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Article

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Zeitschrift für Personalforschung (ZfP)

Provided in Cooperation with:

Rainer Hampp Verlag

Suggested Citation: Freiling, Jörg; Fichtner, Hanno (2010) : Organizational culture as the glue between people and organization: A competence-based view on learning and competence building, Zeitschrift für Personalforschung (ZfP), ISSN 1862-0000, Rainer Hampp Verlag, Mering, Vol. 24, Iss. 2, pp. 152-172,
https://doi.org/10.1688/1862-0000_ZfP_2010_02_Freiling

This Version is available at:

<https://hdl.handle.net/10419/70978>

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Jörg Freiling, Hanno Fichtner*

Organizational Culture as the Glue between People and Organization: A Competence-based View on Learning and Competence Building**

Is organizational culture a catalyst of competence development? This paper argues it is. The reason for this is that organizational culture fosters the process of learning and competence building and works as a glue between people and the organization they belong to. We employ a most recently developed approach belonging to market process theory, the so-called 'competence-based theory of the firm', to explain these causal relationships.

Organisationskultur als Bindeglied zwischen Mensch und Organisation: Eine kompetenzbasierte Betrachtung von Prozessen des Lernens und der Kompetenzentwicklung

Fördert Unternehmenskultur die Entwicklung organisationaler Kompetenzen? Dieser Beitrag bejaht die Frage mit Verweis auf die lernförderliche Wirkung von Unternehmenskultur. Die Unternehmenskultur stellt ein Bindeglied zwischen der personellen und organisationalen Ebene dar. Um die Wirkungsbeziehungen zwischen Unternehmenskultur und Kompetenzentwicklung zu untersuchen, bedient sich der Beitrag der jüngst auf marktprozess-theoretischer Basis entwickelten kompetenzbasierten Theorie der Unternehmung.

Key words: **organizational culture, competence building, learning, Competence-based Theory of the Firm (CbTF)**

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Article received: October 21, 2009

Revised version accepted after double blind review: March 26, 2010.

1. Introduction

Employees depend on companies and companies depend on employees. No firm can be successful without making manpower available. It is rather undisputed that corporate culture as an organizational phenomenon and an informal coordination mechanism is made of shared minds and values of the individuals and, thus, connects both the personal and organizational level. Understood as glue between people and organization, the corporate culture provides the firm with a high level of structural stability and reliability, once an organizational culture is adopted and penetrates the firm. However, this stability does not imply inflexibility, for the corporate culture belongs to the most important sense-making elements of an organization. As such, the culture can fuel organizational moves and, in particular, processes of organizational learning in a rather self-energizing manner.

Our paper addresses the role of corporate culture as a ‘linking pin’ between people and organizations by specifying *how corporate culture contributes to the process of building organizational competences by fostering the learning process in firms*. We employ the competence-based theory of the firm, henceforth: CbTF (Foss/Ishikawa 2007; Freiling et al. 2008), as the frame of reference to understand the role corporate culture plays in organizations in the context of learning and competence building. In this context we build on previous research that outlined the role of culture as an informal structural element that provides the firm with a coordination potential different from other institutions (Osterloh et al. 2001). Organizational culture allows for a rather smooth run of knowledge sharing and interaction processes based on informal ties among the people. These ties grow over time and provide the firm with stability and flexibility. They reduce behavioral uncertainty of internal interaction processes by growing trust and commitment and, in connection with learning processes, enable the firm to explore and exploit business opportunities more intensively (Nooteboom 2006). In this context, it is rather undisputed that a learning process is needed for the purpose of competence building (Prahalad/Hamel 1990) so that we need to select a concrete learning process model in this paper and extent it, where necessary. The Crossan et al. (1999) model allows for connecting the individual learning level and the organizational layer. In particular, the model explains how learning and competence building, supported by the organizational culture, ‘transcends’ from people via groups to companies by processes of intuiting, interpreting, integrating, and institutionalizing. The process, however, is in no way unidirectional but considers feedback processes from the organizational to the individual level as well. We extend the rather internal perspective of the Crossan et al. (1999) model by considering external parties with a perceptible impact on the learning process and add the process of absorbing external knowledge to the Crossan et al. model. Employing the learning model of Crossan et al. (1999) and drawing on Schein’s (1996) model of organizational culture, we address the following research question of the paper: *How does organizational culture contribute to building organizational capabilities by supporting the learning process in organizations?*

Why is this research question relevant? Resource-based theory (Barney 1991; Montgomery 1995) tells us that firms equipped with ‘crown jewels’ are able to raise superior profits in competition, in particular as long as these resources are protected

by working isolating mechanisms (Rumelt 1984). Research on dynamic capabilities (Teece et al. 1997; Eisenhardt/Martin 2000) suggests that protection of core resources is not enough, at least in case of volatile markets. Thus, firms have to manage the process of learning and capability building. It is rather undisputed that learning mechanisms guide the evolution of dynamic capabilities (Eisenhardt/Martin 2000). Insofar firms are well advised to better understand these mechanisms to outpace competitors in markets. This paper sheds light not only on these learning mechanisms but on the organizational culture as a facilitator as well. Understanding the relationships among these constructs allows for recognizing managerial levers to improve firm's competitiveness (Sanchez et al. 1996). This question is of utmost importance for strategic management and human resource management as well.

