Are you viewing, mapping or managing your processes?

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ABSTRACT

Process orientation in one form or another has become a feature in the organizational language of many health care organizations. The objective of the present study was to investigate if different applications of process orientation exist and how these are characterised. Furthermore, the objective was to investigate how the applications of process orientation relate to the line organization. A questionnaire with the purpose to capture the respondents' attitude towards their process initiatives was sent out to people with the explicit knowledge of process orientation within the Region of Västra Götaland. A total of 178 individuals were questioned (response rate 68%). Based on the results, this study suggests that process orientation can be classified into three various applications – process view, process mapping, and process management. On overall, the study also illustrates a fairly low application of process orientation. Worth noticing is that the perceived gap between present status and what is regarded as desired is totally one-sided – no one states that is would be desirable with less process orientation. By viewing process orientation as a spectrum of applications, the study contributes to a more nuanced debate on process orientation.

INTRODUCTION

Recent times have witnessed the emergence of process orientation as a concept for organizational improvement and success in both the private and the public sector. With directed attention towards how value is actually being created within organizations (i.e., the process) instead of the outcome (i.e., the product), process orientation has been described as perhaps the most important management idea of the last 20 years (Cole and Scott, 2000). Considering this recognition and the widespread work of process orientation in today's organisations there is great reason to examine its applications further.

Although management ideas are widely discussed in the management literature, such discussions tend to remain conceptual and there is little attention paid to how they are applied in organizations (Benders, 1999). However, management ideas are generally characterized by a certain degree of conceptual ambiguity. It is therefore difficult to pinpoint their literal meaning (Alänge, Jacobsson et al., 1998). Because of the tacit nature of management ideas, different interpretations are possible and one idea can be given various meanings due to the subjective perceptions of the members of the organization. It is therefore essential to address these interpretations in research on management ideas since the "impact on organizational practice lies in the first place in its interpretations rather than in its original content" (Benders and van Bijsterveld, 2000 p. 53). Consequently, in order say something about the management ideas' usefulness, we need to study its application.

In this paper we will present some partial results from a broader study of the perception and experiences of process orientation. In this paper we will address the practitioners' interpretations of process orientation, and how these interpretations are translated (Czarniawska and Joerges, 1996) into the particular context.

Since it seems reasonable to assume that the inherited interpretative flexibility in process orientation may cause a wide spectrum of different applications of the same original idea, the objective of the present study was to investigate if different applications of process orientation exist and how these are characterised. Furthermore, the objective was to investigate how the applications of process orientation relate to the line organization.

In addressing these questions we hope to shed light on different applications of process orientation and contribute to a more nuanced understanding of the field of process orientation.

The emergence of process orientation

The notion of process orientation can be traced back to the evolving quality movement and its advocated shift in focus from product characteristics to process characteristics (Shewhart, 1931). This shift in focus was emphasized further by next generation of scholars within the quality movement, suggesting that the whole organization should be viewed as a system of processes that should be mapped, improved, and under control (Ishikawa, 1985; Deming, 1988; Juran, 1989). This orientation towards processes became a vital element in Total Quality Management (Hackman and Wageman, 1995) and other management ideas as e.g. Lean Production, Just-In-Time and Business Process Reengineering.

By focusing on activities that generates value for customers, and view the organization as linked chains of activities cutting across departments, process orientation has delivered a powerful answer to many of the perceived problems that functional and product-oriented structured organizations face (Garvin, 1998). The belief is grounded in the conviction that most existing processes have grown unchecked, without any relevant control, and are therefore terribly inefficient (Garvin, 1998). However, by focusing on the processes that generates value for the customers, and question activities within the organization that does not directly contribute to these processes, process orientation promises both speed and organizational efficiency (Davenport, 1993; Garvin, 1998).

Interpretations of process orientation

There is considerable debate about what process orientation means and how organizations should interpret the process message. With lack of any clear-cut directions that might provide guidance on how to deploy process orientation, it has

been described as both a set of tools and techniques for improving processes and a method for integrating the whole organisation (Lee and Dale, 1998).
In an attempt to explain Total Quality Management (TQM), Dean Jr. and Bowen (1994) define it as a "philosophy or an approach to management" made up of a "set of mutually reinforcing principles, each of which is supported by a set of practices and techniques". A similar typology has been used by Hellsten and Klefsjö (2000), when they elaborate on the distinction between core values, techniques, and tools in order to explain TQM.

