Abstract

Title Customer Focused Business Models Within SCA Packaging

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Areas of Inquiry Although SCA Packaging is a successful competitor in the business of

corrugated packaging, margins are small and organic growth negligible. This has lead to a review of the areas in which the company is competing to find customer focused business models more apt to raise

margins and hence profitability.

Purpose The purpose is to identify, describe and analyze customer focused

business models within SCA Packaging.

Methodology The thesis is carried out as a case study of customer focused business

models in different settings primarily focused on SCA Packaging. The study also includes five of SCAP's competitors as well as a possible attacker and a substitute in order to identify trends within Packaging Solutions Providers. The theoretical foundation is a broad base of fairly general theories of what creates competitive advantage together with

theories of how value is created.

Conclusions In a business put under pressure from decreasing margins and

negligible growth, customer focused business models may very well be the future for Packaging Solution Providers. However SCA Packaging is not to abandon their roots in order to satisfy customers and supply services, a segment where margins are much higher, since the box is the Trojan horse of the company. The areas in which we suggest that SCA Packaging focus special attention are the use of synergies, organization of sales and customer bonding. To protect the business from possible attacks of disintermediaries, bonding to customers will be essential. Through increased switching costs and co-dependency between customer and supplier, business gets more intertwined

although enabling each party to focus on their core business.

Keywords Strategy, Business models, Customer focus, Logistics, SCA Packaging,

Packaging Solution Providers, Service, Value,

Preface

Writing a master thesis is a journey and we would like to thank all the people that made it possible. Our tutors, Allan T. Malm and Thomas Kalling, for their good spirit and clear vision that sometimes were desperately needed, our informants for letting us into the minds of Packaging Solution Providers and providing us with great understanding of the packaging business. Thank you Duncan Murcott for our first glance at the packaging business, Niclas Strand for showing us the reality of a box plant, Bengt Wendel for sharing the secrets of Förpackningsservice, Niklas Rönnäng for taking the time to explain specific business solutions, Mats Rabe for showing us that everything is not corrugated packaging, Brian Price for broadening our views of what is possible to offer and finally Johan Apel for providing a critical view of Packaging Solution Providers.

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Table of Content

A	BSTR	ACT	1-1
P	REFA	CE	1-2
T	ABLE	OF CONTENT	1-3
T	ABLE	OF FIGURES	1-6
1	IN'	TRODUCTION	1-7
	1.1	BACKGROUND	1-7
	1.2	INTRODUCTION TO AREAS OF INQUIRY	
	1.3	AREAS OF INQUIRY	1-9
	1.4	PURPOSE OF THE THESIS	1-10
	1.5	TARGET GROUP	1-10
	1.6	DELIMITATION	1-10
2	MI	ETHODOLOGY	2-11
	2.1	METHODOLOGICAL CONSIDERATIONS	2-11
	2.2	THEORETICAL FRAMEWORK	2-12
	2.3	EMPIRICAL STUDY	2-13
	2.4	Analysis	2-16
	2.5	CRITIQUE ON SOURCES OF INFORMATION	
	2.6	REFLECTION ON CHOICE OF METHODOLOGY	
	2.7	DICTIONARY	
	2.8	THESIS OUTLINE	2-20
3	TH	IEORETICAL FOUNDATION	3-22
	3.1	HOW TO MAKE SUPERIOR BUSINESS	3-22
	3.2	LOOKING WITHIN	3-24
	3.3	LOOKING OUTSIDE	
	3.4	EXPANDING THE GENERIC STRATEGIES: THE DELTA MODEL	
	3.5	LOOKING IN FROM THE OUTSIDE	
	3.6	THE POSSIBILITY OF FAVORING ONE	
	3.7	CREATING VALUE	
		lue Innovation	
		lue Co-Production	
		lue Migration	
	3.8	TAKING VALUE CREATION THE EXTRA MILE: NETWORK THEORY	
		om Product to Service	
	3.9	SUMMARY ON THEORETICAL FOUNDATION	
4		MPIRIC	
	4.1	UNDERSTANDING THE BUSINESS	
		cent Historical Development	
		A Packaging	
	4.2	THE ORGANIZATION	
	43	PRODUCTION	$\Delta \Delta \Delta$

4.4 VÄRNAMO	
The Business Idea	
Resources	
External Forces	
Value	
Networks	
The Offering	
The Future	
Critical Activities	
4.5 FÖRPACKNINGSSERVICE VÄSTRA FRÖLUNDA	
The Business Idea	
Resources	
External Forces	
Value	
Networks	
The Offering	
The Future	4-56
Critical Activities	4-57
4.6 SCAP Cr Pollokshaws/The Czech Republic	4-58
The Business Idea	4-58
Resources	4-59
External Forces	4-59
Value	4-60
Networks	4-60
The Offering	4-60
The Future	4-61
Critical Activities	4-62
4.7 LINPAC/ RECOPAC, ESLÖV	4-63
The Business Idea	4-63
Resources	4-64
External Forces	4-65
Networks	4-66
Value	4-66
The Offering	
The Future	
Critical Activities	
4.8 THE CASE OF AN ATTACKER: PACKPLANET	
The Business Idea	
Resources	
External Forces	
The Future	
Critical Activities	
4.9 Internet Survey Competitors; Summary	
Production	
Services	
Logistics	
4.10 CATEGORIZATION OF CASES AND COMPETITORS	
S ANALYSIS	5-74
5.1 STRATEGIC OPTIONS	5-74

	Value Migration	5-76
	New Entrants	
	Substitutes	5-79
	Barriers of Entry	5-80
	Customer Bargaining Power	5-80
	5.2 SCAP VALUE CREATING ACTIVITIES: PRODUCTION	5-81
	Production	5-82
	Geographies	5-82
	Internal Networks	
	5.3 SCAP VALUE CREATING ACTIVITIES: SERVICE	
	Design	
	Complementary products	
	One Supplier	
	5.4 SCAP VALUE CREATING ACTIVITIES: LOGISTICS	
	Consulting	
	Product Management	
	Delivery	
	5.5 KEY SUCCESS FACTORS	
	SCAP Värnamo, Total Customer Solution	
	Förpackningsservice, Total Customer Solution	
	Pollokshaws/The Czech Republic, Total Customer Solution	5-93
6	CONCLUSIONS	6-94
	6.1 Answering the Questions	6-94
	6.2 SUGGESTIONS FOR SCAP	
	6.3 REFLECTIONS	
	6.4 Future Research	
7		
•		
	7.1 PRINTED SOURCES	
	7.2 ELECTRONIC SOURCES	
	7.3 Informants	/-104
8	APPENDIX 1	8-105
	Interview questions	8-105
	Niclas Strand, SCAP Värnamo, Niclas Rönnäng, SCAP Mariestad	8-105
	Bengt Wendel, SCAP Förpackningsservice	8-106
	Brian Price Pollokshaws, Mats Rabe LINPAC	8-107
	Johan Apel, Packplanet.com	8-109
9	APPENDIX 2	9-111
	THE COMPETITORS	
	DAVID S. SMITH	
	INTERNATIONAL PAPER	
	JEFFERSON SMURFIT	
	KAPPA	
	STORAENSO	
	~	

