

Prioritizing Business Processes Improvement Initiatives: The Seco Tools Case

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Abstract. Chief Information Officers (CIOs) face great challenges in prioritizing business process improvement initiatives due to limited resources and politics in decision making. We developed a prioritization and categorization method (PCM) for supporting CIOs' decision-making process. The method is designed in a collaborative research process engaging CIOs, process experts and researchers. In this experience paper, we firstly present the PCM, and then we describe the lessons learned when demonstrating the PCM prototype at a big international company, Seco Tools. The results show that the PCM can produce a holistic analysis of processes by eliciting the “collective intelligence” from process stakeholders and managers. The PCM activities create a top-down social process of process management. By using the PCM the company managed to prioritize business process improvement initiatives in a novel way. This paper contributes to theories/know how on business process management, as well as propose a novel method that can be used by CIOs of large corporations in prioritizing process initiatives.

Keywords: business process improvement, process prioritization, process categorization, demonstration, strategic decision making, industry experience.

1 Introduction

Chief Information Officers (CIOs) are usually responsible for the improvement of business processes [1]. The evidence shows that 60% of business process improvement initiatives, e.g., Six Sigma and Lean IT failed in reality [2]. What can CIOs do to tackle this failure? The answer relies probably on how they make strategic decisions on *what* and *how* to prioritize improvement initiatives through a transparent process. More importantly, CIOs need to establish a supportive culture for implementations of prioritized processes in order to ensure the sustainability and long-term value delivery of these processes [3]. In the business process management (BPM) practice, the available guidelines and methods for process prioritization are “*either of very high level and*

hence not of much assistance when attempting to implement BPM initiatives, or, on the contrary, are so detailed that it can take a significant effort to simply identify the critical processes” ([4] , p. 178). Moreover, these methods focus on activity- level analysis, managers may stuck in “*the complexities of the techniques and tools, and lose sight of the requirement to deliver corporate value*” [5]. Finally, project prioritization by CIOs is mostly politically driven, which means that executives of business units, that are more influential, get funding for projects regardless of their contributions to business strategy and values [6]. Therefore, a new more neutral method for prioritizing process improvement initiatives is needed. The method should 1) *identify* the processes to be improved; 2) *indicate* how to improve; and 3) *avoid* politics. As a result a novel method of prioritization decisions is created. The design requirement of the method is that it should be useful, efficient and reliable. “*Useful*” means the method can solve prioritization problems and support managers’ decision making in prioritization. “*Efficient*” means the method is easy to use and produces results by using limited resources and within a short time. “*Reliable*” means the method can produce good quality results that managers can rely on in decision making.

We adopt design science research methodology [7, 8] to develop and evaluate the new method, which we refer to as the prioritization and categorization method (PCM). Orlikowski [9] asserts the importance of engaging practice in research. Van de ven [10] also promotes the “engaged scholarship” approach in order to gain collective achievement and “co-product” knowledge “that can both advance the scientific enterprise and enlighten a community of practitioners” ([10], p.27). Since January 2011, the first author and a group of CIOs and BPM experts formed a think-tank, Duqtor (www.duqtor.com). The purpose of the think-tank is to facilitate dialogue and collaboration between practitioners and researchers. One initiative, that is core in this paper, is to engage CIOs and experts in collaboration for designing a method in prioritizing business processes improvement initiatives. The managers engaged in the design endeavour came from big organizations in Scandinavia, e.g., Atlas Copco, Postnord, Vattenfall, Västerås Stad, Bombardier Nordic, SSAB, Scania, Siemens Industrial Machinery, Seco Tools, Statkraft (Norway), Sandvik, and a Swedish consulting company Knowit. In February 2012, the PCM, a prototype built on Excel, was introduced for demonstration and testing in companies, e.g. Seco Tools.

In this paper, we mainly focus on the practical experience we obtained from the demonstration of the PCM at Seco Tools. During the demonstration we collected data on the perceptions and viewpoints of decision makers with regard to the use of the PCM in real decision making context. The experience is documented, analysed, and interpreted. The results are served as the foundation for improving the PCM to better fulfilling its design requirements and goals. This paper contributes to theories/know how on business process management, as well as propose a novel method that can be used by CIOs of large corporations.

