

Entrepreneurial Orientation and the Competitiveness of Supply Chains

Minna Vesterinen
University of Jyväskylä
School of Business and Economics
P.O.Box 35
FI-40014 University of Jyväskylä

Mobile: +358 50 428 5295
Fax: +358 14 260 3331
E-mail: minna.vesterinen@econ.jyu.fi

Abstract

The majority of companies belong to a supply chain. The tendency to concentrate solely on core competencies and speed of changes in the operational environment, as well as on the constant cost reduction pressures, increases the importance of supply chain management. How effectively and efficiently one's operations are connected to the others within the supply chain has a substantial effect on a company's success. As a result of this, competition has changed. Today, competition takes place between entire supply chains as well as between individual companies. Being competitive as a supply chain requires a comprehensive understanding of the interdependencies and causal relationships within the supply chain. A commonly shared view of the external environment and entrepreneurial orientation in all of the supply chain companies are the prerequisites for the strategic renewal and competitiveness of the entire supply chain.

Keywords: supply chains, change, strategic renewal, entrepreneurial orientation

1. Introduction

The majority of companies are part of a supply chain or network. It has been stated that, in the future, competition will increasingly take place between these supply chains or networks rather than among individual companies. Hence, the entire supply chain has to possess the ability to strategically renew itself; this requires entrepreneurial orientation at all levels of the supply chain.

The purpose of this article is to theoretically discuss the issues related to the changes in supply chain structures and the prerequisites of these changes. The insights presented in this article are based on previous literature on strategic management, supply chain management (SCM), strategic renewal, and entrepreneurship.

2. The role of supply chain management in success

Supply chain management can be defined as a critical success factor for a company today. This has been demonstrated by numerous empirical examples and theoretical considerations, beginning with the value chain and value system ideology created by Michael Porter. (Porter, M. 1991.) It is obvious that there are very few companies who are not part of a supply chain or chains and, hence, the way in which the companies' value chains are connected to each other, in order to build up the entire value system, becomes crucial. This statement relies on the simple fact that companies within a supply chain do not have any other source of income than the final consumer at the end of the chain. As maximizing profits equals minimizing costs within the supply chain, the way in which the entire chain is managed has a substantial effect on the profitability of the companies. Profitability has, therefore, a natural influence on the companies' ability to operate and satisfy customer requirements. As all development work eventually requires monetary resources, it is clear that companies who are profitable have better opportunities to constantly improve their operations and products/services in order to better satisfy their customers. Indeed, as Trent and Monczka have noted: "The ability of suppliers to affect end customer satisfaction makes supplier quality essential to longer term market success." (Trent, R.J. & Monckza, R.M. 1999. p. 928)

The council of Supply Chain Management Professionals has defined supply chain management as follows:

Supply Chain Management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies. (<http://cscmp.org/Website/AboutCSCMP/Definitions/Definitions.asp>)

The words 'coordination', 'collaboration', and 'integrate' refer to the other important business process related to supply chain management: the combination of different companies' capabilities. Hamel and Prahalad stated already in 1994 that, "Competition for the future often takes place between coalitions as well as between individual firms.... Coalitions may be required for several reasons, the most obvious being the fact

that no one firm possesses all the requisite resources to bring the new product or service to fruition.” (Hamel, G. & Prahalad, C.K. 1994, p.187)

Since the beginning of 1990s, this point of view has been shared by various professionals, such as Spekman et al. according to whom, success is no longer measured by a single transaction; competition is, in many instances, evaluated as a network of co-operating companies competing with other firms along the entire supply chain. (Spekman, R.E. & Kamauff, J.W. Jr & Myhr, N. 1998, p.630)

Good supply chain management can therefore lead simultaneously to cost savings and differentiation through the unique capability combinations of the companies involved. It is no wonder that the findings of recent research support the view that SCM practices can have a discernible impact on competitive advantage and organizational performance. (Li, S. & Ragu-Nathan, B. & Ragu-Nathan, T.S. & Subba Rao, S. 2006, p.119) Changes in the business environment, such as globalization, forces companies to sharpen up their operations. Furthermore, the more we have interchangeable products and services available, the more the way they are produced and delivered will influence the competitive position of the company. This logic is supported by the work of Trent and Monzka, who have defined three trends that point to the increasing importance of suppliers and, hence, supply chain management:

- 1) a focus on core competencies and technologies with outsourcing of non-core requirements;
- 2) pressure to innovate and improve continuously in critical performance areas, including quality, delivery, cycle time, and product and process technology; and
- 3) the presence of intense worldwide competition with constant cost reduction pressure. (Trent, R.J. & Monzcka, R.M. 1999, p. 929)

Finnish researchers such as Kemppainen and Vepsäläinen have come to a similar conclusion by pointing out that the role of the supply chain, as a whole in maximizing the total economic yield, will become bigger. The success in turbulent business environment depends on delivering new products and services at a faster pace and transforming value chains into customer-focused virtual networks. (Kemppainen, K. & Vepsäläinen, A.P.J. 2003, p. 704-705)