Table of Figures

Figure 2-1 Model of Interpretation	2-15
Figure 2-2 PSP Activities	2-16
Figure 2-3 Thesis Outline	2-21
Figure 3-1The VRIO Framework (Barney 1991)	3-25
Figure 3-2 Five Forces of the Industry (Hax & Wilde II 2001)	3-26
Figure 3-3 The Delta Model: Three Distinct Strategic Options (Hax & Wilde 199	
Figure 3-4 Determinants of Success in Distinctive Businesses (Porter 1991)	
Figure 3-5 Value Chain and Value System (Porter 1985)	
Figure 3-6 Value Star (Wikström et. al, 1994)	3-31
Figure 3-7 Shifting Strategy Focus, (Kim and Mauborgne, 1999b)	3-33
Figure 3-8 Conceptual Framework	3-39
Figure 4-1 SCAP Organizational Chart	
Figure 4-2 The Offering Presented by SCAP Värnamo	
Figure 4-3 Value Chain SCAP Värnamo	
Figure 4-4 Critical Activities SCAP Värnamo	4-52
Figure 4-5 Value Chain SCAP Förpackningsservice	
Figure 4-6 Critical Activities SCAP Förpackningsservice	4-57
Figure 4-7 Value Chain SCAP Pollokshaws/The Czech Republic	
Figure 4-8 Critical Activities SCAP Pollokshaws/The Czech Republic	
Figure 4-9 Value Chain LINPAC/ RECOPAC	4-63
Figure 4-10 System for Reusable Packaging	4-64
Figure 4-11 Comparing Costs	4-65
Figure 4-12 Critical Activities LINPAC/RECOPAC	4-67
Figure 4-13 Value Chain Packplanet	
Figure 4-14 Critical Activities Packplanet	4-69
Figure 4-15 Strategic Options; Cases	4-72
Figure 4-16 Strategic Options; Survey	4-73
Figure 5-1 Adaptive Processes; SCAP Cases	5-75
Figure 5-2 Disintermediation and Attack on the PSP Value Chain	
Figure 5-3 Activities in Production	
Figure 5-4 Activities in Service	5-84
Figure 5-5 The Value Star of SCAP Pollokshaws/The Czech Republic	
Figure 5-6 Activities in Logistics	
Figure 5-7 Co-Packing Continuum	
Figure 5-8 Delivery Continuum	5-91

1 Introduction

"Think about it. Corrugated boxes surround your everyday life. When you get up in the morning the bed that you are getting up from has been packaged in corrugated paper as has the toilet you go to, the sink where you wash, the coffee machine that makes your morning cup and the cornflakes that you pour into your bowl. Your bowl, by the way, was probably also packaged in corrugated paper at one time or another."

-Duncan Murcott, SCAP

This chapter will explain the purpose of the thesis as well as the background and introduce the reader both to the competitive situation of SCA Packaging and to the Areas of Inquiry.

1.1 Background

When our work began, we found ourselves looking at a business where no significant technological progress was visible and where competition was getting fiercer by the minute. Today the three large competitors: SCA, Kappa and Smurfit together hold approximately 38 % of the European market. They gain market shares mainly through acquisition of existing businesses in interesting or profitable segments of the business (SCA Annual Report 2000). The organic growth of the market was not more than 0,5 % last year (SCA Year-end Report 2001).

Because of the ongoing consolidation, since the midst of 1980:s, of Packaging Solution Providers (PSP), size has become imperative and the only means with which any company can defend itself. The consolidation has led to intense competition between the three large competitors and they are experiencing diminishing returns and threatening commoditization of their standard product, the corrugated brown box (Malm 2001).

For PSPs there is no such thing as a sustainable competitive advantage at this time, or more precisely, no company has taken use of such advantages as of yet. The production technology is simple, though very capital intense. The simple technology and the fierce competition are both facts that lead to lower prices and therefore lower margins in the market. The industry as such is perceived as extremely traditional and conservative: Few efforts, except the intense acquisitions, have been made up until now to gain competitive advantage. Now changes are starting to occur and companies in the industry are beginning to explore new ways of doing

business (SCA Investors Report 3/01). The development in Information and Communication Technology (ICT) has enabled production control and logistics solutions that are more complex. Through ICT the possibilities of doing business has increased in a number of ways, communication between facilities has become easier and more reliable, the speed in which it is possible to do business has increased and new ways of making business have emerged. This development has influenced PSPs' into trying to be more focused on the customer and add as much value to the products as possible, they are even adding on services in order to differentiate their businesses. These efforts are still shadowed by the core business, the production of standardized corrugated boxes. Businesses related to customer-focused business models equal approximately 20 % of the total turnover within SCA Packaging (SCAP) (Strand 2001). Still, the margins presented by these models by far exceed those of the core business. The question that the large PSPs have to ask is if growth through acquisition of smaller companies is the way to go or if they have to come up with something fresh. Should this fresh new thing then be related to previous activities or separated from them?

1.2 Introduction to Areas of Inquiry

A common reason for change is to set new rules of the game (Ramírez 1998). By doing this, SCAP may become a prime mover, a fact that may help them achieve sustained competitive advantage. According to Normann (2001), companies move away from focusing on a set of required competencies such as to manufacture and sell a product, to a focus with a much broader view related to the design and function of value-creating systems. This change, from a traditional business with traditional competencies to an untraditional business with a much larger scope of needed capabilities will need a different kind of mobilization techniques and requires new competencies in order to coordinate new value systems within which the company can transform (Normann 2001).

When a company is looking at possibilities to transform their business, the company's managers have to be innovative in the process of creating customer value. According to Normann (1975), there are two different ways to transform business. The first consists of modifications and improvements within the framework of the existing business ideas, and is named *product variation*. The second way of transformation considers changes and development of products outside the existing business idea framework. This is named *reorientation* and involves the *embryo of new business ideas* or *branches of business*.

SCAP has become aware of the emerging need for change (Annual Report 2000) and the organization is now timed to act upon this knowledge. Steps have to be taken in order to secure a future position in the market. In order to defend the company from hostile attacks, it is important to identify weaknesses as well as strengths in different value constellations. Eventually it will be a question of acknowledging these value constellations from the organization, or running the risk of getting run over by the rest of the PSPs'. Since PSPs' are

largely conservative, an immediate reaction might be to shake off signals of needed change. SCAP is actually making money, and lots of it too, so why changes at all? Normann 1975(1984) suggests that changes come hardest to companies that have had success in the near past, even if these companies may be the ones in largest need of such a change. Top management might ask why they should change a winning team. The answer might be that it is easier to draw the map than to follow it.

New offers may take many forms; one is the process of unbundling and re-bundling resources, activities and knowledge. The company creates a complex value in a bundled offer as a reconfiguration of the business concept and through conceptualizing the current offer, which means it will be easier to understand what is really happening.

In the emerging possibilities of new business opportunities, it becomes important to recognize the effect of customer focus. It is the customers and the relation to them that eventually will create shareholder value. The better a company relates to its customers, the more the company will prosper (Kim and Mauborgne 1997, 1999a,b). The time is now to focus on the needs and wants of the customer and to get increasingly involved with them. The customer relation will go from just being a matter of occasional meetings and negotiations to take the form of bonding, an interactive relationship. Bonding will lead to an increase in switching costs and possibilities for Customer Lock-in and Competitor Lock-out effects as described by Hax and Wilde II (1999, 2001) even though there is no apparent technological advance. The game is no longer about changing the technological process, but instead about changing business processes, i.e. changing business models or processes as suggested by Slywotzky (1996).

1.3 Areas of Inquiry

SCA Packaging is a successful competitor in the corrugated packaging industry. Although SCAP makes a handsome profit from this part of the industry, they are experiencing a market with slow growth and accelerating competition. These have led SCAP management to review the areas in which SCA Packaging is competing. Instead of becoming a company in a market with commoditized products, a decision has been made to reconfigure the offer with opportunities for value creation (Porter 1985) and value innovation (Kim and Mauborgne 1997). These are just small projects corresponding to less than 20 percent of total revenue (Strand 2001).

Questions that crystallizes from the above discussion are:

- How does the identified business models within SCAP create a higher value for the company and for their customers?
- What components or combination of variables are behind this increased value?
- What Key Success Factors exist for SCAP in customer focused business models?
- How does competitors influence the existing KSF?
- Are there any visible trends in strategic options chosen by Packaging Solution Providers?

1.4 Purpose of the thesis

The purpose of this study is to identify, describe and analyze customer focused business models within SCA Packaging.

1.5 Target Group

This thesis is targeting people working with Packaging Solution Providers, primarily within SCA Packaging, but can also be read by anyone with an interest in how strategy is deployed through business models in manufacturing companies. Readers with less knowledge in the field of strategy will, through the thesis outline, be able to read the theoretical chapter with some benefit and then proceed to the Empiric and Analysis chapters.

