Market Orientation and Entrepreneurial Orientation in a Learning Organization

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Abstract

In this globe of brutal competition, market orientation and entrepreneurial orientation as two types of market-based learning constitute positional advantage to an organization, because this corporate cultural competitiveness is unique, rare, valuable, and inimitable. This dissertation focuses on the change management of market orientation and entrepreneurial orientation in a business unit with approximately 150 employees of a multinational company. It is structured in an evolving way with an overarching theoretical foundation from organizational culture and learning in organization connecting three studies. The first study investigates "what" are the factors (market orientation and entrepreneurial orientation) and how they lead to subjective business performance. The finding of the study reveals that in this business unit, market-oriented and entrepreneurial-oriented values significantly contribute to their respective behaviors. However, only the behavioral construct of interfunctional coordination from market orientation and behavioral construct of innovativeness from entrepreneurial orientation predict the significant impacts on the subjective business performance. Nevertheless, when taking all behavioral dimensions into account at the same time, subjective business performance is perceived to a very high degree. The second study presents "how" market orientation and entrepreneurial orientation can be changed at individual, group and organizational levels through implementing change interventions in the business unit. Quantitative results by comparing pre- and posttests exhibit no significant changes in organization-wide perception of market orientation and entrepreneurial orientation. However, significant differences have been observed among some groups in both tests. The final study aims to investigate change readiness of the business unit comprising of cognitive and affective components through interviews. Qualitative results from a multilevel approach show that the change readiness at individual level is higher than group level's, and group level's is higher than organizational level's. It gives evidence that change initiatives start to bring out behavioral results and actions as well. Therefore, this dissertation offers comprehensive understanding on how an organization conceives, implements and initiates further activities over a period of time.

In diesem Umfeld mit einem unerbittlichen Wettbewerb und starker Markt- und Unternehmensorientierung erzeugen zwei Arten von Markt-basiertem Lernen einen Wettbewerbsvorteil für eine Organisation, diese gemeinsame kulturelle da Konkurrenzfähigkeit einzigartig, selten, wertvoll und unnachahmlich ist. Diese Dissertation fokussiert sich auf das Veränderungsmanagement für Markt- und Unternehmensorientierung in einem Geschäftsbereich mit ungefähr 150 Mitarbeitern einer multinationalen Firma. Es ist basierend auf einer überspannenden theoretischen Grundlage einer Organisationskultur und dem Lernprozess in einer Organisation welche drei Studien miteinander verbindet. Die erste Studie untersucht welche Faktoren (der Markt- und Unternehmensorientierung) und wie diese zu einer subjektiven Geschäftsleistung führen. Aus den Ergebnissen ist zu erkennen, dass die Markt- und Unternehmensorientierung stark zum erwarteten Verhalten beiträgt. Allerdings kann man nur von der Verhaltensweise der inter-funktionellen Koordination von Marktorientierung und der Innovativität von Unternehmensorientierung sagen, dass sie die subjektive Geschäftsleistung signifikant beeinflussen können. Dennoch, wenn alle Verhaltensweisen zur gleichen Zeit betrachtet werden, ist es möglich eine subjektive Geschäftsleistung auf hohem Niveau zu erhalten. Die zweite Studie zeigt wie die Markt- und Unternehmensorientierung auf Personen-, Gruppen- und Organisationsebene verändert werden kann durch die Einführung von Veränderungen in den Geschäftsbereichen. Quantitative Ergebnisse, die durch den Vergleich von vorab- und abschließenden Befragungen erzielt wurden, belegen keine signifikanten Änderungen in der organisationsweiten Wahrnehmung der Markt- und Unternehmensorientierung nach Umstrukturierungen. Dennoch wurden signifikante Unterschiede in einigen Gruppen beobachtet. Die letzte Studie zielt auf die Untersuchung der Veränderungsbereitschaft, welche kognitive und emotionale Komponenten beinhaltet. mittels Interviews. **Oualitative** Ergebnisse, aus einemmehrschichtigen Ansatz, zeigen, dass die Veränderungsbereitschaft bei einzelnen Personen höher ist als auf Gruppen- oder Organisationsebene. Außerdem beginnen Veränderungsinitiativen Verhaltensweisen Organisation und -Aktionen in der hervorzubringen. Daher liefert es umfassende Einblicke in die Dynamik von organisatorischen Veränderungen.

"Live as if you were to die tomorrow. Learn as if you were to live forever." — Mahatma Gandhi

Introduction: Market Orientation and Entrepreneurial Orientation in a Learning Organization

1 Research Background

Why are organizations surprised to find out that their products are not what their customers want, while their competitors are able to aggressively penetrate the market overnight? Why is there no momentum in organizations in exploring new business opportunities? Why is the market leadership threatened and business stagnating? These are some of the questions that are frequently raised by those managers particularly in high technology industries characterized by market uncertainty and volatility.

Resource-based theory explains that only firms with valuable, rare, inimitable, and semi-permanent assets which differentiate from their competitors possess potential sustainable competitive advantage (Barney, 1991; Wernerfelt, 1984). A considerable amount of research (e.g., Barney, 1991; Day, 1994; Hult & Ketchen, 2001; Hult, Ketchen, & Nichols, 2002) suggests that, positional advantage emerging from the confluence of innovativeness, entrepreneurship, market orientation and organizational learning, gives rise to an organization's "cultural competitiveness". Cultural competitiveness comprising shared values, beliefs, norms and practices of all members in the organization is the degree to which an organization is predisposed to detect and fill gaps between what the market desires and what is currently offered (Hult, Ketchen, & Nichols). It is difficult to replicate within short term, and it is found to have positive effects on multinational corporations' performance, for example, five-year average change in ROI, income and stock price (Hult & Ketchen, 2001). Given that innovativeness is considered as one of the dimensions of entrepreneurship (e.g., Miller, 1983; Covin & Slevin, 1986) alongside risk-taking and proactiveness.

Organizational learning is not taken as a separate factor of cultural competiveness either, because it is actually a common bond between market orientation and entrepreneurial

orientation. Organizational learning is defined as the process of acquiring, distributing, integrating, and creating information and knowledge among organizational members (Dixon, 1992; Huber, 1991). Continuously learning about the market and the organization itself contribute to organization's survival because it induces an organization to obtain knowledge from the market, share it across functions and utilize accordingly. Entrepreneurial orientation and market orientation are two separate but complementary market-based strategic orientations (Miles & Arnold, 1991). Both "emphasize the philosophy and behaviors in proactively detecting industrial environment, including market information and competitors strategy, in order to innovate and respond to the customers' needs timely" (Huang & Wang, 2011, p. 564). While entrepreneurial orientation focuses on proactively acquiring opportunities and creating innovation, market orientation refers more to the capability in collecting and acquiring market information (including customers' and competitors'), disseminating within the organization and responding to the market (Kohli & Jaworski, 1990). It can be seen that both entrepreneurial orientation and market orientation are market-based learning. Thus, organizational learning is a fundamental aspect of these two orientations: on the one hand, it facilitates learning about the market, customers and competitors to become a market-driven organization (market orientation); on the other hand, it encourages learning on the new market and exploring new opportunities to be a market-driving organization (entrepreneurial orientation).

Taking the above altogether, this dissertation aims to cast light on the organizational change on market orientation and entrepreneurial orientation, based on three studies conducted in one division of a multinational company.

2 Research Gaps and Structure of Dissertation

The first study identifies "what" contribute to the employees ´ positive perceptions of business performance, referring to market orientation and entrepreneurial orientation. Although many studies take these two orientations from a cultural perspective, most of them only measure the behavioral aspects ignoring one of the most important parts of culture called "value". In light of this, a model is offered to describe how market-oriented and entrepreneurial-oriented values influence their respective behaviors, and finally to which degree these behaviors affect the perceived business performance. Therefore, the result from

structural equation modeling provides the guidance for what specific change should be planned for this business unit and paves the way for the second study.

The second study addresses "how" to change market orientation and entrepreneurial orientation. Due to dynamic and drastic shifts in the external environment, as well as grounded on the results from the first study, creating cultural competitiveness (market orientation and entrepreneurial orientation) is vital especially to a sales and marketing organization. However, despite the great interest in market orientation and entrepreneurial orientations become more culturally competitive in creating these two orientations simultaneously is surprisingly limited. Hence, the primary goal of the second study is to present change interventions implemented at the individual level, group level and organizational level, based on change management theories. The other goal of this study is to examine if the interventions on change management serve to improve the perceived organizational values, behaviors and subjective performance, by conducting paired samples t-test between pre- and posttest.

Examining a cultural change by quantitative analysis is limited because it is rather difficult to detect what exactly change recipients believe and think, therefore, the third study adopts a qualitative methodology to investigate the organizational change readiness. As Mezirow (1991) stated, transformative learning involves "an enhanced level of awareness of the context of one's beliefs and feelings [and] . . . involves profound changes in self, changes in cognitive, emotional, somatic, and unconscious dimensions" (p. 161, 177). However, change readiness has not been paid great attention to the affective responses from the existing research. The other gap identified recently is to check readiness at individual, group and organizational levels. In light of these two gaps, the purpose of the third study is to examine readiness from both cognitive and affective sides at multi levels.

3 Field of the Dissertation

This longitudinal action research was conducted in a business unit of a multinational company that decided to start change initiatives to adopt its go-to-market approach. The headquarters is located in Germany. Due to the confidentiality, the firm's name and products are not disclosed in the dissertation. To clarify the hierarchy of the business unit in the

company/firm, the order from highest level to the lowest related to this research is: Corporate (the highest level of this company/firm) -> Division (4 divisions in this corporate) -> Business Unit (incl. central marketing, sales and marketing embedded in three business lines). Figure 1 shows details of the structure of the business unit in this corporate. The target of the research locates in the business unit with approximately 150 employees in the gray area in Figure 1. Since the dissertation takes a multilevel approach, this business unit is treated as an organization in the dissertation. In other words, when it comes to the organizational level from the multilevel perspective, it actually refers to the business unit level in this research.

The reason for the change initiatives was that both threats and opportunities in the market were recognized by some managers of the business unit (hereafter equate as an organization). Threats took on many forms, to name a few, aggressive competition, drastic changes in customers' requirements and landscape, etc. On the other hand, opportunities had also been sensed in the areas of new channels, new customers and new markets, but they were not widely recognized by the organization. Internal reasons for this change were that the business unit's market share at that time stagnated, members were overloaded with work and were perceived to have no capacity or momentum to change. In this context, this go-to-market approach mainly aimed to achieve business success by broadening customer base. It addresses the shift of the organizational mindsets and behaviors as well as the enhancement of competencies and skills, in understanding customers, expanding sales channels, differentiating from competitors, value positioning, optimizing internal cooperation, etc. Considering it is not realistic to encompass every aspect in the research, also based on extensive literature review, the author narrowed the focus mainly on the market orientation and entrepreneurial orientation in this work. In other words, the author engages herself mainly in the organizational culture element of this go-to-market approach in the research, rather than on operational or strategic aspects.

Market Orientation and Entrepreneurial Orientation in a Learning Organization

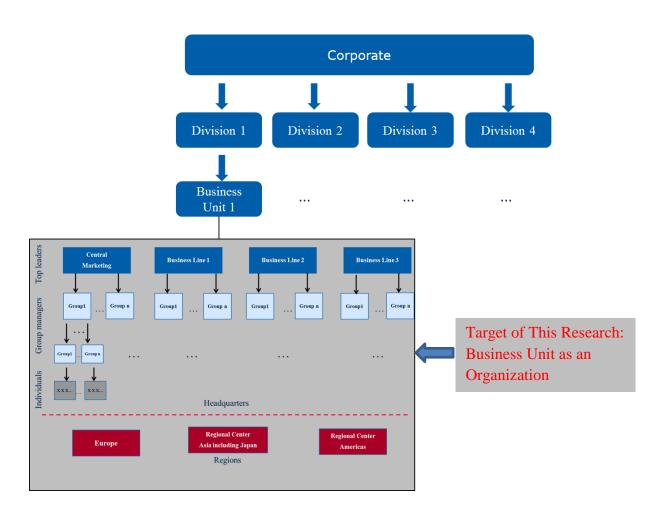


Figure1. An Illustration of the Structure for the Business Unit including Sales and Marketing Functions

4 Research Design and Process

This research lasted for three years. As Figure 2 presented, at the first stage of this research, challenges of this organization were defined by the director of marketing in the business unit, who was the authors' supervisor of this research in the field, and the initiator of go-to-market approach in Program 1 (the real name is omitted here). Based on conversations with managers in the organization and extensive literature review, the research's theme and content was chosen on market orientation and entrepreneurial orientation. Four tracks were established in this Program 1, addressing topics regarding competencies, resources management, culture and process. The author co-developed and implemented some of the interventions under culture and competencies tracks. Questionnaire was developed by the author and reviewed by managers at this stage.

This questionnaire was then delivered through an external online platform to the employees of the business unit in April 2012 as a pretest, aiming to investigate the current state. In addition, it served to examine the effects of interventions by being compared with posttest after interventions. After analyzing the data from the pretest, the research model in the first study was examined. Some critical issues had been identified as priorities for this organization, which led to the next stage for interventions development and implementation.

During the third stage from May 2012 to October 2013, interventions had been developed together with four tracks' managers and external consultants, and then implemented in Germany, Singapore and the USA for all the employees in the business unit. Details of interventions will be introduced in the second study.

Starting from October 2013, the top leaders of this business unit decided to take a more transformational change with intensified commitment from top leaders in Program 2 (the real name is omitted here) for this go-to-market approach, thus Program 1 was integrated into Program 2. An external consulting team was helping this organization in a more systemic way. Activities were ongoing by the time of this writing.



Figure 2. Research Design and Process

At the fifth stage shown in the Figure 1, a posttest in the same form and content as the pretest was rolled out in December 2013 to examine the effects of interventions on the sales and marketing culture and subjective performance. Finally, from January to February 2014, individual interviews with 21 employees were conducted to investigate the organization's change readiness.

5 Groundwork Theories

In this section, an overview of the literature on organizational culture and selected learning theories is provided. The purpose of this overview is to provide theoretical background for the later studies.

5.1 Organizational Culture

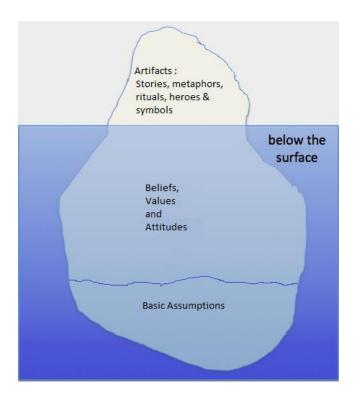


Figure 3. Schein's Three Layers Model of Organizational Culture (2009)

A number of definitions of organizational culture exist in the literature. Schein, as the father of organizational culture, defined culture as "a pattern of shared tacit assumptions that was learned by a group as it solved its problems of external adaption 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, 2009, p. 27). These assumptions are categorized into three layers (see Figure 2). The deeper the layer is, the more difficult to be articulated and changed.

According to Schein, the most visible layer in a culture is the artifacts akin to iceberg which is located on the top of the figure. Any tangible, overt or verbally identifiable elements in an organization are in this layer. Artifacts, for example, stories, facilities, slogans, structure and process, can be easily recognized even by people who are not part of the organization. The second layer is espoused beliefs and values, or rules of behavior of an organization. It is how the members represent and characterize the organization both to themselves and to others. This is often expressed in official philosophies and public statements of identity. Sometimes it can also be a projection of the desirable, and of what the members hope to become. The last layer, which is most difficult to be recognized, is basic underlying assumptions. Shared basic assumptions are deeply embedded and typically very well integrated in organizations. Taken-for-granted thoughts and feelings are usually unconscious, but they are the ultimate source of values and actions, thus constituting the essence of culture.

Culture has a wide variety of traits and elements. Behaviors, practices and actions as the external layer of the culture have been as well focused. Schermerhorn, Hunt and Osborn (2005, p. 436) defined the organizational culture as "the system of shared actions, values, and beliefs that develops within an organization and guides the behavior of its members". It takes a long time to form, given its inherently "socially complex" and "causally ambiguous" nature, and it is usually difficult to be imitated especially in the short run. In this sense, it is considered to be the unique assets and competitive advantage (Barney, 1986; Hall, 1993; Peteraf, 1993; Wernerfelt, 1984). On the one hand, organizational culture has been found to have impacts on organizational process, outcomes and effectiveness numerous studies (e.g., Carmeli & Tishler, 2004; Hofstede, Neuijen, Ohayr, & Sanders, 1990; Powell & Dent-Micallef, 1997). On the other hand, it can also hinder the organization's achievement of its goals when it does not fit the environment (Denison, 1990). In this respect, organizational culture change becomes imperative.

5.2 Selected Learning Theories

5.2.1 Learning Organization

Learning organization refers to an organization with characteristics that support its members' continuous learning. It is a culture in an organization that supports its members' expanding capacity, fosters new patterns of thinking, and encourages them to continually learn to perceive the system they are in (Senge, Kleiner, Roberts, Ross, & Smith, 2007). The core characteristic of a learning organization according to them is that it can sense signals of change in its environment, take them in, adapt to them and change its actions accordingly. A learning organization exhibits five main characteristics: personal mastery, mental models, a shared vision, team learning, and systems thinking (Senge, 1990).

Personal Mastery describes an individual's commitment to continuous-lifelonglearning endeavors. It is a self-directed developmental process towards one's personal vision. When most of the members, if not all, learn faster than those from the competitors, competitive advantage tends to form (Wang & Ahmed, 2003). Therefore, it is important to develop a culture where personal mastery and learning is encouraged as intrinsic motivation, opposed to incentives or punishments.

Mental Models, often termed also as "mindset", are "the images, assumptions, and stories which we carry in our minds of ourselves, other people, institutions, and every aspect of the world. Like a pane of glass framing and subtly distorting our vision, mental models determine what we see" (Senge et al., 2007, p. 235). They are the assumptions held by individuals and organizations. According to the aforementioned concept of organizational culture, the shared mental models in an organization are part of culture, especially with regards to the inner layer. Successes and failures of the past contributed to the formation of mental models about how the marketplace works. These mental models then guide people's perception and help them to interpret the world. However, when time passes, these models may become obsolete but may still operate in an organization, because they are implicit and so ingrained that they are taken for granted without even being noticed. Hence, mental models may limit the possibilities in taking certain options because those options cannot be perceived by the individuals. Furthermore, even if the options are perceived, they might be declined because their realization would contradict the existing value and belief system inherent in an individual's mind or organizational culture (Senge et al., 2007). In this respect, in order to fit to the changing environment, an individual or members of an organization need to be openminded to proactively challenge the long-held routines, assumptions, and beliefs (Day, 1994;

Porac & Thomas, 1990; Senge, 1992; Sinkula, 1994). As a result, the organization engages itself in a process called "unlearning" (Nystrom & Starbuck, 1984), where unwanted beliefs and values are discarded. Unlearning or discarding old mental models is at the heart of organizational change, otherwise, hardly any new options can be perceived or realized. During the implementation of the change, awareness needs to be created about organizational basic assumptions and perceptions causing the behaviors, by open conversations with team members' on reflection and articulation. In the second and third studies, this discipline on mental models or mindsets will be elaborated with empirical results.

Shared Vision is a crucial foundation for organizational learning because it provides a direction for organizational members to focus their energy, commitment and purpose to learn (Day 1994). "Without a shared vision, individuals are less likely to know what organizational expectations exist, what outcomes to measure, or what theories in use are in operation" (Sinkula, Baker, & Noordewier, 1997, p. 309). As a result, an organization tends to have multiple "thought worlds" with divergent or conflicting assumptions (Dougherty, 1992). These assumptions may undermine the ability of an organization to develop a focused response to market trends or environmental shocks. Features contributing to a successful vision are: easy to understand and remember, as well as emotionally compelling as a motivation. In order to get buy-in of members and ensure the implementation of the organization's vision, optimal alignment with personal or group' visions has to be made. Development of a vision is thus suggested to involve members from an organization as much as possible. However, divergence is inevitable in an organization, and thus dealing with tensions, dilemmas, contradictions between reality and vision is among the core skills of organizational members (Zeitz, 1998).

Team Learning refers to the collective and accumulation of individual learning. It requires members to engage in open communication, which means not only actively listening to understand others, but also means to deliver own ideas in an explicit and understandable way to others. Learning organizations typically have structures, processes or tools that facilitate team learning with features such as cross boundary, openness and sharing (Argyris, 1999). In this sense, instead of separately fighting for own survivals, members of team think of themselves as part of the whole and contribute to the benefits of it. The focus of fostering a

team learning is to create a better understanding of the whole by contributing one's own opinions, as well as taking into consideration the views of others.

Systems Thinking concerns an understanding of a system by examining the linkages and interactions between the interrelated parts or components (structures) that cooperate in processes (behavior). Learning organizations use this method of thinking when measuring the performance of the organization as a whole and of its various components (Argyris, 1999). Systems thinking emphasizes the greater awareness and attention to the outside industrial environment. Since system is a dynamic and complex whole, interacting as a structured functional unit, ability to see interrelationships rather than linear cause-effect chains is extremely important in change management.

As a learning organization, Senge et al. stated that all the above mentioned five disciplines should be practiced together without missing any of them. Learning to practice these disciplines will result in perceiving the world in a different way along with acting differently. The learning organization is an organizational model proposing to build a culture of adaption to change (Senge, 1990; Watkins & Marsick, 1993, 1996)

5.2.2 Organizational Learning Process Levels: Single-loop Learning vs. Double-loop Learning

While the concept of learning organization refers to a culture with characteristics that promotes members to learn, organizational learning denotes a learning process through which knowledge is acquired, skills are developed, and collective learning occurs. It facilitates behavior change that leads to improved performance (Senge, 1990; Sinkula, 1994). All businesses competing in turbulent environments must pursue the processes of learning, behavior change, and performance improvement (Slater & Narver, 1995). Argyris and Schoen (1978) made distinctions among three types of learning including the triple-loop learning, whereas this dissertation mainly discusses the first two types.

According to Argyris and Schoen (1978), learning involves the detection and correction of errors. As shown in the Figure 4, when something goes wrong in the Consequence, people tend to start looking for alternative Action Strategy and make an operative adjustment to optimize the internal organizational processes, for example, to

improve quality and efficiency. In this learning, Governing Variables including given or chosen goals, values, plans and rules stay untouched and unquestioned. This is single-loop learning, or also termed as "adaptive" learning (Senge, 1990). This single-loop is related to the first order change where only incremental improvements are initiated on the current strategies.

An alternative response is to question and alter its Governing Variables, resulting in performing a new way of viewing and doing things. During this process, mental models including assumptions, beliefs, values and norms are questioned. Moreover, the goal in the light of experience is modified or possibly even rejected. It requires "unlearning" of some established practices and fundamental assumptions. This is defined as double-loop learning, or as Senge (1990) called "generative" learning, related to the second order or transformational change. Transformational change occurs when entities (individuals, groups or organization) question the values, assumptions and policies that lead to the actions in the first place. It is a response to external environment and directly affects the organizational mission, strategy, leadership and culture (Burke & Litwin, 1992).

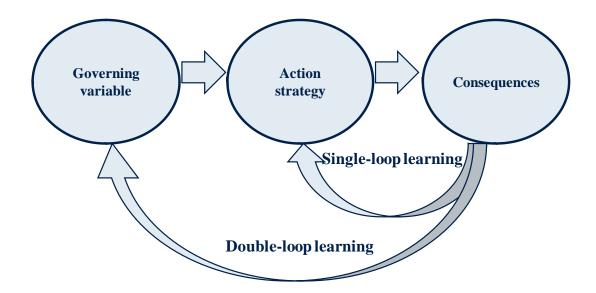


Figure 4. Single-Loop and Double-Loop Learnings from Argyris and Schoen (1978)

Both market orientation and entrepreneurial orientation as market-based learning involves two levels of learning. However, market orientation focuses on the acquisition of knowledge from market (including customers and competitors, etc.) in order to refine existing knowledge and strategies (i.e. adaptive learning), whereas entrepreneurial orientation engages

more in the questioning long-held assumptions, customers, capabilities or strategies in order to look for new market (i.e. generative learning). A learning organization needs both kinds of orientation. The first study will introduce the importance of these two kinds of orientation on the performance.

5.2.3 System Levels: Individual vs. Group vs. Organizational level

According to Watkins and Marsick (1993, 1996), there are three levels of a learning organization with seven distinct but interrelated dimensions. In particular, they are continuous learning, as well as dialogue and inquiry at individual level; team learning and collaboration at team or group level; and finally, embedded systems, system connections, empowerment, and provide leadership at organizational level. These seven dimensions can be further categorized into two components, that is, "people" who comprise an organization, and "structures" created by the social institution of the organization. Watkins and Marsick (1996) suggested that an organization needs to work with people at the individual and group levels first. Although people initiate change on their own as a result of their learning, social learning theory posits that learning is a cognitive process that takes place in a social context and can occur purely through observation or direct instruction (Bandura, 1963). Individuals interact with each other and learn as clusters, teams, and networks in organizational change. Clearly, shifting from individual to organizational learning involves a non-linear transformation, and collective learning or organizational learning is not merely the cumulative results of individuals' learning. Organizations must create facilitative structures to support and capture learning in order to move toward their missions. This multilevel view will be elaborated for change interventions in the second study and change readiness in the third study.

6 Summary

This introductory chapter presented the background and the structure of the dissertation as well as laid theoretical foundation for this work by selected theories of organizational culture and learning in organization. Organizational culture plays a vital role on the organizational performance. Market orientation and entrepreneurial orientation are two cultural competitive factors. A learning organization is a culture which promotes members of the organization continuous learning, and requires members to change mental models or

mindsets. Organizational learning is a dynamic and complex social process through which individuals and groups interact, co-construct knowledge, reflect and move the organization to a new state. To change market and entrepreneurial orientations, both two types of learning should be involved. Finally, change should be implemented and monitored at multilevel as well as taking organization as a whole or a system.

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Study 1: The Impact of Market Orientation and Entrepreneurial Orientation on Subjective Business Performance

1 Introduction

The importance of market orientation and entrepreneurial orientation has been emphasized in its respective research field. Market orientation is posited to reflect the priority which an organization sets to create value for existing and potential customers, accordingly establishing the satisfaction of customer needs (Day, 1994). Entrepreneurial orientation reflects priority which an organization commits to the identification and exploitation of market new opportunities (Lumpkin & Dess, 1996).

In general, a consensus can be drawn from a considerable body of empirical studies that market orientation is positively associated with firm-level consequences, including financial performance and business performance (e.g., Jimenez-Jimenez & Cegarra-Navarro, 2007; Fischer & Reuber, 1995; Narver & Slater, 1990). Likewise, entrepreneurial orientation is also found to positively influence firm-level performance, such as innovation (Wiklund & Shepherd, 2003), intra and extra-industry networks (Stam & Elfring, 2008) and financial performance (Wang, Hult, Ketchen Jr., & Ahmed, 2009). Therefore, these two orientations are concluded as two factors to build cultural competitiveness alongside with other two (innovativeness and learning orientation) according to Hult, Ketchen, and Nichols (2002). The reason why the latter two factors are not in the scope of the research was already explained in the introductory chapter.

Recently, studies have been focused on the examination of how both market orientation and entrepreneurial orientation can together affect organizational performance. Some researchers conclude the complementary effects of both orientations towards organizational performance. Baker and Sinkula (2009) claimed that a common bond between market orientation and entrepreneurial orientation is the learning about the market and customers. Schindehutte, Morris, and Kocak (2008) advocated that organizations need to simultaneously adopt both market orientation and entrepreneurial orientation, thus to create synergy and contribute to the firm's success (for more similar findings see Miles & Darroch, 2008; George & Zahra, 2002). However, quite a number of researchers find that when these two orientations are modeled simultaneously, the direct effect of market orientation on profitability still exists, but the direct effect of entrepreneurial orientation disappears (Matsuno, Mentzer, & Ozsomer, 2002; Slater & Narver, 1998). Matsuno, Mentzer, and Ozsomer proposed that entrepreneurial orientation may be an antecedent to market orientation. Atuahene-Gima and Ko (2001) explored an interactive relationship between entrepreneurship and market orientation—business performance relationship. Furthermore, Baker and Sinkula also affirmed in their research that market orientation has a direct impact on profitability, entrepreneurial orientation indirectly influences profitability mediated by innovation success.