3. Changes in the supply chain structure

A supply chain is not a static institution. As the business environment and conditions change, so should the supply chain. Hau Lee has defined a ‘triple A’ that is crucial to a success of a supply chain: agility, adaptability and alignment. Agility means that supply chains respond quickly to sudden changes in demand. They handle unexpected external disruptions smoothly and cost-efficiently. Adaptable supply chains evolve over time as economic progress, political shifts, demographic trends, and technological advances reshape markets. With ‘alignment’, Lee means aligning the interests of all participating firms in the supply chain with their own. As each player maximizes its own interests, it optimizes the chain’s performance as well. (Lee, H. 2004.) On the other hand, Li et al. have stated, that the SCM practices may be influenced by contextual factors, such as the type of industry, firm size, a firm’s position in the supply chain, supply chain length, and the type of a supply chain. (Li, S. & Ragu-Nathan, B. & Ragu-Nathan, T.S. & Subba Rao, S. 2006, p. 119)

According to Spekman et al., the traditional view of supply chain management is to leverage the supply chain to achieve the lowest initial purchase prices while assuring supply. Typical characteristics include multiple partners; partner evaluations based on purchase price; cost-based information bases; arm's length negotiations; formal short-term contracts; and centralized purchasing. Operating under these conditions encourages fierce competition among suppliers, often requiring one supplier to be played against the others, and uses rewards or punishment based on performance. The fundamental assumption in this environment is that trading partners are interchangeable and that they will take advantage (of you) if they become too important. (Spekman, R.E. & Kamauff, J.W. Jr & Myhr, N.1998, p. 631)

As the importance of supply chains as a source of competitive advantage has risen, the traditional view of supply chain management has been replaced by ideas about extended enterprise (Bititci, U.S., Medibil, K., Martinez, V. & Albores, P. 2005.; Bititci, U.S., Martinez, V., Albores, P. & Parung, J. 2004. Dyer, J.H. 2000.) or encapsulated networks. Davis and Spekman have defined the extended enterprise as follows:

The extended enterprise is the entire set of collaborating companies, both upstream and downstream, from raw material to end-use consumption, that work together to bring value to the marketplace... The flows of information that lie at the core of the coordination and collaboration among network members not only link disparate information sources, they also provide an opportunity to build knowledge-based tools. Companies engage in longer term partnering relationships built around mutual goals and accompanied by a very rich and deep exchange of information. Members' view that their destinies are interdependent. (Davis, E.W. & Spekman, R.E. 2004, p. 20-21)

In their research on industrial trends in Finnish economy, Kemppainen and Vepsäläinen concluded that ongoing outsourcing and specialization are expected to result in a new structure of demand-supply networks with shared technology and systems, extended decision rights and non-territorial services. (Kemppainen, K & Vepsäläinen, A.P.J. 2003, p. 716) They refer to these as 'encapsulated networks'. According to these Finnish researchers, there is an expectation that there will be dominant companies that coordinate, integrate, and orchestrate the value offerings of supply chains. On the other hand, it has been argued that supply chains and networks are too large and complex to be controlled by only one company. However, based on the findings of Kemppainen and Vepsäläinen, even though it is clear that a network needs a driver and a leader, it is not self-evident which companies will dominate the chain: focal companies, large channel partners or small innovative companies? (Kemppainen, K. & Vepsäläinen, A.P.J. 2003, p. 712-713)

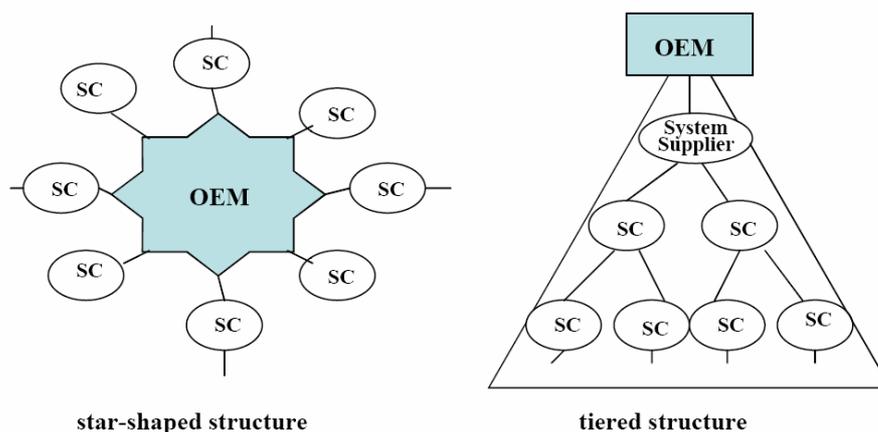
As the world is never only black or white, Anna Dubois and Finn Wynstra have criticized the simple dichotomies of "modern vs. classic" or "competition vs. collaboration". According to them, supplier relationships are much more complicated and varied than that. (Dubois, A. & Wynstra, F. 2005. p. 65 (in Axelsson, B., Rozemeijer, F. & Wynstra, F. 2005.)) As Wynstra says in his article co-written with Rozemeijer:

From a contingency point of view, there is no such thing as the one best organization. To determine the best organizational design, one should closely look at the internal context (e.g. strategy, core competence,