This paper is organized as follows. In section 2, we briefly review the related research. We then give an overview of the PCM in section 3. In section 4, we describe how PCM was introduced at Seco Tools and the results from the demonstration. In section 5, we discuss the lessons learned. The paper concludes with a discussion of PCM contributions to research and to practice.

2 Related Research

Dumas et al. ([11], p.5) define a business process as “ a collection of inter-related events, activities and decision points that involve a number of actors and objects, and that collectively lead to an outcome that is of value to at least one customer”. Business process management (BPM) has rapidly evolved as a management philosophy and discipline with a specific focus on business processes [3]. It considers the continuous improvement and the fundamental innovation of business process to ensure that strategic goals and objectives of the organization can be achieved [12]. Harrington [13] presents the five stages of business process improvement, i.e. organising for improvement, understanding the process, streamlining, measurements and control, and continuous improvement. One of the key activities in the stages is to select the critical processes for improvement. The selection criteria are proposed by previous research; for examples, effectiveness, efficiency and adaptability [13]; strategic importance, process scope, needs to improve, and difficulty of improvement [14]; competition outperforming, many conflicts/high frequency/excessive non-structured communication, and continuous incremental improvement [15]; and importance, dysfunction, and feasibility [11]. The literature also presents the dimensions in order to clearly understand business process characteristics; for examples, flow, effectiveness, efficiency, cycle time and cost [13]; and time, cost, quality, and flexibility [11].

A number of BPM maturity models (e.g. [16, 17]) are developed and introduced to organizations for process improvement and innovation in order to achieve a successful process management. The analysis of maturity level of process and BPM is the indicator for improvement. However, the models lack applicability to practitioners [18]. Previous research has introduced a very few methods specifically for prioritizing processes improvement initiatives, for example, the business value scoring method [4], the process performance scoring method [19], and the value matrix of process and strategy alignment [12]. However, these methods only describe the process performance, and indicate where to prioritize, the information on how to improve is mostly missing. Six Sigma and Lean are the two methods that are widely used in the business for continuous process improvement, but they cannot easily be justified for the purpose of process prioritization. Bandara et al. conclude that prioritization “remains as a ‘mystery phase’ in most available guidelines” ([4], p. 178).

Although there is no standardized methodology yet for selecting and prioritizing processes for improvement, the literature recommends that the selection criteria should focus on: i) the strategic importance of the process; ii) the performance of the process; 3) flexibility for the process improvement, e.g. resource allocation, people’s readiness for change, and organization supportive culture. Previous research shares certain agreements with regards to analysing and understanding process. Quantitative and formal methods are recommended. However, these methods focus on process activity level. Managers may get lost in the complexity of these methods and tools [5]. Moreover, the results bring little values for understanding BPM as an enterprise-wide capability [5]. We are called upon to develop creative thinking in analysing processes which serves as the foundation for process selection and prioritization [11].

BPM is fundamentally a CIO and senior management responsibility [1]. Process governance is crucial for the success of business process as well for sustaining and optimizing process improvement performance [3]. Hence, a new method is required for supporting managers' decision making in prioritizing process improvement initiatives.

3 Prioritization and Categorization Method – PCM

The PCM consists of two models, the process assessment heat map (PAHM) and the process categorization map (CM). The CIOs and practitioners have formulated the perspectives of the heat map and the dimensions of categorization map in the design process. Both concepts are recognizable to business people and help to understand and adapt the processes for prioritizing improvement initiatives [20].

3.1 Process Assessment Heat Map – PAHM

The heat map helps to analyse processes from five distinct perspectives (see Table 1). The **Positioning** perspective is aimed at assessing the alignment of the process with the business strategy, objectives and values. Strategic positioning is the approach that Porter [21] has recommended for analysing process activities in business. With a proper positioning, companies would be able to identify to which degree the process is aligned with business strategy, objectives and values [5], [14]. We argue that positioning processes with the help of PAHM support companies to open employees' minds for generating critical thinking about process prioritization and to create common understanding of business processes and possible improvements. The **Relating** perspective is designed for investigating the attitudes, roles, risks and rewards of stakeholders exposed to the process. Literature has recognized the importance of people and culture-related activities in the context of BPM. A focus on these issues results in longer and stronger process improvements and improved management [3]. The **Preparing** perspective is directed at analysing availability and quality of key capabilities necessary for process improvements. The **Implementing** perspective is focussed on analysing the performance of the process that is subject to analysis. The **Proving** perspective is focussed on the degree to which processes are appropriately monitored and measured. Therefore it is necessary to define the proper metrics and to define the right KPIs levels.

