

Managing Industrial Market Dynamics

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Developing Dynamic Capabilities for Sustainable Competitive Advantage

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Introduction

This paper springs from a need to research the links between market dynamics and companies' ability to sustain competitive advantage. Achieving sustainable competitive advantages is an industrial marketing issue that focuses on relationships with customers, suppliers and competitors. An increasing degree of relationships is also being observed between companies and universities (Harryson and Lorange, 2005; Harryson et al., 2006). Since change in single relationships is the rule rather than the exception, the strategic challenge is a matter of coping with change in business relationships through organizational learning, maneuvering for a favorable position in the industrial network (Håkansson and Snehota, 1995). It has been argued that organizational learning, in the long run, could be the only sustainable source of competitive advantage because if a company is able to go through the process of organizational learning, it will by the time anyone has copied this behavior be much further ahead (Bierly and Hämäläinen, 1995; Edmondson and Moingeon, 1996; Probst and Büchel, 1997; Senge, 1990; Stata, 1989). Consequently, if market dynamics can erode the competitive advantage of a company, and organizational learning is a way of sustaining this competitive advantage, then there is a need to understand the links between organizational capability, organizational learning and sustainable competitive advantage.

Purpose

The overall purpose of this paper is to contribute to the major strategic issue – sustaining competitive advantage – by describing, analyzing and explaining the development of dynamic capabilities in industrial networks.

Assessing and Interpreting Change in Business Relationships

How can an actor improve the capacity to better respond to contingencies in the industrial network in which it is embedded? Håkansson and Snehota (1995) propose a framework for assessing and interpreting change in business relationships through identifying the forces that generate change in industrial networks, and understanding the mechanisms and processes of change. The framework is based on some key assumptions that a network of business relationships is never optimal or in a state of equilibrium; the change process is driven by interactions, in business relationships and generated and carried out by actions and reactions to earlier actions and that the network structure is inherently dynamic, characterized by a continuous organizing process – a networking process in which the actors' activities and resources are related to each other.

In capturing this network process, organizational boundaries are a critical topic. Whereas the traditional organizational-environment dichotomy can be criticized for neglecting the network structure in general and social interaction in particular (Håkansson 1987), market context provides a more suitable construct. It can be defined as that part of the industry network, which the actor perceives as relevant for its scope and purpose (Snehota, 1990; Håkansson and Snehota, 1990).

With emphasis on the resource dimension, an actor¹ is a combination of different resources, implying that within a business relationship various resource elements are brought together, confronted and combined. These linked resources form a structure that is labeled resource constellation. Due to the embeddedness of its subsidiaries, an actor can be divided into an external and an internal business network constituting combinations of resources where that the subsidiaries have access to different types of resources, such as information about changes in customers' needs. The business relationships that exist between the focal actor and its customers, suppliers, competitors and other actors, providing the context that is relevant for its scope and purpose, constitutes the external market network context.

Interactions between actors of these networks create interdependencies. While the perceptions and interpretations of the actors in the network vary, there is some commonality of meaning about the network and how it works. Otherwise the interaction between actors would be stochastic, preventing the context from assuming a common structure. This common interpretation of the network structure can be defined as the network logic (Håkansson and Snehota, 1995). Thus, the common aspect of these inter-organizational networks is that they are defined as a structure of connected resource constellations, held together by some commonality of meaning.

The network structure is inherently dynamic, reflecting a continuous organizing networking process, which results in new combinations of actors' activities and resources. Endogenous drivers internal of the network or exogenous drivers' external of the network determine this process (Ibidem). These drivers provide the process with momentum, resulting in structural change. Structural change is a change in the pattern of connections existing between actors, e.g. customers, suppliers, competitors and other relevant actors of the external network. Structural change may cause a change in positions in the industrial network, such as when an actor gains/loses the identity as most preferred supplier. By determining structural change, endogenous drivers open up existing resource constellations and challenge an actor's position in the network. This is the main reason for focusing on the actor's capacity to manage in business relationships. Structural change changes the interdependencies among actors in an industrial network.

Complexity is a consequence of the number and the kind of possible connections between the actors. Complexity, therefore, becomes problematic when an actor cannot comprehend and make meaning of a change in the variety and/or variability of some connection, because what is causing the change of the network is obscured and ambiguous (Snehota, 1990). A high level of complexity can be attributed to the heterogeneity of resources, and the interdependencies of activities enable innumerable possibilities of new resource combinations. 'Bounded rationality' (March, 1978), which sets limits on actors' capacity to acquire and transform information and, consequently, to access, transfer and transform their own as well as another actor's resources, affects the capability to recognize, communicate, learn and teach in networks.

Consequently, managing change is a difficult task due to overwhelming complexity and bounded rationality, setting limits on an actor's capacity to interpret and make meaning of change, which increases the level of uncertainty about how to cope with it. Cope with change in business relationships is influenced by the perception of itself in relation to the counterparts, e.g. the degree of interdependence perceived to other actors in the network. This refers to its strategic identity, i.e. how the actor wants to be perceived by other actors. How these actors actually perceive this focal actor is due to the strategic role it is able to play. Thus, the extent of the involvement in handling structural change is influenced by the actors' perception of the interdependencies of each other in the network.

Developing Organizational Capabilities

Hence, a network of business relationships is constantly changing, which is a reason for claiming that an actor needs a capacity to manage change. Managing the networking process is, however, a difficult task due to overwhelming complexity, creating uncertainty about the outcomes of decisions. Complexity is caused by the heterogeneity of resources and the interdependencies of activities enabling innumerable possibilities for new combinations. Managing change in business relationships is, therefore, concerned with developing organizational capabilities for coping with contingencies in business relationships.

¹ In this paper, an actor refers to a multinational company and its subsidiaries, such as production and sales companies.

Developing organizational capabilities for handling change in business relationships involves the resource dimension of the industrial networks approach. To further understand the resource dimension and how it can be used for managing change in business relationships, I will resort to some ideas concerning the company's resources and capabilities as the principal basis for its strategy coalesced into what has become known as the resource-based view of the firm (cf. Wernerfelt, 1984; Barney, 1991; Grant 2002). The principal rationale for resorting to this approach is when the external environment is in a state of flux, defining the company in terms of its bundle of resources and capabilities may be a more stable basis for strategy than a definition based on the customer needs that it seeks to satisfy.

Resources are used to perform certain kinds of activities. However, very few resources are productive on their own. Productive performance is rather the outcome of cooperating resources. The term organizational capability² can be referred to an organization's capacity to perform a certain productive activity (Grant, 2002). According to Prahalad and Hamel (1990) an organizational capability becomes strategic when it makes a disproportionate contribution to ultimate customer value, or to the efficiency with which that value is delivered. In other words, the strategic focus on the term organizational capability implies that organizational capabilities provide a foundation for competitive advantages. Organizational capabilities are what Selznick (1957) would term as distinctive in order to describe those activities that an organization does particularly well relative to its competitors in order to achieve a competitive advantage. Furthermore, since new ways of cooperating are difficult to acquire, Kogut and Zander (1991) argue that developing organizational capabilities is a matter of building on existing relationships in which individuals develop new knowledge by learning to recombine their current capabilities.

