LUND UNIVERSITY

Adapting to changes in the supply chain – Challenges to re-defining the supply chain for increased customer orientation and product innovation within the paper packaging industry

Olander Roese, Malin; Olsson, Annika

Published in:
IPSERA conference proceeedings

2007

Link to publication

Citation for published version (APA):
Olander Roese, M., & Olsson, A. (2007). Adapting to changes in the supply chain – Challenges to re-defining the supply chain for increased customer orientation and product innovation within the paper packaging industry. In *IPSERA conference proceeedings* (Vol. IPSERA conference proceeedings)

Total number of authors:
2

General rights
Unless other specific re-use rights are stated the following general rights apply:
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.
• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
• You may not further distribute the material or use it for any profit-making activity or commercial gain
• You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: https://creativecommons.org/licenses/

Take down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

Download date: 12. Oct. 2024

ADAPTING TO CHANGES IN THE SUPPLY CHAIN
– Challenges to re-defining the supply chain for increased customer orientation and product innovation within the paper packaging industry

Malin Olander[1] - Annika Olsson[2]
Lund University, Sweden

Summary

Supply chains are no longer to be regarded as linear constructs with definite starting and ending points, but as systems, or wholes that are to be customer driven rather than product driven. But however easy it sounds in theory industries are struggling to re-invent or re-comprehend existing business models. This paper aims to describe and identify organizational challenges to re-defining the supply chain for increased customer orientation and product innovation. The findings are based on one case study within the paper packaging industry. In conclusion four challenges are identified: *Domineering Perspectives, Tools and Processes, Strategy and strategic decision* and *Implementation approach*.

Keywords: Organizational challenges, Customer orientation, Product innovation, Paper packaging supply chain

Educator and practitioner summary

It is important for academia and practice to recognize the organizational challenges to re-inventing or re-comprehending assumptions, models and tools existing in business and in theory. Using a multi-theoretical approach allows for a more holistic perspective and increased understanding of the different aspects at play when initiating and implementing change.

Introduction

Customer orientation, innovation and product development are known prerequisites for success and survival within the world of businesses. The forest products industry, such as the paper packaging industry, have like many of the Swedish backbone industries a long history of surviving and excelling on a changing marketplace, innovating and developing products and services to meet the demand of their customers. Traditionally, this industry has been far away from the fast-moving consumer goods arena where forever changing trends and fads have become a way of life. They have been sitting at one end of the supply chain quite undisturbed by the market noise, and end consumer needs, focusing instead on long term investments and equally long term customer relationships higher up in the supply chain. Cost-cutting and streamlining of the organization have been, and still are, necessary evils of increased competition

[1] Division of Packaging Logistics, Lund University, 221 00, Lund, Sweden, Telephone: +46 733 220458, Fax: +46-462226080, E-mail: malin.olander@plog.lth.se
[2] Division of Packaging Logistics, Lund University, 221 00, Lund, Sweden, Telephone: +46 46 2229734, Fax: +46-462226080, E-mail: annika.olsson@plog.lth.se

and risings costs, and thus prerequisites to ensure a competitive advantage. A good price has been, and still is, an important selling point. And success has been measured in terms of volume and output of paper (Hayhurst 2002). But is this enough to meet the future?

Globalization, information technology, changing consumer habits and changes of power within supply chains are giving new meaning to success, also for the paper packaging industry. Packaging is becoming increasingly more important from a marketing as well as a logistics perspective for all actors in a supply chain. And paper is the world's most used, and one of the few renewable, materials for packaging (Rundh 2005). However, paper producers are said to be poor at listening to their customers and poor at working with other players in their supply chains (Berg 2005; Hayhurst 2002). Many of the companies within the forest products industry are struggling to meet the future and in the consumer packaging sector, the food producers of the world are now acting to extend their insights upstream instead, not only to converters but to the board suppliers (Berg 2005).

Despite the increased importance of packaging and the packaging industry it has attracted little research from a managerial point of view (Rundh 2005). To our knowledge there is even less research on how the producers of packaging materials, actors at one end of the supply chain, capitalize on their value chain and the increasing importance of packaging, and work towards increased customer orientation and innovative product development.

A number of scholars point at the need to reinvent, or re-comprehend, many of the existing and domineering business models in contemporary industries. Value chains and supply chains are no longer to be regarded as chains, as linear constructs with definite starting and ending points, but as systems, or wholes. The value chain as suggested by Porter in 1985 is based on the old industrial paradigm when the most critical competence was synonym to the production system and the customer was viewed merely as a recipient (Normann 2001). The changing environment has called for supply chains to be customer driven rather than product driven, a crucial network of relationships and information rather than a chain of physical supplies (Christopher & Gattorna 2005; Christopher & Towill 2000).

But however simple it might sound in theory, our research shows that there are a number of challenges to re-inventing or re-comprehending existing business assumptions, models and tools. These challenges might be particularly true for large traditional industrial organizations with a long history and well established procedures and processes, from manufacturing to sales, and with large investments in physical and psychological assets. This paper serves to identify and address some of the challenges, focusing on one organisation trying to adapt internally to changes within the supply chain.

The findings of this paper are based on a case study within one paper packaging producer. The purpose of our study was to explore, identify and increase our understanding of the organizational challenges of re-defining the supply chain for increased customer orientation and innovative product development. The purpose was also to reflect on the findings and propose areas for future research and practice, resulting in suggestions for a continued action research process, with industry, for further understanding and theory building in the areas of supply chain and change management.

