

Change through Internationalization: a Subjective Managerial Perspective

Abstract:

Among the most challenging events individuals have to cope with are those that imply change and adaptation. The concept of cognitive change and learning has been applied in a variety of contexts and on diverse issues. To date, however, research on internationalization of small and medium-sized enterprises has largely ignored this perspective. In response to this research gap, this study focuses on the cognitive change that managers experience when shifting their focus from a national to an international environment. We employ a grounded theory-based qualitative approach in our empirical study on international managers selected from the 'Europe 500 – Entrepreneurs for Growth' database - and the 'Hidden Champions' database. Our results indicate that changes triggering learning experiences affect overall managerial cognition and consequently international decision-making behavior. We discuss the major results and the limitations of our study, propose avenues for further research, and outline managerial implications.

Keywords:

managerial cognition, cognitive change, international strategic decision-making, grounded theory

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Introduction

Many small and medium-sized enterprises (SMEs) show a pattern of centralized decision-making (Hodíková, 2007). Top management teams or chief executive officers (CEOs) in SMEs have direct responsibility for and are actively involved in the strategic decisions of the firm. They are perceived to be the most important power and have a key role (Collinson & Houlden 2005; Hutchinson et al. 2005; Lloyd-Reason/Mughan 2002, Chetty 1999; McGaughey et al. 1997). Furthermore, they are the central forces in organizations that cope with the consequences of internationalization (Hutchinson, Quinn, & Alexander, 2006). Building on such views of the centrality of the manager to the organization, our study focuses on the subjective individual perspective, the managerial cognition in terms of shifts from a national to an international mindset. The transition from a – in a sense limited - national engagement to a position in which international business becomes a significant component of an SME's activity involves a process of management learning and organizational learning (Anderson, Boocock & Graham, 2001). In a similar way, it has been suggested (e. g. Armenakis & Bedeian, 1999) that for successful organizational change, an alteration of individuals' frameworks of understanding as well as change in the processes organizational members employ for interpretation and creating meaning from organizational events seems to be required. As a result, the individual interpretations of organizational change are illustrated by the concept of managerial cognition (Weber & Manning, 2001).

Various authors addressed the link between managerial cognition and action (Eden and Spender (1998); Stubbart, Meind and Porac (1994); Stubbart (1989) by specifically addressing concepts such as sensemaking (Lüscher & Lewis, 2008; Weick, 2005; Thomas, Clark & Gioia, 1993; Gioia & Chittipeddi, 1991) or causal mapping (Fahey & Narayanan, 1989; Eden, Ackermann, & Cropper, 1992). In addition, the issue of cognitive change received an extensive amount of attention from various researchers (e. g. Chattopadhyay et al., 2006; Hodgkinson, 1997; Barr, Stimpert and Huff, 1992). However, none of these aforementioned studies address the changes in managerial cognition that originates from the international strategic decision-making process of SMEs. On the basis of this research gap in cognitive research, the aim of this study is to develop a model based on a qualitative empirical

research employing the principles of grounded theory methodology to explore, analyze and classify the subjective managerial cognitive change in the context of international strategic decision-making. We assume that micro-level cognitive changes lead to organizational and subjective learning experiences in the context of internationalization that cause an overall cognitive change. For this reason, we believe that cognitive change is the relevant construct to be examined as exporters base their decisions on their perceptions resulting from their managerial cognition. Thus, our overall objective is to develop a basic framework and provide an example for exploring cognitive change in the context of internationalization from a subjective managerial perspective that allows for future quantitative research. In order to meet our objectives, we first present a number of issues relevant to managerial cognition and change in the context of international business. Second, we discuss the methodology of our qualitative study. Finally, we discuss the findings of this study, outline research limitations, and propose managerial implications, and point out directions for future research.

Managers and Internationalization

In general, it has been widely recognized that the decision-making process in SMEs is different from that practiced in multinational corporations (MNCs) (Larimo 2003; Lamb & Lisch 2002; Lu & Beamish 2001; Bussiek, 1994). Managers are more personally involved in the strategic decision-making process in SMEs (Bussiek, 1994) whose individual characteristics and predispositions play a key role (Bussiek, 1994). Moreover, the number of decision-makers is limited due to resource restrictions shared by most SMEs (Hodicová, 2007; Hutchinson et al., 2005). In most cases only a few or even just one manager - the CEO - are responsible for the international strategic decision-making process (Hodicová, 2007; Hutchinson, Quinn, & Alexander, 2006; Hodgkinson, 2005; Wilkens & Brussig, 2003; Bamberger & Evers, 1997; Westerberg et al. 1997; Peteraf & Shanley 1997; Fillion 1991; Wiedersheim-Paul et al. 1978) and that he plays a key role before, during, and after the internationalization (Hutchinson, Quinn, & Alexander, 2006; Westhead et al. 2001; Miesenböck 1988; Bilkey 1978). By guiding their companies into and through internationalization, managers themselves become "internationalized" (Hutchinson, Quinn, & Alexander, 2006). The challenges they face affect their cognitive structures and, consequently, influence the basis of their international strategic decision-making process (Neulinger, 1992). Aside from practical implications, this also has implications for management research: it highlights the importance of shifting the unit of analysis from the

organizational level to the individual level, especially also concerning the internationalization process and the international performance of SMEs (Wright, Westhead, & Ucbasaran, 2007; Hutchinson, Quinn, & Alexander, 2006). The most adequate source for the research of cognitive change through internationalization therefore are managers' perceptions.

Managerial Cognition

Over the past twenty years, managerial cognition has been researched from a multitude of perspectives. In table 1 we present an overview of the main studies on managerial cognition that are relevant our research, followed by a brief discussion of some key contributions to the field.