1.6 Delimitation

Theories that focus on for example organizational aspects are not within the theoretical framework, but will be included in a secondary way by other theories as RBV. It could be argued that we are missing important aspects when we as researchers obtain theories. We argue that we feel reliability to our framework and that selected theories have let us collect and discuss relevant and interesting aspects aimed at fulfilling the purpose of this thesis.

An empirical delimitation is the chosen number of cases included. Our reason has been to get more quality-based data rather than a large quantity of the same. By doing this, we focus on the chosen cases in order to fulfill the purpose of this thesis. Hence, our conclusions will be drawn from a few interviews intended to describe customer focused business models. Our case study approach does not include interviews with all parties of the companies considered.

2 Methodology

"We are responsible for what we do and also for what we do not"

-Voltaire-

The idea of the methodological chapter is to describe the methodological considerations and approaches made in the process of completing this thesis. These methodological considerations and choices are described in three parts, theoretical, empiric and analytical. We recommend readers not interested in methodological considerations to proceed to the Theoretical Foundation.

2.1 Methodological Considerations

In order to fulfill the purpose of the thesis, three methodological issues can be identified:

- 1. The build-up of an initial theoretical framework of reference, describing theories in order to identify interesting variables for a business model aimed at creating sustained competitive advantage. This phase is *deductive*.
- 2. The empirical study aimed at generating data in order to identify and structure variables that are interesting in enabling description, identification and analysis of customer focused business models by packaging solution providers.
- 3. Data analysis is pursued with empirical data through our theoretical framework. From this we are trying to identify patterns and critical aspects that are important within customer focused business models. This is conceptualized in a way that enables us to draw conclusions. This phase is mostly *abductive*.

The methodological approach has both deductive and inductive areas. According to Holme & Solvang (1991), most researchers have a deductive approach, but the survey often includes parts with inductive elements. According to Alvesson & Sköldberg (1994) the interaction between the two approaches results in a final approach that can be named *abduction* that may be a more adequate description of the research being done. Abduction is according to Alvesson & Sköldberg (1994) the interpretation of a single case or cases through a general hypothetical pattern that, if correct, explains the case in question. Simultaneously during this process, the empirical area of application develops gradually and the theoretical frame is refined. Abduction then has merits in the sense that we will be creative as researchers or as

Eriksson & Wiedersheim-Paul (1997) say "When to develop new exiting knowledge, you, as a researcher, need a creative point of view".

2.2 Theoretical Framework

What is essentially a business model? Porter (2001) claims, "The definition of a business model is murky at best". What researchers should look at, according to Porter (2001), are strategies and competitive advantages and from these draw conclusions on how to do business. Alt and Zimmerman (2001) suggest that there is no clear definition or consensus of what a business model really contains even though there seems to be a broad understanding of the phenomena. During the past few years several articles have been issued on the subject, most of them, e.g. Amit and Zott (2000) and Sheats (2000), consider business within information technology or E-commerce. One recent article by Pitt (2001) claims that old business models are less useful today in a fast changing world. He promotes a new model for the digital age built on Porter's Five Forces, although not as clear as the latter. In studying the area of interest, i.e. business models, we have found no articles, concerning the subject, from the perspective of a manufacturing company. Our choice was instead to try to link basic strategy theories and their recent followers to each other, since we think that a business model is a process of strategic considerations that is formed to make superior business. A business model in this case being a product of what Normann (1975) calls the business idea. This idea leads the way and points out in which direction the company is, or should be, moving. Companies have to understand which ways that are possible to take in the creation of a successful business model, how to take advantage of their strengths and how do develop their weaknesses as well as using emerging opportunities and foreseeing upcoming threats in the exterior environment.

To really understand how business models are formed, we need to understand the reasons behind the creation of them. In order to understand these reasons, we must look at the competitive situation the company is in. Who are the competitors, what barriers prevents new competition from entering the business segment, who are the customers and suppliers and which powers do they possess compared to the company and finally, is it possible to substitute the company's product. To answer these questions we use the *Five Forces model* as introduced by Porter (1980). To widen our understanding, we need to look into the company. What resources are the company using in order to gain competitive advantages and how are these resources deployed? These questions are best answered with the help of the *Resource Based View* (RBV) (Barney 1991). We also realize the importance of combining the theories of the exterior and the interior and we believe that this have been done by Hax and Wilde II (1999,2001), Spanos and Lioukas (2001) and by Kalling (2001a). This combination is important since no company can succeed by just looking out or just looking in.

When looking at the product of the company and helping us to understand the ways in which products are positioned on the market we initially use Porters Generic Strategies (1980). We choose to take this theory one step further in using the *Delta Model* (Hax & Wilde II 1999, 2001)

We believe that the *Delta Model* provides deeper understanding and a more up to date view on how to position products.

In narrowing our view to increase our understanding, we have to understand how customer value is added. We also have to understand different ways in how to enhance this value and of course, we have to understand what the customers want. How value is added inside the organization is best understood applying Porters *Value Chain* (1985) and to understand the exposure to threats we add on the theory of disintermediation (Evans & Wurster 1999). To be able to understand how to enhance value we have to look at *Value Creation*, meaning *Value Co-production* (Ramirez 1998), *Value Innovation* (Kim and Mauborgne 1997, 1999a, 1999b), Value *Constellations* (Normann & Ramirez 1993 and Wikström & Normann et al 1994), *Network Theory* (Gulati, Nohria, Zaheer 2000) and *Knowledge Webs* (Eneroth, Malm 1999). In order to understand why and how value leaves one competitor in favor of another we use Slywotzky's (1996) theory of *Value Migration*.

To conclude the theoretical foundation, we will describe our own view of how to include different parts into a business model of today. Our view will summarize the content of the theoretical foundation and will be the essence of what the reader should bring along when reading the rest of the thesis.

2.3 Empirical study

The empirical study is aimed at generating data in relation to the purpose of this thesis. In doing this, we have chosen a case study as our approach to answer the areas of inquiry. The reason for choosing a case study methodology is related to the purpose. The idea of the empirical study is to capture reality. Since this requires good contextual understanding and a deeper view of the reality of managers, the use of a qualitative method is preferable to a quantitative one.

When the problem is difficult to delimit and when one is uncertain which model to use, which qualities and relations that are important, case studies have an advantage (Lundahl-Skärvad 1992). According to Yin (1994), a case study tries to illuminate the result of a decision or set of decisions. We believe that this is the most efficient way to get an in depth understanding of SCA Packaging Corrugated.

Normally empirical studies are experiments, surveys or case studies. Lundahl-Skärvad (1992) defines a case study as including a minority of objects that the study focuses on. These objects are then to be studied from many different dimensions and angles.

Our first contact with SCAP was through Thomas Kalling that introduced us to Duncan Murcott. During a meeting in Copenhagen, we discussed what SCAP was now doing within the Packaging division and interesting aspects to look into within the customer-focused concept. Aspects discussed were how business models had emerged within SCAP, differences between new business models and old ones, as well as critical strategic aspects when looking at business models within SCAP. After this first contact with SCAP, we began searching for theory. We also began to work on the purpose of the thesis from above aspects. Our fundamental thoughts were focused at; what characteristics customer focused business model had and what the key success factors (KSF) for these new business models were.

In further discussion with Professor Allan T. Malm, we found that an interesting purpose should have its focus on what these customer-focused business models look like today and on what potentials there are in these new concepts. We also discussed that the approach for the thesis should be to combine an interior perspective within SCAP with exterior cases of PSPs. This was taken into consideration and a short Internet survey was added to find out what the competitors of SCAP were offering. We identified three interesting cases and informants within SCAP. We also located an interesting plastic solution that resulted in an interview with another PSP, stationed in Eslöv, LINPAC with their solution RECOPAC. A fifth, Internet based company, Packplanet, was added due to their interesting business solution.