What is central to our argument is that knowledge is held by individuals, but is also expressed in regularities by which members cooperate in a social community (i.e. group, organization, or network). If knowledge is only held at the individual level, then firms could change simply by employee turnover. Because we know that hiring new workers is not equivalent to changing the skills of the firm, an analysis of what firms can do must understand knowledge as embedded in the organizing principles by which people cooperate within organizations (Kogut and Zander, 1991).

Thus, the emphasis on the resource dimension of the industrial network approach is synonymous with how to cope with change in business relationships and points to the importance of organizational capabilities. An organizational capability can be defined as an organization's capacity to effectively perform certain activities, being considered as strategic when it makes a disproportionate contribution to ultimate customer value, or to the efficiency with which that value is delivered. It is further held that an organizational capability is a kind of organizational routine, which is defined as a predictable pattern of activities made up of a sequence of coordinated activities performed by individuals. This type of organizational capability is, therefore, viewed as a principle for organizing how individuals cooperate to effectively perform certain activities. Developing such organizational capabilities is a matter of learning to recombine current capabilities in order to perform the routines in a different mode, involving a change in the principles for organizing how individuals cooperate.

The Dynamic Aspect of Organizational Capabilities

Within the resource-based approach there is a revival of the interest in the dynamics of strategic management (Barnett and Burgelman, 1996; Spender, 1994, 1996; Teece et al., 1997; Hodgson, 1999). The common assumption departs from the notion of steady-state equilibrium, which can be optimized with given strategies, but rather that asymmetric information is the rule, because individuals may not know what they want, and what they want may change over time. This implies that individuals can interpret information that they become aware of in a variety of ways, which is why a company's behavioral possibilities may also vary. In this way, a dynamic approach attends to occurrences that are the least understandable through a static approach.

To cope with such a situation in such a way that organizational change is not jeopardized, the challenge is to develop dynamic capabilities. Teece et al., (1997) refer to dynamic capabilities as the ability to achieve new forms of competitive advantage where the term dynamic intends the capacity to

² The terms capability and competence will be used interchangeably as it can be argued that the distinction between the two is mere semantic (Prahalad and Hamel, 1993).

renew competences so as to achieve congruence with changes in the business environment and the term capability intends the process in realizing it. For a dynamic capability to be strategic, it should be "honed to a user need (so there is a source of revenue), unique (so that the products/service produced can be priced without too much regard to competition) and difficult to replicate (so profits will not be competed away)" (Teece et al., 1997, 517). However, even if the selection and variation mechanisms hint at what may generate growth and prosperity, it says relatively little about where the actual source of dynamic capabilities resides and how they develop. Teece et al., (1997) advance the argument that the very source of organizational change resides in managerial and organizational processes, or rather routines or patterns of current practice and learning, shaped by how its resources are positioned and the available paths defined as strategic alternatives available to the company. Thus, the source of competitive advantage from the resource-based approach are the 'high-performance routines or practices', shaped by learning from previous experience and, therefore, determining the future strategic path of an organization.

The notion of path dependency implies limitations on organizational growth and prosperity. It may, therefore, be tempting to acquire rather than to develop dynamic capabilities. However, dynamic capabilities have rather a social and organic quality that comes from shared experiences and interactions within the company (Hodgeson, 1999). In other words, capabilities are both context-dependent and organically related to each other. Hiring or acquiring external capabilities cannot replace existing capabilities, "because the experience they gain from working within the firm and with each other enables them to provide services that are uniquely valuable for the operations of the particular group with which they are associated" (Penrose, 1959: 46). Aligned with this argument are Teece et al. (1997) who favor developing dynamic capabilities, even if it may take years or possibly decades. The challenge, however, is that those capabilities that were effective in the past do not automatically guarantee future effectiveness (Leonard-Barton, 1992, 1995; Beer, 2001). To handle this paradox of development seems to pose a vital challenge within the dynamic resource-based approach on strategic management (cf. Teece et al., 1997; Dosi et al., 1998; Nader and Tushman, 1999; Dosi et al., 2000; Morosini, 2002). It is, in a sense, the challenge of sustaining the dynamic nature of capabilities. The consecutive question is then how the dynamic nature of capabilities can be developed?

A Strategic Perspective on Organizational Learning Processes

It has been argued that organizational learning, in the long run, could be the only sustainable source of competitive advantage. The rational, so it is argued, is that if a company is able to go through the process of organizational learning, it will by the time anyone has copied this behavior be much further ahead (cf. Stata, 1992; DeGues, 1988; Senge, 1990, 1994; Bierly and Hämäläinen, 1995; Edmondson and Moingeon, 1996; Probst and Büchel 1997). Crossan and Berdrow (2003) furthermore argue that "organizational learning research, with its focus on process, has the potential to offer insight into...the creation of strategies"...and that..."organizational learning is seen as a means to develop capabilities that are valued by customers, are difficult to imitate, and hence contribute to competitive advantage" (Ibidem, 1089). However, the focus is often on the result and not on the processes that leads up to the leads to the result. Furthermore, few attempts have been made to connect organizational learning with strategy research. Crossan and Berdrow (2003) argue that such attempts have been hindered by three broad categories of shortcomings:

- Organizational learning research has ignored the tension between assimilating new learning, (exploration) and using what has been learned (exploitation) that underlies structural change, i.e. the tension between exploring and developing new capabilities while exploiting existing ones.
- Too narrow conceptualization of organizational learning, such as a trial-and-error or decision making process, which restrict what organizational learning has to offer to strategy.
- Lack of empirical research that applies organizational learning theory to structural change.

Thus, to establish a link between organizational learning and strategy, that captures the tension between exploration and exploitation, it is useful to conceive of learning within and between organizations as occurring over different levels and to disentangle the processes through which learning occurs. Learning may occur at individual, group and organizational levels, which are linked together by four social and psychological processes: intuiting, interpreting, integrating and institutionalizing. Intuiting is regarded as a subconscious process of recognizing patterns in a person's experience. In other words, it is the learning that occurs at individual level. Interpreting, on the other

hand, is the process in which an individual (consciously) makes sense of an experience and, through interaction, collectively creates a similar meaning of the experience. In other words, it is linking the individual and the group level. Integrating is about developing shared understanding among organizational members and taking coordinated action through mutual adjustments. It, therefore, bridges group and organizational levels. Institutionalizing is then the process of embedding the learning that has occurred on individual and group level into the institutions of the organization, such as systems, structures, procedures, and strategy. The fourth process, institutionalizing, captures learning in nonhuman elements, such as structures, systems, procedures and routines (Crossan et al., 1995; Crossan et al., 1996).