According to Hellsten & Klefsjö (2000), a TQM implementation should start with the identification of important values. Secondly, techniques that support these core values should be identified and used continuously and consistently. Finally, tools should be selected and used in an efficient way in order to support the technique chosen. For example, the value focus on processes can be accomplished through the technique of process management. Tools, such as process maps and control charts, are then needed in order to be successful with process management and support a focus on processes.

Despite its explicit focus on TQM, Hellsten and Klefsjö's classification give some ideas on how various applications of process orientation can classified. Process orientation is also described as an evolution with series of steps towards a higher degree of orientation towards the processes. A typical beginning in this evolution is that process maps are developed to generate an awareness of the chain of activities. After establishing the architecture for the processes, processes are streamlined by reducing variation, eliminating redundant activities, smoothening handoffs between traditional organizational boundaries, and grouping related tasks and responsibilities. This may then be further translated into changes in organisational structures when "process owners" are designated. Their role is to lead the improvements of the processes, ensure integration, and be a "spokesperson" for the process in relation the rest of the organization (Harrington, 1991; Garvin, 1998; Pritchard and Armistead, 1999).

Consequently, an increased orientation towards processes might also have implications on distribution of power and organizational structure. The more radical process rhetoric, most loudly promoted by Business Process Reengineering advocates during the 1990s, argued for more fundamental changes in organisational structures by skipping the functional organization and "go horizontal". In reality few organizations took the step to becoming fully process-based (Stalk Jr and Black, 1994; Boehm and Phipps, 1996; Braganza and Korac-Kakabadse, 2000). Instead there is a "design continuum" ranging from the highly departmentalized functional organization to the fully process-based organization (Boehm and Phipps, 1996). Schematically this continuum can be converted into four possible types of organizational forms (see Figure 1): the vertical functional organization, the functional organization with horizontal process overlays, the process organization with functional overlays, and the process-based organization.

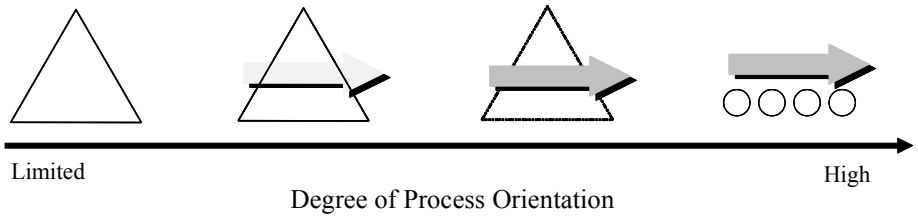

Figure 1 Principle stages of process orientation

METHOD

The paper at hand, present some of the findings from a broader explorative study on the experiences of process orientation, its effects and perceived inhibition. In the present study we decided to include individuals within Region Västra Götaland that both have theoretical and practical experience of process orientation. Region Västra Götaland has 1.5 million inhabitants and 50,000 employees and its major task is to manage the region's health care system. The majority of the employees work at the 17 hospitals, 134 health care centres, and 170 public dental care clinics. To ensure respondents with explicit knowledge on process orientation, the selection criterions were decided to be that the respondents either has participated in a two-day course in process orientation, or occupy positions by which one can assume implying deep knowledge about process orientation (e.g. quality managers, process facilitators). Together these generated 183 individuals, an amount that we considered manageable and sufficient for exploratory purposes, thus we decided to include the whole targeted group of "experts" and regard it as the population at hand.

Developing the questionnaire

The questionnaire was developed with the purpose of capturing the respondents' attitudes towards process orientation and their own experiences of process work. The items was generated by both a literature review on process orientation and a focus group work shop with experienced professionals on process orientation within the health care sector. Following the advise from Krueger and Casey (2000), a limited number of participants (four) took part in the focus group due to the rather complex topic and the high knowledge level among the participants. By using the focus group practical definitions of the topics of interest were obtained.