Insert table 1 about here

According to Wrona (2009), the concept of managerial cognition is a central part of strategic management research. Cognitive management research therefore focuses on the question how managers perceive and process information, leading to strategic decisions (Wrona, 2009). In fact, it outlines an alternative way of how strategies are formed. Strategy in this context describes an anticipatory, planned behavioral intent (Wrona, 2009). It consists of two aspects, namely action orientation and behavioral patterns (Wrona & Breuer, 2009). While behavioral patterns emerge when actions are considered ex-post, action orientations describe strategy as intended global activities that direct future decisions and actions ex-ante (Wrona & Breuer, 2009). Action orientations are not always designed in formal ways with decisions made according to logical and objective criteria (Wrona, 2009). In fact, most of the time strategy only exists by means of cognition (Wrona, 2009). On a managerial level this cognitive strategy development is referred to as individual strategy (Kirsch, 1996,). By employing an individual strategy, the various actors in an organization act in their own interests (Kirsch, 1996). Consequently, they have individual perceptions about how the company ought to develop in the future (Kirsch, 1996). For example, this is particularly true for SMEs, where - for example - the CEO (Reid 1981) has a precise vision for the company, which is not formalized in any way, but still influences his / her decisions and thus the strategy of the organization. In contrast to the classic, rational-analytical frameworks of strategic

management, cognitive management research suggests that the ways in which the individual perceives and processes information defines its actions (Wrona, 2009; Huff, 2005; Porac & Thomas, 2002; Hodgkinson & Sparrow, 2002; Hodgkinson, 2001; Walsh, 1995). Every individual manager develops different pictures of one reality based on differing interpretation mechanisms (Hodgkinson & Sparrow, 2002). Thus, the development of (company) strategies is primarily a mental process (Wrona, 2009, Mintzberg, Ahlstrand & Lampel, 1999). In their jobs, managers or individuals have to cope with a variety of complex and ambiguous streams of information (Walsh, 1995). In order to perceive the reality through this flow of information, to make effective decisions and solve problems, managers employ cognitive structures, schemes, models or knowledge structures (Walsh, 1995). Broadly defined, such cognitive structures are mental templates that individuals use to give their information environment form and meaning (Kauer, 2008). Individuals have two ways of approaching information processing (Walsh, 1995). One is that cognitive structures are formed from experience that affects individuals' abilities to attend to, encode, and draw conclusions about new information (Walsh, 1995). It is assumed that a given cognitive structure is applied in the same manner across time and cognitive concept as long as the subject matter remains similar (Elsbach, Barr, & Hargadon, 2005). Consequently, the individual information-processing task is viewed as context independent (Wrona, 2009). Nevertheless, other researchers in this particular field have questioned the stability of cognitive structures vis-à-vis the environment (Elsbach, Barr, & Hargadon, 2005). They especially refer to various contexts or environments, such as organizational, historical, task, or process contexts, influencing the relationship between cognitive structure and behavior in organizations (Elsbach, Barr, & Hargadon, 2005), coining the term 'situated cognition'. Situated cognition is commonly defined as the process of interaction of perceivers' minds (cognitive structures) and their environment (context) (Elsbach, Barr, & Hargadon, 2005). Hence, situated cognition is embedded in the context in which it occurs (Elsbach, Barr, & Hargadon, 2005). It presents a transitory perceptual frame that arises from the interaction of cognition and context and likewise directs individuals' attention, interpretation and actions (Elsbach, Barr, & Hargadon, 2005). A similar view has been proposed by Wrona (2009) who argues that context influences on cognitive structure. In a circular process, both cognitive structures and context have a situative influence on cognitive processes (Elsbach, Barr & Hargadon, 2005) through the process of sense-making (Wrona, 2009). Finally, these cognitive processes reflect upon and change cognitive structures as well as provide elements for context (Wrona, 2009).

This paper focuses on managers that experienced the transition from a national to an international work environment within SMEs. Therefore, we assume the national vs. the international environment to be the contexts in which those individuals work to be both an individual and an organizational one (Hruby, 2009). As cognitive structures are being influenced by dynamic environments, and - in return - managers perceive things differently now that they work in an international environment, we established the concept of situated cognition as the core framework for this study.

Cognitive Change

Managerial cognition and learning are often perceived as the two sides of the same coin (Hodgkinson & Sparrow, 2002). Managers act as individuals on the stage of the organization and learn from this acting (Hodgkinson & Sparrow, 2002). When information managers receive from their context changes and it does no longer fit their established cognitive structures (Labianca, Gray & Brass, 2000), cognitive change is initiated (Kuada, 2006). Cognitive change itself unleashes a process in which existing patterns are being disrupted (Isabella, 1990). As a result, the “frame of reference” through which managers view an event shifts (Isabella, 1990) and managerial learning occurs (Kuada, 2006). According to Kuada (2006), the motivation for learning derives from the detection of a mismatch between an individual's current behavior and the expected outcomes. The desire for improvement of these outcomes is intrinsically generated, for example by self-awareness, or extrinsically triggered (Kuada, 2006). Although learning does not immediately result in improved performance outcomes, it still encourages individuals to further learning activities in expectation of performance benefits (Kuada, 2006). At the same time, a process of unlearning established routines is taking place (Reihlen & Apel, 2007) - ineffective patterns have to be unlearned before learning can occur (Akgün et al., 2007). McGill & Slocum (1994), for example, argue that ‘unlearning’ can be triggered by three things: One is that managers have to unlearn some of their views because their current models are not working (McGill & Slocum, 1994). Another is that managers do not know how to respond to a new environment (McGill & Slocum, 1994). Yet, another is that managers simply do not know how to formulate an adequate response because they have to take into account a number of demands when making decisions (McGill & Slocum, 1994).

Naturally, this concept can also be applied to cognitive change through the process internationalization of SMEs. When managers find themselves working in an international environment in contrast to a national one, their usual behavior does not generate the expected outcomes. We expect them to hardly behave in the same way they did when working in a rather national environment. Hence, we assume that their motivation to learn and change resides in the achievement of adequate and profitable actions. A cognitive structure develops and at the same time it becomes obsolete when reality changes (Hedberg, 1981). In a changing environment - provoked by internationalization - managers feel that their previous strategies are less effective or are no longer effective at all (Akgün et al., 2007). Consequently, in response to environmental changes managers have to unlearn, learn and adjust their cognitive structures towards a global mindset.