Below we start by introducing the focal company and the challenges raised in practice. Next we describe our methodology approach. This is followed by a presentation and discussion of our empirical and theoretical findings structured according to the four challenges we have identified. We conclude by reflecting on our findings and present suggestion for practice and future research before ending with our conclusions.

A case from reality

In 2004, the management team of a paper packaging producer was deliberating on the next steps for ensuring the organization's continued and future success. In spite of a positive development on the global paper market in 2004, the company's own result was not as expected, and a number of factors were of concern. The overall cost levels in Europe, demographic changes, increased competition from plastic materials, and not least increased power of the retail sector among others had given rise to questions about the company's customer orientation and product development. In order to ensure a strong and leading position on the market, the current scope of their supply chain seemed to narrow and the product development ill suited to meet the demands in the future. "*We must find new business concepts…we have to get closer to our customers' customer*" as expressed by one manager.

So far, the focal company, operating at one end of the supply chain, had increased productivity and rationalised their production after best practice. Their product portfolio consisted of a number of products with competitive advantages and many lead market positions. But, to continue their progress the management team had a number of issues on the table, among them: *How to keep the success achieved so far by increasing market pull (instead of push), how to create a product development process which guarantees innovation and "new thinking", how to learn more about the market and identify potential areas of development*?

To move forward the management team revised the company's strategy and initiated a restructuring of the organization into segments with the aim to become more customer oriented and provide for more innovative product development.

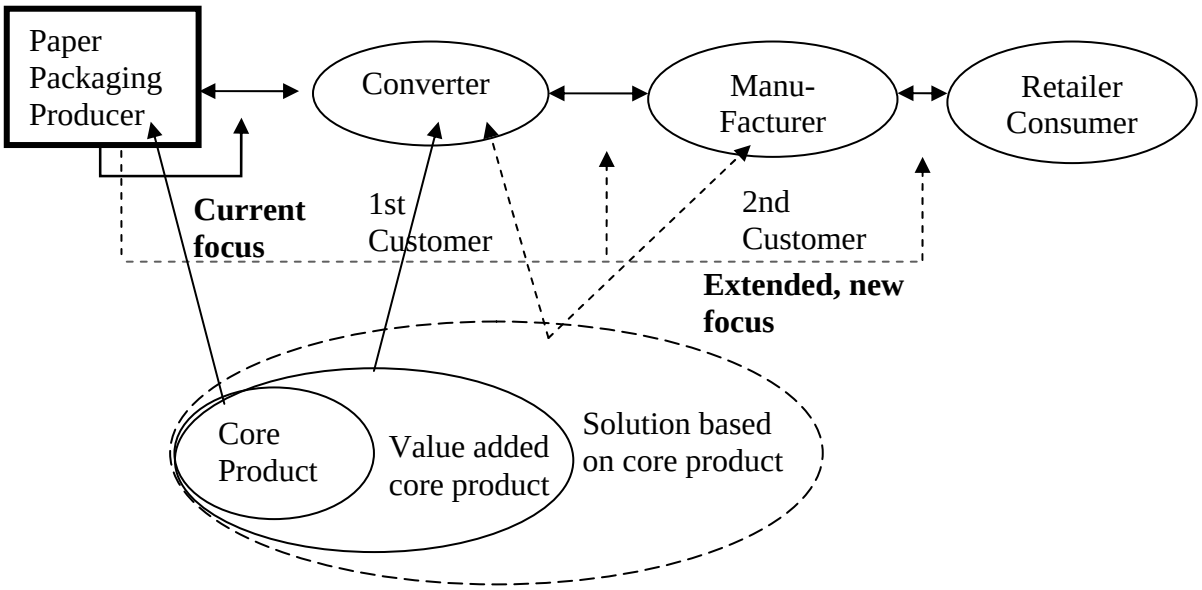
With the view to learn more about the market and customer needs, the scope of their supply and value chain was redefined and extended to cover not only their customer (below 1st customer) but also the customers' customer, the 2nd customer – the manufacturers of for example consumer, food and medical products (see figure 1). Including the 2nd customers in the scope of their supply and value chain is believed to be detrimental to their future success. The aim is *not* however, to integrate forward in the chain, i.e. to become a converter or packaging producer. The existing network organization was restructured into 14 segment teams, integrating technical and market competence, hence moving from a product oriented to a more customer oriented organizational structure.

The strategy and segment structure itself had been developed by the management team. The new mission, objectives, roles, responsibilities, ways of working and reporting structure were defined by management. The responsibilities of the segment teams were to map the value chain for their product areas, to identify cooperation projects with customers, to systematically build relationships and to identify product development needs. Two initial objectives of the respective segment teams included road shows amongst 2nd customers and a minimum of two new products or product improvements (cost saving ideas) per year.

Furthermore, the marketing organization which had previously been spread out on the respective manufacturing units was centralized to the headquarters to further emphasize the new direction, followed by the segment team structure.

The new strategy was first communicated at a joint meeting with managers and middle managers, a group of 100 people, in the beginning of 2004 followed by a number of similar meetings. But the way forward was not as straight as the management had thought or hoped for.

Figure 1. New supply chain perspective (focal company). Model based on Normann (2001)



Methodology

Research aimed at understanding and exploring issues raised by practice with the purpose to simultaneously contribute to the development of theory and practice requires a methodology which will ensure academic as well as practical relevance. The questions raised by the focal company, our purpose, and the issues identified in theory, allow for an in-depth qualitative study with a broad scope. The research design adopted is therefore action research oriented (to aid in the process of the focal company and the further generation or refinement of theory) and abductive (to allow for description, understanding and discovery through an iterative process between empirical data and existing theory).