One of the issues observed by the author from vast research is that despite that these two orientations are considered to be cultural constructs, previous empirical research on simultaneously examining and measuring them has not explicitly distinguished among different layers of culture. Most of the research uses behavioral indicators, sometimes mixed with value indicators (e.g., market orientation scale from Narver & Slater, 1990; entrepreneurial orientation from Covin & Slevin, 1991). This might be one of the causes for intricacy of the relationship among market orientation, entrepreneurial orientation and firm's success including profitability. While Homburg and Pflesser (2000) attempted to use a multilayer model for market orientation with four layers, they admitted by themselves that this multilayer model increases the complexity of construct conceptualization. Since one of the key elements of culture is "value" which drives behavior, hence, the first goal of this study is to unify the concepts of market orientation and entrepreneurial orientation by explicitly incorporating their values and behaviors.

The second reason for this study is that while most of the research has been conducted among a large number of firms to examine the impact of these two orientations on the organizational performance, it is seldom looked inside an organization regarding the relationship between employees' perceptions of two orientations and their perceptions of general business performance. As such, the second goal of this study is to investigate the complementary impacts from these two perceived orientations to subjective business performance through a conceptual model in one business unit. This clarification paves the way for the second study on the scope of change interventions, thus allowing these findings to become actionable.

The remainder of this study is organized as follows: First, literature on market orientation and entrepreneurial orientation is given to refine them as cultural constructs including values and behavioral indicators. Then hypothesis and a research model are derived, followed by the description of the methods. Next, results on the reliability and validity of measurements for the constructs, as well as the results of the research model are presented. Last, the findings are discussed leading to theoretical and practical implication.

2 Literature Review

2.1 Market Orientation

2.1.1 Market Orientation Conceptualization

Since the 1950s, the concept of market orientation has continuously received great attention from researchers, especially over past 25 years. Three perspectives on market orientation can be distinguished, namely, behavioral, cultural, and capability perspectives. Basically, the first comprehensive discussion of the market orientation concept is attributed to Kohli and Jaworski's (1990) behavioral perspective. They defined it as the organization-wide generation and dissemination of market intelligence and responsiveness to it. According to these authors, market intelligence includes the current and future needs of customers, and external market factors, such as competition, regulation, technology and other environmental forces. It is the responsibility of all departments throughout the organization to generate and collect market intelligence. Next, this intelligence must be effectively disseminated to the relevant departments and individuals within the organization in order that the appropriate responses can be initiated. Responsiveness to market intelligence is conceptualized to be twofold, consisting of response design (developing plans in response to market intelligence) and response implementation (the implementation of these plans), with virtually all departments participating in responding to market trends.

The second cultural perspective has also been followed by great interests, which is related to more fundamental characteristics of the organization in terms of values and norms. Narver and Slater (1990, p. 21) defined market orientation as "the organizational culture that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers and, thus, continuous superior performance for the business." According to them, market orientation has three dimensions: customer orientation, competitor orientation and interfunctional coordination. To be more specific, customer orientation is the sufficient understanding of one's target buyers to be able to create superior value for them continuously; competitor orientation is the understanding the short-term strengths and weaknesses and longterm capabilities and strategies of both the key current and potential competitors; interfunctional coordination is the coordinated utilization of a firm's resources in creating superior value for target customers. Despite the fact that this conceptualization has been widely accepted, it is criticized by several researchers (e.g., Homburg & Pfelsser, 2000; Gauzente, 2000) with regards to the definition and its measurement. They contended that although Narver and Slater defined market orientation from a cultural perspective, their measures do not reflect the cultural part of market orientation but rather measure three behavioral components.

The third perspective centers on resource capabilities (Kyriakopoulos & Moorman 2004). This firm level capability links a firm to its external environment in collecting customers' needs and disseminating the obtained customers and market information within the organization in order to react to the market timely. With this, firms are able to compete by anticipating market requirements ahead of competitors and by creating and maintaining good relationships with customers, channel members, and suppliers.

In this dissertation, market orientation is understood as a type of organizational culture. A broad conceptualization for organizational culture can be summarized as shared assumptions, beliefs, values, norms, behaviors and practices of members in the organization. One of the most widely accepted definitions on organizational culture in marketing is from Deshpande and Webster (1989, p. 4): "the pattern of shared values and beliefs that help individuals understand organizational functioning and thus provide them norms for behavior in the organization." Three different layers of culture can be inferred here, respectively, values, norms, and behaviors.

Deriving from Schein's three different layers of organizational culture model (see introductory chapter, 5.1), Homburg and Pflesser (2000) defined market orientation including four components organization-wide: 1) shared values supporting market orientation; 2) norms for market orientation; 3) perceptible artifacts of market orientation; and 4) the market-oriented behaviors. Here collective behaviors have also been incorporated in the market orientation as a cultural construct. They postulated that the presence of shared basic values supporting market orientation has a positive impact on the presence of the norms for the market orientation, and the presence of norms has positive impact on the presence of artifacts of market orientation as well as market-oriented behaviors.

Given that values are central to many definitions of organizational culture (e.g., Michela & Burke, 2000; Cameron & Quinn, 1999; Schein, 2004), and are understood to influence a number of specific behaviors, market orientation in this study thus conceptualized by sets of shared values (including beliefs) and behaviors. In the third study, more layers and traits are touched upon, because through deep conversations more facets can be explored. This view is in line with some researchers, for example, House et al. (1999) in the GLOBE project measured culture from these two aspects, because aspired values reflect "should be", whereas behaviors reflect the actual behaviors at the external and visible level. Furthermore, Gauzente (2000) also focused on market-oriented values and behaviors for market orientation. In the light of these, the definitions and measurements from Narver and Slater (1990) as well as Kohli and Jaworski (1990) still belong to the part of cultural perspective.

The author of this research adopted three dimensions by Narver and Slaver (1990) but refined it with a set of values and behaviors manifested in customer orientation, competitor orientation and interfunctional coordination. It has overriding values that members of the organization are jointly having customers' concerns in mind and committed to create superior value for them. Here customer value refers to the customers' perceptions of how well their needs are satisfied, focuses on providing the outcome the customers seek, not the product or service they purchase (Goodstein & Butz, 1998).

Market-oriented values drive a series of behaviors and practices in understanding customers' entire value chain in the environment, satisfying their expressed and latent needs. To name a few more specific behaviors, for example, spend sufficient time and resources to

acquire a deep knowledge of customers' products, systems, applications, business and culture perspectives; have regular meetings and visit to talk to understand not only their current problems and expressed needs, but also proactively help them to identify their latent needs and future trends, because sometimes the customers themselves are not able to state explicitly what they want (Narver, Slater, & MacLachlan, 2004); act as a consultant and have continuous intimacy relationship with them; as well as collective actions internally and externally based on the intelligence collected.

2.1.2 Hypotheses of Market Orientation and Performance

Numerous empirical studies show that market orientation has a positive impact on the organizational performance. For instance, Narver and Slater (1990) confirmed its effect on business profitability. Jaworski and Kohli (1993) also supported a significantly positive relationship between market orientation and subjective measure of business performance. A meta-analysis about empirical studies on market orientation conducted by Kirca et al. (2005) showed that market orientation exerts an influence on a company by influencing innovativeness, customer loyalty and quality. In these findings, the relationships are examined between market orientation as a whole (unidimensional, not split up the values and behaviors) and organizational performance. Furthermore, some other studies look at the relationship of both by splitting up organizational culture layers and also find positive impact on objective performance. For example, Hombourg and Pflesser (2000) found that a market-oriented culture influences financial performance indirectly through market performance and that this relationship is stronger in highly dynamic market.

Because no objective performance could be evaluated due to data insufficiencies (only one organization), the employees' perceptions of the culture and perceptions of business performance were asked in this dissertation. Based on the above literature review and arguments, one general hypothesis and its sub ones are derived. The argument is that when employees in an organization are perceived to jointly commit to create superior value to customer, they tend to exhibit behaviors, for instance, understanding customer by actively listening to identify their expressed and latent needs, keeping track on competitors in order to differentiate from them and positioning against them at customers, jointly sharing intelligence and coordinating internally to serve customers. By doing so, performance probably will be perceived well in terms of overall internal (efficient alignment) and external performance (brand recognition).

Hypothesis 1: The market-oriented values of the organization perceived by employees have a positive impact on their perceived market-oriented behaviors, and subsequently have a positive impact on their perceptions of business performance. To be more specific,

Hypothesis 1a: The perceived market-oriented values have a positive impact on the perceived customer-oriented behaviors.

Hypothesis 1b: The perceived market-oriented values have a positive impact on the perceived competitor-oriented behaviors.

Hypothesis 1c: The perceived market-oriented values have a positive impact on the perceived interfunctional-coordinated behaviors.

Hypothesis 1d: The perceived customer-oriented behaviors have a positive impact on the subjective business performance.

Hypothesis 1e: The perceived competitor-oriented behaviors have a positive impact on the subjective business performance.

Hypothesis 1f: The perceived interfunctional-coordinated behaviors have a positive impact on the subjective business performance.

2.2 Entrepreneurial Orientation

2.2.1 Entrepreneurial Orientation Conceptualization

For both start-up ventures and existing firms, entrepreneurship has gained wide praise on its positive relationship with performance results in both the popular press and scholarly literature. Entrepreneurship is the pursuit of new market opportunities and the renewal of existing areas of operation (Naman & Slevin, 1993).

The original framework of entrepreneurial orientation was introduced by Miller (1983). He summarized that "an entrepreneurial firm is one that engages in product-market

innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations, beating competitors to the punch" (p. 771). Lumpkin and Dess (1996) differentiated between the entrepreneurial orientation and entrepreneurship. They concluded that the early strategy literature of entrepreneurship addresses the principal question of strategy content, that is, "What business shall we enter?" In the later stage, the emphasis shifted to entrepreneurial processes, that is, the methods, practices, and decision-making activities used to act entrepreneurially that lead to new entry. Put it simply, entrepreneurship addresses "what" is new entry, entrepreneurial orientation describes "how" new entry is undertaken.

Miller (1983) identified three dimensions for entrepreneurial orientation, which are innovativeness, proactiveness, and risk-taking. Lumpkin and Dess (1996) introduced another two dimensions in addition to the aforementioned three, which are autonomy and competitive aggressiveness. Since most of studies use three dimensions, this research also focuses on three factors and is going to present them briefly.

Innovativeness: according to Miller (1983), it is about introducing novel goods, service and technology. Schumpeter, the father of entrepreneurship theory, in 1936 already pointed out that entrepreneurship is the way to innovation. It represents the seeking of creative and novel solutions, experimentation in new product and services, utilizing new technology resources, and exploring new markets (Davis, Morris, & Allen, 1991). Very recently, Larry, Walters and Quinn (2013) in their book "Ten Types of Innovation: The Discipline of Building Breakthroughs" stated that most companies focus all efforts on product innovation whereas most value is derived from other types of innovation, to name a few from ten types, Profit Model (the way to make money), Network (connections with others to create value), Customer Engagement (distinctive interaction). They claimed that best-practice innovations usually combine several innovation types.

Proactiveness: reflected in seizing initiative by anticipating and pursuing new market opportunities, as well as by participating in emerging markets. It is about the anticipation of future problems, needs or changes of the market and customers, and actions ahead of the competitors (Miller, 1983; Namen & Slevin, 1993).

Risk-taking: referring to make reasonable decisions when faced with environmental uncertainties, and systematically mitigating risk factors (Miller, 1983). It reflects a firm's willingness to commit available resources to opportunities that might be in conjunction with a chance of costly failure.

According to Lumpkin and Dess (1996, 2001), entrepreneurial orientation refers to how to enter a new entry in terms of decision-making styles, practices, processes and behaviors. Thus, it involves the intentions or the minds, and actions of key players functioning in a dynamic generative process to be innovative, proactive and to be bold to take risks when facing opportunities (Wiklund & Shepherd, 2003; Walter, Auer, & Ritter, 2006). Furthermore, a number of literature points out that opportunities identification is the heart of entrepreneurship (e.g., Stevenson & Gumpert, 1985; Shane & Venkataraman, 2000; Busenitz et al., 2003).

Following the same logic as how the conceptualization of market orientation is developed to have unified cultural constructs, entrepreneurial orientation in this study is also described with a set of values and behaviors reflected in three dimensions, respectively, innovativeness, proactiveness and risk-taking. It has pivotal values that members of the organization are consistently committed to identify opportunities and to explore new markets. These values drive behaviors and practices in experimenting with promising new technologies, creative processes that may result in new products, seizing new product-market opportunities, anticipating market changes, taking actions ahead of competitors, and undertaking risky ventures, etc.

2.2.2 Entrepreneurial Orientation and Business Performance

A significant positive relationship between entrepreneurial orientation and business success was indicated in a meta-analysis study by Rauch, Wiklund, Lumpkin, and Frese (2009). While self-perceived performance dominated in the measures of business performance in these 51 studies, objective financial performance was also measured in one third of studies. Among these 51 studies, only four studies reported mixed or insignificant results.

The majority of studies were conducted in the international context, for instance, in the USA (Richard, Barnett, Dwyer, & Chadwick, 2004; Monsen, 2005), in Sweden (Wiklund &

Shepherd, 2005), in China (Tan & Tan, 2005), in Germany (Walter, Auer, & Ritter, 2006), in Vietnam and Thailand (Swierczek & Ha, 2003), and in the United Kingdom (Morgan & Strong, 2003). Even though a growing cohort of researchers scholars postulate that entrepreneurial orientation might differ across countries (e.g., Knight, 1997; Thomas & Mueller, 2000), or a moderator effect of national culture might exist between the relationship of entrepreneurial orientation and business performance (Lumpkin & Dess, 2004), in this meta-analysis study the relationship between entrepreneurial orientation and performance was found to be of similar magnitude in different cultural contexts (Rauch, Wiklund, Lumpkin, & Frese, 2009).

Other moderators, for example, business size and technological intensity of the industry were also investigated in this meta-analysis study, and Rauch et al. found some indications that size moderates the entrepreneurial and performance relationship. Specifically, the association was stronger in micro businesses than in small businesses, but no significant differences existed between micro and large businesses or between small and large businesses. Besides, differences were found between high-tech and non-high-tech firms, with a stronger relationship in the high-tech group.

The above literature review and arguments serve to support the argument that when an organization is perceived to have high commitment to the process of identifying and exploiting market opportunities, the members tend to exhibit behaviors and practices in experimenting with promising new technologies, seizing new product-market opportunities, anticipating market changes, taking actions ahead of competitors, and undertaking risky ventures, etc. Thus, overall performance internal and external will be probably perceived well. In summary, this leads to the following:

Hypothesis 2: Employees' perceived entrepreneurial-oriented values of the organization have a positive impact on their perceived organization-wide entrepreneurial-oriented behaviors and, subsequently have a positive impact on employees' perceptions of business performance. To be more specific,

Hypothesis 2a: The perceived entrepreneurial-oriented values have a positive impact on the perceived taking innovativeness behaviors. Hypothesis 2b: The perceived entrepreneurial-oriented values have a positive impact on the perceived taking proactiveness behaviors.

Hypothesis 2c: The perceived entrepreneurial-oriented values have a positive impact on the perceived risk-taking behaviors.

Hypothesis 2d: The perceived taking innovativeness behaviors have a positive impact on the subjective business performance.

Hypothesis 2e: The perceived taking proactiveness behaviors have a positive impact on the subjective business performance.

Hypothesis 2f: The perceived risk-taking behaviors have a positive impact on the subjective business performance.

2.3 Relationship between Market Orientation and Entrepreneurial Orientation

Market orientation directs a firm's attention towards its customers and markets, referring to collect market forecasts and customers' needs, disseminate within the organization, and respond to the market and competitors. Entrepreneurial orientation reflects organizations' beliefs and behaviors with an emphasis on proactively acquiring entrepreneurial opportunities and exploring new markets. That is, both entrepreneurial orientation and market orientation play priority on learning about customers, competitors and markets (Baker & Sinkula, 2009). In this sense, firms continually learn and refine their judgments through broad scanning and experimentation to timely respond to customers and innovate.

However, these two concepts have distinctive features. Market orientation puts stress on understanding and reacting to the preferences of customers (including potential ones), and efficiently satisfying them, as well as monitoring and reacting to the actions of competitors (including potential ones). According to Jaworski, Kohli and Shay (2000), this is similar to "market-driven" approach, in which market structure is not changed. By contrast, firms with high entrepreneurial orientation tend to disrupt their own equilibrium, pursue, identify, create, and launch new venture opportunities, and strategic renewal of organizations, their markets, or industries. That is similar to what Jaworski, Kohli and Shay define the market-driving approach as "influencing the structure of the market and/or the behaviors of market players in a direction that enhances the competitive positions of the business" (p. 45). Although this "market-driving" is classified as the second approach for market orientation by Jaworski, Kohli and Shay, the author of this study agreed with Schindehutte, Morris and Kocak (2008) that market-driving approach is distinct from a firm's market orientation, and instead is the essence of entrepreneurial orientation in the "creative destruction".

As Tuominen et al. (2004) associated the link between market-driving behavior with generative/explorative learning whereas market-driven behavior leads to adaptive/exploitative learning, the relationship between market orientation and entrepreneurial orientation can be seen in a similar way: they both are market-based learning as overlapping; while market orientation is more adaptive/exploitative learning (first-loop learning, see introductory 5.2.3.), entrepreneurial orientation is more generative/explorative learning (second-loop learning, see introductory 5.2.3.). These two types of learning are not in conflict with each other in an organization. Market orientation and entrepreneurial orientation can and should coexist to achieve the competitive advantages. Neither an order is existed between both, though some researchers propose entrepreneurial orientation may be an antecedent to market orientation (Matsuno, Mentzer, & Ozsomer, 2002). These two orientations are distinct but complementary with each other as market-based learning. Hence, the third general hypothesis is derived as follows.

Hypothesis 3: Perceived market orientation and entrepreneurial orientation are positively correlated.

To conclude the hypotheses and relationships, a research model linking market orientation, entrepreneurial orientation and performance is presented in Figure 1.

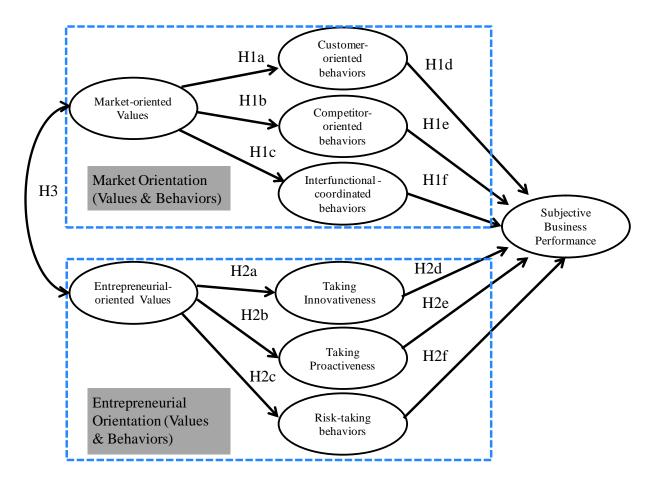


Figure1. Influence of market-oriented and entrepreneurial-oriented values on their respective behaviors and finally on the subjective business performance.

3 Method

3.1 Participants

As mentioned in the introductory chapter, the research was conducted in a business unit of an international high-tech company. This business unit has approximately 150 employees from departments of sales and marketing. Among them, 121 participants completely filled out the survey in the pretest resulting in a high response rate around 80%. Because this pretest was intended to be compared with the following test in the second study, and a number of inconsistent codes were found in both tests, the number of cases for the analysis was thus reduced to 93 participants. This means that only those participants with same code in the preand posttest were kept. The reason for the attrition of participants will be briefly explained in the second study. In order to comply with the organization's policy on protection of privacy, the survey was examined by the company's works council (Betriebsrat). Personal information like name, gender, age and education was advised not to be included.

The following Figure 2 illustrates basic demographic data of participants in terms of which function/responsibility and which region they belong to. It can be seen that the Marketing group with 39 participants (in the analysis) occupies almost the half of the number. The smallest group by function is the Management group with seven participants. The definition of each group determines the number of participants, because the organization structure is quite complex in this business unit. Marketing in this business group includes regional marketing, product marketing, product management, business development, as well as business intelligence and communication. Technical/Innovation group (N=19) here refers to program management, technical marketing, business development and innovation, etc. It is worthy to note here that this Technical/Innovation is not from R&D department but rather embedded in this business unit, because they are more sales and marketing oriented. Sales group (N=28) includes key account manager, account manager, internal sales, etc. Management group (N=7) has the leaders from business lines as well as regional management. In terms of regions, the Europe group dominates with 56 participants, because the headquarters is located in Germany. The region in Americas is the smallest group with 9 participants in the analysis. Asia group has 29 participants.

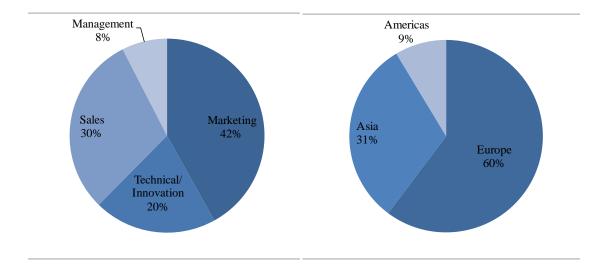


Figure2. Demographic data for responsibilities (functions) and locations of participants

3.2 Procedure

Both threats and opportunities in the market were recognized by some managers of the organization because of the rapid environment change. In this context, the management decided to initiate a broader go-to-market approach. Based on conversations with managers in the organization and extensive literature review, the focus of the dissertation was identified, i.e., organizational culture pertaining to market orientation and entrepreneurial orientation. An online questionnaire was delivered to the whole business unit at the beginning of the research, and after one month it was closed for analysis. This questionnaire served as a pretest before the intervention. From the analysis, some challenges of the organization were identified with regards to market orientation and entrepreneurial orientation, which paved the way for the second study addressing on How to change.

3.3 Instruments

The instrument for market orientation with 17 items was based on the scale from Narver and Slater (1990). Some items were adjusted to fit to the context of the organization where the research was conducted, and others were modified resulting from the conceptualization. To be more specific, value construct was evaluated by two question items, for example, "In our sales and marketing organization, our business strategies are primarily driven by our beliefs about how we can create greater value for customers". Referring to the behavior constructs, each behavioral construct has five items. An example item for customer-oriented behavior is, "In our sales and marketing organization, people precisely transfer our customers' needs and requirements into features and value"; for competitor-oriented behavior, "…information about competition is sufficiently reflected in our business strategies"; and for interfunctional-coordinated behavior "…people effectively align our activities across different organizational units to drive best value of our organization".

The instrument for entrepreneurial orientation has 10 items, adjusted from Naman & Slevin (1993). The value construct has 2 items, for example, "...people think that the marketplace must be continually explored". The innovative behavioral construct has 3 items, for example, "...people frequently market innovative features of our products to customers"; proactive behavioral construct has also 3 items, for example, "...we often approach potential

new customers proactively"; risk-taking construct has 2 items, for example, "...our leaders have a strong tendency to pursue high-risk projects (with chances of very high returns)".

Two items from subjective business performance were adjusted from Jaworski and Kohli (1993) on the overall performance, for example, "Our sales and marketing organization, over the last 12 months, performed excellent in general". The other four items were developed together with the author's supervisor and reviewed by other managers in the organization. These four items are more in the scope of sales and marketing, for example, "Our sales and marketing organization, over the last 12 months, has strengthened its `go-to-market approach`".

All questions in the survey were requested to answer within a six-point rating scale (from 1 "strongly disagree" to 6 "strongly agree"), or an additional answer "not applicable to me". The reliability and validity of the instruments will be reported in the Results part. Detailed questionnaire see Appendix 1.

3.4 Data Analysis

In this study, Partial Least Squares (PLS)-based structural equation modeling method in SmartPLS 2.0 software was used to assess the measurement models, as well as the research model concerning Hypothesis 1 and Hypothesis 2. The decision to use this method is based on the criteria for covariance-based vs. variance-based approach from Chin and Newsted (1999). First, this research goal is to predict the impact of market orientation and entrepreneurial orientation on the performance, whereas the goal of covariance-based method is for exploration. Second, PLS path modeling avoids small sample size restriction. Third, the instruments used in the study are not yet established, and the model structure is complex with many items. Furthermore, there is no evidence if the data will be multi-normally distributed. Variance-based PLS approach is free from these restrictions, thus it is more suitable for the current research.

Intercorrelation between market orientation and entrepreneurial orientation was conducted in SPSS to test Hypothesis 3.

4 Results

4.1 Assessment of Measurement Model

Before the structural model can be tested for significant relationships, the measurement models have to show sufficient levels of validity and reliability. In general, there are two measurement models: the first one is reflective measurement and the second one is formative measurement. Since the criteria of the quality of these two models are different, it is important to know first whether a construct/latent variable is reflective or formative. Based on the criteria from Jarvis et al. (2003), briefly for formative measurement, the causality is from indicators to construct which means indicators are defining characteristics of the construct; indicators are not interchangeable and covariance are not necessary; indicators are not required to have the same antecedents and consequences. Differences between these two measurement models see the illustration in the Figure 3.

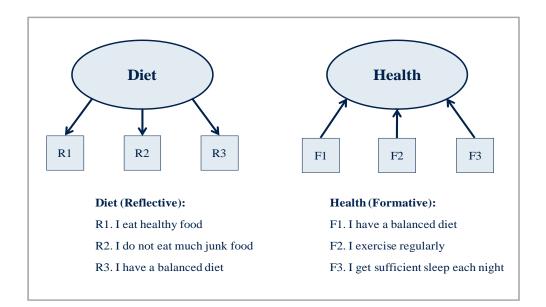


Figure 3. Reflective measurement and Formative Measurement

All the constructs in the current research model fit the criteria of reflective measurement (Jarvis et al., 2003). For example, in the market-oriented values, the indicators are manifestations of and depending on the latent variable. Indicators are similar in content (e.g., in market-oriented values, item 1 "our business strategies are primarily driven by our beliefs about how we can create greater value for customers" vs. item 2 "we believe that efficient cooperation among different units to drive best value for customer is of high

importance"). These two indicators have similar content reflecting the beliefs in creating the best value for customers. Therefore, the indicators can be considered interchangeable. Dropping one indicator would not alter the domain of the construct. Indicators will likely co-vary with each other. These criteria are fit to all of the constructs in the research model. Therefore, it was decided to take all of them as reflective measurement models. Table 1 shows the quality details of measurement models.

The first step in evaluating these constructs is concerned with establishing content validity. This was done by making reference to an extensive literature and expert discussions in the organization where the research was done. The content validity of the selected indicators for the constructs was thus confirmed from academic and managerial sides.

Constructs	Number of Indicators	Indicator loading***	Composite Reliability	Average Variance Extracted (AVE)	
Market-oriented Values	2	0.80, 0.88	0.83	0.71	
Customer-oriented Behaviors	5	0.69-0.89	0.88	0.61	
Competitor-oriented Behaviors	5	0.76-0.89	0.92	0.69	
Interfunctional- coordinated Behaviors	5	0.76-0.83	0.88	0.63	
Entrepreneurial-oriented Values	2	0.91, 0.92	0.91	0.84	
Taking Innovativeness	3	0.82-0.88	0.89	0.74	
Taking Proactiveness	3	0.76-0.85	0.83	0.62	
Risk-taking Behaviors	2	0.87, 0.95	0.90	0.82	
Subjective Business Performance	6	0.74-0.89	0.93	0.68	

Table 1. Assessment of Reflective Measurement Models: Reliability and Validity

Note. *** All factors loadings are significant at the level of p < .001

Indicators and construct reliability as well as the construct validity are presented in Table 1. At the construct level, internal consistency reliability was assessed by composite reliability. It can be seen in the table that all the values of composite reliability of the constructs are above the threshold of 0.70 (Hair, Ringle & Sarstedt, 2011), which demonstrates that the constructs were excellently measured by their indicator variables. At the indicator level, all the indicators' loadings are higher than the cutoff value 0.70 and significant, except one item in customer-oriented behaviors which is 0.69. Nevertheless, it was kept in the measurement because it is very close to the threshold and is still significant. Besides, eliminating it would weaken the content validity.

Convergent validity of all constructs was well indicated by values of the Average Variance Extracted (AVE). According to Bagozzi, Yi and Phillips (1991), AVE figure above 0.50 demonstrates that the latent variable explains more than half of its indicators' variance. In other words, high AVE value means that a set of indicators represents one and the same underlying construct (Henseler et al., 2009). Because the figures in table 1 for AVE are all above 0.50, the convergent validity of all constructs was also confirmed.

