

HRM, Dynamic Environments and Institutionalism: how to achieve organizational agility?

Authors: drs. M. Nijssen, prof. Dr. J. Paauwe

Department of Human Resource Studies

School of Social and Behavioural Sciences

Tilburg University

Warandelaan 2

5037 AB Tilburg, The Netherlands

Contact details: mnijssen@uvt.nl (+31 6 21234142) and paauwe@uvt.nl

Keywords: Agility, dynamic environment, institutional pressure, strategic response

AUTHORS

Mark Nijssen (Tilburg University) is a PhD-candidate at the Faculty of Social Sciences at Tilburg University. The main focus of his research is Organizational Agility in an Institutional context. This research originates from an HRM point of view. Besides his work as a PhD-candidate he works as a consultant in the field of Strategic Human Resource Management.

Email: mniijssen@uvt.nl / mcn@berenschot.com

Address: Department of HR-Studies, Faculty of Social Sciences, P.O.Box 90153, 5000 LE Tilburg, phone: +31-6-21234142, fax +31-30-2916858

Jaap Paauwe (PhD, Erasmus University Rotterdam) is Professor of Human Resource Studies at Tilburg University. Before joining Tilburg he worked as a full professor of Organization at Erasmus University Rotterdam, where he is still involved in supervising PhD students and the coordination of research on HRM in the health care sector. His main research interests are in the area of HRM and Performance, corporate strategy, organizational change and industrial relations. His latest book is on *HRM and Performance: achieving long term viability* (Oxford University Press, June 2004), for which he received the Dutch HRM network Award in 2005. Actual research topics include HR functional excellence, HR governance and risk management, and the balance between productivity and well-being. Contact details:

Email: paauwe@uvt.nl

Address: Department of HR-Studies, Faculty of Social Sciences, P.O.Box 90153, 5000 LE Tilburg, phone: +31-13-4662851/2371, fax +31-13-4663002

ABSTRACT

Nowadays most organizations operate in a dynamic environment, with frequent unpredictable events which have an impact on the organization. This paper aims to identify which organizational practices help to become agile in order to survive in such a dynamic environment. Furthermore we explore the response of organizations to the institutional context affecting the leeway for implementing these practices. To aid our search we build a heuristic framework based on the concept of dynamic capabilities. We identify organizational practices with regards to a scalable workforce, fast organizational learning and a highly adaptable organizational infrastructure.

We expand on this heuristic framework by studying four cases: two Public Broadcasting Organizations (operating in a highly institutionalized context) and two Engineering companies (operating in a relatively low institutional context). These cases show a continuous balancing act while building and maintaining a stable core. Secondly we focus on the leeway for organizations to respond to cope with this dynamic environment. When facing a high level of institutionalization the cases show a mix of conformist, innovative and defiant responses.

INTRODUCTION

Nowadays most organizations operate in a dynamic environment. A dynamic environment, with frequent unpredictable events which have an impact on the organization, implies that management needs to align the organization with this ever changing context. Organizations struggle when the rate of change in their environment outpaces their organizational capacity to keep up (Foster & Kaplan, 2001). It is no longer possible for organization to get better: they need to get different (Hamel, 2000). We pose that organizations need to get different in the way they cope with dynamics. One way of doing this is by no longer managing uncertainty but by embracing it. This is what truly agile organizations do.

Environmental dynamism has lead to a focus on organizational capabilities as the principle source of competitive advantage in such an environment (Grant, 1996). These organizational capabilities are referred to as dynamic capabilities (Teece e.a., 1997). Dyer and Shafer discuss a 'growing interest in an entirely new organizational paradigm – one that views organizational adaption not as a one-time or even periodic event, but as a continuous process. That paradigm is Organizational Agility' (1998: 6). Organizational Agility is considered a necessary dynamic capability for organizations operating in a dynamic environment. Eisenhardt and Martin (2000) expand the concept of dynamic capabilities by stating that the effective patterns of dynamic capabilities varies with market dynamism. This means that organizational agility is not an on/off-switch. Organizations can have a certain level of organizational agility. In this paper we first discuss the organizational practices organizations apply to cope with a dynamic environment, thereby enhancing their level of organizational agility. The organizational practices focused on three agility-competencies will be explored: a scalable workforce (in terms of quantity and quality), fast organizational knowledge creation and a highly adaptable organizational infrastructure.

The second, related issue we discuss and explore in this paper is the institutional setting in relation to the implementation of these organizational practices and more importantly the response organizations opt for. Organizations sometimes seem to apply organizational practices that at first sight seem to be incompatible with the objective of coping with a dynamic environment. For example, they continue to hire most employees on a permanent contract thereby creating organizational rigidity. Paauwe (2004) explains this by stating that contingency factors limit the leeway of both organization and management. In general institutional theory provides a popular and powerful explanation for organizational action within this leeway (Dacin e.a. 2002; Paauwe, 2004, Pursey, e.a. 2009). Where early institutionalists tended to emphasize the constraining effect of institutional mechanisms (Dacin e.a., 2002; Scott, 2008), more recently attention is given to using and enlarging the room to maneuver for organizations. This agency approach refers to the way in which an actor can choose his own response to institutional pressure (Oliver, 1991; Lee and Pennings, 2002). Human agency and strategic choice give organizations several options to cope with institutional pressures varying from active resistance to passive response (Oliver, 1991). Boon, Paauwe, Boselie & Den Hartog, (2009) develop three types of institutional fit based on Oliver (1991) and Mirvis (1997): conformist, innovative and defiant.

This paper aims to identify which organizational practices are important determinants of organizational agility and to determine in what way institutional mechanisms facilitate or hinder organizations in achieving organizational agility. Our paper starts with setting out the characteristics of a dynamic environment and the challenges organizations face in such an environment. Next we discuss the concept of dynamic capabilities and develop this concept towards an heuristic framework for organizational agility. In this framework we focus our attention to three specific topics: the way in which an organization can scale its' workforce, maintain its' knowledge base and is able to balance both control and chaos. We then turn our attention to the institutional context, which might impact decisions on the adoption and implementation of relevant organizational practices and

the attitude and available options towards this institutional context. Finally we apply this heuristic framework and concepts to four case studies of organizations operating in a dynamic environment. By doing so we identify organizational practices and strategic responses to the institutional context aimed at organizational agility.

SURVIVING IN A DYNAMIC ENVIRONMENT

Many studies and papers – as our own paper – start with statements in the lines of ‘nowadays most organizations need to survive in a dynamic environment’. In fact, when we ask practitioners from all kinds of trades and types of industries whether they operate in a dynamic environment, the answer is a convincing and heartfelt ‘Yes!’. Moreover, many of them struggle when coping with this dynamic environment. However, one could argue that not all of them have given the correct answer to our question. Some industries might be less dynamic and some organizations are less affected by the dynamics in their environment.

However, whether or not these practitioners are right is not of primary relevance for studying the way in which organizations cope with such a dynamic environment. In order to determine the level of dynamics in the environment we need to look at several aspects of dynamism. Dess and Beard (1984) define environmental dynamisms as the degree of change that is hard to predict and that heightens uncertainty. Ansoff and Sullivan (1993) describe the level of turbulence in a dynamic marketplace by four factors; the complexity of events which occur in the environment, the familiarity of the successive events, the rapidity with which the events evolve after they first are perceived and the visibility of the consequences of the events. In these descriptions we see three elements. In general it is contended (Miles, Snow and Pfeffer, 1974) that first it is important to distinguish between the rate of change and the unpredictability of change. A further addition is made in terms of amplitude (or impact) of change.

Now, why is it of less relevance whether there is actually a high rate of change, a high level of unpredictability and a high impact of change? Considering the discussion of Duncan (1972) regarding the operationalization of uncertainty we believe we should focus on *perceived* uncertainty and therefore perceived dynamics in the definition of environmental dynamism. In other words, although the actual level of dynamism in the environment may be low, what really matters are the perceptions of practitioners who struggle with the level of dynamism they perceive and consequently try to find ways by which they can cope with these perceived dynamics.

However, this would be a too one-sided line of thought. Consider what it means for our objective. Organizations that perceive dynamics but actually are not experiencing a high level of dynamics may implement organizational practices to cope with these perceived – but non-existing – dynamics. And they may be very successful. But does this logic also hold the other way around? Can organizations that operate in an actually very dynamic environment implement organizational practices aimed at a perceived lack of dynamics in the environment thrive as well? Based on Nelson and Winter's (1982) discussion of evolutionary economics, organizations whose organizational practices (genes) are best adapted to current (dynamic) conditions flourish whereas those less adapted falter. With regards to our focus on organizational practices aimed at achieving organizational agility those organizations best utilized to face the ever changing conditions in the dynamic environment flourish and survive. We can assume that organizations operating in an actual dynamic environment and perceiving this dynamics — have at least a minimal level of relevant organizational practices in place in order to survive in these dynamic environments.

Before turning to these organizational practices, we first take a closer look at the sources for dynamics in the environment. The business environment consists of a vast number and range of external influences that affect the organization. Grant (2002) defines the industry environment – as the core of the business environment – by the firm's relationships with customers, suppliers, and

competitors. Starbuck (1976) defines the environment as those elements with which the organization is in direct exchange (being customers and suppliers) and those elements that compete with the organization for the resources being directly exchanged (being competitors). These competitors compete for the resources supplied by customers and suppliers. This broadens the definition of competitors. Taking this broader definition of competitors, also significantly broadens the definition of the industry, which in turn increases the potential dynamics in the environment of the organization.