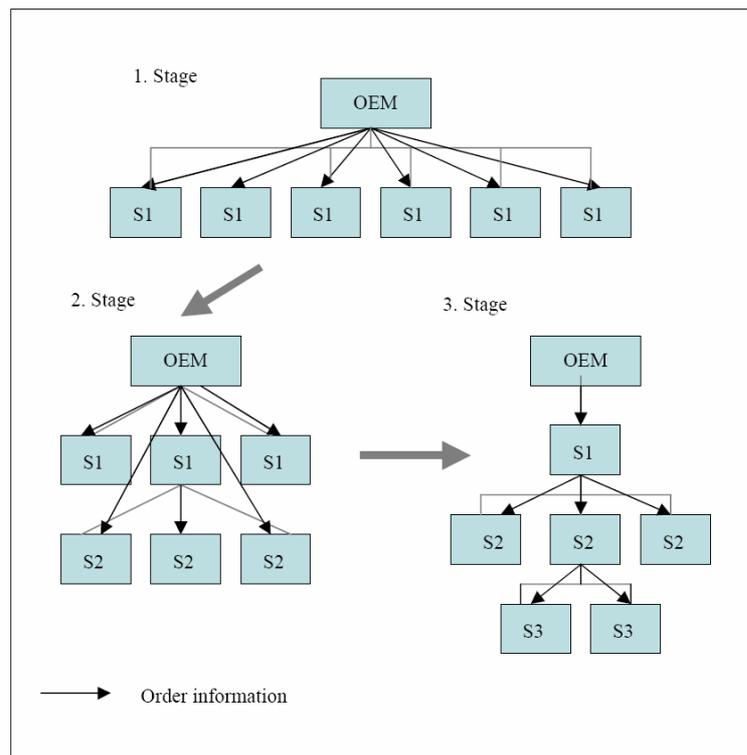
processes, available technology, capabilities of people) and the external context (e.g. market developments, government regulations, competition). Even then, more than one design alternative might be appropriate. Driven by shifting demands of customers, suppliers and employees, organizations tend to evolve over time. This also holds true for sourcing. (Rozemeijer, F. & Wynstra, F. 2005. p. 88 (in Axelsson, B., Rozemeijer, F. & Wynstra, F. 2005.))

The important point Rozemeijer and Wynstra raise is that there is no standard recipe for success. Careful analysis is important and, based on that, companies should always choose among those alternatives that are best suited to their specific situation, and not just follow the latest fashion. (Rozemeijer, F. & Wynstra, F. 2005. p. 105 (in Axelsson, B., Rozemeijer, F. & Wynstra, F. 2005.))

In her case studies on the Finnish metal and electronics industry, Ulla Lehtinen has noted that three distinct stages in the development of the subcontracting structure can be identified. According to Lehtinen, in the first stage the prime contractor reduced the number of subcontractors by assigning subassemblies to a certain subcontractor, which became a first-tier subcontractor or a system supplier. This naturally required changes in the material and information flows within the supply chain. In the third stage, the structure of the supply chain stabilizes and subcontractors take a more active role in the product/service development. This development is presented in a simplified way in figure 2. (Lehtinen, U. 2001, p. 45-46) A very similar development process, in terms of the supplier structure, has been also recognized in the Finnish shipyard industry – the traditional, star-shaped supplier structure has evolved into a pyramid-model, which contains first-tier system suppliers who are in charge of specified entities together with their own supplier base. (Toivonen, J. 2000.)



Picture 1: The star-shaped and tiered structure of a subcontracting system. Source: Lehtinen, 2001, p. 41.



Picture 2: The evolution of the structure of subcontracting chain. Source: Lehtinen, 2001, p. 46.

4. The challenges of supply chains

Collaboration, trust, shared vision and information, long-term relationships, and win-win situations are the new key words in supply chain management. It has come to be seen that the traditional point of view to supply chain management is too narrow-minded, at least when applied as a sole approach, eventually only causing increased transaction costs. As Davis and Spekman have stated, in the circumstances of ever-tightening competition, value creation requires sharing information and innovation with suppliers (Davis, E.W. & Spekman, R.E. 2004, p.4), and that kind of relationship requires a completely different approach than yearly price-based negotiations. This makes sense when looking at the most essential factors that influence the performance of the supply chains according to various international research reports. (Porter, M.E. 1991; Simatupang, T.M., Wright, A.C. and Shidharan, R. 2002.; Brewer, P.C. and Speh, T.W. 2000.; Morgan, C. 2004.; Gunasekaran, A., Patel, C. and Tirtiroglu, E. 2001. Simatupang, T.M. and Shidharan, R. 2004.; Chen, I.J. and Paulraj, A. 2004.; Holmberg, S. 2000. Yee, C.L. and Tan, K.H. 2004.; Hannon, D. 2004.; van Hoek, R.I. 2001.; Lockamy, A. III and McCormack, K. 2004.; Perona, M. and Miragliotta, G. 2004.; de Souza, R., Zice, S. and Chaoyang, L. 2000.; Hoole, R. 2005.) The factors can be listed as follows:

- ability to recognize and satisfy customer needs
- clear vision – commonly shared and acknowledged goal of the entire supply chain integrated to the strategic goals of the individual companies within the chain, alignment
- measurement methods – should be related to customer satisfaction, are in line with the strategy and eliminate non-value adding actions

- ability to manage the entire picture of the supply chain
- ability to understand the causalities of the functions within the supply chain.