According to Greenwood & Levin (1998) the first step in the action research process is to define a common problem or point of interest between the researcher and the organization. The focal company has identified a number of issues with regard to their customer orientation and product development in relation to their new strategy. The issues raised are shared by the focal company and by the researchers, and a further reason for selecting the particular company as a research partner. In other words, the area of interest is identified both from a practical as well as from an academic standpoint. Given the scope of the study, covering more than one theoretical and practical perspective, we chose a multi-theoretical approach: *strategy* and *product development* in relation to customer orientation and innovation, being two researchers involved with corresponding theoretical and practical backgrounds.

The abductive approach is suitable when the contribution to knowledge is about discovery, description or understanding (Dubois & Gadde 2002; Stuart et al. 2002). The abductive approach is similar to induction in the aim to generate theories. One main distinction however, is a stronger reliance on theory in abduction which allows for an iterative process between different research activities and between empirical data and theory which we believe to be fruitful (Alvesson & Sköldberg 1994; Dubois & Gadde 2002).

Where the aim is to understand and analyze different processes within an organization such as change, decision making and implementation, qualitative methods are preferred

(Gummesson, 2000). The data collection in our study is based on interviews, participation in meetings and written material. The interviews were conducted with all members of the management team, a selection of managers and employees within R&D, Production and Marketing & Sales, and all of the members within one selected segment team: "Segment I" (see table of interviewees in Appendix 1). In the selection for the interviewees, in dialogue with the focal company, we acknowledged the challenge with studying organizations put forward by Bryman (1989) as to what level of analysis to conduct the research and who should be included in the empirical studies. In total we conducted 14 in-depth semi-structured interviews based on questions covering: the reasons for the on-going change initiative, the actual strategy and implementation efforts, and the possibilities and challenges as to customer orientation and product development from the perspective of the particular segment. Furthermore we had four meetings with the management team to prepare and reflect on our findings. In addition we participated in two segment meetings concerning the planning and follow-up to the road show among 2nd customers.

The questions were developed by the researchers together in order to ensure that both research perspectives were covered. The interviews were audio taped and each researcher listened, analyzed and interpreted the interviews independently on the basis of their respective theoretical frameworks and pre-understandings. In the next sequential step, an integrated analysis was made with the two researchers together, where the individual interpretations were compared and analyzed together to summarize our understanding from our respective perspectives and identify patterns and issues for further research. The meetings with management and the segment team were recorded by hand and reflected on in the same way.

The written materials included internal power-point presentations, structure and process descriptions as well as employee newsletters and annual reports which were equally analyzed by respective researcher, independently and jointly in an iterative process. The written material also included a separate study of actors within the value chain of the focal company, primarily 2nd customers.

As our approach on the one hand provides an opportunity for a holistic and in-depth richness and learning, for the researchers as well as the focal company, it is also accompanied with a number of risks. The multi-theoretical perspective and the single-case study give room for questions about our ability to follow a stringent research approach and/or reach conclusions of interest not only for practice but also for academia. In combining action research with the abductive approach, in referring to (and questioning) our own pre-understanding and relevant theoretical and empirical sources, and through describing and publishing our actual research process (Olsson & Olander 2005), we have strived to eliminate the risks.

The interviews were conducted over a period of four months, preceded by initial meetings and review of the written material, and followed by our participation in two segment meetings covering a total of 1,5 years in 2004 – 2005. The findings and reflections below are the point of departure for a continued action research process.

Identifying the challenges

The findings of our study are summarized in four themes and identified as challenges to re-defining the supply chain for increased customer orientation and innovative product development. These are described below as *Domineering Perspectives*, *Tools and Processes*, *Strategy and strategic decision*, and *Implementation approach*. With a single theoretical perspective it is likely that only one or two of these themes would have emerged. Using a multi-

theoretical perspective we have aimed at a more holistic approach hence illuminating the multitude of factors that come into play when aiming to increase customer orientation and innovative product development. The four themes that have emerged from reflecting on our findings in practice and theory are presented and elaborated below.

Domineering perspectives

Customer orientation is a key concept of the focal company who serves nearly 1000 customers, mainly converters of paper bags, boxes, cartons and more. But however important a concept: "*We have to put less focus on our machines and more focus on our market – we need to focus on value rather than production capacity and tonnage*" as expressed by one manager. From a supply chain perspective the management aimed at putting the customer as a primary driver rather than the manufacturing and logistics processes, hence turning it into a "demand" rather than a "supply" chain (Mason et al. 2006).

However, and in spite of a widespread understanding of the changes within the supply chain and the need for increased customer orientation, emphasized in the redefining of their supply chain, the way forward was not so simple. The focus on production, rather than customers and future potential of products and services, prevailed. "*There is a lot of brainstorming in the product development council, especially with regard to the production process and less regarding products*" and "*there is an instinctive no to new (product) ideas*" as expressed by two interviewees.

The studied segment was struggling to implement the new strategy and taking their initial steps of analyzing their value chain and preparing for road shows. Few in the segment had as of yet a clear idea of who represented 1st or 2nd customers. Or what their needs, or priorities, were: "*Our focus on customers is clearer but I don't really know what it means*" as expressed by one member of the segment.

The interviews further revealed that the members of the segment team did not fully share the management's view of their segment's future potential or the focus on 2nd customers: "*we are to find new arguments for paper within our segment and adjust these to our 1st and 2nd customers, but the 2nd customers aren't necessarily more important, and I wonder if it is even motivated for our segment*" and "*Focusing on 2nd customers rather than our existing customers - are we really to invest energy in this*?".