Finally, discriminant validity was assessed for the item and construct. Indicator discriminant validity was evaluated by checking if an indicator's loading was higher than all of its cross loadings. The analysis showed that the loadings of all the indicators related to their constructs are higher than the loadings to other constructs. Hence, item discriminant validity was fulfilled. At the construct level, the discriminant validity was evaluated by comparing the square roof of the AVE of each construct to the correlations of the construct, with every other construct. Fornell and Larcker (1981) indicated that for any two constructs, A and B, the square root of AVE for A and B both need to be larger than their correlation coefficient between A and B. Table 2 shows that all the square root values of AVE (in bold) are larger than their correlation coefficients of any other two constructs. Therefore, the construct discriminant validity was confirmed.

Constructs	Market- oriented Values	Customer- oriented Behaviors	Competitor- oriented Behaviors	Interfunctional- coordinated Behaviors	Entrepreneurial- oriented Values	0	Taking Proactiveness	Risk-taking Behaviors	Subjective Business Performance
Market-oriented Values	0.84								
Customer-oriented Behaviors	0.57	0.78							
Competitor-oriented Behaviors	0.40	0.58	0.83						
Interfunctional- coordinated Behaviors	0.60	0.68	0.64	0.79					
Entrepreneurial- oriented Values	0.59	0.57	0.49	0.66	0.91				
Taking Innovativeness	0.54	0.68	0.61	0.77	0.65	0.85			
Taking Proactiveness	0.37	0.54	0.50	0.62	0.59	0.73	0.79		
Risk-taking Behaviors	0.54	0.46	0.49	0.58	0.51	0.67	0.54	0.91	
Subjective Business Performance	0.56	0.64	0.61	0.73	0.66	0.78	0.63	0.64	0.82

Table 2. Squared Roots of AVE and Correlations of Constructs

Note. The bolded are squared root value of AVE.

4.2 Evaluation of Structural Model

An overview of the results comprising of standardized path coefficients, significance level, and coefficient of determination (R^2) is presented in Figure 4. Path coefficient is the strength of relationship between independent and dependent variable. It aims to find out which exogenous constructs have the strongest impact on the endogenous variables. The significance criterion t-values are established via using bootstrapping. The coefficients of the paths in the Figure 4 exhibit significant positive relationships from market-oriented values to the customer-oriented behaviors, competitor-oriented values show significant and positive relationship to behaviors manifested in innovativeness, proactiveness and risk-taking. Hence, Hypotheses 1a, 1b, 1c, 2a, 2b, 2c were supported. However, the coefficients of the paths from market-oriented and entrepreneurial behaviors to subjective business performance are surprisingly low. Moreover, only interfunctional-coordinated and innovativeness related behaviors/practices display significant positive impact on subjective business performance.

As a result, Hypothesis 1f and Hypothesis 2d were supported, whereas H1d, H1e, H2e, H2f were not supported. Behaviors in innovativeness seem mostly contributing to the performance, followed by interfunctional-coordinated behaviors.

The coefficient of determination R^2 measures the fit of structural model. It is defined as the proportion of the total variation of endogenous variable explained by exogenous variables (Kvalseth, 1985). As shown in Figure 4, in total, around 68.7% of the variance of overall subjective business performance could be explained by the exogenous latent variables. Chin (1998) suggested R^2 values of 0.67, 0.33, or 0.19 for endogenous latent variables in the structural model can be described as strong, medium, or low, respectively. As such, it can be concluded that the model has a very good fit with robust explanatory power.

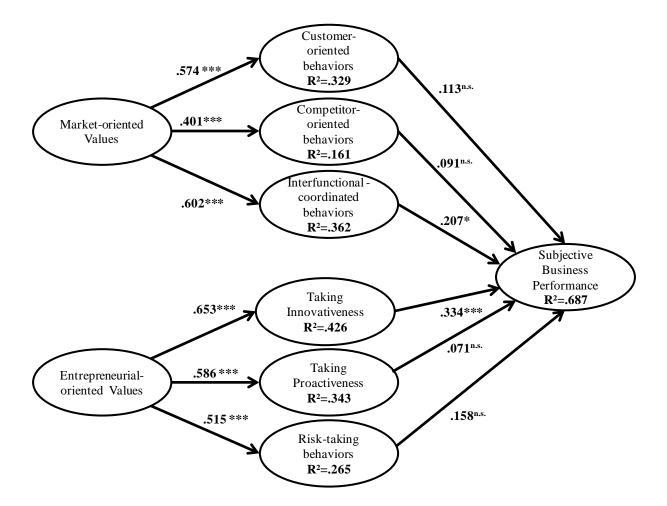


Figure 4. Results of Structural Model with Path Coefficients

Note. *p < .05. **p < .01. ***p < .001. n. s. = non significant

4.3 Correlation between Market Orientation and Entrepreneurial Orientation

Overall market orientation and entrepreneurial orientation were examined by aggregating their respective values and behaviors into one dimension respective, in order to calculate their correlation in SPSS. Market orientation (M = 3.95, SD = .79, N = 93) was highly positively correlated with entrepreneurial orientation (M = 3.78, SD = .93, N = 93), r = .79, p < .001. It indicates when one orientation increases, the other orientation also increases. Therefore, Hypothesis 3 was also supported.

5 Discussion

The goal of this study is to test the perceived market orientation and entrepreneurial orientation with a set of values and behaviors from a cultural perspective, and examine their impacts on subjective performance in an organization. To the best knowledge of the author, since research seldom looks inside an organization to investigate the relationship between two orientations and subjective performance, evidence will be checked with those studies involving a large number of companies.

5.1 Interpretation

Overall, a good quality of the constructs could be affirmed, with regards to their robust reliability and validity. In the structural model, market-oriented and entrepreneurial-oriented values showed high impact on their respective behaviors. To be more specific, in terms of market orientation, it is the commitment of responding to customers' requirements with the objective of maximizing customer satisfaction that guides behaviors and activities of the stakeholders of an organization. Therefore, market orientation is not simply reflected in the behaviors of getting requests from customers, scanning the external market environment, or sharing customer information (Baker & Sinkula, 2009). In terms of entrepreneurial orientation, it is the commitment of proactively pursuing new opportunities regardless of the behavior of competing firms or purely pursuing innovation. The relationship from market-oriented values on behaviors is in line with Gauzente (2000) who concluded that firms tend to first commit to market-oriented values, and then implement market orientation through adequate behaviors. Given that no studies have split entrepreneurial-oriented values and behaviors when measuring the concept, it is impossible to verify with other studies.

Regarding behavioral dimensions, surprisingly, only the perceived behaviors reflected in interfunctional coordination of three dimensions of market orientation significantly led to perceived business performance, though a certain number of researchers, for example, Narver and Slater (1990) found all three behavioral dimensions had positive impacts on firms´ profitability. Interfunctional coordination is the mechanism that enables all departments to cooperate in achieving customer success as well as self-organization´s success. It can enhance information sharing and joint problem solving (Gatignon & Xuereb, 1997), as well as increase mutual trust among employees in different functions such as marketing and sales (Olson, Walker, Orville, & Ruekert, 1995). When employees in an organization cooperate with each other, it is plausible that they would perceive a higher performance.

Customer-oriented behaviors, which are considered to be a pivotal dimension in market orientation leading to superior performance of an organization, in this study surprisingly no significant impact has been found. A collective perception seems to be that enhancing these behaviors does not necessarily result in the business success. The reason could be twofold: first, employees perceived this organization had already exhibited adequate customer-oriented behaviors, adding more to them does not account for significant increase in their subjective business performance; taking every customers' request into consideration could be dangerous, because the provider should balance the cost and profit for itself.

Likewise, competitor-oriented behaviors were not significant related to perceived performance. This indicates that employees probably did not think that careful monitoring and active responding to competitors' moves would enhance their perceived performance. If the resources and attention only direct towards competitors, the organization might not have capacities and resources to focus on their own core competencies. As a result, overemphasizing competitor orientation might even hinder their business success.

In entrepreneurial orientation, the construct of behaviors in innovativeness ranked the most important, and in fact, was also the only one significant factor of perceived business performance. This is in line with the results from Frishammar and Hörte (2007) with a sample of 224 mid-sized manufacturing firms. These authors found that innovativeness was positively related to performance in new product development, while proactiveness and risk taking showed no such relationship.

Innovativeness as a determinant of superior business performance has been strongly supported in a vast range of empirical studies. This view is strongly supported in the empirical studies. The logic behind this relation is that innovations serve as a 'coping mechanism' for environmental uncertainty. Given the dynamism and rapid technological changes in high-tech industries, it is extremely important to be innovative to cope with uncertainty and achieve competitive advantage.

According to certain researchers, the influence of entrepreneurial orientation or some dimensions of it on performance may vary as a function of national culture (e.g., Rauch, Wiklund, Lumpkin, & Frese, 2004). Risk taking in some countries is perceived to be positive by important stakeholders and rewarded in some cultures but to be negative and avoided in other countries like Germany (House et al., 1999). Employees from this business unit located in Europe, Asia and America, hence, risk-taking behaviors might differ in individual location. As a result, difficulties may arise in converging perceptions from different regions towards the whole organization. One participant commented in the survey like this: "The risk profile is different between headquarters and the regional offices. Even if we communicate in a common language (English), the entrepreneurial approaches are very different. While the profile of the USA is fast and executes by trial and error, China is very fast follower, and Germany is very linear and methodical in its approach." This might explain the non-significant relationship between the perceived risk-taking behaviors to performance in this organization.

The most interesting finding is that the construct of behaviors in proactiveness had the lowest path coefficient to the perceived business performance. That means the employees did not perceive the behaviors in proactiveness would result in an increase in their perception of performance. Lumpin and Dess (1996) defined proactiveness as "how a firm relates to market opportunities in the process of new entry. It does so by seizing initiative and acting opportunistically in order to `shape the environment`, that is, to influence trends and, perhaps, even create demand" (p. 147). They also equated proactiveness with competitive aggressiveness. In viewing the low non-significant relationship between proactiveness and performance from this business unit, some questions may be raised. Was it a real situation that this organization did not need proactiveness back then? Some potential control variables may moderate the relationship between proactiveness and performance, for instance, business

cycle or competitive environment. According to the objective business performance two years ago when this pretest was conducted, the performance of this organization was indeed better than the performance in posttest. Back then, probably customers more actively approached to this organization because there were not so many strong competitors in the market. Therefore, as long as this organization had innovative features and good quality of the products, it did not worry about getting business. As such, taking initiatives to approach new customers or act ahead of competitors had not been considerably concerned, whereas emphasizing some factors for example innovativeness might be sufficient to achieve successful business performance perceived by employees. However, when it was not the case, then the other question is: was it an indicator that the employees in this organization had not realized the importance of taking initiatives and seizing the new opportunities in the market? If this is true, then a deficiency probably existed in the proactiveness of this organization which needed to be addressed. This reasoning could be in fact applied into other behavioral factors as well.

Although almost every single behavioral dimension had either weak or non-significant impact on the performance, the overall model showed an excellent quality. It could be inferred that only by taking all behavioral dimensions into account simultaneously, business performance can be perceived to a high degree. This argument is supported with the high correlation between two orientations as well. Baker and Sinkula (2009) concluded a significant correlation between two orientations ranging from 0.24 to 0.69 in the previous research. In this study, the correlation between two perceived orientations in one organization is even higher (r = .79). That means a robust market orientation can enhance the effectiveness entrepreneurial orientation, and vice versa. They both simultaneously serve to the subjective performance. This result also corresponds to the proposal from Schindehutte, Morris and Kocak (2008) that organization should simultaneously adopt both market orientation and entrepreneurial orientation, and thus create synergy and contribute to the success of firm.

5.2 Limitations and Implications

5.2.1 Research Limitations and Theoretical Implications

This study provides new insights on the measuring of market and entrepreneurial orientation with a set of values and behaviors, which are important elements of organizational culture. Measurement models show high levels of quality of the constructs. Nevertheless, two

items in the values' constructs are not ideal. Further research may consider adding more items in the constructs of market-oriented and entrepreneurial oriented values.

In addition, the structural model has a very good fit from behaviors to subjective business performance because of the high R^2 value. However, the generalizability of this study should be treated cautiously. Despite the advantage that it indeed offers an in-depth understanding of its collective perceptions of organizational culture and business performance by looking into one organization, bias concerning the respondents' self-assessment can be induced as well. For example, the path relationship between the perceived behaviors in proactiveness and business performance is rather skeptical whether it was a true case that proactiveness did not account for performance or employees lacked the awareness of its importance. In this sense, future research should investigate the market orientation and entrepreneurial orientation by using data from multiple companies, and taking into account some potential control variables, for instance, competition intensity, market dynamism, business cycle, etc.

5.2.2 Managerial Implications

First, the good quality of the structural model and high correlation between two orientations in this study suggest that organizations should have a good balance when implementing these two orientations. Organizations with strong entrepreneurial orientation but without a strong market orientation are likely to have innovations without the customer appeal. They tend to be arrogant, feel "superior to the market", and cite customer's inability to express his future needs as a reason of not listening to them. As a result, innovation probably does not create value or profitability for the organizations. On the other hand, firms with a strong market orientation without a strong entrepreneurial orientation may facilitate a focus on customer satisfaction, but not necessarily an ability to aggressively pursue new market opportunities. Thus it may lead to what Day (1999) named "customer compelled", which means doing whatever customers want, losing focus of own strategy, price competition, mimicking products or service without competitive advantage.

Second, the research model may also serve as diagnostic for a specific organization who aims to enhance sales and marketing culture and performance. To subject the path coefficients drawn from the analysis of the questionnaire to critical scrutiny, with considering factors in the internal and external environment, management may discover where the strengths and weaknesses of the organization are, accordingly, decide on priorities for changes. For instance, the management in this business unit sensed that employees lacked competitor orientation and customer orientation. Therefore, interventions had been prioritized on these two topics and at the same time, implementing activities on the factors. The second study will elaborate the change interventions.

Finally, it is noteworthy to mention that although values were confirmed to direct behaviors in the theoretical model, it does not mean that in the cultural change program, organizations should first implement values then wait for a certain period to implement behaviors. In addition, the advice from a certain number of authors (e.g., Burke, 2010; Hofstede, 1980) regarding changing behaviors preceding values should be taken prudently. Their arguments are that taking a direct, frontal approach to changing mindsets or values is attended with difficulty, resistance, and strong human emotion. Facts and actions are symbolic and stand for adoption of values. When members of the same organization share these behaviors they become shared norms, and then turn into values and basic assumptions. However, the author of this dissertation holds that even though behaviors can be changed to some extent by rewarding, requirement from the management, or by exemplarity in an organization, if members are not aware or committed to, their actions might be not genuine. Besides, in uncertain situations, when values are not instilled in members' mind and heart, behaviors might deviate from the commitment to customers and new opportunities. To conclude, it is suggested that values should be simultaneously accompanied by behaviors to achieve the success of change.

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Study 2: Change Management Interventions on Market Orientation and Entrepreneurial Orientation

1 Introduction

The previous study in this dissertation shows that both market orientation and entrepreneurial orientation have jointly been associated with higher level of subjective business performance. This result is in line with a number of existing research findings as described in the first study. However, there have been no published accounts of interventions aiming at changing these two cultural elements simultaneously, though this is especially an interest for the managerial application.

Organizational change is the movement of an organization from the existing plateau toward a desired future state in order to increase organizational efficiency and effectiveness (Cummings & Worley, 2005; George & Jones, 2002). The importance of change is well embodied in the following short statement from W. Edwards Deming, "It is not necessary to change. Survival is not mandatory". In the book *Built to Change* by Lawler and Worley (2006), it is noted that stability is essentially the opposite of effectiveness. Therefore, in this dynamic globe, almost all of the organizations take planned and unplanned changes to adapt to its environment.

Although one could argue that there are no completely failed change management programs nor completely successful ones, Balogun and Hope Hailey (2004) reported that around 70% of the change programs did not achieve their intended outcomes. One of the major challenges in today's and those of previous eras are the complexity of changes (Pryor, Taneja, Humphreys, Anderson, & Singleton, 2008). Particularly, organizational culture change involves deep changes in mental models/mindsets and complex behaviors arising from the inter-relationship and interaction, accompanied with attached emotions. As a result, such change does not occur overnight. Even though temporary results can be achieved within an

organization, when change is not appropriately and continuously implemented, the organization easily falls into the previous same old routines.

To unravel the complexity of the changes, a number of researchers have acknowledged that organizational change efforts inherently involve multilevel processes (Caldwell, Herold, & Fedor, 2004; Caldwell, Yi, Fedor, & Herold, 2009; Pettigrew, Woodman, & Cameron, 2001; Whelan-Barry, Gordon, & Hinings, 2003). According to Watkins and Marsick (1993, 1996), there are three levels of a learning organization. In particular, they are continuous learning, as well as dialogue and inquiry at individual level, team learning and collaboration at team or group level, and finally, embedded systems, system connections, empowerment, and provide leadership at organizational level. Nevertheless, organizations are far more complex than merely these three levels. In fact, the interactions across levels are so salient that the organization change should be treated as totality and system.

This study thus aims to develop, implement and evaluate change interventions in a business unit at individual, group and organizational levels on the market orientation and entrepreneurial orientation as well as considering their interactions. Noteworthy to mention here again is that the organizational level in this dissertation refers to this business unit level (see introductory chapter, 3. field of the dissertation). To achieve these goals, in the following section, first the literature on the organizational change at multilevel will be reviewed. Next, change interventions will be described in the method, by breaking them down into different levels and meanwhile taking their interrelationships into account. Afterwards, by comparing the results from pre- and posttests, effects of interventions on market orientation, entrepreneurial orientation and subjective business performance will be examined. Results and limitations of this study are then discussed. Finally, implications of findings for management and possible directions for future research are suggested.

2 Literature Review

2.1 Change at the Individual Level: the Theory of Planned Behavior

Watkins and Marsick (1996) suggested that organizational change needs to start with people at the individual and group levels. To create the individual change, it is necessary to

see where one's behavior comes from. The theory of planned behavior provides a valid framework to understand, predict and change an individual behavior. It focuses on the behavior itself, and goes beyond attitudes to take into account other antecedents such as subjective norms and perceived behavioral control. "As a general rule, the more favorable the attitude and subjective norm, and the greater the perceived control, the stronger should be the person's intention to perform the behavior" (Ajzen, 2011, p. 75). The following Figure 1 is a schematic representation of the theory.

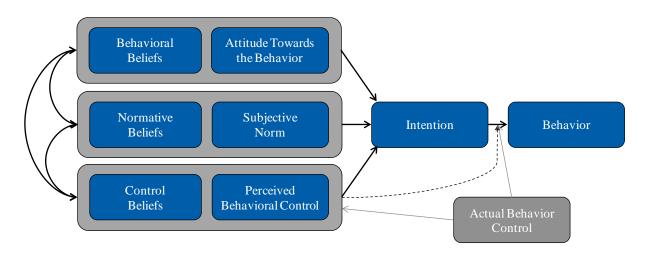


Figure 1. The Theory of Planned Behaviors (Ajzen, 2011)

In this model, behavioral beliefs are twofold: the first one is an estimation of the likelihood that performing will lead to a certain outcome, and the second one is estimation of the valence (positive or negative) attached to those outcomes. By taking the likelihood and valence into consideration, an overall favorable or unfavorable attitude towards behavior is produced in the aggregation of several behavioral beliefs.

Normative beliefs are a person's subjective estimation of the likelihood that a given referent individual or group (e.g., manager, colleagues, family, friends) would approve or disapprove performing the behavior. It composes the basis for perceived social pressure, or subjective norms to which degree a behavior is socially desirable. The strength of the subjective norm is determined by the person's motivation to comply with the referent individual or group.

Control beliefs are a person's estimation of resources which can facilitate or inhibit performance, including skills and abilities, sufficient or insufficient time and money, support from others, and so on. "Each control belief contributes to perceived behavioral control or a sense of self-efficacy, in direct proportion to the factor's perceived power to facilitate or impede performance of the behavior" (Ajzen, 2011, p. 78).

Interventions designed to change individual behavior can be directed at one or more of its determinants: the behavioral, normative, and control beliefs. Individuals subjected to an intervention are exposed to new information or experiences. They may well change some of their behavior-relevant beliefs and, as a result, changes in attitudes, subjective norms, or perceptions of behavioral control probably will take place. Given adequate control over the behavior, finally, new intentions should be carried out when the opportunity arises.

2.2 Change at the Group Level

Work group is the interface between an individual and an organization. In this sense, it is primary social relationship in an organization, as well as a source of employee's sense of organizational reality. The extent to which the group members work well together and how well different groups work with each other, determines in part the overall effectiveness of the organization (Burke, 2010).

Social learning theorists (e.g., Bandura, 1986) have argued that learning occurs by observing role models in work groups, especially from middle managers who possess positional power over frontline employees and expert peers who possess personal power over frontline employees by their expertise and proximity. Hence, role models from group managers and expert peers directly influence group individuals' emotions, attitudes and behaviors, and thus have impact on group performance. Interpersonal interaction with superiors and peers is highly valued for individuals to make change. It is reflected in the two determinants of one's intention and behavior in the aforementioned planned behavior theory. The first relevant determinant is subjective norms, or the perceived social pressure from managers and peers, and the second relevant one is perceived behavioral control which includes support from managers and peers. Individuals need trust, support, and cooperation in the group or team to function effectively.

Team members' shared mental model (or overlapping mental representation of the task environment) leads to improved performance (Van den Bossche, Gijselaers, Segers, Woltjer, & Kirschner, 2011). This shared mental model can be developed by team learning behaviors identified as co-construction and constructive conflict. While co-construction of meaning strives towards mutual understanding, constructive conflict strives towards mutual agreement. Team members carry out these behaviors in an open dialogue, by listening carefully to each other, incorporating diverse ideas, and clarifying to reach a shared mental model.

Other literature suggest to follow some steps to initiate change at group level (e.g., Whelan-Barry et al., 2003; Ness & Cucuzza, 1995): 1) explicitly communicating the organization-wide change vision to the group, and addressing what the change means for the work group; 2) developing a tailored change vision for the group, identifying the goals and implications of the change for the group; 3) planning a work group-level implementation that reflects particular contingencies in that group; 4) engaging in efforts to develop the capability of the group. Furthermore, Beckhard (1989) advised on interventions for group change: first, setting goals and priorities, analyzing or allocating the work according to team members' roles and responsibilities, then examining its working processes (such as norms, decision making, communications, and so on), and finally managing interpersonal relationships among members. Paying attention to these purposes and the order is important according to him, because it is possible that problems in interpersonal relationships could be a consequence of group members' lack of clarity regarding team's goals, roles and responsibilities, as well as procedures and process.

2.3 Change at the Organizational Level

A number of ways of organizational change can be categorized, for instance, radical or incremental, revolutionary or evolutional, disruptive or continuous, emergent or planned, etc. To describe all different types and models from literature is beyond the scope of this study. One of the first change models at the larger-system level is Lewin's unfreezing-movement-refreezing model (1958). The three-step model was adopted for many years as the dominant framework for understanding and managing the process of organizational change (Todnem,

2005). This theory has been reviewed, modified or divided into more specific steps since its formulation, for example, Schein's (1987) extensions to Lewin's model.

In this model, Phase 1 is to unfreeze the system. In this phase, beliefs, values, attitudes and behaviors in the organization need to be challenged. It may take many forms by offering rationales and inducing emotions, for instance, presenting data to employees on the financial performance where the organization is and where the target should be. When organizational members are faced with data that shows a discrepancy between what is and what should be, they might feel guilt and anxious to reduce the gap, thus a sense of urgency about the need to do business differently is created. However, Schein (1987) contended that it is not sufficient to create only disconfirmation and induce negative emotions (e.g., anxiety) among members, rather they need to feel psychological safe without feeling embarrassment or loss of selfesteem. When it is managed well, the change readiness of individuals is consequently nurtured and they are willing to move to the next stage.

The second phase is movement, or changing the organization in new directions. With respect to the organizational gap, moving might take forms of developing innovative technology or business models, behaving differently in the markets towards customers and competitors, managing employees in another way, and the like. Overall, radical change normally generates high levels of disturbance, and transforms the organization towards another orientation by developing new visions, values, strategies, skills, behaviors, etc. It involves cognitive restructuring (Schein, 1987), akin to change shared mental model or engagement in second-loop learning. Organizational members need to see things differently from how they saw before, thus different behaviors will follow accordingly. Incremental change is often considered to be unexceptional and fine tuning some parts, as a result of organizations reacting to external forces. When an organization engages itself into a radical change, it typically involves incremental change as well, but not vice versa.

The last phase is to refreeze. The change that has occurred cannot be allowed to dissipate or drift away. The new, changed condition needs to be reinforced and institutionalized through the system. A new organizational chart, desired behavior being incorporated into performance appraisal, or support from leaders, all of them present the outward signs of the refreezing.

There are some authors who offer more practical sequences of actions to organizations and managers, for example, the model from Kotter (1996). His model should be used at the strategic level of an organization to change its vision and subsequently transform itself. This model shows that the change process goes through a set of phases: 1) create a sense of urgency. People are ready for change when there is a need; 2) creating a guiding coalition; 3) developing a vision and strategy, to help direct and achieve the change effort; 4) communicating the change vision; 5) empowering broad-based actions, by removing barriers to change and encouraging risk taking and creative problem solving change (Kotter, 1996, 1998); 6) generating short-term wins. It is positive reinforcement to reward people when they break away from old behaviors and perform as desirable; 7) consolidating gains and producing more change. Using increased credibility to add, change or delete systems, structures, and policies to fit the vision; recruiting, promoting, and developing employees who can implement the vision; 8) institutionalizing new approaches, articulating the connections between the new behaviors and corporate success. Furthermore, Kotter (2008) listed a number of methods to deal with the change resistance at the organization-wide: education and communication, offering the rational and logic of change; participation and involvement, listening to people's voice and advice, involving members especially potential resisters in some aspect of the design and implementation of change; facilitation and support, giving guidance, providing training in new skills and supporting in emotions; negotiation and agreement, offering incentives and rewards. The other two strategies, manipulation and coercion, can be risky and lead to future problems if people feel manipulated, hence here in this study these two are not recommended.

2.4 Interaction across Levels

Organizations consist of groups with individuals and they are far more complex than merely these three levels. The social system theory offers a system thinking to the organization, in the sense that organization is seen as complex evolving system based on communication and decision, and within it, complex behavior arises from the interrelationship and interaction. System is more than the sum of its parts, and there are networks within networks (Senge, 1990). From the learning perspective, individuals interact with each other and learn as teams, networks and then transform into a higher-level, collective phenomenon. Shifting from individual to organizational learning involves a non-linear transformation. Collective learning or organizational learning is not merely the cumulative results of individuals' learning. In order to have transformational change, an organization needs to engage itself into deep levels of learning (referring to first and second-loop learning), through which the assumptions and mindsets are questioned, individuals and groups are committed and open to learning. Furthermore, the organizational support and conditions are needed to be provided.

Dynamic culture view (Erez & Gati, 2004) advocates that the nature of culture change consists of top-down process that transmits the effects of culture from higher (organizational level) to lower levels (group level and individual level), and bottom-up process through which adaptive behaviors emerge from the individual level, become shared behavioral norms and values at the group and organizational level reflecting the cultural change.

To sum up, literature about change management has been reviewed at three levels in an organization, thus it provides theoretical background for change interventions at multilevel. Although the consideration of three levels is limited, it helps to understand where to start, and about how to lead and manage the overall change. Meanwhile, it should remain highly cognizant that the organization change has to be treated as totality and system.

2.5 Research Question and Hypotheses

In the introduction section, the purposes of this study have been presented: to create change management interventions on market orientation and entrepreneurial orientation in a business unit; to examine the effects of interventions. The literature review section has provided the theoretical background for the change interventions at individual, group and organization levels. The main research question of this study is: will the designed interventions at individual, group and organizational levels serve to improve the sales and marketing organizational culture (market orientation and entrepreneurial orientation), and eventually increase the subjective business performance? Hypotheses are as follows:

Hypothesis 1: There is a significant increase in organization-wide perception of market orientation including values and behaviors from pretest to posttest.

Hypothesis 2: There is a significant increase in organization-wide perception of entrepreneurial orientation including values and behaviors from pretest to posttest.

Hypothesis 3: There is a significant increase in organization-wide perception of subjective business performance from pretest to posttest.