Based on previous work and by employing CbTF as the theoretical frame of reference, the paper intends developing causalities. Given the complexity of the phenomenon under scrutiny (Hayek 1964) and the early state of research on the impact of culture on competence building, our paper strives to develop causalities and is, thus, a conceptual one. However, the paper intends triggering further empirical research in a manner discussed below.

Against this background, the paper is organized as follows: In the next step (section 2) we clarify briefly the very nature of the investigated object. Based on this, a selection of an adequate theoretical approach is possible. The chosen theory (CbTF) is introduced briefly. This paves the way for relating the phenomenon of organizational culture to this theoretical framework. Section 3 continues with clarifying the competence building process. We refer to the model of Crossan et al. (1999) and extend it for the purpose of considering all relevant dimensions of competence building. In section 4 we build on this model to develop research propositions as for the influence of organizational culture on learning and competence building. Finally, section 5 contains some theoretical and managerial implications and an outlook.

Our paper extends prior research in at least the following ways: We feature the role of corporate culture as an informal structural coordination mechanism. Moreover, we connect research on individual and team-based learning with competence research to understand the interdependence between people and organization. In this respect, we extend the Crossan et al. (1999) learning model as mentioned above. As a centerpiece of this paper, the model is used to better understand the energizing power of corporate culture in the context of learning and competence development.

2. Theoretical Background

In this section we will introduce the core concepts we use in this paper. First, we introduce the very nature of the investigated topic to prepare the selection of an adequate theoretical framework (CbTF) as a next step. Next, we briefly introduce this theory and relate it to the debate on organizational culture. In this context we clarify our understanding of corporate culture, pick a concrete model and explain where it is positioned in the CbTF. Against this background, we are ready to analyze the influence of organizational culture on the process of building capabilities in the next section.

The profile of the research object

The research question, as raised above, already prepares the ground in methodological regards since it sheds particular light on the research object. What are the consequences when formulating the research question as done above?

First, as for the subject matter, the investigation focuses processes of learning and competence development. It takes an evolutionary perspective to capture this part of the nature of the research object. Second, learning and competence development include approaches that address the availability and use of knowledge. Moreover, organizational culture belongs to the firm's resources that are deeply embedded in the network of organizational structures. An adequate theoretical framework should be in a position to consider resources and, in particular, knowledge in use. Moreover, the idiosyncratic nature of knowledge, competences, and organizational culture should be addressable. Third, learning and competences on the one hand side and corporate culture on the other are phenomena that can be better understood in case of a multi-level approach that takes into account the various activities of single agents, teams, and organizations in an integrated manner. Fourth, the particular viewpoint and simultaneously the *unit of analysis* is the *firm level* as the focal point of investigation. This does not mean that we can neglect other ontological levels. However, our focus is much more on management in general than on aspects of human resources. The four mentioned aspects are requirements that frame the selection of a scientific procedure to further our understanding of the topic.

Methodological implications

We already mentioned the complexity of the research phenomenon in the Hayekian sense (Hayek 1964). Moreover, little (Barney 1986; De Long/Fahey 2000; Burmann 2002; Zahra et al. 2004) has been said about the role of culture for the final purpose of the development of organizational competences so that much more conceptual and explorative work is required. In the face of the fact that, to date, the findings are limited and rather disconnected the ambition of this paper is to connect and advance the available insights by employing a conceptual framework that strives to prepare further empirical studies. To this end, a theoretical framework is useful that considers the above mentioned profile of the research object and provides us with a structure to connect and advance our knowledge. Moreover, this structure should be used to develop research propositions that guide later steps of empirical research.

Theory selection

The subject matter can be addressed by different disciplines. For the process of the development of organizational competences is an important milestone on the way to firm's competitiveness, the viewpoint of this paper is a managerial one. In organization and management theory some approaches belonging to resource-based research stand out for addressing knowledge, learning processes, competence development, and corporate culture. Research on dynamic capabilities (Teece et al. 1997; Eisenhardt/Martin 2000; Helfat et al. 2007) reached more or less paradigm status in management studies. More recently, other scholars developed a program that is called 'competence-based theory of the firm' (CbTF; cf. Foss/Ishikawa 2007; Freiling et al.

2008). CbTF's ambition is primarily to understand the nature of the firm in the context of surrounding markets and business environments by employing the basic system of antecedents of market process theory. Compared to the dynamic capabilities approach, this stream of research is positioned more clearly in the landscape of organization and management theories and more intensively grounded in the philosophy of science (Freiling et al. 2008). Since CbTF relies on Austrian School market process theory, it can fully adopt its view on the role of knowledge in the market and the society and simultaneously address the knowledge-based processes within companies. CbTF is evolutionary and addresses the up-grading of assets as well as the proactive management of the adaptation process between firm and business environment. Since CbTF seeks to explain the firm's competitiveness and the nature of firm, the primary unit of analysis is the organization. At the same time, CbTF pays attention to individuals, teams, and networks as well. Thus, CbTF fulfils all the stated requirements. We therefore employ this theory henceforth.

