

Balancing Short-term and Long-term Behaviours in Process Management

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Abstract

Purpose of the paper: To elaborate on the idea that process management (PM) must be infused with a quality culture (QC) to function and reach expected performance targets. The framework of change-driven process management (CDPM) (Cronemyr *et al.*, 2024) has been used in modern and comprehensive PM. Behaviours supporting long- and short-term action and development (Cronemyr *et al.*, 2017; Mårtensson, 2022) have been used as the frame for QC. The purpose of this study is to investigate where and how certain behaviours relate to different PM scenarios. Furthermore, the roles of other behaviours not mentioned in this framework are investigated with respect to successful PM.

Methodology: The paper is based on previous research and deductive discussions among the three authors.

Main Findings: The CDPM framework is defined by four scenarios differentiated by two dichotomies: stability vs. change and control vs. creativity. Two of the scenarios, traditional PM and trust-based PM, are characterised as stable; however, the first is governed more by control and the second more by creativity. Traditional PM is sometimes ‘slow and rigid’, whereas trust-based PM is more ‘free and creative’. However, trust-based PM can sometimes lead to greater process variation, tampering and unpredictable results. The analysis reveals that long-term behaviours are more common in traditional PM, whereas short-term behaviours are more common in trust-based PM. Both types of behaviour may be ‘effective’ in the appropriate circumstances; otherwise, the opposite behaviour may be recommended.

Practical implications: This study reveals how different behaviours characteristic of a quality culture can support organisations in implementing and working with PM.

Originality/value: PM and QC are well-researched areas within quality management; however, the intersection of these areas requires further investigation and development.

Type of paper: Research proposal

Keywords: Process Management, CDPM, Quality Culture, Behaviours

1. Introduction

1.1. Background

The requirements for operations in the private and public sectors are challenged by societal demands to comply with requirements for economic, social, and environmental sustainability, all of which are addressed in quality management (QM). While process management (PM), a way of organising QM, has long been a common way of structuring and organising value creation, process management is not static but is evolving (Reijers and Mansar, 2005; Cronemyr and Danielsson, 2013; Backström *et al.*, 2017; Fundin *et al.*, 2020; Gross *et al.*, 2021; Cronemyr *et al.*, 2024). A new expanded framework for working with process management, change-driven process management (CDPM), with significant change-driven phases and guidance on working methods, was developed and presented by Cronemyr, Fundin and Wemme (Cronemyr *et al.*, 2024). The CDPM framework expands on traditional process management by accelerating process improvements but without the risk of implementing ‘quick and dirty’ changes.

While PM is focused on how to organise processes, systems, work routines and roles, quality culture (QC) is another significant component of successful quality management (QM). If process management is the ‘hard’ part of QM, quality culture is the ‘soft’ part; both need to be in place for QM to be successful.

There has also been extensive research on quality culture (see *e.g.*, Cronemyr *et al.*, 2017; Mårtensson, 2022, Mårtensson *et al.*, 2023, Ingelsson *et al.*, 2018). A culture is often described as having three different components: values, norms and behaviours. Cronemyr, Bäckström and Rönnbäck (Cronemyr *et al.*, 2017) mapped long- and short-term behaviours, which they claimed represent a ‘quality culture’ and a ‘blaming culture’, respectively. However, short-term behaviours, or actions, are sometimes needed. For example, if there is a fire, one should leave the house at once and not stay and worry about how to prevent fires in the future. That question may be investigated in the future.

Therefore, if PM and QC are both central parts of QM, how should they be combined? This is the question posed in this paper.

1.2. Purpose of the paper

The purpose of this paper is to elaborate on the idea that process management must be infused with a quality culture to function and reach expected performance targets. This purpose is carried out by investigating where and how certain behaviours appear, should appear, or should not appear in PM. Furthermore, the roles of other behaviours not mentioned in this framework are investigated with respect to successful PM.

2. Theoretical framework

2.1. Process Management and CDPM

While process management has been a solid way of structuring and organising value creation for several decades (Davenport and Short, 1990), it is facing a paradigm shift and needs to evolve (Reijers and Mansar, 2005; Cronemyr and Danielsson, 2013; Backström *et al.*, 2017; Fundin *et al.*, 2020; Gross *et al.*, 2021; Cronemyr *et al.*, 2024). Cronemyr *et al.* (2024) described a framework for a new expanded way of working with process management, change-driven process management (CDPM), with significant change-driven phases that guide working methods: 1) control and stability (traditional process management), 2) creativity and stability (trust-based process management), 3) creativity and change (process innovation management), and 4) control and change (process change management) (see Figure 1). The CDPM framework

is an expansion of traditional process management, accelerating process improvements without the risk of implementing ‘quick and dirty’ changes.