However, the environment of firms does not solely constitute the industry. The institutional context also plays an important role in the environment of firms (Dacin e.a., 2002; Pursey e.a., 2009; Powell, 1998; Meyer and Rowan, 1977). DiMaggio and Powell (1983) provide the concept of an organizational field, which refers to 'those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies and other organizations that produce similar products and services.' (148). The organizational field expands the definition of the environment by adding to the industry institutions such as regulatory agencies.

Considering our focus on dynamics in the environment we also need to take a closer look at the temporal dimension of such institutions (Scott, 2008; Winn and Jennings, 2001). In other words, can these institutions add to the dynamics of the environment? Williamson (2000, 1998) distinguished four levels of social analysis, which also differ in terms of frequency of change. Environmental dynamism is related to the level of the governance (play of the game (1 to 10 years)). This play of the game holds the potential for dynamics in the environment. Therefore, both industry as well as institutions such as regulatory agencies or professional associations should be considered as sources for dynamics in the environment of the organization. After all, they co-determine the play of the game.

DYNAMIC CAPABILITIES AND ORGANIZATIONAL AGILITY

Teece e.a. (1997) developed the dynamic capabilities framework to analyze how and why certain firms achieve and sustain competitive advantage in dynamic environments. By focusing on dynamic capabilities, the research on achieving sustainable competitive advantage takes inside-out approach (Grant, 1996). The resource based view (Barney, 1991) is one strand of literature in this approach, emphasizing firm-specific capabilities and assets as the fundamental determinants of success. The dynamic capabilities framework refers to the combinations of competencies and resources that can be developed, deployed and protected as sources of competitive advantage. Eisenhardt and Martin (2000) expand the concept of dynamic capabilities by stating that the effective patterns of dynamic capabilities varies with market dynamism. In other words, organizations need a different level of dynamic capabilities depending on the level of dynamics in the environment.

Dynamic capabilities are focused on achieving and sustaining a competitive advantage (Teece e.a., 1997, Eisenhardt and Martin, 2000). Following the emerging trend in the strategy literature achieving and sustaining a competitive advantage is focused on effective strategy implementation (Barney, 2001). Becker and Huselid, in their article on strategic Human Resource Management, place an emphasis on strategic business processes in strategy implementation and therefore in achieving and sustaining a competitive advantage: 'That focus on strategy implementation is operationalized and made concrete by a focus on strategic capabilities and activity systems reflected in strategic business processes' (2006: 903). Strategic business processes refer to those business processes that are the source of the value customers derive from the firm's products or services (Becker and Huselid, 2006). This approach has an important implication for analyzing dynamic capabilities. The focus on dynamic capabilities varies for strategic and non-strategic business processes. In fact, we assume that only in strategic business processes the presence of dynamic capabilities leads to sustainable competitive advantage in a dynamic environment. Therefore the focus of our paper is on key strategic business process and whether organizational practices aimed at achieving organizational agility are linked to these key business processes.

Dynamic capabilities refer to the tangible and intangible assets firms use to develop and implement their strategy (Ray, Barney and Muhanna, 2004). Teece e.a. (1997) pose that the competitive advantage of the firm lies with its managerial and organizational processes, shaped by its asset position and the paths available to it. These managerial and organizational processes are intangible assets, which are the focal point of our study. The organizational and managerial processes are related to coordination and integration, learning and reconfiguration and transformation (Teece e.a., 1997). Coordination and integration, learning and reconfiguration and transformation can be developed into three competencies of which organizational agility as a dynamic capability is composed as will be outlined in the following sections.

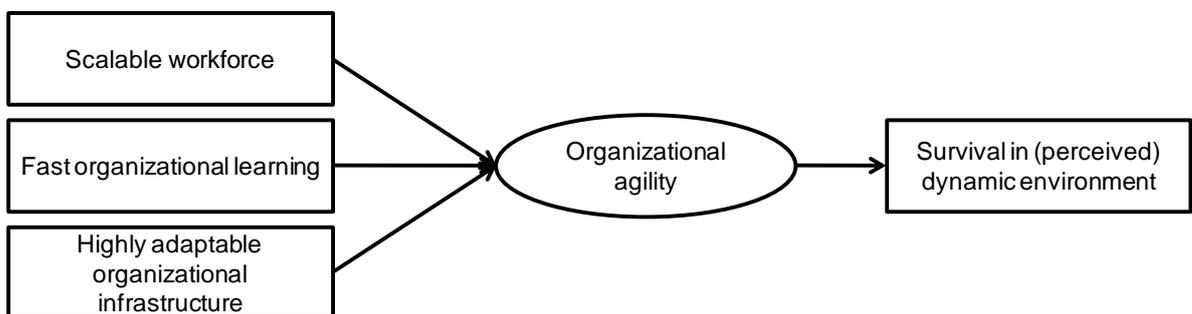
Here we take reconfiguration and transformation as a starting point. When considering human resources as important assets in a firm's asset structure, we need to think about the competency to reconfigure and transform the workforce. Dyer and Erickssen (2006) suggest workforce scalability as a requirement of organizations operating in a dynamic environment. Workforce scalability refers to 'the capacity of an organization to keep its human resources aligned with business needs by transitioning quickly and easily from one human resources configuration to another and another, ad infinitum' (3). This leads us to the first competency for agile organizations: having a scalable workforce.

But a scalable workforce in which human resources are reconfigured and transformed leads to the risk of loss of knowledge. More importantly it might lead to a disconnection in the social infrastructure important for creating new knowledge. Dyer and Shafer (2003) suggest a number of organizational competencies related to knowledge for agile organizations: 'sensing the market, mobilizing rapid response, exploiting temporary advantage and embedding organizational learning' (p.12). Constantly obtaining and creating organizational knowledge is very important in a dynamic

environment. Without this, an organization's knowledge reservoir would rapidly become outdated. Dyer and Shafer mention the 'capacity to constantly create, adapt, distribute and apply knowledge' (2003: 14). So the second competency for agile organizations is fast organizational knowledge creation.

Finally Dyer and Erickssen (2006) mention a highly adaptable organizational infrastructure as a prerequisite for workforce scalability (Dyer and Shafer, 2003). Here we would go further and pose that a highly adaptable organizational infrastructure in itself is a key competency for agile organizations (Mintzberg, 1992; Volberda, 1998; Dyer and Shafer, 1998), since this organizational infrastructure is key to coordinate and integrate activities and deploy resources by creating order in an otherwise chaotic world. This makes having a highly adaptable organizational infrastructure our third competency for agile organizations.

The discussion above leads to a heuristic framework which will guide our exploration into agile organizations. In this paper we first take a look at possible relevant organizational practices stemming from literature, before going into the actual practices to be found in organizations operating in a dynamic environment.



ORGANIZATIONAL PRACTICES AND ORGANIZATIONAL AGILITY

Teece e.a. (1997) in developing the terminology for their dynamic capability framework define an integrated cluster of assets as organizational routines and processes. Here we focus on organizational practices, being 'an organization's routine use of knowledge for conducting a particular function that has evolved over time under the influence of the organization's history, people, interests and actions. Organizational practices come to reflect the shared knowledge of the organization and tend to be accepted and approved by organizational members' (Kostova and Roth, 2002: 216). This definition of organizational practices is similar to Nishii and Wright's (2007) model of actual (HR) practices. The actual practices provide an explanation for variability in HR practices. This variability is based on differences in implementation of practices and response to practices. Becker and Huselid point out that managing the workforce is a shared responsibility for HR and management, unlike managing the HR architecture. This means that in our analysis of the organizational practices aimed at developing the competencies that lead to the dynamic capability of Organizational Agility we focus on both HR professionals and line managers at various levels in the organization, and their role in the implementation of the actual organizational practices.

We have identified three organizational competencies for agile organizations: the ability to scale the workforce, the ability to learn fast at the organizational level and the ability to constantly adapt the organizational infrastructure to balance order and chaos. Furthermore we focus on organizational practices, as implemented *actual* practices which are accepted and approved by organizational members (Kostova and Roth, 2002) in strategic business processes (Huselid and Becker, 2006). And finally, we have stated that these practices are the responsibility of both HR professionals and management in implementing them. Now it is time to focus our attention on the possible organizational practices associated with the three competencies.

Scalable workforce

Workforce scalability refers to ‘the capacity of an organization to keep its human resources aligned on an ongoing basis by constantly transitioning from one human resource configuration to another and another, ad infinitum, on a timely basis and in a seamless way’ (Dyer and Erickssen, 2006: 11). These human resource configurations comprise of four dimensions: headcount, competence mix, deployment pattern and employee contributions. Headcount refers to the number of full-time equivalents, competence mix to the distribution of employees’ knowledge and skills and deployment pattern to employees’ assignment across organizational and/or physical locations. Employee contribution refers to the organizational value of the tasks employees perform.