The Competence-based Theory of the Firm in overview

CbTF has evolved as re-conceptualization of the competence-based view (Sanchez et al. 1996) and builds on the following set of antecedents (Foss/Ishikawa 2007; Freiling et al. 2008) as hard core assumptions in the sense of Lakatos (1970): radical uncertainty, subjectivism, agents modeled according to the acting men notion (*'homo agens'*), methodological individualism, moderate voluntarism, and historicity (path dependence of organizational development). The CbTF wants to explain the existence of firms based on their competitiveness and enabled by the resource endowment (with a particular emphasis on people's human capital), consisting of more or less homogenous assets, heterogeneous resources, and idiosyncratic competences (Teece et al. 1997). The CbTF uses the following key terms in its causal structure (Sanchez et al. 1996; Freiling et al. 2008):

- *Assets* are homogeneous, unspecific, and therefore usually procured in markets, serving as input for value-added/upgrading processes. They can be internally or externally produced.
- *Resources* are those assets that have undergone a firm-specific upgrading process. They account for the firm's heterogeneity and should contribute to the actual and future competitiveness of a firm.
- *Competences* denote a repeatable, knowledge-based, rule-based and therefore non-random ability to render competitive output and to remain competitive. Competences enable a firm to launch goal-oriented processes that try to improve a firm's future performance potential (by being alert and responsive to market opportunities).

Thus, competences are made of knowledge and, in particular, skills of people. They are needed to tap the potential of knowledge available to the firm and to embed knowledge in the organizational structures (Ridder et al. 2007) to the end of effective use. The individual skills, however, are connected by rules and routines and provide the firm with a reliable potential to act. Insofar, competences rest on the organizational level but are inextricably linked with the people who act skillfully. This con-

forms to CbTF's position of methodological individualism to fully address organizational phenomena as long as they can be traced back to individuals – according to the Kincaid (2004) concept of explanatory individualism.

Due to its subjective nature, the (moderate) voluntaristic viewpoint and the evolutionary nature, CbTF, as a theory, belongs to the so-called 'interpretive paradigm' in the sense of Burrell and Morgan (1979). In this view firms are highly idiosyncratic entities that are made of a set of interrelated resources and, in particular, a network of personal ties among the people. The debate on the so-called 'isolating mechanisms' (Rumelt 1984; Dierickx/Cool 1989) reveals that in particular asset interconnectedness, social complexity of human relations, and tacit knowledge protect precious resources and competences from imitation and substitution by rivals. Moreover, they foster processes of competence building due to the factors mentioned above. Although not researched in detail, it transpires that organizational culture plays a crucial role in this regard (Barney 1986; Fiol 1991). Thus, it is useful to uncover the role of corporate culture for the purpose of competence development in more detail. Before doing so, we need to clarify our understanding of organizational culture.

Organizational culture

Next, we give a short overview of organizational culture in general, describe the concrete model we choose in this paper and show how far organizational culture can be regarded as glue between people and organization. Business research has largely ignored organizational culture before it became popular in the 1980's (Ouchi/Wilkins 1985). Publications by Peters/Waterman (1982) and Deal/Kennedy (1982) changed the view of organizational culture as a mere context factor to a key success factor in management. Empirical studies furthermore underlined the contribution organizational culture has on success (Deshpandé/Farley 2004).

Smircich (1983) notes, that few concepts in organization theory have as many different and competing definitions as organizational culture. One can cluster the different understandings of organizational culture into three main perspectives: the *objective view* that believes organizations *have* culture, and culture is a variable that one can change (Smircich 1983). The *subjective view* believes that organizations *are* cultures, and that culture is a root metaphor to understand organizations (Jelinek et al. 1983). Finally, the *integrative view* is a combination of the prior two ones, believing that organizations *have* culture and *are* cultures. Culture exists on an imaginary level as well as on a tangible level (Sackmann 1992).

Among the variety of cultural concepts we choose the integrative view, for it builds on the same antecedents as the CbTF: In the taxonomy of Burrell/Morgan (1979) CbTF belongs to the interpretive paradigm (Freiling et al. 2008). For the integrative view the same holds true.

As for the concrete model of organizational culture we adopt Schein's approach (Schein, 1983, 1984, 1996b, 2004), because of its very precise definition and clear argumentation (Hatch 1993). Schein distinguishes three layers of organizational culture (Schein 2004). These layers mainly differ in visibility and perceptibility of culture. On the upper layer we find artifacts as the 'cultural surface', on the middle level espoused values, and on the deepest layer basic assumptions as the 'cultural roots'. The essence

of organizational culture lies on the layer of basic assumptions (Schein 1983), artifacts are only manifestations or indicators but not culture itself (Christensen/Shu 1999). That is why we equate organizational culture with underlying assumptions and only describe this basic level of culture in the following parts (for alternate conceptualizations cf. Drumm 1988; Sackmann 1991; Hatch 1993).

Schein formally defines organizational culture as: “(...) a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (Schein 2004, 17). Simply regarding this definition the glue character of organizational culture between people and organization transpires. People are usually not really aware of basic assumptions in their group and within one group assumptions vary only little (Schein 1996a). Basic assumptions are learned reactions to problems the firm faces. Schein distinguishes basic assumptions of external adaptation (mission, strategy, and primary task), internal integration (common communication system, common language, definition of relations, openness for discussions) as well as deeper underlying assumptions (definition of reality and truth, levels of ambiguity, view on human nature, hierarchy; for more detail cf. Schein 2004).

As for the very nature of organizational culture, it is undisputed that it rests on the use of knowledge because corporate culture develops when knowledge is created on the level of assumptions (Schein 2004). Moreover, organizational culture is an enabler of internal processes since it provides people with a sense of direction. Culture enables targeted processes because the assumptions were developed while solving problems. Only solutions that succeed can become an assumption. As such, culture influences all processes in the firm because it is “pervasive and ubiquitous” (Schein 1984, 12). We will demonstrate the specific characteristics of culture in more detail by using an example in the next section (Narver/Slater 1990; Noble et al. 2002; Yoon/Sung-Ho 2005).