Global Mindset

Cognitive structure is the very basis of a global mindset (Levy et al., 2007). By its representation of the environment it enforces cognitive complexity, which in turn influences individuals' information-processing capabilities (Levy et al., 2007). The more cognitive complexity managers employ, the more they are likely to end up with a complete and objective picture of their environment, namely a global mindset. There are various definitions of global mindset depending on the basis on which it is being examined. For the purpose of explaining global mindset from a cognitive point of view, we will use the following definition by Weick, 2005 (in Levy et al., 2007). He describes the global mindset “...as the ability of seeing events from various perspectives and of generating several competing interpretations of events and their interactive effects.” (Weick, 2005 in Levy et al., 2007). The concept of the global mindset from a cognitive perspective is important as it combines the concept of cognition with SMEs' internationalization. Nummela et al. (2004) infer that work experience correlates positively with the formation of a global mindset. This leads to concluding that a global mindset is learned when the internationalization process of SMEs triggers cognitive change.

Methodology

An inquiry into cognitive change in managers in the context of internationalization of SMEs is largely a journey through uncharted waters. Typically in such situations a richness of data is required that quantitative research does not generate. We therefore chose to follow a grounded theory approach for our study that is qualitative in nature. Qualitative research is a nonmathematical process of interpretation in order to discover concepts and relationships in raw data that is later on organized into a theoretical explanatory scheme (Strauss & Corbin, 1998). Grounded theory is an inductive and deductive, qualitative and scientific style of research respectively methodology (Strauss & Corbin, 1990). It provides a systematic set of procedures to develop a subject-anchored (grounded) theory about a specific phenomenon (Strauss & Corbin, 1990).

Based on an extensive literature review, we first identified a set of research questions. Using these as a point of departure, and combining them with gaps and contradictions in earlier research results, we developed a guideline for semi-structured expert interviews (Hruby, 2009). Experts interviews are interviews conducted with respondents that have privileged access to information that is relevant for the research of a particular topic (Russ-Mohl, 2007). Those interviews are especially suitable for explorative studies with the aim to generate hypotheses, as is the case for our research (Meuser & Nagel, 2002). Semi-structured interviews only provide for a general interview guide, which allows the interviewer to stay flexible in questioning (Fronhoff, 2010). This fits the nature of explorative studies in order to collect information about the general frame of reference of the interviewee (Fronhoff, 2010). The qualitative in-depth expert interviews employed for this study are also a combination of problem-centered interviews and narrative interviews (Hruby, 2009). The main purpose of problem-centered interviews is to gather objective evidence on human behavior, to capture subjective perceptions, and to gain insights into social reality (Witzel, 2007). This method utilizes a short, theme oriented guideline, mostly in connection with pre-formulated entry questions that serves as a basis for sticking to the problem, while it focuses on having the interview partner engaged in an open conversation (Fronhoff, 2010). The purpose of narrative interviews is to enable the interviewee to talk freely (Pfaff, 2006). In contrast to problem-centered interviews, narrative interviews use no entry questions in order not to influence the respondent in any way (Pfaff, 2006). As a result, the interviewee discloses his / her opinion or point of view, without being influenced by the opinion of the interviewer (Pfaff, 2006). After the completion of the final version of our interview guideline, we conducted seven pilot interviews based upon which we made several revisions to the structure and the questions.

Companies for our sample were selected from both the 'Europe500 – Entrepreneurs for Growth' and the 'Hidden Champions' database. Based on a number of selection criteria, we reduced the total number of companies to a final sample of 200 companies in Austria, Germany and Switzerland, out of which 35 SMEs agreed to participate in our study. These 35 SMEs represent successful and fast growing organizations with at least one subsidiary abroad, some of them world market leaders. Within the companies we selected those managers who were responsible for the decision to internationalize. The selection process of interview partners was on one hand theory-driven in accordance with theoretical sampling and on the other hand driven by the sampling strategy of maximizing differences. This means that maximizing differences between decision-makers of SMEs occurred, such as CEOs and members of board of directors from various industries, different branches, different age structures, different company sizes and different sexes. During the interviews the past internationalization process of their learning experience and learning processes have been in the research focus. Ultimately, we conducted a total of 40 semi-structured interviews with top executives. The data collection process lasted approximately 15 months. The interview questions were slightly and dynamically modified over time and an interview lasted, on average 50 minutes. Each interview was recorded and transcribed.

Data analysis was computer assisted by the use of Atlas.ti software. Atlas.ti is an analytic software tool that organizes data, codes data segments and simplifies the retrieval and graphic display of data (Hadolt, 2009). The main strength of the software is the management of data and its graphical presentation of the results (Hadolt, 2009). It enables analysts to handle large amounts of research material, notes, and associated theories in qualitative data analysis and interpretation (Muhr, 2005). Grounded theory postulates an inductive and deductive, interpretive and iterative process (Strauss & Corbin, 1990) when working with data. On the practical side, grounded theory is a categorical analysis based on coding (Rosenthal, 2008). Coding breaks up data and then conceptualizes and rearranges it in a new manner (Strauss & Corbin, 1990). This is the essential process by which theories are constructed (Strauss & Corbin, 1990). There are three main types of coding, namely open coding, axial coding, and selective coding (Strauss & Corbin, 1990). Open coding is an analytical process that breaks the text into smaller concepts or statements and clusters these around specific phenomenon (Strauss & Corbin, 1990). This is done in a process of questioning and comparing data in order to identify similarities and differences (Strauss & Corbin, 1990). For our study we

identified 554 statements that were grouped into 184 categories. This first activity is of utmost importance as it lays the basis for axial coding (Strauss & Corbin, 1990). Axial coding adds depth and structure to a defined category by relating them to each other (Strauss & Corbin, 1998). For this purpose, we used a C-paradigm that according to Glaser (Glaser in Böhm, 2003) describes five functions for subcategories, namely causes, consequences, conditions, context and activities. It explains how they are connected to the phenomenon, as illustrated by figure 1 and serves as a blueprint and describes our perspective towards the data (Strauss & Corbin, 1998). A paradigm is useful in providing general guidance to the analyst, as it helps to systematically gather and order data resulting in an integration of structure and process (Strauss & Corbin, 1998). During our research, axial coding led to the identification of ten core categories. All other categories were built around them in accordance to the C-paradigm.