Table 1 shows the working definitions of the five perspectives, and the sample questions, which were adapted from [3], [22]. Because each organization has its own strategy and business processes, the model allows managers to define and refine crucial aspects and questions in each perspective as relevant to the heat map (PAHM). The motivation for this design choice is twofold. First, the questions used, should motivate and engage managers and stakeholders to provide tactical knowledge and sample experiences. Therefore, the questions should be directly related to their work life, experience and context. Second, the information included in the heat map should be focused on each relevant process and on each relevant perspective, so that prioritization and decision making fits a specific organization. Relevant information to fill out the heat map is collected based on interviews with managers and stakeholders.

Table 1. PAHM Perspectives and Sample Questions

PAHM perspectives	Sample questions
Positioning assesses the alignment of the process with the business strategy, objectives and values.	How clear has management positioned the process role, mandate and importance in relation to the business strategy and operational model? Is the process well described in the management system?
Relating assesses the attitudes, roles, risks and rewards of stakeholders exposed to the process.	Do stakeholders share risks and rewards among the units/departments? Do stakeholders have clear understanding of the process? Are all key stakeholders in agreement with the process interfaces and improvement roadmap?
Preparing assesses the availability and quality of key capabilities for improving the process.	Do people have the right skills and competence? Are necessary resources secured? Do we depend on a key person? Do people commit to the process?
Implementing assesses the performance of the process that is subject to analysis.	What are customers' (internal, external) perceptions about the performance? How well do interfaces work around supporting processes? How effective is the process?
Proving assesses the degree to which the process is appropriately monitored and measured.	How well is business impact measured? What is the right level of process evaluation/measuring? What are the relevant KPIs? What is the relevant feedback loop?

We adopt Hammer’s colour regimes and quantitative measurements [22] in the heat map. If a process according to the perspective chosen is considered by CIOs or stakeholders to be eligible for improvement, the colour red is used to indicate the improvement potential to be more than 50%. If it is considered to have an improvement potential between 20% and 50%, the colour amber is used. If the process is considered to have less than 20% improvement potential, the colour is green. The heat map offers the opportunities to provide comments and motivations for the assessment based on current performance and expected improvements. The colour and comments are documented as shown in Fig. 1 (G=Green, A=Amber, R=Red).

PROCESS	POSITIONING	RELATING	PREPARING	IMPLEMENTING	PROVING	ADVICE
Create Forecast	G: visible activities	G:	A: Process flow interfaces red (very manual), resources red, skillset green	R: frontend information from the different markets. Should be relevant (by product and realistic growth ambitions)	A: We are at same service level as competition.	Closer to the markets, get outside Sweden (developing markets in particular) , get closer to product level (selected)

Fig. 1. The PAHM represented after one interview/one stakeholder

All assessments based on interviews are then consolidated in one table (See also Fig. 4). This table also presents an aggregated view of all individual assessments. If an interviewee assesses one of the processes from one perspective as red, then the aggregated view for this person will be red. For example, in Fig. 1, if the interviewee

assigned red to a process from the implementation perspective, the aggregated view of this process from this interviewee is also red. The process with the highest number of red assessments will be then getting the highest priority.

3.2 Process Categorization Map – CM

The PCM offers the possibility to position processes in a space that is defined by three dimensions, i.e., differentiating, formality and governance in the value network. The



Fig. 2. CM map

result is presented in what is labelled as the categorization map (CM) (Fig. 2). The map is aimed to obtain indicative information on how the prioritized processes resulted from the heat map can be improved, e.g. which type of process support system should be used, and what degree of change in the process is desired, i.e. incremental improvement or reengineering.

