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Citation for the original published paper (version of record):

Gyllenhammar, D., Eriksson, E., Eriksson, H. (2023). Theory and practice of customer-related improvements: a systematic literature review. Total Quality Management and Business Excellence, 34(1-2): 201-219. http://dx.doi.org/10.1080/14783363.2022.2038558

Total Quality Management, 2022
https://doi.org/10.1080/14783363.2022.2038558

Theory and practice of customer-related improvements: a systematic literature review

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Customers are vital to any organization and system, and must therefore be considered when seeking to improve. However, how to improve with regard to the customer, is not clear, and the knowledge is spread over several research fields, making it difficult for researchers and practitioners to comprehend. The purpose of this literature review is to show how customer-related improvements are described in the literature and how the research is performed. 666 articles were screened, resulting in 99 coded and analysed articles. The study concludes that there is a lack of understanding when it comes to the process of how to improve and that both practitioners and academics should focus more on the system level. It is also seen that by involving the customer in the improvement process, the improvement is more likely to succeed. The article concludes that there is a need for future research which are conceptual, longitudinal, and are addressing actual improvements, not just potential. From the practitioners' point of view, the article is proposing an increased focus on customer-related improvements which address aspects concerning people, such as employee competence and work environment, and reward systems, rather than strategy and processes to improve the potential benefits.

Keywords: customer; improvement; literature review; system; management; theory; practice

Introduction

To continuously improve has always been essential for organizations and systems (e.g., Deming, 2018; Juran et al., 1962). Even though management concepts depart from different industries and have different focuses (Andersson et al., 2006), the role of improvements is an important and natural part in most popular management concepts, such as Six Sigma (Schroeder et al., 2008), Lean (Liker, 2004), and Agile (Appelo, 2011; Bosch, 2017). Two common exemplifications of improvements are the Deming cycle, also known as the Plan-Do-Study-Act-cycle (or Plan-Do-Check-Act), and Define-Measure-Analyse-Improve-Control (DMAIC), which have both been applied in a variety of contexts (e.g., Chen et al., 2009; Cheng & Chang, 2012; Henrique & Godinho Filho, 2020; Kaushik & Khanduja, 2009; Kuvvetli & Firuzan, 2019). Improvements are often described as incremental changes performed by empowered employees on the frontline (Eriksson, 2020; Siverbo et al., 2014). However, many management concepts also relate to large-scale transformations where the whole organization implements the concept in question (e.g., Andersson et al., 2006; Beer, 2003; Kotter, 2007; Liker, 2004). This implies that there are numerous ways to view and describe improvements.

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Several researchers (e.g., Eriksson et al., 2016; Lengnick-Hall, 1996; Van Assen, 2021; Witell et al., 2011) have argued that the voice of the customers must play a role in improvements of organizations and systems. A customer can be defined in multiple ways, ranging from the end-customer to the 'next in line' of the value chain, or separated into internal or external customers (Bergman & Klefsjö, 2010). In the present study, however, the term 'customer' is used in a broader perspective that includes those next in line in the value chain, where the customer can also take the form of an organization. Even though many of the abovementioned management concepts stem from examples within the manufacturing industry (Ferlie & Ongaro, 2015), it is important to understand the customer and the customer needs in other industries as well (Eriksson, 2020), and to involve the customer in different parts of the organization and in the service/policy cycle (Osborne, 2020) to develop successful organizations.

Furthermore, since the 1980s, services have attracted increased attention in practice and theory (e.g., Grönroos, 1982; Parasuraman et al., 1985), which has further strengthened the focus on the customer, not least in relation to improvements. At the heart of these ideas is the notion of the active involvement of the customer as a co-producer (inevitably, due to services being produced and consumed in parallel) (Vargo & Lusch, 2004) or as a co-creator (Vargo & Lusch, 2008) taking place in provider-customer interactions, so-called moments of truth (Normann, 2001). Co-production may also entail the customers' involvement in developing the provided services for the benefit of other, future, customers (Grönroos & Voima, 2013) or to perform tasks that staff have previously carried out (Normann & Ramirez, 1993). Recently, a multiplicity of overlapping co-concepts emphasizing the importance of the active involvement of customers have attracted increased attention (Dudau et al., 2019); probably the most notable of these is co-design (Trischler et al., 2019). Hence, the involvement of the customer can take many forms and perspectives.