Change Driven Process Management

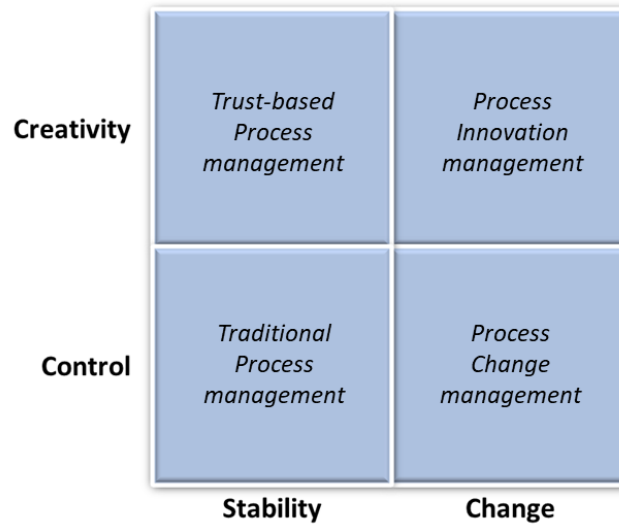


Figure 1 – Change-driven Process Management model with four quadrants (Cronemyr et al., 2024).

The working methods of the four CDPM quadrants are described in Figure 2. Additionally, the CDPM quadrants are associated with the quadrants of the SECI analytical framework by Nonaka and Takeuchi (1995).

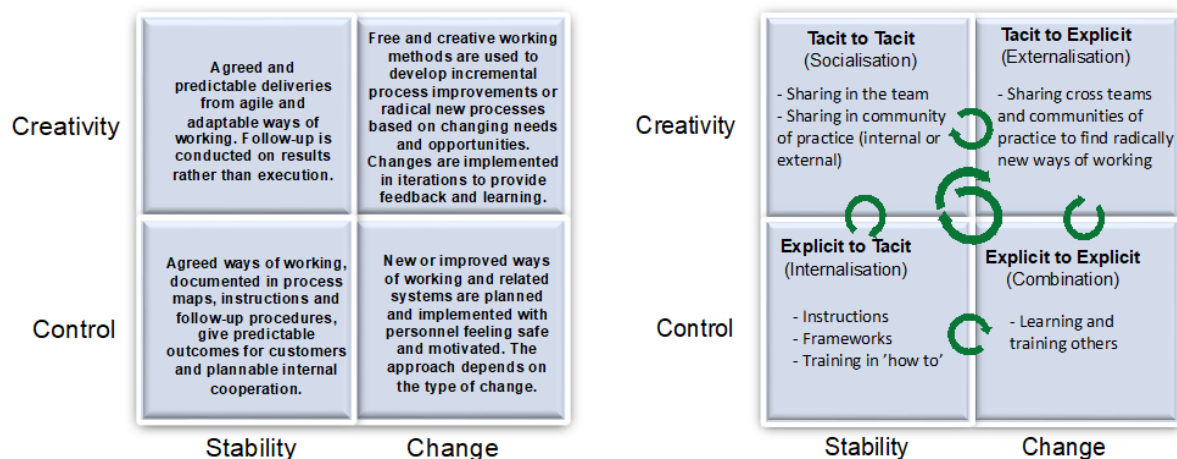


Figure 2 – Working methods of Change-driven Process Management with four subsequent quadrants (Cronemyr et al., 2024), associated with the quadrants of the SECI analytical framework by Nonaka and Takeuchi (1995).

In Figure 2, clockwise iterations are indicated by round arrows. The smaller arrows indicate actions that may be needed in smaller iterations, whereas the large arrow in the centre indicates

larger and more fundamental process changes and improvements. Cronemyr *et al.* (2024) elaborated on these actions but did not relate them to short- or long-term behaviours.

2.2. Quality Culture

An organisational culture is a structure of shared values (Chatman and Eunyong Cha, 2003), which constitute the core of cultures, specifically organisational cultures (O'Reilly *et al.*, 1991). Organisational culture occurs on different levels where 'level' corresponds to the degree to which a cultural phenomenon is observable (Schein, 2009). The values within quality culture can be found in the second level of organisational culture, called 'espoused values' by Schein (2009), often leaving large areas of behaviours unexplained.