In a preparation meeting for the road show with 2nd customers the segment's intentions voiced were more in the lines of a "search" than a "show". The presentation that was being developed demonstrated their current product offering, and the questions prepared concerned the customer's purchase process rather than their concerns, needs or development process. The actual road show ended up being one meeting with one 2nd customer, not followed by any particular feed-back to other relevant segment groups or initiatives on how to proceed. And the work with the value chain was moving slowly.

Findings from a study among 2nd customers (food producers) in the value chain of the focal company show that the cooperation or contacts with the paper packaging industry is indeed very limited whereas the relationship with plastic producers is described as much more active on behalf of the producers (Berglund & Hallbergson 2005). The perspective on customers and ways of working within the focal company is very much in line with that of its' position in the supply chain and its' industry where traditionally the production rather than the customers have been the primary driver and area for improvements (Berg 2005). The instinctive no to new ideas, and the struggle to consider, or work with, other actors than the organization is accustomed to, are

common in large and mature organizations where the existing business is often privileged over new (Bessant et al. 2005; Dougherty & Hardy 1996). This approach seemed to prevail within the focal company in spite of the focus put on increased customer orientation and innovation.

In theory, customer orientation and its' importance for business success has been thoroughly debated, covering disciplines from marketing and product development to strategy and supply chain management. Slater and Narver (1998) distinguish between two forms of customer orientation: customer-led and market oriented. Customer-led orientation means satisfying customers expressed needs, is reactive in nature and short term in focus. Market orientation on the other hand is proactive in nature and focused on understanding and satisfying customers' expressed as well as latent needs in the long term, and argued to be essential for long term success.

However, the real difference between a customer-led and market oriented organization lies in behaviours that are "bedrock values" for the businesses that are market oriented. "*Their commitment to continuous market learning, to discovering latent needs and unserved markets, and to organization-wide mobilization of resources, enables them to achieve market-focused innovation and to sustain competitive advantage in all types of markets*" (Slater & Narver 1998, p.1005). Hence market orientation requires not only a strong customer focus and particular ways of working but also commitment and certain values. If a market orientation is to be achieved within the focal company the current perspective has to be altered.

However, market orientation is synonymous with dynamic markets and fast moving technology or consumer products (Jenster & Jaworski 2000; Slater & Narver 1998), far from the paper packaging industry. It raises the question as to what customer orientation really means for an actor upstream in the supply chain. Is it to be "customer-led" or "market oriented", or is the way forward for the paper packaging industry in between the two? An inquiry into what customer orientation and product innovation actually means and what it entails could be a crucial step in rendering the current perspective visible and highlight the need for, and the difference of, a new perspective – both in practice and in theory. To question the domineering perspective in practice does not mean that it is wrong per se or that it needs to be given up completely but can help in further understanding of the assumptions and behaviours which in turn might lead to a new or altered perspective and ways of working (Jacobs & Heracleous 2005; Markides 1997; Dougherty & Hardy 1996). Hence, the first challenge is related to the domineering perspective inherent within the focal company but also within theory.

Tools and processes

One of the important aims with the new strategy of the focal company is to allow for a more creative and innovative product development process, to actively participate in solving the customers' packaging problems and create new demand, pull instead of push – to offer "*innovative packaging paper of high quality*" and "*innovative packaging solutions in selected segments*". The segment teams are one important step, being given the overall responsibility for customer orientation and product development, mixing technical and marketing competence: "*The new thing is that we are developing our ways of working which will also allow us to take yet another step forward*" as expressed by one manager in the employee newsletter.

To organize product planning and development into cross functional groups corresponds well to theories established by several authors as to be instrumental for successful product development (Adams et al. 1998; Lagnevik et al. 2003; Pinto & Pinto 1990; Stalk et al. 1992). A dynamic interchange and collaboration between different departments, or competences, such as

technology and marketing is shown to yield improved product development and innovation and to be a crucial factor for market orientation (Jenster & Jaworski 2000; Kahn 1996; Mintzberg & Quinn 1992; Lagnevik et al. 2003). Hence, the focal company's cross functional segment structure is one step in the right direction for achieving and sustaining market orientation and a more innovative product development. However, other prerequisites were missing.

One immediate issue for the segment team was how to identify their customers' actual needs: "*the purpose is clear but the ambitions are on a dream level as is the time for implementation…it is harder than one thinks to find information about customers*" and "*Our customers do not have the ability to readily express their needs or demands – we have taught them our language"* as stated by two interviewees. So far the focal company's market and customer information had been based on the internal database for customer contact information and sales reports, customer surveys (in accordance with ISO 9000), market surveys as well as personal and on-going contacts with long term customers among those responsible. But the existing information on customers, from for example the sales corps, was not perceived as readily available "*we have to hunt reports from the sales guys to find out what happens at the customer end*" as expressed by one member. Many of the interviewees expressed a lack of information and know-how on how to move forward, as well as a limited direct access to customers, not least 2nd customers.

Furthermore the actual product development process is not fully conceptualized and there is no definition of what is to be regarded a new product: "*we are to launch X number of products each year but I do not know what defines a new product*" or "*What defines a new product is buoyant. The market team decides, also considering the production capabilities*" as expressed by two segment members. There is also an identified lack of resources for product development in terms of access to test production. And there are no routines in place for evaluation and prioritization of new product ideas or the development process.