Customers are not just important when single organizations are to improve, but when systems and public entities in which many interacting organizations co-exist are to be improved (Elg et al., 2017; Osborne, 2020). With the growth in a number of actors, the complexity also increases (Vargo & Akaka, 2012), which is characterized by a high level of uncertainty, where numerous ideas compete as solutions in combination with an unknown number of factors that affect the context (Brunsson, 1982). Moreover, the impact of structures – such as formal and informal rules and norms – are likely to have a major influence on the actors' actions and interactions in the joint system (Blocker & Barrios, 2015; Skålén et al., 2015). Furthermore, there is seldom a single right answer when addressing such complex problems; instead, the solution emerges as actions are taken, which requires creativeness and innovation (Snowden & Boone, 2007). Consequently, for a system to improve, all relevant parts have to be taken into account (By, 2005) and aligned towards a common direction to avoid sub-optimization (Galbraith, 2002; Nadler & Tushman, 1980).

When it comes to the aspect of organizational design, several models exist for researchers and practitioners. One of these is the Star model, which includes five aspects of the organization: strategy/capabilities, processes, people, rewards, and structures (Galbraith, 1982, 2002; Kates & Galbraith, 2007). Furthermore, Pettigrew (1987, 2012) showed in his strategic change model that not only the content (what is changed), but also the process (how the change is done) and the context (why and where) needs to be considered and could ultimately explain the outcome. Customer-oriented improvements are not easy in practice (Gravesteijn & Wilderom, 2018) and research has shown that even though organizations have a well-ordered strategy process, the execution and implementation of the plan often seems to fail, and the results are not improved (Raharjo & Eriksson, 2017). In fact, many improvement initiatives do not reach an action phase, but rather

end up in an endless planning phase (Eriksson, 2020). Furthermore, Eriksson (2004) showed that the planning and analyses take too much time and energy, meaning that there is no time for the actual execution of the improvement. However, Greenhalgh et al. (2004) argued that it is not only a matter of time and energy, but that it is rather seductive to be in a continuous planning mode. One issue could be that managers and administrative staff believe too strongly in the top-down implementation approach, rather than a more iterative, continuous experimentation approach performed by frontline employees closest to the customer (Eriksson, 2020).

As shown, the research that discusses improvements in general, and customer-related improvements in particular, can be found in several research streams (e.g., quality management, change management, service management, public management, operation management, and several industry-specific research traditions) and it has been argued that, to move the research frontier forward, it is necessary to have cross-fertilization between different research domains (Fundin et al., 2020). Also, the practice and process of succeeding with improvements differ among different sectors and industries. The diversity of customer roles and views on the customers' involvement with organizations makes the current knowledge basis of customer-related improvements unclear and vague. Hence, there is a need to consolidate and summarize the literature of improvements to date in order to be able to advance the theory and practice of customer-related improvements further (Eriksson et al., 2016; Fundin et al., 2018). Even though important work has been performed in the past, people, organization, systems and societies are continuously evolving. Therefore, we also need to improve the way that we improve.

Purpose and Research Questions

To improve the above-mentioned interlinkages between research streams and relieve the unclarity of customer-related improvements, the purpose of this study is to illuminate how research literature describes the context, content, process, and outcome of customer-related improvements, and from the description generate propositions for research and practice. We consider customer-related improvements to address an organization's/system's efforts to improve (whether they are successful or not), either for their customer(s) or with input (active or passive) from their customer(s).

To address the research gap of customer-related improvements, the following research questions have been used:

(1) How is the research that illuminates customer-related improvements conducted?
(2) How are customer-related improvements described in the research literature?
(3) How can the research and practice of customer-related improvement be developed?

A systematic literature review has been conducted to answer the research questions and accomplish the purpose. The methodology and the results of the literature review are described next, followed by a discussion and conclusion including propositions for research and practice in the field of customer-related improvements.

Method

The process of the literature review was inspired by the procedure by Tranfield et al. (2003) and the PRISMA model (Liberati et al., 2009; Moher et al., 2009). Tranfield et al. (2003)

focused on the whole literature procedure, from identifying the need for research, to reporting and dissemination of the study, and were oriented towards management studies. Meanwhile, the PRISMA model, which originates from healthcare research, is more focused on the components, and contains detailed checklists and procedures for how to conduct a systematic literature review (Liberati et al., 2009; Moher et al., 2009). Therefore, the procedure applied in the current literature review has benefited from the adaptation to management studies and the rich details of the PRISMA model.