Workforce scalability consists of organizational practices aimed at workforce alignment and workforce fluidity. Workforce alignment exists when an organization has the right number of people, with the right knowledge and skills in the right place at the right time doing the right things right. Workforce alignment is a steady state – although not for long. Workforce fluidity refers to ‘the speed and ease with transitions are made from one aligned human resource configuration to another...ad infinitum’ (Dyer and Erickssen, 2006: 12). Thus workforce fluidity aids workforce alignment.

Workforce alignment is aimed at creating a temporary steady state. In this steady state the workforce is aligned with the goals and objectives of the organization. This requires organizational practices focused on strategy formulation and planning. In these processes, HR planning needs to be aligned with business planning. However, the dynamic environment forces strategy formulation and business planning to be adaptable, implementing fast decision-making. Faster decision making in Eisenhardt’s (1989) study was associated with simultaneous consideration of multiple alternatives. Eisenhardt also shows that ‘the greater the integration among decisions, the greater the speed of the strategic decision process’ (565). Considering multiple alternatives is a key feature of scenario planning. This requires business and HR plans to be open for adaptation, while

maintaining a stable core and sense of direction. More importantly, it requires the organization to be in constant dialogue with their employees on the business planning. A closely linked organizational practice is employee involvement. Comments and suggestions intended to improve organizational performance – especially in a dynamic environment – are critical for an organization (Detert and Burris, 2007; Senge, 1990). Employee voice can enhance the decision making process, by using the input of experienced counselors, such as senior executives and the use of active conflict resolution (Eisenhardt, 1989). Furthermore, communication on both the strategy and the context in which the organization operates is of importance to instill a shared mindset (Dyer and Erickssen, 2006) giving employees a sense of direction within the dynamic environment. There are several organizational practices that can contribute to employee participation (Sumukadas and Sawney, 2004). Examples are employee participation groups aimed at suggesting improvements to work-related problems (Ledford, e.a., 1988), or suggestion systems aimed at mobilizing employee ideas on improving work or the work environment (Schroeder and Robinson, 1991).

Workforce fluidity refers to the speed and ease of transitions in the human resource configuration. This is in line with time being a key resource in dynamic environments (Stalk, 1988), as well as the concept of leanness. Again, based on the principles formulated by Dyer and Erickssen (2006) we can suggest a number of organizational practices aimed at fluidity.

Dyer and Erickssen (2006) refer to acquiring talent as one of the principles for achieving workforce fluidity. When applying principles of agile supply chains for acquiring resources (Christopher, 2000), we might consider workforce supply management as specific organizational practice. One of the keys of agile supply chains lies in the quality of supplier relationships. With regards to the workforce these supplier might be universities, training institutions or agencies. Not only for swift acquisition of talent, but also for working together in making sure the potential workforce has the required skills. This is analogous to the process of new product development in agile supply chains, where

introduction time can be reduced through involvement of suppliers in the innovation process (Christopher, 2000). Another aspect related to acquiring talent is the management to the outflow of human resources. Again this needs to be done in a speedily and easy way. Related organizational practices revolve around an integrated outplacement process. This can be done by building relations with possible alternative employers for the workforce or other mobility concepts.

The previous organizational practices are aimed at external mobility to aid workforce fluidity. Dyer and Erickssen (2006) also refer to internal transitions, as part of workforce fluidity. Again, we can apply certain aspects of agile supply chain management to the workforce. An important agile supply chain tactic is postponement. Postponement refers to carrying an inventory in a generic form, awaiting final localization (Christopher, 2000). When we think about the principle of postponement in human resources, we can consider organizational practices such as training and development aimed at competencies instead of jobs and horizontal career paths. Volberda (1996) also refers to a high level of training, which is focused on craft (versus a low level of training and education, which is focused on routine) in discussing organic organizational structures with a high flexibility potential. Only if employees have a broad skill set can they perform a flexible range of tasks. In order to enhance this skill set, training is vital. Specific forms of training in agile organizations refer to cross-training (Hopp and Van Oyen, 2003) and job-rotation (Sumukadas and Sawhney, 2004). When we think about postponement with regards to work design, we can consider organizational practices such as discretionary work design (Dyer and Shafer, 2003). Discretionary work design refers to specifying only a minimal core of required tasks and responsibilities. Employees are expected to take up other tasks and responsibilities that need to be done based on own initiative. Other – perhaps more simple organizational practice – are creating organizational slack and managing overtime (Koene e.a. 2004). This allows the organization to quickly deploy employees where and when needed. The obvious downside however are the additional costs.

In the table below we give an overview of potential organizational practices with regards to having a scalable workforce.

Workforce alignment	Workforce fluidity
<ul style="list-style-type: none"> - Open (workforce) planning - Creating a shared mindset - Employee participation 	<ul style="list-style-type: none"> - Building relations with suppliers of human resources as well as potential employers of the workforce - Competence based training - Training aimed at building a broad skill set (e.g. cross training and job rotation) - Discretionary work design (relying on own initiative) - Allowing organizational slack

Fast organizational learning

When looking at organizations in a dynamic environment we need to consider two different aspects with regards to organizational learning. First of all the organization needs to keep a constant look towards the outside world in order to be able to proactively obtain knowledge about the dynamics in the environment. In line with workforce alignment we define this as knowledge alignment. Knowledge alignment refers to having the right knowledge at the right time in order to proactively respond to changes in the environment. Secondly an agile organization needs to manage the constant creation, adaptation, distribution and application of this knowledge.

When changes in the environment are so rapid and discontinuous as they are in a dynamic setting, decisions often need to be made based on inaccurate, unavailable or obsolete information (Bourgeois and Eisenhardt, 1988). However, organizations benefit from trying to constantly sensing the environment and obtaining knowledge. Eisenhardt (1989) focuses on both speedy and high quality strategic decision making. The features of this decision making process include the usage of real-time information, which is defined as “information about a firm’s operations or environment for

which there is little or no time lag between occurrence and reporting” (549). Sumukadas and Sawhney (2004) refer to the importance of access to relevant and timely information, if employees are expected to respond to changing organizational needs. Having realtime, up-to-date information on the dynamics in the environment as well as constantly monitoring the environment is required to be able to respond to these dynamics.

Dyer and Shafer (2003) and Dyer and Erickssen (2006) discuss the process of learning with regards to organizational agility. ‘Learning is a process by which repetition and experimentation enable tasks to be performed better and quicker.’ (Teece e.a. 2003: 520). With regards to dynamic capabilities we need to focus on the organizational level. The aim is to create appropriate organizational knowledge. ‘Any organization that dynamically deals with a changing environment ought not only to process information efficiently but also create information and knowledge.’ Nonaka (1994). In this approach Nonaka takes an organizational and proactive approach.

Nonaka and Von Krogh (2009) give the following definition: ‘organizational knowledge creation is the process of making available and amplifying knowledge created by individuals as well as crystallizing and connecting it to an organization’s knowledge system’ (635). In the process of organizational knowledge creation there are three main building blocks: tacit knowledge, explicit knowledge and knowledge conversion. Tacit knowledge refers to knowledge that is unarticulated and tied to the senses, movement skills, physical experiences, intuition or implicit rules of thumb. Explicit knowledge refers to knowledge that is uttered and captured in drawings and writhing. The concept of knowledge conversion refers to the process by which tacit and explicit knowledge interacts (Nonaka and Von Krogh, 2009). When we look at the process of knowledge conversion we can see several organizational practices, which are related to four specific phases with regards to creating, adapting, distributing and applying knowledge. In the first phase, individual tacit knowledge is shared among individuals. Then, tacit knowledge is articulated into explicit concepts, which

means that knowledge is being discussed and reflected upon. In the ‘combination’ phase, the newly formed explicit knowledge is combined with other explicit knowledge that the organization holds. In this phase the knowledge is documented and shared. Then, the ‘internalization’ phase aims at individuals embodying this explicit knowledge into their own tacit knowledge (Nonaka et al., 2006) for example through experimentation or simulation. These organizational practices might be both formally and informally and at the inter- and intraorganizational level (Nonaka, 1994).

In the table below we give an overview of potential organizational practices with regards to fast organizational learning.

Knowledge alignment	Knowledge creation
<ul style="list-style-type: none"> - Collecting real-time information - Constantly monitoring the outside world 	<ul style="list-style-type: none"> - Sharing knowledge between individuals - Discussing and reflecting on knowledge - Documenting knowledge - Experimenting and simulating

Organizational infrastructure

Dyer and Erickssen (2006) and Dyer and Shafer (2003) also mention the highly adaptable organizational infrastructure as key in facilitating workforce scalability. This line of reasoning represents a departure from prevailing practice in the SHRM literature, which, to date, has basically ignored organizational infrastructure as a potentially important construct (Wright & Gardner, 2000). Dyer and Shafer (1998) state that three components in the organizational infrastructure stand out: organizational design, business processes and supporting technologies. These elements are also co determinants for the absorptive capacity of an organization, and therefore the process of knowledge creation. Dyer and Shafer (2003) provide two relevant organizing principles in this context:

- Fluid organization design: flat (but not without some hierarchy), minimal formal authority, boundarylessness, cellular division into small sub-units, and team based (Ashkenas, Ulrich, Jick & Kerr, 1995; Dove, 2001; Hamel, 2000; Morgan, 1997; Youngblood, 1997).
- Flexible core business processes: with regards to internal processes the guiding principle is: routinize only where, when, and as much as absolutely necessary, otherwise have faith in employees' common sense and savvy (Foster & Kaplan, 2001).