The dimensions for selection are based on three criteria. First, the fundamental criterion for prioritizing a process is the degree to which it contributes to the business strategy [14]. It is important that the process must make it possible for the company to differentiate itself from competitors by creating added value. Hence, we define differentiation as the degree to which a process is superior to analogous processes of competitors, and supports the value proposition of the organization. A continuous scale is used with differentiating processes and common processes as the extremes.

Second, BPM systems have become the inseparable mirror of process management. Information technology capabilities have to support process management capabilities [3]. If a process is fully aligned and supported by information technology, then it can become formalized and contribute to cost-effective execution [23]. As a contrast, if a process is unpredictable and knowledge intensive, operational cost in an organization will increase considerably [24]. Hence an assessment of the degree of formality is crucial for the analysis. **Formality** means the degree to which a process is strictly managed, repeatable, predictable, automatable, and involves applications rather than people. Formality is scored on a continuous scale with formal and informal as the extremes.

Third, it is the phenomena that companies in the different value networks collaborate to co-create values for consumers and create network value, i.e. revenues for individual network partners [5]. The positioning of a specific process in a value creation network helps companies to allocate limited resources to support value creation and relation building with network partners. This leads to serious (re)considerations of establishing process governance structure and mechanism, e.g. process ownership, accountability, responsibility, or decision rights [25]. So network governance is identified as the third dimension. **Value network governance**, thereby, is defined as the degree to which a process interacts with front-end or back-end network partners/customers in the value network, which determines process governance.

So back-end and front-end are opposites. The detailed operationalization for the three dimensions is offered in table 2.

Figure two shows an example how a process can be positioned. In the map you see a business process. Letter A that illustrate the current *as-is* positioning, and T that indicates the *to-be* positioning of the same process. The map is constructed as a six-cell grid in two dimensions rather than a cube in three dimensions. The reasons for this design choice are that: 1) the visualization of results in two dimensions is easy to understand, and 2) a process that has the characteristics of being common and informal, independent from the question if it is a back or front process *ideally* should not exist. However, we realize that such a process may remain in reality and A* is then used to indicate this instance. The CM is engaged in the assessments from level 1 to level 3, which is the core corporate processes (level 1), process areas (level 2), and main processes (level 3) [26]. The reasons for this design are because we aim to avoid the complexity in the assessment; as well top management is not interested in syntactic details of the lower business processes.

Table 2. CM Dimensions and Sample Questions

CM dimensions	Sample questions
Differentiation assesses the degree to which a process is superior to analogous processes of competitors, thereby differentiating the value proposition of the organization (scale: differentiating to common).	Does the process in scope differentiate your company versus your competitors? Does the process in scope perform poorer than your competitors?
Formality assesses the degree to which a process is strictly managed, repeatable, predictable, automatable, and involves applications rather than people (scale: formal to informal).	Does the process in scope reside on tacit knowledge? How strict is the process in scope managed? How much of the process in scope is done in an unstructured way? How much of the process is done with manual work?
Value network governance assesses the degree to which a process interacts with front-end or back-end network partners/customers in the value network, which determines process governance (scale: back to front).	Does the process interact with suppliers, consumers or others actors in the value network? Where is the ownership of the process in scope? Who is accountable and responsible for the process?

4 The Seco Tools Project

Seco Tools is a global company with 5,600 employees in 42 countries, and annual sales of 7,000 MSEK (~1 BUSD). The company has an established reputation as a world leading manufacturer and supplier of carbide cutting tools and related equipment. “Passion for customer” is the core driver for their business. Seco Tools actively contribute to improving customers’ productivity and competitiveness by providing powerful machinery solutions to leading companies in the automotive, aerospace, oil and gas, energy and medical industries, among many others around the world.

4.1 The CIO's Motivation

Seco Tools launched “one Seco program” to improve their business processes in 2011. However, the senior management team did not share the same view on BPM and did not agree on how to establish a process-oriented organization. The CIO and senior vice president (VP) of process and IT was responsible for implementing the “one SECO program”. The aim of this program was to create a common understanding and culture with regard to BPM, and to decide on the budget for process improvement projects. The manager faced the following challenges:

1) Seco Tools stems from the traditional “manufacturing” industry. The company has a rather conservative and strong organization culture.