Insert figure 1 about here

The third analytical activity is selective coding (Strauss & Corbin, 1990). It is the stage where the analysis is completed (Strauss & Corbin, 1990). At the beginning, we came to identify a certain structure in the data (Strauss & Corbin, 1990). Then we integrated and refined the seven core categories around a central category according to the same paradigm (Strauss & Corbin, 1990). In other words, similar to axial coding this central category builds the core after which other categories are systematically coded (Strauss & Corbin, 1990). As a result, a common pattern is identified, which is reflected by the data (Strauss & Corbin, 1990). This pattern is characterized by repeatedly occurring relations between characteristics and dimensions of categories (Strauss & Corbin, 1990, p. 95). The pattern also indicates which actions lead to which conditions and therefore increase the specialty of the emerging grounded theory (Strauss & Corbin, 1990).

Findings

As discussed earlier, we set out to identify possible changes in managerial cognition influenced by the shift from a national to an international work environment. What had been an assumption, a research question at best, in the beginning quickly turned into hard evidence

through the analysis of our data, sometimes in the most direct ways by statements such as *"[...] if you do it for some time (working internationally), you understand or, I would rather say, that you enjoy such a privilege to learn about other cultures and approaches and interpretations. Therefore I believe that there is nobody whose personality doesn't change [...]"*.

Our analysis revealed a total of ten categories of cognitive change which have been paradigmatically classified according to Strauss and Corbin (1998) as can be seen from the following figure 2:

Insert figure 2 about here

Among the ten, there are four core categories which are ‘how international business is done’, ‘perception of trust’, ‘gut feeling’, and ‘cultural awareness’. In case of cultural awareness, three further core categories are closely linked, namely ‘personal presence’, ‘loss of authenticity’, and ‘local language’. ‘Planning’, ‘retrospective analysis’, and ‘complexity’ are further identified as core categories associated with a ‘change in work approach’ category. All of these core categories indicate that cognitive change is based on recognizing the importance of understanding how business is done in a different way in different environments, which then leads to a learning experience from internationalization. For example, one manager stated: *"[...] this is a development, where you learn from problems and that things are done, for example we did an acquisition two years ago in England, and there we relatively quickly realized [...] that the English market is different."* Furthermore, it can be concluded that the learning process through internationalization in turn triggers an overall cognitive change and consequently leads to a change in decision-making as outlined by figure 2 and the following statement: *"[...] well I do think that I say the experiences I collected abroad affect the decisions we make to 80 or 90 percent [...]"*. Following, we will be briefly discussing the four core categories.

Perception of Trust. In contrast to national managers, international managers not only have to trust new different types of individuals or organizations such as translators or foreign

distributors, but they also have to develop trust in new systems and cultures. As a result, the perception of trust is a more complex construct of cognitive change in an international environment in comparison to a national one that influences managers' perception of their work environment and in turn their decisions. Amongst others, our research indicates that the change in perception of trust is caused by the degree of weariness. It appears that too much weariness causes lethargy in terms of an action stop as outlined by one CEO: "*[...] you learn to view things more critically, more cautiously. On the other hand, you learn to view them not too cautiously to avoid lethargy, because this is a problem. Yes, you can be cautious and act or you can be overcautious and eventually you fall into an action stop, because you don't trust in anything anymore [...]*". In general, it seems that increasing weariness and critical thinking are elements of significant cognitive change of international managers that influences their choice of whom to trust. Moreover, it is inferred that putting trust into people in a higher degree compared to trust in people in a national work environment conflicts with control. In sum, the perception of trust, mostly in terms of increasing reliance on other people and systems, is a major cognitive change that managers undergo by switching from a national to an international work environment. Furthermore, it is a personal change affecting the understanding of how international business is done, which is a learning experience and affecting decision-making as a consequence. Although for some managers adaptation is simply a requirement, the cognitive change in perception of trust is an opportunity to learn and grow for others.

Gut Feeling. We assume that often managers base their decisions not on rational indicators but on personal feelings by the development and use of gut feeling. These feelings have been developed and sharpened throughout internationalization and also beyond it. Accordingly, international experience is perceived to initiate an increasing trust in personal judgment. Most of all, managers recognize that not only facts matter for accurate decision-making: "*[...] deriving from the typical channel thinking which dominated the earlier times or that back then I would have said okay for my decisions I need this and that and yet a third information and I compare it and then I take it and so on. It turns into a heuristic approach, where you focus on factors [...] that maybe don't take into account the human side, not necessary. I can't decide everything by doing the calculations, yes only based on facts [...] you can't base every decisions on facts and I learned much more for myself that there are no decisions that impact negatively on something else. You will never make a decision in your life, which I believe, well at least I can claim that for myself, which only comes with advantages and even if only*

the disadvantage is that somebody else is affected by this decision [...] This is the most important point for me where I think, what I learned through my experience and certainly also through my international contacts and internationalization in general [...]".

The core category of gut feeling exhibited also some contradictions and unexpected results. While a majority of respondents indicated a cognitive change towards an increased reliance on their gut feeling for decision-making, a minority experienced cognitive change in terms of recognizing the importance of rational decisions. In most cases this minority of managers exhibited the tendency of viewing internationalization as a job necessity. According to some managers, gut feeling and rational decision-making seem to contradict each other.

Interestingly, a switch from gut feeling to planning was also recognized. This leads to the cautious presumption that if internationalization is viewed as a necessity of the job decisions are more based on rational factors. However, if internationalization is understood in a proactive way a more extensive use of gut feeling is involved in the decision-making process, as outlined by one interviewee: *"[...] Well, I am convinced that it works in both directions. On one hand, I base decisions more on my gut feeling than in the past. Likewise, there are decisions which I have to view from much more different perspectives before I make a decision. Automatically, I need more time, but it works in both directions. It's about the diversity in decision-making, which has just grown [...]"*. As far as planning is concerned, we identified a shift from using one's gut feeling to more formal and rational modes of planning.