Mintzberg (1992) provides four typologies for the environment of the organization. One dimension is dynamic / stable, while the other is complex / simple. In our discussion we focus on the dynamic environment, in which the best fitting organizational form is 'organic', which is typically an adhocracy (Mintzberg, 1992). An organic organizational design includes flexible procedures, mutual adaptation (coordination through informal communication) and a minimal level of standardization. Volberda (1996) provides an overview of the design variables of the basic organizational form with a high flexibility potential. It describes the degree of functionalization to be low in agile organizations, which refers to the extent to which management is subdivided into various functional areas. Furthermore, Volberda (1996) also mentions a flat organization with low process regulations and only rudimentary planning and control systems. By having a minimal level of formalization, routinization and standardization, the organizational infrastructure becomes more adaptable. In the table below we give an overview of potential organizational practices with regards to a highly adaptable organizational infrastructure.

Highly adaptable organizational infrastructure	
-	Flat hierarchical organization
-	Minimal formal (functional) authority
-	Minimal routinization and standardization
-	Informal coordination

STRATEGIC RESPONSE TO INSTITUTIONAL SETTING

The behavior of organizations is not solely a response to the dynamic environment, but also to institutional pressures (Greenwood and Hinings, 1996). DiMaggio and Powell (1983:150) put it best 'Organizations compete not just for resources and customers, but for political power and institutional legitimacy, for social as well as economic fitness'. Legitimacy refers to the situation in which a firm is accepted or judged appropriate by its' environment (Deephouse, 1998: 360). The search for legitimacy is relevant for an organization's access to resources. In order to be perceived as legitimate, organizations adapt their formal structures and routines to conform to institutional norms (DiMaggio and Powell, 1991). Hannah and Freeman (1984) suggest that stability and standardization of an organizational form positively affect this access to resources. According to this view, stability leads to consistent actions and outcomes, which resource holders value and reward (Delacroix and Rao, 1993; Hannan and Freeman, 1989). Jaffee (2001) states that organisations are constrained in their free will by standard operating procedures, values, and premises that regularize patterns of behavior, increase the predictability and enhance legitimacy. These propositions make it relevant to take the institutional context into account. Not only is the leeway for organizational action determined by the institutional context, for organizations operating in a dynamic environment it might actually lead to counterproductive organizational practices.

Early institutionalists tended to emphasize the constraining effect of institutional mechanisms (Dacin, e.a. 2002; Scott, 2008). More recently attention is given to the room to maneuver for organizations to institutional change. This agency approach refers to the way in which an actor can choose his own response to institutional pressure and provides an explanation for the variation found within an organizational field (Oliver, 1991; Lee and Pennings, 2002). Jaffee (2001) states that not necessarily the most effective and efficient organizational practice is chosen, but that there is a certain degree of differentiation and of conformation needed for high performance (Deephouse, 1999). Oliver (1997) states that even in a highly institutionalized context, the right level of adaption to institutional mechanisms can be a source of organizational success. These statements require

the organization to have a certain degree of freedom to respond differently to institutional pressures. Agency refers to the active role of decision makers (Colomy, 1998). Management is considered the most dominant decision makers (Kochan, e.a., 1984; Paauwe and Boselie, 2003). Human agency determines whether and how organizations can create more room for strategic choice (Paauwe, 2004).

Strategic choice gives organizations several options to cope with institutional pressures varying from active resistance to passive response (Oliver, 1991). Boon e.a. (2009) develop three types of institutional fit based on Oliver (1991) and Mirvis' (1997) distinction between 'leaders', 'followers' and 'laggards': conformist, innovative and defiant. Conformist behavior refers to a passive or neutral response. This means that organizations comply with the rules and regulations and follow normative and mimetic pressures. Deviant behavior refers to active resistance, or in other words, not complying with rules and regulations and not following normative and mimetic pressures. Whether or not organizations opt for conformist or deviant behavior depends first off all on the perception of risk. In the context of institutional theory this means that organizations assess the risk of not complying on its' legitimacy. Secondly it depends on the focus of attention (Lehman and Ramanujam, 2009). This means that an organization might not be able to assess all risks and all efforts on being compliant or deviant. The third type of response refers to being innovative in coping with the institutional context by active development of this context. In the table below we give an overview of possible organizational practices in response to the institutional pressures.

Strategic response to insttutional pressures	
-	Assessing risks
-	Actively managing compliance
-	Developing the institutional context

METHODOLOGY

The study for organizational agility as well as its' imbedding in an institutional setting is a relative new contribution to organizational theory. Therefore it requires a specific methodology aimed at new theory development. The configurational and interpretive nature of the research objectives requires an inductive approach using case studies (Yin, 2003). The goal of this research is to make statements about how the four firms (cases) in our study deal with dynamics in their environment. It is not our goal to generalize to a bigger population, but to research new topic areas in-depth.

Research strategy

In order to explore the organizational practices that make up the dynamic capability of organizational agility and the related institutional responses we turn to the concepts of grounded theory. Central to grounded theory are two basic concepts (Glaser and Strauss, 1967): constant comparison and theoretical sampling. Constant comparison refers to the process in which data are collected and analyzed simultaneously. This contradicts the traditional view of a clean separation of data collection and analysis (Suddaby, 2006). Theoretical sampling refers to the process in which decisions are being made on what data to collect next based on the emergent ideas. The flexibility and limited structure in this kind of research help to keep an open view and allow room for emerging insights to develop new theory based on the data (Glaser & Strauss, 1967; Yin, 2003). The qualitative design allows for gathering rich and deep data needed to go in-depth into ill-explored concepts and theory. However, the method of grounded theory does not ignore existing literature. The misconception that the researcher should be a 'blank sheet' is not only a wrongful justification for ignoring prior research (Suddaby, 2006), but is also impossible. Researchers bring their prior knowledge and concepts through professional background and disciplinary literature into the inquiry (Strauss and Corbin, 1990). The point made by Glaser and Strauss (1967) is not to ignore all prior research, but to prevent researchers to be forced into hypothesis testing, instead of directly observing social

phenomena. In this respect grounded theory requires a balancing act between a theory-laden view of the world and an unfettered empiricism (Suddaby, 2006).

Theoretical sampling

The case studies are selected based on the selection of the relevant organizational field. First all cases should operate in a dynamic marketplace. A dynamic marketplace is an environment which faces change that is hard to predict, with a high rate and with significant impact that heightens perceived uncertainty for key organizational members (Duncan, 1972; Ansoff and Sullivan, 1993; Dess and Beard, 1984). Secondly, we select one organizational field which has a relatively high level of institutionalization and one which has a relatively low level of institutionalization. Finally, we select the relevant sectors based on similarity in the capital/labor ratio as well as the level of education for the employees involved in the key business processes. Based on these criteria we selected the following organizational fields: public broadcasting (dynamic and highly institutionalized) and engineering (dynamic and low degree of institutionalization).

The organizational field of Public Broadcasting Organizations (PBO's) is regulated through a central coordinating organization, the NPO (Nederlandse Publieke Omroep [Dutch Public Broadcasting organization]). The NPO decides which programs are broadcasted, and PBO's have to pitch for time slots (with money to make the program related to the slots). In the Netherlands there are 14 Public Broadcasting Organizations. Four of them have a specific task (such as bringing news or providing shows on arts and culture or for specific target groups such as minorities) which is regulated by law in the Dutch Medialaw (Mediawet). The PBO's can broadcast on three public channels (Nederland 1, 2 and 3) each of which have a distinct character. Nederland 1 aims for a broad public, Nederland 2 focuses on news and backgrounds and Nederland 3 is an experimental channel mostly aimed at a younger audience. Besides these three public channels, there are numerous commercial channels

in the Netherlands as well. The Public Broadcasting Organizations do not only focus on TV, but also on radio and internet.

Both our case studies are PBO's which broadcast mainly on Nederland 3. The netcoordinator of the NPO decides twice per year on the programming of Nederland 3. But it also happens in between these formal moments that decisions are made about starting a new show or cancelling a show. When there are not enough viewers, another PBO can make the same sort of program for a lower price, or a new PBO is introduced into the field that has to be given airtime, a decision for or against programs can be made by the NPO. A division can be made here between long-term, stable programs that are often quite certain on their future existence as long as they have enough viewers, and smaller, experimental and more uncertain programs, which undergo changes more regularly. However, even a show which was deemed by the respondents of Org. A. to be a long-term stable show was cancelled by the NPO during the research period. In this respect the changes relevant for PBO's are relatively frequent.

Another source of frequent events is the society as a whole and politicians specifically. In the most general sense the environment of Org. A and B consists of the whole Dutch society, since these are the 'consumers' of programs broadcasted on TV and radio. They are also the ones that (indirectly) pay for the PBO's. As a consequence Org. A and B are closely related to the Dutch society at large. This also implies that politicians are involved in the organizational field of PBO's. As one line manager from organization A commented: *'I believe that over the past year alone, 34 questions have been asked in parliament on what I do'*.