The first three processes are similar to the organizational learning process as described by Dixon (1994). However, Dixon divides the interpretation process into two different but interrelated processes. The fourth process, however, adds to the description of the organizational learning process and identifies a critical link to strategy, which merits further discussion. Strategy can be regarded as the link between the organization and its environment (e.g. Grant, 1996). Hamel and Prahalad (1994) argue that when the environment is changing there is a need for alignment between the organization and its environment. Alignment they define as a dynamic process that involves the capability to reinterpret its environment and incorporating this new understanding into new structures, systems and procedures. Crossan and Berdrow (2003) refer to this dynamic process as institutionalized learning, which is described through feedback loops, feed-forward and feedback processes. Feed-forward learning is a process that involves how learning feeds forward into group learning and learning at the organizational level, such as changes that affect structure, systems and procedures. Feedback learning, on the other hand, is a process for the learning that is embedded in the organization and how it affects learning at group and individual learning levels. The institutionalized feed-forward learning process enables exploitation of existing organizational capabilities whereas the institutionalized feedback learning process enables exploration of what has been learned. For further understanding of fundamental experiential learning problems, I refer to the works of Holmqvist (2002, 2003) and Holmqvist and Larsson (2004).

Methodology

This research is conducted according to the abductive methodology of systematic combining by Dubois and Gadde (2002), which they define as the matching of theory with empirical findings. It is a combined process of deduction and induction that involves analytic abstraction and generalization (cf. Alvesson & Sköldbberg, 1994). Systematic combining is a flexible research method that enables the researcher to continuously go back and forth between different kinds of research activities, and between theory and empirical observations. The major strength is that it allows for the identification of unexpected yet interrelated issues to emerge and to be further explored. Systematic combining emulates from existing theories and emphasizes the discovery, rather than checking data, which is why it is different from triangulation. In systematic combining, multiple sources of findings are used to contribute to new dimensions of the research problem. This may result in the redirection of the study. The methodology is, therefore, more useful for theory development than theory generation.

In this study, the scope was initially to include most of case company's subsidiaries, which at that time amounted to three production and eleven sales companies. Nine of these companies were selected due to access restrictions. After the first round of interviews at the eight companies, the complexity of the collected data seemed overwhelming. I, therefore, decided to narrow the scope. Since the new strategy originated from the Swedish production company it seemed reasonable to keep it. This meant that I was going to study the relationship between the Swedish production company and some sales companies from which I had gathered a profound plethora of data. This turned out to be the Dutch, German and British sales companies. Focus is, however, not on the production and sales companies per se, but rather to the business relationships between them. The structural boundaries of the empirical domain are, in this study, set by the activities and resources and consecutive interdependencies between the Dutch, German and British sales actor and the Swedish production actor. Had different companies of the group been selected the structural boundaries, the interdependencies and the interpretations thereof would probably have been different. The units of analysis in this study are, therefore, the three business relationships between:

- the Swedish production actor and the Dutch sales actor;
- the Swedish production actor and the German sales actor;
- the Swedish production actor and the British sales actor.

This study revolves around the role of organizational learning for the development of organizational capabilities. With a focus on processes, organizational learning is viewed as a means to develop capabilities (cf. Crossan and Berdrow, 2003). Organizational learning is a dynamic term that is considered to have analytic value especially in situations characterized by organizational change. In this paper, organizational learning processes are, therefore, used to describe and understand the development of dynamic capabilities in situations of organizational change. In addition, the analytic value of organizational learning increases as it captures and unites different levels of analysis; individual, group and organizational level. However, there is a risk that the description of organizational learning will suffer from reification, i.e. that abstracts terms on group or organizations levels are treated as if they were objects. On the opposite side, there is a similar risk for anthropomorphism, i.e. those unique human characteristics are attributed to objects (Hellgren and Löwstedt, 1997). Still, researchers argue for the relevance of organizational learning, claiming that organizational learning is not simply the sum of organization's individual learning (Argyris and Schön, 1978; Kim, 1993; Dixon, 1994; Hellgren and Löwstedt, 1997). Aware of these evident risks, I have tried to avoid regarding organizations as human beings and human beings as organizations.

Furthermore, throughout this study, the aggregation problem, i.e. whether individual learning can be aggregated into an organizational level, has been constantly recurring. The first time I encountered this problem was after the first round of interviews in the three selected subsidiaries. Interestingly, however, there were normally only few interviewees who had relevant insights. The solution was to regard the interviewees as representatives of the specific function in the company in which they were working. The term actor representative was coined. Also when analyzing the accounts of the actor representatives the aggregation problem recurred. More specifically it was about how the empirical accounts of the actors' representatives were translated into meaning structures.³

The empirical evidence for this case study has primarily been collected through interviews. In the first round of interviews, 64 interviews were conducted with 52 interviewees at sales and production companies in nine countries (Finland, Sweden, Holland, Italy, Spain, France, Denmark, Germany, UK). In addition, I made four interviews with four interviewees at the headquarters in Sweden. In the second round of interviews, data were gathered only from those who were directly responsible for, and involved with, logistics activities at the sales companies, more specifically for forecasting, order handling and stock-keeping. In the second round of interviews, 18 interviews were conducted with 13 interviewees in four countries (Sweden, Holland, Germany and UK).

A foundation for analytical inference is what Dubois and Gadde (2002) label 'logical coherence', which refers to the adequacy of the research process and the extent to which the theories are empirically grounded. This means that logical coherence concerns whether a developed theoretical framework is a relevant representation of the empirical findings. It seems that logical coherence is about the 'explanatory power' of the theoretical concepts used, and can be treated as synonymous with what Yin (2003) labels internal validity. This means that the theoretical concepts of the theoretical framework used to explain the development of dynamic capabilities to cope with industrial network dynamics need to have analytic value. In this study, the internal validity is considered to be acceptable.

Another concern that needs to be discussed is whether the different theoretical concepts match each other, which refers to the construct validity of a research study (Merriam, 1989). High construct validity presupposes acceptable analytical inference between the different theoretical concepts used and the empirical domain, involving why they were selected. Merriam (1989) further argues that a conceptualization is a constructed and simplified representation of the empirical findings, guided and influenced by the researcher's bias. The different theoretical concepts used, and the reasons for using them were discussed above. In this study, the theoretical concepts are compatible and cross-fertilized, which is why the construct validity is considered to be acceptable.