3 Method

3.1 Participants

After one and a half years since the pretest, posttest was launched with the same questions to the same target sample. 141 participants completed the survey (response rate 82%), but only 93 of them were identified to be the same participants as in the pretest according to the identity codes they made. The reasons why the remaining were not identified could be that some of them were changing jobs in the last one and a half years, some used different codes when they participated in the posttest, while still others just participated in one test. Paired samples t-test was conducted in SPSS among these 93 participants to find out if there are significant differences between pre- and posttests concerning market orientation, entrepreneurial orientation and subjective business performance. The demographic data see Figure 2 in the first study 3.1.

3.2 Process and Interventions

As described in the introductory chapter (3. field of the dissertation), this business unit was confronted with opportunities as well as threats internally and externally. In this context, a group of empowered managers created a coalition to plot the change process in go-to-market approach. It mainly aimed to shift the organizational mindsets and behaviors towards a broader customer base.

This go-to-market approach change experienced two phases. The first phase from May 2012 to October 2013 was primarily a bottom-up approach, here in this dissertation named as Program 1. A senior marketing director initiated this program with four tracks aiming to address competency, resource management, process and culture in this business unit. The author was co-developing and implementing some of the interventions. Second phase from October 2013 onwards named as Program 2 here, was top-down driven with intensified

commitment from top leaders as well as involving bottom-up. An external consulting team was helping this organization in a more systemic way. While the first program was more a continuous improvement in market orientation and entrepreneurial orientation, the second program was full change management focusing on understanding customers, (entrepreneurial) behaviors, skills, positioning and leadership. Activities in Program 2 were continuously ongoing by the time of this writing.

In this section, some of the designed and implemented interventions are going to be described. In an organization, informal changes follow formal ones are used to sustain the new orientation, but it is not possible to write all of the change activities. Therefore, only a few most relevant activities for this research were chosen to be written as examples here. As some of the activities touched upon organizational confidentiality, details were also omitted. It is worthy to note here that not all interventions are strictly following the theories and procedures, as organization quite often do things in a more intuitive and pragmatic way.

1) Online Survey (Pretest)

Organizational change management started with a systematic diagnosis of the current situation through the online survey to decide the areas of change. Values and actual behaviors about market orientation, entrepreneurial orientation, as well as perceived business performance were evaluated at the organizational level. Survey results were presented in an annual worldwide meeting for sales and marketing colleagues. This large scale survey and feedback served to create the awareness on what was important to the organization change by answering the questions, because it invited all the employees to be engaged in the change process through feedback and action planning. By demonstrating the result, it showed a discrepancy between current state and ideal state especially in some areas, for example, the competitor orientation and exploring new opportunities behaviors. Moreover, this pretest established data points serving as a benchmark for the posttest in one and a half years. The comparison between these two tests provides insights if the change efforts have impact on both orientations and subjective business performance.

2) Project "Market Leadership Dilemma"

Change efforts continued with a small project called "Market Leadership Dilemma", in cooperation with three students from a change management course in Ludwig-Maximilian-University from Munich. The purpose of this project was to find out if this organization had the arrogance and ignorance because of its decades of market leadership position. Symptoms of the market leadership dilemma were identified from literature research: blindness against changing market requirements, ignorance against customers and competitors, trend to conservatism, and tendency to arrogance and self-satisfaction. The reasons of this market leadership dilemma can be explained by the notion of Frey and Schulz-Hardt (1998) "gelernte Sorglosigkeit" (the learned carelessness), "Alles ist gut und wird auch in Zukunft gut bleiben" (everything is good and it will stay good in the future), or the attitudes of "nothing-willhappen-to-us".

During this project, eight employees in this business unit were interviewed at the individual level. Their internal images about how the business unit was functioning had been surfaced and articulated. It provoked individuals to rethink and look hard at the company's market position, competitive situation, people's behavior towards customers and so on. For example, a question concerning Blindness/Resistance was: How does our organization deal with the changing market trend? Questions regarding Arrogance were for example: What does our organization respond when the expectation of customers is different from us? How does our organization put in the customers' shoes and understand their needs?

No clear signals of this dilemma in this business unit had been sensed after using content analysis of the interviews. Nevertheless, it was recommended to develop and implement some prevention concerning active listening and competitor orientation. The result of the project was presented and discussed in a meeting with employees, and also published in the internal newsletter to raise the awareness of this market leadership dilemma.

3) Active Listening Workshop

A market orientation consists of one overriding value: the commitment by all members of the organization to continuously create superior value for customers. Creating a market orientation requires, first and foremost, implanting the core value of an organizational crossfunctional commitment to continuously create superior value for customers. And the second requirement is to develop the requisite resources, skills, and continuous learning to create superior value for customers and satisfy them.

Culture change depends on individual behavior change, and behavior changes derive from the beliefs (behavioral, normative, and control beliefs) as described in the theory of planned behavior. When members of the organization understand what is expected from them, what are the outcomes of the new behavior, how to actually do the new behaviors, given adequate support and opportunities, new intentions should be carried out.

Workshop can be very useful in discussing shared mental models, implanting espoused values, teaching new behaviors, and acting on the new behaviors. Active Listening Workshop was developed and offered to the organization as the intervention for customeroriented behaviors and interfunctional coordinated behaviors, from the premise of the core value to continuously create superior value for customers. Before each workshop, an invitation email from top management was sent out, and at the beginning of the workshop, this leader or manager opened the workshop by stating the importance of the Active Listening to the customers and to internal cooperation. During the workshop, a reflection of the consequence of listening actively and not listening actively took place. Real examples and experiences were shared among participants, thus awareness of why active listening was important was created. Then techniques including paraphrase, clarify, summarize, verbalize, weigh up, etc. were introduced; finally, participants were requested to apply the techniques in the real selected situations in different roles. Acting in different roles help participants to see things from other person's point of view, in this context, from external customers and internal colleagues. This "see our seeing" can lead to self-discovery of discrepancies. Through the procedure, people learned to efficiently identify customers and colleagues' real intention and needs in the discussions, consequently, transfer and deliver what others want.

In one year, 126 participants from 9 sessions (on average 14 participants in each session) participated in Active Listening Workshop. Workshops took place in 3 locations, in Germany where the headquarters is, then Singapore for Asia Pacific colleagues and as well as in the USA. In Germany, the majority of the workshops were held in German, and in the overseas locations the workshops in English. Overall, 95% of the participants rated 5 (Strongly Agree) or 4 (Agree) that it was a good workshop in a Likert scale with 5 points in

the evaluation of the workshop. The sessions consistently inspired a great deal of debate, emotion and energy among workshop members. Feedback after each workshop contributed to the continuous improvement of the next workshop. As more employees had completed the workshops, its relevance to the organization as a whole became clearer.

4) Competitor Orientation Workshop

From the results of pretest, changing organizational members' competitor orientation was identified as one of the priorities, because it was observed by the management that while competitors made aggressive movements, members in this business unit did not really show the awareness and behaviors, manifesting particularly in conducting competitor analysis, sharing the knowledge about competition, and accordingly taking actions in strategies including differentiation and positioning. As such, the top management decided to pay much more attention to this aspect. The goal of this workshop was to create awareness of its importance and common understanding of competitor orientation in this business unit. Rather than providing detailed knowhow on specific competitors, the workshop focuses on the behavioral side and gives hints on how to use competitive knowledge in day to day work.

Akin to Active Listening Workshop, an invitation email from a top leader was sent out to the participants before the workshop, and at the beginning of each session he made opening words to show the commitment to this topic. The workshop started officially with reflections on the firm's market leadership, in a frank discussion of potentially unpleasant facts about shrinking margins, decreasing market share, flat earnings, a lack of revenue growth, and aggressive competitors, etc. Afterwards, a short lecture on the competitor orientation with regards to the process and roles of the different functions was made. Competitor oriented behaviors include continuously observe the market, generate market intelligence by evaluation and interpretation, disseminate intelligence to the relevant people via various channels, finally differentiate and position accordingly at customers or take actions against competitors (for instance, concerning speed to market, aggressiveness in communication and anticipation of competitors' move, etc.) where necessary. Next, the participants were separated into different groups. Each group compared between the self-organization and competitors on one dimension, respectively in products/applications, financial figures and goto-market approach. After group discussions, each group presented in front of all the participants of that session. Hence, participants could self-explore the discrepancy and weakness by comparing the strongest competitor. This kind of understanding created pressure and anxiety, and thus reinforced the importance of this topic in participants' minds. In the final step, scenario planning technique was taught in combination with case studies, so that participants learned how to anticipate different moves of competitors and develop corresponding strategies.

123 participants from 8 sessions participated Competitor Orientation Workshop within half a year. Overall, around 85% of the participants strongly agreed (5) or agreed (4) it was a good workshop in a 5 points Likert scale. People made positive comments at the end of workshops, for example "Starting point for change of mindsets of this business unit", or "Systematic and first time to have training on the topic of competitors". After the workshops, following activities and practices manifested the competitor orientation in many aspects in the organization. For instance, particular categories about the information of competitors in the below mentioned knowledge tool was established. Fighting guides on certain products were generated and disseminated in the organization. Moreover, marketing communication was adjusted to a more assertive tone.

Nevertheless, some participants reported the lack of down-to-earth process of competitor orientation as well as insufficient commitment and support from management. Strategies and guidelines on how to behave more assertively or even aggressively needed to be developed and educated.

5) Internal Learning and Networking Platform

An internal learning tool, or a social media networking platform as an intervention for promoting market orientation was introduced to the organization across functions. It aims to generate, disseminate information and knowledge about customers, competitors, as well as to broadcast the news of internal business lines across the organization.

Four antecedents of promoting the adoption such kind of technological tool in an organization are identified by Kwahk and Kim (2008): performance expectancy (usefulness), effort expectancy (ease of use), organizational commitment, and perceived personal competence. Based on these factors, this learning tool is designed and characterized to share

knowledge fast, easily and interactively in open discussions. It fosters collaboration among functions and locations, and creates the identification in the community. In addition, introduction and demonstration of the tool were organized to make people feel comfortable to start using it.

Furthermore, Huy and Shipilov (2012) found out in their research that, internal social media initiatives must focus on developing emotional capital in order to be successful. Emotional capital is defined by them as the aggregate feelings of goodwill toward a company and the way it operates. Two out of the four pillars of emotional capital are extremely important to create the organizational commitment as an antecedent of IT tool change: the feelings of attachment and pride. Employees' attachment to the company is generated when employees feel that they belong to a community with shared values and interests. This is exactly one of the main goals of the collaboration platform. Pride is a feeling experienced when one's expertise and achievements are recognized and appreciated, and this helps motivate people to continue achieving in the future. In the networking tool, clicking the "like" button or the "one-liner" response to the employee' posts are two inexpensive symbolic responses but they significantly encourage people to continue to do so.

One year after the launch of the platform, more than 95% (around 140) of the employees in this business unit signed up for the platform. It was the most active community among other 220 communities at the corporate level (levels see Figure 1 in 3. Field of the Dissertation in Introductory Chapter). Nevertheless, as the community expanded and more data were posted, the maintenance of this platform became imminent. For example, pieces of information seemed to be more and more unstructured and chaotic when it becomes expanded in a category. Moreover, although hundreds of posts were generated, significantly less comments or replies were created. Feedback from employees, and support from cooperate level as well as from external consultants contributed to the continuous improvement of this platform with regards to the user-friendly layout and structure.

6) Business Innovation Activities

This organization realized the importance of business innovation besides innovation on technology. Business innovation according to the definition from this organization is the successful implementation of new business ideas beyond product and technology innovation, which creates value to existing or new customers, and also creates competitive differentiation and profitable growth for the organization itself. Huge efforts were put at the corporate level to foster this culture in different forms in the last two years, and this business unit was part of it. Innovation week at the corporate level annually presented various innovative ideas across IT, quality, business, and supply chain functions. Topics including internet of things, intelligent machines, big data, and system thinking (technical term) were tapped into discussions to inspire new business ideas. Business innovation teams across divisions exchanged knowledge and ideas from different industries, as well as facilitated ideas into applications and promoted this culture in the corporate.

At this business unit level (equate with organization level in this research), some experts gave speeches on relevant topics, for example, "How to deal with disruptive innovation and market adoption of disruptive solutions", "Making the difference with social media communications". Activities were running on a broader market approach, which included value chain optimization through innovative partnerships, extension of sales channels, etc. Business innovation culture activities started to roll out, which encouraged employees to present creative ideas on the "go-to-market approach" as well as "from product thinking to system understanding".

7) Performance Evaluation Tool

When Program 1 was about to reach the end, the expectations for "what" and "how" related to market orientation and entrepreneurial orientation were institutionalized in a tool at the organization level which was used to annually evaluate the individual employee's performance. These expectations were defined jointly with top leaders and some managers, subsequently cascaded down to all middle managers and finally to each individual's annual performance evaluation dialogue. By formalizing values and behaviors in the employees' performance evaluation process, it explicitly recognized and rewarded those behaviors.

To be more specific, main aspects in "what" for all of the members of the organization (incl. managers and employees) were: 1) value proposition and differentiation: clear identification of value drivers for (end) customers as well as technical and non-technical key success factors for target groups; reflection of these value drivers and success factors in product positioning and strategy; 2) competitor orientation: consideration of key competitor

strategies and their anticipated moves in marketing, business development and sales approaches; 3) customer strategy: development of regional customers beyond key accounts in line with segment-specific customer strategy; 4) communication/branding: personal contribution and active participation in sales-supporting communication and branding activities (e.g., external events, speeches in conferences, internet promotions, campaigns).

The main aspects on "how" for managers are: 1) team up for best results: active participation in change management process (behavioural change) to further develop go-to-market approach; 2) focus on the customers: derive department specific strategies to support modified go-to-market approach; 3) foster talents: competence analysis on team level to derive development plans for underdeveloped skills & competences (talent management/ development). Main aspects on "how" for employees are: 1) foster talents: identification of development fields and active development of own talents in focus areas; 2) team up for best results: proactive enabling of customer-interfacing functions to present products and competences; 3) be ambitious and manage risks: properly assess requirements and own capabilities, when starting new things.

8) Global Management Alignment Meeting (Launch of Program 2)

After two years of Program 1, the management realized the need to engage themselves more in the go-to-market approach and decided to initiate a more fundamental change in the whole organization. The global management alignment meeting was an official starting point for Program 2 in the context of go-to-market approach. Over 100 managers participated in at two days meeting (including managers from other functions e.g., R&D). On the first day, top leaders clearly showed that financial performance of this unit did not meet the target of the year. This message on discrepancy induced the belief that if people in the organization did not change, not only the unfavorable personal consequences would follow, but also the organization might threat to fail. In knowing that overemphasizing the gap can produce counterproductive energy and decrease the morale of members (because individuals need to have controlled beliefs that they are capable of performing activities), top leaders bolstered confidence that with collective efforts and capabilities they would make achievements on the second day of the meeting. They shared stories from their own experiences and showed a genuine respect and belief that every employee in the organization could contribute to the organization's future.

Emotions were intensively aroused in these two days. Financial figures offered the rationale to change, whereas a picture with a fish jumping from a small bowl to a bigger bowl sent out the message very emotionally that "if we don't leap and change, and if we don't do our business differently, we will fail." In the following demarcation activity, some members from top leaders and coalition jumped into the lake nearby the meeting room which showcased the management's commitment to change program. This activity induced surprise and excitement among participants thus helped to foster trust in the leadership. Next, the goal to be "A strong and winning team `wow` our customers and make them successful!" delivered passion towards customers. Market and entrepreneurial orientation were emphasized here: with joint efforts, enable customers to be successful, by not only meeting their needs but also surprising them and helping them to explore their needs. Behavior norms were outlined afterwards and include, for instance, understand the requirements of customers and emerging applications, extend the customer base, etc.

In the following weeks, continuous communication about the change purpose, values and behavioral norms for the change was delivered via emails, organization's newsletter and public quarterly gatherings.

9) Group Activity

A number of activities took place at group levels. For example, in one group workshop, a manager delivered the change target "to be a winning team" from the organizational to the group level. In this workshop, group members tailored the organizationwide target to their group. They identified two major issues on interfunctional coordination: improve team work and regional empowerment. Through open discussions and reflection, they agreed on the action items in meeting culture, decision making and information sharing. Furthermore, they decided to empower the regions to become an independent and fully responsible unit in the local market. Dedicated responsible persons were assigned with action items and deadline.

10) Following Activities

Several sub-projects were defined to tackle the most important issues. Some of them were in the scope of fostering the market orientation, to be more specific, "Strengthen all areas of customer interaction" could be classified into customer orientation, and "Alignment between headquarter and regions" into interfunctional coordination. Other sub-projects focus on entrepreneurial orientation, for instance, "Broader market - be successful in all sales channels", or "Young radicals – utilize unorthodox thinking and business ideas" which encourages unconventional thinking and tolerance of risks in experimentation. These sub-projects independently gather concepts and specific business results. They continuously make quick change wins and foster culture on a sustainable basis by the time of this writing. Teams in these sub-projects benefit from broad participation, experience and expertise across different functions and regions.

When the change is created, it should be continuously communicated. Continuous communication by involving people actively and meaningfully in the change process can help them to see the connections between their personal contributions to the overall organizational performance. It creates transparency on the progress of change, thus nurturing employees' trust in the management and confidence in the success of change. In the Program 2, the top management and the project managers regularly communicated the updates via emails, newsletters, social media platform/learning and networking tool, as well as in face-to-face meetings. Top leaders consistently showed their commitment as role models. Employees were invited to give feedback and make contributions to the program. For instance, employees were invited to share their business ideas in a poster or in front of the plenum in an innovation event of the company. Dialogues and communication between headquarters and regions were stressed as the essential part of the program. A high degree of interest and involvement in the change program was perceived in the regional workshops.

Table1 summarizes the aforementioned intervention examples with the scope with regards to the constructs, the change level and the purpose.

Table 1. Examples of	Intervention at	Multilevel on	Market	Orientation	and Entreprene	eurial
Orientation						

	Intervention Example	Construct	Change Level	Purpose
1	Pretest & feedback-start Program 1	MO, EO	Organizational	Create awareness
2	Project "market leadership dilemma"	MO, EO	Individual, organizational	Create sense of agency, share mental models
3	Active listening workshop	MO (focus on customer orientation and interfunctional coordination)	Individual	Strengthen values, behaviors, and skills
4	Competitor orientation workshop	MO (focus on competitor orientation)	Individual	Strengthen values, behaviors, and skills
5	Social media platform	МО	Organizational	Foster internal learning about markets and networking across functions as well as regions
6	Business innovation activities	EO	Organizational	Nurture the entrepreneurial spirit
7	Performance evaluation tool	MO,EO	Organizational, group, individual	Institutionalize and evaluate the performance
8	Global management alignment meeting program-start Program 2	MO, EO	Organizational, group	Create sense of agency, set goals in the management teams
9	Group activity	MO (focus on interfunctional coordination)	Group	Improve team work and regional empowerment
10	Follow-up activities	EO, MO	Organizational	Involve employees in various sub- projects

Note. MO = Market Orientation, EO = Entrepreneurial Orientation

3.3 Instrument

A posttest was conducted after one and half years' interventions from programs. The same instrument as the one in the first study was adopted. Detailed questionnaire see Appendix 1.

4 Results

4.1 Organization-wide Perception of Culture and Business Performance between Both Tests

Paired samples t-test was conducted in SPSS to find out if there were significant differences of participants' perceptions concerning market orientation, entrepreneurial orientation and subjective business performance between pre- and posttests. Table 2 shows an overview of the descriptive statistics with means and standard deviations for both tests.

Overall, it can be seen that market orientation's dimensions were slightly higher than entrepreneurial orientation in this business unit.

Variable	Two conditions	Μ	SD
Market-oriented Values	Pretest	4.54	0.69
Warket-oriented values	Posttest	4.50	0.81
Customer-oriented Behaviors	Pretest	4.00	0.77
Customer-oriented Benaviors	Posttest	4.01	0.94
	Pretest	3.70	0.97
Competitor-oriented Behaviors	Posttest	3.85	0.96
Interfunctional-coordinated	Pretest	3.86	0.85
Behaviors	Posttest	3.94	0.86
Entrepreneurial-oriented	Pretest	4.06	0.63
Values	Posttest	4.33	0.78
	Pretest	3.90	0.87
Taking Innovativeness	Posttest	3.71	1.15
	Pretest	3.66	0.95
Taking Proactiveness	Posttest	3.65	1.07
	Pretest	3.34	1.00
Risk-taking Behaviors	Posttest	3.50	1.20
Subjective Business	Pretest	3.81	0.79
Performance	Posttest	3.64	0.95

Table 2. Descriptive Statistics for Pretest and Posttest (N = 93)

Note. M = Mean, SD = Standard Deviation. The same as follows.

Table 3 shows no significant differences between the means of pretest and posttest at significance level p < .05. This means there was no significant change perceived by the organization-wide participants in the culture and performance after interventions. As a result, the hypotheses of this study, including significant increases in organization-wide perception of market orientation, entrepreneurial orientation and subjective business performance from pretest to posttest, were not supported.

Variable	D.:	Paired Differences				
	Pairs	М	SD	t	Df	Sig. (2-tailed)
Market-oriented Values	Pretest - Posttest	0.05	0.87	0.52	92	.607
Customer-oriented Behaviors	Pretest - Posttest	-0.01	1.02	-0.11	92	.914
Competitor-oriented Behaviors	Pretest - Posttest	-0.15	1.25	-1.16	92	.250
Interfunctional-coordinated Behaviors	Pretest - Posttest	-0.08	1.02	-0.77	92	.443
Entrepreneurial-oriented Values	Pretest - Posttest	-0.12	0.96	-1.18	92	.242
Taking Innovativeness	Pretest - Posttest	0.20	1.22	1.54	92	.126
Taking Proactiveness	Pretest - Posttest	0.01	1.26	0.07	92	.947
Risk-taking Behaviors	Pretest - Posttest	-0.17	1.33	-1.20	92	.233
Subjective Business Performance	Pretest - Posttest	0.17	1.12	-0.61	92	.541

Table 3. *Mean Differences between Pretest and Posttest* (N = 93)

4.2 Group Differences in Perception of Culture and Business Performance in Both Tests

However, when further conducting paired samples t-test in each regional or functional group between its pre- and posttest, several significant differences were found (see Table 4). It shows that while employees in Europe rated significantly lower in taking innovativeness and subjective business performance after interventions, employees in Asia perceived significant higher in organization's entrepreneurial-oriented values and risk-taking behaviors after interventions. In addition, the technical/innovation group perceived business performance much lower after interventions.

Region/	Variable	Paired Di	fferences		Sig. (2-
Responsibility	, unable	Μ	SD	df	tailed)
Europe	Taking Innovativeness1 - Taking Innovativeness2	.33	1.13	55	.032
Europe	Subjective Business Performance1 - Subjective Business Performancee2	.34	1.11	55	.024
Asia	Entrepreneurial-oriented Values1 - Entrepreneurial-oriented Values2	41	1.00	28	.035
Asia	Risk-taking Behaviors1 - Risk-taking Behaviors2	45	1.13	28	.042
Technical/ Innovation	Subjective Business Performance1 - Subjective Business Performance2	.60	1.15	18	.035

Table 4. Significant Mean Differences of Groups between Pretest and Posttest Based onResponsibilities or Regions

Note. 1 = pretest, 2 = posttest. Mean difference = pretest - posttest

Afterwards, one way ANOVA and Post Hoc Tests with the use of LSD were conducted to see if group differences resulting from responsibilities and regions existed in respective tests. A few of significant differences have been explored and presented in Table 5 and Table 6 (p < .05).

As indicated from Table 5 for pretest, employees from sales group perceived much higher than those from marketing group on organizational culture (values and behaviors in market orientation and entrepreneurial orientation) and subjective business performance. Particularly, employees from sales group evaluated significantly higher in organizational interfunctional-coordinated behaviors than marketing and technical/innovation employees, which means that sales employees felt much better about the cooperation among functions and regions in the organization than people from other two groups. In entrepreneurial orientation, sales employees again rated more positively in the entrepreneurial-oriented values of this organization than marketing and technical/innovation employees. Furthermore, sales participants perceived more positively pertaining to entrepreneurial behaviors in innovativeness and risk-taking than those from marketing. Finally, participants from sales group evaluated more positively in the subjective business performance than those from marketing group. In addition, only one significant difference was noted among different locations, which was between Asia and Europe regarding their perceptions of market-oriented values of the organization.

Variable	Responsibility/ Region? (1)	Responsibility/ Region? (2)	MD (1-2)	Sig.
	0.1.	Marketing	0.61	.003
Interfunctional-coordinated Behaviors	Sales	Technical/Innovation	0.66	.007
		Marketing	0.31	.046
Entrepreneurial-oriented Values	Sales	Technical/Innovation	0.40	.030
Taking Innovativeness	Sales	Marketing	0.56	.009
Risk-taking Behaviors	Sales	Marketing	0.50	.041
Subjective Business Performance	Sales	Marketing	0.50	.011
Market-oriented Values	Asia	Europe	0.35	.028

Table 5. Significant Group Differences in Pretest Based on Responsibilities or Regions

Note. MD (Mean Difference) = pretest - posttest. Primary responsibility: N (Marketing) = 39, N (Technical/Innovation) = 19, N (Sales) = 28, N (Management) = 7. Region: N (Europe) = 56, N (Asia) = 29.

As shown in Table 6, more significant differences were observed among regions in the posttest, especially between Asia and Europe, in interfunctional-coordinated behaviors, entrepreneurial-oriented values and subjective business performance. Among functions or

responsibilities, participants from sales were again generally more positive than those from marketing and technical/innovation, for instance, they rated much higher in three behavioral

Variable	Responsibility/ Region (1)	Responsibility/ Region (2)	MD (1-2)	Sig.
Market-oriented Values	Sales	Marketing	0.45	.024
Customer-oriented Behaviors	Sales	Marketing	0.52	.027
Interfunctional-coordinated Behaviors	Sales	Marketing Technical/Innovation	0.53 0.56	.012 .028
Entrepreneurial-oriented Values	Sales	Technical/Innovation	0.51	.042
Taking Innovativeness	Sales	Marketing	0.66	.019
	Sales	Technical/Innovation	0.90	.008
	Sales	Marketing	0.59	.021
Taking Proactiveness	Sales	Technical/Innovation	1.06	.001
	Management	Technical/Innovation	1.09	.016
Risk-taking Behaviors	Sales	Marketing	0.64	.030
	Sales	Technical/Innovation	0.78	.028
Subjective Business	Sales	Marketing	0.47	.042
Performance	Sales	Technical/Innovation	0.70	.013
Market-orientated Values	Asia	Europe	0.39	.035
Interfunctional-coordinated Behaviors	Asia	Europe	0.48	.014
Entrepreneurial Values	Asia	Europe	0.49	.010
Subjective Business Performance	Asia	Europe	0.51	.019

Table 6. Significant Group Differences in Posttest Based on Responsibilities or Regions

Note. Primary responsibility: N (Marketing) = 39, N (Technical/Innovation) = 19, N (Sales) = 28, N (Management) = 7. Region: N (Europe) = 56, N (Asia) = 29

dimensions of organization's entrepreneurial orientation. Two more significant differences in posttest than in pretest occurred between sales and marketing groups, namely, market-oriented values and customer-oriented behaviors. A striking difference had been found in taking proactiveness behaviors. While in pretest no any significant difference among groups was found in proactiveness, in posttest sales had more positive evaluation than those from marketing and technical/innovation functions, and management evaluated more positively than technical/innovation participants.

4.3 Individual Differences in Perception of Culture and Business Performance between Both Tests

Table 7 presents that results of most of the constructs are correlated but with very small significant correlation coefficients between both tests, and some of them are not significant, for example, competitor-oriented behaviors, entrepreneurial-oriented values and subjective business performance (significance level p < .05).