The procedure for conducting the literature review was as follows. After the initial step of defining topic and research questions, different search strings were constructed, discussed, and tested in combination with the development of the search criteria. After adjustments, five overarching inclusion criteria were developed, which are shown in Table 1. Here, one key element is improvements, notably there is an important distinction from change, which is that an improvement is striving for something better, not just change in itself. Afterwards, a search was conducted the 8 June 2020 in the databases Scopus, Web of Science (WoS), and PubMed. An overview, including the number of articles in each step, can be seen in Figure 1. It is notable that PubMed only included duplicates from the other databases and is therefore excluded in the figure. A description of how the search string was composed can be seen in Table 2, since the search syntax of each database is different, the search string has to be adapted to each database. Furthermore, the databases were chosen with the assistance of bibliometrics expertise in order to select those databases with wide coverage because the objectives – despite addressing management specifically – were known by the authors, from prior experience within the field of customer-related improvements, to be found across disciplines.

Next, after removing duplicates and before the first screening, a pilot screening was conducted by the authors on a randomized sample of 30 articles to ensure the unification and understanding when applying the inclusion criteria. The first screening was then conducted by the authors and a research assistant in a web-based programme called Rayyan

Table 1. Inclusion criteria.

No.	Criteria	Comment
1	Only peer-reviewed articles or reviews	
2	Minimum 5 pages	References and cover page excluded
3	Only articles in English	
4	Includes a change on an organizational or managerial level, resulting in an improvement.	It should concern management sciences; that is, not just improvements of a working method or tool, code (IT), or clinical (healthcare). The improvements concerns both radical and incremental.
5	The customer should be a part of the improvement and should be directly involved in (1) shaping/deciding upon what should be improved, (2) being a part of the improvement initiative, (3) realizing the improvement; or indirectly involved as in: (4) customer data/observations are used to shape the improvement for the customer, or (5) customer data/observations are used to verify an improvement has been made for the customer.	For (4) and (5) to be included, they must have a *detailed description* of how the customer observation/data was used in *relation* to the process of the improvement. That is, not just data showing an increase of revenue or similar.

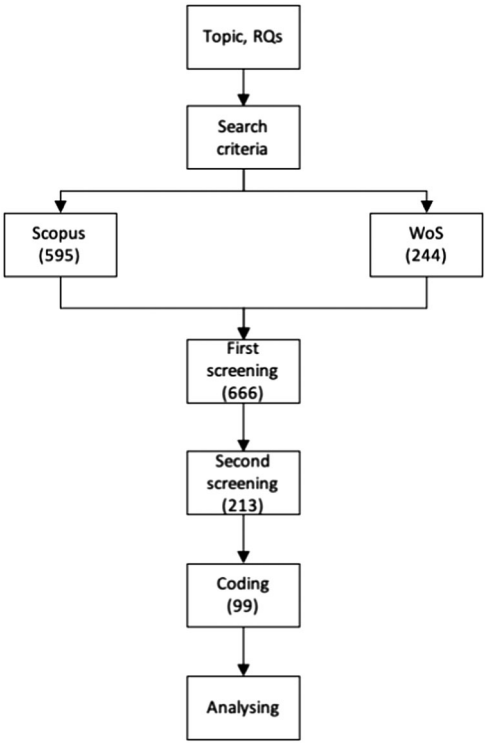

Figure 1. Research procedure.

(Ouzzani et al., 2016), where titles and abstracts (and, if necessary, other sections as well) of the articles were deemed to align with the aim and topic. The first screening was done in two pairs, in which the decision to include/exclude was blinded to the others. On the occasions where two authors had not come to the same decision (inclusion/exclusion), the full group discussed these articles until an agreement was reached. At this stage, 666 articles remined, of which 50 were randomly selected and analyzed. The categories on different levels were continuously discussed among the authors until consensus was reached.

Table 2. Composition of search string.

Search area	Terms	Comment
Title	improv* and customer (including synonyms: citizen, client, user, and consumer)	Plural for each term was also included. Industry-specific terms such as patient and student were not included as search terms due to the risk of creating an imbalance from these specific industries
In either, title, abstract, or keywords	process, network, administration, system, ecosystem, eco-system, organizati*, organisati*, business, company, or actor, and management	Plural form was also included.

Table 3. Overview of included articles.