A strong organisational culture is formed by a great level of agreement among coworkers about what is valued and a high level of commitment to these values (Chatman and Eunyong Cha, 2003). 'The managers need to be present among their co-workers and aware of how their own actions affect the possibility to build a strong Quality Management culture' (Ingelsson, 2013, p. 77).

The culture that exists in an organisation influences most of the behaviours and actions that take place within the organisation as well as the actions that occur outside of the organization. Total quality management (TQM) is considered a philosophy or culture and/or a set of values, methodologies and tools to create a sustainable quality culture. According to Dahlgaard *et al.* (2002), such a culture is distinguished by increased customer satisfaction through continuous improvement, where all coworkers actively participate. Bergman *et al.* (2022) presented a theoretical model containing six core values or cornerstones that form the basis of a sustainable quality culture: focus on customers, develop committed leadership, allow everyone to actively participate, improve continuously, focus on processes, and base decisions on facts. These core values or cornerstones are interdependent and act as a system in combination with methodologies and quality tools (ibid). Together, the core values or cornerstones shape the quality culture of an organisation and provide a sustainable system of thinking, which are necessary for an organisation to improve and succeed. Although different authors have used different terms to refer to the content of TQM, such as factors, key elements, values, cornerstones, or principles (Foster, 2004; Dale, 2003; Sila Ebrahimpour, 2002; Lagrosen, 2006), several researchers have agreed on the core values described above, as shown in Figure 2.

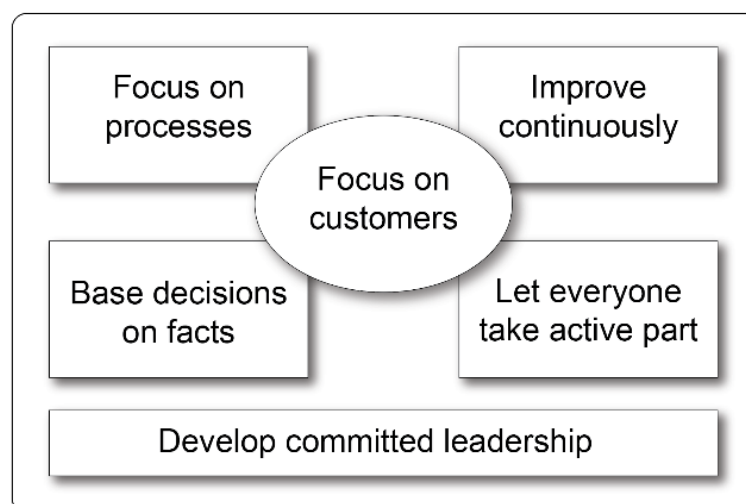


Figure 3 – The cornerstone model, including the core values or cornerstones that are the basis for a sustainable quality culture, together with methodologies and tools for forming TQM. (Bergman *et al.*, 2022, p. 60).

The need to be more efficient at improving performance while maintaining a healthy working environment is increasing (Bäckström, Wiklund and Ingelsson 2012). However, many organisations fail to meet this challenge. One cause of the failure to succeed seems to be a focus on TQM tools and processes and a lack of understanding of the influence of quality culture (Ingelsson *et al.* 2010).

A systemic approach to TQM values also incorporates a long-term view of the organisation as an entity and as a way to stay in business over time (Deming, 2000).

Measuring quality culture is not an easy task. In some way, the values must be quantified. How can this be done? One way is to find objective ‘hard’ measurements for each value, *e.g.*, the number of customer complaints about (the lack of) customer orientation, but these types of measurements are too distant from the culture of everyday work. Another way is to ask employees if values exist, *e.g.*, “To what extent do you agree that the organisation is orientated towards the customer?” The problem with this approach, however, is that most employees have different (or no) mental models of what ‘customer orientation’ means. Another way is to ask employees if they perceive that values are important and/or exist and grade them on a scale from ‘totally agree’ to ‘do not agree’, *e.g.*, “We are constantly working on getting better in everything we do”; this approach was elaborated in Ingelsson and Mårtensson (2014); Sten *et al.* (2021); and Sten *et al.* (2023). This type of measurement frames the respondent’s experience when they answer the questionnaire.