To help achieve the innovative climate sought for and a successful new product development process, one step is to implement a formal and disciplined approach, or blueprint. Research shows that the reason why companies often fail is because they do not undertake the initial 'front-end' activities or because they lack all together a formal, step by step development process. On the contrary many success stories are related to when there is a disciplined approach from idea to launch, including activities such as sourcing of ideas, market studies, sharp and early product definitions, project planning, executive reviews, prototyping and test manufacturing (Cooper & Kleinschmidt 1993; Deschamps & Nayak, 1995; Khurana & Rosenthal 1998). Furthermore, a combination of 'stage setters' such as appropriate goals and empowerment, together with 'enablers' such as team leadership, sufficient decision-making power and top management support, when needed, are important steps besides the interdepartmental cooperation (McDonough III 2000).

However organizations must also must make resources available and, except for providing collaborative structure, also enhance processes for creative problem solving. To gain the full benefit of productive friction that might occur when people with diversified knowledge solve problems, companies must establish processes to be able to reflect on and learn from the practices emerging from this collaboration. This can be made through recognizing patterns and increase awareness of solutions across related groups (Dougherty 1992; Hagel III & Brown 2005).

The learning process and the process of know-how accumulation are important cornerstones for market orientation and innovation, involving elements of internal and external learning (Rothwell 1994; Slater & Narver 1998). In addition to interdepartmental links, and relevant tools – established links to other organizations, such as to customers, will affect the

outcome of innovations (Tidd 1995). Links which the focal company was struggling to establish in spite of 2nd customers welcoming improved co-operation with actors upstream in the supply chain (Berglund & Hallbergson 2005). The new customer perspective within the focal company and the new segment structure did not automatically improve these links. In practice and supported by theory, the focal company's experienced lack of definitions, tools and processes poses a second challenge to the implementation of the company's strategy. Hence, complementing the segment team structure with new ways of working and a development of necessary tools and processes (as suggested by research or developed by the focal company itself) could provide for a better platform for increased customer orientation and a more innovative product development.

Strategy and strategic decisions

The focal company's strategy is best described as an effort to combine cost leadership and differentiation to use Porter's terminology (1985). At the time for our study the wish to differentiate the company was clearly expressed: "*we are to be different from other companies within the paper industry – we should focus on niche rather than commodity*" as stated by two managers. The focus was put on product innovation while at the same time management was expressing the wish to find a new value proposition or a new role in the value chain.

Meanwhile, a new organization-wide project was launched with the aim to substantially reduce overall costs and establish a more standardized, unified, way of working. This, in addition to the history of the company having focused on productivity and rationalising the business, created confusion as to the strategic direction of the company, whether the company was to be a commodity or a niche player in the future, or both: "*the company must decide where its going – are we to produce paper and aim for low prices or are we to deliver packaging solutions which will cost more money initially*" as expressed by one interviewee, or "*…we have to decide if we are to produce quantities of paper at low prices or deliver solutions for packaging, which in turn requires an investment initially*…" as expressed by another. The developments created a number of questions on how the work with increased customer focus was to be understood, or proceeded with, and what was to be prioritized in terms of product development. And furthermore what the strategy of the company really was?

Linking customer orientation and incorporating innovation as a meaningful component of the business strategy of the organization are crucial for new product development as well as sustained product innovation (Dougherty & Hardy 1996; Khurana & Rosenthal 1997). According to Frambach et al. (2003): "*Understanding the links between a firm's market orientation and its underlying business strategy is critical to understanding how an organizations-wide commitment to markets can be created or, conversely, how this commitment may fail to arise in a firm*" (p. 379). Their findings show that a differentiation strategy has a positive effect on customer orientation and greater customer orientation leads directly to increased new product activity. Cost leadership, on the other hand, show a greater competitor orientation which in turn has a negative direct effect on new product activity.

Hence, the focal company's efforts to become more customer oriented and provide for more innovative product development is hampered or facilitated by the actual business strategy, and/or the decisions shaping the strategy.

However, conditions for product development and innovation are often found to be poor in large, established firms (Dougherty 1992; Dougherty & Hardy 1996; Lagnevik et al. 2003; Moore 2004). The further a company is on its life cycle, and the more successful it has been, the

harder it is to focus on new types of innovation. To overcome the challenges organizations must introduce new types of innovation while at the same time deconstructing old processes and organizations. When developing the future competitive advantage the focus should be on the innovation team sponsored by management. The deconstruction on the other hand should focus on productivity rather than differentiation but both steps should be carried out simultaneously (More 2004).

In spite of the focal company's efforts to combine cost leadership and differentiation the decision mentioned above seems more focused on cost-leadership than differentiation. The "simple" answer then, for the focal company, might be to clarify their strategic intent of doing both.

However, clarifying the strategy might not be enough. The suppositions above made by Frambach et al. (2003) are based on the behavioural view of market orientation – from the perspective that strategy influences market orientation. Market orientation is also conceptualized in literature from a cultural view. The cultural view considers market orientation as a set of organization-wide shared values and norms that reflect expectations about specific behaviours, to actual market-oriented behaviours themselves (Deshpandé & Webster 1989; Frambach et al. 2003; Homburg & Pflesser 2000). In the cultural view, the organization's values will influence an organizations market orientation, and hence innovation, rather that the intended strategy. The question on what influences what is also echoed in the on-going debate within the business strategy field itself as there is not *one* clear definition or even agreement among scholars on what strategy really is (Markides 2004; Whittington 1997). Whether it is a position as suggested by Porter (1985) or "*…a deeply entrenched perspective which influences the way an organization develops new ideas, considers and weights options, and responds to changes in its environment*" (Mintzberg & Quinn 1992, p. 177).