With regards to unpredictability, a PBO can never know for sure whether its programs will stay on TV the year after. *'The uncertainty of 'does my program stay on TV?' is actually of all times'* according to a line manager in Org. A. The two PBO's in our study specifically broadcast on Nederland 3, which is a channel dedicated to more experimental programs. This leads to additional unpredictable changes in the programming: *'Nederland 3 is really focused on being young and*

innovative. Well, you can only be innovative when you have a tight schedule, and dare to change your programming...(line manager, Org. B).

Politics are directly responsible for rules and regulation, and for financing the PBO's through budgetting. Together with the ongoing discussions concerning the structure of the Dutch public broadcasting sector (every few years there are discussions on whether the field should be reorganized, for example according to the 'BBC model'), this leads to uncertainty for all PBO's on the amount of money they are provided, but also on their future existence. A good example concerns Org. A, which was very close to being disbanded in 2005, due to a governmental decision to reorganize the sector.

The budgets available for PBO's for making programs have a large impact on managing the organization. *'For the money available for PBO's there is a minimum guarantee, for the rest we have to pitch. This means that the resources are shifting constantly'* (HR Manager Org. A). When budgets are cancelled, this has an immediate impact on the financial health of the organization, especially since up until recently PBO's were allowed to only have a very limited financial reserve.

In general the organizational field for Engineering companies consists of clients, partners, competitors, and other related parties. In relation to dynamics in the environment this field has quite different setups depending on the field of operations that is looked at. But in general there is the continuous risk of building projects being stopped, put on hold or accelerated. Especially during the economic crisis of the last few years this has been a regularly seen phenomenon in among others the office building sector. The public clients of Org. C and D bring with them completely different dynamics, related to requirements that the law demands, which in both healthcare and airports are subject to regular and significant changes. These are often incident-driven. *'In Twente there was a small fire in an operation room. Well, then there is a response, investigations are carried out and immediately it is a hot item for hospitals to check their own situation...our customers will also*

immediately ask us question on this' (line manager Org. C.) The possibility of changes in the pace and continuity of projects and the sometimes incident-driven requests from clients the organizational field for Engineering companies shows both frequent and unpredictable changes and events.

The impact of these changes and events is mostly related to workforce planning. *'[the project] has been stopped...so mid last year, when we were working with 20 people fulltime on the project, it was reduced to 1 or 2 people, all within 3 months. Well, that leads to a problem. If you look at one of our offices, then you are talking about 40% of the staff of that office'* (board member Org. C).

With regards to the level of institutionalization, all organizations in our sample have to cope with generic labour law, as do all companies operating in the Netherlands. However, the companies in the Public Broadcasting sector have several additional relevant institutional factors. These consist of European legislation on the level of production being outsourced, a Collective Labour Agreement on the ratio fixed / flex employees, the code of conduct expected from companies supported with public funding and their normative awareness of their role as watchmen for democracy. As one line manager in Org. A puts it *'obviously, we are seen as guardians of our democracy, because we are independent institutions...which the public should be able to trust that we bring news that is reliable'*. However, up until recently there was no formal relevant education for most employees in PBO's, with the exception of journalists, so the normative pressure from educational institutions is fairly limited.

The level of institutionalization for the Engineering industry is relatively low. Most important is the generic labour law which is relevant for all organizations operating in the Netherlands. With regards to additional labour regulation the Workers Council is the most important institution. *'...we are not associated to a trade organization, where the trade organization determines 'this year we will all work one hour longer or shorter, or the salaries go up by so much, or these kinds of issues. Since it is not regulated in such an association, it is all arranged by the organization itself'* (Workers Council

representative Org. C.) Both Org. C and D have their own organization specific labor regulations. There is actually a trade organization (NLIngenieurs). This trade organization is mostly focused on promoting the sector. Furthermore, normative pressure comes from the educational institutions for engineers. The table below provides an overview of differences with regards to the level of institutionalization.

	Public Broadcasting	Engineering
Coercive	<ul style="list-style-type: none"> • Generic Labour Law • Collective Labour Agreement • Additional national and European rules on sourcing and employment mix 	<ul style="list-style-type: none"> • Generic Labour Law • Company specific regulations
Normative	<ul style="list-style-type: none"> • Operating in public spotlight, highly visible • Specific role in society • Professional bodies 	<ul style="list-style-type: none"> • Need for quality and reliability based on public discussions • Educational institutions for engineers • Professional bodies
Mimetic	<ul style="list-style-type: none"> • All located in one location (mediapark) • Benchmarking and best-practices based on formal visitation from NPO 	<ul style="list-style-type: none"> • Benchmarking and best-practices

The core process of Org.A is *creating and developing programs (on TV, radio, and internet) on 4 broad topics: backgrounds on the news/information; education for children; diversity-related issues; and arts & culture*. This core process is dictated by law. Two sub-categories are relevant for this process: long-term, stable programs, especially on topics as news / societal backgrounds, and education for children; and developing new formats and programs, especially diversity-, arts- and culture- related. Within these core processes added value is created by providing programs that

other PBOs do not provide, and by focusing on the core values 'quality', 'independency', and 'pluralism'. Org. B. has a similar core process of *creating and developing programs* with a main focus on TV, while adding to radio and internet. They focus mostly on young people and create programs focused on core values of *being bold and young*.

Org. C and D are both Engineering firms who define their core process as being consultants with regards to construction. Org. C is mostly focused on Installation (the interior of the building) while Org. D has a broad focus on both interior and exterior of buildings and the built environment. Both also claim to be able to handle the whole process from initiation phase to building phase.

Data collection and analysis

The research methodology includes semi-structured interviews with informants on the organization as a whole. These key informants are HR practitioners, managers, and worker representatives involved in the key business processes. A list of topics and subtopics to discuss is used, and there is a flexible order of asking and stating the questions. There was also room for informants to bring forward issues on their own initiative. After the first round of cases (Org. A and C), the list of interview questions was revised to include more detailed and additional questions. This is done to increase the amount of data on the relevant and emerging topics. Furthermore, desk research was done on both the individual cases as well as the environment in which they operate. As with the interviews, the desk research is also performed on both the organizations as well as the sector. The main contact of each organization is asked to review the case study report afterwards, and give feedback. Via this member check, the participants can validate that their input is correctly represented in the research.

HR managers were the first to be interviewed. These interviews served two functions. First, they were used to actually get answers on all questions formulated in the case study protocol. Next to this, they were used to generate a list of potentially interesting interview subjects within the

organization. Here, the ideas of among other Nishii and Wright (2007) were applied, who argue that in the stages of implementing and communicating organizational practices a number of actors within organizations are involved, and not in the last place line managers. Thus, in order to get a broad understanding of what is general practice in an organization, a broad array of actors needs to be interviewed, with a focus on 'saturation'. This means that the collection of data continued until no new information could be gathered from these collection procedures (e.g. Yin, 2003). This approach resulted in a total of 30 interviews. Details on who has been interviewed are provided in the table below.

Function	Org. A	Org. B	Org. C	Org. D
Board of Management	2	2	1	2
HR Manager	1	0	1	1
Line Manager	3	5	2	2
Senior employee / project manager	0	1	2	2
Workers Council	1	0	1	1
Total	7	8	7	8

This is an iterative, cyclic process in which the phases of data collection, analysis and theory are interchanging during the research process. All interviews are transcribed. Analysis of the data is done via event-to-event coding. The initial coding is performed by each of the three investigators separately. After this, the three researchers came together to discuss their coding. Outcome of such a dialogue is one coding per interview transcript, on which all researchers agree. Another result of the investigator dialogues are discussions which bring new insights, which help steer the research question, the relevant theoretical concepts, and the interview questions for the two cases performed later. All these discussions are documented in memo's. The second step is focused coding, in which

the vast amount of codes is sorted and integrated, focusing on the most significant aspects from the initial coding. This resulted in a fewer amount of higher-order categories. During the process of coding, the data is constantly compared within-case and cross-case. This is done to identify missing pieces of information and clues for further data collection.

FINDINGS

Here we present our findings on the four cases in our study. The objective of this paper was first to identify the organizational practices commonly found in organizations operating in a dynamic environment, as is the case with our four case-study organizations. We will look at the organizational practices observed in line with previous literature as well as organizational practices which unfold themselves during data analysis. We consider this as only a first step in understanding organizational agility. . Secondly we wanted to explore the strategic response to the institutional pressures. Here we will look at the differences between both sectors and the way in which the four cases have coped with the relevant institutional context.

Workforce scalability

Workforce scalability comprises of organizational practices aimed at workforce alignment and workforce fluidity. Workforce alignment requires an open (workforce) planning, creating a shared mindset and employee participation.

With regards to open workforce planning all cases have a pragmatic approach to it. If at all, the workforce planning has a time horizon of maximum two years and focuses mostly on demographic developments. These demographic developments are more easily predictable and provide clues for potential shortages in capacity and the risks of loss of knowledge. Within this limited strategic workforce planning the organizations have an operational coordination on workforce planning aimed

at the time horizon for which they are able to look ahead. This coordination is however very much centralized. In both Engineering companies this central coordination is formalized in a coordination meeting in which project and line managers (Org. D) or line managers and directors (Org. C) together with the HR Manager have a short meeting on the deployment of employees within projects. PBO B has a somewhat more pragmatic approach to central coordination:

During the last elections Org. B produced a show specifically aimed at the elections. They planned to do a similar show during the next elections, which were planned in November 2010. However, due to a conflict on the participation by Dutch troops in Afghanistan the cabinet fell in February 2010, requiring elections in June 2010. This meant for Org. B to immediately after the fall of the cabinet to start preparations for the show on the elections. Deploying employees on this show was a centralized effort cascading down in the organization. The managing director called the chief editor and the external producer who started reshuffling employees in order to have the team ready. Within one weekend the newly formed team started on the preparation of the show. By half April the first show was broadcasted.