To reduce the possibility of non-random error effects, six practitioners with extensive experience of process orientation approaches in general and knowledge in the various applications within the Region Västra Götaland in particular, reviewed the questionnaire. Special attention was directed towards if it was comprehendible, i.e. that questions and vocabulary not will be misinterpreted, that it measured the aspects intended, and that all relevant aspects are included. After the review, appropriate adjustments were made to achieve relevant questions with an adequate vocabulary. The final questionnaire was distributed via a web questionnaire software during August and September 2006.

Response rate

The population consisted of 183 individuals. Within this population, two stated that they no longer worked in the Region Västra Götaland. Another claimed she had never participated in the stated course and therefore did not belong to the targeted population. These three individuals were consequently excluded from the original setting (N=180). A total number of 122 individuals answered the questionnaire, which results in a response rate of 68% (122/180).

A non-response analysis was performed by sending out a shorter version of the original questionnaire to all the non-respondents in the first call. This dispatch generated 16 responses. The shortened questionnaire contained background questions on the respondents' experience, how successful the applications have been, and how they would describe the application of process management. A question on what was the main reason for not responding to the first call was added as a final question. The responses to this final question showed no reason to suspect any biases in the group that responded to the first call. A majority of the respondents stated lack of time as the main reason for not responding. A t-test on the background questions for the two

response groups was also conducted. Results showed there were no significant difference (at $p<.05$), therefore non-response bias has not been recognised as a problem.

RESULTS

A classification of process orientation

The questionnaire included six questions regarding the application of process orientation, see Table I. By performing a principal component analysis on these variables, the number of variables can be reduced by removing redundant correlated variables in the data set, replacing it with a smaller number of uncorrelated variables. By this analysis, the structure of the data is also examined and potential underlying factors can be identified. Tests showed that principal component analysis was a suitable analysis method for the variables at hand (Kaiser-Melkin-Olkin Measure of Sampling Adequacy=0.807, Barlett's Test of Sphericity with p=0.000).

The Kaiser criterion on deciding the number of factors suggested two factors. The scree plot showed that it would be possible to retain two or three factors. The factor solution of the analysis (using varimax rotation) with two factors was troublesome to interpret due to ambiguous factor loadings. However, the factor solution from the analysis with three factors made more sense. The rotated component matrix for three factors is shown in Table I.

Table I. Factor loadings for the variables describing usage of process orientation. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. The three factors accounts for 85% of the variance. According to Hair (1998) factor loads below 0.5 are not significant on sample size below 120 and are not shown in the table.

Item	**Factor Loads**		
	1. Process management	***2. Process mapping***	***3. Process view***
1. A view, i.e. processes are something one thinks of and talks about			.967
2. Processes are identified		.845	
3. Processes are defined and mapped		.828	
4. Positions with special responsibility for the processes are appointed, e.g. process owners	.783		
5. Targets and measurements are connected to the processes	.865		
6. Assessments and improvements of the processes have been carried out	.844		
Rotation Sums of Squared Loadings	*39.4%*	*28.0%*	*18.0%*
Cronbach's alpha	*.85*	*.88*	-

The first factor is marked by high loadings on the last three variables (process owner, measurement system, assessments and improvements) and was given the label "Process management". The second factor has high loadings on variable two and three (processes are identified and processes are mapped). This factor was suggested the label "process mapping". The last factor loads entirely on variable one – processes are seen as a certain perspective on the organization/operation, and is consequently suggested the label "process view". These three new latent variables on ways of working with process orientation show a condensed structure of the original data that might be easier to interpret and simpler to explain.

The relationship between line organisation and process orientation

The questionnaire also included two questions on the relationship between the traditional line organization and the process initiative. The questions are based on an operationalization of the "design continuum" ranging from the highly departmentalized functional organization to the fully process-based organization (previously illustrated in Figure 1). In one question the respondents were asked to state the relationship between the line organization and their organizations' application of process orientation, see Table II. In the second question the respondents were asked to state what status between the line organization and the process initiative they perceived as desirable.