There is no question that this list is rather challenging for a traditional supply chain management system that has relied on a star-shaped supplier structure. This is due to the fact that pursuing value-added activities is easier the fewer suppliers one has. (Trent, R.J. & Monczka, R.M.1999, p.928) Two-way information sharing, crucial for all the factors listed, can be organized more efficiently the smaller the number of recipients are. The alignment of goals and measurement methods to support the world-class quality of end-customer service is easier with tens of suppliers than hundreds or thousands of them. Innovative co-operation that results in unique competitive solutions for end-customer requires trust among partners, and development of trust requires time and mutual efforts. As one cannot have deep, mutual relationships with everyone, the solution is to decrease the number of the suppliers and re-evaluate the responsibilities between the partners.

Dubois and Wynstra have reminded us about the paradoxes related to the development of supplier relationships. Following the logic that every coin has two sides, they state that even though close supplier relationships are essential for a firm's competitive success, they may at the same time restrict the company's ability to change. They refer to the risk of getting locked in – commercially and/or technologically. Close collaboration may be necessary to jointly develop and exploit new technologies, but can at the same time harm the buying firm's flexibility to embark on competing technologies that are appearing in parallel. The importance of understanding what the critical resources for the company are, be they purely internal or also gained from the supplier network, becomes essential when making decisions about the trade-off. Another paradox is the fact that supplier relationships may be used by the buying firm to influence others or by others to influence the buying firm. The third paradox, according to Dubois and Wynstra, is that the more successful a buying firm is in controlling its supplier network, the less innovative it becomes. Control has a negative effect on creativity, renewal, and innovation. The more open opportunities suppliers have, the higher the chances are that they may come up with new products, processes, and procedures that may benefit the buying company. (Dubois, A. & Wynstra, F. 2005. p. 78 (in Axelsson, B., Rozemeijer, F. & Wynstra, F. 2005.))

5. Triggers of the change

What causes the change in the supply chain strategy and structure? Is the change the result of strategic decision-making or just the evolution of the markets? A common nominator in the Finnish industry in general seems to be must – quoting Blomberg, “the change does not take place before the satisfaction to the current status deteriorates”. (Blomberg, J.1995.) According to Agndal, Axelsson and Melin, organizational and other systems tend towards stability because of their inherent inertia and their history. Previously made investments, organizational culture or obligations to stakeholders can be such reasons. On the other hand, organizations do not exist in isolation and the activities they can undertake are limited by what customers, suppliers and/or competitors allow. The economic climate, financiers and regulatory frameworks naturally also have an influence on the ability to change. (Agndal, H. & Axelsson, B. & Melin, L. 2005. p. 41. (in Axelsson, B., Rozemeijer, F. & Wynstra, F. 2005.))

Jouko Toivonen has researched the institutional change of the subcontracting relationships in Finnish shipyards. His findings support the idea that institutional change requires two things: the old institution has to end up in crisis, and at the same time, there has to be a new competing operating model available. In other words, the personnel has to realize that this cannot go on, and that there already exists an alternative way to do things better. The crisis in the Finnish shipyards was caused by changes in the external business environment. Eventually the increased customer requirements and tightening competition revealed that the organizing and operating models that the shipyards were using were ineffective. In addition to these external pressures, there were also internal pressures to amend the operating model: the numerous small suppliers were producing poor results and dissatisfaction with the relationship between the suppliers and shipyards was felt on both sides. (Toivonen, J. 2000.)

Toivonen lists the following things as the prerequisites for the actual change in the supplier strategy and structure at the shipyards:

- the top (shipyard) management’s awareness of subcontracting and purchasing issues
- strategic line decision about the new supplier strategy
- entitlement of the new supplier strategy by giving concrete reasons for it and making it thus understandable to people involved. (Toivonen, J. 2000)

According to Toivonen’s research, the change in the supplier strategy and structure was therefore a result of strategic decision making at the original equipment manufacturer, the shipyards. Nonetheless, even though this unavoidably resulted in changes in the suppliers’ internal relationships and hierarchy, Toivonen reported that the subcontractors reacted rather passively to the impulses received from the shipyards. There was no strategic planning among subcontractors concerning the change of the position within the supply chain. (Toivonen, J. 2000.) The changes among the suppliers were based on evolution more than on true results of strategic decision-making; it was therefore a kind of survival game.

Similar unplanned business behaviour has been reported in the Finnish electronics and metal industries by Ulla Lehtinen. Lehtinen mentions the undeveloped structure of the supplier network and the lack of co-operation among suppliers as the main barriers against the development. On the other hand, she reports that the original equipment

manufacturers did not actually collaborate with their selected first-tier suppliers; even though the idea was to clarify and improve the supply chain through the pyramid-model, the relationships between the OEMs and suppliers did not actually function accordingly. (Lehtinen, U. 2001.) In all of the cases researched by Toivonen and Lehtinen, the OEMs were substantially bigger companies in comparison to their suppliers, which could be defined as SMEs.