We need to describe situations and narratives that are easy to understand. Therefore, we must define behaviours that either support or obstruct the values of a quality culture. The practitioners and researchers of a research project (Cronemyr *et al.*, 2017) prepared definitions/narratives of behaviours; for more details, see the methods of investigation section below.

Long-term behaviours align with an organisation’s vision to implement strategies and fulfil the goals that support its mission (Mårtensson, 2022). In QM culture, long-term strategies are often connected to delivering value to customers (Jonker, 2000) and stretch over system boundaries (Senge and Sterman, 1991). In contrast, short-term behaviours often involve quick results (Dahlgaard-Park, 2011), promote risk-taking (Tang and Greenwald, 2016), and can be a barrier to practising long-term behaviours (Barnett, 2017). On the other hand, short-term and long-term operations are both present, but a culture supporting long-term thinking, strategies and behaviours should be adopted to guide every action (Sewchurran *et al.*, 2018). In this respect, ‘supportive behaviours’, as defined by Cronemyr *et al.* (2017), are identified as ‘long-term’, whereas ‘obstructive behaviours’ are identified as ‘short-term’. The developed framework with supportive ‘long-term’ and obstructive ‘short-term’ behaviours (Cronemyr *et al.*, 2017), is presented in Table I.

Table I. Statements describing behaviours for six quality values that either support or obstruct the creation of a quality culture (Cronemyr *et al.*, 2017). (*) The value of proactivity was included in committed management.

<i>Quality values</i>	<i>Customer orientation</i>	<i>Process orientation</i>	<i>Committed management (*Proactivity)</i>	<i>Participation and cooperation</i>	<i>Continuous improvements</i>	<i>Base decisions on facts</i>
<i>Supportive behaviour #1</i>	1A. We cooperate to satisfy the customer's needs.	3A. We adhere to our agreed-upon guidelines and working methods.	5A. Our leaders encourage suggestions for improvements and look at problems as a way to improve.	8A. Development of our activities involves all coworkers based on their competencies.	10A. We evaluate and improve our working methods.	12A. When we have a problem, we determine what the root cause is before we decide on a solution.
<i>Obstructive behaviour #1</i>	1B. In our organisation, specially appointed staff solve the customer's problems.	3B. Each person chooses individually how to work.	5B. Our leaders assume that we do things right from the beginning to avoid problems.	8B. Our improvement at work is managed by our leaders or specialists.	10B. We solve problems when they arise.	12B. We solve problems as quickly and easily as possible.
<i>Supportive behaviour #2</i>	2A. We determine what needs and expectations the customers have and adapt our products and services.	4A. We cooperate between departments and functions as we develop our business.	6A. Our leaders ask for customer consequences in decision situations.	9A. We work to achieve the organisation's overarching objectives.	11A. We work on improvements in a structured fashion.	13A. We gather information and measurement results which we use to develop our business.
<i>Obstructive behaviour #2</i>	2B. We develop products and services that are as good as possible. We offer these to customers.	4B. We focus on developing our business within the group and our own department.	6B. Our leaders ask for efficiency when decisions are made.	9B. We work to achieve our team's objectives.	11B. We adapt our improvement work to the situation.	13B. We develop our business based on the knowledge and experience of our coworkers.
<i>Supportive behaviour #3</i>			7A. Our leaders prioritise preventive work (*)			
<i>Obstructive behaviour #3</i>			7B. Our leaders prioritise solutions to problems that have arisen (*)			

3. Method of investigation

3.1. Development of the CDPM framework

The Swedish Quality Management Academy (SQMA—Eleven Universities in Sweden), with research expertise in quality management, broached the need for a more flexible approach to process management to achieve a more dynamic way of working in organisations (Fundin *et al.*, 2018, 2020). Consequently, a prestudy was initiated in which interviews were conducted with process management professionals from the telecom, automotive, health care, and social service sectors to better understand and define the relevance of the research. On the basis of the findings of the prestudy, a subsequent research project was initiated with two researchers. The findings from the prestudy indicated that most organisations, at varying process maturity levels, used process management to standardise their ways of working; however, the use of process management to enhance change-based processes was limited owing to organisational conflict. The new case study organisations were represented by six process management professionals from four companies in three countries (Sweden, France, and Germany) in the energy, automotive, and medical technology sectors. An interactive research approach was jointly created on the basis of organisational needs and the case study's research relevance. To ensure validity, data were collected through a triangulation process with three data collection procedures: 1) in-depth prestudy interviews, 2) quantitative respondent self-estimations of process maturity in selected processes, and 3) research project interactive narratives. In parallel, the researchers tested and analysed the data by comparing related existing theories and validated the results with the four organisations considering the research question and objective of the research study. The overall project was planned in stages, each producing validated results ready for use by the participating organisations. As the traditional process management paradigm faced challenges from new theories, such as trust-based management, innovation management, and change management, user stories were used to examine construct validity.