Variable	Two conditions	Correlation	Sig.
Market-oriented Values	Pretest & Posttest	0.33	.001
Customer-oriented Behaviors	Pretest & Posttest	0.30	.004
Competitor-oriented Behaviors	Pretest & Posttest	0.15	.149
Interfunctional-coordinated Behaviors	Pretest & Posttest	0.29	.004
Entrepreneurial-oriented Values	Pretest & Posttest	0.15	.145
Taking Innovativeness	Pretest & Posttest	0.30	.004
Taking Proactiveness	Pretest & Posttest	0.23	.027
Risk-taking Behaviors	Pretest & Posttest	0.28	.007
Subjective Business Performance	Pretest & Posttest	0.18	.091

Table 7. Intercorrelations between Pretest and Posttest in organization-wide perception of market orientation, entrepreneurial orientation and subjective business performance

Since the correlations are so low (coefficients r ranges from .15 to .33), it might indicate that there were a lot of changes in people's perceptions of culture and performance. Figure 2 drawn from simple scatterplot indeed shows the heterogeneous changes on the individual perceptions. Those points above the reference line in each diagram illustrate that people rated lower in posttest compared with pretest, whereas points are below the reference line means that people rated higher in posttest than in pretest. The overall observation from these diagrams is that most of the employees changed their perceptions toward organizational culture and performance over time. Nevertheless, the number of positive changes and the number of negative changes are almost equal, because in the figure 2 the amount of points below and above the reference lines are generally very close to each other. No systematic trend can be inferred either. As such, it implies that interventions may have different effects on people.

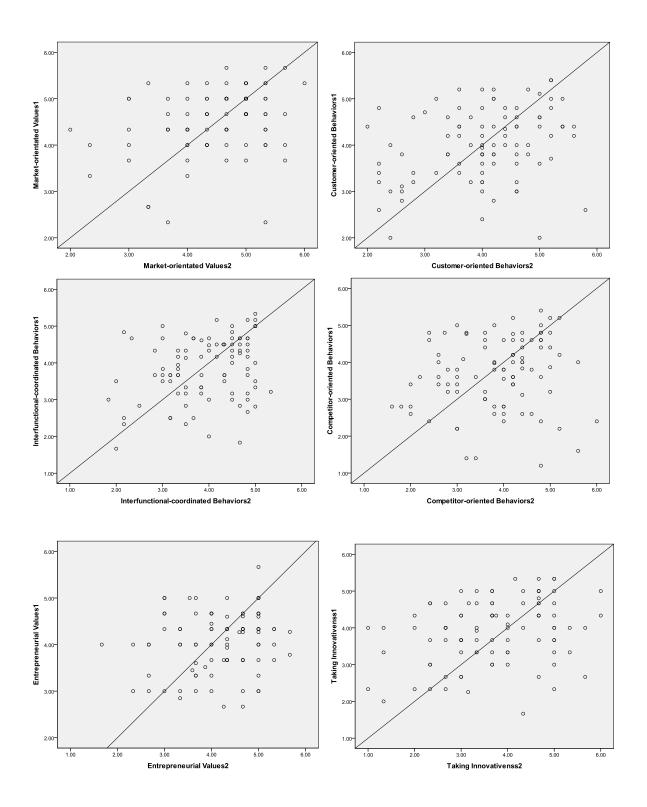


Figure 4. Simple Scatterplot of Pre- and Posttest in Culture Elements and Subjective Business Performance (to be continued)

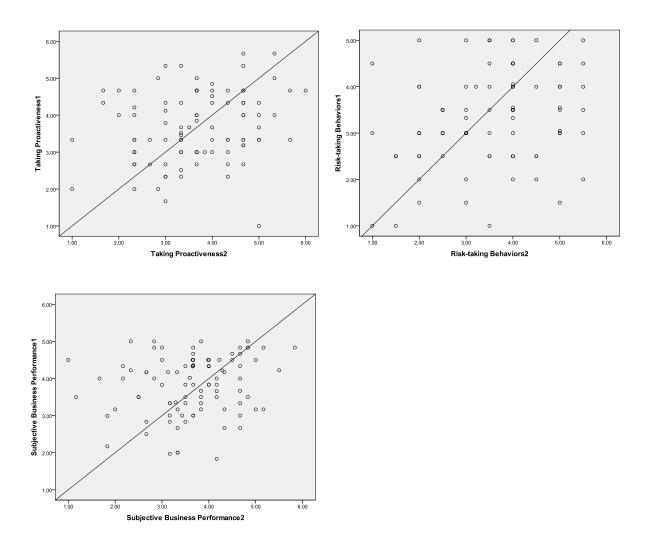


Figure 4. Simple Scatterplot of Pre- and Posttest in Culture Elements and Subjective Business Performance

5 Discussion

The aim of this study is to gain insights into the effects of change interventions on employees' perception of market orientation, entrepreneurial orientation and subjective business performance. Change interventions were initiated by management in the organization in cooperation with external consultants, partially developed by the author of this dissertation and implemented in the organization. The target group participated in the pretest, attended activities and completed posttest. Overall, no significant changes of organization-wide perceptions of the culture and performance have been found by conducting paired samples t-test. Therefore, hypotheses were not supported. Surely, the goal and the appropriateness of the change programs especially from the Program 1 could be questioned. However, discussion in this section mainly focuses on other reasons, because the appropriateness of the programs is going to be examined in the next study.

First, culture change is the toughest task and takes a long time, because it is formed over years of interaction between the participants in the organization. Organizational culture change concerning market orientation and entrepreneurial orientation focuses on the change of mindsets, values, attitudes and behaviors. Hence, it is not surprising that no significant organization-wide changes within two years were perceived. Noteworthy to mention is that even though no big effects occur for the time being, it does not necessarily mean that interventions or change initiatives have no impact on culture change in the longer term. Dynamic complexity according to Scharmer (2007) describes "a systematic distance or delay between cause and effect in space or time" (p. 59). In other words, a lagged effect can exist between an intervention and the result. An open comment from posttest confirmed that "result should be measurable in revenue and profitability.... and will be visible in a year or so..."

Second, it is evident that the commitment from leadership during Program 1 was significantly less than in Program 2. It was probably another potential reason that change initiatives were not widely influential. Jaworski and Kohli (1993) found out that top management emphasis on market orientation would enhance the level of market orientation in the organization. Day (1994) suggested that market-driven behavior is more likely to occur when top management is committed to and involved in the process. Moreover, literature in entrepreneurial orientation indicates that managers or entrepreneurs are often been viewed as the key components in the entrepreneurship theory and models of the entrepreneurial process (e.g., Covin & Slevin, 1991).

The third reason for non-significant increase in the employees' perception of the culture could be due to the change results tend to be linked with the business results particularly in these sales and marketing functions. In other words, if the business results continue to stagnate, focusing on only culture change in the organization without strategic and

operational change, organizations members may become disinterested in the change on the culture as a "soft factor". As such, it is plausible for them to think non-significant change effects have been carried out.

Fourth, when explaining the absence of significant increase in the subjective business performance, external environment needs to be taken into account, because it may moderate the effects of interventions on the change. It is evident that this business unit indeed experienced aggressive competition in the passing year. Business cycle played an important role in affecting business performance. When the entire market was in downturn, the internal climate and financial performance of the organization was impacted in a negative way. As such, the perceived culture and business performance tend to decrease.

Although no significant increase was observed at the organizational level, a number of group differences in the perceptions of culture have been found. In general, sales respondents rated much higher than those from marketing or technical/innovation functions in both preand posttests. For example, constructs of interfuntional-coordinated behaviors, three entrepreneurial behaviors and the subjective business performance were rated much higher by sales group than the other groups in posttest. One potential reason for this job function effect could be that sales respondents are more optimistic in perceiving organizational culture and organizational performance than the other groups. It might be a tendency that sales persons have more contacts with customers, and are more perseverant to get business opportunities. They might be more open, extravert and optimistic in their personalities or psychological disposition. While sales strive for getting as many projects as possible, marketing employees in this business unit typically search for the balance between the investment and profit, and look at those projects in a more stringent way. In this context, marketing employees sometimes say "no" to sales employers for certain projects. Likely, employees who work in technical function probably tend to be more analytical than sales. These may contribute to explain why sales group generally rated higher than the other groups.

In addition, respondents from Asia rated much higher than those from Europe especially in posttest on the market and entrepreneurial-oriented values, interfunctionalcoordinated behaviors as well as subjective business performance. It was found from the paired samples t-test that the group of Asia was the only group which evaluated significantly higher in posttest than in pretest, with regards to organization's entrepreneurial-oriented values and risk-taking behaviors after interventions. A plausible explanation could be that because market was emerging in Asia and more business and opportunities were undergoing there, employees were generally more optimistic. Moreover, the empowerment of region was an essential part for Program 2, so employees from Asia might feel more recognized and empowered. As a result, they tended to have more optimistic perceptions towards the whole organizational culture and performance.

Furthermore, by looking at individuals in the scatterplot, it can be inferred that a lot of heterogeneous changes took place and negative and positive changes were almost equal. Hardly could a systematic trend be inferred because people had diverse views after the change interventions. As such, it might imply that interventions may have different effects on people.

5.1 Research Limitations and Theoretical Implications

One of the limitations of this study is that the sample size was rather small especially in some of the groups (e.g., management group has 7 participants, Americas group has 9 participants. Details see 3.1 Participants in Study 1), which causes the difficulty in yielding significant differences among groups. Moreover, to examine cultural change effects, future research needs to be spent longer time.

The other limitation is that the quantitative method is difficult to measure organizational culture change pertaining to market orientation and entrepreneurial orientation. As Martin (2002) noted, "people seldom agree on more than a few aspects of culture and the rest are beset by paradox, inconsistency, contradiction and ambiguity" (p. 451). That can be supported by some open comments from participants in the survey. For example, with regards to interfunctional-coordinated behaviors, one participant commented that "the reason for me to select `Slightly Disagree` is that the products that are being produced are very much segmented into individual business group. There is no `convergence` even though we preach that `convergence` is coming. It seems that three business lines are running individually." Moreover, as discussed in the first study, national culture might moderate the effects as well. In this sense, a varying range of perceptions regarding market orientation and entrepreneurial orientation in functions and regions led to the inconsistency and ambiguity. In addition, in the present study, individual subjective evaluation of the organizational business performance

might result in bias because people tend to involve emotions and feelings when rating. Furthermore, because organizational culture change can be broad and pervasive in many aspects, measuring all of them is impossible. Even if some activities have been rolled out in certain aspects of the culture, when other aspects have not been tapped into within short time, the perceptions of culture could be rated still low. For example, in the customer orientation section, one participant suggested to cover other topics for instance "customers" customers" (end customers) and distributors instead of only customers. Taken all together, a qualitative study with interviews would be a good approach to get more insights of the organizational culture change.

5.2 Managerial Implications

A high degree of variation on the perceptions among groups and individuals showed that group of stakeholders and their interests were very diverse and heterogeneous. That means, social complexity was very high, thus all of their voices must be heard and taken into account. Therefore, on a managerial level, a multi-stakeholder approach is more suitable. Systemic change management as part of a multi-stakeholder approach was thus used in the Program 2. More than 90 employees were interviewed to investigate what were the dilemmas which contributed to the future change initiatives.

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Study 3: Change Readiness on Market Orientation and Entrepreneurial Orientation: A Qualitative Study

1 Introduction

As long as an organizational change has been implemented, periodic evaluation on whether the changing effort influencing change recipients' beliefs and attitudes, helping them to internalize those values into their own to engage in the upcoming change are necessary, so that remedial actions or midcourse corrections can be accordingly planned and executed. Change readiness is the "cognitive precursor to the behaviors of either resistance to, or support for, a change effort.is reflected in organizational members' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully make those changes" (Armenakis, Harris, & Mossholder, 1993, p. 681), or put differently, it is "a mindset that exists among employees during the implementation of organizational changes" (Armenakis & Fredenberger, 1997, p. 144).

A belief is "an opinion or a conviction about the truth of something that may not be readily obvious or subject to systematic verification" (Armenakis, Bernerth, Pitts, & Walker, 2007, p. 112). For example, a description of an organizational outcome, event, or act by someone is subject to being believed by other persons. Five important beliefs that determine the degree of change readiness or the buy-in from organizational change recipients were identified by Armenakis and Harris (2002), namely, a sense of discrepancy (belief that change is needed), appropriateness (belief that change is appropriate to a situation), efficacy (perceived capability to implement a change initiative), principle support (belief in support from peers and supervisors to change) and valence (evaluation of the benefits or costs of a change). In the literature review part, these five beliefs on the change readiness will be explained.

One of the limitations in the research area of change readiness is that, while change has cognitive, affective and behavioral components, the affective facet has been frequently overlooked (Piderit, 2000; Szabla, 2007). Crites, Fabringar, and Petty (1994) claimed that

affect comprises discrete, qualitatively different emotions. To name a few for positive affect, they are love, delight, happiness, calmness, excitement, joy; and negative ones, they are hate, sadness, annoyance, boredom, anger, acceptance, disgust, and sorrow, etc. Rafferty, Jimmieson, and Armenakis (2013) concluded that researchers have paid much less attention to employees' emotional element to change attitude. For example, Armenakis et al.'s (1993) definition of change readiness does not address the affective component. However, more recently, Holt, Armenakis, Field, and Harris (2007) defined change readiness as "the extent to which an individual or individuals are cognitively and emotionally inclined to accept, embrace, and adopt a particular plan to purposefully alter the status quo" (p. 235).

According to Smollan and Sayers (2009), organizational culture is developed with emotion and, therefore, cultural change involves a high degree and a large variety of emotions. By looking at how people experienced the emotions in the change will surely offer more insights into people's attitudes and intention on the change, and thus enlighten practitioners on how to more sensitively manage them during a change. Due to the fact that this study was conducted to evaluate the midcourse of the change, affective change readiness is proposed to look at the change recipient's reactions to current experience of change initiatives, as well as towards the prospect of coming change.

The second major limitation of the change readiness literature is that while a number of researchers have acknowledged that organizational change efforts inherently involve multilevel processes, specifically, from micro or individual level, meso or group level, and macro or organizational level (Caldwell, Yi, Fedor, & Herold, 2009; Pettigrew, Woodman, & Cameron, 2001; Whelan-Barry, Gordon, & Hinings, 2003), very few have reflected change readiness from this multilevel perspective. Since the level of concept and measurement have dominantly been at the individual level for studying change readiness, researchers often use these data to interpret the change readiness at the organizational level (Bouckenooghe, 2010). This could be problematic, according to Ostroff (1993), as the analysis of relationships at one level may be stronger or weaker at a different level of analysis. It is only until very recently, a growing cohort of researchers like Rafferty et al. (2013) and Vakola (2013) started to look at the levels of change readiness from conceptual approach. Vakola (2013) argued that individual readiness to change has to be explored along with group readiness to change, because an individual is not isolated from the groups with which he/she may identify. While micro level refers to the individual's perception change, the meso level represents a group's capacity and decision to support change, and the macro level refers to an organization's capability of implementing change (Judge, Thoresen, Pucik, & Welbourne, 1999; Oreg, 2003; Wanberg & Banas, 2000; Vakola & Nikolaou, 2005).

The purpose of this qualitative study is thus mainly to fill the aforementioned two research gaps by reporting the findings of interviews in a business unit (which is treated as an organization in this dissertation; see introductory chapter, 3. field of the dissertation), that is, to examine the change readiness from both cognitive and affective components at multilevel. This business unit had been experiencing an organizational change in terms of go-to-market approach, as described in the second study.

This study contributes to change readiness research in three ways. First, it includes the examination of affective component or emotional responses of change readiness besides the cognitive part for the overall evaluative judgment towards the change. That adds the horizontal aspect pertaining to the content of readiness. Second, a multilevel approach is adopted to investigate different levels of readiness. That adds the vertical aspect in terms of the approach to examine readiness. Based on the previous two contributions, change readiness will be investigated in a more holistic way, and implications for obtaining future buy-in are thus drawn. Third, by adopting the qualitative method, more insights with regards to the organization's mindsets/mental models, attitudes of organizational culture change were tapped into, which were limited to explore in the second quantitative study. As a result, critical issues regarding the change programs, market orientation and entrepreneurial orientation in this organization have been identified for the relevance of managerial implications.

The rest of this study is organized as follows: it starts with literature review on the five change recipients' beliefs as cognitive component of change readiness, the affective component of change readiness, as well as the multilevel on change readiness. Then, the method including content analysis is introduced. Afterwards, results and discussion are presented based on the findings of the interviews. Finally, it ends with conclusion and implications for the managerial aspects and future research avenues.

2 Literature Review

2.1 Cognitive Component of Change Readiness

Profitability and business results are the ultimate goals for most of organizational change initiatives. Nevertheless, criteria that can be evaluated in the short term to gauge change recipients' readiness to an organizational transformation may be preferred. Especially for such a cultural change in market orientation and entrepreneurship, evaluating employees' attitudes and beliefs can produce richer and more descriptive information, and reveal critical points during the intervention planning and implementation. Thus, it serves as corrections for the future oriented change.

In view of the underlying importance of the evaluation, it is critical to know what types of criteria are most suitable for the analysis of recently implemented organizational change. Numerous models of organizational effectiveness (Lewin & Minton, 1986) can be used to guide change planning and assessment activities. Among these, Armenakis and Bedeian (1999), Armenakis et al. (1999, 2007) proposed a set of five key change beliefs to study reactions and readiness of organizational change recipients. This framework can serve two following purposes. One is to help the change practitioners to take the necessary actions during the phases of readiness, adoption and institutionalization of a change effort in order to facilitate positive beliefs of change recipients (Armenakis & Bedeian, 1999). The other one is to monitor the progress of a change effort. The following section will explain each change belief in details from theoretical point of view and primary at the individual level.

Discrepancy is the term describing a difference or a gap between current and desired performance. Once the belief of discrepancy exists, a specific organizational change is necessary to eliminate the discrepancy. A number of organizational scientists, to name a few, Bandura (1986), Kotter (1995), Bartunek, Rousseau, Rudolph and DePalma (2006), Rafferty and Griffin (2006), Rousseau and Tijoriwala (1999) agreed with this argument that employees must believe that a need for change exists.

Some researchers use other phraseology alike to Discrepancy, such as intellectual pain (Nadler & Tushmann, 1989) or organizational failure (Bandura, 1982). Among practitioners, it is referred to as, for example, the "burning platform" by Kotter (1995), which is a sense of

urgency for change. Change recipients' beliefs about discrepancy can be influenced by what Bies (1987) labeled as social accounts, that is, the information should be given by change agents to illustrate why an organizational change is needed. Nevertheless, showing how the current performance differs from the desired state should be consistent with relevant contextual factors, for example, increased competition, depressed economic conditions, etc. (Armenakis, 1993).

Appropriateness. In addition to believing a discrepancy exists, individuals must believe that the specific organizational change being proposed is an appropriate response to a situation and effectively addresses the discrepancy. In other words, appropriateness is to describe whether the proposed or implemented change is/was the correct one to the current situation. If it is appropriate, there may be some evidence that change is having or believed to have the desired effect on the organization.

Several aspects related to appropriateness can be drawn from literature. The first requirement is to realize the uniqueness of a given situation, according to early work by Kepner and Tregoe (1965). Because of this uniqueness, a corrective action should be matched to a specific situation. However, many managers select change initiatives based on the actions of other progressive managers to have a quick fix (e.g., Abrahamson, 1996; Ghoshal & Bartlett, 1996), rather than conducting a systematic analysis of their own unique situation. Such fads do little to get buy-in from employees to the change efforts.

The second requirement is proper depth of interventions, suggested by Harrison (1970). Depth represents the extent to which participants emotionally involve in change interventions, with value laden and central to the individual's sense of self. For example, operations analysis is relatively shallower than task-group therapy (Armenakis et al., 2007). This is in line with the internalization and integration of values and behavioral regulations from self-determination theory (Deci & Ryan, 1985). "Internalization is the process of taking in a value or regulation, and integration is the process by which individuals fully transform the regulation into their own so that it will emanate from their sense of self" (Ryan & Deci, 2000, p. 60). According to them, the concept of internalization describes how one's motivation for a behavior can range from unwillingness, to passive compliance, to active personal commitment in a continuum. Therefore, the more a change initiative involves

internalization, the more positive self-perceptions, greater persistence and engagement in proposed change people will have.

More recent empirical evidence supporting the salience of appropriateness can be found in Rousseau and Tijoriwala (1999), Bartunek et al. (2006), and Rafferty and Griffin (2006). Rafferty and Griffin, for example, found that change recipients expressed less uncertainty, when an organizational change was perceived as being implemented through careful deliberation and planning.

Efficacy. It refers to the perceived capability to implement the change initiative (Bandura, 1982). While realizing that a discrepancy can be a powerful motivator for change, it can on the hand result in counterproductive energy or defensive reactions, like denial, fight, or withdrawal (Nadler & Tushman, 1989). To minimize the possibility of the defensive reactions, a sense of efficacy should be created among individuals, which means, individuals must feel that success is possible in order to be motivated to support a change. Bandura (1982) stated that human-beings undertake and perform activities that they are confident in. In contrast, people tend to avoid activities that they believe exceed their coping capabilities. In his social learning theory, Bandura claimed that employees who feel comfortable with their present skills must believe that, a different skill or behavior required to successfully execute in the change can be also learned and mastered, so that they will be able to regain the comfort prior to the change.

A sense of efficacy is a central tenet of most motivation theories, for example, in the self-determination theory, Ryan and Deci (2000) claimed that feeling competent is one of the three human beings' basic psychological needs to maintain and enhance intrinsic motivation, and internalize extrinsic motivation as well. In Vroom's (1964) expectancy theory, with the expectance that effort will lead to successful accomplishment, an individual chooses behaviors based on his/her self-efficacy, goal's difficulty, and perceived control.

Therefore, in creating readiness, change agents must not only communicate the discrepancy and the need for change, but also bolster the efficacy of employees that they are capable of executing the new behaviors required by change initiatives. Otherwise, the outcome of a change initiative may be less than expected. The role of efficacy in the organizational change has been evident in many studies, to name a few, Eby, Adams, Russell,

and Gaby (2000); Jansen (2004); Jimmieson, Terry, and Callan (2004); and McGuire and Hutchins (2006).

Principal Support. Armenakis et al. (2007) defined it as to which degree the support from the change agents, organizational leaders, immediate managers and respected peers is perceived by individuals. Social learning theory (Bandura, 1986) describes that through interpersonal networks, people observe and sense others in their behaviors, verbal and nonverbal cues before engaging themselves in a particular behavior. Support from the networks thus influences one's belief and attitude with regards to the change. Behavioral integrity (Simons, 2002), or a common phrase "walking the talk", is the alignment of words and deeds. Leaders play an important role in followers' behavior and are likely to serve as role model. Furthermore, research demonstrates that opinion leaders or respected colleagues play an important role in organizational change as a source of information for the other peers, thus facilitating the success of organizational changes (e.g., Lam & Schaubroeck, 2000; Salancik & Pfeffer, 1978). Employees interacting with change agents and respected peers are searching for evidence for support of change. If the individuals believe principal support (i.e., among the global and local change agents as well as the opinion leaders) for the change is inadequate, they will feel less motivated or even stop to embrace the change initiative.

In the marketing research, it is found out that leaders who exhibit market-driven behaviors and attitudes facilitate followers' market-driven learning (e.g., Manz & Sims, 1981; Weiss, 1977). Lam, Kraus, and Ahearne (2010) confirmed that top managers serve as market-oriented role models to middle managers and work-group expert peers; in turn, these observers become top managers' envoys and role models of market-oriented behavior to frontline employees.

Valence. It is concerned with an individual's evaluation of perceived personal benefit or personal loss one may expect as a result of an organization change (Armenakis et al., 2007). Put it simply, it is about the perceived outcome of the change. This "what's in for me" belief originated in Vroom's (1964) work on motivation and refers to the attractiveness from the change recipient's perspective. Valence can be segmented into extrinsic and intrinsic categories. In self-determination theory (Deci & Ryan, 1985), people do things with intrinsic motivation because it is inherently interesting or enjoyable; and with extrinsic motivation it leads to a separable outcome, like a reward or a punishment.

The operant theory (Skinner, 1953) describes that all behaviors are motivated by rewards or by separable consequence such as food or money. Intrinsically motivated activities are the ones for which the reward is in the activity itself. Thus, researchers have focused on investigating what characteristics make an activity interesting. In contrast, learning theory (Hull, 1943) asserts that all behaviors are motivated by physiological drives. Therefore, intrinsically motivated activities are the ones that provide satisfaction of innate psychological needs and reflect the natural human propensity to learn and assimilate. Researchers for example Ryan and Deci (2000) explored that social contextual condition that support one's three basic psychological needs, specifically, feeling of competence, a sense of autonomy, and a sense of relatedness can maintain intrinsic motivation and become more self-determined to extrinsic motivation.

In an organizational change, extrinsic valence refers to the rewards or benefits realized from adopting the new behaviors. For example, incentive systems, like gain-sharing programs (Bullock & Tubbs, 1990), contribute to the perceived benefits of the change initiative. An organizational change can also provide intrinsic rewards. Morse and Reimer (1956) found that an organizational change that provides more autonomy for decision making among operative workers resulted in increases in higher-order need satisfaction. This is consistent with Ryan and Deci's (2000) argument that, by supporting the needs of autonomy, intrinsic motivation could be facilitated. Bandura (1986) also stressed the importance of intrinsic valence in organizational change efforts.

Other studies, for example, van Dam (2005) investigated the role of valence in job changes of hospital employees. She found out that attitudes towards job changes, for instance, changing job content, changing departments, relocation, are related to the beliefs about expected extrinsic and intrinsic benefits and costs. Furthermore, Bartunek et al. (2006) claimed that personal gains and losses with regards to quality of care and professional development from the shared governance initiative are important to the change recipients.

The scientific importance of the framework including discrepancy, appropriateness, efficacy, principal support, and valence, can be confirmed from the above (Armenakis et al.,

2007). However, it has not been applied to examine the readiness in the market-oriented and entrepreneurial cultural change. This framework of change recipients' beliefs thus serves as a guide to conduct the interview in this scope. By analyzing the answers from interviewees, an understanding of the beliefs and attitudes with respect to the current change among organizational change recipients can be elicited. Since it is essential to consider both the cognitive and affective aspects of change readiness when defining and measuring it (Rafferty et al., 2013), the following section shifts to the affective component as one of these two proximal antecedents of the overall evaluative judgment.

2.2 Affective Component of Change Readiness

One of the factors contributing to the development of culture is the "emotional intensity of the actual historical experiences' organizational or group members has shared" (Schein, 2004, p. 11). As a result, any attempt to manage culture is also an attempt to manage emotions (van Maanen & Kunda, 1989). A person's identity is partly determined by his or her values, which may or may not be consistent with the organizational values. As such, values alignment between one's own and organization's is the base to carry out a successful organizational change (Branson, 2008).

Affective component of the change readiness refers to the emotional reactions, resulting from the experience of previous, current change or towards the upcoming change. Change leads to a series of negative emotional reactions, which have been the focus of literature, while positive reactions have been more difficult to uncover (Smollan & Sayers, 2009). For example, a dislodgement of the identity between an individual and a group or an organization can lead to anxiety and grieving (Carr, 2001). Moreover, change can undermine one's identity, particularly the social status (Van Dijk & Van Dick, 2009). Elsmore (2001) concluded that a large scale culture change causes pain and anguish. Nevertheless, emotions can be experienced positively, for instance, hope is aroused currently due to the prospect of a desirable future event. Hope is the feeling of optimism, confidence, relaxation or excitement about the prospect of a desired event. Furthermore, emotions may arise from imagining the experience of certain emotions in the future once events have occurred (Baumgartner, Pieters, & Bagozzi, 2008). For example, one may say "I will feel very happy if the mindset of our organization regarding working with small customers changes in the future".

Emotions are found to be related to the assessment of organizational change activities and job attitudes in some studies, for example, the studies conducted by Mossholder et al. (1995, 2000). The relation from emotional reactions to the five change beliefs has been emphasized recently. Liu and Perrewe (2005) suggested that cognitive evaluations of change should predict the emotional reactions. A positive relationship between appropriateness, valence, and efficacy and pleasant emotional reaction to change is found in Harris and Gresch's (2008) preliminary study.

2.3 Change Readiness at Multilevel

The above literature review primary looks at the cognitive and affective change readiness at individual level. Recently, researchers such as Vakola (2013) and Rafferty et al. (2013) suggested viewing readiness for organization change at three levels, namely, micro-individual's perception of change, meso-group's capacity and decision to support change, and macro-organization's capability of implementing change. Rafferty et al. (2013) stated that "work group's change readiness and an organization's change readiness emerge from the cognitions and affects of individuals that become shared because of social interaction processes and that manifest as higher level collective phenomena" (p. 116).

From the systems thinking perspective, system is more than the sum of its parts, there are networks within networks. To understand organization change readiness comprehensively, it is crucial to examine various parts not only at individual, but also at group and organizational levels, as well as the dynamics across levels. The following part will briefly introduce change readiness at the group and organizational levels.