6. Bottlenecks in the development

The fact that subcontracting suppliers do not seem to actively utilize the business opportunities that one might expect a cluster transition to produce raises several interesting questions. If, according to Timmons and Marshall (Chell, E. 1994.), the entrepreneurs are able to see business opportunities even in those places in which everyone else sees only chaos, and they have the ability to provide new solutions to better respond to the actual demand of the markets, why does this not seem to be the case in the examples mentioned above? One could assume that when an industry moves from the star-shaped supply structure towards a more collaborative one, this opens up business opportunities for suppliers to either expand their business, to become a system supplier or 'category captain', or to specialize in certain services/products needed by the system suppliers. Are there factors that are limiting the Schumpeterian innovativeness (Chell, E. 1994.) of entrepreneurs within a supply chain?

Richard J. Arend and Joel D. Wisner provide an interesting point of view on the topic of supply chain management. According to their empirical research, supply chain management and small and medium sized enterprises are not a good fit. The researchers define supply chain management as a way of obtaining vertical integration benefits without its formal ownership costs. They state that,

SCM, the integration of key business processes among industry partners to add value for customers, tightly links together several consecutive elements of the industry value chain, from upstream suppliers to subassembly manufacturers to final manufacturers to distributors to retailers to end-customers to make the process more efficient and the products and services more differentiated. (Arend, R.J. & Wisner, J.D. 2005, p. 403-404)

They emphasize the long-term relationships, share of information and innovativeness among partners, so that the definition they are using can be related to the ideas of extended enterprise rather than to the traditional view of SCM.

The explanations for the poor fit are that

- 1) SMEs do not implement SCM appropriately;
- 2) SMEs do not use SCM to complement strategic foci, and;
- 3) SMEs are not freely choosing to pursue SCM. (Arend, R.J. & Wisner, J.D. 2005, p.429)

The first two explanations refer to the capabilities and knowledge-based resources of SMEs, but the third one actually raises the question of whether it is understood by all supply chain parties what the change from the price-based bargaining to the collaborative relationship actually requires. If the chain is expected to be only as strong

as its weakest link, and if the SCM practices are actually having a negative effect on the SMEs involved, there is a clear indication that the implementation does not work appropriately.

Sheu et al. came to a similar conclusion in their recent research, i.e. that what is needed for achieving interorganizational collaboration is not fully understood. (Sheu, C. & Yen, R.H. & Chae, B. 2006, p.25) They constructed a framework based on case studies that shows in a structured way the causalities of the factors resulting from interorganizational collaboration. The framework can be presented as follows:

- 1) Supplier-retailer business relationship (interdependence, intensity, trust) affects long-term orientation
- 2) supplier-retailer business relationship affects supply chain architecture (information sharing, inventory system, IT capabilities, and coordination structure)
 - a. the lack of trust between the companies' management never develops a long-term orientation and discourages information sharing and IT applications
 - b. High trust reduces the perception of risk associated with the occasional opportunistic behaviour of the suppliers
- 3) long-term orientation affects supply chain architecture
- 4) supply chain architecture affects the level of supplier-retailer collaboration
- 5) supplier-retailer collaboration enhances supplier-retailer performance
 - a. as expected, higher levels of collaboration result in operational efficiency in supply chain systems, in terms of inventory levels, fill rates, returned products, and levels of satisfaction. (Sheu, C. & Yen, R.H. & Chae, B.2006, p.25)

Hence, everything starts from trust. Indeed, as Davis and Spekman have stated: Trust manifests itself in the integrity of information shared, in the belief that partners will do as they say, and in the willingness to share risk and reward equitably in pursuit of common goals and interests... Trust is truly the cornerstone of any extended enterprise because it is the foundation for social order. (Davis, E.W. & Spekman, R.E. 2004, p.161)

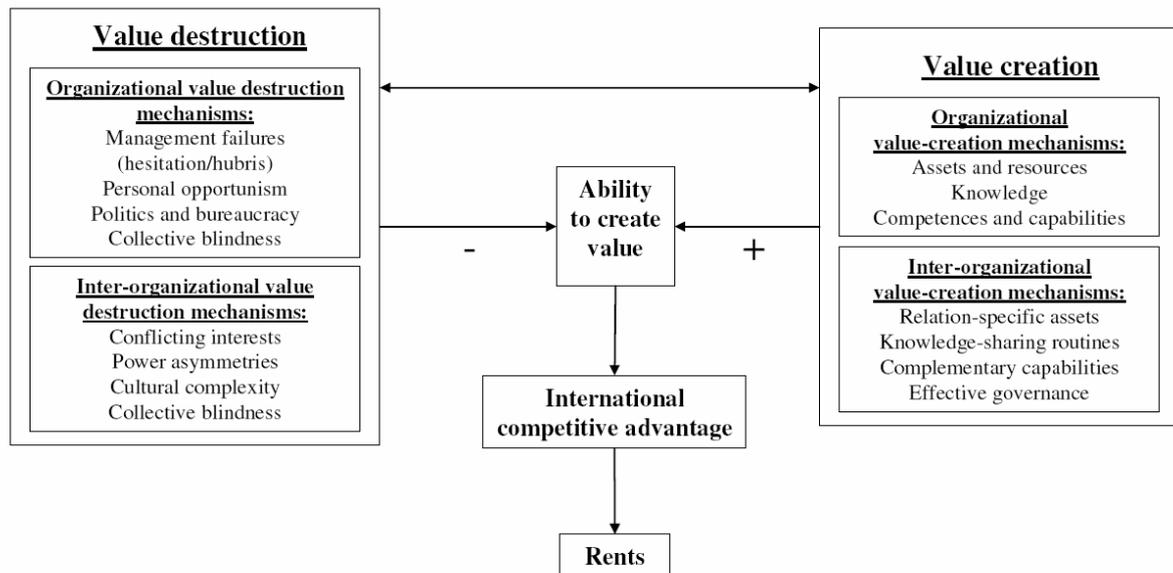
Dyer has also recognized the value of trust within extended enterprise based on the results it provides: lower transaction costs, superior knowledge sharing, and increased investments in dedicated assets. (Dyer, J.H. 2000, p. 88) He emphasizes the meaning of process-based trust in creating a trust orientation between individuals in two large organizations. According to Dyer, process-based trust recognizes that interorganizational trust may be built upon impersonal structures, processes, and routines that create a stable context for exchange. Individuals may come and go in the organizations, but the trust orientation will not be affected because it is not based on individual relationships. Processes that can foster trust include supplier-selections that demonstrate commitment, freely given assistance (to the supplier), stable and long-term employment (the greatest amount of trust appears among companies where both interpersonal and process-based trust can be found), career paths between firms, and minority ownership. (Dyer, J.H. 2000, p.100-108)