Case 1. SCA Packaging in Värnamo consists of, among other things, a box plant. A box plant can be considered the original business model and its standardized product still corresponding to 75-80 % of turnover in SCAP. The addition, customer-focused business models, is being of interest to us. Värnamo is an above average performer that has adapted to the customer focus and therefore this facility is of interest to us. Our informant Niclas Strand is the Customer Service manager in Värnamo and was capable to provide information concerning production, customer relations and the offering made to customers. We also, when in Västra Frölunda, got the opportunity to interview Niklas Rönnäng, Key Account Manager, regarding a new business solution, an in-house concept, mentioned to us by Niclas Strand.

Case 2. Förpackningsservice (FPS) in Västra Frölunda is focused on providing services and solutions to customer in a bundled fashion, a rare way of doing business within SCAP. The rareness of this solution as well as its customer focus is of interest to us. The interview provided data about how SCAP manages packaging services within their business. Our informant in this case was Bengt Wendel, General Manager of the FPS. Wendel has been employed by SCAP for several years and has great experience and knowledge of packaging solution providers.

Case 3. SCAP Pollokshaws, Scotland and the Czech Republic, has developed a customer focused business concept. Even though their business is outside the core business of SCAP, Pollokshaws has managed to incorporate both documentation and logistics with core competencies of other SCAP facilities. The ability to utilize synergies is a strength in the offer provided by SCAP Pollokshaws. The solution is unique within SCAP and therefore interesting to us. Our informant in this case was Brian Price, a former Compaq Procurement Manager employed by SCAP only six months ago.

Case 4. Our interest in LINPAC/RECOPAC was addressed to get a broadened understanding of how different materials are dealt with by PSPs and in understanding the role of substitutes. With LINPAC/RECOPAC included as one of our cases, we will get a better and more critical understanding of PSPs through an external view of the phenomenon packaging solutions.

Case 5. The virtual PSP Packplanet is interesting for the reason that it tried to provide a solution not previously known to the market. The founders of the company, including our informant Johan Apel, all came from the fast moving consumer goods industry and therefore had a customer perspective on packaging solution providers. The inclusion of Packplanet into the case study provided a much more complex, initiated and differentiated view of PSPs' competitive advantages.

According to Gilje & Grimen (1993), it is possible, through the choice of a critical method, to maintain both an onlooker- and a participator perspective. The idea is not just to reproduce what the respondents are telling us in the study. The respondents have their own version of reality and their own capability of analysis. Since they already have their own picture of reality, we as researchers have to create opportunities to investigate if their picture is correct or not. We did this by performing semi-structured interviews, using a questionnaire that gave the respondent the possibility to answer in their own words emphasizing what they thought to be of importance. This format allowed us to be participators during the interviews that are the basis of our Empiric. This resulted in an active role in processing data during interviews.

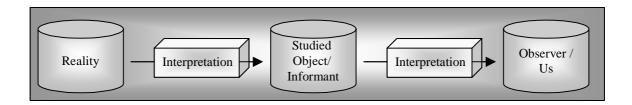


Figure 2-1 Model of Interpretation

During our work we managed to identify a value chain that was common to the cases although to a varying extent. This value chain was used as a common denominator in order to make it easier for the reader to follow our thoughts through the Empiric. The value chain was

then complemented with a more detailed picture of the activities critical to each case. The value chain is presented in figure 2-2

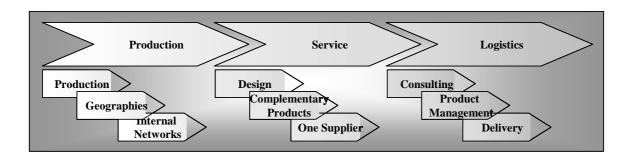


Figure 2-2 PSP Activities

We found that the empirical part could be supported by a short survey of what the competitors were doing. This was done through Internet research aimed at over-viewing the competitors' different offers. The survey is thought of as support to our choice of cases meaning that the survey would show a certain direction of packaging solution provider's development as such. If we had chosen cases that were not corresponding to this development, this discrepancy would mean one of two things. One, SCAP is ahead of the competition and trying to change the rules of the game, or two, we have made a mistake in choosing cases. The competing companies where chosen from SCAP home page where the competitors where listed. We chose to include companies that are global, or at least Pan-European. Kappa and Jefferson-Smurfit were chosen because they are the main competitors to SCAP in Europe, International Paper because of their broad product range that even includes operation distribution business, StoraEnso because of proximity, they are present in the Swedish market with three production facilities, as many as SCAP itself. David S. Smith was chosen as a company presenting interesting packaging solutions. There is an obvious risk that we might have missed a company or companies with interesting business solutions or offers, but since the survey is aimed at providing an overview of offers presented by packaging solution providers such a mistake will have a negligible effect on the thesis. The Internet survey is presented in Appendix 2

2.4 Analysis

Our analysis took part in four distinct steps:

- 1. The categorization in strategic options according to the Delta Model
- 2. The identification of strengths and weaknesses through analysis of the categorization of strategic options using a combination of Five Forces and RBV as well as value migration.
- 3. Analysis of the identified value chain for the cases through a value perspective.
- 4. Identification of KSF for the customer focused business models in general and for the different business models in particular.

Data analysis is aimed at relating patterns of events to the initial framework. A metaphor could describe our idea better, if you are just looking at a bunch of sand on the ground you will never strike gold. Just as a gold digger, a researcher needs to filter the gold from the sand. Our theoretical framework is in this case working as a strainer. When analyzing different events they are viewed from certain angles and perspectives thereby focusing on the issues described in the framework. Hence, the framework is a tool of framing the empirical material of the study in order to focus on the purpose. When doing this, one of the most desirable strategies is to use a pattern-matching logic (Yin 1994). Yin (1994) states that this logic compares an empirically based pattern with a predicted one. This means that you are "playing with the data" in the sense that matching patterns from the empirical to your initial proposition, in this case our theoretical framework. If the results are predicted, you can, according to Yin (1994), draw a solid conclusion about what packaging solutions providers' customer focused business models look like. However, if the results fail to show the entire pattern as predicted, that is, even if one variable does not behave as predicted, our initial proposition would have to be questioned (Yin 1994).

2.5 Critique on Sources of Information

We are aware of the fact that we are writing this thesis for a specific company, SCAP, may bias our view of reality, however we are not employed by the company, rewarded for the effort or even compensated for our costs. You as a reader of the thesis should be aware of these facts and view the thesis accordingly.

When studying the empiric it is important for the reader to remember that informants may be prone to enhance their own, or their company's performance. This is an important consideration when describing and analyzing the cases. There is no such thing as objectivity and we, as researchers, have to be aware of this. Information collected from home pages on the Internet is equally prone to be enhanced in order to improve the image of a company. This enhancement can also be a way of signaling strategic intent, the company perhaps tries to intimidate competitors and attract customers through the image delivered in a homepage. The information provided in the Internet survey should be regarded as biased.

2.6 Reflection on Choice of Methodology

When writing a thesis there are always choices that need to be made. Above we have described the choices we made in the process of answering the purpose of our thesis. There might be other ways to conduct the research in order to fulfill the purpose of this thesis. Our primary choice was to answer the purpose of the thesis through a case study. Alternatives to the case study approach could have been for example a quantitative approach, where our

purpose could have been answered through statistic reasoning, through deploying a number of detailed questionnaires and from these draw conclusions on which strategic considerations that are important for customer focused business models within SCAP. Our main argument for not choosing this quantitative approach was that the information retrieved would be of a shallow nature and that we, as researchers, would not be able to pick up on interesting leads as we would be able to do during the interviews in a case study. Furthermore, we are not interested in being able to generalize the results to all of the packaging industry or even to SCAP, instead we are interested in describing a phenomena to increase the understanding of packaging solution providers.