Cultural Awareness. One of the most significant differences between a national and an international work environment is that in international environments managers often have to deal with a variety of different cultures. Hence, the cognitive change of being aware of cultural specifics, recognizing differences as well as similarities and acting accordingly is another core category of our research: *"[...] there are differences, in other industry it's surely the same thing, but you learn so much and personally you learn as well of course, because you get to know new cultures and always experience something good, sometimes also something bad, but the good things clearly prevail [...]"*.. The general awareness of cultural differences forms the basis for other cognitive changes, such as recognizing the importance of personal presence, developing a stronger national sense of belonging in combination with loss of authenticity and recognizing the importance of local languages. While cultural awareness is supposed to ultimately lead to loss of authenticity in the sense of assimilation or strong adaptation where national specifics are forgotten as it is true for one manager: *"[...] it always had to be learned that different cultures work in a different way and that you have to adjust.*

You have to think about to what degree you should adjust, to what degree you shouldn't adjust [...]". It also has the ability to strengthen the national sense of belonging, as one of the interviewed top managers stated: "[...] yes and finally I believe that we have a very good, it is fun to see here in Germany that we have a culture that is assiduously, which is still influenced by Prussianhood, where reliability and meeting still plays an important role, which you will find a little bit less in the Asians, except of the Chinese which are used to having a sit-in. Last but not least, I like Germany and I also want to, I do the whole thing (internationalization) solely to strengthen the position of Germany [...]". Furthermore, it enables international managers to identify different work attitudes and strategically integrate national cultural considerations into the corporate culture. Overall, this often leads to cultural learning, which means learning from each others' behavior and attitudes. Only a minority of managers stated that culture is a negligible factor in international business: "[...] that's true, well I do think anyways that many behavioral mechanisms are universal and cultural differences, as they are highlighted so often, eventually don't play the decisive role for success or failure [...] I believe that the Knigge [...] could be a purely technical help, but does not play a decisive role. I think that if you have the ability to carefully listen and to look closely, well just to be open, friendly and able to defend your point of view rigorously. In my experience this is true all over the world in the same ways and is highly appreciated [...] sensibility, how I treat my business partner, how do I succeed within a short amount of time to establish a common basis for a conversation, to find a right level. I believe this is what you learn, you won't learn it, if you're not cut out for it in the first place, then you'll hit so many walls that in the end you will lose your fun [...] but if you're just open then you'll quickly develop and that I perceive as extremely positive [...]".

How international business “is done”. Our research findings indicate that in the context of international business, change in perception of trust, development and use of gut feeling, cultural awareness and their further core categories are major changes in recognizing the importance of understanding how international business is done. In case of cultural awareness one respondent stated: “[...] everywhere it is essential to understand the culture how business works, because in Italy business is made in a different way than in Germany or Austria [...]”. Eventually, these core categories lead to a change in work approach in terms of recognizing the importance of planning and retrospective analysis as well as learning to deal with the increasing complexity caused by internationalization. “[...] to eventually enlarge existing internationalization is no issue for us, but rather to again reduce complexity, because we now

have 70 production and distribution locations, which is a lot for a company of our size. Actually, we have to think about if we again want to found a new subsidiary and is that really necessary, and can't we merge some subsidiaries, or implement a regional shared service center or a regional holding [...]". Generally, recognizing the importance of understanding how international business is done in different contexts leads to a learning experience indicating an overall change in managerial cognition, which in turn affects managerial decision-making behavior. "*[...] we have tried that in small small and really stumbled from step to step [...] and obtained one rejection after another until we finally understood that we can only make it if we really get in on the highest hierarchical level and then the whole thing worked [...] socializing, we have worked together with the minister of economic affairs of one country and therefore gained a significance that we could've never achieved through work and there you act in a different way [...] as a foreign investor you're then perceived in a totally different way [...] there is little sense in taking a bottom-up approach in those countries, but my philosophy is now to work as quickly as possible from top-down [...] and you can't get in high enough and from start to pave the way through a contact in the highest hierarchical level [...]*".

Discussion and Conclusion

The aim of this research has been to address the research gap between managerial cognition, cognitive change and the internationalization of SMEs. In particular, we intended to address three questions in detail. First, we wanted to explore if there is a cognitive change when managers switch from a national to an international work environment. Our findings in the field of international management confirm that there are some significant changes in managerial cognition that come along with the internationalization of managers' work environment. This result was also confirmed by various other studies (Fernandez-Ortiz & Lombardo, 2009; Child & Czegledy, 1996; Anderson & Skinner, 1999) addressing managerial learning in connection with engaging in international business.

Second, our study aimed to identify which cognitive changes take place when managers' work focus shifts from a national to an international work environment. Our theory of cognitive change is described along ten categories. Our research indicates that managers change through acknowledging the importance to understand how international business is conducted in different contexts. Differences in the perception of trust, increasing the reliance

on gut feeling and the rising importance of cultural awareness are core categories in this relation. As illustrated in figure 2, we additionally discovered a cognitive change in how managers approach their work in terms of recognizing the importance of planning and retrospective analysis as well as recognizing ways to cope with increased job complexity that was caused by internationalization.

Moreover, the general structure we imposed on these results refers to a link between the indicated cognitive changes, business experience, managerial learning and decision-making behavior. Various studies seem to confirm this relationship. For example, the results for recognizing the importance of gut feeling correlates with various studies (Paprika, 2006; Sadler-Smith & Shefy, 2004; Hayashi, 2001; Khatri & NG, 1996;). By applying gut feeling, managers base their decision-making on past experiences stored in their subconscious. This includes lessons learned over time in the field of international business (Sadler-Smith & Shefy, 2004; Hayashi, 2001; Khatri & NG, 1996). In addition, Rogers and Blonski (2010) argue that cultural awareness, strengthening national sense of belonging in connection with loss of authenticity, as well as recognizing the importance of local language, constitute important factors in developing a global leadership mindset. Consequently, we conclude that our identified cognitive changes drive managerial cognition; ultimately they result in a global mindset, a concept that additionally has been discussed by various authors (Cohen, 2010; Bowen & Inkpen, 2009; Javidan, Steers, & Hitt, 2007).