2) Business and IT do not share a common understanding of the business. They have a clear vision on process ownership, and quite a different understanding of each other's work. As the CIO/VP said: *“I have the feeling that there were two parties sitting on respective sides of the fence and no common understanding.”*

3) All businesses ask for improvements in their business areas. But the CIO/VP has limited budgets/resources for executing all projects. He said *“The demand is three times larger than what we could do with existing budgets and resources.”*

4) The CIO/VP needed clear evidence as well as consensus in prioritizing process improvement projects, to be able to say “no” to other projects. Without transparency and trustworthiness in the decision-making process, the CIO would endanger his position and support in the company.

The CIO/VP decided to use the PCM in prioritizing process improvement initiatives. He articulated the motivation that

“Because of our strong manufacturing culture in the company, we will never accept management consultants, who bring a model, perfectly with a three or four letter acronym. This is deemed to fail from the start. The BPM maturity models, which are a kind of off-the-shelf survey that is conducted by doing impractical assessments in numbers, would not be our way forward. By engaging myself in the PCM design process with other CIOs and academic researchers, I learned to appreciate the value and relevance of the method in solving our problem. We jointly discover the common problems in prioritizing process improvement initiatives. With this background, I strongly believe the worth of testing the PCM in my company.”

The aims of the project for Seco Tools were to: 1) prioritize the process that has high improvement potential, for example, to achieve “operational excellence” in operational process, “product & services innovation” at the back-end, and “passion for customer” at the front end; 2) to find out which processes have improvement potential and can be handled in the future. The project was done between January and April 2012;¹ 3) for research purposes, we aimed to demonstrate the method and use it to solve the prioritization problems. Moreover, we gathered feedback to improve the PCM in future research.

¹ The CIO/VP shared the experience and his reflections with the public in March 2013. The video is available at <http://bambuser.com/v/3434182> (in Swedish). The quotations we cited in this paper are translated by the first author from Swedish to English.

4.2 The PCM Demonstration Procedure

The demonstration was completed by following the **four steps**.

1. The CIO firstly selected 40 processes that were intended for improvement. He then contacted the former CEO, who has worked for 30 years for the company; then he selected the VP in the Asian region, and the global process manager. They together identified 12 out of 40 processes for assessment, including a few simple lower-level processes. The pre-selection was guided by using the PCM.
2. The CIO and the three managers reviewed and agreed on the core questions in the assessment. Then the three managers further recommended other stakeholders based on their informal network to perform the assessments and interviews. Altogether they selected 20 key stakeholders (both owner and customers of the processes) from different business functions, different countries and from different levels in the organization, i.e., strategic, functional as well as operational. These managers were the CIO/Senior Vice President, Global Distribution Manager, Country Managing Director, Global Process Manager, Director Operations and Human Resources, Quality Manager, Process Owners and Process Improvers.
3. Interviews with each manager were conducted by involved researchers. In the first part of the interviews the heat map (PAHM) was used. This took about one and half hours. In the second part of the interview the CM assessment was central. This part took about 30 minutes. The researchers didn't impose personal opinions and kept neutral in the interviews.

First the 12 selected processes for the assessment were introduced. Next the five perspectives in combination with the key questions for generating a PAHM were discussed. The managers were asked to decide on a colour, green, amber or red, based on their knowledge and experiences of the process and on discussion of the key questions with involved researchers. The managers were asked to give concrete reasons and to motivate why they chose a specific colour. They were also asked to give their advice on how to improve the process. All these comments were documented in the heat map.

Next, the interviews were focused on process categorization. The CM, the three dimensions and the key questions, and the *as-is* and *to-be* analysis were introduced by the researchers. The managers did the *as-is* analysis of the process by answering and reflecting on the three dimensions and the questions for the current situations first. As a follow up, they went through the same questions again but with a future oriented thinking, i.e. two to three years, of where they would like to see the process *to-be* to move to. The discussions during the completion of the task related to the heat map helped the managers to get familiar with the assessment. Their learning and reflections served as the basis for generating the CM. The intensive interaction during the interviews had generated active learning and reflection for both involved managers and researchers.