2.3.1 Change Readiness at Group Level

Social relationship theory depicts that reactions to a change initiative/program will hinge on the network of relationships individuals have (Armenakis et al., 1993). When a change is implemented or communicated to be implemented, individuals interact with each other and over time converge on a consensual view of events (Kozlowski & Klein, 2000). Social differentiation theory argues that change recipients' cultural or sub-cultural membership influence their response to change. Such cultural memberships may differ in their beliefs, attitudes, and intentions of members due to hierarchical structure (e.g., leaders,

managers, and individual contributors) or functional differentiation (e.g., sales, marketing, logistics, R&D, etc.). In other words, members from the same work group can arrive at shared beliefs when interacting with each other to interpret the change based on their common values, beliefs, as such. However, among groups or levels, various interpretations may occur when the change goal is not clear.

From the cognitive point of view, group readiness to change is based on collective perceptions and beliefs that: 1) change is needed; 2) the group has the capability to successfully undertake change; 3) the group will benefit from change outcomes (Vakola, 2013; Rafferty et al., 2013). From the affective point of view, collective emotional reactions capture the composition of various shared emotions of the group members and can develop in response to change events (Sanchez-Burks & Huy, 2009). Individuals use two types of cues to synchronize their emotions with others, namely, self-produced cues which are the individual perception of own expressive behaviors, and situational cues which are the perceptions of what others' expressive behaviors in a given situation (Rafferty et al., 2013). Emotional comparison is a process that individuals seek out and use cues from similar others (for example, group members) to label their aroused state in ambiguous situations, thus result in a shared affective reaction. Emotional contagion is another process that a person or group influences the emotions of another person in the group through the conscious or unconscious induction of emotional states. By behavioral mimicry and synchrony, individuals become emotionally in tune with others. Empirical research indicates that collective emotions have impact on the individual and group outcomes and performance, according to Rafferty et al.

2.3.2 Change Readiness at Organizational Level

Organizational readiness to change refers that employees in an organization as a whole develop shared beliefs with regards to: 1) change is needed; 2) the organization has the capability to successfully undertake change; 3) the organization will benefit from change outcomes (Rafferty et al., 2013). It also refers to the existing mechanisms, such as organizational structure, processes or policies that can encourage or disrupt change (Vakola, 2013). The role of transformational and charismatic leadership in periods of change has been emphasized, because those leaders establish a clear vision of the future and thus the

employees in the organization create similar interpretations or beliefs about change events (e.g., Herold, Caldwell, & Liu, 2008; Oreg & Berson, 2011).

Shared affective responses are likely to develop if employees have similar interpretations about the motivation for change or if they have had similar experiences regarding the following costs and benefits of the change (Rafferty et al., 2013). Research by Connelly, Gaddis, and Helton-Fauth (2002) suggested that transformational leaders create shared organizational positive affective responses such as hope and optimism, when they convey a compelling organizational vision. In addition, employees who strongly identify with their organization are likely to experience similar emotions with each other toward the changes (Dutton & Dukerich, 1991).

Based on the literature review, dimensions of change readiness are illustrated in Figure 1. This study is concerned with four related research questions:

- What is the change readiness at the individual level, concerning cognitive and affective components of this business unit?
- What is the change readiness at the group level, concerning cognitive and affective components of this business unit?
- What is the change readiness at the organizational level, concerning cognitive and affective components of this business unit?
- What is the overall organizational change readiness of this business unit, and what are the major issues?

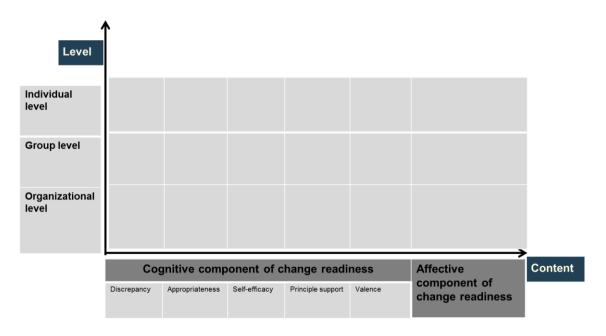


Figure 1. Dimensions of Change Readiness

3 Method

3.1 Participants

Interviews were conducted with 21 participants in a business unit of a multinational company which was exposed to a recent cultural change in the context of go-to-market approach. This cultural change encompassed beliefs, values, and behaviors in the scope of market orientation and entrepreneurship. For details of the intervention on cultural change see the second study. Among these 21 interviewees, three of them were top leaders of the business unit, eight of them were the middle managers, and another ten were individual contributors. See the structure of the business unit with three levels in the introductory chapter (3. field of the dissertation). Participants were purposively sampled, covering various responsibilities/functions and regions in the business unit. The interview was semi-structured, lasting from one hour to two hours. Most of the interviews were conducted face to face in the company's headquarter in Germany, five among whom were conducted via video call, because they were located in international branches.

3.2 Data Collection

The interview was started with a short introduction of the author's research framework and the purpose of the talk. Afterwards, seven questions in the following sequence were asked: discrepancy or the need to change, the appropriateness of change, efficacy and perceived ability to carry out change, principle support from the management, valence including benefit and cost, positive or negative emotions responding to the change, and a general rating for change readiness. Change readiness at individual level was inferred from the qualitative analysis of five questions concerning cognitive beliefs, one question about emotional response, and the general readiness scale. See questions at the individual level below.

- (1) Do you think a change was needed two years ago? Is it still needed? Why?
- (2) Do you think the change implemented is appropriate for the current situation facing the organization? Why?
- (3) Do you think you can contribute to the change successfully? What are the barriers to success?
- (4) To what extent is the management of the organization committed to the success of the change?
- (5) What are the benefits and efforts to you as a result of these changes?
- (6) How do you emotionally feel about the current and future-oriented change?
- (7) How are you ready for further change? Please choose a number from 1 "not at all ready" to 6 "very ready" in the Likert scale.

To study change readiness at group and organizational level, though three out of five beliefs (Discrepancy, Efficacy and Valence) from the framework by Armenakis et al. (1999, 2007) were mainly considered to account for the group and organizational change readiness (Vakola, 2013; Rafferty et al., 2013), in this study, however, all of the five beliefs were included to check the collective beliefs. A middle manager's perception of his/her group denoted collective beliefs of group members. For example, a middle manager was asked, "Does your work group (members) think a change was needed?", or "Does the work group (members) think they can make the change successfully?" Likewise, top leaders were asked to estimate the whole organizational level. For example, a top leader was asked, "Do the organization members think they can make the change successfully". In the question of the Principle Support, top leaders and managers were asked to reflect themselves from employees' perspective, "How does the organization see: to what extent is the management of

the organization committed to the success of the change?" Change readiness at group and organizational levels were similar at individual level to be detected by five questions concerning cognitive beliefs, one question about emotional response, and the general readiness scale. For detailed interview questions at all levels see Appendix 2.

3.3 Data Analysis

Content analysis is one of the classical methods of analyzing textual data. The use of codes and its application to the empirical data, assessing this data against the codes, further modifying the data using codes is a significant feature of content analysis. Mayring (2000, 2004) has developed a content analysis procedure for analyzing the text to a qualitative-interpretative stage. Following the guidelines of Mayring (2000) the data analysis was conducted step by step as described below:

1. Transcription: Due to the restriction that the company did not allow voice recording of any conversations in order to protect employees' privacy, only notes were typed during the interview. For the sake of validity, a summary of the answers of each question was made on the spot to get the feedback from the interviewees if that accurately represented their view. If not, clarification was made by the interviewee and corresponding modification thus took place. Through this way, the authentic views from interview participants were kept to the utmost without electronically recording. After each interview was conducted, the author prepared a transcript of the notes taken during the interview.

2. Content analytical units: To have a basic structure of the huge data from transcripts, interview content was transformed into units. These units consisted of the reduced data derived by marking the most relevant text that was close to the question and the research purpose. Repeated ideas across different questions were marked. Furthermore, these statements were allocated to specific codes. One statement could have more than one code assigned to it.

3. Codes development: A coding scheme was developed for the data analysis. The framework of five beliefs plus one code for the question regarding affective component of the change readiness and the other code for the general change readiness scale, constitute 7 major codes (see Table 1). Sub-codes were inducted and defined according to the textual units based

on the positive or negative comments, as well as based on the emerging themes on those topics from market orientation and entrepreneurial orientation.

A computer software MAXQDA was used to organize the interview coding, because this software manages coding process in an efficient, transparent and repeatable way. The relevant text units were put into codes and sub-codes based on previous theoretical review and research questions. Further revision of sub-codes was carried out during the process of analysis.

Reliability analysis: The inter-rater reliability of the coding system developed was measured in two ways. Firstly, 2 out of 21 interviews were randomly selected and the code correlation was established through inter-rater rating. The correlation was calculated by the MAXQDA and turned out to be r = .92, which means 92% codes matched between rater 1 and rater 2. Secondly, Cohen's kappa was calculated for these 2 interviews using IBM® SPSS®

Code level	Code Name	Definition including example
1. Code	Discrepancy	Describing a deviation in acceptable performance. It captures the belief that change is needed
1.1	Perceived need for change	If people see the change has been needed
1.2	Market orientation as the reason to change	Joint efforts to create superior value to customers
1.2.1	Customer orientation	Critical issues in understanding customers and communicating to them
1.2.2	Competitor orientation	Not sufficiently monitoring competitors, positioning against them
1.2.3	Interfunctional coordination	Cooperation problem among different departments and regions
1.3	Entrepreneurial orientation as the reason to change	A lack in identifying new market, making bold decision and doing things innovatively
2. Code	Appropriateness	Whether the change that has been implemented is the right one for the situation
2.1	Positive perceptions	People see the change initiatives have positive effect for the organization
2.2	Negative perceptions	People do not really see the change initiatives have positive effect for the organization
3. Code	Efficacy	Confidence in people's ability to contribute to the change
3.1	Positive perceptions	People feel confident in their knowledge, skills, capabilities, and competencies
3.2	Negative perceptions	Barriers block members' confidence in implementing change
3.2.1	Capability	Missing knowledge, skills or competencies as barriers for people to contribute to change, for example, marketing knowledge
3.2.2	Workload	Too much workload to focus
3.2.3	Processes/tools	Block because of organizational mechanism
4. Code	Principle support	The extent to which the top leaders, immediate manager, and respected peers demonstrate the support for the change
4.1	Positive perceptions	Perceived positive support from the management for the change, e.g., changing themselves as role models, provide conditions and autonomy
4.2	Negative perceptions	Perceived negative support from the management for the change, e.g., unclear direction of the task/change, inadequate guidance
5. Code	Valence	Perceived benefit or loss one may expect as result of an organizational change
5.1	Intrinsic motivated benefit	An interest or enjoyment in the change and task itself, e.g., have fun in the work, learning, autonomy in the work
5.2	Extrinsic motivated benefit	Change because of the external reward, e.g., better business performance
5.3	Efforts/cost	e.g., time, energy needed to carry out the change
6. Code	Emotions	Emotion responses result from previous, current change or towards the upcoming change
6.1	Positive emotions	e.g., hope, happy
6.2	Negative emotions	e.g., scared, hesitated
7. Code	Change readiness scale	How people are ready for change (reflected in a Likert scale from 1 "not at all ready" to 6 "very ready")

Table 1. Code System

statistics software which turned out to be $\kappa = .75$. Both of the scores satisfy the general reliability standards.

4. Review of coded statements and revision of codes: After all the statements in 21 interviews were allocated to specific codes and sub-codes, MAXQDA allows a quick retrieval of the coded segments into groups. This helps to review each statement according to the relevant codes and check if it was allocated to a correct code. Moreover, the reviewing helps to remove redundant codes as well.

5. Qualitative interpretation: The classification of retrieved statements according to different codes helps to find out the positive, controversial or negative attitudes and beliefs towards the change initiatives in market orientation and entrepreneurship. The groups for different levels offer a view in the similarities and differences within and among levels. Through this way, research questions are answered.

4 Results and Discussion

4.1 Discrepancy

As explained before in the literature review, discrepancy refers to the belief that a change is needed, because there is a gap between the current state and the desired state. In this major code, three sub-codes including perceived need, market orientation and entrepreneurial orientation were derived. Furthermore, another three sub-codes under market orientation were drawn, including customer orientation, competitor orientation and interfunctional coordination.

4.1.1 Perceived Need for Change

All of the individuals confirmed during the interviews that it was necessary to implement change in the organization. The majority of the middle managers concluded as well that their group members perceived the need of change. Some statements illustrate this point:

"Yes, they are hungry for that to get out of the situation. There is nobody want things to stay like they are." (interview 12, middle manager, 21)

"I thought it was necessary and I think it is still necessary to change in terms of the customer orientation and go-to-market approach." (interview 1, individual, 3)

Nevertheless, opinions on the starting point for the change varied among different levels, in particular, top leaders' perception of the whole organization, as opposed to the individuals themselves and middle managers to the group members. Almost all of the individuals and the majority of middle managers believed the change had been needed since two years. However, all of the leaders perceived the organization-wide urgency to change started only recently, even though one of them was referring to himself that he started to push more than three years ago.

Despite the majority of the interviewees' agreement on the need of a change, a few of them gave ambivalent opinions on the necessity of the change at group level. As they argued, it was not because they were not willing to change, neither the content of the change was not appropriate, rather because their groups had already started two or three years ago by themselves before the change initiatives. For example, they pointed out that they had already searched for new market and applications for years, by tailoring products and customizing solutions for other customer groups and sales channels, etc. Hence, they did not see the need of the extra call of change for them. It is interesting to find out that people across all the levels frequently pointed out that change was more needed for the other people and other groups. On the one hand, this argument could be held rather skeptical, as Leo Tolstoy, the Russian novelist wrote, "Everyone thinks of changing the world, but no one thinks of changing himself". On the other hand, probably it was true that different business segments played in very diverse markets, for example, some were more emerging than the others. Thus, the room and time to change differed in business lines as well as segments to a large extent.

"My group works in a traditional market, which is not influenced by the go-to-market approach change. We are still key account base, further consolidating not regionalizing. It is not so representative, as it is far away from the scope of go-tomarket approach" (interview 12, middle manager, 22)

"For other groups change may be necessary, but not for us, because we have already handled a lot of customer' requests. Other groups could provide better service, or implement some tools." (interview 5, individual, 7) "It is easier for the new business, but for the existing business when it runs for a longer time, it is more difficult to change. In our group we are already doing these, we already spend time with customers, with counterparts in regions to set up the right processes, treat customers better, and improve pricing attractiveness. As long as the product is ready, we have business and we have a lot of success. Why do we need change if we are already doing these?" (interview 11, middle manager, 6)

"I have seen business line 2 and business line 3 made smaller changes, which also depends on the business, as our market (in business line 1) is very different. For example, in business line 2 they have much more focus on specific opportunities, might miss out a little bit of the whole organization's big picture and the positioning in the market. They are very project focused, but we, business line 1 don't have bandwidth for people to work on all the projects." (interview 19, top leader, 5)

4.1.2 Market Orientation as the Reason to Change

Two main reasons for the need of change emerged from the interviews were market orientation and entrepreneurial orientation. There were other reasons spoken of, for instance, stagnant business performance, no focus, the delay of product vs. initial plan, and so on. Since they are beyond the scope of this research, details are not presented here. Market orientation, as described in the first study, directs a firm's attention towards its customers and markets. It has three dimensions: customer, competitor orientation and interfunctional coordination.

4.1.2.1. Customer Orientation

One of the main reasons for the need to change reported by more than half of individuals was that the organization still lacked customer orientation. While some of the participants claimed that the organization had the mindsets and values of striving for the superior value for the customers, many others expressed that a big proportion of the organization still did not possess them nor perform accordingly in the practices of the daily work. For example, one employee referred that technical support should be more tailored to different customer segments. It was indicated that regions were not authorized to test the defective product, because they should be sent back to the headquarters, thus resulting in the significant delay of feedbacking to the customers.

In addition, interviewees reported that organizational members tended to offer customers the products which they assumed to be characterized with advanced technical features, rather than ask and listen to what customers really need. Seeking to understand customers and tailor the offering accordingly seemed to be imperative to be improved. This understanding manifests in the following ways: ask and understand customers' problems and requirements, understand customers' applications and systems, understand what kind of marketing communication they look for, etc. The following statements show that behaviors had not exhibited towards understanding of customers' needs yet. This might result from the value aspect, because when the commitment to create the superior values of customers is still not there, ignorance might occur.

"My impression is that our formal way is not looking at customers' side, and not thinking about their needs. Our people think we are XX (the real company's name for this research is replaced by XX, the same hereafter), we have the product and you (referring to the customer) have to use it. Even now many of them still have this mindset". (interview 10, individual, 10)

"We don't really ask our customers about their real requirements, but just try to sell the solution we have in our mind. We are often too fast to make conclusions and solutions, proposing something according to our capacity or available solutions, without questioning our customers what they have in their mind." (interview 7, individual, 8)

The following statement illustrates that the marketing communication material prepared by the organization was too technical and too complicated for the customers to understand. According to the interviewees, marketing materials were so full with facts and figures that the customers or distributions who were not experts had little idea about what they stood for.

"In the marketing area we talk too much about the technical features, not so much about the use cases and applications. We are thinking about the world how we think is, not how the customer sees it. For example, you tell a customer that the car newly developed is with 300 horse power. You are assuming everyone knows that with 300 horse power one can drive fast. Imagine there is some customer who does not have any idea about this technical feature, so you have to explain why it is good for him." (interview 6, individual, 18)

4.1.2.2. Competitor Orientation

Competitor orientation refers that a firm understands not only the short-term strengths and weakness, but also long-term capabilities and strategies of both key currents and potential competitors, so that takes assertive or even aggressive responsiveness against competitors.

External pressure especially by competitors was mentioned by most of the participants across different levels. Hence, it shows a clear sense of urgency to change resulting from the competitor orientation. Participants claimed that the competition's landscape was changing, and some of them were growing so remarkably and playing very aggressively in the market. However, compared with those competitors, the organization in this research was perceived by the interviewees to be too modest and shy to position itself. Thus, the positioning against competitors as well as setting a more assertive tone is imperative to be changed.

"Our competitor A found out that we XX have a better product, so they decided to do more marketing and communication, and do things differently. They only communicate their strengths and greatness, even though their products have more weakness than ours'. They are not only talking about the features, but also about solution arguments, in order to convince the networks that they are the greatest company in the world. But they will not speak of their weakness at all." (interview 1, individual, 7)

"We are very technical and an engineering-driven company, we have to gain more marketing strength. If there is 100 % of a product, our competitor A they have 75% of the product, we have 95%. We always talk about the missing 5% because of technical restrictions. We tend to focus on our weakness, feel sorry about that. It is just not our genes to be proud." (interview 1, individual, 5)

As indicated by many interviewees, the affective culture of this organization was analytical, logical, rigorous, and too shy. The emotional aspects of the organization's culture have been termed as affective culture (Barsade & Gibson, 2007) or emotional culture (Zembylas, 2006). Affective culture of the organization is important in signaling staff how emotions are to be experienced, expressed and regulated (Alvesson, 2002). When communicating with externals (such as customers, media and partners, etc.) as a high-tech engineering company, or positioning against competitors, this organization tended to hide its pride and passion and to be too shy. Because of this analytical culture, employees were probably not familiar with expressing positive emotions to their customers, in the marketing material for example.

4.1.2.3. Interfunctional Coordination

Interfunctional coordination is the coordinated utilization of firm's resources and joint efforts in creating superior value for target customers. Interfunctional coordination as one of the reasons to change was identified by many interviewees.

Although most of the participants believed that internal cooperation was generally good, some people felt that they did not get sufficient support from different levels and functions to make products commercially successful. Social learning theory (Bandura, 1986) depicts that people observe and sense others in their behaviors, verbal and nonverbal cues before engaging in a particular behavior. Employees depend on each other to work and carry out the change. Support from the networks thus influences one's belief and attitude towards change.

"Not so much support from other colleagues. I have not seen anybody say `no, I don't want to do it`, but I have also not seen anyone really moving." (interview 13, middle manager, 34)

"Our group is willing to move, but not far ahead. They start slowly, look around whether the others are also moving and then accelerate to the next stage. They see if the change is reaching everybody, management and other business lines. If not, the group get slower and get tired of making effort." (interview 16, middle manager, 12)

Among all of the factors which were blocking internal cooperation, issues arising from cross locations particularly between headquarters and regions were most frequently reported, by almost half of the interviewees across different levels and regions. Due to the different styles of intercultural communication, frictions among different regions happened in some situations, explained by several interviewees from different locations. Differences in beliefs and values originating from national culture might determine the ways how people work internally in an organization across different locations, as well as how they understand customers' requirements. That could lead to communication harassment, resulting in the deficiency of support for the "go-to-market" approach. For instance, in terms of internal communication, while some employees from the headquarters in Germany expressed that communication could be more open, free and active in some region, others from the regions felt the German culture was too rigid regarding the rules and communication ways. See the below comment,

"German culture is like this: creating rules before taking the action. Our regional 3 colleagues are following German company's culture or rules. The good side of this culture is that it is very strict with rules to avoid mistakes. But if we go to a new market, the old rules never fit, because the new market needs new rule or new strategy. So we need flexibility here." (interview 10, individual, region 3, 37)

In terms of top management from headquarters visiting customers in regions was perceived differently among regions. While an employee in one region requested more management visiting to regional customers to show the attention, one employee from another region perceived that the management visiting would in fact undermine the position of local office at customers. The following statements illustrate how people from different cultures vary in their way of maintaining relationship with customers.

"Support from headquarter has room to improve, but more or less because of culture. Sometimes the courtesy visit to customers is just to show support and build relationship. Because of cultural difference, it takes time to convince headquarters' people to come to visit customers here. For example, in defining the product requirements, we don't send an expert from headquarters to offer onsite support, neither work together with local customers. They only come when they have a solution. It's not that they don't want to support, but they need something at hand to support. However, I think it is important to just show support is here and try to understand them even we don't have a solution yet....." (interview 14, middle manager, region 1, 23)

"Positive aspect of managers/experts' visits from headquarters to regions is that they show commitment, they put effort to maintain the relationship and make the information flow..... Particular visit for an important customer in urgent cases is good. But sometimes for the regular visits from business line leader, is this necessary? They are not sales people. While region 1 is appreciating having headquarters' visit to customers, but region 2 we love to have authority by ourselves so that in the customer meeting we don't always say 'I understand your issue, I will go back to headquarter, discuss with them and then go back to give you an answer.' " (interview 4, individual, region 2, 24)

It is evident from the interviews that both headquarters and regions realized the importance of proactive communication among them. Empathetic intercultural communications between headquarters and regions, as well as autonomy endorsed to the regions were expected to improve interfunctional coordination. One of the top leaders from headquarters advised that the regions should take initiatives to provide guidance and input from their environment to the overall strategy, meanwhile, headquarters should also communicate frequently on what was overall strategy and what they expected from regions. Likewise, one regional middle manager proposed that headquarters and regions should learn how to understand and adapt each other's way of thinking. For instance, in this region, new employees were taught by managers on how to write emails to the German colleagues, specifically, describing the situation with details, offering solid evidence and clear message, and proposing ideas to them. Another example for realizing proactive communication from region is that,

"We have to communicate more between regions and headquarters. In our region1 I have to push our people a lot to talk to headquarters. If people from headquarters don't get information and they don't feel comfortable, we might not get support. On the other hand, people from headquarters should also come over, because when they experience they will know more." (interview 2, individual, region1, 27)

4.1.3 Entrepreneurial Orientation as the Reason to Change

Miller (1983) suggested that a firm's degree of entrepreneurship is the extent to which it innovates, acts proactively, and takes risks. It calls for striving best for profit by continuously identifying and exploring new opportunities, by making bold decisions and doing business innovatively.

Although going for new markets had been advocated for a while in the organization, the mindset or awareness seemed to be still not there. Most of the individuals reported that the whole organization needed to be much more eager to go for new opportunities in the market, to be more specific, going for different regions, new customer segments and new application markets. Some of the employees believed that the organization still had to overcome the inertia.

"When some new customer's revenue is only a few thousands of Euros, some of our colleagues will say we will not produce. The product is not ready. They are always making criteria or judgments on how much sales value (those new customers) can bring immediately. Our mindset is to look at current market and big customers, but do not think to win smaller customers. They don't think that small projects can bring big projects in the future, because the small customers will also grow!" (interview 10, individual, 14)

Several probable reasons might explain why there was still insufficient entrepreneurial spirit and behaviors, even though many people thought they should go for new markets. One block was that people were overloaded with projects, thus small projects were not prioritized. The other one was that as Gaglio and Katz (2001) indicated that opportunity identification is the most fundamental issue in understanding entrepreneurial behaviors, however, going to new market is always uncertain for the players. When the direction is not clear, people might get lost and end up with nowhere as described in the following story originally from "A Little Fable" by Franz Kafka:

"The mouse (refers to the organization) is running in a huge field (it refers to the market). The mouse was lost and afraid and kept running and running. The field gets smaller and smaller. Then he was happy to see a town. The town was narrowed until

he saw a house, and there a trap was waiting for him in the corner. We are the mouse, and the market is the field which gets smaller and smaller, if we don't have a right direction there will be a trap....Where are the new markets outside the traditional business, where is our goal and what is vision? We have no new customers.....We need to broaden business lines and market." (interview 6, individual, 9)

Some of interviewees hoped that a general appreciation from the organizational level for new markets would be there. That mindset was reflected in many aspects according to some employees, for instance, related preparation of offerings like product documentation should be tailored to a broader customer base, working processes or procedures should be more flexible and efficient, decisions from leaders and managers should be faster, and support from relevant groups and colleagues should be more sufficient.

To summarize this code for Discrepancy, at the individual level, all the participants confirmed that they had sensed the necessity to implement change in the organization even two years ago. At the group level, middle managers' perceptions of their groups are treated as collective beliefs for their groups. Similar to the opinions of most of individuals', the majority of middle managers perceived the need, too. Notwithstanding, some of them said the change was not really necessary at the group level, because they believed they had already started, whereas other groups had not. At the organizational level, top leaders' perceptions towards the whole organization are treated as collective beliefs of the organization. All the leaders saw that the organization-wide urgency to change started only recently (half year before the interview).

The areas needed to be changed were identified as follows: 1) entrepreneurial mindsets in terms of going for new markets were still not well shared in the organization; 2) understanding customers needed to be strengthened by means of asking their requests, understanding their applications and systems, tailoring marketing materials, offering tailored solutions; 3) different positioning against aggressive competitors moves should be implemented; 4) communication and alignment among headquarters and regions still needed to be improved.

4.2 Appropriateness

It describes the proposed and implemented change as an appropriate response to a situation and effectively addresses the discrepancy. This code contributes to explaining why no significant changes had been found after interventions in the second study. Change interventions here refer to the change programs (Program 1 and Program 2) as described in the second study. While the Program 1 focused more on the cultural aspect, Program 2 emphasized the strategic part as well as cultural aspect. Two sub-codes were derived here, which are "positive perceptions" and "negative perceptions". Due to the fact that Program 2 was kicked off only a few months before the interviews, participants gave their opinions mainly on Program 1.

4.2.1 Positive Perceptions

All of the participants believed that change was appropriate to the situation to a certain degree. They saw the target, purpose as well as content of the change were fit and important to the current situation. In particular, in terms of content, some of the interviewees felt those workshops and trainings under the Program 1 were interesting and useful, because they could apply in talking to customers and in positioning against the competition accordingly. Hence, they were more active in the daily work. This reflects the unique feature of the appropriateness of interventions, because they matched to a specific situation and critical issues in the organization.

"Program 1 is a good idea. It is quite open about what to be changed, and everybody was invited. I found those competitor orientation and active listening workshops very helpful....." (interview 11, middle manager, 13)

"Program 1: regarding the competitor orientation workshop, we made progress here. I found it very encouraging. For example, I recently received a fighting guide from one of our colleagues about a product positioning against one of our competitors. It was very useful and helpful, and it never happened before. I learned the weak spots of the competitors, for instance, they don't have (a certain type of manufacturing process). I benefit a lot because now I actively use these weaknesses of competitors in customer discussions. This is a very strong differentiation point because for sure that

they don't have the equal quality as we have. I got the feedback that it is important. So this is super case for having customer orientation and competitor orientation in marketing. I take it as a very positive change." (interview 6, individual, 23)

"We are also now more aggressive from the marketing perspective. More information on competitors is passing on to everyone. Sales and business development colleagues are using it when they go to the market. I think these are the changes from Program 1. Of course competitor A is very aggressive, but we don't have to mimic them. We have to find our style, and we will fight." (interview 2, individual, 11)

Some positive results with regards to the attitudes and beliefs had been generated according to the interviewees, particularly, understanding customers and competitive positioning. Sense of urgency had significantly increased compared to one and a half years ago, as indicated by some interviewees. Behaviors and practices also started to change, for example, meeting customers and end customers more often, changing approaches in the regions, revisiting marketing communication materials (e.g., press releases or image videos) and modifying them in a more assertive tone.

