

Author: Torstein Nesheim

Process ownership in matrix organizations: Identifying a research gap

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Jorunn E Tharaldsen Project Manager	Sign.date	Gottfried Heinzerling Sr. Vice President (Social Science and Business Development)	Sign.date
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1 INTRODUCTION

The process based perspective on organizations is based on the premise that value is created in sequential work processes, that often cut across functional departments and competence areas (Hammer and Champy, 1993; Derezin, 1997; Anand and Daft, 2007). The role as process owners, who is responsible for the governing and monitoring of these work processes, often has a key role in such endeavors. This begs the question of how the process owner role and related devices are aligned with the organizational structure of the firm. While one would expect that that process roles and structures often coexist with functional and product based skills and activities, there has been little systematic research on these issues.

Further, the literature on matrix management and lateral structures, that (by definition) analyze how different interdependencies and bases of grouping are combined, has neglected the work process dimension. In this paper we sketch how the process owners as an horizontal “overlay” may coexist and interact with the hierarchical line organization. Research should extend the understanding of matrix management by investigating a new element in such structures; the process owner role. Thus, the main contribution of the paper is to identify a research gap in our understanding of organizational design.

2 HORIZONTAL WORK PROCESSES AND THE PROCESS OWNER ROLE

From the mid 80s, there has been a stream of writing on organizations from a work process perspective. These approaches share a common focus on the processes by which organizations create value. A common thread is the suggestion that value creation for the most part is a process, that involves the lateral coordination of chain-of-events in response to market based feedback. These assumptions differ from the traditional approach to organizational design, and thus the process approach question many of the principles that have guided the design of organizations (Denison, 1997). On one level of abstraction, the problem is that organizational design is a discipline that seeks to explain the control of the value creation process, but not the value creation process itself. On another level, (especially) large organizations tend to have bureaucratic, functional and non-flexible structures where work processes tend to be slow, inefficient and difficult to change. In a summary of the literature, Denison (1997) identifies a number of concepts and approaches in this stream of literature; including continuous improvement, benchmarking, lean production and reengineering.

In the reengineering approach, Davenport (1993) defines a business process as “a structured, measured set of activities designed to produce a specific output for a particular customer or market” (page 5). Setting up a process-based organization starts with the identification of the key processes in the company. Each process entails a number of sequential activities. For example, order fulfillment is the process of receiving an order, entering it into the computer, checking the customer’s credit, allocation inventory from stock, picking and packaging goods, loading and sending them etc. A given process often involve

several functional departments. In order to do the set of tasks in a process, knowledge from different specialized fields and functional units are mostly needed. Functional organized companies have problems in taking a customer's perspective, because processes that produce values for the customer cut across several departments. In such an organization frontline managers in different functions will tend not to take a customer perspective. Rather, such organizations are characterized by layers of hierarchy, long chains of command and complex decision processes.

In order to create a process-based organization, several authors have emphasized the role as process owner. A process owner is responsible for planning and control functions regarding the governing of a certain work process in the organization. Planning activities include to set goals and expectations, identify, formalize and document work processes, provide resources and implement processes. The process owner needs to ensure that the people performing the various tasks in a process understand it and have the required tools for it. Control activities include monitoring of processes, reinforcing successes, diagnosing deviations and taking corrective actions. The process owner has the authority to allow variations from the generic process to fit local circumstances. (Hammer, 2002; Hammer and Stanton, 1999, Harmon, 2003).

The literature on this role and related devices tend to be normative, and illustrated by success stories and reports of failures. There are few stringent empirical studies investigating how the process owner works in practice, what the empirical challenges are and how they are acted upon by the incumbent of the role. One group of challenges is how the process owner role is related to the vertical structure and chain-of-command in the organization. When

implementing a process owner role, what issues arise when this position confronts other dimensions of the organizational structure?

Vanhaverbeke and Torremans (1999) point out that there are few contributions that throw light over the implications for organizational structure when a company develops towards a more process-based organization. Denison (1997) says that the process perspective criticizes bureaucratic organizations, but is not clear on “what forms of control and integration that have replaced hierarchical control, and what principles of organizational design might be derived from those new forms of control and integration” (page 6).