Articles 10-year period	1981–1990	1991–2000	2001–2010	2011–2020	
N	1	9	32	57	
Data collection approach	Qualitative	Quantitative	Mixed	Not applicable	
N	36	27	28	7	
Reported improvements	Actual	Potential		No	
N	36	33		30	
Customer involvement	Active	Passive		No	
N	14	61		24	
Action Research	Yes	No			
N	8	91			
Level of interest	Organization	System			
N	73	26			
Type of article	Conceptual	Empirical		Literature review	
N	6	91		2	
Star Model	Process	People	Structure	Strategy	Rewards
N	84	26	11	7	3
Industry	Healthcare	Manufacturing	Private Service	Public Service	Other
N	44	13	22	14	6

The following step included the analysis of full text articles. Similar to Barratt et al. (2011) the included articles were categorized based on background data, see Table 3. In total, 18 themes were used during this coding, although only nine of these were further utilized in the analysis; these are discussed later in this paper. Further details about the classification sheet can be found in Appendix A. Other than constructing new pairs, the review procedure was the same as in the previous step. Minor adjustments to the constructed themes were needed to enable a focused analysis due to the number of articles at this stage. The inter-rater reliability (Hartling et al., 2012) proved high and sorting between the authors was largely consistent. At this stage, the few inconstancies were immediately brought to the whole group in order to harmonize sorting. A few articles ($N = 2$) could not be retrieved in any form, and some were excluded for not aligning with inclusion criteria in Table 1. The coding was then performed and recorded in Excel, on 19 November 2020, but later finalized in JMP for further analysis. In total, 99 articles went through the whole procedure and are included in the next section. Hence, the time frame of the literature review was set between 8 June (retrieving sample from databases) and 19 November (coding of the 99 articles).

Results

As shown in Table 3, the number of papers included in the present review increased steadily since the 1980s, no earlier articles were found in the databases. Furthermore, the distribution between *qualitative, quantitative,* and *mixed* methods papers is quite even. A majority of the papers present *no*, or solely *potential,* improvements, whereas 36 papers

Table 4. How data collection relates to reported results of improvements.

	Data collection approach			
Reported improvements	Qualitative	Quantitative	Mixed	Not applicable
Actual	32%	30%	46%	43%
Potential	35%	33%	36%	14%
No	32%	37%	18%	43%

report *actual* improvements. Similarly, the customer is *actively* involved in the improvements in only a minority of the reviewed papers.

On a general level, *quantitative, qualitative*, and *mixed* methods are used equally. However, as seen in Table 4, both the *actual* (46 percent) and the *potential* (36 percent) improvements are more common amongst those studies using *mixed* methods than any of the other approaches. Meanwhile, *qualitative* studies are fairly equally distributed and, among *quantitative* studies, a slightly higher number of studies had *no improvements* reported.

It can be seen in Table 3 that only eight articles explicitly state that they use an *action research* approach. However, within the sample there were several articles that could have been conducted as action research projects, but where this was not stated, or the research process was not detailed enough to be certain whether it was or not.

As seen in Table 5, it is more common to analyze *system* when it is explicitly stated that an *action research* approach has been utilized.

Table 6 shows the percentage of articles in five classified industries. To a large extent, the selected articles had their origins in the *healthcare* context (44 percent).

Most of the articles deal with a single entity (that is, an *organization*) and do not address a *system*, see Table 7. Relatively speaking, many of the articles concerning *healthcare* tried to tackle an improvement of a *system* (34 percent of healthcare sample). Also, the context of *public services* had several *system* improvements (29 percent of public services sample).

The fact that the majority of studies are based upon *passive* customers, as shown in Table 8, is also seen in the articles through that tools like surveys or observations of customer behaviours are used to enable the improvements. Moreover, few articles explicitly describe how the customer is involved when this is stated. On a general level, the sample does not give a detailed view of how an improvement process is actually conducted. Items and artifacts are stated, but are not sufficiently contextualized or detailed to support an understanding of the improvement process.

Table 5. How Action research is represented within level of analysis and industry.

	Organization			System			All
	Action research			Action research			
Industry	Yes % of total	No % of total	All % of total	Yes % of total	No % of total	All % of total	% of total
Healthcare	1%	28%	29%	5%	10%	15%	44%
Manufacturing	0%	11%	11%	0%	2%	2%	13%
Private service	0%	17%	17%	1%	4%	5%	22%
Public service	0%	10%	10%	1%	3%	4%	14%
Other	0%	6%	6%	0%	0%	0%	6%
All	1%	73%	74%	7%	19%	26%	100%

Table 6. How the articles display the results of improvements separated by industry.