"Region 3 is completely different now compared with a year and half ago, triggered by exchange of people, internal discussion how to get business more..... So our mindset is changing step by step, from supplier side to customer side. We have to go for new markets." (interview 10, individual, 18)

Regarding Program 2, some business lines and groups started to have workshops in order to cascade the goals down and explore the areas they can improve and strengthen, and several of them perceived it as a good starting point. Customer orientation was again emphasized,

"We have had several workshops regarding our go-to-market approach in region 1 and region 3. We have not finished yet, but we are on the right track. The idea is to define the go-to-market strategy on the ... segment, which is customer orientation. What is the end customer's interest, what kind of communication/word to them, how to convince/communicate them to use our product. We try to find the value of customers' side and rephrase the wordings in slogan, slides, flyer, etc. By doing this, we not only

show how our performance is, but also help them to improve their overseas market." (interview 13, middle manager, 14)

Even in some business segments within traditional markets, people were also reflecting themselves on what they can do differently:

"In business line 3, we have to rethink what we can improve, where we could do differently, and what we have learned from one application can transfer to another. We are already doing different approaches in different application segments." (interview 21, top leader, 14)

4.2.2 Negative Perceptions

Although all of the participants expressed positive beliefs on the appropriateness of the change, meanwhile, some of them raised doubtful or negative voices on the result. They claimed that only small steps were made, thus no visible result and breakthrough yet.

"But some of my group members haven't had the feeling for themselves to move. They have not changed obviously. We still have not got the big action and tangible results yet." (interview 13, middle manager, 15)

Several reasons were touched upon by interviewees for why there was no obvious result especially for the Program 1. One main reason was that there might be a time delay from the change to the result. For example, one interviewee said "it will take some time to get there, to change the mindset. People are doing things for a long time, to change behavior is difficult. 3 years is nothing for the cultural change." Cultural change does not take place overnight. Even though sometimes mindsets are there with regards to the customer orientation for instance, yet people do not live the way it should be. That is the discrepancy between "espoused theory" (what people say) and "theory-in-use" (what people do) in the theory of action by Argris and Schoen (1978).

The second reason is that the change content did not relate a lot to some of the segments and employees, or the change vision was not so clear when it started. People were confused on the scope of change, and they had their own interpretation about change relevant to their work. Kotter (1995) suggested the importance of creating a vision of what the change

is about, tell people why the change is needed and how it will be achieved. Without a sensible vision, a transformation effort can easily dissolve into a list of confusion and incompatible projects. As a result, it can take the organization in the wrong direction or nowhere at all.

"There are a lot of differences among people and regions. For those who are facing the problem with customers, they are starting to change. But for those people who do not directly interact with customers, go-to-market approach has much less impact on them." (interview 10, individual, 17)

"What do you see as a change? There is constant change, where people are even initiating, in software, service and more business development." (interview 21, top leader, 11)

"Everyone has his/her mind to change about when I can start, how we could......We need to speed up, but unfortunately not everybody is on the same level of change process." (interview 3, individual, 25)

Employees' understanding and comprehension towards company's and change vision are vital. This view resonates with recent empirical evidence. For example, Rafferty and Griffin (2006) found that change recipients expressed less uncertainty, when an organizational change was perceived as being implemented through careful deliberation and planning. Furthermore, Strebel (1996) noticed that many change efforts fail because executives and employees see change differently.

The third reason is about the "depth" aspect of the appropriateness regarding the implementation of the program. The feature "depth" of an intervention represents the extent to which participants emotionally involve in change interventions, and internalize the value to the individual's sense of self. The more a change initiative involves internalization, the more positive self-perceptions, greater persistence and engagement in proposed change people will have (Ryan & Deci, 2000). The following statements support this argument.

"Before, some of the management came to my team, saying `I found out you are doing wrong in this and that, you need to change......` Nobody will change. I find the Program 2 good. Change agents say `it looks like you have the power internally to manage and improve yourself. We set up a change, please be part of it, let's do it together." (interview 11, middle manager, 17)

"We try to change the mindset by using the tool and framework, but these tools only give you support and it does not change the way you do things. The only way to change mindset is to talk to people and reflect what they are doing and what their expectations are. Figure out what he wants to do, and what is important to him. Let them start, give them guidance and more coaching. It does not work by top down order." (interview 20, top leader, 13)

One way to engage participants emotionally in the change inferred from the above statements is that change management processes should be designed in-depth to enhance participation (Rafferty & Restubog, 2010). This is consistent with empirical studies' findings which indicate that when employees participate in decisions related to the change, feelings of empowerment and control are created (Armenakis et al., 1993; Gagné, Koestner, & Zuckerman, 2000). Furthermore, Wanberg and Banas (2000) claimed the importance of employee participation that providing opportunities for voice and self-discovery facilitates employee openness and acceptance of change. The following statement proves this argument as well.

"There was not enough participation from the people to generate change ideas before. We'd better ask more people what changes we need. Ask the individual level their opinions on change, but not only ask leaders and managers. Asking for change from the top only will not work. Employees should have common understanding on what change means, and what is really needed. We should improve the interaction with people, engage lower levels, and try to understand people." (interview 11, middle manager, 16)

The fourth reason as indicated by most of individuals and middle managers was no proper follow up and continuous tracking for activities.

"We have done a lot of things, but I am not sure how far the change has gone. This is typical experience you get when you have a program. People feel this is interesting, but then as usual nothing really happens. No follow up by team and management.... I am not sure if Active Listening workshop has effects? In the workshop, we have learned to read between the lines, to verbalize and paraphrase on what they have said, and to understand customers better in some cases. But at the end, I have the feeling that we still think about our internal issues first in the reality...... We have to review from time to time in the team to challenge ourselves, and just raise the awareness in concrete situation: what could be another requirement we never thought about? How do we come to the conclusion?" (interview 1, individual, 11)

It can be concluded from this code that participants believed that change was appropriate to the situation to some extent. Most of them believed the target, purpose and content of the change initiatives were unique and important to the current situation, because they can apply to the work directly. Some initial attitudinal and behavioral changes had been sensed, as well as relevant activities started to roll out step by step. At the same time, they claimed that only small steps were made, it took a long time to get the awareness, and no visible impact especially on business result and no breakthrough yet.

Differences across levels were found as follows. Participation and involvement of employees in the change events were realized and emphasized especially at the group level and organizational level. Most of individuals and middle managers criticized the follow-up and continuous tracking of the change programs. Final finding noted here is that all of the top leaders claimed that their own business line had generally started to change its go-to-market approach under market-oriented and entrepreneurial-oriented culture.

4.3 Efficacy

It refers to the perceived capability to implement the change initiatives successfully. Two sub-codes were derived, one is positive perceptions and the other one is negative perceptions. Under negative perceptions, another three sub-codes were derived, namely, capability, workload, and processes/tools.

4.3.1 Positive Perceptions

At the individual level, all of the individuals believed that they were able to implement the organizational changes with their skills and knowledge. This implies a high level of individual's self-efficacy.

"Yes, everyone can contribute. I can contribute to the change at least something at my level, like the idea generation." (interview 3, individual, 13)

"Yes. I have the strong points here: finding out what our assets and what the problems are, building bridge to the problem of our customers. I like the process to communicate and to explain. I like working with customers, and find it encouraging." (interview 6, individual, 26)

Some of them stated that they had learned knowledge and skills by having workshops, and started to apply into daily work. Others were teaching their peers, or would like to learn more new knowledge, for instance, one individual said "I am changing; I focus on learning knowledge in marketing." Most of the middle managers and all of the three top leaders believed that their group and organizational members had the capabilities available, and they were able to implement the change successfully.

"Most of the skills are available. Some skills we should train a little bit more. In our team, we are already very customer orientated. We never get negative feedback from our customers. We are also competitor oriented. We try to get competitors' information from customers, and then we give feedback to the organization." (interview 18, middle manager, 12)

4.3.2 Negative Perceptions

4.3.2.1. Capability

In spite of most of interviewees' confidence in own capability to carry out the change, five middle managers and all of the three top leaders reported that some skills still had room for improvement, for example, assertive communication to customers. Although people were trained from the workshop about assertiveness, it was reported that many employees still didn't know how to act exactly, according to one middle manager. Another middle manager believed that his team was good at listening actively, but the next problem was how to make

others to listen to himself. He stated that was in fact about interfunctional coordination that everybody should listen more to the other.

It was mentioned by many participants especially by middle managers and top leaders that system knowledge was missing for the whole organization. System knowledge, according to the participants, is not only to focus on the product itself but also to think about how the product can be fit to the whole application from the customers' perspective. Furthermore, both the headquarters and regions reflected that regions needed to strengthen their application know-how, selling skills, and marketing knowledge.

"Our current team still does not know exactly how to transfer market information into certain product. We need marketing support and system knowledge....Right now my team members focus on only standard technical support, sales activity and business development tracking projects. They don't have the bandwidth to look into the market." (interview 14, middle manager, regional, 16)

"Regional support is sometimes not well perceived. People in region 1 need to improve sales skills in negotiating and engaging customers, and become more proactive and assertive. They should also have more technical knowledge and strategic capability, as well as learn how to order samples." (interview 12, middle manager, headquarter, 40)

When managers and leaders perceived that there was a necessity to improve certain knowledge and skills for the whole organization or to certain groups, they also believed that the organization and relevant groups were able to learn. It is then in accordance with Bandura's (1982) social learning theory that people will regain comfort prior to the change if they are confident that different skills or behaviors required to the change can be also learned and mastered.

4.3.2.2. Workload

The other most mentioned barrier is workload. In fact, this topic was mentioned several times across questions, in discrepancy, efficacy and principle support, etc. Half of the interviewees stated that too much operational work hindered them to change, because to be

successful with current product development and business was a more urgent topic. As a result, employees did not have the freedom and bandwidth to think about the different approach, even though they knew it was important to take the culture change topic.

"The biggest barrier is the actual priority; I am busy with real business, which applies to most of my colleagues. That is limiting my ability to make more change, and to have extra time to think about what we can change. You can just not work so much in a certain time. For example, there is a request from customer, which is deadline driven, and then you are also invited for some change initiatives like workshops. Those workshops teach more generic skills, which you might not see the direct result to the business, and they just compete with business priorities. At the end, you probably will drop out of those change activities." (interview 4, individual, 19)

"In the last two years I have been asked to do some research on the new customers. Yes I know it is important, I know it is our strategy from top management to have smaller and newer customers so we can spread more seeds. I have 8 or 9 customers now, and there probably be more to come, but I don't have time to do all." (interview 9, individual, 14)

4.3.2.3. Processes/tools

It can be concluded based on most of the individuals that the current process at the time of the interview were mainly suitable for big key customers but not fit for other customers anymore, because it had complicated procedure and needed a lot of templates to fill in and sign. Hence, employees called for efficiency and flexibility in some process. Interestingly, only one middle manager and none of the top leader mentioned this. Some tool needed to be adapted to the new approach as well, according to the following statement,

"From the colleagues within team, there are some doubts. If we have more customers, more samples need to be delivered, so the sampling process cannot run as today. There are so many hand-made things, for instance, prepare every sample for every customer by hand, because there are too many exceptions. We fear if we have a broader customer base, it will blow up. It is not really depending on the person, but based on surrounding and environment. We need tools and structure or efficiency work flow." (interview 18, middle manager, 25)

Armenakis et al. (1993), or Beckhard and Harris (1987), revealed that the degree to which organizational policies, procedures and practices (e.g., logistics) are supportive of change may also be important in understanding how an employee perceives the organization's readiness for change (Eby, et al., 2000).

In short, at the individual level, almost all of the individual employees showed a high level of self-efficacy to complete a task or accomplish a goal, and they were confident in successfully implementing the change. However, because of the work overload, they didn't have capacity to implement change on the top of their exiting work in many cases. At the group level, although the majority of the managers believed that generally their group members had the knowledge and skills, some of the knowledge and skills in relevant groups should be strengthened, for example, negotiation skills in regions, or assertive communication in the marketing function. System knowledge was reported by middle managers and top leaders as a barrier for the whole organization to implement the change. Nevertheless, almost all of them believed that the organizational members were willing to grasp the new knowledge. Processes/tools were defined as other barriers blocking the successful implementation of change at the organizational level.

4.4 Principle Support

It is defined as the extent to which the top leaders, one's immediate manager, and one's respected peers demonstrate their support towards organizational change. Due to the fact that most of the participants made comments on the management, two sub-codes were derived here, namely, positive perceptions and negative perceptions of the support from the management.

4.4.1 Positive Perceptions

Almost all of the individual contributors reported that they perceived commitment and support from managers as well as top leaders on the change initiatives. Most of the middle managers sensed commitment from the top leaders. Support and trust from management had been perceived, because their mindsets and behaviors started to change.

"Fairly high, I really have to give them credit. It is probably the highest commitment to the change from the leadership team over the last years within XX." (interview 4, individual, 21)

".....but now I see positive change here from the top management. Still the customer is escalating, still there are a lot of conversations, but our leaders are making decision based on the feedback from the organization. One example is that the escalation's call with a customer regarding the delivery time. The top management did not immediately say `yes` to the customer that we can shorten the delivery date. Instead, they said `we will talk to the team and tried to take some days out`. It is a clear sign that the management made efforts to communicate with the team, but also left the freedom to the team on how we communicate back to the customer." (interview 13, middle manager, 29)

Meanwhile, top leaders reflected themselves on their commitment about how to change themselves and how to motivate people to change.

"I push my people to make use of the program to the advantage of themselves and of the organization. I told them you have the chance to shape it. You can shape if you contribute, you can be part of it....." (interview 13, middle manager, 31)

"What I do in my area of responsibility is that I share a lot of positive examples on how our visibility in customers and end customers has increased significantly over time, how we have improved in communicating to the market, lighthouse projects like" (interview 19, top leader, 22)

4.4.2 Negative Perceptions

Apart from the positive appraisal, almost all of the interviewees across different levels pointed out that support from management still needed to be improved. Likewise, managers and top leaders were aware of the issues and critical about themselves.

"It's the way how we as leaders and the organization support them and foster the talents. If I put our five employees into competitor A, I can bet after five months they will perform the job as I want. So I don't blame them, but I blame myself. It's just me

about how I guide them with the right strategy, how we support them. It's about if we give freedom, framework, spend sufficient time with them and motivate them." (interview 20, top leader, 17)

The first most critical issue from principle support is that the management acted as role models, stated by many interviewees. People in the organization observe and sense the attitudes and behaviors from others (Bandura, 1986), first and foremost, from management. Although a strategy was called for doing business with new customers, top management did not really show in execution. In one situation, the top management cancelled meetings with smaller customers due to other priorities. Employees then learned not to put efforts and waste energy anymore in the future. This example resonates with the concept of behavioral integrity from Simons (2002). The below comments further demonstrate the importance of management role.

"Still everyone is waiting for the other, and we need to speed up. If the management started, then others will follow." (interview 3, individual, 21)

"Our organizational culture is that, we are not good at saying `no`, me either. I had an experience when I said `no` to a customer, so the customer escalated to our leader. But then the top management said `yes`. Next time the customer will not talk to me anymore. So why should I say `no` then?" (Interview 13, middle manager, 28)

"The organization perceives us hesitated and to be too shy to move on. Awareness is the first step, and we have to make it happen. Our employees expect us as role models to start the change a step ahead, in terms of time and focus there. Since I am part of the change, I might be not so far as they wish......" (interview 20, top leader, 22)

This is in line with empirical research evidence in the marketing area that leaders who exhibit market-driven behaviors and attitudes facilitate followers' market-driven learning (e.g., Manz & Sims, 1981). Lam et al. (2010) confirmed that top leaders serve as market-oriented role models to middle managers and expert peers; in turn, these persons become top leaders' envoys and role models of market-oriented behavior to frontline employees.

The second most critical issue drawn from interviews is that top leaders should provide empowerment and autonomy to employees, not only in the headquarters but also in regions. This argument is consistent with Kohn (1999) and Pink (2010), who suggested managers to create the best conditions under which intrinsic motivation can flourish. Providing autonomy support, encouraging initiation, taking employees' perspective, being responsive to their thoughts, questions and initiatives, offering the experience of choice while minimizing the pressure to do a behavior, are the ways leaders help employees to internalize the organizational/group values and norms to their own interest and importance. Due to the fact that people are naturally prone to seek development and achievement, managers or leaders must provide these opportunities and circumstances in which the employees can motivate themselves. The following comment from another participant shared this point too.

"What our people don't like is that somebody forces you to change by exampling disasters and stating it did not work, without giving appropriate ideas. But we have to shift from blaming somebody to encouraging. We need to change to get things better. If employees experience things by themselves, for example, if a customer tells them, or if they see the market when they go there, then they will feel `wow, we really need to change`. How to engage people to change: make their own suggestions on what they want to change, give them some guidelines, but not too strict, define the realistic and find ambitious joint targets, give the freedom to them and allow different ways to decide how to manage and perform. Of course support should be also given when they have questions for me. Help people to grow themselves, and change should get from oneself. "

This is in accordance with the empirical and theoretical studies around selfdetermination theory on the exploration of the social conditions that facilitate internalization and integration. Social context that facilitates satisfaction of human beings basic psychological needs yield the most psychological, developmental, and behavioral outcomes (Ryan & Deci, 2000). A number of studies including a study by Baard, Deci, and Ryan (2004) highlight that autonomy support by leaders or managers to their employees not only can enhance the workers' performance, but also improve their adjustment, persistence, and creativity. The third most critical issue emerged from the interviews was the entrepreneurial vision, which was common vision for new markets. This aspect was raised from time to time in different questions during interviews, such as in the first question about the need and reason to change, and the third question about efficacy (as a barrier to implement change successfully). Many of them pointed out that the top leaders didn't subscribe the clear direction where the organization was going for the new market. Therefore, various interpretations at individual level occurred when it came to specific situations or projects, thus led to uncertainty, confusion and sometimes even conflict. Shared vision influences the direction of learning, and it must be conveyed at different levels of the firm in order to align organizational goals with business processes (Lumpkin & Dess, 1996)

"Not knowing what to do, probably not about knowledge, but more about if I should go this way, or that way. Uncertainty about what is the next is a challenge. My group members are not sure about which direction they should go, so the leadership should give direction." (interview 13, middle manager, 24)

While many individual contributors and middle managers complained to a certain degree about the lack of entrepreneurial vision, some top managers and middle managers indicated that to give a clear direction or guidance, they need first to get the input, feedback or knowledge from their employees.

"There are a lot of cases which are true that people need guidance and clear vision. But there are also cases that I do expect the decisions from employees. In the past I could live with no software, but then I got feedback from a responsible person saying that something is changing in the market, so we should do things differently. This is what I mean about the differences where the guidance comes from. I need the entrepreneurship from the segment level. I appreciate that they have the ownership, proactively drive the topic forward in the organization, and point out something is changing and what to do with it. In the end, it is a leadership decision to say that we have heard and that is the way we are going to do..... so I should be the one provide infrastructure, organizational framework and some guidance and support on the strategy to make things work." (interview 21, top leader, 45) Cashman (1999) argued that leadership should be looked at from within, and this form of leadership can be found at all levels in an organization. Individual should also lead oneself to get what he or she needs and drive tasks forward. "There's only power in empowerment if you are a self-leader" (Blanchard, Carew, & Parisi-Carew, 2000). The call from the top leader in this organization clearly shows that employees should take the initiative and responsibility by giving input in decision making process. This again corresponds to self-determination motivation research that the support can, to some extent, come from individuals' abiding inner resources which facilitate their ongoing feelings of competence and autonomy, though immediate contextual conditions have been found vital to these psychological feelings (Ryan & Deci, 2000). Following statements reflect this argument.

"It is not fair to push everything to the leaders to change...... So we have to execute it, don't wait for managers/leaders to come and say that change is important. We must know ourselves that change is important, and know how to change ourselves." (interview 2, individual, 27)

"They will support only when they have the dedicated order from managers. If there is a task force focusing on this, then it works well. But there is no proactive driven support. There is a push from management but not a pull from employees....." (interview 15, middle manager, 23)

In summary, commitment from leaders/managers to embrace the change was fairly high, reported not only by the employees but also from leaders own reflection. From the observations and perceptions of employees, mindsets and behaviors from management started to change. Apart from the positive appraisal, creating a vision for the new markets and for the change, as well as providing infrastructure and offering autonomy support were identified as important areas to be improved in the management. On the other hand, the management urged employees to be more proactive and self-lead towards the change.

4.5 Valence

It refers to the perceived personal/group/organizational outcome by calculating benefits and losses as a result of an organizational change. People are more motivated to change when they see potentially higher benefits (intrinsic motivated and extrinsic motivated) than costs. Three sub-codes were derived from here, namely, intrinsic motivated benefit, extrinsic motivated benefit and cost.

4.5.1 Intrinsic Motivated Benefit

Intrinsic motivation is defined as the doing of an activity for its inherent satisfactions rather than for some separable consequence. When intrinsically motivated, a person is moved to act for the fun or challenge rather than because of external prods, pressures, or rewards. People are active, inquisitive, curious, and playful in nature, displaying a ubiquitous readiness to learn and explore (Ryan & Deci, 2000).

Almost all the individuals showed intrinsically motivated by pointing out at least one aspect as important outcomes from the change for themselves, for instance, interesting task and work, or having fun and passion in the work. Hence, they are self-determined to take the change. The following statement is just one of them.

"I will get bored if I do the same things all the time. It's important for me when there is a challenge that I do something different and more interesting" (interview 8, individual, 27)

According to the self-determination theory, activities or environments which meet people's basic psychological needs, including feeling of autonomy and feeling of competence, facilitate and enhance one's intrinsic motivation for action. During the interviews, several individuals stated that the change would bring the feeling of autonomy. For example, some pointed out that it would be much easier if he was given the flexibility in the market instead of sticking to the process.

"Now I have the freedom to design portfolio. We often said we don't deliver...... (certain service) to end customers, because if we do, our direct key accounts will lose their customers. We did not want to upset our key account. Now we are about to allow...... (the service mentioned before), so I have more steering and maneuvering. I now get less restriction than I used to." (interview 1, individual, 26)

In addition, most of regional colleagues were commenting that if the change took place, they would have more chances to talk to customers. They would feel more empowered to take decisions by themselves instead of communicating back and forth to headquarters, and waiting to get decisions. Some people indicated another psychological need which is feeling of competence, for example,

"When we have new customers with new applications, we will gather more experience and learn more. It is about personal development, and we widen our knowledge." (interview 18, middle manager 29)

One striking finding here is that almost all of the employees at individual level and top management talked about intrinsic motivation such as having fun in the work, but only a few middle managers were talking about it at group level. A tendency could be probably inferred that middle managers saw significantly less intrinsic motivation for the group than individuals saw themselves and leaders saw the whole organization. Since Bandura (1986) stressed the importance of intrinsic valence in organizational change efforts, this could be a potential improvement for the middle management to promote more intrinsic motivation in their groups by autonomy support (Morse & Reimer, 1956; Ryan & Deci, 2000).

4.5.2 Extrinsic Motivated Benefit

Contrasting with intrinsic motivation that doing an activity is simply for the enjoyment of the activity itself, extrinsic motivation refers to attain some separable outcome when doing an activity (Ryan & Deci, 2000). Almost all of the individuals and middle managers spoke of at least one extrinsic motivated benefit. And the most frequent mentioned one was about achieving business and financial performance at the organizational level, by understanding customers better and gaining recognition from them, or exploring new markets and bringing more new opportunities.

"They are willing to do new business, go more often to the customers and the market, they can do more often. Change is part of their wishes, and for them it is self-fulfilling. They are more motivated." (interview 17, middle manager, 23)

From this statement, it is evident that some of the groups had internalized the extrinsic motivated benefit into their own values and needs. That is integrated regulation, the most autonomous form of extrinsic motivation. Integration occurs when the reason for change initiatives is fully taken in and being congruent with one's own values or goals, so that the will to change emanates from the sense of self (Ryan & Deci, 2000). As a result, people will be self-determined in change. However, they are still extrinsic because behavior is motivated by instrumental value pertaining to some outcome which is separate from the behavior. For instance, some individuals and middle managers pointed out that when the change took place, they did not have to fight for the resistance, less alignment in the organization would be needed, and blocks for tasks would be moved away.

4.5.3 Cost

Cost or effort resulting from the change as indicated by the majority of the interviewees was more work overload, for example, they would have to invest more time on talking to customers in order to understand them and engage them. More efforts would be spent on thinking and doing things differently, such as producing concrete marketing communication material. Some of them had to train people, and others have to learn additional things. Internally, more alignment and discussion with other colleagues were needed, too.

"Our group members feel more exposed, have to deal with more external influences, need to explain and justify more. The change program is creating more work." (interview 12, middle manager, 44)

While some of the interviewees realized the efforts to change, others perceived no particular extra efforts, because they believed they were already in line with the change target,

"I have to change my mind and behavior in the work. I have to involve customers more proactively, and inform internal colleagues of the request from customers not only about price and technical features." (interview 9, individual, 24)

"I don't have cost. It is neutral. I don't have to spend more time and effort, because I am already doing. I am in line with the change target and I have tried to perform in this direction already. To change these things for me there is no cost." (interview 3, individual, 27)

Taking advice from Deci's work, managers could attempt to make constraints (here is the cost) as informational as possible, as opposed to controlling. Giving a rationale for the painful change, offering some choices about how to do the task, and acknowledging feelings, help people internalize behaviors (Gagné & Deci, 2005).

To summarize this code of valence, at the individual level, employees perceived fun, learning and developing opportunities, feeling of autonomy as intrinsic motivated benefits resulting from the change. At the group and organizational levels, achieving business and financial performance by understanding customers and gaining recognition, exploring new markets and bringing more new opportunities were the most expressed extrinsic motivated benefits. While top leaders perceived more fun at work resulting from the change initiatives, few middle managers recognized the intrinsic motivated benefits for their groups. In addition, efforts and costs were expected to put in the area of internal support, learning new knowledge and new ways of doing things, as well as in understanding and engaging customers, etc. Notwithstanding the efforts, "At the end, benefits will by far outweigh the efforts", concluded by one of the individual contributors.

4.6 Affect

Affective component of the change readiness refers to the emotional responses resulting from the experience of previous, current change or towards the upcoming change. Two sub-codes were derived here, positive emotions and negative emotions.

4.6.1 Positive Emotions

Various positive emotions were raised by all of the top leaders, individuals, and most of the middle managers. One of the top leaders stated that their employees were curious about what change would come and wanted to know more about the change initiatives. Another top leader said that people were open, and did not fear to change. The third top leader said employees' attitudes were positive towards change and they were motivated. Most of the middle managers had similar opinions on their group emotions towards the change, and perceived their group members were open, positive and looking forward to change. While the top leaders and middle managers perceived their employees' emotions towards the change were fairly positive, most of the individuals expressed strong positive emotions such as happiness, pride and passion, particularly towards the future oriented change. For example:

"I think it is fantastic! It is the time to change." (interview 3, individual, 35)

"I am personally very motivated. To communicate with customers in an understandable way about our products is very challenging. I like it very much to build a new market story. I taught my colleagues what to say to customers and what is important to them. That is fun of the work!" (interview 6, individual, 42)

In addition, some of the individuals expressed "hope" about the change, an emotion currently experienced due to the prospect of a desirable future event (Baumgartner et al., 2008),

"I feel positive and have hope for the change. I think it's good for us, and it's necessary. I am happy that we start those activities, and feel proud of our change." (interview 1, individual, 29)

4.6.2 Negative Emotions

Pertaining to the negative emotions, significantly more middle managers reported on these than top leaders and individuals. One potential reason could be that the top leaders did not work so closely with the organizational members as the middle managers, so that they could not sense the emotions easily. Another plausible reason is that top leaders probably saw such a big organization where people and groups differed very much from each other, so it was hard to generalize. Nevertheless, two major emotions were expressed by top managers at organizational level, one is fear because of the uncertainty and people did not know what would come. The other one is frustration,

"I am not sure about negative emotions, maybe they don't tell me. There is frustration or dilemma. There are problems they don't like, and many problems are not easy to solve. For most of people, changes are difficult because they always have to deal with uncertainty." (interview 21, top leader, 58) The majority of the middle managers reported that some of their group members had negative emotions to some extent. Negative emotions spoken of by them were more drastic and various than the other levels, to name a few, fear, doubt, dissatisfaction, deception, sarcasm, etc.