By choosing just five cases we delimit ourselves from finding all of the business models that could be of interest to us. A short Internet survey could hardly make up for this shortage since we then have to relay on printed subjective information without the possibility to pose additional questions. This is all true; we do delimit ourselves from finding additional business models of interest. The Internet survey is also based on information that might be considered biased. Adding everything together, this thesis is neither stating that it is the only truth, or that the business models chosen are the only ones of interest. Our argument for selecting only five cases is because of the time limit. There is not enough time to conduct a study on all packaging solution providers in Europe, much less globally. In the current competitive situation, there is also the matter of, getting access to all of the competitors in the business. The large competitors are not eager to release sensitive information on coming or existing ways of doing business.

There is also the issue of area specific theories. We have not included any theoretical views that can be considered area specific. There are three reasons for this. First, we think that there are no area specific business model theories since a business model is based on generic parts and that these parts are not changing and are common to all businesses. Second, the industry as such is to be considered traditional and has therefore not attracted attention from many scientists, regarding development and use of business models. Third, our theoretical foundation is concluded with a conceptual framework explaining how sustained competitive advantage is created. The framework includes the Delta Model combined with the interaction between Five Forces and RBV.

2.7 Dictionary

Box Plant

A box plant is a facility where both corrugation and conversion are conducted.

Conversion

Conversion is the process in which corrugated board is processed, cut, punched and painted in order to become a corrugated box.

Corrugation

Corrugation is the process in which containerboard or flat paper is corrugated into corrugated board. This process takes place in either a box plant or a sheet feeder.

Flute

Flute is the inner layer in corrugated board. The flute can have different altitudes depending on the choice of durability, simplified, the larger the wave or corrugation the more durable the board.

Liner

Liner is used to enclose the corrugation. Kraft liner consists of virgin fiber i.e. fresh wooden fibers never recycled; test liner consists of recycled as well as virgin fibers.

Packaging Solution Provider (PSP)

Any company providing packaging solutions, including physical packaging, at one stage or another.

Pulp

The raw material used in production of containerboard is pulp. Pulp may consist of both a recycled paper and virgin fibers

Reversed Auctions

In a reversed auction, a specification of a product or a service is presented. Producers are then able to offer a solution at a price. The auction is then about the producers trying to outbid each other with the lowest price. This type of auction is to take place in a virtual setting.

SCAP Cr/Cn

(SCAP), Svenska Cellulosa Aktiebolaget Packaging division Corrugated (Cr) and Containerboard (Cn) are business areas of SCAP. Corrugated are producing corrugated board and boxes and selling services to customers and Containerboard is supplying the raw material, paper, primarily to Cr, for the production of corrugated board and boxes.

Sheet Feeder

A sheet feeder is only producing corrugated board. No conversion takes place in a sheet feeder.

Sheet Plant

A sheet plant handles only the conversion of the corrugated board.

Stacking Possibilities

Stacking possibilities is a measure of how many empty boxes that can be stacked on to a pallet for transportation to the washing unit, or back to the producers.

2.8 Thesis Outline

The *Introduction* will present a brief overview of the problems facing Packaging Solution Providers and describe why we chose the subject as well as formulating the purpose of the thesis.

The *Methodological* chapter describes in detail how we proceeded in answering the purpose of the thesis, the choices we made and the ones we did not, as well as what other paths we could have walked during the course of our work.

Theories that are the foundation of a business model in general, as well as the ones of special interest to us, are presented in the *Theoretical Foundation*. In the end of this chapter, a model of how different forces collaborate in order to create superior performances is presented together with what we perceive to be essential for the reader to bring along while traveling through the rest of the thesis.

For the reader to be able to get a better grasp of the facts of the penetrated cases these are presented in the *Empiric*, together with a brief history of SCA in general and SCAP in particular. The historical glance is meant to enhance the understanding of the business and of decisions made by SCAP. The chapter contains some analytical work and ends in a strategic classification of both the cases and of the competitors in survey. The competitors are presented in more detail in Appendix 2.

In our analytical work we will relate findings in the Empiric to the Theoretical Foundation. In the *Analysis* we will try to find general patterns concerning all of the SCAP cases presented as well as specific patterns to be considered in order to develop the concepts further

In the *Conclusion* we will present a summary of our findings in relation to the questions asked in the areas of inquiry. We will make suggestions as how SCAP should carry on implementing customer focused business models and suggestions regarding future research. Finally, we will make reflections on our work.

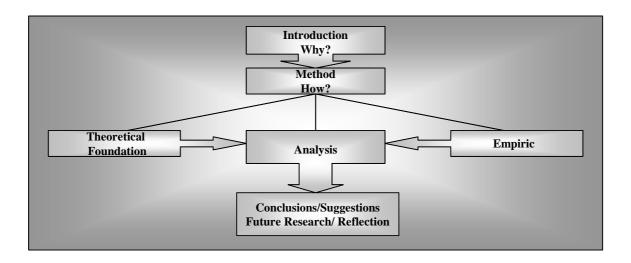


Figure 2-3 Thesis Outline

3 Theoretical Foundation

"If you have no knowledge of the names, your knowledge of things will also vanish"

-Carl Von Linné-

In this chapter we will try to create a basic understanding of the concept of business models, that is, how to make business in a competitive way. This chapter commences with an overview of what it is that makes a company achieve above average performance over time. The chapter will proceed into specifying areas of particular interest to the field of competitive advantage. Theories that link the exterior to the interior will conclude this part. Network theories will enhance our understanding of how the firm can work more closely linked to customers and complementors, as will theories on the creation of value within the firm, value innovation and co-production of value. This will lead to our connection of the theories described, a connection that will conclude the theoretical foundation through a conceptual framework.

3.1 How to Make Superior Business

According to Normann 1975 (1984), there are two different ways to transform business. The first consists of modifications and improvements within the framework of the existing business ideas and it is named *product variation*. The second transformation considers changes and developments of products outside the existing business idea framework, which involves the embryo of new business ideas or branches of businesses. This change is named *reorientation*.

Normann 1975 (1984) claims that there are fundamental differences between these two concepts. Product variations can be produced through the deployment of existing technologies and resources, whereas reorientation demands new types of resources and capabilities. When there is a situation of redefinition of the company business, the business idea and the growth idea must coexist. Normann 1975 (1984) claims that it is imperative that strategy becomes a function of the organizational structure, rather than the reverse, since it is very difficult to form an existing organization after a new strategy.

Businesses with an over ripe business idea have had a long story of success in the near past. Normann 1975 (1984) means that this success in the near past has led to a neglect of the ability to create new ideas and the use of natural incitements of growth. To enhance the possibilities of growth, management has to initiate a struggle between ideas. This might, in

the end, create an environment where ideas are produced and accepted. To change from a single idea to a multi business idea, dominant ideas must be abandoned or altered.

Finally, there are two different ways of looking at planning (Normann 1975(1984)), the *goal-focused* way and the *process-focused* way. The goal-focused way is a product of the belief that rationality is the best option in every scenario. This is not so, although in limited and constrained context rationality might work. The formulation of goals and the pursuit of them often lead to poor results because of inflexibility and because of the fact that the firm knows nothing about the future in establishing these goals. Instead of goals, Normann 1975 (1984) suggests a more process focused way. This way suggests the establishment of visions. Visions are a much looser construction that is interdependent of the actual actions taken and can therefore change during the course of time. While goals are specific, a vision is much more loosely constructed. The development within the company is derived from the vision and actual steps taken can be compared to that vision. The vision can also simplify the creation of commitment and activity within the business.

The term business idea is to be construed as a business superiority of some kind, like superior knowledge or superior ability. These superiorities are built into the organizational structure and into the individuals working within the organization. The business idea becomes then a competitive advantage, but also a complex system of such competitive advantages (Normann 1975 (1984)).

To construct a business idea some different factors come together in a system for dominance. To build this system there has to be congruence between three different levels, the *segment* within which the company *acts*, the product it *offers* and the *organizational structure* (Normann 1975(1984)).