3.2. Development of Quality Culture behaviours

The Quality Culture project was conducted in 2015 with researchers from three Swedish universities and five Swedish public and private organisations (Cronemyr *et al.*, 2017). During the workshops, each quality value in the framework was analysed to identify the behaviours that constitute the values. The exercise resulted in 67 described behaviours for the values in the framework. The researchers gathered after the workshop to further analyse the results and develop the narratives. For each value, narratives were formulated: two long-term behaviours that support a quality culture and two short-term behaviours that obstruct a quality culture. The developed framework incorporating supportive and obstructive behaviours in quality culture was then analysed and revised by both practitioners and researchers during a workshop in August 2015. The final behaviours (see Table I above) were then used in surveys with the purpose of measuring what behaviours were most common in the organisations and what behaviours the employees preferred. Best practices were also shared between the organisations. The results from the investigation are given in Cronemyr *et al.* (2017).

3.3. Methodology of the current paper

The current study was initiated by the first author, who had previously participated in both research projects, first, quality culture (Cronemyr *et al.*, 2017), and second, CDPM (Cronemyr *et al.*, 2024). He had extensive experience in process management and some experience in quality culture. The second and third authors were approached with the research idea, since these two researchers also had extensive experience in quality culture. The third author also published a previous research project on quality culture.

The main purpose was to ‘map’ long- and short-term behaviours on the CDPM model to ‘infuse’ a quality culture into process management. The analysis in this study is based on conceptual and deductive discussions between the authors. The authors first performed the mapping individually and then discussed the results until a consensus was reached. This was not easy, partly because of the different preconceptions of the CDPM model. No testing or validation of the analysis results has been performed. This could be the purpose of subsequent research projects.

4. Results – Behaviours mapped on the CDPM

On the basis of conceptual and deductive discussions between the authors, the behaviours supporting a quality culture (long-term behaviours) and those obstructing a quality culture (short-term behaviours), as described in Table I, were classified according to whether they were characteristic of one of the four process management scenarios in the CDPM model (Figure 1).

The results are given in Figure 3 below, where ‘A’ behaviours, *e.g.*, ‘1A’, represent long-term behaviours, and ‘B’ behaviours, *e.g.*, ‘1B’, represent short-term behaviours.

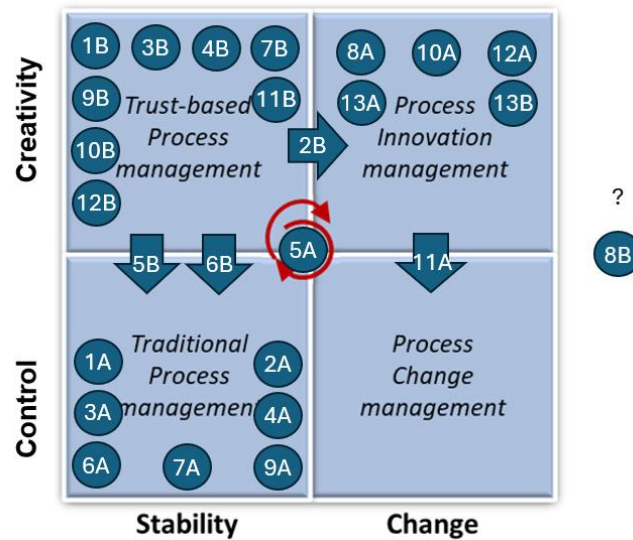


Figure 3 – Behaviours (see Table I for numbers) mapped on the CDPM model (explained in Figure 1 and Figure 2).

As shown in Figure 3, most (but not all) short-term behaviours (‘B’) are located within the ‘trust-based process management’ scenario, whereas long-term behaviours (‘A’) are located either in the ‘traditional process management’ or the ‘process innovation management’ quadrant. The behaviours represented by arrows indicate movement between two quadrants. Unexpectedly, no quality culture behaviours from Cronemyr *et al.* (2017) are located in process change management. Behaviour 8B was not classified as characteristic of either of the four quadrants, whereas behaviour 5A was classified as ‘normal PDSA work’ and, hence, was placed in the middle spiral.