4. Finally, the results from the individual interviews were consolidated, calibrated and coordinated at the end. The evaluation results were presented and discussed at a Business Process Council meeting where 18 top managers of Seco Tools participated in March 2012.

4.3 Results

We only present one of the examples of the results. We focus on the process to Create Forecasts. The process received the highest numbers of red in the assessment.



Fig. 3. Create forecast process at Seco Tools

The forecast process is presented and analysed here to illustrate the kind of results that can be derived from using the PCM. The process under discussion is a level 3 process that is part of the “supply”

domain and a core processes at the corporate level (see Fig. 3).

Figure four shows the heat map of the process. Each cell presents the results from an assessment by an individual manager (R1 -interviewee 1 - to R20- interviewee 20). The results show that the process has high potential for future improvement in the overall assessment. A majority of the managers (17) assessed the process as having more than 50% improvement potential (illustrated by the colour red). The other three managers consider it to be an amber process. The results from the five perspectives indicated that the improvement should be focused on Implementation (14 red, 4 amber) and Proving (10 in red, and 7 in amber). The company should also pay attention to the Preparing perspective, as the 18 managers perceived its potential for improvement (4 in red and in amber). It seemed that most of the managers (12, 60%) were satisfied with the process performance from the perspectives of Positioning and Relating.

The CM of the “create forecast process” is shown in Fig. 5. Most of the managers (13) described the as-is state (marked as A) of the process as having the characteristics of being formal, common and back (closer to supplier). Four managers believed that the process was common, informal and back (mark as A*). A majority of them (13) prescribed the to-be state of the process as informal, differentiating and near the vertical line between the front and back dimension. Although the other seven managers had different perceptions of the to-be state of the process, they also believed that the process should possess the characteristics of being near the vertical line between the front and back dimension. The relative distance between the as-is dots and the to-be dots was clearly shown in the map, which indicated that the process should be reengineered [27]. The to-be process required the seamlessly collaboration of the supporting processes at the back (with suppliers) and front (with customers) dimension. This suggested the need for change in the process management and resource allocation for establishing and ensuring this inter-organizational process collaboration.

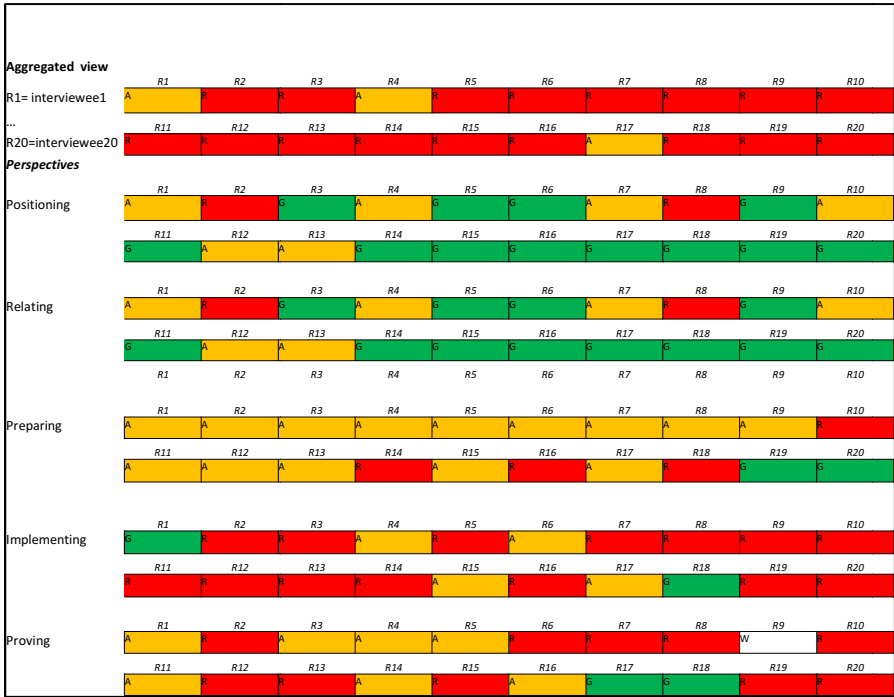


Fig. 4. PAHM: Create forecast process (manipulated picture)