3. The competence building process

Next, we analyze the process of building (new) competences. In this context we keep in mind a potential influence of organizational culture on this process. To this end, we first explain the relevant processes in CbTF. Then we choose a specific process and describe it in more detail.

Impact on competence and resource building processes

We already pointed out above that organizational culture has an impact on all relevant processes in the firm. However, what are the relevant processes from a CbTF point of view? CbTF appreciates the value of competences and resources and their contribution to the firm's competitiveness. We argue that besides the sole existence of competences their activation is needed, because competences cater only for a potential for action, not the action itself (Penrose 1959). Thus, three processes are relevant to tapping the potential of competences: the process to *build* competences, the process that *avoids erosion* and the process that *activates* competences. With regard to resources, only the process of *building* resources and the process of *avoiding erosion* are relevant. The ac-

tivation of resources is conceptualized through competences. For the purpose of delimitation, we focus on the competence *building* process for it is a good example to demonstrate the influence of organizational culture on firm processes (Sanchez/Heene 1996). The other processes can be analyzed using the same method.

We understand competence building as the creation of new competences that is one part of competence development (Proff 2005). Competence development as a term considers the refinement of available competences as well. Although the high significance of competence building in competition is rather undisputed (Sanchez et al. 1996), a detailed and comprehensive exploration of the process itself is still missing (Wilkens et al. 2004). Many articles focus on descriptions what competences are made of. But a theory of competence building should not focus on the 'end products' but rather on the process leading to these results (Wilkens et al. 2004). That is why we define a process for competence building below.

Many scholars agree that learning processes can be used to conceptualize the competence building process (e.g. Prahalad/Hamel 1990). However, little is done so far. To fill this gap, we need to choose a learning process that explains the building of competences. This learning process should be in line with the antecedents of the CbTF, particularly the methodological individualism, because many learning theories take a holistic view without tracing the collective processes back to the individual (Popper 1971; Udehn 2002). We decide to take the learning process of Crossan et al. (1999) and Crossan and Bedrow (2003) for the following reasons:

- The argumentation is consistent with the concept of methodological individualism employed in CbTF (Wilkens et al. 2004; Spender 2006).
- Unlike many others, the model considers the interface between the individual and the collective level (Balbastre/Luzón 2003).
- The model covers the whole range of organizational learning, not only certain perspectives (as e.g. Nonaka/Takeuchi 1995, who only focus on innovations).
- The model builds on existing research and therefore provides several linkages to study the effects of culture.
- The model is dynamic (Dutta/Crossan 2005). This is in line with CbTF's evolutionary nature.

Modeling the competence building process

We now describe the learning process in detail as required for our paper, and will extend it where necessary to address the competence building process comprehensively (for a full description see Crossan/Bedrow 2003 and Crossan et al. 1999). The learning process of Crossan et al. rests upon four principles.

1. Learning involves a tension between exploration (assimilating new learning) and exploitation (using what has been learned). Firms need to find a balance between both (March 1991; Gupta et al. 2006).
2. The learning process stretches out over three levels: the individual, the group, and the organizational level.
3. Cognition and action affect each other.

4. These levels are linked by social and psychological processes: intuiting, interpreting, integrating, and institutionalizing.

Located in the field of interpretive theories, social and psychological processes can be captured by CbTF for Crossan et al.'s (1999) antecedents, especially the methodological individualism, are consistent with CbTF.

The first of the four steps in the learning process is *intuiting*. In line with the alertness (Kirzner 1973) of agents according to the homo agens notion (Mises 1949), new insights are created, based on the recognition of patterns in a personal stream of experience. This is a process located on the *individual level*. There are two types of intuition: Expert intuition is the recognition of patterns that have been learned in the past and are now tacit knowledge. The second type is entrepreneurial intuition. This kind of intuition allows for discovering new opportunities and arranging new connections between things based on the insight that there are no two situations that are completely identical so that every time new solutions can be found. In the *interpreting* step, the people explain their insights to themselves and to others. In CbTF terms, the asset interconnectedness and the social complexity of personal ties explain why and how these processes evolve. Hence, this step takes place on the *individual* as well as on the *group level*. This process is crucial to learning because giving meaning implies structuring and restructuring of knowledge. In the *integrating* step a shared understanding is created through dialogue and joint action. Once again, new knowledge structures develop by personal interaction in line with the methodological individualism (Spender 2006) based on former interpretation. In CbTF terms, tacit knowledge and routines play a vital role for the purpose of structuring the knowledge and preparing the people to act competently in a non-random manner. Through *institutionalizing*, learning is – often deeply – embedded in the organization, its systems, structures, routines, and practices. Thus, the way from intuiting to institutionalizing already provides us with a rough impression how organizational competences in the sense of CbTF develop from individual skills. Notably, for the process of the – more or less emergent – development of core assumptions, as the ‘cultural essence’, the same holds true.