Further, Normann 1975(1984) claims that the business idea has to have the character of a system, i.e. it consists of many different components that form a complex pattern. The business idea is an expression of the wholeness of the system. A description of it demands portrayal on several levels, such as the businesses territory, i.e. the niche that the company dominates, the products that are offered to the territory and the resources and capabilities within the firm by which dominance is achieved. The business idea is an expression of the actual circumstances or superior capabilities that exist within a company or at other significant actors, i.e. the actual way in which the company works. The business idea is a product of historical events that due to its complexity becomes very difficult to imitate. Harmony and congruence capture the character of the business idea and when all the parts fit together, they are capable of performing.

Growth is an important part in creating superior performances. It is important to have an idea of how and when to grow (Normann 1975(1984)). The growth idea has some important characteristics, e.g. process parts that have to be part of the growth idea, knowledge

development, e.g. the creation of propelling forces, handling of obstructions in the system of power and the development of resources. According to Normann, 1975(1984), planning of growth takes place in steps where the vision and actual actions taken are in a dialectic relationship. The ability to handle growth is largely based on the ability to create and take advantage of tension; therefore, the conditions in which growth is handled must be reflected in an organizational context.

3.2 Looking within

The *Resource Based View* (RBV) is a tool for viewing a company from the inside. The theory makes suggestions about possible sources for value creation. Hence, RBV theory postulates that the services rendered by the firm's unique bundle of resources and capabilities may lead to value creation and eventually sustained competitive advantage. (Amit & Zott 2001)

RBV focuses on the firm's specific resources and how to gain sustained competitive advantage through these resources to be able to beat other firms and reach above normal performance. The theory implies a shift from an industry focus to an intrafirm focus (Kalling 1999). Whereas Industrial Organization (I/O) theory explains performance from an industry perspective through, either differentiation, or cost focus of the product RBV emphasizes the characteristics of underlying independent factors behind the I/O focus of performance, i.e. the resources of the company (Barney 1991, Kalling 2001). Sustained competitive advantage is created when the company implements a strategy and/or when an existing or a potential competitor does not. The RBV states that a unique combination in a set of complementary and specialized resources and capabilities (they should be valuable, heterogeneous within an industry, rare, durable, not easily traded and difficult to imitate) and the maintenance of these may lead to value creation (Barney 1991).

Resource analysis takes place at two levels of aggregation (Grant 1997). The basic unit of analysis is the resources of the firm. Resources that are valuable, rare and costly to imitate or substitute are of strategic importance and might in themselves mean competitive advantage (Barney 1991). However, in order to understand how the firm can create sustained competitive advantage, we must look at how resources work together to create capabilities, this is the second level of analysis.

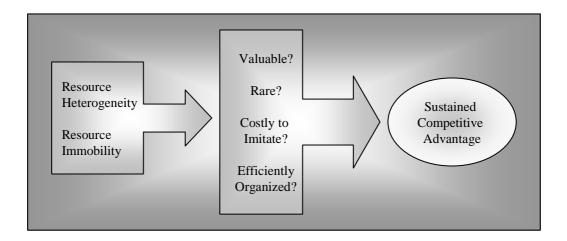


Figure 3-1The VRIO Framework (Barney 1991)

According to Barney (1991), the way to measure *imitability* is to examine the costs required for a competitor to imitate. The costs involved in imitating depend upon three factors. Unique *historical conditions*: If the historical conditions, under which one firm obtained its resources, were particularly favorable, an imitating firm will have to pay more for the same kind of advantage, therefore limiting the imitator's chance to gain the same kind of competitive advantage. *Causal ambiguity*: Firms making numerous small resources decisions, rather than big public ones, may not attract much attention from their competitors. This, in turn, makes it difficult, costly or even impossible for competitors to imitate the strategies, i.e. the resources. *Socially complex resources*: Resources that are tacit and dependent upon several interrelated aspects, such as culture and customers or business systems, may be impossible to imitate while they are contained in a complex social context, a complexity is extremely difficult to duplicate. (Barney 1991, Kalling 2001)

3.3 Looking Outside

Porter (1980) views strategy strictly from an industry perspective. He claims that external industrial forces in the environment affect competition and thus the work of managers (Porter 1980). It is important to note that Porter's (1980) focus to understand competition is outside the company, i.e. factors outside the company determines and drives the competition and hence the profitability within the industry.

Porter (1980) identifies, apart from the industry itself, four additional external structural factors which all determine the intensity of competition and profitability and hence the attractiveness of the industry in question. These five sources of competitive pressure have been modelled into Porter's (1980) *Five Forces Model*. See figure 3-2

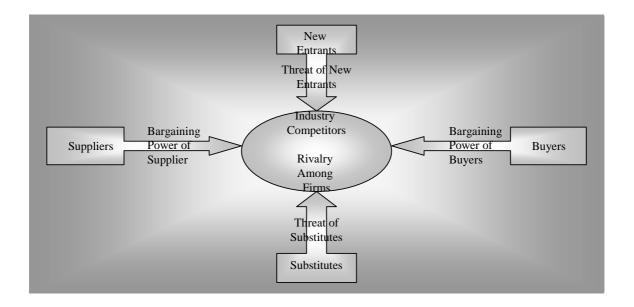


Figure 3-2 Five Forces of the Industry (Hax & Wilde II 2001)

When the competition has been revealed in the industry analysis, there have to be decisions made on how to gain competitive advantage, i.e. to become unique and/or best in its class. According to Porter (1980), the possible strategic actions to be taken here are the so-called *generic strategies*, the positioning of products through either low cost or differentiation.

3.4 Expanding the Generic Strategies: The Delta Model

As a complement to Porters *generic strategies* (Porter 1980), the *Delta Model* (Hax & Wilde II 1999, 2001) will increase and deepen the understanding of how to position the firm strategically in order to generate the best possible financial performance. The *Delta Model* discovers new sources of profitability in a networked economy (Hax & Wilde II 2001). It is a complementing theory that will bring us to a better understanding of how to create economic value through the triangle *System, Lock-in, Best Product* and *Total Customer Solutions* (Figure 3-3).

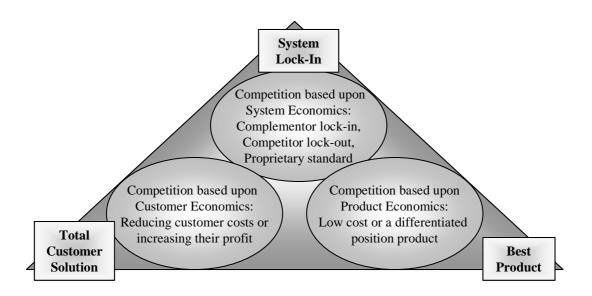


Figure 3-3 The Delta Model: Three Distinct Strategic Options (Hax & Wilde 1999, 2001)

Based on the three tenets of strategy, the creation of economic value, the creation of the unique customer value proposition and the creation of the sprit of success, the theory clarifies how to link strategy with execution. Execution is captured through three adaptive processes: Operational Effectiveness, Customer Targeting and Innovation (Hax & Wilde II 1999, 2001). The adaptive process changes over time as it supports different strategic options.

On how to explain mechanisms involved in the bonding between customer and supplier, Hax and Wilde II (1999) presented the Bonding Continuum, four different stages describing bonding from the customer's first loyalty to a complete systems lock-in. In the first stage, customer loyalty is based on the specifications of the product, either through low price or the uniqueness of a differentiated product. According to Hax and Wilde II (1999), this first stage moves towards dominant design, when a single product fills the requirement of many users even though it does not fill the exact specifications of any single customer segment. The dominant design is the opposite of customization. The second stage is described by Hax and Wilde II (1999) as based on increasing customer switching costs through adding additional support and services to the original product and thus making it more attractive and harder to switch from. Different assets to be deployed in order to reach customer lock-in are collateral assets, ownership of distribution channels, specialized sales force and brand supporting functions. Other ways of locking in customers are through customer care, personalized services and even billing. The third stage in the bonding continuum is, according to Hax and Wilde II (1999), to create a competitor lock-out. There are four forces involved in competitor lock-out. Restriction of distribution channels so that no competitor can get in, branding i.e. forcing retailers to warehouse a special brand at the expense of competitors, a stream of new products through which costs for imitation increase immensely which hinder entrance of competitors and finally patents. The final stage of bonding, the sustaining of proprietary standards, demands according to Hax and Wilde (1999), two things. First, the customer switching costs need to be high and second, the product has to be difficult and expensive for competitors to imitate. Hax and Wilde II (1999) claim that even though the achievement of a proprietary standard may carry immense rewards, it is not possible to accomplish in all businesses or companies at all times.