A third concern that needs to be discussed is to what extent the results of a research study are generalizable, which refers to the external validity of a research study (Merriam, 1989). In this study, external validity concerns the extent to which the empirical and the theoretical results are general enough to be applied in situations other than the present case study. High external validity presupposes high internal validity. The purpose was to contribute to the major strategic issue –

³ In this paper, meaning structure is defined as a conceptual system for making sense of data based on assumptions and norms that compose everyday experience (Dixon, 1994; Senge et al. 1994).

sustaining competitive advantage – by describing, analyzing and explaining the development of dynamic capabilities in industrial networks. To accomplish the purpose I have studied the realization of a new strategy in a multinational company. The study was performed with an industrial network perspective, into which organizational learning theories and the concepts from the resource-based view of the firm were integrated. The study involved what can be considered ‘a theoretical developments breakthrough’. For instance, rather late in the research process, an organizational capability was considered to be a kind of organizational routine and a principle for organizing how individuals cooperate to effectively perform activities. This was a theoretical development breakthrough because it enabled me to connect the principles of the new strategy that was to be realized with the organizational routines of EPLSG that were studied – the forecasting, ordering and stock-keeping routines – and to describe and analyze them with the theoretical concept of organizational capability. The results of this research study can be regarded as that which Merriam (1998, 209) labels “context-bound extrapolations rather than generalizations”. In this paper, it is argued that coping with industry network dynamics is a challenge of developing dynamic capabilities. Although each situation and strategic alternative to cope with it is different, it is assumed that the theoretical framework developed can be instrumental to companies other than EPLSG for managing the consequences of structural change in complex global business landscapes.

Another often used criterion for evaluating the quality of a research study is reliability. Merriam (1998) suggests that the reliability of studies in social science can be conceived in terms of whether the empirical and theoretical results are consistent with the data collected rather than whether the results will be found again. To avoid biases in the research situation, the probing technique proved to be useful i.e. the continuous asking for more details and for clarification through examples. I tried to avoid technical jargon and theoretical concepts, which could risk causing misunderstandings. Reliability was also improved through the establishment of a case-study base, which was reviewed several times by respondents.

A Case of Learning to Recombine Capabilities at EPLSG

Historically, EPLSG has had a central and dominating role in its industry being one of the most preferred suppliers. In recent years, however, its relative importance and dominating role had decreased. The rate of turnover and profitability has leveled out. Deregulations have opened up for new entrants resulting in tougher competition. Another factor driving change was increasing, new and more specified customer demands with focus on ‘problem free operations’. Lead times are, therefore, becoming increasingly important for customers satisfaction. As a consequence, there was a new purchasing behavior among some customers. Before the deregulations in the public sector segment, salesmen made business directly with local authorities, most often medical doctors. But, some insurance companies moved into this market. Local authorities were removed from the purchasing responsibility, which instead was located centrally with a commercial manager.

A new supply chain strategy was formulated to cope with the changes. The overall objective was to further integrate the production and sales actor in order to increase the capacity to respond to changes in customers’ needs. The overall objectives were further specified into some specific measures. Sales companies should recognize the difference between delivery security of requested orders and of confirmed orders. Also, the level of the delivery security should be improved. The delivery security was to be divided into on-time of confirmed quantity, and on-time of requested quantity. The delivery security should be 100 per cent on-time for orders the quantity of which was confirmed to the customer, and 90 per cent on-time for orders the quantity of which was requested by the customer. The objectives for delivery time were further related to the type of product ordered by the customer. Products ordered by the customer and kept in stock by the sales actor were labeled: A-products. Those, which were to be assembled in the succeeding production batch, were labeled: B-products. Finally, those products that required engineering work before they could be assembled were labeled: C-products. The delivery time for A-products should be within 24 hours, for B-products within 2 weeks and for C-products not more than 8 weeks.

Re-Organizing Organizational Routines

Coping with changes on the market was considered to be a matter of translating and transferring changes in customers needs. More specifically, this meant that the information flow between sales and production companies would have to be improved. A major implication was that one of the core processes, the order-to-delivery (OTD) process, linking the customers and the group of companies, would need to be re-organized. Another implication was that the sales companies would need to

recognize that they played an important role in transferring information about customer needs, changes in customer needs as well as of sales activities and other kinds of activities that may change customers' needs. An on-line IT system was considered essential in order to facilitate for the sales companies to transfer this kind of information. A major reason was because it would make it possible to analyze information on a deeper level, identifying changes in demand and challenging the forecasts from the sales companies and thereby improve the ability to foresee deviations in customer demand. Current guesswork would be eliminated.

Re-organizing the OTD process should involve the forecasting, ordering and stock-keeping routines. The following changes should be made:

- Sales companies should stop forecasting every second month and instead forecast only once a year and continuously inform the production companies about deviations from the annual forecast. The forecasts should be more specified in terms of product and quantity in stock.
- Production and sales companies should be connected via an on-line IT system through which customer orders should be processed. Instead of using product descriptions for a customer order, product numbers should be used.
- The production companies should start keeping stocks for the sales companies. Products should be classified either A, B or C products depending on their turnover. Sales companies should reduce their local stocks, which should contain only 'sold products', i.e. A-products.

The result of re-organizing the OTD process was to create a new order of organizational routines in which the involved parties would have the same kind of information regarding customers' orders almost simultaneously. By using a standardized language, in the form of product numbers, individual interpretations and misunderstanding, when sending and receiving information, would be eliminated. By means of the re-organized process, confidence would thus be infused among the parties involved. The new order of routines in the OTD process was considered to capture some important benefits. Firstly, it would create more time for leaders to be leaders. Secondly, it would improve the productivity and optimize capital utilization. Thirdly, it would result in improved ability to foresee deviations in customer demand. Fourthly, and maybe most importantly, it would result in improved ability to handle changes in customers' demand, and thereby regain the strategic position as most preferred supplier in the professional laundry industry.

The British Sales Actor

The British market situation indicated that customer demand was due to deregulation not increasing but rather changing. The business was, to a major extent, characterized by increasingly sharp competition, price pressure and replacement of old products with existing customers. In other words, the market was a non-growing replacement market where the customers' purchasing pattern had changed. The strategic position of the British sales actor was difficult to evaluate since the information system could not generate any kind of reports as to whether the volume of sold products had increased or decreased during these years. To cope with the new market situation, new sales channels with new brands had been developed. The new brands were successful and that the operating margin had increased.

The role of the British sales actor was as an innovative and successful actor that added more value than many other sales companies with knowledge about the domestic market. As one of the largest sales actor in the group, and because the managing director held a seat in the board of directors, the position of the British sales actor in EPLSG was relatively strong. The relationship with the Swedish production actor can be characterized as being kept somewhat 'at arms length'. Due to historical reasons, the British sales actor did not trust the Swedish production actor when it came to delivery and stock issues. The delivery times and delivery security was measured neither between the Swedish production actor and the British sales actor nor between the British sales actor and the domestic customers.