Third, we wanted to identify if there is a general pattern of cognitive changes caused by internationalization of SMEs from a managerial perspective. We came to the conclusion that while parts of our model constitute a general pattern for cognitive change in an international environment, others did not. In particular, recognizing the importance of understanding how international business is done depicts an international learning experience resulting in an overall cognitive change of managers and in turn affecting their decision-making behavior. Concerning other core categories of cognitive change, we perceive the findings as too specific. We also discovered that there are noticeable differences in managerial cognition between managers working in an international environment in contrast to those engaging only in a single national one.

Limitations and Outlook

Overall, this study aimed at contributing to cognitive or psychological strategic management (Wrona, 2009; Hodgkinson & Sparrow 2002; Porac & Thomas, 2002) research in the field of cognitive change. In addition, we add to existing literature on cognitive change by connecting this concept to the field of managerial cognition caused by the internationalization process of SMEs. Ultimately, it aims at serving as a basis for further research in this particular field and as an inspiration to other scientific researchers by providing propositions for future research. We suggest that further studies investigate the issue of cognitive change through internationalization from a managerial perspective. For this purpose we summarized our most important findings in the form of research propositions. An overview of these propositions is arranged by core categories and is depicted in table 2 in the appendix to this study.

Naturally, our research has some limitations. First, there are those that are rooted in the general criticisms of the grounded theory approach. The two criticisms that seem most prevalent in the context of our research are the fit of grounded theory with only select research questions, and the role of the researcher. Concerning the fit of grounded theory method with only select research questions, especially Brown (1973) argues that the grounded theory is only applicable in a limited number of circumstances. He argues that this approach rather fits short-term processes, with sequential behavior that is directly observed and reported as such a behavior is repetitive (Brown, 1973). It can be concluded that grounded theory is dependent on observational or interview data (Seale, 1999). However, according to Seale (1999) there is logical explanation why other types of data are not supposed to be included. Ultimately, limitations of grounded theory also stem from the person of the researcher (Böhm, 2003, p. 484). It is argued that the specifics of grounded theory ask for a high degree of creativity and analytics (Böhm, 2003). Therefore, the quality of the theory that slowly evolves by processing the collected data is heavily depended upon the skills of the researcher (Böhm, 2003). Moreover, there are no fixed rules about the transition between the various phases, which allows for significant derivations in the process of analysis (Böhm, 2003). Nevertheless, Glaser and Strauss (1999) conclude that in order to generate a useful grounded theory, the analyst does not have to be a genius. All it takes is some training on the principles of grounded theory (Glaser & Strauss, 1999). Second, our research is limited in terms of our developed findings. Concerning the structure of the results, our main objective was to provide a structured and logical overview of issues that are subject to cognitive change in internationalization. Of course, the identified core categories influence each other much more than described by our model. One example is cultural awareness. Cultures differ significantly

across countries, sometimes even across regions within countries which shows impacts on both managerial practice and management research beyond what is commonly acknowledged. Furthermore, although personal presence is considered highly important for cultural experiences it constitutes a basic change in work approach and is also necessary for a change in the concept of trust or decision-making in terms of gut feeling. Consequently, we could have arranged core categories also in different ways to illustrate their hierarchy and influence. Our categorizations in themselves are deeply subjective.

We expect that our research is of value to practicing managers. First, especially junior managers who get their first glimpse of working internationally will profit from the findings of this paper. Second, this paper will additionally be important for expatriates and expatriate managers as it outlines the consequences of an international work environment in contrast to a purely domestic one. Third, our study will help all managers whose job becomes more and more internationalized, and in general to people working for an internationally operating SME to understand how they are cognitively affected by their environment. As a result, managers are able to adequately prepare for the changes ahead before they cross the boundaries towards internationalization and profit from not repeating the mistakes of their international colleagues.

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Table 1: Key Literature on Managerial Cognition (in alphabetical order)