However, if the reality is that there is a long and traumatic history of mistrust between suppliers and OEMs, as was the case in the Finnish shipyard industry, what are the ingredients that enable the strategic change in the supply structure?

7. Shared world view and collective blindness

One of the fundamental factors involved in the change in supply structure is the shared view among supply chain partners concerning the market environment. If the supply chain partners see the development and requirements of the market environment in a very different way, they will end up having different, even controversial strategic actions. As Agndal, Axelsson and Melin have stated: “the environment is certainly out there in an objective sense, but it is the subjective way that this environment ‘exists’ in the mind of the actor that determines each strategic action.” (Agndal, H. & Axelsson, B. & Melin, L. 2005. p. 41. (in Axelsson, B., Rozemeijer, F. & Wynstra, F. 2005.)

The ability to see the environment as objectively as possible raises a question about the level of collective blindness within the organization. Collective blindness is defined by Tapio Ranta as the unwillingness or inability of actors to see the things objectively; an organization’s way of handling things is considered to be correct and possible contradicting signals are ignored, doomed to be wrong or interpreted wrongly for various reasons. (Ranta, T. 2005.) In short, people see and hear what they want to see and hear. The problem with collective blindness is that it has a negative impact on an organization’s ability to produce added value. According to Ranta, organizations have both value producing and value destroying mechanisms, which have an intra- an inter-organizational influence, simultaneously creating the ultimate ability for an organization to add value to its customers. Other destructive mechanisms within organization are management failures, personal opportunism, politics and bureaucracy. Inter-organizational value destruction mechanisms are conflicting interests, power asymmetries and cultural complexity. On the positive side, the value adding organizational mechanisms are assets and resources, knowledge as well as competences and capabilities. As inter-organizational value creation mechanisms, Ranta names relation-specific assets, knowledge sharing routines, complementary capabilities and effective governance. (Ranta, T. 2005.) The beauty of Ranta’s value adding framework is that it provides a comprehensive understanding of the reality of organizations: organizational success does not only depend on their own ability to provide added value but also on the way in which they act with other organisations and how objective they are in relation to the existing world.



Picture 3: Determinants of an organization's ability to create value. Source: Ranta, T. 2005, p. 182.

How can collective blindness be diminished and a shared view of the market environment ensured among supply chain partners? A good way to check the objectiveness of an individual's own thoughts and enlarge their worldview is to get to know what the other actors within the supply chain think – simply discuss. Japanese companies have utilized this logic for decades with success and common workshops or employee rotation between the supply chain companies are a natural way of learning to ensure more efficient and effective inter-organizational operations. (Cooper, R. & Slagmulder, R.1997.) As the organization's real ability to implement a strategic action is also dependent on the external factors, would it not be reasonable to get to know them as well as possible? Trying to understand what the reality of the other supply chain organizations is does not yet mean necessarily close collaboration, rather it only provides a more realistic base for the strategic actions. Various industry related development teams can exist without binding commitments among organizations. In other words, organizations can also learn to understand how the opposite side thinks and feels before any kind of engagement.

8. Entrepreneurial orientation – key to strategic renewal

Change in the supply chain strategy and structure can also be analysed as a need for strategic renewal. Volberda, Baden-Fuller and van den Bosch define strategic renewal in the following way:

Strategic renewal can be broadly defined as the activities a firm undertakes to alter its path dependence. Important parameters of a journey of renewal include: the behaviour of managers at each level of the organization in response to each other (top-down or bottom-up); the way they view investing for tomorrow versus milking profits today (exploration versus exploitation); and the way in which they share knowledge with each

other across organization boundaries (intra-organizational learning). (Volberda, H.W. & Baden-Fuller, C. & van den Bosch, F.A.J. 2001. p. 160.)