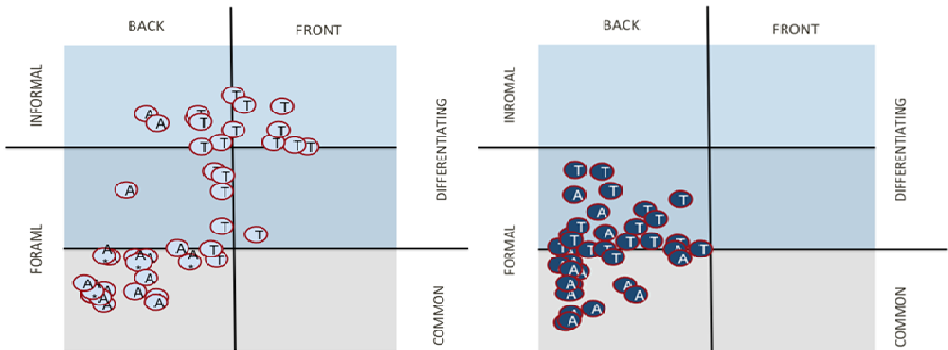


Fig. 5. PCM – Process Create Forecast (left) in comparison with another process at Seco Tools

Figure five also showed the CM of another process that we evaluated at Seco Tools. Comparing these two processes, we can easily find out that the managers had different views of the two processes’ characteristics. The create forecast process as we discussed needs big changes and should be reengineered. In comparison, another process needs a small improvement, as the as-is and to-be dots are mostly located in the “formal, common and back” area. The company only needs to improve the process to be “differentiating” to a small degree. The CM results indicate how to improve the process in scope.

4.4 Top Management Decision in Prioritizing Process Improvement Initiatives

The top management team discussed the overall results of the 12 processes from the PCM analysis, particularly which processes to prioritize to generate a better value from the process prioritization projects for the business. The managers also tried to identify if the organizational capabilities were aligned for a successful implementation for the prioritized processes. The team reflected the shared view of the purposes and challenges for implementing the process driven operations in the organization. The two most important problems were raised at the end of the discussions: 1) the process performance varied a lot among different processes; 2) and the process performance measurement was missing in almost all the processes, therefore the proving perspective of PAHM should be improved. Because the consensus is achieved in the PCM demonstration based on the assessments from managers at different levels, the team was comfortable to make the decisions [21]. Accordingly, they made the following decisions: 1) five processes were prioritized for improvement, including create forecast process; 2) at least two KPIs per process should be published on a regular basis in order to improve process transparency and performance, in order to enhance the “proving” perspective; and 3) the organizational capabilities, e.g., people, culture and IT priorities (reliability, cost, agility, quality) should be in focus for supporting a successful implementation of the prioritized processes.

5 Lessons Learned

Five lessons from this demonstration stand out.

First, the PCM is a *useful, efficient and reliable* method in supporting prioritization decisions. The PCM can produce a holistic analysis of processes with good quality within a short time by interviewing 20 people. It assists the managers in gaining a common understanding of the processes’ performance, and to reach consensus about where to prioritize and where to invest the resources. Therefore, the PCM can solve the problems in prioritizing process improvement initiatives. The CIO/VP stated:

“The method is a tremendous help to me, in that it creates, together with the management board, a common picture regarding our as-is state and to-be state. It was a foundation, where we could agree which process works well and which does worse. This consensus was not present at all before we did this demonstration. We know where to assign our resources to the prioritized process. The processes that work fine can wait.” He continued that: *“The method helped us to decide what, where in the processes the improvements should take place, but then, the how, is the next question the method can indicate. Should we go for a large change project or implementing an existing process with everyday business operation through small adjustment?”*

Based on analysis of the process characteristics, the categorization map (CM) can give an indication for the “how” question. For instance, if the *to be state* of a process should be formal and common, then the company can automate the process; if the *to be state* of a process should be informal and differentiating, then the company should focus on business process reengineering for big changes. The “*to be*” state also implies that companies should allocate limited resources, and capabilities for ensuring a successful implementation of the prioritized processes [3].