Author / Year	Field of Research	Methodology	Key Research Findings
Budhwar and Sparrow (2002)	Cross-cultural HRM and managerial and organizational cognition	Quantitative Research	This study identifies similarities and differences in managers' thinking at the cross-national level and reveals the influence of a range of national differences on HRM policies. The study indicates that the VCS technique proves to be a useful methodology for studying managerial thinking about HRM in across-national context from a cognitive perspective.
Chattopadhyay et al. (2006)	Cognitive underpinnings of institutional persistence and change	Qualitative Research	When important factors in managers' environment shifts, the initial responses of decision makers is be isomorphic or nonisomorphic. Moreover, this study outlines how institutional persistence and change depends on whether decision makers view environmental events as potential opportunities or threats.
Elsbach, Barr, and Hargadon (2005)	Situated cognition	Qualitative Research	Evidence for common patterns of interaction between schemas and context throughout the process of sensemaking is presented. Accordingly, a new framework for the interaction of context and cognition is presented.
Fahey and Narayana (1989)	Link between changes in causal maps and environmental changes	Quantitative Research	The fit between cognitive structures and the environment is inadequate. Therefore, decision makers both under-identify and over-identify certain environmental factors
Hodgkinson (1997)	Cognitive inertia in the case of UK residential estate agents	Quantitative Research	The results of this study suggest that the respondents' individual and collective cognitions remain highly stable despite a significant downturn in the property market during a particular time span.
Isabella (1990)	Investigation of how managers construe organizational events as change unfolds	Qualitative Research	The model outlines how interpretations evolve as an organizational change unfolds. In particular, it describes the interpretative tasks, predominant frames of reference and construed realities associated with each of four interpretative stages.
Labianca, Gray, and Brass (2000)	Organizational schema change during empowerment	Qualitative Research	The model identifies four phases of schema change and highlights the importance of a period of testing and comparing action in relation to old and new schemas. Moreover, three models have been proposed that explain the process through which individuals' schemas change.
Lüscher and Lewis (2008)	Organizational change and managerial sensemaking	Qualitative Research	This study points to the managerial challenges of organizational change and provides support by suggesting external facilitators, and collaboration in order to support the sensemaking process. Moreover, it stresses the importance of a paradox lens in investigating managerial sensemaking.
McNamara and Bromiley (1997)	Cognitive and organizational influences on decision-making	Quantitative Research	The results suggest that both organizational and cognitive factors influence risky decision-making. However, when both of these factors were present, organizational factors appeared to overwhelm cognitive bias.
Mitchell et al. (2000)	Cross-cultural cognition	Quantitative Research	Cognitive arrangements, willingness, and ability scripts were found to be associated with the venture creation decision. Furthermore, preliminary evidence of consistency in cognitive scripts across cultures is provided.
Reihlen and Apel (2007)	Internationalization process research by employing constructivist learning theory	Qualitative Research	The concept of learning during the internationalization process of professional service firms is explained as a process of social interaction with the socio-cultural environment. Moreover, the paper outlines specific individual and social mechanisms through which firms acquire new knowledge when moving across borders.
Schwenk (1989)	Strategic decision-making and strategic change	Qualitative Research	Cognitive, organizational and political perspectives is be combined in a certain way to enable individuals to deal with the full complexity of strategic decisions and the strategic change process.
Sengupta, Abdel-Hamid, Van Wassenhove (2008)	Interruption of learning cycles from a cognitive perspective in project management	Qualitative Research (Simulation)	The findings interfere that experienced managers at some point stop learning from their experience and rather apply generalized cognitive models to difficult situations that do not trigger the best outcomes. Consequently, managers do not materially improve the quality of their mental models to take into account the realities of complex projects.
Swan (1997)	Cognitive mapping as a management research tool	Qualitative Research	The findings of this study indicate that cognitive mapping may provide a useful addition to existing management research tools under the assumption that researchers are clear about what is revealed by the particular methodology used.
Thomas, Clark, and Gioia (1993)	Strategic sensemaking	Quantitative Research	The results of this study indicate that not only is there a relationship between cognition and action, but that the strategic sensemaking processes of scanning, interpretation and action are linked to organizational performance.

Walsh (1995)	Knowledge structures	Qualitative Review	The early accumulation of research appears fragmented. Therefore, it is difficult for anyone to find out what is already known or unknown about a topic as research in the area of managerial cognition has not been productively synthesized. Moreover, ten areas of needed research concerning knowledge structure representation were identified.
Walsh and Charlambrides (2007)	Belief structure change	Quantitative Research	The results of this study indicate that individuals with a high public self-consciousness are likely to change their belief structures when exposed to individuals with differing belief structures.
Walsh and Fahey (1986)	Negotiated belief structure in strategy management	Qualitative Review	Negotiated belief structures are assumed to underscore strategic decisions, enacted beliefs or assumptions that reflect the politics of decision-making.
Weber and Manning (2001)	Causal maps, sensemaking, and organizational change	Qualitative Research	Cause mapping presents a good source of information, demonstrates high degree of content validity, and is a particularly useful technique for capturing the dynamics of sensemaking. Furthermore, this study indicates significant differences in cause map content over time without corresponding differences in cause map structure.
Wrona (2009)	Cognitive strategy research	Qualitative Review	Recently various cognitive perspectives on management research developed. However, areas for improvement are still provided by the issues of group cognition, and the role of context.

Figure 1: Paradigm, Source: Strauss and Corbin (1998, p. 128)