Hence, the third challenge that we have identified in practice is the formulation of strategy itself – here being that of both cost and differentiation – and the impact of the strategy, or rather the *understanding* or *perception* of the strategy, in relation to the objectives for customer orientation and new product activity. In the case of the focal company, the question emerges as to whether it is their intended strategy that will determine its' strive towards customer orientation and innovative product development or whether is it the organization's values and norms of behaviour as suggested above. The answer to an inquiry into this issue will in turn have an impact on the focal company's process of change, whether it is a matter developing and implementing a more stringent strategy or addressing the values inherent in the company's domineering perspective.

Implementation approach

A fourth theme emerged which is linked to the implementation process of the strategy. The work within the company had been gradual: "*first we took care of the productivity and the quality of our products, now we can focus on customers*" to quote one manager. The strategy itself, and the structure with regards to segment teams, had been developed by the management team. "*We did the job, and in the strategy was a description on what we expected…*" as expressed by one manager. But, the communication and introduction of the increased customer focus and segment structure was understood differently in the organization, and did not create the commitment management had hoped for.

After the initial information meeting, held by management, three different interpretations flourished regarding the presented changes: A completely new way of working, or, something put

on top the existing organization, or, a mix of both. "*When we came out of the meeting the three product area managers had completely different views on what was to be done*" as expressed by one interviewee. This manifested itself in the daily work within the segments which was going at different speeds and directions. In the studied segment there were particular expressions of uncertainty and doubt as to the new changes and direction, and the meaning thereof, as expressed by one segment member "*we do not invent products – we solve customer problems*" or "*we are to launch X number of products each year but I do not know what defines a new product"*.

From a classical perspective on strategy, and a behavioural view of market orientation, the management team of the focal company had acted in accordance with the schoolbook. But from other schools of thought within strategy it can be said that the strategy process per se was wrong from the very outset, subsequently hindering innovation and customer orientation – both in terms of the chronicle order of steps as well as the involvement or non-involvement of relevant employees in the planning phase. The classical approach regard strategy formulation and implementation as two separate measures where implementation is performed top-down, and where structure follows strategy. The processual approach will regard formulation and implementation as two interlinked phenomena where actual implementation may constitute the formulation and the implementation is a joint process of bargaining and learning (Mintzberg 1994; Porter 1985; Whittington 1997).

From a supply chain and product innovation perspective the management team's aim to move from push to pull can be compared to moving from the traditional perspective of a supply to a demand chain, or 'technology-push' to 'market-pull'. That in turn requires a more processual approach to customers, product design strategy, organizational structure and more, not least with regard to planning and decision making involving more than the management (Dougherty & Hardy 1996; Mason et al. 2006; Rothwell 1994; Vonderembse et al. 2006). The implementation of the segment teams within the focal company was regarded by many of the interviewees as something put on top of the existing organization and processes for idea exchange were not familiar. Furthermore the former product development organization was kept, including local product development groups at respective manufacturing unit, along with one joint development council which was confusing the view of the product development process, as well as the ownership of the goals for product development as suggested by Stewart (1995). Ideally, the cross-functional teams should be involved and actively participate in the planning, implementation and development process (Dougherty & Hardy 1996; Thieme et al. 2003).

Hence, in practice the implementation process is identified as a fourth challenge to the new strategy and strategic direction. A number of questions are raised and uncertainties expressed with no process, or tradition, for discussing or managing these issue which in turn lead to activities which were supporting the old rather than the new strategy. In theory, different schools suggest different approaches to implementing strategy. However reflecting on all challenges identified above, a more processual approach would likely have allowed for a better way to manage the challenges identified.

Reflection on findings and identified challenges

The aim with this paper has been to explore, identify and increase the understanding of the organizational challenges of re-defining the supply chain for increased customer orientation and innovative product development. The findings are summarized in four themes and described above as *Domineering Perspectives*, *Tools and Processes*, *Strategy and strategic decision*, and *Implementation approach*.

Using a multi-theoretical perspective we aimed at a more holistic approach thereby illuminating the multitude of factors that come into play when aiming to formulate and implement a strategy to increase customer orientation and innovative product development.

In theory, from the perspective of change, scholars point at the need for more comprehensive and holistic scope when initiating change: from addressing parts of an organization to addressing more encompassing patterns and wholes, and for change to be continuous and not only a one-of event (Marshak, 2002).

For practice, however, a more holistic approach increases the complexity. When reflecting on these findings together with the focal company, each theme, or challenge, was acknowledged per se. However the whole spectrum and the relationship between them were not counted for in practice, as in theory (Frambach et al. 2003). The questions that emerge for practice, and theory, concern the order of influence of the challenges and the process needed to address the challenges in practice without loosing the efficiency needed in the world of businesses.

Suggestions for practice and future research

Based on our findings we suggest (where possible) a continued action research process, or qualitative approach, to further contribute to the understanding of challenges to re-defining the supply chain for increased customer orientation and innovative product development, and *how* these challenges could be managed. When identifying and reflecting on the challenges above we have proposed measures such as: an inquiry into what customer orientation and product innovation actually mean, a development of necessary tools and processes, clarifying the strategy or identifying the values guiding the strategy and a processual implementation approach.