Hax and Wilde II (2001) also suggest that *aggregate metrics*, measurements that provide an overall view, are not enough to measure performance even if they supply a full picture of the overall performance. They should be complemented with *granular metrics*, measurements providing an in-depth understanding, that are capable of explaining the inherent variability in important parameters, e.g. product costs, customer profitability and so on. Performance metrics is also aligned with strategic options and processes. Granular metrics allows us to focus, measure variability, to detect the sources of variability and to improve. Hence, to keep up with the strategy, Hax and Wilde II (1999, 2001) suggest that a company have to *experiment* and get *feedback*. These two variables are key adaptive mechanisms, a major business transformation can only be wisely implemented through careful experimentation, learning and roll out. Smart feedback mechanisms are critical for adaptation and flexible changes. (Hax & Wilde II 2001)

3.5 Looking In from the Outside

In an article, Porter (1991) separates the theory of strategy in two dimensions, the *cross-sectional problem*, what causes superior performance at a given period in time and *the longitudinal problem*, addressing the dynamic process by which competitive positions are created.

Porter (1991) assumes that a firm's success is manifested in attaining a competitive position that leads to superior and sustainable financial performance. He suggests a *causality* approach to the relation between firm activities and firm successes. He further claims that low-cost and differentiation advantages, that a firm possesses, come from some sort of driver, which in turn is created by firm-specific drivers.

The chain of causalities begins with initial conditions and managerial choices and end with firm success, i.e. profitability (Figure 3-4). The in between phases, following the initial phase, include drivers which build up activities that in turn enable the generic strategies, both of which enable choices between specific strategies and positions in attractive markets/industries (Kalling 2001a).

This approach by Porter (1991) includes many features that should be included in a business model. He combines relative position, from value-chain analysis with activities and drivers with attractive industry structure, to form sustainable competitive advantage. Together they give a dynamic approach. Porter (1991) integrates a resource-based view in his approach with

the perspective of the industrial organization and highlights the complementary nature of the two viewpoints, based on the chain of causality.

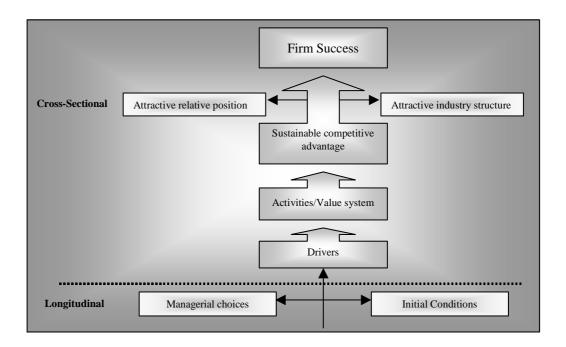


Figure 3-4 Determinants of Success in Distinctive Businesses (Porter 1991)

3.6 The Possibility of Favoring One

Research has, since the introduction of the RBV, claimed that the static model of Porter (1980, 1985) or rather his latter more dynamic view (1991) and RBV are two sides of the same coin (e.g. Spanos & Lioukas 2001). One cannot exist alone or, at least, strictly focusing on one or the other will mean constrictions to firm performance. In resent work by Spanos and Lioukas (2001), they present a view that both RBV and Porter's Five Forces are significant factors in the decisions on strategy leading to competitive advantage. Spanos and Lioukas (2001) tested two hypotheses in their study:

- 1. That firm performance depends on the effects of external factors, i.e. Porter's Five Forces.
- 2. That firm performance depends on the available resources and capabilities, i.e. RBV.

In testing these two hypotheses, Spanos and Lioukas (2001) found out that the only thing affecting profitability in *Five Forces* was the supplier's bargaining power. Industrial rivalry also had an effect, but on market performance. Resources, on the other hand, were seen as critical in developing strategy configuration and for achieving high market performance through which higher profitability was achieved. The conclusion that Spanos and Lioukas (2001) draws is that industry, *Five Forces*, and firm assets, *RBV*, both contribute significantly to the firm's success.

3.7 Creating Value

In order to understand the underlying factors of competitive advantage Porter (1985) developed his original work further and presented his model of the *Value Chain*. In this model cost, differentiation and scope decompose into elemental parts, activities. In the value chain framework, Porter (1985) analyzes value creation at the firm level. In this analysis, the activities of the firm are identified and the economic implications of those activities are then studied (Amit & Zott 2001). The analysis includes four steps:

- (1) Definition of the strategic business unit,
- (2) Identification of critical activities,
- (3) Definition of products,
- (4) Determination of the value of an activity.

Porter (1985) implies that a firm is a collection of discrete but interrelated economic activities such as assembling a product, making sales visit, processing an order and so forth. The strategy of the firm defines the configuration of activities and how they interrelate. Competitive advantage then results from a firm's ability to perform the required activities at a collectively lower cost than it's rivals (cost advantage), or to perform some activities in a unique way that create buyer value and hence allows the firm to command a premium price (differentiation) (Porter 1985). The required mix and configuration of activities, in turn, is altered by competitive scope. The basic unit of competitive advantage is then, according to Porter, the discrete activity. The economics of performing discrete activities determine a firm's relative cost. They are the discrete activities that create buyer value and hence differentiation (Porter 1991).

The activities in the firm are schematically shown in, what Porter (1985) termed, the value chain and the value system (Figure 3-5).

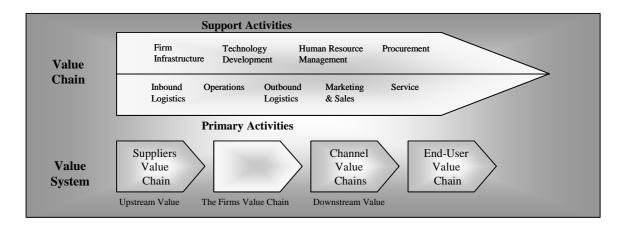


Figure 3-5 Value Chain and Value System (Porter 1985)

Porter (1985) defined value, as the amount buyers are willing to pay for what a firm provides. Value is then measured by total revenue. The firm is profitable if the value it commands exceed the costs involved in creating the product. Porter (1985) also claims that firms must not only create value, but also "signal" that they will do so through their sales forces and other activities.

If the activities in a firm's value chain are easy to perform at economic profit there is a risk of disintermediation. A competitor may be inclined to overtake these activities and perform them better or at lower cost to the customer, which in turn may lead to the collapse of the firm's value chain. According to Evans and Wurster (1999), the most sensitive parts to disintermediation of the value chain are those of an informational character since they are often "the primary source of differentiation and thus profitability" (Evans & Wurster 1999).

Value Innovation

In the traditional value chain, the value creation process is focused on each activity and the product is then passed on to the next level. The concept of *value star* will, through an increased closeness of actors' resources and activities, increase value creation (Wikström & Normann et. al 1994). This means that the relationships between the actors will be synchronized rather than sequential as in the traditional value chain (Figure 3-6). With this *value star* approach, the value creation for the customer is put at focus. The value creation will, according to Wikström & Normann et al. (1994), be improved and it forces the company to be active in every activity that takes part in the customer's value creation. The offer from the company will then complement the skills, knowledge and resources the customer possesses.