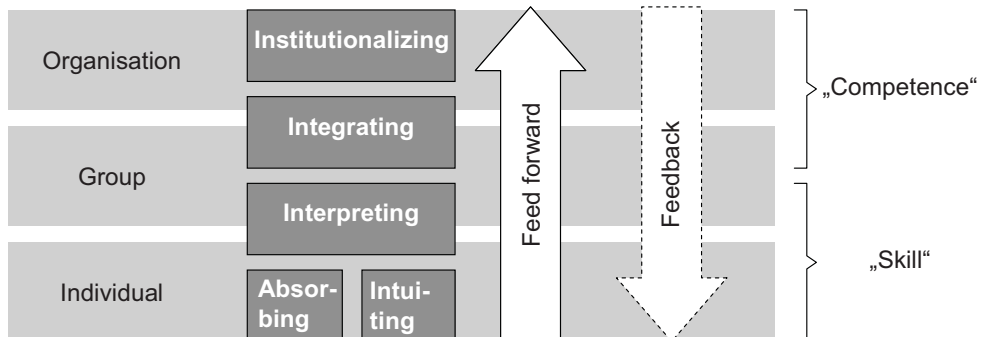
Two directions in the learning process can be separated: the *feed-forward* and the *feedback* process. Feed-forward rests on new learning processes, beginning at the individual and spreading through the group to the whole organization. The feedback process goes the other way round, spreading from the organization to the individual. It has the function to refresh and deepen what has already been learned (Vera/Crossan 2004). Since literature does not describe precisely which steps are involved in the feedback process, we need to touch on this issue here. Feedback is used to provide institutionalized knowledge back from the organization to the individual. Hence it is not the group that is first involved in the process, but the people. The group itself is not able to learn, it is always the single agent who learns – individually or in connection with other people. Thus, the process starts at the individual level. For this process, intuiting is not necessary (cf. figure 1) because the knowledge has already been verbalized. Hence for the people the process starts with interpreting. After the interpretation, the integration of the knowledge into the group begins. Thus the feedback process consists of interpreting and integrating.

Extension of the learning process

To consider the typical nature of learning processes, an extension of the Crossan et al. (1999) model is necessary. The source of new knowledge, as in the learning process model described, is a process within the firm. However, it is also possible that knowledge is created not by the firm itself, but already exists outside of it, and merely needs to be integrated into the firm. The construct of the absorptive capacity (Cohen/Levinthal 1990; Zahra/George 2002; Todorova/Durisin 2007) is able to address this. The absorptive capacity means the ability of a firm to recognize, integrate, and apply new knowledge. Whenever we want to consider this new source of knowledge in the learning process, we need to be careful to avoid overlap with our existing procedures. We may only integrate those steps that are not already covered by the learning process described above, and it is the ‘recognizing the value’-step in the model of Cohen and Levinthal (1990) that remains. The ‘recognizing the value’-step is followed by ‘assimilation’, which is already part of the above mentioned learning process, since assimilation mainly means integration and interpretation of new knowledge (Zahra/George 2002). For this reason we add the ‘recognizing the value’-step to our model and name it *absorbing*.

What is involved in this step? Todorova/Durisin (2007) remind us to consider three cornerstones: knowledge, skills, and evaluation criteria. Existing knowledge is required to recognize new knowledge (‘prior related knowledge’ in the sense of Cohen/Levinthal 1990). Skills as a backbone of organizational capabilities are useful because people that have experience with one learning object are more effective with the next (Ellis, 1965). Evaluation criteria are necessary to judge the value of the identified external knowledge according to general objectives and the needs of stakeholders (Todorova/Durisin 2007). Figure 1 contains the basic model of Crossan et al. (1999) and the extension we introduced.

Figure 1: Extended learning process of Crossan et al. (1999)



4. The effects of organizational culture on learning and competence building

Keeping the process of learning and competence building in mind, we now discuss how organizational culture can influence the steps of this process. We use findings in literature that we apply to our reasoning, for example the analysis of leadership style of

top managers by Vera/Crossan (2004) since to some extent leadership style might influence organizational culture (McGill/Slocum 1993; Sinkula et al. 1997; Hurley/Hult 1998). We mainly focus on the feed-forward process, as it provides most insights on the influence of organizational culture, and add some remarks to the feedback process where appropriate. The considerations are accompanied by the development of research propositions. As for the above mentioned state of research and the ambiguity in connection with the complex phenomenon under scrutiny, we decided to develop a wider set of propositions for further exploratory research. We also consider causalities with somewhat contradictory and/or fuzzy findings in literature for the findings provoke further investigations on the respective causal relationship.

Influence on intuiting

One core element of CbTF reasoning is the non-deterministic but moderate voluntaristic view on relationship between the firm and the environment. In this respect, it is important to encourage people (who behave in the sense of the homo agens notion of Mises 1949) to be open-minded and alert, to develop new ideas, and to recognize patterns by the usage of existing knowledge. It is helpful to motivate people to question their current assumptions, to be inquisitive and to strive for creative observations (Argyris/Schön 1978; Bass 1998). An activation of the willingness to experiment further increases intuiting (Ulrich et al. 1993). McGill/Slocum (1993) emphasize the importance of questioning existing knowledge with the catchphrase ‘unlearning’. Which underlying assumption in organizational culture is required to induce that behavior? The relevant attitude is related to the way people act in relation to their environment. A culture where people actively want to shape their environment fosters intuition, because people who do not believe that the environment is given and that one has to adapt to it, will question the given circumstances, look for new ways how to make business and create new insights.

Proposition 1a: Intuition increases with an organizational culture with a high willingness to actively shape the environment.