Beer et. al (2005) suggest an continuous and structured process for strategic implementation which takes account of both hard and soft issues, and provides an analytic as well as emotional framework where dialogue, honest feedback and communication are important cornerstone. Using dialogue as a tool is further suggested as the (one) way to render underlying assumptions visible, to handle the one often identified barrier to change and strategic innovation, namely mental models. A process of constructive and structured dialogue per se is also suggested to be key for strategic innovation as it requires shifts in existing mental models of organizational actors that underlie the overall strategy paradigm of a firm (Jacobs and Heracleous, 2005, Markides 1997).

The action research process will allow for studying the process of change itself and further elaborate suggestions on *how* the identified challenges can be better understood and managed. Hence, we suggest further research – or steps for practice – where a process of inquiry or dialogue is at the heart of the study, or the internal process, to further increase the understanding of the challenges and how these can be met, hence improving the knowledge on how to bridge the gaps – in theory and in practice.

- How can identifying and addressing challenges to increased customer orientation and innovative product development be managed and benefited from?
- What are the main drivers among the identified challenges – is it domineering perspectives, values and norms of behaviour or is it the strategy, the structure and/or the tools and processes.
- How will identifying and rendering challenges visible impact a (continued) process of change?
- What are the prerequisites for and consequences of a process of inquiry and dialogue?

We would also suggest using the supply chain perspective as it is embraced by many organizations due to its' focus on the entire value chain and due to the fact that it in itself is moving from a linear construct with definite starting and ending points, to systems, or wholes where the main drivers are shifting (Cox 1999; Normann 2001; Vonderembse et al 2006). Using a familiar construct might simplify an understanding and implementation of a change process and at the same time the supply chain perspective offers a multi-theoretical approach which we would argue to be relevant for organizations trying to move from one perspective to the other.

Conclusions

In our study we have focused on the organizational challenges to re-defining the supply chain, formulating and implementing a strategy, for increased customer orientation and innovative product development within a paper packaging industry. The study of the focal company gives at hand a number of challenges, specific to the subject of our research. However, there is enough evidence from industry experts (Berg 2005; Hayhurst 2002) that lead us to suggest that our findings are not specific to the particular company.

In conclusions we have identified four challenges summarized in four themes: *Domineering perspectives*, *Tools and processes*, *Strategy and strategic decisions* and *Implementation approach*.

For practice we argue that these findings are important, not least, when considering why and *how* to re-invent or re-comprehend existing business assumptions, models and tools. For theory, we argue that there is more to be achieved in identifying these challenges and in studying the bridging process itself – how to make the transition from push to pull, from cost to value, from production to customer focus.

The limited research on the link between strategy, customer orientation and new product activity together with our findings further point to the need for the multi-theoretical perspective and a more holistic approach for understanding the complexity of organizational challenges in practice and for the generation of theory. Not least as to *how* similar challenges can be managed.

References

Adams, M. E., Day, G. S., & Dougherty, D., 1998. Enhancing new product development performance: An organizational learning perspective. Journal of Product Innovation Management, 15 (5), 403-422.

Alvesson, M. & Sköldberg, K., 1994. Tolkning och reflektion - Vetenskapsfilosofi och kvalitativ metod. First edn. Studentlitteratur, Lund.

Beer. M., Voelpel S.C., Leibold, M. & Tekie, E.B., 2005. Strategic Management as Organizational Learning: Developing Fit and Alignment through a Disciplined Process. Long Range Planning, 38 (5), 445 – 465.

Berg, P., 2005. Are you really customer focused. PPI 47 (6), 64.

Berglund, J. & Hallbergson, M., 2005. En analys av faktorerna som berör beslutsprocessen för flexibla förpackningar. Master thesis, Department for Design Sciences, Division of Packaging Logistics, Lund University, Lund.

Bessant, J., Lamming R., Noke, H. & Philips, W., 2005. Managing innovation beyond the steady state. Technovation 25 (12), 1366-1376.

Bryman, A., 1989. Research methods and Organizations Studies. Reprint 1995. Routledge, London.

Christopher, M. & Gattorna, J., 2005. Supply chain cost management and value-based pricing. Industrial Marketing Management 34 (2), 115-121.

Christopher, M. & Towill, D.R., 2000. Supply chain migration from lean to agile and customised. Supply Chain Management: An international journal 5 (4), 206-213.

Cooper, R.G. & Kleinschmidt, E.J., 1993. Screening new products for potential winners. Long Range Planning 26 (6), 74-81.

Cox, A., 1999. Power, value and supply chain management. Supply Chain Management: An International Journal 4 (4), 167-175.

Deschamps, J-P. & Nayak P.R., 1995. Fomenting a customer obsession. National Productivity Review 14 (4), 89-121.

Desphandé, R. & Webster, F.E., 1989. Organizational Culture And Marketing: Defining The Research. Journal of Marketing 53 (1), 3-16.

Dougherty, D., 1992. Interpretive barriers to succesful product innovation in large firms. Organization Science 3 (2), 179-202.

Dougherty, D. & Hardy, C., 1996. Sustained product innovation in large mature organizations: overcoming innovation-to-organization problems. Academy of Management Journal 39 (5), 1120-1153

Dubois, A. & Gadde, L.-E., 2002. Systematic combining: an abductive approach to case research. Journal of Business Research 55 (7), 553-560.

Frambach, R.T., Prabhu, J. & Verhallen, T.M.M., 2003. The influence of business strategy on new product activity: The role of market orientation. International Journal of Research in Marketing 20 (4), 377-397.

Greenwood, D. J. & Levin, M., 1998. Introduction - Action Research, Diversity, and Democracy. In: Introduction to Action Research - Social Research for Social Change, SAGE Publications Inc, pp. 3-13.