5. Analysis

5.1. Pros and cons of the behaviours as mapped on the CDPM model

The most common or well-known PM scenario is traditional PM. The benefits of which include a good structure for work activities, documents, roles and systems for complicated processes and a good setup for measurements, monitoring and control. However, traditional PM is sometimes considered ‘slow and rigid’ (Cronemyr *et al.*, 2024). However, as Cronemyr *et al.* (2024) reported, PM, as applied in several organisations, is much less rigid and controlled. After processes have been established and become a new way of working, a more ‘free and creative’ way of working has often been adopted, *i.e.*, what Cronemyr *et al.* (2024) call trust-based PM. As shown in Figure 2, in trust-based PM, follow-up is conducted on the results rather than execution, as in traditional PM. However, this can sometimes lead to greater process variation, tampering and unpredictable results (Cronemyr *et al.*, 2024). The reasons for this are illustrated in Figure 3, where behaviours have been mapped on the CDPM model.

The analysis indicates that long-term behaviours are more common in traditional PM and process innovation management, whereas short-term behaviours are more common in trust-based PM. Both types of behaviours may be ‘effective’ if the circumstances are appropriate; otherwise, the opposite behaviour may be recommended. The short-term behaviours applied in trust-based PM may be conducive to a ‘free and creative’ way of working but may lead to unpredictable results in the long run. For example, the short-term behaviour “*each person chooses individually how to work*” (3B) represents a ‘free and creative’ workstyle but may eventually lead to unpredictable results when the work methods of employees differ and when external and internal customers do not know what to expect as an outcome. In such cases, management must steer the organisation towards traditional PM, prioritising long-term behaviour reflecting that “*We adhere to our agreed-upon guidelines and working methods*” (3A). After some time working with greater control, work methods may become more creative again. This is indicated by the spiral arrow between the trust-based and traditional PM in Figure 2 (right).

However, not all long-term behaviours have been incorporated into traditional PM, as shown in Figure 3. Some are located in process innovation management. This scenario is characterised by creativity and change. Cronemyr *et al.* (2024) described how needs for change and improvements lead to minor, major or radical innovation projects. First, projects must be selected and started by management; then, they are carried out by a project team with a methodology, *e.g.*, Six Sigma, DfSS, lean or free innovation; and finally, the improved process is handed over to process change management, where employees are informed and trained in the new/improved process’s way of working. Then, a period of traditional PM is implemented. The large loop is represented by the central spiral arrow in Figure 2 (right) and in Figure 3.

Therefore, some short-term behaviours in trust-based PM should not shift into traditional PM but rather move into process innovation management. For example, the short-term behaviour “*We solve problems as quickly and easily as possible*” (12B) may be ‘free and creative’ but may not solve the underlying root cause of a recurring problem. Neither does moving into traditional PM solve this problem because the official way of working may not have worked well in all circumstances. Instead, an innovation project needs to be started to analyse the root causes and determine a new way of working in which the root causes do not occur. This behaviour is the following: “*When we have a problem, we determine what the root cause is before we decide on a solution*” (12A), located in process innovation management. After minor changes (*e.g.*, in a document template) are fixed, the innovation project can continue with a trust-based PM approach; see the small spiral arrow in Figure 2 (right). Otherwise, major and radical improvements should always involve process change management, as indicated by behaviours 5A and 11A. The behaviour “*Our improvement work*

is managed by our leaders or specialists” (8B) did not fit in any quadrant since it is not naturally related to process management. However, the behaviour “*Development of our activities involves all coworkers on the basis of their competencies*” (8A) is clearly characteristic of process innovation management.

There may be pros and cons of short- and long-term behaviours in PM, as mapped on the CDPM model. While short-term behaviours help build a freer and more creative way of working, which may be good for employee satisfaction, they may lead to unpredictable results. That is, when management needs to steer into more traditional PM or if established processes do not work as intended, there may be a need for process innovation management.

One thing *not* covered by Cronemyr *et al.* (2024) is how to diagnose where a process in an organisation is currently in the CDPM model. Figure 3 shows that it might be possible to diagnose the current CDPM status by measuring behaviours within that specific process context. This could be accomplished by the method presented by Cronemyr *et al.* (2017). By inquiring about current behaviours using surveys, one might diagnose the current CDPM state. By analysing process performance measurements (KPIs), *e.g.*, feedback from internal and external customers, suggestions on how to steer and behave can be obtained.