"Some have more concerns, because they are not sure; others are afraid and scared to change; still others don't like change and perceived it as negative, because it might impact the way how they do things, impact the roles they have now, and means to leave certain places where they are comfortable. There is also sarcastic comment `yet another change program`." (interview 13, middle manager, 43)

"There is certain illusion and sarcasm on how to improve employees' work and their success. When employees receive a message from top management, `We need to change..... still need to change`, they will say, `please give me a break`." (interview 12, middle manager, 51)

The reason why some middle managers felt that there was sarcasm at the group level, probably because the expectation of change had not been met, or because the change was not relevant to certain business segments. Another plausible explanation as one of the middle manager reported, could be attributed to the stagnant business, so there was no big appreciation for change initiatives.

Only three out of ten individuals were indirectly expressing the negative emotions about themselves, by saying "not everybody is positive about the change". They were showing that they were not sure about the current change approach and method. Furthermore, they had some doubts on what the result would be brought in.

To conclude, participants experienced both positive and negative emotional reactions to changes concerning market orientation and entrepreneurial orientation. While individual contributors expressed stronger positive emotions (e.g., passion, pride), middle managers and top leaders reported milder positive emotions (e.g., curiosity, open). With regards to negative emotions, middle managers reported significant more than those at individual and organizational level. A combination of positive and negative emotions arising from cultural change is typically observed in research. Kusstatscher (2006), for example, in her interviews of employees in four organizations revealed both positive and negative emotions during mergers and acquisitions change processes. However, Smollan and Sayers (2007) concluded that negative emotional responses to cultural change have been the focus of much of the literature, whereas positive reactions have been also documented but are more difficult to uncover. Elsmore (2001) claimed that changing culture on a large scale is a long term endeavor and causes pain and anguish, particularly when the change is legislated in a top-down fashion. For example, everyone hated the new way when Cisco, the communication giant, demanded forms of collaboration, because this subtly changed Cisco's original culture which was innovation but also termed to be "brutally competitive" (Smollan & Sayers, 2007). Therefore, it is surprising to find in this study that positive emotions towards the market-oriented and entrepreneurial cultural change seemed dominate especially at the individual level. It could be probably because the change took place in this business unit was both top-down and bottom-up especially in the Program 2. Another plausible explanation could be that the change was not yet a large scale, thus the negative emotional reactions were mitigated by the positive ones.

4.7 General Change Readiness Scale

In this last question, interviewees were asked to rate themselves, their groups' or the organization's change readiness along the Likert scale from 1 "not at all ready" to 6 "very ready". Interestingly, a significant contrast was observed at different levels. To be more specific, almost all of the individual contributors rated themselves ranging from 5 to 6, which indicates a very high readiness towards the future change at individual level. All of the middle managers rated their groups ranging from 3.5 to 5, which shows a fairly high group level's readiness. General score from 2 to 4 was rated by top leaders. Furthermore, a comparison between the whole business unit (three business lines) and their own business line was made by leaders. One of them rated 4 for both, the second one rated 3 for the whole and 4 for his business line, and the third one rated 2 for the whole but much higher in his business, though he did not specify a score.

5 Conclusion and Implications

5.1 Conclusion

The extent to which organizational members attitudinally and behaviorally embrace a change initiative is a function of what and how changes are implemented within a given context. In order to get a holistic view of the readiness of a business unit (equate with an organization in this research) during a change implementation, cognitive beliefs and affective responses at individual, group and organizational levels were examined through interviews with 21 employees. Eight middle managers perceptions of their groups were considered as the change readiness at group level. Likewise, three top leaders' beliefs of the organization were considered as the change readiness at organizational level of this business unit. Conclusion of the answers to the research questions are as follows.

The overall impression from the analysis of the qualitative data is that the individual level of readiness tends to be the highest, followed by the group level and finally by the organizational level, and this confirms the assumption from Rafferty et al. (2013).

Specifically, at the individual level, almost all of the individual interviewees reported that they believed there had been a need (Discrepancy) to change for the organization since two years, especially in the entrepreneurial mindsets and vision, understanding customers, as well as positioning against competitors, cross regions' communication, etc. The change target was believed to be appropriate (Appropriateness); nevertheless, continuous implementation and more involvement of employees were called for. They were confident (Efficacy) in their capabilities to implement the change successfully, but workload seemed to be one of the biggest barriers. Support (Principle Support) from leaders and their commitment to change were well perceived too, but the entrepreneurial vision and autonomy support for the new markets needed to be improved. Individuals expressed more intrinsic motivation (Valence) including fun at work, feeling of autonomy, learning and developing opportunities, despite that they should invest more time and energy on change activities. Most of them were enthusiastic, proud and hopeful (Affect) especially for the future change. Finally, almost all of the ten individual contributors rated themselves 5 or 6 in the change readiness general scale (1 "not at all ready" to 6 "very ready").

At the group level, the majority of the managers reported that their group members believed that the change had been needed and appropriate. However, several groups did not believe the change was relevant to their own groups, mainly because of the differences in business segments. While most of the groups were believed to have the knowledge and skills, some other groups were perceived to have to enhance their skills in negotiation and marketing especially in some regions. The support from the management was perceived similarly as from the individuals. More extrinsic motivated benefits resulting from change were reported at this level than the other levels, for example, achieving financial performance, and bringing new business opportunities. Compared with other two levels, more negative emotions were reported at the group level, for instance, fear, doubts and sarcasm. Eight middle managers rated their groups' readiness ranging from 3.5 to 5.

At the organizational level, it was perceived by the top leaders that the organization started to believe change was needed since half a year or so, especially in the area of understanding customers and positioning against competitors. In addition, organization-wide mindsets were called for change in the scope of market orientation and entrepreneurial orientation. It is inferred that the shared mental models needed to be further modified. Top leaders believed that the change was appropriate to the situation. They believed the organization members were able to implement change initiatives successfully with their knowledge and skills, though system knowledge was reported as the biggest barrier. However, all of the leaders believed that the organizational members were willing to grasp the new knowledge. Existing mechanisms, such as organizational structure, processes or policies should be adapted to be more flexible for encouraging change. The vision of going for new markets as well as for the change should be made clearer. The role of transformational and charismatic leadership to offer autonomy support in periods of change had been emphasized. Finally, the organization was believed to benefit from the change by having challenges and fun at the work, as well as achieving business goals. Pertaining to the emotional responses, top leaders perceived employees were open, positive and looking forward to change despite of the uncertainty. Three top leaders rated from 2 to 4 in the change readiness scale for the whole organization. Table 2 presents a brief summary with a clearer view for the findings this study, though is simplified.

Content		Cognitive component of change readiness					
Level	Discrepancy	Appropriateness	Self-efficacy	Principle support	Valence	component of change readiness	1-6
Individual level (10 individual contributors)	almost all think the change is needed since 2 years	change target is fit, execution needs to be improved	confident in themselves	yes, but need entrepreneurial vision	more intrinsic: fun, autonomy, learning	enthusiastic, proud and hopeful	5-6
Group level (8 middle managers)	the majority agrees on the need, but some don't	the majority think so	negotiation & marketing skills in some groups are missing	similar to individual level	more extrinsic: financial, business	fear, doubts and sarcasm	3.5-5
Organizational level (3 top leaders)	all of the leaders think the organization perceived the need since half year	all of the leaders said yes	system knowledge is missing, but confident the org. will develop it	autonomy support is emphasized	both: having challenges and fun achieving business goals	open, positive and looking forward	2-4

Table 2. Findings of the qualitive analysis in a nutshell

Some positive changes with regards to the attitudes and beliefs had been started according to interviewees, particularly in understanding customers and competitive aggressiveness. "Sense of urgency has increased since one and a half years", commented by many interviewees. Behaviors and practices started to change as well, for example, meeting more often the customers and end customers, changing approach in the regions, revisiting marketing communication materials and modifying a more assertive tone in press releases or image videos. In addition, it is surprising to find in this study that positive emotions towards the market-oriented and entrepreneurial cultural change dominate especially at the individual level. Ryan (2005) stated that positive emotion can be taken as a sign that change has been embraced. Thus, it probably could presage the success of future change initiatives.

Major issues for no significant effects of interventions had been found at the organizational level in the second study, can be concluded from the interviews in this study as well: 1) entrepreneurial vision for new markets was remarked as a critical issue from time to time in different questions during interviews, such as in the first question about the need and reason to change, the third question about efficacy (as a barrier to implement change successfully), and in the question of principle support. Many of them pointed out that the clear direction for the new market was missing, thus led to uncertainty, confusions and even conflicts; 2) work overload hindered employees to carry out change activities, though they

were aware of the importance of exploring new markets and to be more customer-oriented. Employees stated that they did not have the capacity, freedom and bandwidth to think about and work in the different go-to-market approach; 3) some of the current processes and tools at the time of the interviews were mainly suitable for big key customers but not fit for other customers anymore, because they had complicated procedures and were not flexible. This caused frustrations for those employees who were willing to go for new approach, whereas external factors limited them to do so; 4) in line with the interpretation from the second study, a wide range of group and segment differences exist. Hence, change initiatives were perceived in diverse ways.

5.2 Research Limitations and Theoretical Implications

One of the goals in this study aims to investigate the change readiness at multilevel. Readiness at group level was checked with group managers, and readiness at organizational level was checked with three top leaders. Due to the nature of cross levels' interaction, it was common for participants to interject answers beyond their levels and functions during interviews. For instance, instead of talking him or herself, an individual was talking on the group level or organizational level. Therefore, it leaves ambiguity to generalize the readiness at each level. Future research, when conducting interviews, may explicate at the beginning and request interviewees to focus the answers on their corresponding level.

Furthermore, researchers should be aware of social desirability bias in the interview as well. A tendency that respondents answer questions in a manner that will be viewed favorably by others may exist in interviews. When asking an individual employee about his or her attitudes towards change, he or she may over report "good" feelings or under report undesirable ones. Hence, the varying degree of change readiness at multilevel (individual higher than group and organizational) should be subject to scrutiny.

5.3 Managerial Implications

Since it was found that there was a varying degree of readiness at different levels on cognitive and affective components (especially the group and organizational levels are lower), several implications arise to build collective change readiness.

First, different forms of communication should be used to influence emotions (affect) and rationales (beliefs). For example, the main ways to influence beliefs in communication include words, arguments, rationales, analyses, and numbers. In contrast, when seeking to influence individuals' emotional reaction, it can be considered to use different ways of communication, including pictures, videos, posters with colors, music, and atmosphere.

Second, one critical finding from this study was that the middle managers at group level perceived more negative emotions of their groups. Therefore, it is suggested that managers should pay more attention to employees' emotions to have successful change. Individuals who are struggling during the change need their feelings to be validated rather than ignored. Scharmer (2007) in his theory U emphasized Precensing (a combination of present and sensing), that is continuously observing and sensing, three emotional voices (voice of Cynicism, Fear and Judgment) should be empathically listened to and sensitively dealt with, so that authentic, deep communication and the final crossing of the threshold take place. Managers and leaders should accurately recognize individual's as well as collective emotions, act on a deep level of understanding and accepting them, facilitate adaption, leverage and internalize those positive emotions during a change.

Third, as demonstrated from the results, middle managers perceived more extrinsic motivated benefits out of the change for their subordinates. One suggestion could be that they promote the change as intrinsic motivated benefit. Because learning and personal mastery are intrinsic motivation for employees, a learning organization can encourage its members to operate the change as self-development. For example, to be engaged in a change program, employees can get in touch with different interesting and challenging tasks, they will have more learning and self-developing opportunities, and they will probably have more fun at work, etc.

Fourth, since values and mindsets are important elements of the organizational culture, to change a culture is to change some of the values which have rational and emotional elements. It is unavoidable in some situations that a person's or a group's values can clash with organization's. For instance, in this study, the organization was shifting the focus from key accounts to exploring more new markets. This means, although key customers are still valued, new and smaller customers should be paid attention as well. It might be not easy for

the traditional segments because their priority had been key customers. Getting staff to buy into a new culture through values alignment might be the key to successful change. One leader in this organization advocates internalizing the organizational value to the groups in this way: ".....go-to-market approach.....we have to rethink what we can improve, where we could do differently, and what we have learned from one application can be transferred to another". Autonomy support fosters internalization of the value should be taken into consideration during a change. This kind of support includes providing individuals with a rationale for doing it (including reasons and relevant information about change), acknowledging the participants' perspectives and feelings about the activity (e.g., a statement from a top leader "It is going to be painful....we have to figure out what we want to do"), and supporting the experience of choice while minimizing the use of pressure to do the behavior (e.g., a statement from a top leader "let them start, give them guidance, more coaching, let them think by themselves about what is important"). Furthermore, it can be emphasized by offering the feeling of relatedness, that they are part of the organization and part of change (e.g., a statement from change agents "please be part of it, let's do it together"). As a result, a warm emotional climate is created where people feel free to follow their interests, consider the relevance and importance of social values, norms to themselves. As a result, they tend to integrate the behavioral regulations. Surely, the way of managing emotions should be handled in an authentic and natural way, where people don't feel manipulated deliberately.

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Summaries for Three Studies

1 The First Study: The Impact of Market Orientation and Entrepreneurial Orientation on Subjective Business Performance

The first study identifies "what" contribute to the employees' positive perceptions of business performance, referring to market orientation and entrepreneurial orientation. Although many studies have taken these two orientations from a cultural perspective, most of them only measured the behavioral aspects while ignoring one of the most important parts of culture called "value". It was hypothesized in this study that the market-oriented and entrepreneurial-oriented values of the organization perceived by employees would have a positive impact on their perceived respective behaviors, and subsequently would have a

Some researchers (e.g., Schindehutte, Morris & Kocak, 2008)) advocated that firms need to simultaneously adopt both market orientation and entrepreneurial orientation, thus to create complementary effects on firms' success. However, other researchers found that when these two orientations are modeled simultaneously, the direct effect of market orientation on firms' success still exists, but the direct effect of entrepreneurial orientation disappears (e.g., Matsuno, Mentzer, & Ozsomer, 2002). Therefore, the interactive relationship between these two orientations was proposed by them, for example, entrepreneurial orientation may be an antecedent to market orientation. In this study, it was postulated that two orientations would be positively correlated as market-based learning. In other words, they would be distinct but complementary with each other.

The research was conducted in a business unit including approximately 150 employees from departments of sales and marketing of an international high-tech company. In this study, an online survey was distributed to this business unit as pretest. Among them, 121 participants completely filled out the survey but only 93 of them were chosen to be analyzed in this research because of the consistency in the posttest. SmartPLS 2.0 software was used to assess the measurement models, as well as the research model. Intercorrelation between market orientation and entrepreneurial orientation was conducted in SPSS.

By using Partial Least Squares (PLS)-based structural equation modeling method, overall, a good quality of the measurement models were affirmed, with regards to their robust reliability and validity. This indicates the adapted instruments have good quality. In the structural model, market-oriented and entrepreneurial-oriented values showed high and significant impact on their respective behaviors. However, only the behavioral construct of interfunctional coordination from market orientation and behavioral construct of innovativeness from entrepreneurial orientation predicted the significant impacts on the subjective business performance. Nevertheless, when taking all behavioral dimensions into account at the same time, subjective business performance was perceived to a very high degree. This argument is supported with the high correlation between two orientations as well (r = .79). It is then in line with the last hypothesis in this study that both orientations positively correlated to contributed to the organization's performance. A robust market orientation can enhance the effectiveness entrepreneurial orientation, and vice versa.

The generalizability of this study is called for being taken cautiously, because despite the advantage by looking into one organization, which indeed offers an in-depth understanding of its collective perceptions of organizational culture and business performance, bias concerning the respondents' self-assessment can be induced as well. However, based on the prudent consideration from the management, this study can be served a diagnostic for the challenges for an organization. Hence, it paves the way for the second study on the scope of change interventions, allowing these findings to become actionable.

2 The Second Study: Change Management Interventions on Market Orientation and Entrepreneurial Orientation

The second study addresses "how" to change market orientation and entrepreneurial orientation in an organization. Grounded on the results from the first study, creating cultural competitiveness including market orientation and entrepreneurial orientation is confirmed to be vital to survive in the drastic environment especially for a sales and marketing organization.

Organizational change involves multilevel processes (e.g., Caldwell, Herold, & Fedor, 2004; Caldwell, Yi, Fedor, & Herold, 2009): individual, group and organizational levels. Hence, the primary goal of the second study is to have an overview about change management theories and present change interventions implemented at multilevel. The second goal of this study is to examine if these interventions have positive impacts on the perceived market- and entrepreneurial-oriented values, behaviors and subjective business performance.

Within one and half year, a number of activities were initiated by the management in this organization in cooperation with external consultants, and partially developed by the author. These change interventions under the scope of market and entrepreneurial orientation challenged the mental models, values and behaviors of the members, enhanced related skills for individuals, as well as implemented tool at the organizational level. For example, project "Market Leadership Dilemma" at individual and organizational levels was to find out if this organization had the arrogance and ignorance because of its decades of market leadership position. It provoked individuals to rethink and look hard at the company's market position, competitive situation, people's behavior towards customers and so on. Active Listening and Competitor Orientation workshops were implemented at the individual level and eventually had impacts on the organizational level. They were aimed to raise the awareness of the importance of market orientation and enhance related skills by lectures, discussions, role plays, scenarios planning, etc. Social media platform or a learning tool was utilized at the organizational level to foster internal learning about market and facilitate the interfunctional coordination. Business innovation activities at the organizational level including poster session with innovative ideas were rolled out to nurture the entrepreneurial spirit. At the group level, self-organized workshops were conducted to tailor the organizational vision to group vision, to identify critical areas where needed to be changed, to discuss solutions and carry out actions items after workshops.

Afterwards, posttest was launched with the same questions and to the same target group as in the pretest. Paired samples t-test was conducted in SPSS among 93 participants. The result exhibited no significant changes in organization-wide perception of market orientation and entrepreneurial orientation. Several factors can be explained to the nonsignificant effects, for example, the external competitive environment, internal objective business performance, lagged effects of interventions, and so on. One-way ANOVA and Post Hoc Tests were used to analyze if group differences resulting from responsibilities and regions existed. A number of significant differences have been observed. Particularly, sales respondents generally rated much higher than those from marketing or technical/innovation functions in both pre- and posttests. It might be attributed to their job functions as well as their personalities or psychological dispositions. Furthermore, respondents from Asia rated much higher than those from Europe especially in posttest on the market and entrepreneurial-oriented values, interfunctional-coordinated behaviors as well as subjective business performance. This phenomenon probably resulted from the context of emerging market in Asia, so employees there might be more actively pursuing new opportunities. At the individual level, there were changes but no systematic trend.

A high degree of variation on the perceptions among groups and individuals showed that group of stakeholders and their interests were very diverse and heterogeneous. That means, social complexity was very high, therefore, all of their voices must be heard and taken into account. The quantitative method is limited to detect culture change pertaining to what exactly change recipients believe and think. A next study with qualitative method is thus needed.

3 The Third Study: Change Readiness on Market Orientation and Entrepreneurial Orientation: A Qualitative Study

The third study addresses two issues: the first one is to examine the horizontal dimension of change readiness, that is, to examine the readiness from both cognitive and affective perspectives; the second one is to examine the vertical dimension of change readiness, that is, to examine the readiness at individual, group and organizational level.

Interviews were conducted with 21 participants in a business unit of a multinational company. Among these 21 interviewees, three of them were top leaders of the business unit, eight of them were the middle managers, and another ten were individual contributors. Content analysis was used to analyze the textual data. Seven major codes were derived, which are Discrepancy, Appropriateness, Efficacy, Principle Support, Valence, Affect, Change Readiness General Rating(1 "not at all ready" to 6 "very ready").

Qualitative results from a multilevel approach show that the change readiness including cognitive and affective aspects at individual level is higher than group level's, and group level's is higher than organizational level's. The most striking results are as follows. While almost all of the individual interviewees and the majority of the managers believed that there had been a need to change (Discrepancy) for the organization since two years, it was perceived by the top leaders that the organization started to sense a change was needed only since half a year or so. All of the individuals were confident (Efficacy) in their capabilities to implement the change successfully. Most of the middle managers believed that their group members had the knowledge and skills, but some groups were perceived to need to enhance their skills in negotiation and marketing. Top leaders reported that system knowledge was the biggest barrier for the organization. Nevertheless, they believed that the organizational members were willing to grasp the new knowledge. Top leaders as role models started to show commitment for the change (Principle Support), as perceived by the interviewees. Autonomy support were appreciated and emphasized at all of the levels, especially at the organizational level. Individuals expressed more intrinsic motivation (Valence), for instance, fun at work, feeling of autonomy, learning and developing opportunities; middle managers reported more extrinsic motivated benefits, for example, achieving financial performance, and bringing new business opportunities; top leaders mentioned both motivations, intrinsic motivation by having challenges and fun at the work, as well as extrinsic motivation by achieving business goals. Finally, individuals had strong positive emptions (Affect) towards change, for instance, enthusiastic, proud and hopeful, leaders perceived milder positive emotions from the organizational members, whereas more negative emotions were reported at the group level, for instance, fear, doubts and sarcasm.

This qualitative study found that positive changes concerning attitudes and beliefs as well as practices and behaviors started to change. Major issues blocking change readiness were: entrepreneurial vision for new markets was missing, and thus led to uncertainty, confusions and even conflicts; work overload hindered employees to carry out change activities, so they were frustrated that they did not have capacity to change; some current processes and tools were complicated and inflexible, so that they were not suitable for other smaller customers anymore; a wide range of group and segment differences exist, as a result, one-size-fits-all solution did not work in this organization.

4 Contributions

A wide range of theoretical and interdisciplinary orientations enlightens researchers and practitioners with the following aspects: 1) compact theories overview on learning, market orientation, entrepreneurial orientation, change management and change readiness; 2) new insights on the measuring of market and entrepreneurial orientation, as well as their impact on subjective business performance; 3) an in-depth case study of how an organization conceives, implements and initiates further activities over a period of time; 4) evaluation on the change effects at different levels, with quantitative and qualitative methods, by looking at cognitive, emotional and behavioral aspects. Therefore, it offers comprehensive understanding into the dynamics of organizational change.

Appendix I Questionnaire for Pre- and Posttest

Dear sales and marketing colleagues,

Please respond as candidly as possible to the following statements that best match your perception of our Sales and Marketing organization, by choosing a number between: 1 (strongly disagree) to 6 (strongly agree). Or please click the last selection (N/A) if you have no idea.

1	2	3	4	5	6	N/A
Strongly	Disagree	Slightly	Slightly	Agree	Strongly	Not
Disagree		Disagree	Agree		Agree	Applicable

Your code:_____

Rule for code: first capital letter of (your mother's first name + your father's first name + your hometown). For example, if a person's mother's first name, father's first name, hometown are: Mary, Wolfgang, Hannover, respectively, then the code is: MWH

I. Market Orientation

(In) Our sales and marketing organization,

Values

- 1. ... our business strategies are primarily driven by our beliefs about how we can create greater value for customers
- 2. ... we believe that efficient cooperation among different units to drive best value for customers is of high importance

Behaviors in

Customer Orientation:

- 3. ... people frequently talk to customers to identify their underlying requirements
- 4. ... people sufficiently capture future customers' needs
- ... people precisely transfer our customers' needs and requirements into features and value
- 6. ... we make sufficient use of our sales channels to win more customers

7. ... people promptly respond to customers' needs and requirements

Competitor Orientation

- 8. ... the analysis of our competitors' strengths, weaknesses and strategies is done sufficiently
- 9. ... we use appropriate tools and public information to analyze and understand our competitors
- 10. ... people sufficiently share information within our organization concerning competitors' portfolio and strategies
- 11. ... information about competition is sufficiently reflected in our business strategies
- 12. ... people adequately respond to significant changes in our competitors' activities shown in the market

Interfunctional Coordination

- ... people effectively align our activities across different organizational units to drive best value of our organization
- 14. ... people reconcile among central and regional colleagues on best sales and marketing practices
- 15. ... people freely communicate customer experiences across all relevant functions
- 16. ... people efficiently share resources and information across different locations
- 17. ... people apply a fast and lean decision-making process during the cooperation

Do you have any further comments in this section?

II. Entrepreneurship

(In) Our sales and marketing organization,

Values

- 1. ... people think that the marketplace must be continually explored
- 2. ... we aspire to new business opportunities

Behaviors in

Innovativeness

- 4. ... people frequently market innovative features of our products to customers
- 5. ... we have innovative ways in "go-to-market approach"
- 6. ... people quickly assess and decide on new business opportunities

Proactiveness

- 7. ... compared with our competitors, we are often the first-to-market to introduce new products or services
- 8. ... we often approach potential new customers proactively
- 9. ... typically our organization initiates actions which competitors respond to rather than we respond to them

Risk-taking

10. ... our leaders have a strong tendency to pursue high-risk projects (with chances of very high returns)

11. ... people are prepared to take risks consciously to exploit potential opportunities Do you have any further comments in this section?

III. Subjective Business Performance

- (In) Our sales and marketing organization, OVER THE LAST 12 MONTHS,
- 1. ... has strengthened its "go-to-market approach" for different business models
- 2. ... the focus on external brand recognition has created value
- 3. ... there has been efficient alignment across organizational boundaries
- 4. ... we have faster adapted to changes in the market environment
- 5. ... performed excellent in general
- 6. ... has outperformed our competitors

Do you have any further comments in this section?

IV. Demographic data

- 1. What is your primary responsibility?
 - A. Marketing
 - B. Technical/Innovation
 - C. Sales
 - D. Management
- 2. Which region are you from?
 - A. Europe B. Asia C. Americas

Appendix II Interview Questions

At the Individual Level

- 1. Do you think a change was needed two years ago? Is it still needed? Why?
- 2. Do you think the change implemented is appropriate for the current situation facing the organization? Why?
- 3. Do you think you can contribute to the change successfully? What are the barriers to success?
- 4. To what extent is the management of the organization committed to the success of the change?
- 5. What are the benefits and efforts to you as a result of these changes?
- 6. How do you emotionally feel about the current and future-oriented change?
- How are you ready for further change? Please choose a number from 1 not ready to 6 very ready in the Likert scale.

At the Group Level

- 1. Does your work group (members) think a change was needed two years ago? Is it still needed? Why?
- 2. How does your work group see: is the change being implemented appropriate for the current situation facing the group/organization? Why?
- 3. Do the group members think they can make the change successfully? What are the barriers to success?
- 4. How does your work group see: to what extent is the management of the organization committed to the success of the change?
- 5. What are the benefits and cost to the work group as a result of these changes?
- 6. How does your work group emotionally feel about the current and future-oriented change? Why is so?
- 7. How is your group ready for further change? From 1 not ready to 6 very ready in the Likert scale.

At the Organizational Level

- 1. Do the organizational members think a change was needed two years ago? Is it still needed? Why?
- 2. How does your work organization see: is the change being implemented appropriate for the current situation facing the organization? Why?
- 3. Do the organization members think they can make the change successfully? What are the barriers to success?
- 4. How does the organization see: to what extent is the management of the organization committed to the success of the change?
- 5. What are the benefits and cost to the organization as a result of these changes?
- 6. How does the overall organization emotionally feel about the current and futureoriented change? Why is so?
- 7. How is the organization ready for further change? From 1 not ready to 6 very ready in the Likert scale.

Resume

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10/2008 - 02/2011	International Master Program: Psychology of Excellence in Business and Education Ludwig-Maximilians-Universität München	
09/1999 - 06/2003	Bachelor: Management Major: Marketing Zhejiang University of Finance and Economics, China	
Working Experiences		
03/2004 - 09/2008	Bosch Packaging Technology (Hangzhou) Co., Ltd.1) Responsible for Marketing Department2) Assistant to the General Manager	
Social Activities Since 2011	The Federation of German-Chinese Young Professionals Co-founder and Vice President	
Knowledge and Skills	 Emotional intelligence, intercultural competence training Organizational culture change management Leadership Marketing communication 	
Languages Chinese: English: German:	Native Fluent Intermediate	