Industry	% of whole sample	% of specific industry with actual	% of specific industry with potential	% of specific industry with no
Healthcare	44%	41%	43%	16%
Manufacturing	13%	31%	38%	31%
Private service	22%	36%	23%	36%
Public service	14%	36%	21%	43%
Other	6%	17%	17%	67%

Based on the star model's aspects, a clear majority (85 percent) of the studies include improvements concerning *processes*, compared to *people* (26 percent), *structure* (11 percent), *strategy* (7 percent), and *rewards* (3 percent). Note that it is possible for a study to address more than one aspect of the star model at a time, hence the sum for each industry can be more than 100 percent as seen in Table 9. Furthermore, there is a difference between the industries when adding the parameter of *actual* improvements, as can be seen in Table 9. Looking at the *organization/system* perspective, the picture is not unified between the industries and it can be seen that *manufacturing* has no ($n = 0$) *actual* improvements regarding the *system* perspective, *healthcare* succeeds with improvements for *process* (9 percent of total healthcare sample), *people* (5 percent), and *structure* (5 percent). *Public services* only regard *structures* (7 percent) for those articles that show *actual* improvements. When it comes to *private services,* articles with *actual* improvements noted concerns regarding *processes* (5 percent), *people* (5 percent), *structures* (5 percent).

Table 7. Representation of industries upon categories.

	Industry					
Customer involvement	Healthcare	Manufacturing	Private service	Public service	Other	All
Active	11%	0%	2%	1%	0%	**14%**
Passive	25%	9%	15%	7%	5%	**62%**
No	8%	4%	5%	6%	1%	**24%**
All	**44%**	**13%**	**22%**	**14%**	**6%**	**100%**
Reported improvements						
Actual	18%	4%	8%	5%	1%	**36%**
Potential	19%	5%	5%	3%	1%	**33%**
No	7%	4%	9%	6%	4%	**30%**
All	**44%**	**13%**	**22%**	**14%**	**6%**	**100%**
Level of analysis						
Organization	29%	11%	17%	10%	6%	**74%**
System	15%	2%	5%	4%	0%	**26%**
All	**44%**	**13%**	**22%**	**14%**	**6%**	**100%**
Action research						
Yes	6%	0%	1%	1%	0%	**8%**
No	38%	13%	21%	13%	6%	**92%**
All	**44%**	**13%**	**22%**	**14%**	**6%**	**100%**

Note: How the different industries are represented upon the categories of: customer involvement, how the results of the improvement are reported, level of analysis, and action research. The 100 percent at each bottom right of each category is the sum of either the bold or the non-bold percentage numbers of that category.

Table 8. Results of the improvements reported, separated by how the customer was involved.

	Customer involvment			
Reported improvements	Active	No	Passive	Total
Actual	7%	10%	19%	36%
No	0%	5%	25%	30%
Potential	7%	9%	17%	33%
Total	14%	24%	62%	100%

Table 9. Industry percentage and starmodel.

	Percentage of total sample from specific industries				
Industry	Actual and process	Actual and structure	Actual and people	Actual and rewards	Actual and strategy
Healthcare	36%	11%	7%	0%	0%
Manufacturing	31%	0%	0%	0%	0%
Private Service	23%	5%	14%	0%	9%
Public Service	29%	14%	0%	0%	0%
Other	0%	0%	17%	0%	0%
	No and process	No and structure	No and people	No and rewards	No and strategy
Healthcare	14%	2%	5%	0%	0%
Manufacturing	31%	0%	0%	0%	0%
Private Service	36%	9%	14%	0%	0%
Public Service	29%	7%	14%	7%	7%
Other	67%	0%	0%	0%	0%
	Potential and process	Potential and structure	Potential and people	Potential and rewards	Potential and strategy
Healthcare	39%	2%	18%	0%	0%
Manufacturing	23%	0%	0%	0%	8%
Private Service	18%	0%	5%	5%	9%
Public Service	21%	0%	7%	7%	7%
Other	17%	0%	0%	0%	0%

Note: The percentage of articles from an industry that address a specific category of the Star model and what the improvement outcome were.

Discussion

In the light of the presented results, the following discussion is structured by the previously mentioned framework of context, process, content, and outcome (Pettigrew, 1987, 2012) and ends with answering the research questions in Table 10.