A common sense of direction or shared mindset also seems to be a very important factor for all organizations. A dynamic environment not only leads to the need for organizational agility, but also to uncertainty for employees with regards to the content of their work, their workload and the sustainability of their job. When employees are insecure on these issues they look at the organization to provide another form of security. This seems to be a stable core with regards to the organizational identity or common sense of direction for employees. All cases stress the importance of their core values to aid employees in making the right choices and to provide a stable core. Another important organizational practice with regards to a shared mindset is communicating with employees. Since organizations in a dynamic environment can only communicate sparsely on specific future developments, the focus is on providing contextual clarity. *'The message we communicated last year, because dark clouds were coming at us, is being communicated in a filtered way with the employees. I think it is always important, not surprising them, but involving people with the problem'*. (board member Org. B). A much used way of communicating with employees for providing contextual clarity are town hall meetings and using the Workers Council as a specific communication channel.

Besides communicating with employees the managers in the cases also specifically invite employees to participate in decision making. However, all cases differentiate in employee groups based on knowledge, expertise or creativity in choosing the level and way of participation in decision making. Consultation of employees on strategic issues is limited to a small group of senior employees. They are asked to actively contribute to the strategic discussions. On new product development or new business ventures employees with specific competencies are asked to provide input.

Workforce fluidity requires building relations with suppliers of human resources and potential employers of (temporary) redundant employees, competence based training, developing a broad skill base (e.g. through cross training and job rotation), discretionary work design and managing numerical flexibility by allowing organizational slack.

Before discussing the way in which the case organizations built relationships with suppliers and potential employers, we first need to focus our attention on the subject of sourcing strategies. All organizations have a choice in deciding on whether to perform activities internally or externally. In order to avoid a too heavy impact of dynamics on the own workforce – and the cost related to this workforce – activities are outsourced to external providers. Especially in the Public Broadcasting sector this is a common practice. Another way of externally sourcing the activities is by employing freelancers. This is done by both PBO's as well as engineering companies. However, all of these cases have mechanism in place to manage the externally sourced activities. These mechanisms are stronger in case of outsourcing then in case of freelancers. With regards to outsourcing, they have a specific function to manage the outsourced activities. With regards to freelancing this is done by preselecting the potential freelancers.

Managing the employee supply chain refers to the whole process of getting the right people in at the right time. All companies rely on preselecting good candidates and keeping them on file.

Furthermore, saying goodbye is also actively managed, since employees leaving the organization are also ambassadors in the labor market.

PBO A takes initiatives to actively help employees to a new job in a related sector. For example, employees specialized in history have been working on a documentary type of show as interns or on fixed contracts. When they need to say goodbye to these employees they discuss their profile with the National Historic Museum. PBO B takes a somewhat different approach by not actively searching for a different position but by saying goodbye in a positive way in order to have the option to rehire these employees when needed.

An important aspect in this is investing in the external network. Not only for obtaining new knowledge (as will be discussed later) but also for keeping an eye on new talent and having contacts for helping redundant staff to find a new job.

An additional organizational practice with regards to workforce fluidity refers to mixing different employment patterns. Most commonly used are fixed contracts, flex contracts, temporary contracts, internships and freelancing. What is most striking is that the engineering companies prefer fixed contracts but are forced by scarcity in the labor market to make use of other forms of contracts. *'What we do have regarding flexibility are fixed term contract...but those were hired with the intention – since often it concerns younger people – with the intention that we educate and train them and that they become craftsmen here'* (line manager Org. D). Although the reasoning is different from that of PBO's, for both it leads to increased workforce fluidity. Another important fact here is the fact that the fixed contracts are always related to functions or people that determine the identity of the organization. This seems to be also closely related to the earlier point of creating a shared mindset. When asked about being flexible with regards to the workforce, a board member from Org. B answered: *'Not having too long contracts, keeping your staff as mobile as possible and not being vague about it....and making sure that your key positions are filled with typical [Org. B] type people, on who you can always rely'*.

In order to be able to reshuffle staff it is important that some level of interchangeability is possible. First, all companies recognize the limitations of interchangeability. These limitations are mostly

linked to having specific functional skills or expertise. For example in PBO's working for TV, Radio or Internet is seen as three areas where very specific skill sets are required. And within TV being an expert editor on Modern Ballet is something completely different from being a sports editor. This is the same for engineering companies. An engineer on Installations is completely different from building management or geophysics. However, there is internal mobility between projects in the same field of expertise. Furthermore, a distinction can be made between specialists and more generic profiles. *'So where you actually have some interchangeability is at a fairly low level in the organization. And even then with a relatively limited scope'* (line manager Org. D).

Whenever possible, all companies provide training for broadening the skill set. Org. A for example has very clearly made efforts in helping employees to look beyond their own expertise through training and job rotation.

Org. B has a broad offering of training for their employees. With regards to the limitations in interchangeability between TV, Radio and Internet they offer training around cross medial working. In their training around career planning they have a module called 'Bij de buren gluren' [peeking at the neighbours] allowing employees to learn of the job for a day on other shows or within other functions.

Another way for most organizations to increase workforce fluidity is by cultivating an atmosphere of helping each other out. This seems to be a very important aspect in all four case studies.

The HR Manager from Org. C summarizes it as following: *'You have to allow each other success and if dynamics require you to have internal mobility and if one employee moves and another does not fill the gap that is left or does not facilitate it, you won't get a good result....So you have to allow each other success and the one who is successful needs to be able to share this success.'* In Org. B the most important organizational practice to create such an atmosphere is facilitating socializing: *'I think it is an advantage when people also socialize outside work and have a good time. Simply because it is a matter of allowing each other to...when an chief editor does not have a good relation with an editor that works for our department on a show...they might find it more difficult to work an additional ten more minutes or...'*

Finally all organizations manage the numerical flexibility. This sometimes means choosing not to take on new work. This is very much related to having modest performance objectives. All companies indicate that financial success or growth is not their first focus. Quality and adding value

are more often mentioned. Other ways of managing the workload is closely related to the focus on output control by all companies. Not so much the work needs to be done as the results need to be delivered. This is reflected in the organizational practices such as working overtime, stretching employees in their workload and applying flexible working hours.

Fast organizational learning

As we have seen in the previous discussion, fast organizational learning is an important aspect of organizational agility. Here we focus on both knowledge alignment and knowledge creation. With regards to knowledge alignment we see reliance on real-time data and knowledge, building an external network, and having key players focused on the outside world.

First of all there is a strong reliance on external data and knowledge. For example, the PBO's make use of data on viewer rating supplied by an external suppliers. Although this data is not real-time, it is the closest there is. Moreover all companies invite external experts to share knowledge with them. They have a very pragmatic approach to outside expertise: they let suppliers or clients tell them what they need to know or invite external experts to give their view on the marketplace or the specific products and services of the organization.

Finally there is a general focus on the outside world due to the line of business the organizations operate in. Obviously journalists and other media professionals have a outside focus due to the products they make. The engineers are more focused on the outside world related to the latest technical developments. The commercial project managers are more focused on the outside world with regards to clients.

With regards to knowledge creation we look at sharing knowledge between individuals by building internal networks, discussing and reflecting on knowledge, documenting knowledge and experimenting and simulating.

The most important practice for knowledge creation – and maybe even for a scalable workforce and related to organizational infrastructure – in a dynamic environment is building an internal network. All cases invest in making sure that employees know each other – professionally as well as informally – in order to share and coordinate knowledge. In this respect they do not need knowledge repositories, which become obsolete quickly as new knowledge emerges. In fact, in agile organizations, knowledge travels by foot and is stored in the collective mind of the organization. Specific practices for building internal networks is a social introduction program for new employees, a workplace layout to facilitate meeting and discussion, a strong focus on socializing and mixed training when related to broad competencies.

Having an internal network helps for sharing knowledge. Formal knowledge repositories such as internal Wiki's, the intranet or physical library are only used scarcely. *'People just visit each other, just to ask what they need to know'* (line manager Org. C). Within Org. D the intranet is used, but only as an instrument to facilitate knowledge sharing through the informal network. They have an experts list published to make it easier for employees to find the right people for the information they need.

Discussion and reflection on new knowledge is mostly done through evaluation. All cases use extensive and continuous evaluation of projects, products and employees. The evaluation is being done on different levels of the organization: informal peer evaluation, formal evaluation by management and evaluation with clients. Most striking here is the openness for mistakes and allowing yourself as an employee and an organization to be vulnerable. This also helps in being open for external expertise.