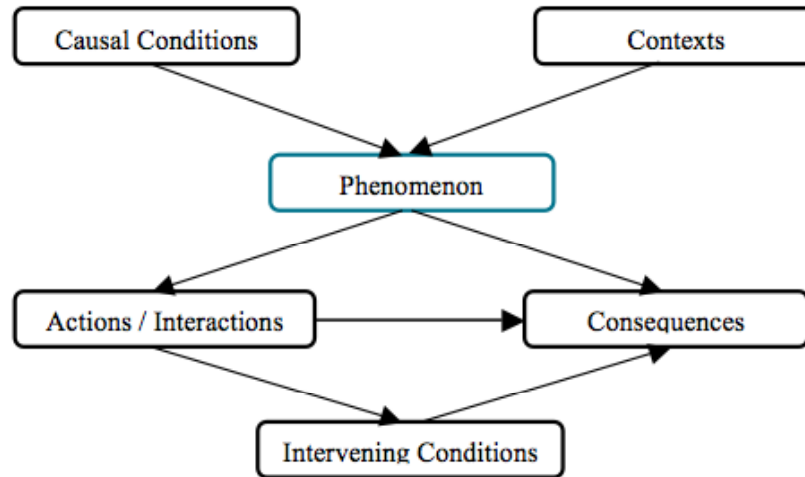


Figure 2: Overview of Research Results

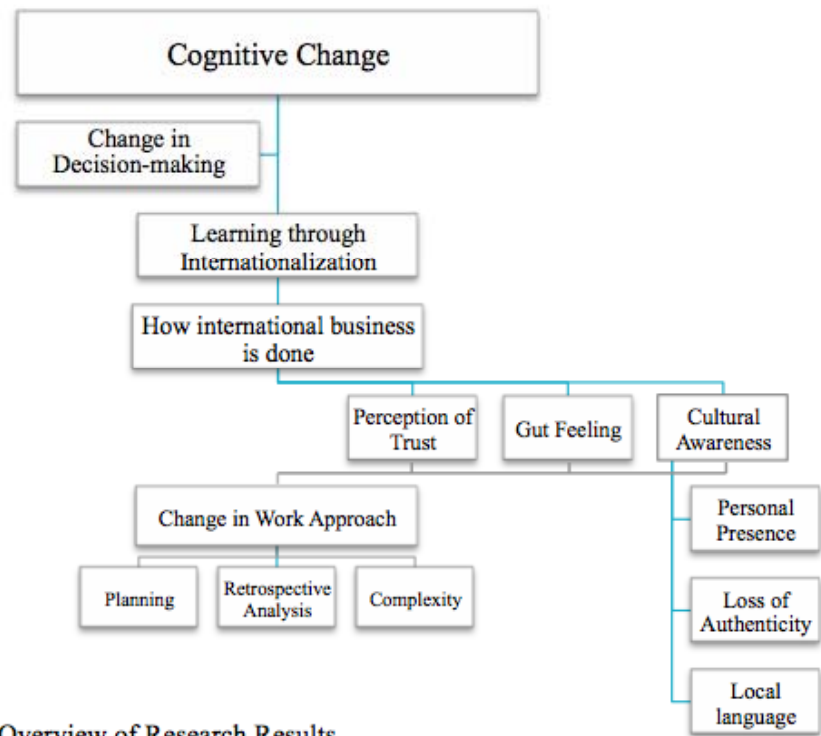


Figure 2: Overview of Research Results

Table 2: Research Propositions

Central Category: Cognitive Change	
1.	The understanding of how international business is done differently in various countries is an experience process that triggers international learning that results in cognitive change affecting decision-making.
2.	Change in perception of trust, change in decision-making approach by reliance on gut feeling, and change in their cultural awareness impacts on the recognition of how international business is done.
3.	In a similar way, change in perception of trust, change in decision-making approach by reliance on gut feeling, and change in their cultural awareness initiates a change in work approach, especially in planning, retrospective analysis, and dealing with complexity.

Perception of Trust	
1.	When managers' work environment becomes internationalized they develop a different perception of trust in order to handle their work load than if they were working in a purely national environment.
2.	Weariness and critical thinking increases when managers work in an international compared to a national environment and influences their choice of whom to trust.
3.	Increasing trust is a way of learning from others and bridging knowledge and/or experience gaps, but also a way of losing control.

Gut Feeling	
1.	When managers' work environment becomes internationalized they develop more trust in their gut feeling for decision-making than if they were working in a purely national environment.
2.	A pro-active attitude towards internationalization leads to an increasing trust in managers' gut feeling for decision-making.
3.	When managers view internationalization as a job necessity they rather rely only on purely rational indicators for decision-making.
4.	Decisions that are based on gut feeling are determined unconsciously in a rational way and therefore do not contradict rationality.
5.	In case of planning there is a cognitive change towards basing plans on purely rational indicators and less on gut feeling when managers work more internationally than nationally.

Cultural Awareness	
1.	Cultural awareness is a major cognitive change when working in an international environment in comparison to a purely national one.
2.	Cultural awareness is the basis for other concepts, such as personal presence, loss of authenticity, national sense of belonging and local language.
3.	According to how managers view internationalization, as an opportunity or a necessity to stay in business, managers appreciate or reject cultural differences.
4.	The way how managers view internationalization, as an opportunity or a necessity to stay in business, determines if culture leads to loss of authenticity or reinforcement of the national sense of belonging for international managers.
5.	Culture has a learning effect on managers.

Personal Presence	
1.	Recognition of the importance of personal presence is a major cognitive change managers' experience when switching from a national work environment to an international one.
2.	Personal presence is an important factor for learning as it involves first-hand experience.
3.	Literature and technical advances are no substitutes for personal presence in terms of experience.
4.	Lack of personal presence can lead to serious business mistakes and failures, as managers consequently miss first-hand experience.
5.	Managers have troubles in tracing business mistakes and failures to their lack of personal presence.
6.	Experience is an accumulating factor which indicates that the more experience exists the more experience can be gained in future.

National Sense of Belonging versus Loss of Authenticity	
1.	Most managers develop a stronger national sense of belonging when working internationally than they had in comparison to working in solely in their national environment.
2.	A stronger national sense of belonging is triggered by stress deriving from international complexity.
3.	Some managers experience a loss of authenticity when working internationally than they had in comparison to working in solely in their national environment.
4.	A stronger national sense of belonging is due to the perceived alienation from the original culture of managers.
5.	A strong national sense of belonging does not contradict cultural openness and pro-active international behavior. Although in many cases as strong national sense of belonging along with stress deriving from international complexity leads to the formation of prejudices and a rejecting behavior against other cultures.

Local Language	
1.	Recognizing the importance of local language for international business is a major cognitive change managers' experience when switching from a national to an international work environment.
2.	Recognizing the need for knowing the local language is crucial for business success.
3.	Knowing the local language of a foreign market is unimportant in comparison with other factors, such as personality and commitment.

Understanding how international business is done	
1.	The recognition of the importance of understanding how international business is done is a cognitive change that managers undergo when switching from a national to an international work environment.
2.	How international business is done differently in various countries is strongly influenced by culture and history.
3.	When it is well understood how international business is conducted in various countries, it is useful to adapt corporate philosophy in accordance to this knowledge.
4.	Change in perception of trust, development and use of gut feeling, cultural awareness and their sub-categories are important activities in understanding how international business is done.
5.	Business problems are an important motivator for recognizing the importance of understanding how international business is done.
6.	The cognitive change recognizing the importance of understanding how international business is done and the subsequent learning experience of understanding how international business is done leads to a change in managerial decision-making behavior.

Planning	
1.	The recognition of the importance of planning is a core cognitive change, which takes place when managers' work environment becomes internationalized.
2.	Planning is a crucial activity for managing successful international business.
3.	Planning contradicts flexibility and risky behavior.

Retrospective Analysis	
1.	The recognition of the importance of retrospective analysis is a core cognitive change, which takes place when managers' work environment becomes internationalized.
2.	Retrospective analysis supports learning from past mistakes.
3.	The recognition of the importance of retrospective analysis and its implementation in business routine has a positive effect on decision-making.

Complexity	
1.	When managers' work environment becomes internationalized they develop other strategies in order to deal with work complexity than if they were working in a purely national environment.
2.	International complexity can be dealt with by either reducing complexity, correspondingly increase work complexity, or by controlling complexity.
3.	Reduction of international complexity in terms of re-focusing on the company's core-business hinders innovation.
4.	In response to work-related stress managers become more flexible.