Context

Even though it is important to regard the whole *system* in the context for which organizations exist (Vargo & Akaka, 2012), the majority of studies focus on smaller units and

Table 10. Research questions and review findings.

Research question	Findings
RQ1: How is the research illuminating customer-related improvements conducted?	(a) Most research is distant from the research object; few articles are said to use *action research*. (b) The research mainly constitutes of *empirical* studies, very few *conceptual* and *literature reviews*. (c) For *quantitative, qualitative,* and *mixed* approaches, these are evenly distributed. (d) The terms Customer and improvements are used widely.
RQ2: How are customer-related improvements described in research literature?	(a) The research literature is focusing on *processes* when it comes to customer-related improvements. (b) *Healthcare* is widely represented in the sample. (c) Research is focusing on *organizational* and single unit analysis. (d) Research is describing context and content. (e) Research is mainly describing *potential* ways for improvements. (f) Research is mainly describing improvements made *for* customers, but not with or in close collaboration *with* them.
RQ3: How can the research and practice of customer-related improvement be developed?	Propositions for Practice (a) Practice should focus more on *people* and *rewards,* as this drives success to a higher degree. (b) Practices should focus more on the *system* level to avoid sub-optimization. (c) Practice should involve the customer to a higher degree. (d) Practice should dare to take action instead of finding more alternative solutions, as more solutions can create confusion and stagnate the momentum of the improvement. Propositions for Theory (a) More research is needed on *people, rewards, structure,* and *strategy*. (b) There is a need for a greater understanding of how to improve *system* with multiple actors. (c) Closer proximity to the research object can enable more details in the process of improvements and thereby increase the knowledge of how to improve. (d) Research should be more precise when using the terms customer and improvement. (e) There is a need for conceptual studies. (f) Research should focus on displaying how *actual* improvements are generated, not just on describing *potential* improvements. (g) As improvements and change takes time, longitudinal studies are recommended to facilitate understanding.

are restricted to single *organizations,* not accounting for broader contextual factors such as the impact of formal and informal rules and norms enabling/restricting actors actions and interactions – not least in improvement initiatives (Blocker & Barrios, 2015; Skålén et al., 2015). The implications for this are that there is a risk of sub-optimization and also difficulties of solving the problem at hand (Camillus, 2008; Geuijen et al., 2017). However, there is arguably a need to understand the details in smaller entities to understand the system. Hence, studies focusing on single entities are not to be seen as waste; rather, it is argued that there is a lack of studies combining several pieces of the puzzle simultaneously to understand the system.

This literature review shows that the spread of knowledge about customer-related improvements is wide, ranging from value chain improvements in the mango industry (e.g., Badar et al., 2015) to improving client-centered care (e.g., Broekhuis et al., 2009). However, it has several gaps that can make it difficult for researchers to comprehend and practitioners to implement customer-related improvements. Many of the articles that were excluded between the first and second screening (that is, title and keywords) initially appeared to address customer-related improvements. When going into details, however, these articles were shown to only utilize the customer as a distant motivator or reason for trying to improve, without a clear tie to the actual beneficiary. One reason for this is the increased attention the customer paradigm has gained over the years, which is not restricted to the field of quality management (e.g., Bosch, 2017; Elg et al., 2017; Petrescu, 2019), resulting in the popularization and perhaps over-usage of the term 'customer'.

Furthermore, the studies had a broad sense of what was to be considered an improvement. Some referred to explicit improvement for performance measurements such as revenue, customer satisfaction, or other measurement indexes (e.g., Agus, 2004; Birch-Jensen et al., 2020). Other studies used the term 'improvements' as something that was hoped for or insinuating that by doing A, improvement B will occur, but where improvement B is never accounted for or said to be achieved and realized (e.g., Attafar et al., 2013; Minelli & Ruffini, 2018). This vagueness of the term 'improvement' puts both researchers and practitioners in a troubling state as it is unknown what meanings of 'improvements' are actually found when searching the term.

The lack of clarity regarding the term 'improvement' can be related to the description of a change process by Pettigrew (1987, 2012). This is due to the fact that some refer to the *outcome* when using the word 'improvement' (for example, an improvement of the results has occurred). Meanwhile, others refer to the *content* of what has been improved (for example, referring to an improved customer feedback system) and some aim to describe the *process* and the action to improve (for example, the verb to 'improve' and the process for improving).