Table II. The actually perceived versus desired relationship between the line organization and the process initiative. Relationship converted into five possible types of situations. (missing = 1)

Relationship between the line organization and the process initiative as it is today	**Desired relationship between the line organization and the process initiative (see column 1 for detailed description of each status)**					
	Status 1	**Status 2**	**Status 3**	**Status 4**	**Status 5**	***Total***
Status 1: Traditional line organization. Processes are not talked about.	2	0	5	2	1	10
Status 2: Traditional line organization. The process initiative is foremost used as an improvement method.	0	6	34	21	6	67
Status 3: Line organization with complementing process perspective. Formal decision-making is done in the line organization, but with the process perspective as a complement.	0	0	13	20	8	41
Status 4: The organization is mostly described on the basis of the processes. Formal decision-making is done in the process, but with the line organization as a complement.	0	0	0	3	0	3
Status 5: The organization is organized according to its processes. The line organization, in traditional meaning, has been abolished. The organization is solely being managed on the basis of its processes.	0	0	0	0	0	0
Total	2	6	52	46	15	121

The matrix illustrates that the most common relationship is Status 2 - a line organization where the process perspective is primarily used as an improvement technique. Status 3, the process perspective is starting to complement the line perspective, is stated as the second most common relationship. Only three respondents state that they regard their organization as primarily being managed with their processes as a basis, and none stated Status 5 as their organizations´ situation. When examining the desired state, the overall picture shows a wish for a greater orientation towards processes. Status 3 and 4 are by the majority regarded as the most desirable states. The longing for a greater process orientation is further illustrated by the fact that the extreme level, Status 5, is actually stated as the desirable state by 15 respondents. This longing for greater process orientation is even more illustrated by the fact that a minority of the respondents that perceive their organisations as being

between Status 1 and 3, regard their present situation as desirable. Noteworthy is however that the three respondents regarding their organisations as Status 4-organizations are satisfied with their situation.

CONCLUDING DISCUSSION

Based on the results, one is led to the conclusion that process orientation can be classified into three various applications – process view, process mapping, and process management. These findings are close to the classifications of general quality management applications presented by Dean Jr. and Bowen (1994) and Hellsten and Klefsjö (2000). However, these two classifications use similar vocabulary but do not always mean the same thing.

One way to establish process orientation is by process management. Typical elements in process management are that process owners are appointed, a process measurement system is established, and improvements opportunities are identified. By establishing these new organizational elements, the structure is adhering to improved processes and is altered to reflect the orientation towards processes.

Process mapping is the most tangible and concrete level of the classification. It can be used as a separate improvement tool as well as in combination with e.g. process management. By identifying and mapping the processes, architecture is developed as a means of understanding the organisation and improvement opportunities are identified. This architecture can then be the basis for adhering process management.

Process view is a bit more intricate to classify. In one perspective it is easy to make the connection to what Hellsten and Klefsjö (2000) calls value, i.e. a basic element of the culture of the organization. They exemplify "focus on processes" as a core value in TQM. However, the explicit formulation in the questionnaire was "A view, i.e. processes are something one thinks of and talks about". To only see this approach as a value may be wrong since it reduces the operative dimension of "a view". We would prefer to define it as a linguistic or intellectual approach to process orientation. Processes might be used metaphorically as a perspective on the organization by which the personnel can be encouraged to view individual actions as links in a much longer chain of events, crossing traditional functional barriers. The usage of the concept 'chain of care' might be a typical application of this mode of process orientation. In this 'softer' application of process orientation, the main objective is not to establish a new structure since no real efforts have been made to identify or map the processes that could be the basis for a management structures for the processes. Given this perspective, the label 'value' seems not fitting.

On overall, the study also illustrates a fairly low application of process orientation. The most common relationship is Status 2 - a line organization where the process perspective is primarily used as an improvement technique. Status 3, the process perspective is starting to complement the line perspective, is stated as the second most common relationship. When examining the desired state, the overall picture shows a wish for a greater orientation towards processes. Worth noticing is that the perceived gap between present status and what is regarded as desired is totally one-sided – no one states that is would be desirable with less process orientation.

In further research on process orientation we think it is necessary to differentiate between different applications of process orientation and clearly address what kind of process application one refers to. With our classification we show that process orientation benefits of more decomposable definitions, and by that we hope to contribute to less single-minded discourse on process orientation.

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