In line with the methodological individualism (Spender 2006), it is the single agent who creates new couplings of existing knowledge and generates new knowledge in the intuiting step. To increase the amount and quality of knowledge the individual can build on, people need to interact: “(...) employees (...) must be boundary spanners, working across functional departments and divisional lines to mine the experience of customers, suppliers, and even competitors” (McGill/Slocum 1993, 74). The willingness to interact in a cross-functional context mitigates coordination conflicts and creates a personal internal network that increases reliability of the division of labor while at the same time this reliability can foster innovative thinking and creativity (Chatman/Barsade 1995). For organizational culture, this means that a culture, where people are willing to interact, increases intuition.

Proposition 1b: Intuition increases with an organizational culture with a high willingness to interact with each other.

People who are intensively monitored and have little room for action will hardly find new ways to act (Snell/Man-Kuen Chak 1998; Winter et al. 1997). Instead, employees should be given support, mentoring and coaching (Tierney et al. 1999) and, over and

above this, some degree of discretion. Studies reveal that this leads to more knowledge available to the agents and, thus, better learning results (Oldham/Cummings 1996). Since the essence of organizational culture are the assumptions about human nature, an organizational culture with a self-motivated view on people gives employees discretion for their own decisions and actions so that they can behave in the sense of the 'homo agens'. This assumption in organizational culture improves intuition and thereby the competence building process.

Proposition 1c: Intuition increases with an organizational culture with a self-motivated view on people.

What causes learning processes? Market process theory, as the over-arching frame of CbTF, argues in terms of expectations and experience. Based on the principle of 'trial and error' (Hayek 1978), the more expectations and later experience are in conflict, the more people question their current knowledge structures and beliefs (Lueger/Keßler 2006). Accordingly, adaptations to the new state of knowledge occur and learning processes take place (Fiol/Lyles 1985). As for organizational culture these considerations imply that a rather vague corporate culture is typically not in a position to produce the conflict mentioned above. A rather clear-cut organizational culture, represented by a clear mission and a primary task, however, is much more likely to produce ambiguity when people access market information that is not consistent with what they learned before. These contradictions trigger and fuel learning processes.

Proposition 1d: Intuition increases with an organizational culture with a clear-cut mission and primary task.

In sum, the different propositions show the relevance of organizational factors to the intuiting behavior of individuals. Many facets of the cultural essence seem to matter in case of fostering intuition.

Influence on absorbing

To be able to absorb external knowledge, the respective willingness to identify external information is needed (Henderson/Cockburn 1994). People will be externally oriented when truth is defined according to reality and not according to tradition (Schein 2004). Pragmatic people seek validation in their own experience and in external information. Instead, moralistic people will mainly ignore both and seek validation only in tradition (Schein 2004). Hence, a pragmatic orientation in organizational culture seems to increase absorption.

Proposition 2a: Absorbing increases with an organizational culture with a pragmatic orientation of people.

To judge the value of external knowledge at the interface between the organization and the environment, people need to have prior knowledge. In this respect, often much knowledge is required. However, the question arises how this knowledge should be structured to foster external absorption. Utterback (1971) and Simon (1985) argue that a more diverse distribution of prior knowledge within the firm is useful to evaluate a broad range of knowledge (similarly: Cohen/Levinthal 1990). This increases the likelihood that new external knowledge is or can be related to knowledge already available to the single agent (Waalkens et al. 2008). An asymmetric distribution of knowledge within the firm, however, will be induced in an organizational culture

where people are seen as self-motivated employees (McGregor 1960). In case of these cultural circumstances people can create their own knowledge bases without monitoring and guidance of management. Thus an organizational culture with an assumption of self-motivated people encourages absorbing.

Proposition 2b: Absorbing increases with an organizational culture with the view that people are self-motivated.

Influence on interpreting

As shown in figure 1, interpretation connects the individual and the group level. To be able to create new interpretations, people build on communication. From CbTF's point of view, communication is useful since every person is equipped with an idiosyncratic profile of knowledge, expectations, skills and structures of the mind. Insofar, the exchange of ideas and knowledge can help to overcome bottleneck situations and personal shortcomings of people. However, the way how communication and the exchange of knowledge is organized, seems to matter. Vera/Crossan (2004) argue that with clearly established and commonly accepted communication it will be easier to create new language to interpret new information and knowledge. An organizational culture with a clear communication system, including a common language, will facilitate interpreting.

Proposition 3a: Interpreting increases with an organizational culture with a clear and common communication system.

So far, we focused on the role of the people in general and did not consider the particular role of managers and leaders. Goleman et al. (2001) argue that in case of interpretation leaders might play a crucial role. A cultural element that fosters interpretation are, in particular, leaders that ask for input (Argyris/Schön 1978; Shrivastava 1983; Goleman et al. 2001). This induces employees to share their ideas in the interpreting phase. For the purpose of considering this aspect in empirical research, the (low) level of hierarchy can be used as an indicator.

Proposition 3b: Interpreting increases with an organizational culture with leaders asking their employees for input.

Just at the interface between the individual and the group level, leadership issues play a pivotal role in another regard. Leadership style generally creates a certain kind of working atmosphere as a crucial intangible resource. Friedlander (1983) argues that people might fear sanctions or a loss of face in case of insufficient proposals. Leadership that admits to make mistakes creates an atmosphere where people are not threatened to share ideas they are not perfectly sure about (Goleman et al. 2001). This, however, requires an organizational culture that is able to handle ambiguity to a large extent. An organizational culture that can handle ambiguity will therefore be better in interpreting.