In Org. B there are two ways of becoming employee of the week: by doing something really well or by making a mistake *'because everybody can learn from the mistakes of another, it's fun to make jokes about it'* (board member Org. B.) Within Org. C it is called the 'Misser van de Maand' [Mistake of the Month]. *'Somebody is selected and asked 'what have you done wrong this month?'...and then that person has to talk about the mistakes he has made'*. (senior employee Org. C.) This openness for

mistakes is only possible when combined with celebrating success in an equal fashion. Having cake seems to be the most used practice for this.

Experimentation is an important way of getting new knowledge. It allows employees to be open for mistakes. However, experimentation is often only done within affordable risk. For example, new international ventures are carried out only when linked to an existing client.

Organizational infrastructure

Finally, agile organizations need to balance chaos and order. The organizational infrastructure can help structure the organization. Here we discuss having a flat hierarchical organization, minimal formal functional authority, minimal routinization and standardization and informal coordination. Specifically with regards to the findings on the organizational infrastructure we need to consider that the case studies have been relatively small organizations (between approximately 120 to 400 employees).

First of all we see a flat hierarchical organization. Overall the organization does not have more than one management layer below the Board of Management. This also allows for minimal formal authority – which however is not the same as no informal authority. In fact, even in the most informal of the four case studies (Org. B with its' focus on being young and bold) indicates that some formal authority is necessary. '*These are basically just codes of conduct*' according to a line manager from Org. B. However, coordination of reshuffling of employees in face of dynamics is very much centralized and strictly coordinated. In all cases there is very much a top down approach to resource deployment. Also centralized are the management of the corporate identity or shared mindset (more focus in PBO's) and risk management (more focus in Engineering companies). Furthermore we see specific centralized functions to enhance cooperation and knowledge management. All other aspects of the core process seem to be mostly regulated through informal coordination. Here, the strong internal network plays a facilitating role by shortening the lines of communication.

With regards to the core process all organizations appreciate initiative and pro-activity of the employee over routinization and standardization. The own initiative allows employees to respond to changes in the environment, bring forward new ideas and creating new business opportunities. As the HR Manager from Org. C puts it: *'You have to deal with 80% or 90% highly educated people. They like to invent a better system. They leave existing documents behind to think up a new method'*.

Strategic response to institutional pressure

Based on the differences in the level of institutionalization we compared the Engineering companies and PBO's. The Engineering companies – having a relatively low level of institutionalization – seem to be less concerned with the institutional pressures that occur. They also seem to opt for conformity as the most appropriate approach. There is very much a differentiated approach within PBO's, related to the level of impact on the organization and its' image in the outside world. In fact there is a constant assessment of impact on legitimacy. This does not always seem to be a conscious management of compliance:

Org. A has a daily show on news and backgrounds. In this show they also look critical at companies and other institutions as part of their role in society. This also means that they themselves need to be compliant. However, some institutional pressures are stronger than others. In general the Collective Labor Agreement regulates the working hours of an employee. The normative pressure for journalists to always bring the news 'no matter what' makes them break the regulation regarding working hours. This is seen as legitimate, since the normative pressure is stronger for the employees and managers involved than the coercive pressure, stemming from the CLA-regulations.

The active management of compliance is mostly through the previously mentioned central risk management, managing the shared mindset and setting a code of conduct. By doing so, in case employees are unable to make an assessment, they know they should contact the legal counsel or manager.

Another strong way for both PBO's to handle the institutional pressure is by trying to be involved in defining the institutional context whenever necessary. A line manager in Org. A describes the necessity of being 'embedded' in the institutional context. *'[Being embedded means that] you seek linkage with important societal organizations, which whom you have such good ties and cooperate so intensive, that they will without doubt take action should anything happen. That can serve as a shield or that can lobby...'*

CONCLUSION

The objective of this paper was to identify a number of organizational practices that contribute to the level of organizational agility in the four cases at hand. Organizational agility allows the organization to survive in a dynamic marketplace. Based on the four case studies we see that organizational practices with regards to a scalable workforce, fast organizational learning and a highly adaptable organizational infrastructure are present and seem to be contributing to organizational agility. Further data analysis and a wider scope in the case studies (larger organizations) are required. This mode of investigation fits the grounded theory approach.

However, we do see a number of overarching principles that seem to be at the base of most organizational practices in the cases. First there is a focus on building a stable core. This stable core means trying to plan for the events that can be planned, such as demographic developments in the workforce and operational resource deployment in projects with a limited time scope. On the other hand the stable core means creating and instilling a shared mindset and corporate identity amongst all employees. In fact, one could argue that the less an organization is able to plan with regards to the workforce, the more the organization should focus on a shared mindset and corporate identity.

Secondly, there is a balancing act between centralized formal coordination and decentralized informal coordination. In order to be able to decentralize responsibilities and initiative there needs to be a centralized function for enhancing the shared mindset, knowledge management and cooperation. With regards to the execution of the strategic core process, decentralization seems to be the way to go for our cases.

Finally, all cases focus on the collective cooperation over the individual performance. This is the case for both employees individually and the organization as a whole. The case organizations facilitate the individual employee to build an internal network for quick and informal coordination as well as knowledge sharing. The organization as a whole relies on outside expertise for new knowledge and on the external network for managing the workforce supply chain.

Our second objective was to determine the strategic response of the organizations to the institutional pressure limiting the room to maneuver in order to be agile. We have seen that the Engineering companies, which experience a relatively low level of institutional pressure seem to be less concerned with it and for this reason also not focused on other responses than just conforming. PBO's, who face a relatively high level of institutional pressure, take a more differentiated approach. By centralizing risk management and building a culture in which risk assessment takes place they are able to determine the impact on the legitimacy of the organization.

All and all, we see that building an agile organization is a balancing act. Balancing between planning for what can be predicted and organizing what cannot be predicted. Balancing between centralized and decentralized coordination. Balancing between focus on own initiative and building relations. And finally balancing between conforming, innovating and defying institutional pressure. This first analyses provides some interesting starting points for future analysis and research. It is clear that more research can be done to specify more detailed organizational practices. Furthermore, the case

selection should be broadened in order to eliminate the effect of the size of the organization on the organizational practices.

REFERENCES

- Ansoff, H.I. and Sullivan, P.A. (1993). Optimizing profitability in turbulent environments: A formula for strategic success. *Long Range Planning*, 26(5), 11 – 23.
- Ashkenas, R., Ulrich, D., Jick, T. & Kerr, S. (1995). *The boundaryless organization*. San Francisco, CA: Jossey-Bass.
- Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*. 11(3), 656 – 665.
- Barney, J.B. (2001). Is the resource-based “view” a useful perspective for strategic management research? Yes. *Academy of Management Review*. 49(1), 9 – 15.
- Becker, B.E. and Huselid, M.A. (2006). Strategic human resource management: where do we go from here?. *Journal of Management*. 898 – 925.
- Boon, C., Paauwe, J., Boselie, J.P.P.E.F., and Hartog, D. den (2009). Institutional pressures and HRM: Developing institutional fit. *Personnel Review*, 38(5), 492 – 509.
- Bourgeois, L.J. and Eisenhardt, K. (1988). Strategic decision processes in high velocity environments: Four cases in the microcomputer industry. *Management Science*. 34, 816 – 835.
- Christopher, M. (2000). The agile supply chain: competing in volatile markets. *Industrial Marketing Management*. 29(1): 37 – 44.
- Colomy, P. (1998). Neo-functionalism and neo-institutionalism: human agency and interest in institutional change. *Sociological Forum*. 13(2), 265 – 300.

- Dacin, M.T., Goodstein, J. and Scott, W.R. (2002). Institutional theory and institutional change: introduction to the special research forum. *Academy of Management Journal*, 45(1), 45 – 47.
- Deephouse, D.L. (1998). Legitimacy. In Cooper, C.L. and C. Argyris, C. (Eds.), *Encyclopaedia of Management*, Oxford: Blackwell.
- Deephouse, D.L. (1999). To be different, or to be the same? It's a question (and theory) of strategic balance. *Strategic Management Journal*. 20(2), 147 – 166.
- Delacroix, J. and Rao, M.V.H. (1993). Externalities and ecological theory: Unbundling density dependence. In J.V. Singh and J. Baum (Eds.) *Evolutionary dynamics of organizations*, 255 – 268, Oxford: Oxford University Press.
- Dess, G.G. and Beard, D.W. (1984). Dimensions of organizational task environments. *Administrative Science Quarterly*, 29(1), 52 – 73.
- Detert, J.R. and Burris, E.R. (2007). Leadership behavior and employee voice: is the door really open?. *Academy of Management Journal*. 50(4), 869 – 884.
- DiMaggio, P.J and Powell, W.W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*. 48: 147 – 160.
- DiMaggio, P.J and Powell, W.W. (Eds.) (1991) *The New Institutionalism in Organizational Analysis*, Chicago, MI: University of Chicago Press.
- Dove, R. (2001). *Response Ability: The language, structure, and culture of agile enterprise*. New York, NY: Wiley.
- Duncan, R.B. (1972). Characteristics of Organizational Environments and perceived environmental uncertainty. *Administrative Science Quarterly*, 17(3), 313 – 327.
- Dyer, L. and Ericksen, J. (2006). Dynamic Organizations: Achieving marketplace agility through workforce scalability. *CAHRS Working Paper*. 06 – 12.