Barr, Stimpert and Huff emphasize the top managers' ability to link environmental change to corporate strategy and to modify that linkage over time. According to them, organizational renewal is a continuous process in a successful company. (Barr, P.S. & Stimpert, J.L. & Huff, A.S. 1992. p. 15.) Furthermore, Huff, Huff and Thomas have concluded that the need for renewal is never ending. In addition to the aspect of having an evolutionary perspective of continuous renewal, Huff et al. talk about large and small renewal outcomes and discontinuous change. They go on to explain renewal through inertia and stress, which are interdependent factors that both have influence on a company. Inertia means the tendency to remain within the status quo and the resistance to strategic renewal outside the frame of the current strategy. According to Huff et al., inertia is defined as the level of commitment to the current strategy, reflecting individual support for a given way of operating, institutional mechanisms used to implement strategy, monetary investments and social expectations. Stress, on the other hand, is present here – as no strategy is perfect – and it increases because the environment is dynamic. Stress reflects the dissatisfactions of individual actors and imperfections in the fit between the organisation and its environment. The level of stress and inertia determines the company's ability for strategic renewal. (Huff, J.O. & Huff, A.S. & Thomas, H. 1992. p.55-60)

Huff, Huff and Thomas have stated that a viable organization must have the capacity to frequently improve its alignment with internal and external demands. (Huff, J.O. & Huff, A.S. & Thomas, H. 1992. p.55) Related to this point, Burgelman pointed out already in 1983 that firms need both diversity and order in their strategic activities to maintain their viability, which is the recipe for continuous survival in the markets. The order results from imposing a concept of strategy on the organization and the diversity is provided by the entrepreneurial activity within the organization. Corporate entrepreneurship is the key to a company's strategic renewal. It depends both on the capabilities of operational level participants to exploit entrepreneurial opportunities and on the perception of corporate management that there is a need for entrepreneurship. According to Burgelman, entrepreneurial activity is a kind of "insurance" against external disturbances or a "safety valve" for internal tensions resulting from the pressures of creating opportunities for growth. (Burgelman, R.A. 1983. p. 1349-1355.)

Borch and Forsman-Hugg have researched the competitive positioning of small firms in mature industry and their findings also highlight the importance of a company's entrepreneurial orientation. (Borch, O.J. & Forsman-Hugg, S. 2004.) Entrepreneurial orientation can be defined on the basis of Miller's work as innovativeness, willingness to take risks and proactiveness. According to Miller, a nonentrepreneurial firm is one that is not very innovative, has a high aversion to risk, and imitates the moves of competitors instead of leading the way. Miller points out that an entire organization can be entrepreneurial. His statement is that the most important factor for a company's renewal is not who the critical actor is, but rather the process of entrepreneurship itself and the organizational factors that foster and impede it. (Miller, D. 1983. p. 770-771.) Covin and Slevin have further developed the work of Miller and they have created a measurement system for entrepreneurial orientation at a company level. In their research on strategic management of small firms in hostile and benign environments, Covin and Slevin created a nine-item scale to measure a company's strategic position. The scale contains items that focus on innovation, proactiveness and risk-taking, and the higher

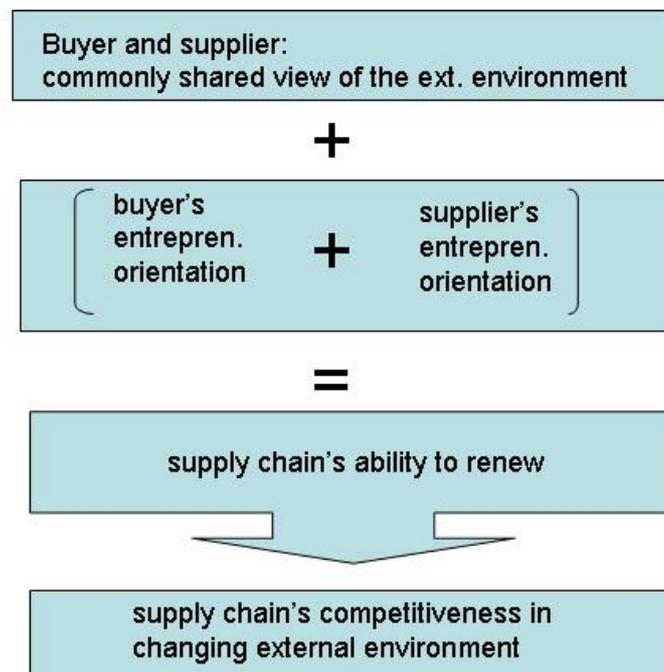
the score, the more entrepreneurial the strategic posture is. (Covin, J.G. & Slevin, D.P. 1989. p.79.)