Proposition 3c: Interpreting increases with an organizational culture with a high ability to handle ambiguity.

We already touched on the role of leaders in the process of interpretation. Despite the role of leaders, CbTF stresses the role of creating a certain stretch of the organization to tap the potential of motivation (Pralhad/Hamel 1990; Freiling et al. 2008). Stretch,

however, is related to the system of basic objectives, such as vision and mission. Vision and mission facilitate the process of internal sense-making and help people to create a meaning for learning outcomes. Berson et al. (2006) argue that interpreting is easier when the firm has a clear mission (similarly Smircich/Morgan 1982). A clear primary task for the firm helps to create meaning in the interpreting step.

Proposition 3d: Interpreting increases with an organizational culture with a clear mission.

Influence on integrating

Integration connects the group level with the organizational level (figure 1) and contributes to a common understanding in groups so that knowledge becomes more and more embedded among people with considerable differences as for knowledge, skills, and motivation in terms of CbTF. The common understanding is basic for joint decision-making and action. As for the process of integration, the same supporting factors of organizational culture as in the interpretation step might work (Vera/Crossan 2004). Besides that, some more cultural facets can foster learning and competence building. This increases the complexity of the new learning and competence building. Penrose (1995) mentioned that the heterogeneity of services is relevant to the complexity of a resource. It is helpful when employees come with their own ideas, rather than just executing what the management told them. Own ideas cannot be imitated by competitors because they would require a deeper understanding of the internal structures and the interplay of ideas in the respective company. Oppositely, as for an organizational culture where people only apply what the management tells them, it is easy to imitate learning since the management processes are to some extent observable. Obviously, the willingness to discuss makes an important difference (Friedlander 1983). In particular leaders with a high willingness to let people discuss and question internal issues facilitate learning and competence building which is useful for integrating.

Proposition 4a: Integrating increases with an organizational culture with a high willingness for discussion.

Facing CbTF's antecedent of subjectivism, people are not only different in what they know and what they can but also as in things they want to do. This raises the question what to do to make action in groups more reliable and predictable. Organization theory knows many answers to this question. Are cultures with clear guidelines and monitoring systems better than those that rely on means of self organization? Friedlander (1983) argues that informal ways of coordination are superior in terms of creating trust and commitment.

Proposition 4b: Integration increases with an organizational culture based on informal internal coordination.

Influence on institutionalizing

Figure 1 suggests that institutionalization refers to the organizational level. To institutionalize an idea in a firm implies a high degree of embeddedness in organizational structures, such as systems, procedures, routines, or activities (Crossan/Bedrow 2003). These processes of knowledge institutionalization require a certain power of the peo-

ple who change the status quo. In case of new ideas, the person who develops an idea needs to have certain power to implement it. The power can be accumulated by the owner of the idea or by a supporting network of persons. However, firms with extensive hierarchical structures typically do not allow these power constellations. Flat hierarchies, instead, allow for power accumulation based on expertise, persuasion and similar factors (Calori/Sarnin 1991).

Proposition 5a: Institutionalizing increases with an organizational culture with a flat hierarchy.

On the level of the firm, ideas not only need to be implemented. They also have to be aligned with each other so that they can support the overall direction of the firm (Vera/Crossan 2004). This alignment is necessary because people are equipped with specific knowledge, expectations and abilities. A clear mission and primary task of the firm in organizational culture help to align routines and systems with strategy.

Proposition 5b: Institutionalizing increases with an organizational culture with a clear mission and primary task.

So far, we developed a system of propositions along the feed forward process. The causalities show that a lot of facets and elements of corporate culture might have an impact on the organization's processes of learning and competence building. Notably, there is sometimes a direct influence at the organizational level, sometimes culture nurtures learning and competence building via other organizational levels (individual, group). Next, we point out the implications of our discussion and present an outlook on future research.

5. Implications and outlook

Theoretical implications

To date, market process theory was predominantly applied as a market theory. The paper suggests that market process theory can be meaningfully applied to organizational issues when employing CbTF as a frame of reference.

CbTF itself provides us with the opportunity to analyze multi-level phenomena like learning and competence building in organizations. Thanks to the model of Crossan et al. (1999) we are in a position to tap CbTF's potential to address the relevant intangible assets (corporate culture, knowledge, skills, and competences) and to apply it to a particular learning model. This learning model allows for a structured consideration of all elements of the cultural essence that can make a difference as for learning outcomes.

The application of CbTF reasoning in this context strictly leads to a necessary extension of the Crossan et al. (1999) model. Whereas the learning model is focused on internal circumstances, CbTF – as a part of market process theory – acknowledges that the firm's competitiveness depends to some extent on firm-addressable assets that have to be integrated to reinforce the firm's resource endowment. Consequently, CbTF applies thinking in terms of firms as open systems (Sanchez et al. 1996) and suggests that the identification of external knowledge is of utmost importance for the outcome of learning and competence building. Connecting CbTF with an extended

Crossan et al. (1999) model is therefore useful to enhance our understanding of competence building that is facilitated by corporate culture.

To date, theories in the domain of resource and competence research often addressed issues that are directly connected with performance issues. This paper aimed at analyzing issues that are located more at the 'front of the pipe'. Although empirical evidence is required we can expect that informal structures that are deeply rooted in the organization (such as culture) seem to matter significantly for key organizational processes such as learning and competence building. In particular, some elements of the organizational cultural seem to be very important to facilitate learning and competence building while others are not. Thus, we need to carefully analyze the specific type of culture. However, at this point of time we must be very cautious with drawing conclusions.