Second, top management should initiate and participate in the assessment. The CIO/VP recognized the power of “collective intelligence” in the demonstration process. He identified the key stakeholders based on his formal and informal network in the company, and then those key stakeholders recommended other influential persons from their own social network. In doing so, a top-down social process in decision making was created. This ensures the right people are included in the interviews. Therefore, politics in decision making is avoided. Involving right people also increases the data quality of the assessment. Consequently, it improves the quality and reliability of the results which are used for strategic decision making. The CIO/VP reflected that:

“It is very important to do a good preparation work and to choose the right interviewees. They are not only from the management group, but also from a more heterogenous group of key stakeholders, informal leaders in the organization, such as individuals who have not formal leadership but have a strong position and great knowledge of the business. The number should be manageable, given the size of the business and decent coverage of the business areas. You have to adopt the method to your own business.” He further explained that: *“By using the method in the decision-making process, I took help from the ones that have spent their entire carrier in the business; those who know how things really work. ...I get a sense of what is important at present, and what I should do next.”*

Third, the interviews guided by the PCM, were conducted with the right people, which creates openness, transparency and trust in the decision-making process. The interviewees’ names were known by the whole organization. The selection of the right people was a deliberate choice. People who were not involved would “buy in” to the decision because they saw their peers who they trusted participated in the decision making. This effect was very much appreciated by the CIO/VP: *“I was a little bit worried, how the people who were not interviewed would interpret this. It turned out, because of our openness regarding who was interviewed and that we had made a consensus decision, it was quite well accepted.”*

Fourth and lastly, the interviewer(s)/facilitators should preferably remain neutral in the assessment. This helped in avoiding personal influences and creating trust during the interview sessions enabled the interviewees to open up their thinking and transferred more intangible knowledge during the interviews. Involving two interviewers proved to give a better result than only one considering the limited time for interviews, since taking both notes and facilitating the interviews was too challenging.

The general learning outcomes of this demonstration are that, 1) the PCM can identify the processes to be improved and indicate how to improve. The PCM produces a holistic analysis of processes from the five perspectives of PAHM and the three dimensions of CM. The PCM can solve the prioritization problem in organizations, and it is useful in a real decision-making context. 2) The CIO and process stakeholders have deepened their understanding of how process prioritization and categorization can be facilitated, operated and analysed by the PCM in the organization. 3) The CIO/VP at Seco Tools recommended that it is crucial to choose the right people in the interviews for ensuring the full benefits of using the PCM, especially, avoiding politics in decision making. In other words, people in both the formal network and infor-

mal network in the organization should be identified and included in the assessments [28]. Moreover, the top-down social process created in adapting the PCM in decision making, has improved the communication between business and IT, enhanced the information/knowledge sharing among managers at different levels, and established a supportive culture for an effective process management.

6 Conclusion

This paper presents the PCM and depicts the experience from Seco Tools in prioritizing process improvement initiatives by demonstrating the method. The evidences support that the PCM is a novel method in prioritizing process improvement initiatives. It clarifies the prior theoretical “mystery” in prioritization by providing a holistic analysis of processes from the five perspectives of PAHM and three dimensions of CM. The PCM can identify processes to be improved and indicate how to improve.

A significant benefit of using the PCM is that practitioners can gain a better and common understanding of processes, improvement potentials and how to improve processes. This builds up a solid foundation for decision making in prioritizing process improvement initiatives. Furthermore, the company creates a novel way of making decisions by using the PCM. The prioritization process was transparent, open, and trustworthy. This supported top management in making the right decisions, and created a good “buy in” of the decisions made. Additionally, the top-down social process in using the PCM has been beneficial for the company in eliciting the “intelligence” from the right people and creating a culture for process management. Therefore, the PCM can avoid politics in decision making for prioritizing process initiatives.

Building upon the experience from the Seco Tools project, we further developed a web-based application of the PCM. The PCM has now been tested and evaluated by a number of Swedish companies and public organizations. We will evaluate the PCM in different contexts and improve the method in future research.

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