Logistics was not considered to be of strategic importance but rather a process of getting a product from one place to another. Priority was given to solve IT problems, which is why the work of realizing the supply chain strategy had been set a side; no objectives had been formulated in regard to the relationships with the Swedish production actor because it was not considered important and not aligned with the British way of working. No changes had been made in the organizational routines concerning forecasting and ordering. The stock-keeping routines had changed as the Swedish

production actor had started to keep stock for the British sales actor. However, an integrated IT system had not been implemented, products had not been classified into A, B and C categories and product numbers were not used. Consequently, the British sales actor had become more integrated with the Swedish production actor with regard to stock-keeping but not forecasting and ordering. Finally, the representative of the British sales actor was dissatisfied with the new supply chain strategy essentially due to mistrust in the Swedish project management

The Dutch Sales Actor

The Dutch market situation can be characterized by increasingly sharp competition, price pressure, stagnating and, due to deregulations, changing customer demands. The turnover of the Dutch sales actor was almost equally divided between replacing old products and new sales. The rate of profitability was below that of the group target, which implied a deteriorated market position.

The role of the Dutch sales actor was perceived to be that of a relatively small sales actor, trying to cope with the market situation not by competing on price but rather through differentiation, i.e. by offering a differentiated range of products and services. Their position in EPLSG was relatively weak, which was primarily due to their relative size. The Dutch sales actor was active in coming up with suggestions for increased cooperation with the Swedish production actor and their relationship has, over the time period, improved.

Logistics was perceived as being connected with customer needs and different means for transferring information about these needs. Attention had been given to the internal change project, and changes had been made in organizational routines concerning forecasting, ordering and stock-keeping. For instance, an on-line IT system had been implemented and product classifications as well as product numbers were used when ordering. Delivery times between the Swedish production actor and the Dutch sales actor were, however, not measured but actually claimed to have increased. Objectives to improve the OTD process had been formulated, reached but not re-formulated. Thus, the Dutch sales actor had become more integrated with the Swedish production actor.

The reflections on the internal change project mainly conveyed satisfaction with the internal change project and with the development of the relationship with the Swedish production actor. Even if the delivery times were believed to have increased, the level of trust in the relationship between the parties had increased. The prime rationale was claimed to be improved social relationships and communication. The Swedish production actor had become more committed to help the Dutch sales actor with deliveries, which had a feeling of being supported satisfactorily. Finally, the representative of the Dutch sales actor had not only learned how to work more efficiently but also learned how to learn by reflecting on the assumptions about how to work effectively, for instance when it came to ordering routines.

The German Sales Actor

The German market situation indicated that due to a new environmental law the largest segment - public sector - was fully invested. As a consequence, a decline in this part of the market was expected. The business was increasingly revolving around replacement of existing customers' old products. Furthermore, there was a salient trend towards institutions becoming privately owned and financed. The strategic position of the German sales actor had not changed. To cope with the market situation, the sales focus would shift from the public sector to the dry cleaning segment, which was expected to grow. At the German sales actor, there was awareness of the OTD process but it was not a priority for the managing director.

The role of the German sales actor was perceived as being responsible for sales and the brand on the German market. Its position in EPLSG can be regarded as strong. The Swedish production actor was perceived as somewhat inflexible, having a potential to provide better services, and that the delivery times sometimes caused problems, the relationships with the Swedish production actor was considered to be good. The prime rationale was the impression that representatives of the Swedish production actor understood their situation.

Although the OTD process was not a priority, attention was given to the new supply chain strategy. Changes had been made in organizational routines concerning forecasting, ordering and stock-keeping. For instance, an on-line IT system had been implemented and product classifications had been made. Product numbers were, however, not yet used when ordering. Delivery times and delivery

security between the Swedish production actor and the German sales actor were not measured. Nor were they measured between the German sales actor and the domestic customer. Operational goals to improve the OTD process were formulated, accomplished but not re-formulated. For instance, the local stock level had been reduced to a historically lowest level. A major reason was that the Swedish production actor had started to keep stock for the German sales actor. This change in the stock-keeping routines erased the local 'squirrel mentality', i.e. to stock products not based on actual customer needs but on future possible customer needs. Thus, the German sales actor had become more physically integrated with the Swedish production actor.

Over time, a new understanding of logistics and the OTD process developed. The link, i.e. the OTD process, between logistics and customer needs was recognized. The interdependencies in the OTD process were also recognized. For instance, that information in the OTD process about customers needs was important not only for the production companies but also for the sales actor, because if the production companies did not get the information as soon as possible there could be delays in the deliveries of products from the production actor to the sales actor. A consequence could then be that the sales actor could not deliver to the domestic customer on time as promised and eventually they would lose the customer order.

Analyzing the British Sales Actor's Capability to Cope with Structural Change

No changes had been made in the organizational routines concerning forecasting and ordering. The stock-keeping routines had changed as the Swedish production actor had started to keep stock for the British sales actor. However, an integrated IT system had not been implemented, products had not been classified into A, B and C categories and product numbers were not used. It can, therefore, be concluded that the British sales actor had made only minor changes in the existing organizational routines. It had become more physically integrated with the Swedish production actor with regard to stock-keeping but not forecasting and ordering.

The reflections of the British sales actor on the internal change project, primarily conveyed dissatisfaction that was essentially due to mistrust in the project management and in the internal change project. Delivery times and delivery security between the Swedish production actor and the British sales actor were not measured. Nor were they measured between the British sales actor and the domestic customer. No objectives had been formulated with regard to the relationships with the Swedish production actor because it was not considered important and not aligned with the British way of working. It can, therefore, be concluded that no learning process had occurred. Furthermore, since the Swedish production actor had taken over the stock-keeping routine, the British sales actor had not recombined existing stock-keeping capabilities and, consequently, not developed any new organizational capabilities to cope with change in the external environment.

Analyzing the Dutch Sales Actor's Capabilities to Cope with Structural Change

Attention had been given to the internal change project and changes had been made in organizational routines concerning forecasting, ordering and stock-keeping. For instance, an on-line IT system had been implemented and product classifications as well as product numbers were used when ordering. Delivery times and delivery security between the Swedish production actor and the Dutch sales actor were not measured. Nor were they measured between the Dutch sales actor and the domestic customer. Objectives to improve the OTD process had been formulated, reached but not re-formulated. It can, therefore, be concluded that major changes in the existing organizational routines had been made. The level of physically integrated with the Swedish production actor with regard to stock-keeping, forecasting and ordering routines had increased.

The reflections on the internal change project, primarily conveyed satisfaction with the internal change project, and with the development of the relationship with the Swedish production actor. Furthermore, the representative of the Dutch sales actor had not only learned how to work more efficiently but also learned how to learn by reflecting on the assumptions about how to work effectively, especially when it came to routines for handling orders. It can, therefore, be concluded that a learning process had occurred in which the representative had learned how to recombine existing capabilities regarding order handling. This implied that new organizational capabilities had been developed to cope with change in the external environment.