Managerial implications

Touching on managerial implications of the impact of organizational culture on learning and competence building requires raising the question whether and how far it is possible to manage organizational culture at all and, if so, how far it is useful to manipulate the culture of the organization (Trice/Beyer 1984; Schreyögg 1991). Prior research on this topic suggests that differentiated answers instead of simple 'yes' or 'no' replies convince. Regarding the different propositions we developed above, there are indeed cultural elements that are manageable and seem to allow for manipulating the key causality of this paper. Without intending to recapitulate the debate on the changeability of organizational cultures, we adopt the reflected position of planned cultural change (Trice/Beyer 1984; Schreyögg 1991).

In this context, the question of the nature of a 'learning culture' comes to an issue. Prior research suggests that (Watkins/Marsick 2003; Bates/Khaswneh 2005; Friebe 2005) learning cultures matter. The research propositions we developed are potentially able to specify the elements that foster processes of learning and competence building as well. To the end of a rather comprehensive impression we consciously considered a bigger number of propositions to better understand what might matter – and what not so much. In this context, it seems that certain culture-related factors seem to matter much. The Crossan et al. (1999) model allows for identifying level-specific processes, learning and competence building consist of.

At every level, we can identify first hints for managerial action. Moreover, certain issues penetrate all ontological levels. For instance, the ability of a firm to discuss current beliefs nurtures all steps in the learning process. In particular the creation of new intuitions and sharing them in the integrating step is very much induced by a high willingness to discuss. A single person acting will not be able to question her/his beliefs in a critical manner. Yet, it would be wrong to assume that the existence of culture itself guarantees open discussions, but only a particular kind of the organizational culture. Organizational culture can provide a place for a risk-free discussion of new ideas, which, as shown above, is necessary in the integrating step. When imperfect ideas are not punished directly (or not at all), employees are willing to share them. In the absorbing step we showed that prior knowledge is necessary to assess new external knowledge and that a self-motivated view of human nature leads to an asymmetric dis-

tribution of knowledge. As shown, the complexity of competence depends on the diversity of ideas involved. One person alone cannot create this diversity. Similarly, a culture in connection with very hierarchical structures only leads to a limited diversity of ideas. A flat hierarchy and high willingness to discuss, however, will produce very different applications of resources.

In sum, a specific type of organizational culture is necessary to make best use of the specific knowledge, skills, and creativity of people (subjectivism). Organizational culture enables this potential and works as glue between people and organization that enables goal attainment. Organizational culture is required to foster collaboration in teams and to contribute to competitiveness via learning and competence building. Notably, firms are well advised to manage the feed-forward and feedback process according to figure 1 in an integrative manner. The more the two processes are skillfully aligned, the more valuable the organizational culture and the organizational competences will be. This reasoning builds on the fact that corporate culture and organizational competences belong to the category of the so-called ‘generative resources’ that are created and simultaneously augmented in use (Moldaschl/Fischer 2004). As such, they are highly relevant to a competence-based management.

Outlook

One core ambition of this paper is to develop research propositions for further empirical work. However, before doing the next steps the question arises how to proceed. The answer cannot be easily given for it takes a discussion of appropriate epistemological concepts. One can argue that organizational culture, learning processes, and activities of competence building are phenomena that are highly idiosyncratic so that generalizations are difficult, if not impossible. This reasoning relates to the concept of radical subjectivism according to Lachmann (1977). Moreover, identified regularities from unique past cases – be it in large numbers or not – can but need not occur again (Mises 1949). However, later protagonists of the Austrian School did not entirely buy into this ‘a-priorism’ and favored a more empirical orientation (Gloria-Palermo 1999). As for an empirical orientation Hayek (1964) suggested to apply in case of complex phenomena the procedure of ‘pattern matching’ with patterns as an ‘explanation of the principle’ but not the exact prediction and test of the occurrence of individual events – as it is typical for the concept of critical rationalism in the sense of Popper (1959). Notably, this epistemological approach of pattern matching is fully in line with the interpretive paradigm, CbTF belongs to. Thus, it could be an adequate frame in our context as well.

Next, the question is still open what empirical methods to apply. As mentioned above, the research object is complex and still insufficiently researched so that more exploratory work is useful. Over and above this, typical methods of qualitative (and quantitative) research might fail to explore the impact of organizational culture on learning and competence building. In this context, Schein (2004) postulates an intense integration of the scientist to decipher underlying assumptions. Surveys and individual interviews cannot be used because “(...) survey instruments cannot get at the deeper shared tacit assumptions that define the essence of cultures” (Schein 2004, 206). Schein (1987) identifies two ways how to proceed in such a situation: clinical research

and the ethnographic approach. In case of clinical research the scientist plays the role of a management consultant and scrutinizes the firm from a top management perspective. He gets in touch with the 'back-stage' of the firm. In case of the ethnographic approach, the researcher develops a close relationship to the firm he investigates. Integrated in everyday life, he observes the activities 'front-stage'. In this position he is much closer to basic cultural phenomena. However, he can face the problem to understand the background of the run of events incompletely. Both empirical research approaches can be useful to check our propositions. Schein (1987) points out that there is no need for a definite choice for it is possible to combine the two methods. Thus, apart from traditional ways of case study research (Eisenhardt 1989) there are interesting options to investigate the very nature of the research object more directly.

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