The call for research on the interplay between process organization and organizational design has largely gone unheeded. However, there are a few contributions that sketch various alternatives with regard to how organizing according to processes may be combined with other design principles; especially how processual and functional roles and principles of grouping are combined:

One solution is to add process management as an additional element of structure, in addition to the existing dimensions. Typically process ownership is assigned to managers who also have functional or product responsibilities (Davenport, 1993). Alternatively, a company may have permanent process councils, where functional managers meet to share best practices (BoozAllenHamilton, 2003). Davenport (1993) argues that this solution is non-satisfactory since process responsibility is not accorded the necessary organizational legitimacy.

A more radical alternative is to group the firm according to core processes, and nominate process owners at the top management level. This implies the

identification of key processes, and that those activities that logically belong together to create value for the customer, are grouped together. The vertical structure is based on units that are organized around core processes. Each unit should have a manager, and as few hierarchical levels as possible, to enable effective communication and decision making. Thus, Ostrom (1999) advocates a strictly process-based (and minimal) organization structure; the horizontal organization, where cross-functional teams should figure prominently.

Others argue that while processes should be the main basis for grouping, support structures are necessary. Companies that restructure as horizontal organizations may lose expertise as they break up established functions and the resources are redistributed to horizontal organizations. Critical mass may be lost in key functional areas (Stalk and Black, 1994). Thus, Hernaus (2006) suggests that the structure should consist of a few core processes managed by process owners, supplemented by centers of excellence where the functional knowledge is gathered, as well as staff and support units. Vanhaverbeke and Torremans (1999) say that functions should not be abolished completely, since functional and product-oriented skills remain vital in process-based organizations. They hypothesize that most firms will adopt a multi-dimensional matrix structure in which process responsibility is a key dimension.

BoozAllenHamilton (2003) says that there is not one best way for process organization to be aligned with the organization structure. In addition to the alternatives mentioned earlier, they sketch a solution that seem to balance the the requirements of function and process. The organizations consists of two types of units; a number of functions in order to realize economies of scale as well as process owner units. The model is not elaborated but resemble a matrix organization.

Summing up, the literature on process organization has touched upon the question of how process organization may be aligned with the organization structure of the firm, and especially how the process owner role should be balanced with functional based units. While different alternatives have been sketched, there are little systematic research on the challenges that arise in these organizational designs. The main part of the literature cited has its origins among proponents of the process perspective and especially in the business process reengineering approach. The contributions are normative, partly illustrated by empirical examples and often rather superficial. While the mechanisms and explanatory factors may prove useful input for research, they have not yet been scrutinized and tested in systematic empirical analysis. In addition, while the literature on lateral structures and matrix organization clearly has the potential to inform the analysis of process organization, one has not drawn on this literature to any great extent. Therefore, we now consider this stream of research.

3 MATRIX ORGANIZATION AND LATERAL STRUCTURES

According to classical organization theory it is through the grouping into units that formal authority is established and the hierarchy of the organization built. Grouping is a fundamental means to coordinate work in an organization, since it establishes a system of common supervision among positions and activities, require positions to share resources, creates common measures of performance and encourages coordination through informal communication and mutual adjustment (Mintzberg, 1979). There are several bases of grouping,

such as knowledge, function, work process, time, output, client and place (Mintzberg, 1979). Once an organization has established a hierarchical organization, it is expected that the most important issues of coordination and dependencies are handled inside the various units or by the use of the hierarchy. However, in (especially) large and complex organizations, there will be dependencies and issues that require coordination between departments and units. In order to handle such handle these issues, there are number of lateral structures – horizontal devices that are incorporated into the formal structure - that can be employed.

In some instances such lateral devices are used sporadically, in the sense that they cover issues and themes that are relevant for a selected number of units, positions and activities. In other instances they are relevant for all employees, who in addition to their primary home in the hierarchical line organization, also are a member of a secondary horizontal “overlay”. For example, in an organization based on grouping according to product; employees may also be a member of a functional area, which serve as an arena for sharing of experience and knowledge development. A system of double membership applies.