- Dyer, L. and Shafer, R. (2003). Dynamic Organizations: Achieving Marketplace and Organizational Agility with People. In Peterson, R.S. and Mannix, E.A. (Eds.) *Leading and Managing People in the Dynamic Organization*. Mahway, NJ: Lawrence Erlbaum.
- Dyer, L. and Shafer, R. (1998). From human resource strategy to organizational effectiveness: lessons from research on organizational agility. In Wright, P., Dyer, L., Boudreau, J. and Milkovich, G. (Eds), *Strategic human resource management in the 21st century. Research in personnel and human resource management, supplement 4*.
- Eisenhardt, K.M. (1989). Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*. 32(3), 543 – 576.
- Eisenhardt, K.M. and Martin, J.A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21, 1105 – 1121.
- Eisenhardt, K.M. and Martin, J.A. (2000). Dynamic capabilities: what are they?. *Strategic Management Journal*. 21, 1105 – 1121.
- Foster, R. and Kaplan, S. (2001). *Creative destruction: why companies that are built to last underperform the market and how to successfully transform them*. New York: Currency.
- Glaser, B. and Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. London: Wiedenfeld and Nicholson.
- Grant, R.M. (1996). Prospering in Dynamically-competitive environments: Organizational capability as knowledge integration. *Organization Science*, 7 (4), 375 – 387.
- Grant, R.M. (2002). *Contemporary Strategic Analysis*. (4th ed.). , Malden, MA: Blackwell Publishers.
- Greenwood, R. and Hinings, C.R. (1996). Understanding radical organizational change: bringing together the old and the new institutionalism. *Academy of Management Review*. 21: 1022 – 1055.
- Hamel, G. (2000). *Leading the Revolution*. Boston, MA: Harvard Business School Press.

- Hamel, G. (2000). *Leading the Revolution*. Boston, MA: Harvard Business School Press.
- Hannan, M.T. and Freeman, J. (1984). Structural inertia and organizational change. *American Sociological Review*. 49(2), 149 – 164.
- Hopp, W.J. and Van Oyen, M.P. (2003) Agile workforce evaluation: a framework for cross training and coordination. *Working paper*, IEMS Dept. Northeastern University, Evans, IL.
- Jaffee, D. (2001). *Organization theory: tension and change*. New York, NY: McGraw-Hill.
- Kochan, T.A., McKersie, R.B., and Cappelli, P. (1984). Strategic choice and industrial relations theory. *Industrial Relations*. 23(1), 16 – 39.
- Koene, B.A.S., Paauwe, J. and Groenewegen, J.P.M. (2004). Understanding the development of temporary agency work in Europe. *Research Paper*. Erasmus Research Institute of Management (ERIM).
- Kostova, T. and Roth, K. (2002). Adoption of an organizational practice by subsidiaries of multinational corporations: institutional and relation effects. *Academy of Management Journal*. 45(1), 215 – 233.
- Ledford, G.E., Jr., Lawler, E.E., III and Mohrman, S.A. (1988). The quality circle and its variations. In Campbell, J.P. and Campbell, R.J. (Eds.). *Productive in Organizations: New perspectives from industrial and organizational psychology*. San Francisco, CA: Jossey-Bass.
- Lee, K. and Pennings, J.M. (2002). Mimicry and the market: adoption of a new organizational form. *Academy of Management Journal*, 45(1), 144 – 162.
- Lee, K. and Pennings, J.M. (2002). Mimicry and the market: adoption of a new organizational form. *Academy of Management Journal*. 45(1), 144 – 162.
- Lehman, D.W. and Ramanujam, R. (2009). Selectivity in organizational rule violations. *Academy of Management Review*. 34(4): 643 – 657.

- Lepak, D.P. and Snell, S.A. (2002). Examining the human resource architecture: The relationships among human capital, employment and human resource configurations. *Journal of Management*, 28, 517 – 533.
- Meyer, J.W. and Rowan, B. (1977). Institutionalized organizations: formal structures as myth and ceremony. Reprinted in Powell, W.W. and DiMaggio, P.J. (Eds.). *The New Institutionalism in Organizational Analysis*. Chicago, MI: University of Chicago Press, 1991.
- Meyer, J.W. and Rowan, B. (1977). Institutionalized organizations: formal structures as myth and ceremony. Reprinted in Powell, W.W. and DiMaggio, P.J. (Eds.), *The New Institutionalism in Organizational Analysis*, Chicago: University of Chicago Press, 1991.
- Miles, R. E.; Snow, C. C. and Pfeffer, J. (1974). Organization-environment: Concepts and issues. *Industrial Relations*, 13, 244 – 264.
- Mintzberg, H. (1992). *Structure in fives: designing effective organizations*. Prentice Hall.
- Mirvis, P.H. (1997). Human Resource Management: Leaders, laggards and followers. *Academy of Management executive*, 11(2), 43 – 56.
- Mirvis, P.H. (1997). Human Resource Management: Leaders, laggards and followers. *Academy of Management executive*. 11(2), 43 – 56.
- Morgan, G. (1997). *Images of Organization* (2nd Ed.). Thousand Oaks, CA: Sage.
- Nelson, R.R. and Winter, S.G. (1982). *An Evolutionary Theory of Economic Change*. Cambridge, MA: Belknap Press of Harvard University Press.
- Nishii, L.H. and Wright, P.M. (2007). Variability within organizations: Implications for Strategic Human Resource Management. *CAHRS Working Paper*, 07 – 02.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*. 5(1), 14 – 37.

- Nonaka, I. and Von Krogh, G. (2009). Perspective-tacit knowledge and knowledge conversion: controversy and advancement in organizational knowledge creation theory. *Organization Science*. 20(3), 635 – 652.
- Nonaka, I., Von Krogh, G. and Voelpel, S. (2006). Organizational Knowledge Creation Theory: Evolutionary paths and future advances. *Organization Studies*. 27, 1179 – 1208.
- Oliver, C. (1991). Strategic response to institutional processes. *Academy of Management Review*, 16(1), 145 – 179.
- Oliver, C. (1991). Strategic response to institutional processes. *Academy of Management Review*. 16(1), 145 – 179.
- Oliver, C. (1991). Strategic response to institutional processes. *Academy of Management Review*. 16(1), 145 – 179.
- Paauwe, J. & Boselie, P. (2003). Challenging strategic HRM and the relevance of the institutional
- Paauwe, J. (2004). *HRM and performance: Achieving long-term viability*. Oxford: Oxford University Press.
- Powell, W.W. (1998). Institutional theory. In Cooper, C.L. and C. Argyris, C. (Eds.), *Encyclopaedia of Management*, Oxford: Blackwell.
- Pursey, P., Heugens, M. and Lander, W. (2009). Structure! Agency! (and other quarrels): a meta-analysis of institutional theories of organization. *Academy of Management Journal*, 52(1), 61 – 85.
- Ray, G., Barney, J.B. and Muhanna, W.A. (2004). Capabilities, business processes, and competitive advantage: Choosing the dependent variable in empirical test of the resource-based view. *Strategic Management Journal*. 25, 23 – 37.
- Schroeder, D.M. and Robinson, A.G. (1991). America's most successful expert to Japan: continuous improvement programs. *Sloan Management Review*. 32(3): 67 – 81.

- Scott, W.R. (2008). *Institutions and Organizations: Ideas and Interest*. Thousand Oaks, CA: Sage.
- Scott, W.R. (2008). *Institutions and Organizations: Ideas and Interest*. Thousand Oaks, CA: Sage.
- Scott, W.R. (2008). *Institutions and Organizations: Ideas and Interest*. Thousand Oaks, CA: Sage.
- Senge, P.M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- setting. *Human Resource Management Journal*. 13(3): 56-70.
- Stalk, G. (1988). Time -The Next Source of Competitive Advantage. *Harvard Business Review*. 66, 41 – 51.
- Starbuck, W.H. (1976). Organizations and their environments. In Dunette, M.D. (Eds.) *Handbook of Industrial and Organizational Psychology*. 1069 – 1123. Chicago, MI: Rand McNally.
- Strauss, A.L. and Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage
- Suddaby, R. (2006). From the editors: What grounded theory is not. *Academy of Management Journal*. 49:4, 633 – 642.
- Sumukadas, N. and Sawhney, R. (2004). Workforce agility through employee involvement. *IIE Transactions*. 36, 1011 – 1021.
- Teece, D.J., Pisano, G. and Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509 – 533.
- Volberda, H. (1998). *Building the flexible firm: How to remain competitive*. Oxford: Oxford University Press.
- Williamson, O.E. (1998). Transaction cost economics: How it works; where it is headed. *The Economist*. 146(1), 23 – 58.

- Williamson, O.E. (2000). The new institutional economics: Taking stock, looking ahead. *Journal of Economic Literature*. 38(3), 595 – 613.
- Winn, L.T. and Jennings, P.D. (2001). The Temporal Dynamics of Institutionalization. *Academy of Management Review*, 26(4), 624 – 645.
- Wright, P. & Gardner, T. (2000). Theoretical and empirical challenges in studying the HR practice-Firm Performance Relationship. *CAHRS Working Paper Series*.
- Yin, R.K. (2003). *Case study research: Design and methods* (third edition)
- Youngblood, M. (1997). *Life at the edge of chaos: creating the quantum organization*. Dallas, TX: Perceval Publishing.