The healthcare sector is well represented in the sample overall, as well as in the papers addressing *actual* improvements (e.g., Alba et al., 2010; Lee et al., 2018); see Table 6. A probable reason may be the explicit objective of healthcare to improve not only competitive advantage, but also contributing to the greater good (Mintzberg, 2017). The result of this makes *healthcare* more prone to incorporate the customer (or patient) perspective due to its possibility to enhance their competitive force on the market (Bergman et al., 2015), as well as building and sharing that knowledge in the quest to improve society, the healthcare community, and research (Mintzberg, 2017). It is also mentioned by Henrique and Godinho Filho (2020) that the field of continuous improvements is rapidly growing within healthcare. Hence, contributing to the sample in this literature review. Moreover, there is also an entire field within healthcare called improvement science (Marshall et al., 2013), which can further explain the representation in the sample. However, even

though the field of healthcare is well represented in the sample, it is still a field that demands improved ways of working and customer-related improvements as criticism towards the healthcare sector is still heard (Mintzberg, 2017).

Process

The literature review shows that there is insufficient knowledge about how customer-related improvements should be conducted in order to be successful. However, what research is illuminating is the content; for example, implementing framework A results in achievement B, but neglecting the 'How' in the improvement process. Even though articles address success factors and barriers, to different degrees, these are only broad statements that provide little guidance in practice for how to actually perform improvement initiatives.

This knowledge gap is especially prominent in aspects when there is a *systems* perspective, but also when the customer is *active* in the improvement initiative, even though these aspects are shown to be important for success (Ansell et al., 2020). This might not be surprising due to the complexity of studying multiple entities at once (Dansereau et al., 1999), but the two aspects of system perspective and an active customer is also something that is highlighted as important areas for future research for the area of quality management as a whole (Fundin et al., 2020) i.e., not just regarding improvements. Hence, further investigation is required.

Moreover, there is a heavy emphasis on observations or surveys regarding customers, leaving the customer either *passive* or not a part of the improvement at all, see Table 3. This one-sided approach to conducting customer-related improvements creates a gap for understanding when and how to involve customers in improvements.

Only eight of the reviewed papers explicitly stated that an *action research* was used, which mirrors the alleged lack of the approach in both the healthcare (Bradbury & Lifvergren, 2016) and public management fields (Ospina et al., 2018). Nevertheless, six of these eight action research papers were set in a healthcare context (e.g., Gonzalez, 2019; Heslop et al., 2019). Of these, five had a systems perspective (e.g., Cranwell et al., 2016, 2017; Heslop et al., 2019) rather than an intraorganizational focus – possibly a consequence of the claimed need of collaborative approaches in addressing the complex challenges of contemporary healthcare (Eriksson & Hellström, 2021). Those articles that explicitly stated that they used *action research*, or a similar approach, described the improvement process and how to improve on a much more detailed level than most articles. Hence, action research can be a tool for supporting research into customer-oriented improvements in more detail.

Another finding was that many of the articles in the sample became stuck on mapping the problem or potential solutions (e.g., Brimblecombe et al., 2007; Luck et al., 2015), an issue that is also found elsewhere (Eriksson, 2020). However, this could be a consequence of the typical role of the researcher, which does not include producing the actual improvement. Another possibility is that it could be a symptom of addressing complex problems, a situation where more possible solutions are created in the belief that it will produce a clear answer. However, the fallacy created is that, when faced with complex problems, the solution cannot be known before it is implemented (Snowden & Boone, 2007) and, therefore, the generation of more solutions makes it even harder to act due to all possible ways forward (Brunsson, 1982).

Furthermore, when trying to improve, the customer is more often *not involved* or *passive* than involved, which might be because it is easier to only observe than to involve and interact. However, there is a need to involve the customer to a higher

degree, not just to solve complex problems, but to manage a more turbulent world (Ansell et al., 2020). Furthermore, a close interaction with customers are also pointed out to be an aspect which is important to preserve and further develop for the field of quality management (Fundin et al., 2020).

Moreover, it is seen that only 36% of the articles actually address verified successful improvement initiatives, which might not come as a surprise given that customer-related improvements are difficult to achieve, especially in sectors such as healthcare and public sector (Gravesteijn & Wilderom, 2018) where there are a multitude of actors which has to be involved (Bryson et al., 2017).