Analyzing the German Sales Actor's Capability to Cope with Structural Change

At the German sales actor, attention was given to the internal change project although the OTD process was not a priority. Changes had been made in organizational routines concerning forecasting, ordering and stock-keeping. For instance, an on-line IT system had been implemented and product classifications had been made. Product numbers were, however, not yet used when ordering. Delivery times and delivery security between the Swedish production actor and the German sales actor were not measured. Nor were they measured between the German sales actor and the domestic customer. Operational goals to improve the OTD process were formulated, accomplished but not re-formulated. For instance, the local stock level was reduced to the historically lowest level. A major reason was that the Swedish production actor had started to keep stock for the German sales actor. This change in the stock-keeping routines erased the local 'squirrel mentality', i.e. to stock products not based on actual customer needs but on future possible customer needs. It can, therefore, be concluded that some changes in the existing organizational routines had been made. The level of physical integration with the Swedish production actor with regard to stock-keeping, forecasting and ordering routines had increased.

Also the reflections on the internal change project, predominantly, conveyed satisfaction with it. It was considered enriching to actually have seen a production facility and to have met other colleagues working in the OTD process, developing social relationships. Over time, a new understanding of logistics and the OTD process developed. The link, i.e. the OTD process, between logistics and customer needs was recognized. The interdependencies in the OTD process were also recognized. For instance that information in the OTD process about customers needs was important not only for the production actor but also for the sales actor, because if production did not get the information as soon as possible there could be delays in the deliveries of products from production to sales. A consequence could then be that the sales actor could not deliver to the domestic customer on time as promised and eventually the loss of the customer order. It can, therefore, be concluded that a learning process had occurred in which the German sales actor had learned how to recombine existing capabilities, primarily, regarding forecasting and order handling. This implied that new organizational capabilities had been developed to cope with change in the external environment.

EPLSG's Capability to Cope with Structural Change

This case study is about the realization of a new supply chain strategy in EPLSG. The new strategy captured a potential to better translate and transmit information about changing customers needs. This could, in turn, result in enhanced ability to offer and provide variety to meet contingencies in customer relationships. The question is therefore: has the group of companies become more integrated and thereby enhanced its capability to better respond to structural change in the external market network? The Dutch and the German sales companies had made major changes in the existing organizational routines and become more physical integrated with the Swedish production actor with regard to stock-keeping, forecasting and handling customer orders. In these sales companies a learning process had occurred in which the actor representatives had learned how to recombine existing capabilities regarding forecasting, order handling and stock-keeping routines.

Thus, it can be concluded that capabilities in the relationships between the Swedish production actor and the Dutch and the German sales companies with regard to stock-keeping, forecasting and customer order-handling routines had been developed. This implies enhanced capability to better translate and transmit information about changing customers' needs and enhanced capacity to, in the future, better cope with structural change in these parts of the external market network. Also, representatives of both the Dutch and the German sales companies had learned how to work more effectively when it came to routines for forecasting. However, even more important, the representative of the Dutch sales actor had learned how to learn by reflecting on the assumptions about how to work effectively when it came to routines for handling customer orders. It can, therefore, be concluded that a learning processes had occurred in EPLSG in the relationships with the Dutch and the German sales companies in which the representatives had learned how to recombine existing capabilities with regard to forecasting, handling of customer orders and stock-keeping. Whether or not the development of new capabilities is enough to restore the actor's position as preferred supplier remains to be seen.

Furthermore, the empirical findings of this research study shows that structural change had occurred in the local external market network at all three sales actors. Consequently, there were incongruencies between the local external market and the internal network, calling for a need to adjust to the structural change. Already before the initiation of the change project, all three sales actors had become aware of

the need to change strategy in order to adapt to the structural changes in the local market network. Furthermore, not only were they aware that structural change had occurred in the external market network but also of its detrimental strategic and organizational consequences. This means that the intuiting process had occurred before the initiation of the change project, which explains the widespread awareness among the actors of the structural change, and the consequences thereof. It also means that the institutionalization process had commenced before the initiation of the change project.

At the initiation of the change project the three sales actors had different understandings, for instance, about which strategy to apply to best cope with the structural change. At the completion of the project, two of the three sales actors had developed shared understanding thereof. This means that an interpretation process had occurred in the sense that shared understanding had been developed, enhancing the actors to take effective action. In other words, an organizational learning process had occurred. This process occurred because these two sales actors - the Dutch and the German - re-conceptualized their knowledge regarding which strategy to apply to best cope with the structural change. A major contribution of this empirical study is that the interpreting process involves the re-conceptualization of knowledge, which occurs when organizational members engage in the sequence of collectively interpreting information with other organizational members who are themselves engaged in the same sequence.

However, the German sales actor changed the knowledge first when trust had been established in the relationship with the Swedish production actor. On the contrary, the British sales actor did not re-conceptualize the knowledge regarding the new strategy. During the change period trust was not established in the relationship between the British sales actor and the Swedish production actor. The Dutch sales actor's trust in the Swedish production actor remained high during the whole change project. Yet another contribution of this empirical study is that trust is an important condition for the re-conceptualization process to occur.

Research shows that there are other conditions for the re-conceptualization process to occur. According to Probst and Büchel (1997) and Klimecki and Lassleben (1998) there are six salient conditions for the development of shared knowledge to occur. (i) Individuals need to have the intention, i.e. to be ready and willing, to participate in the exchange of knowledge, discussing and negotiating their individual views. This means that the development of organizational knowledge is dependent on, not only the intention to engage in the exchange of individual knowledge, but also in communicating them. (ii) Individuals need to communicate the assumptions underlying the individual knowledge by means of language. However, for the communication process to result in 'mutual understanding' (iii) the knowledge need to be accessible and (iv) the content of the communication process needs to be transparent as to 'reveal' fundamental assumptions and beliefs. (v) Transparency, in turn, presupposes the existence of a medium in which knowledge is stored. The medium in which vision, mission etc. can be stored has an instrumental value since it enables individuals to gain access to the organization and, if transparent, to reflect on them. (vi) The integration of group processes into the organization makes individual knowledge available to the organization. Aligned with these findings is a research stream that revolves around the role of dialogue for developing shared understanding (Bohm, 1980, 1985, 1993; Argyris, 1986; Argyris, 1990; Argyris 1993; Isaacs, 1993; Dixon, 1998, 2000).

Hence, it was implied that the institutionalization process had commenced before the initiation of the change project. Had it been completed it would indicate that all three sales actors had realized the new strategy. However, the British sales actor had neither accepted nor realized the new strategy. This implies that neither a feed-forward nor a feedback process had occurred and, consequently, that existing organizational capabilities were neither exploited nor explored. This supports the conclusions that the British sales actor has not developed dynamic capabilities to better cope with structural change in the local external market network. The lack of trust further explains why the institutionalization process with the British actor came to a halt, and consequently, why an organizational process did not occur. Furthermore, its engagement in the realization process was quite insignificant which is why it can be questioned as to whether it had the intention of participating in the realization of the new strategy.