5.2. Behaviours missing in the mapping

As noted above, trust-based PM is often characterised by short-term behaviours, which may lead to unpredictable results. It would be beneficial if some ‘short-term’ behaviours were slightly more ‘long-term’. Something in that vein was actually suggested by the CDPM project (Cronemyr *et al.*, 2024). In Figure 2, trust-based PM is described as follows: “*Agreed and predictable deliveries from agile and adaptable ways of working. Follow-up is conducted on results rather than execution*”. Here, “*agile and adaptable ways of working*” refer to the agile methodology with setting priorities, iterations and follow-up as *the guiding principles of speed* described by Kotter (2014). Using the terminology of QC behaviours, they can be considered as ‘short-term behaviours with a long-term focus’.

According to Mårtensson (2022), perhaps the most important thing to consider with regard to long-term behaviours in an organisation is that all behaviours are constantly linked to the organisation's vision and obstacles. Otherwise, no behaviour will be truly long-term. If the QC, which includes long-term thinking (Deming, 2000), is woven into the reasoning behind long-term behaviours, the underlying values will provide support and direction to shape an operation.

The QC spans a wide range of values; see Dahlgård *et al.* 2002 and Bergman *et al.* (2022). Identifying all behaviours is considered an impossible task, partly because of the quantity and partly because they change in step with development. The long-term behaviours presented by Cronemyr *et al.* (2017) should not be considered comprehensive but can be seen as guidelines for a QC. The guiding behaviours can be used as a starting point for organisations; however, the organisations themselves must evaluate whether they are relevant or if they should be modified to adapt to their own operations.

Regarding the quadrants in the CDMP model, more long-term behaviours may need to be clarified and developed. Among the current behaviours linked to continuous improvement, there must be a full understanding of the entire concept; the value of constantly working on improvements includes both solving problems and systematically learning from new solutions. Learning is clearly developed in the process change management quadrant (see Figure 2) but is not individually stated among the behaviours in Table 1.

6. Conclusions

The purpose of this paper was to elaborate on the idea that process management (PM) must be infused with a quality culture (QC) to function and achieve the expected performance targets. The framework of change-driven process management (CDPM) (Cronemyr *et al.*, 2024) has been used for process management. As the frame for quality culture, behaviours supporting long- and short-term action and development (Cronemyr *et al.*, 2017) have been used. Additional behaviours from another current study have also been included (Mårtensson, 2022). The paper was based on previous research and deductions made by the authors.

In the CDPM framework, which is defined by four scenarios—traditional PM, trust-based PM, process innovation management and process change management—different short- and long-term QC behaviours are classified and positioned in the most likely quadrant, *i.e.*, scenario.

Traditional PM is sometimes ‘slow and rigid’, whereas trust-based PM is more ‘free and creative’. However, trust-based PM can sometimes lead to greater process variation, tampering and unpredictable results. The analysis indicates that long-term behaviours are more common in traditional PM, whereas short-term behaviours are more common in trust-based PM. Both may be ‘effective’ if the circumstances are appropriate; otherwise, the opposite behaviour may be recommended.

There is a need in trust-based PM for ‘short-term’ behaviours that are slightly more ‘long-term’ to maintain trust-based PM rather than transition to traditional PM. This type of behaviour could be inspired by Kotter’s (2014) *the guiding principles of speed*, including setting priorities, iterations and follow-up.

From the analysis, it is assumed that it might be possible to diagnose the current CDPM status by measuring behaviours within a particular process context by using the method presented by Cronemyr *et al.* (2017). By analysing process performance measurements (KPIs), *e.g.*, feedback from internal and external customers, suggestions on how to steer and behave can be obtained. This could be the objective of subsequent research projects.

Furthermore, whether short-term behaviours are negative depends on the situation. Importantly, they are connected to the next step in a chain of behaviours and movements in the CDPM model. A strong and agreed-upon quality culture with values and principles should permeate the entire organisation and be mirrored in the behaviours among leaders and employees. This study reveals the results derived from three researchers’ solid knowledge and experience with PM and QC. However, we are aware that others may have different personal experiences from different contexts regarding PM and QC. We are also aware that this study is not comprehensive regarding QC behaviours.

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