Lateral structures include liaison positions, task forces/standing committees, integrating managers and outright matrix structures. An integrating manager, often with his own unit, is assigned some of the decision power that cut across the affected departments, “but it never (by definition) extends to formal authority of the department personnel” (Mintzberg 1979: 165). A matrix structure differs from integrating managers, because the line no longer has primacy and the principles of “one-boss” and unity of command are violated. In a pure matrix two sets of hierarchies, interdependencies and bases of grouping coexist in equal balance. The organization is designed in order to create an balance

between the two. This type of organizational design combines double membership with double authority.

While a system of integrator roles overlaying the hierarchical organization differs from a pure matrix organization, both share the intention of building different considerations and dependencies into the formal structure. An implication is also that conflicts are accepted, and that the organization must be prepared to resolve these through formal or informal negotiation rather than through hierarchy and formal authority. Knight (1976) identified four general problems with the structure; a) it internalizes conflicts into the organization; b) they are a stressful places to work, with a fair amount of role conflict and role ambiguity; c) how to maintain the delicate balance of power between managers, as well as d) the cost of administration and communication.

The challenges of matrix-like organizations are primarily related to fact that two *different* interdependencies and considerations are built into the structure, and not *what* these dimensions are. Since there are many possible bases of grouping of organizational units, there are also many possible dyadic combinations; such as functional/product; competence area/project; work process/function etc. However the literature on such designs tend to emphasis how functions are combined with products or projects, and tend to generalize from the patterns observed in such settings. For example, in their review article, Ford and Randolph (1992) place a matrix organization at the centre of a continuum between a purely functional organization and a purely product type of organization. They go on to discuss the advantages and disadvantages of cross-functional structures, which are not differentiated from matrix-like structures.

Ford and Randolph's (1992) summary is compatible with most work on matrix management and lateral structures, because most empirical studies in actual fact have analyzed such cross-functional structures. However, matrix-like structures may be based on many different combinations of grouping principles. Cross-functional structures are but one (vital and often studied) type of such structures, and one should not generalize to all types of matrix structures from studies of the former. Some of the challenges may be related primarily to this combination only, and may have less relevance for other combinations. Other combinations –with other inherent managerial challenges and outcomes - have largely been neglected. Besides, the ascent of the process perspective, process organization and the process owner role has brought attention to another principle of grouping with a set of “new” considerations, as well as lateral structures built into the organization to strengthen exactly these considerations.

4 RESEARCH QUESTIONS AND CONTRIBUTIONS

Thus, while the literature on process owners and related support structures has failed to address how these new devices are built into the organizational structure, the literature on matrix organization have emphasized cross-functional structures and neglected organizing according to work processes and the process owner role as an integrating managerial role. It is possible that these “holes” in our understanding of complex organizations quite simply mirror the lack of empirical and theoretical relevance of such structures. We tend to believe, however, that the lack of attention is a product of the internal

developments in the respective fields of managerial research, rather than the lack of relevance of process organization in complex organizations. Firstly, it is common that large organizations have complex structures and matrix-like structures figures prominently: Secondly, the devices related to the identification, formalization, control and improvements of work processes have been gradually institutionalized in today's organizations. Thirdly, critical research on the "process perspective" have hypothesized that these are means of bureaucratization and deskilling of work, making it relevant to study exactly how this perspective have been built into the structure.

Based on these arguments, our empirical research in Statoil will describe and analyze how the process owner role and related devices are aligned with the organizational design in matrix like structures. We will both a) describe the structure of one organization that has sought such a combination in a detailed manner, and b) analyze the challenges in such an organizational design. The contributions to the literature are threefold. Firstly, we will extend the understanding of matrix management by investigating a new element in such structures; the process owners role. Secondly, we will contribute to an understanding of how the process based perspective is built into the structure and how the formal devices to control and support work processes are related to other aspect of the organizational design. Thirdly, we aim to suggest a number of themes for further research.

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