Hitherto I have discussed how an organizational capability becomes dynamic through organizational learning processes. An implication derived from the literature is that the institutionalization of the

organizational learning processes enhances an actor's capability to *continuously* manage structural changes. This implication will be further developed in the next section.

Dynamic Capabilities and Sustainable Competitive Advantage

Dynamic capabilities that create customer value and which are difficult for competitors to imitate (Teece et al, 1997; Crossan and Berdrow, 2003) provide the link between organizational learning and sustainable competitive advantage. To further discuss this link I will first resort to the resource-based view on strategy. Nanda (1996), who reviews and examines the core concepts and discusses their interrelationship, argues that for a capability to yield sustainable competitive advantage, the underlying resources need to meet the following criteria: scarcity and immobility due to the difficulty to imitate and substitute that specific resource and ex-ante access or information asymmetry among companies with respect to a resource, caused by unequal access to or information about the resource.

If the dynamics of the marketplace may erode the competitive advantage of an organizational capability, how can organizational learning sustain such dynamics? In this paper, a distinction is made between different learning levels, namely learning-to-act, learning to learn and learning-to-learn how to learn (deutero learning). Edmondson and Moingeon (1996) connect the notion of organizational learning processes with competitive advantage. They use the notion of operational learning (know-how) and conceptual learning (know-why) to characterize different organizational learning processes. They further elaborate on this distinction, connecting these two kinds of learning processes with competitive advantage. Operational learning involves acquiring relevant 'how to do' instructions, such as how to perform a certain process. This implies that organizations have the capacity to develop learning-how as a dynamic capability, for instance in implementing new processes. This kind of capability can be applied, and implemented to meet relatively clear criteria for competitive advantage, such as to better, faster, and more thoroughly cope with contingencies. Conceptual learning, on the other hand, involves the inquiring into cause and effect relationships to discern underlying logic or causal factors. This implies that organizations similarly have the capacity to develop learning-why as a strategic capability, such as the capacity to diagnose and identify underlying causes in a variety of new situations. Thus, developing operational and conceptual learning capabilities has the potential to sustain competitive advantage. A condition that is required to release the potential of such a capability to generate sustainable competitive advantage is that of being valued in the marketplace in which the organization competes. A capability that is not valued, for instance after having been changed due to the dynamics of the marketplace, is not 'strategic' and, therefore, simply a feature of the organization that possesses it.

The above reasoning implies that a dynamic capability refers to different organizational learning capabilities: operational and conceptual. Furthermore, these kinds of capabilities can be related to different kinds of organizational learning process. Operational learning capabilities can be described as (i) a lower single-loop-learning-to-act cycle, corresponding to the ability to maintain a basic strategic position in the external market network. Conceptual learning capabilities can be described as (ii) a double-loop-learning-to-learn cycle, corresponding to the ability to test and re-define the organization's assumptions for improving its strategic position or (iii) a deutero-loop-learning-to-learn-how-to-learn cycle, corresponding to the ability to achieve repeated double-loop learning. Thus, a second condition for accomplishing sustainable competitive advantage is the re-definition of the organization's assumptions for achieving congruence between the external market network and the internal network. A conceptual organizational learning capability, therefore, has a higher potential than an operational learning capability to sustain an actor's competitive advantage. For instance, it was concluded that the Dutch sales actor had not only learned how to organize a part of the marketing process more efficiently, the ordering routines, but also learned how to learn by reflecting on the assumptions regarding the principles for organizing this part of the process. Accordingly, the Dutch sales actor has a high capacity for sustaining its competitive advantage.

Provided that a dynamic capability is difficult to imitate, resulting in something that is valued by customers, e.g. shorter lead times, and involves the re-definition of the organization's assumptions for coping with incongruities, it has the potential for sustaining an actor's competitive advantage. Furthermore, the different organizational learning processes suggest that there are different levels of sustainability to a competitive advantage. A double-loop-learning-to-learn denotes the lowest and the deutero-loop-learning-to-learn-how-to-learn process the highest level in sustaining a competitive advantage.

Organizational Meaning Structures – A More Encompassing Description of Organizational Knowledge

As should now be clear, intangible resources such as those of organizational capabilities are considered a particularly viable source of competitive advantage. Some literature points to the fact that intangible resources determine the extent to which companies will be competitive in the complex business landscape of today's global world (Nonaka and Takeuchi, 1995; Spender and Grant, 1996). To understand intangible resources and their role in the development of dynamic organizational capabilities it is necessary to first understand the knowledge of the organization. From a resource-based view, organizational knowledge is regarded as residing in organizational routines (Nelson and Winter, 1982) or more specifically as embedded and expressed in the principles of how individuals cooperate to perform activities (Kogut and Zander, 1991). However, the commonality of the term knowledge can be further specified by the term meaning structure.

"I have used the term 'accessible meaning structures' here rather than using the more common term knowledge or information because I want to represent something more encompassing than the conclusions that organizational members have reached. I also want to include within the framework of accessible meaning structures the relationships of those conclusions to other conclusions... the logic by which those conclusions were reached, the data that support them, the inferences that were made from them, and the tacit assumptions behind them. Accessible meaning structures are considerably different from what we would normally refer to as information. Information is data that are information that is the data have been organized into charts, graphs, speech, written statements etc. Information thus organized can reside in many places in the organization, including books, reports, memos and journals, but meaning structures can reside only in human beings" (Dixon, 1994: 38).

Hence, the term meaning structure can be used rather than the term knowledge to represent and manifest not only the understanding that organizational members have reached but also how and why it was reached. Thus, the major argument for resorting to the notion of meaning structures would be that it is instrumental for capturing and clarifying intangible resources.

Dixon (1994) argues that organizational members have meaning structures that can be categorized as private, accessible and collective. Private meaning structures are both explicit and tacit and refer to those parts of a person's meaning structures that are withheld from other organizational members. Reasons for retaining private meaning structures can be a wish to respect information that was given in confidence fear of punishment, embarrassment if the person's mistakes or incompetence are made public etc. Accessible meaning structures are those parts of an individual's meaning structures, which he or she is willing to make available to other organizational members. However, although individuals are willing to make their meaning structures available to others, there are times, space, political, intellectual and cultural factors that limit the access to other organization members' meaning structures. Collective meaning structures are the sets of assumptions about how the work is divided and how tasks are performed that organizational members share with others in the organization. With the term 'collective', Dixon does not intend that organizational members have exactly the same meaning structure but that "there is 'close enough' accord that members function as if there were total agreement" (1994: 39). However, when such meaning structures are carefully examined they often reveal significant differences.

