by management levels (e.g. IP2, IP8).

Third and last, *P3* refers to a compliance-oriented use of QMS and concerns documentation and standardization. The correlations are small, but the results are mixed as compared to the other two propositions. The statement viewing QMS as a tool for documentation, displays correlations supporting parts of *P3*. That is, it positively correlates with little respect for quality management and a view of it as being costly. However, the statement on documentation does not correlate with quality management being seen as strategic. Moving to the other statement on a compliance-oriented QMS use ("standardization"), the correlations do not support *P3*. The use of QMS as a tool for standardization negatively correlates with all three views on quality management. It does not appear supportive of a view on quality management as costly, or of it being little respected. However, it does have a negative correlation with quality management being viewed as strategic (as outlined in *P3*). Again, the correlations are small and further investigation is needed. The interview findings related to *P3* are somewhat ambiguous. Regarding management perceptions that QMS, primarily used as a tool for

documentation, increases both work and costs and also reduces respect, the findings support *P3* (e.g. IP1, IP2, IP5, IP6). Concerning perceptions of QMS used as a tool for standardization, statements on QMS as filling regulatory purposes recur (e.g. IP8, IP9, IP11). Standardization is viewed as both an imperative and something that is self-evident and “the right thing to do” (IP8) with references to safety and brand perception in order not to “run into problems” (IP9).

Discussion

To support improved QMS usage and increase the perceived value added by a QMS, there is a need to move beyond the broad conception of QMS usage and move towards a more detailed analysis. This paper contributes to research on QMS by outlining three different ways of using QMS, rather than studying QMS usage overall. Drawing on [Maguad \(2006\)](#) three types of QMS usage are described as being oriented towards business management, improvement or compliance.

First, the business management-oriented use of QMS is operationalised by QMS “significantly impacting the way an organisation works”, and “is a tool that supports efficient management of an organisation”. As assumed in proposition 1, these functions appear to support that management will likely show respect for quality management and not view it as cost-driving but rather as being of strategic importance. This is in line with previous research by, for example, [Bunney and Dale \(1997\)](#) establishing that deployment of quality initiatives will be more successful if they are perceived as closely connected to – and potentially improving upon – current work practices.

Second, the improvement-oriented use of QMS is based on QMS as “a tool that help us to fulfil our customers’ needs”, and “a tool for managing our quality work and improve the quality of our products/services”. The proposed impact of these functions is supported, thus ensuring respect for quality management and not viewing it as costly but as strategic (*P2*). Hence, using QMS to fulfil customer needs and improve the quality of the product or service will positively impact management perception of quality management overall. Previous research has shown that improved quality of the product/service will lead to increased customer satisfaction and loyalty ([Honore Petnji Yaya et al., 2011](#); [Parasuraman et al., 1988](#)), and that improved product/service quality is a benefit of QMS ([Psomas and Pantouvakis, 2015](#)). Thus, if QMS is used in a way that can be linked to improved quality and customer satisfaction, this will likely impact management perception of the value added by the QMS.

Third, the results are more mixed in relation to *P3* that QMS is used as “a tool for documentation” and “standardization”. This would be correlated with management showing little respect for quality management, viewing it as cost-driving, and not viewing it as strategic. As management perception and support is critical for QMS implementation ([Willar et al., 2015](#)), it is critical to minimize the risk with a too strong focus on documentation conveying a view of QMS as bureaucratic ([Allur et al., 2018](#)) rather than a respected and value-adding activity. However, a certification is still of value as a qualifier in certain business relations ([Boiral and Amara, 2009](#); [del Castillo-Peces et al., 2018](#)). This might be a reason that the documentation focus does not appear to have the anticipated negative correlation with management viewing quality management as strategic value. Moreover, a standardisation-focussed use of QMS does not appear to reduce respect for quality management nor lead to it being seen as costly. Perhaps this can be linked to [Poksinskàs \(2007, 2010\)](#) notion of practising the standard rather than standardising current practices. In other words, if standardisation is done with an improvement approach rather than one of pure documentation, it will likely be perceived as beneficial. This is also linked to the function of QMS as having “impact on work”, which is classified as a business management-oriented QMS usage. If this is practised and

QMS is allowed to impact actual practices, it will likely mean that QMS is used to standardise and at the same time improve existing work practices.

Overall, the findings support literature pointing to challenges of QMS in terms of focus on compliance rather than organisational efficiency (Alič and Rusjan, 2010), and sometimes not being relevant for actual practice (Poksinska *et al.*, 2006). However, by distinguishing QMS usage in the three orientations presented above, this study indicates that the documentation focus is what might be the cause for many negative perceptions of the value of QMS. On the other hand, many respondents fully agree that QMS is “a tool that helps us to fulfil our customers’ needs”, which has a relatively high correlation with management viewing quality management as strategic. Contrary to the view of limited value from QMS, this paper supports Poksinska (2007) and Lenning and Gremyr (2017) in that there is potential value in QMS, and that this perceived value will increase if QMS usage is mainly business management- and improvement-oriented, although wisely documented and standardised processes are also required to maintain a certified QMS. An important issue highlighted in the interviews is the risk of using QMS as “quality washing” by management. The interviews indicate that there is still a need to further increase knowledge and understanding within higher management levels on the value of QMS.

The data set underlying this paper is limited in size and the correlations established from the quantitative data are small, yet the qualitative data also supports the propositions. To further establish how an organisation should work with QMS to gain as much benefit as possible, more empirical studies on the three orientations (i.e. business management, improvement and compliance oriented) to QMS are suggested.

Conclusions

Based on an extended view of QMS, this paper has elaborated on three types of QMS use: business management, improvement and compliance-oriented use. The purpose was to explore how these three differing types of uses of QMS correlate with management perceptions of quality management in terms of respect, cost, and strategic importance. Overall, the conclusion is that different ways of working with QMS does not only impact the value of QMS *per se*, rather it also influences management’s respect for and view of quality management. In terms of difference between the three types of QMS usage, there is a correlation between business management- and improvement-oriented uses of QMS with quality management being respected, and viewed as strategic and not cost-driving. Earlier research has suggested a compliance-oriented use of QMS was the reason for many of the negative perceptions of QMS that in turn was suspected to lead to negative views on quality management in general. However, the findings of this study are somewhat contradictory to this and provide a more nuanced picture showing that, in general, compliance-oriented views might not drive negative perceptions and that it is useful to operationalise compliance into documentation and standardisation. It is suggested that a perception of QMS as having limited value is mainly due to a focus on documentation, whereas work on standardization, which is also part of a compliance-oriented QMS, does not carry similar negative implications. In summary, this study highlights how the perceived strategic value of quality management can be increased through a deliberate design, and choice of an organisation’s ways of using QMS.

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Corresponding author

Ida Gremyr can be contacted at: ida.gremyr@chalmers.se

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