Wiklund and Shepherd have also analysed companies from the entrepreneurial orientation point of view. According to them, firms with considerable knowledge-based resources know where to look for opportunities, can more accurately assess the value of potential opportunities, and have the ability to extract value from these opportunities, but unless the firm is willing to grasp and enthusiastically pursue these opportunities, the knowledge-based resources are likely to be underutilized. Wiklund and Shepherd's findings suggest that an entrepreneurial orientation can help explain the managerial processes that provide some firms with the ability to utilize their resources in identifying and responding to environmental cues earlier than their competitors. (Wiklund, J. & Shepherd, D. 2003, p. 1310, 1313)

A cluster transition that is triggered by the changes in the external environment can be a rather chaotic and turbulent time. It is then crucial that companies who are sharpening their competitiveness by re-evaluating the value added by the traditional supply chain management, and transforming their organizations accordingly, have leaders who are able to create a shared vision together with the selected partners within the supply chain/network. The direction for actions is important, but it is not enough. The leaders have to be able to look for the new opportunities and capability combinations that actually make the vision achievable and then inspire people to work accordingly. Based on the findings of Hult et al., it can be stated that the entrepreneurial orientation is an important driving force behind innovation. According to the researchers, developing the extent that innovativeness is critical for organizational success entrepreneurship appears to be an important orientation for managers to foster. While market orientation and learning orientation may help managers to devise superior products, processes and ideas, it is likely that an entrepreneurial orientation provides the stimulus for driving such activities. This is because entrepreneurialism embodies the qualities of proactiveness, aggressiveness, and initiative that can propel managers into action in various innovation projects. Accordingly, an entrepreneurial orientation might be regarded as the impetus that pushes the firm into innovative action. (Hult, G.T.M. & Hurley, R.F. & Knight, G.A. 2004, p.437)

The assumption that can be made is that the lack of an entrepreneurial orientation in one or more of the supply chain partners hinders the development of the supply chain towards higher competitiveness. The reasoning behind this assumption relies on the dependency that exists between supply chain partners. Dubois and Wynstra discuss the dilemma of being locked in to the close collaboration needed for joint development activities, which may restrict the buying firm's possibilities in the markets. (Dubois, A. & Wynstra, F. 2005. p. 78 (in Axelsson, B., Rozemeijer, F. & Wynstra, F. 2005.)) Naturally, this is true, but it also has to be noticed that the dependency between supplier and buying firm also limits the possibilities that the supplier may have. As Angdal, Axelsson and Melin have observed; companies do not live in isolation and their actions are limited, for instance, by what customers and suppliers allow. (Agndal, H. & Axelsson, B. & Melin, L. 2005. p. 41. (in Axelsson, B., Rozemeijer, F. & Wynstra, F. 2005.)) As the operational environment of companies change, they should take actions for strategic renewal in order to be competitive in the new environment. The ability of taking these renewal actions is, however, limited by suppliers' or customers' attitude towards it, and, furthermore, as the key to strategic renewal is the level of entrepreneurial orientation, it can be stated that the more entrepreneurial the strategic attitude of the company's partners is within the supply chain, the better the chances are

for the company to also be successful in strategic renewal. For example, even though a supplier recognizes the opportunity to develop its business from being a standard supplier to a category captain that could benefit the entire supply chain, the actual achievement of that position depends a lot on the OEM. If the OEM is not capable or willing to recognize the added value that the change in the particular supplier's strategic position within the supply chain could provide, the successful implementation of the change becomes rather difficult. This logic is also applicable the other way round. Both of the partners need to be able to see the value of the new kind of collaboration and division of labour and foster the attitudes and processes within both organizations to support the desired development.



Picture 4: Shared worldview, the entrepreneurial orientation and competitiveness of the supply chain

9. Summary

We are living in a constantly changing world. In order to remain competitive, companies have to be able to adapt their operations to correspond to the new environment and customer demands. They need to be able to strategically renew themselves and this requires critical evaluation of the current operating models and means. In order to be successful in this self-assessment means that companies have to be honest with themselves and humble to the signals coming from the operational environment.

As organizations do not live in isolation, their strategic actions are always limited by the stakeholders such as their suppliers or customers. Companies influence and are influenced by their stakeholders; only the level of interdependency and, hence, the power of the actions vary. This means that when planning strategic renewal, in order to remain competitive, companies have to also take into account the influence their actions have on their stakeholders and analyze what their strategy implementation actually requires from the stakeholders in order to become true.

The level of entrepreneurial orientation is stated to have a positive effect on a company's strategic renewal. The more a company's strategic attitude indicates proactiveness, innovation and risk-taking ability, the better the chances are for survival at the ever-changing markets. However, being proactive, innovative and willing to take risks alone is not enough if there is no response to this behaviour from the stakeholders' side. This aspect is especially important when discussing future competition. As the competition will take place more and more between supply chains and alliances rather than among individual companies, the requirements of strategic renewal within a supply chain or alliance must be acknowledged. If an entire supply chain has to change to better respond to the end-customer demands in the constantly evolving operational environment, this has the result that all the companies forming the supply chain must have similar worldview. It is not enough that they analyze the operational environment from their own point of view only. Instead, they need to understand the interdependencies and the causal relationships that exist within the supply chain. This is the definitive prerequisite in order to have strategic actions within the supply chain that are in line with the ultimate goal of satisfying the sole source of income, the end-customer.

In addition to a commonly shared worldview, in order to have agile, adaptable and aligned supply chain, companies forming the supply chain must pay attention to their entrepreneurial orientation. It is not enough if only one part in the supply chain sees the new opportunities and possibilities for capability combinations to strengthen the supply chain if others are not capable or willing to do that also. There has to be a sufficient level of proactiveness, innovation and risk-taking ability in all supply chain partners in order to ensure the competitiveness of the entire supply chain.

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