It is claimed by Dixon (1994) that many collective meaning structures are tacit, and that they have positive as well as negative effects on how an organization functions. The usefulness of this kind of cognitive structure is that it enables an organization to act swiftly and in concert without any lengthy discussions. People simply accept it and 'get on with their work'. On the other hand, when there is such acceptance among organizational members there is risk that this collective meaning structure will become rigid (if no one in the organization challenges it). Dixon further argues that this kind of meaning structure influences how events are interpreted, the willingness to cooperate, the level of trust, etc. She concludes that collective meaning structures may make the introduction and realization of a new idea difficult if it is considered to conflict with the existing collective meaning structure. Thus, the implication for this study is that collective meaning structures are important for the introduction and realization of a new strategic idea. If it is in conflict with the existing collective meaning structures, the risk is that it will be resisted.

Dynamic Capabilities and the Theory-of-the Business

In this paper, it is argued that intangible resources are often invisible assets that reside in individual meaning structures that collectively contribute to the organizational meaning structure. This means that the individual meaning structures are embedded in organizational meaning structures. Organizational knowledge is considered to reside in meaning structures, enabling individuals to perform organizational routines. Organizational knowledge can, therefore, be defined as the know-how and know-why captured in individual meaning structures and shared among organizational members, guiding and influencing organizational action.

However, individual meaning structures are not merely repositories of sensory data but 'active' in that they influence organizational action through individuals building theories "that define what an organization pays attention to, how it chooses to act and what it chooses to remember from its experience" (Kim 1993, 44). The individual meaning structures regarding how an actor realizes a new strategy to sustain its competitive advantage are, in this paper, embedded in the actor's meaning structure regarding the industrial network of which it is an integral part. The industrial network is, in turn, divided into what is external and internal to the actor. The external dimension represents the degree of competitiveness, and is described in terms of (i) the existence of structural change, (ii) customer demand, (iii) customer's purchasing pattern, (iv) the business in which the actor is operating, (v) competitive means to improve the network position. The internal dimension, on the other hand, represents the degree of interdependencies perceived by other actors and is described in terms of (i) the actor's strategic identity, (ii) its role in the group of companies, (iii) other actors' role in the group of companies. This is what Kim (1993) labels an organization's worldview or 'Weltanschauung', i.e. an organization's assumptions about itself and its environment that influence how the organization interprets environmental contingencies and the means employed to cope with them. Similarly, Drucker (1994) uses the term "theory of the business" to denote an organization's assumptions and divides them in three parts: (i) assumptions about the environment of the organization including society and its structure, the market, the customer and technology; (ii) assumptions about the specific mission of the organization, which define what is considered to be a meaningful results and how it makes a difference in the economy and in the society at large; (iii) assumptions about the core competencies needed to accomplish the organization's mission, which define where an organization must excel in order to be competitive. This means that a conceptual dynamic capability sustains competitive advantages when it involves the capacity to re-define of actor's theory-of-the-business *repeatedly*. This involves the re-definition of organizational meaning structures regarding the external market network, the internal network of relationships with other companies in the group and how to achieve congruence with structural changes. A valid theory-of-the-business implies a sustainable congruency between the external market network and the internal networks in which the multinational company is embedded. Realizing a new strategy by developing conceptual dynamic capabilities that sustain the validity of a theory-of-the-business, therefore, has the potential for the highest level of sustainable competitive advantages.

Implications for strategic leadership in the complex business landscape of today's global world, sustaining competitive advantage, rest more on intangible advantages than on tangible resources of organizations. This suggests a paradigmatic shift that provides strategic leadership a new meaning and content (cf. Drucker, 1994; Bierly and Hämäläinen, 1995; Sandberg and Targama, 1998)⁴. One important task for strategic management is to foster and lead the organizational learning processes that transform organizational capabilities into dynamic capabilities. Furthermore, dynamic capabilities are intangible resources that reside in individual meaning structures, which are embedded in the organization's theory-of-the-business. A second important task of strategic management is therefore to maintain a valid 'theory-of-the-business' by helping managers to challenge their deeply held assumptions regarding the external and the internal dimension of the organization and how to achieve congruence with structural change. Strategic leadership revolves around developing dynamic capabilities that maintain a valid theory-of-the-business, for instance by realizing a new strategy, because it has the capacity to repeatedly achieve new forms of competitive advantages, and thus coping with structural changes in industrial networks.

⁴ Sandberg and Targama (1998) argue that the paradigmatic shift changes the role of strategic leadership from prescribing what the work is about and how it is going to be done to a more consultative role which is about guiding and stimulating employees to reach a more qualitative understanding of their work 'to make things happen'. This is based on the assumption that it is not the structures, systems and prescriptions that govern the behavior of people but rather how they perceive and understand these structures, systems and prescriptions. This will have consequences for how new people are recruited and how competencies are developed.

Major Conclusions

Finally, a central argument in this paper is that organizational learning can be regarded as a means to develop capabilities. Furthermore, organizational learning is a way to develop organizational capabilities in the internal network to better translate and transmit information about changing customers' needs to, in the future, better cope with structural change in the external market network in which the actor is embedded. An organizational capability is a kind of organizational routine and a principle for organizing how individuals cooperate to effectively perform activities, such as forecasting, ordering handling and stock-keeping. It involves an actor's capacity to effectively perform certain activities, being considered as strategic when it makes a disproportionate contribution to ultimate customer value, or to the efficiency with which that value is delivered. Thus, an organizational capability becomes 'distinctive' when it generates a perceived value, describing those activities an actor does particularly well relative to its competitors in order to achieve a competitive advantage.

The development of organizational capabilities is the modification of organizational routines; a re-organization of the marketing-oriented activities in a novel pattern. This occurs as organizational learning processes in which the meaning structures of an actor regarding, for instance, the principles for organizing how individuals cooperate to effectively perform activities, are re-conceptualized. These principles can be used to describe the extent to which a new strategy has been realized through organizational learning. The process of organizational learning, therefore, transforms organizational capabilities into dynamic capabilities, which means that organizational learning processes are an integral part of a dynamic capability. An organizational capability is integrated with different kinds of organizational learning processes. The major difference between the organizational learning processes is the questioning of the principles for organizing a routine.

Hence, organizational learning endows an organizational capability a dynamic nature. A dynamic capability is the ability to achieve new forms of competitive advantage where the term dynamic intends the capacity to recombine existing capabilities so as to achieve congruence between the external market and the internal network. Since there are different kinds of organizational learning processes and different capacities for organizational learning, there are different kinds of dynamic capabilities: conceptual and operational. The different kinds of dynamic capabilities suggest that there are different levels of sustainability to a competitive advantage. A double-loop-learning-to-learn denotes the lowest and the deuterio-loop-learning-to-learn-how-to-learn process the highest level in sustaining a competitive advantage. This means that a conceptual dynamic capability sustains competitive advantages when it involves the capacity to repeatedly re-define an actor's perception. This refers to the actor's theory-of-the-business, which, from an industrial network perspective, involves assumptions about how to achieve congruence between the external market and the internal network.

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