Content

The results presented show an emphasis on *process* improvements (e.g., Turner et al., 2002; Zamanian et al., 2011), which might lead to a reasoning that this aspect is the most important aspect of a well-performing organization. However, it is in fact more important to develop the human resources and leadership within the organization (Raharjo & Eriksson, 2017); that is, to develop the *people* and the *reward systems* supporting their motivation. What the results show is that there is a lack of knowledge about how to improve in the aspect of *people* and *reward systems* in terms of the Star model, even though these aspects are more important for organizational performance than other aspects. Neither *structure* nor *strategy* is broadly represented, which calls for further research that also can support practitioners working in the field.

From a practical point of view, however, process improvements might be seen as 'low-hanging fruit' as the knowledge here is quite extensive.

Outcome

It is often stated that 70 percent of change initiatives fail (By, 2020) and, at first glance, this is reflected in the results presented above, where only 36 percent of the articles report actual improvements. However, this failure rate is actually a common misconception, as there are no scientific evidence that it is actually true (Hughes, 2011).

Delineating the results, it can also be argued that since 33 percent of the sample is identified as *potential*, these should not be seen as failures, as they have not (yet) failed or succeeded. Furthermore, as noted by Pettigrew (1990), improvements take time, which delays the possibility of seeing results. Moreover, as organizations face an increasing amount of change in their environment, the number of initiated improvements has to increase to ensure the survival of the organizations (Burnes, 2005). The combination of delayed results and an increasing number of initiated improvement initiatives is further increasing the number of projects that have yet to be defined as success or failures. However, if looking solely at the number of *no reported improvements* and *actual reported improvements*, the amount of realized improvements are 55 percent of this sub-sample, which offers two possible conclusions. Either the statement that 70 percent of all change initiatives fails can entirely be falsified, or customer-related improvements are more likely to succeed than change initiatives in general. In other words, the statement can be falsified in the subsample of customer-related improvements. Even though the terms 'change' and 'improvement' can have different meanings, improvements can at least be seen as a sub-sample of all possible changes.

Moreover, it is seen that when the customer is involved in the improvement, the sample shows a 50/50 divide between *actual* and *potential* improvements, which implies that there are zero improvement initiative where there are *no improvements reported* when the customer is involved. Meanwhile, the majority of the articles where the customer had been *passive* resulted in *no reported improvements*. This suggests that improvements are more prone to success if they involve the customer.

Conclusion

What is seen as customer-related improvements is used in a wide manner, making it difficult for both researchers and practitioners to make use of the knowledge and potential that resides within this aspect, which calls for more careful usage of the term. From a context perspective, both research and practice should focus more upon the system level and on how multiple actors can contribute to improvements to minimise the risk of sub-optimization. When it comes to the content of improvements, processes are dominant, which calls for more research regarding the aspects of strategy, structure, people, and rewards. The latter two aspects are also especially relevant for practitioners, as they are seen to have the greatest impact on results. However, the process of the customer-related improvements themselves are, to a large extent, obscured in darkness as the focus of research has primarily been on the context and content. Given that those improvements involving the customer are more likely to report actual results, it is proposed that future research should address how and when to involve the customer in improvements, and by this aid practitioners. Here, researchers can apply an action research approach to facilitate the enrichment of knowledge, as those studies utilising action research are more successful in describing the process of improvements. Furthermore, future research should address actual improvements to a higher degree, as many articles now only describe potential improvements, especially in sectors of healthcare and public sector as these tend to struggle with customer-related improvements. Research should also allow for more longitudinal studies, as this makes it possible to see results and understand the whole journey of the improvement. It is further noted that when it comes to customer-related improvements, the statement that 70 percent of change initiatives fail can be falsified, and it is seen that those improvements involving and focusing on customers are more prone to success.

Limitations

This literature review chose to focus on academic journal articles and hence excluded a variety of sources such as books, websites, conference proceedings, reports, and grey literature. Furthermore, the literature review only included articles in English and might therefore have missed sources in other languages. Even though healthcare was widely represented in the sample, there is a limitation concerning the industry-specific terms that are not included in the search string, such as ‘patient’ or ‘student’. Therefore, a further development of the area could be to investigate more industry-specific terms of the customer.

Acknowledgements

The authors would like to thank Yommine Hjalmarsson for guidance regarding databases and the development of the search string, and also Emelie Gertmo and Patrik Alexandersson for support during the literature review.

Disclosure statement

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

Supplemental data

Supplemental data for this article can be accessed at doi:10.1080/14783363.2022.2038558.

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