Gummesson, E., 2000. Qualitative Methods in Management Research. Second edn. Sage Publications, Inc, Califiornia.

Hagel III, J. & Brown, J. S., 2005. Productive Fiction - How Difficult Business Partnerships Can Accelerate Innovation. Harvard Business Review 83 (2), 82-91.

Hayhurst, D., 2002. Valuing the customer's voice. Paperloop, August 2002, 25-27.

Homburg, C. & Pflesser, C., 2000. A multiple-layer model of market-oriented organizational culture: Measurement issues and performance outcomes. Journal of Marketing 3 (4), 449-462.

Jacobs, C. D. & Heracleous, L.Th., 2005. Answers for questions to come: reflective dialogue as an enabler of strategic innovation. Journal of Organizational Change Management 18 (4), 338-352.

Jenster, P.V. & Jaworski, B., 2000. Driving forces in market orientation: a study of industrial firms. Strategic Change 9 (6), 357-362.

Kahn, K.B., 1996. Interdepartmental Integration: A definition with Implications for Product Development Performance. The Journal of Product Innovation Management 13 (2), 137-151.

Khurana, A. & Rosenthal, S.R., 1997. Integrating the fuzzy front end of new product development. Sloan Management Review, 38 (2), 103-121.

Khurana, A. & Rosenthal, S.R., 1998. Towards Holistic ”Front Ends” In New Product Development. The Journal of Product Innovation Management 15 (1), 57-74.

Lagnevik, M., Sjöholm, I., Lareke, A., & Östberg, J., 2003. The Dynamics of Innovation Clusters. Edward Elgar Publishing Limited.

Markides, C., 1997. Strategic Innovation. Sloan Management Review 38 (3), 9-23.

Markides, C., 2004. What is strategy and how do you know if you have one. Business Strategy Review 15 (2), 5-12.

Marshak, R. J., 2002. Changing the language of change: how new contexts and concepts are challenging the ways we think and talk about organizational change. Strategic Change 11 (5), 279-286.

Mason, K., Doyle, P. & Wong, V., 2006. Market orientation and quasi-integration: Adding value through relationships. Industrial Marketing Management 35 (2), 140-155.

McDonough III, E.F., 2000. Investigation of Factors Contributing to the Success of Cross-Functional Teams. The Journal of Product Innovation Management 17 (3), 221-235.

Mintzberg, H., 1994. The rise and fall of strategic planning. Prentice Hall International (UK), Hertfordshire.

Mintzberg, H. & Quinn, J.B., 1992. The Strategy Process – Concepts and Contexts. Prentice-Hall International Editions.

Moore, G.A., 2004. Darwin and the Demon: Innovating Within Established Enterprises. Harvard Business Review 82 (7-8), 86-92.

Normann, R., 2001. När kartan förändrar landskapet. Liber.

Olsson, A. & Olander, M., 2005. Multitheoretical perspectives in an abductive action research study. Conference Proceedings NOFOMA 2005 edn, B. Gammelgaard & T. Skjött-Larsen, eds., Copenhagen.

Pinto, M. B. & Pinto, J. K., 1990. Project Team Communication and Cross-Functional Cooperation in New Program-Development. Journal of Product Innovation Management 7 (3), 200-212.

Porter, M. E., 1985. Competitive advantage, Creating and Sustaining Superior Performance. The Free Press, New York.

Rothwell, R. 1994. Towards the Fifth-generation Innovation Process. International Marketing Review 11 (1), 7-31.

Rundh, B., 2005. The multi-faceted dimension of packaging – Marketing logistic or marketing tool. British Food Journal 107 (9), 670-684.

Slater, A.F. & Narver, J.C.,1998. Customer-led and market-oriented: Let’s not confuse the two. Strategic Management Journal 19 (10), 1001-1006.

Stalk, G., Evans, P. & Shulman, L. E., 1992. Competing on Capabilities - the New Rules of Corporate Strategy. Harvard Business Review 70 (2), 57-69.

Stewart, B., 1995. Packaging as an Effective Marketing Tool. Pira International, London.

Stuart, I., McCutcheon, D., Handfield, R., McLachlin, R. & Samson, D., 2002. Effective case research in operations management: a process perspective. Journal of Operations Management 20 (5), 419-433.

Thieme, J. R., Song, X. M. & Shin, G.-C., 2003. Project Management Characteristics and New Product Survival. Journal of Product Innovation Management 20 (2), 104-119.

Tidd, J., 1995. Development of Novel Products Through Intraorganizational and Interorganizational Networks - The case of Home Automation. Journal of Product Innovation Management 12 (4), 307-322.

Vonderembse, M. A., Uppal, M., Huang, S.H. & Dismukes, J.P., 2006. Designing supply chains: Towards theory development. International Journal of Production Economics 100(2), 223-238.

Whittington, R., 1997.What is strategy and does it matter. International Thomson Business press, London.

Appendix 1. Table of Interviewees

1	Member of the Board of Directors
2	President and CEO
3	Senior Vice President Marketing Director Paper
4	Senior Vice President Technical Director and Mill Manager (Plant A)
5	Product Area Manager and Manager Segment I
6	Manager Product Technology (Plant A), member Segment I
7	Product development engineer (Plant A), member Segment I
8	Technical Customer Support (Plant B), member Segment I
9	R&D Manager (Plant A)
10	R&D Manager (Plant B)
11	Production Manager (Plant B)
12	Manager Product Development (Plant B), member segment III
13	Technical Customer Support (Plant A), member Segment II
14	CEO and Manager Sales, European subsidiary