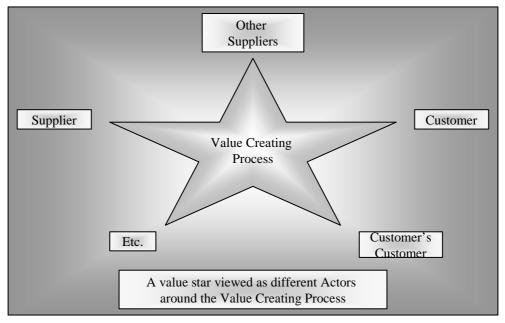


Figure 3-6 Value Star (Wikström et. al, 1994)

Looking at the company from the value chain perspective, different parts of the company can be analyzed. The analysis then is limited to what already exists. To widen the perspective Kim and Mauborgne (1997) proposed that resources and capabilities, not yet existing but possible to add, should also be considered. This new logic by Kim and Mauborgne (1997) called *value innovation*, derived from research of high growth companies. The findings of Kim and Mauborgne (1997) stated that companies with high profitable growth aimed to make competition irrelevant by providing the buyers with a quantum leap in value. The focus had, according to Kim and Mauborgne (1997), shifted from building competitive advantage over their competitors to rather focusing on building value for their customers.

Kim and Mauborgne (1999a) state, "A systematic approach to value innovation can help companies break free from the competitive pack". This implies, as in Kim and Mauborgne (1997), a different approach to strategy. Five dimensions of strategy are described where value innovation and traditional strategies differ. These dimensions imply for value innovation logic as follows: (Kim and Mauborgne, 1997)

- Industry assumptions. Industry's conditions can be shaped.
- *Strategic focus.* A quantum leap in value should be pursued to dominate the market.
- Customers. Targeting on the mass of buyers. Focus on key commonalities in what customers' value.
- Assets and capabilities. The company should not be limited to what already exists. It should ask, what do we need if we start fresh?
- *Product and service offering*. The company should be directed to what kind of total solution the customer seeks, even if it forces the company to go further than what the industry traditionally offer.

What Kim and Mauborgne (1999a,b) state is that emphasis on value places the buyer, not the competitor, at the center of strategic thinking. Value innovation makes competition irrelevant in the sense that the offering brings a fundamentally new and superior buyer value to the existing market and thus enables a quantum leap in buyer value to create new markets. This means, according to Kim and Mauborgne (1999a,b), that focus should be directed towards creating opportunities and to widen the creative scope not constrained by the traditional industry. To achieve a continued, profitable growth companies must break out from the usual competitive trap. Instead of outperforming competitors companies then must strive to cultivate value innovation and perhaps do things in a very new way. Kim and Mauborgne (1999a,b) state that knowledge is one of those factors that drive wealth creation together with ideas. They are today major inputs for value innovation. With value innovation, companies do not need to compete for a share of a given hand because they can create new demands. Further, with value innovation, low cost or differentiation does not need to be an "either or" decision because innovation itself can be a sustainable strategy (Kim and Mauborgne 1999a,b).

Value innovation connects innovation with buyer value. Hence, it is then a narrower concept than value creation. Technology innovation is also different since it, according to Kim and Mauborgne (1999b), does not necessarily produce value innovation, the latter can occur with or without the former. Value innovation links innovation to what the mass of buyers' value. Companies must then, Kim and Mauborgne (1999b) states, in order to value innovate, question weather they are offering the customers a superior value and if the price is acceptable for the mass of buyers in the chosen market. Kim and Mauborgne (1999b) claim; "By redefining the problem an industry focuses on, a value innovator shifts the performance criteria that matter to customers". This in turn creates new market space. By redefining customer problems it is possible for the company to discover existing but hidden demands or to create very new demands (Kim and Mauborgne 1999b).

For the value innovator, strategic pricing is important to capture the mass market. Therefore, the focus shifts from restricting output at a high price to creating a new aggregated demand through a leap in value and introduction at a satisfactory price. This will in turn create an incentive to reduce costs to the lowest possible level (Kim and Mauborgne 1999b).

The aim of the value innovator's strategic mind-set is, according to Kim and Mauborgne (1999b), to create radically new and superior value. In order to do this the company must, Kim and Mauborgne (1999b) state; monitor the customers closely, but more important the non-customers must also be followed close to discover trends and changes as well as a deeper knowledge about the customer. When a radically superior value is discovered the value innovator, according to Kim and Mauborgne (1999b), makes use of capabilities both inside and outside of the company to actualize an opportunity. This implies use of partners with complementary assets, capabilities, products, services, etc. The three main blocks of strategy, competition, customers and corporate capabilities can illustrate how the strategy focus is shifting for the value innovator (Figure 3-7).

The Basic Building Blocks of Strategy	Competition	Customers	Corporate Capabilities
Conventional Focus	Outperforming the competition	Retaining and better satisfying existing customers	Leveraging and extending the current capabilities of a company
Value Innovation Focus	Seeking radically superior value to make the competition irrelevant	Targeting the mass of buyers by following non-customers closely and willingly losing some existing customers	Willing to combine with other companies' capabilities

Figure 3-7 Shifting Strategy Focus, (Kim and Mauborgne, 1999b)

Value Co-Production

Co-production is an alternative view of value creation to that associated with industrial production. While in the industrial view, customers as consumers destroy the value created by producers, in the alternative customers create value, or more exactly, co-create and even co-invent it with their suppliers and their own customers (Ramírez 1998). The co-production view of service differs fundamentally from that of the industrial era, for example, Porter (1980, 1985), in co-production it is co-produced offerings, not the "business unit" actor, who becomes the central unit of analysis. This helps co-production to open up new opportunities for research of business development, entrepreneur-ship and strategy (Ramírez 1998). From a research perspective it requires considering a multiplicity of values, held in relation with multiple actors. Normann and Ramírez (1989) suggest, when looking into service companies, that the offering always consist of five elements, which replace each other functionally upon redesigned as a new offering:

- 1. Physically tangible entities (goods).
- 2. *Human* activities (service and self-service) carried out by and shared among, at least, supplier and customer persons.
- 3. A risk-sharing and risk-taking formula among interacting parties.
- 4. Access to, or right of use of systems and infrastructure.
- 5. *Information*, manifested orally, tacitly---often based on previous experiences, or in other symbol systems.

Ramírez (1998) claims that it is no longer possible to view production and the environment where it takes place as static where it is possible to build large factories and run long series. Today economies of scope become, according to Ramírez (1998), even more important and small-scale production becomes economically feasible. Fixed and sunk costs become increasingly risky, hierarchies disappear in favor of "noerarchies" or "lowerarchies" and finally it makes the stakeholders' role more important in value creation. Value is sliding from being very static and tied to one product to getting denser, i.e. containing many more variables than before (Normann & Ramírez 1993).

When value occur in constellations it is no longer as much about making or doing something of value to the customers as about mobilizing customers to take advantage of the density in the offerings to create value for themselves (Normann & Ramírez 1993). Normann and Ramírez (1993) claim that this means that there is not as much competition between companies as there is competition to get the attention, time and money from the customers. Since a single company rarely provides everything anymore, the most attractive offerings consist of both customers and suppliers. It is crucial for the company to be able to handle this bundling strategically through relationships and business systems. If the key to creating value is co-production then, according to Normann and Ramírez (1993), the only competitive advantage worth having is the ability to create and maintain the performance of the entire value-creating system. The interaction between the customer and the supplier implies that it is

not only important to make the offerings more intelligent but also to make the customer more intelligent as well. Normann and Ramírez (1993) claim that what the company must consider is not only the potential of their main assets, the knowledge base and the customer base, but also the creation of a better fit between the company's competencies and the value creating activities of the customers.

Normann and Ramírez (1993) claim that boundaries are becoming more permeable and overlapping and co-production means bringing firms together to view new partners as organizational resources instead of threats. It is also becoming increasingly accepted that it is no longer possible to predict the future and companies, such as IKEA, are even abandoning the budget as a controlling tool. To achieve the above it is as important to connect with outside co-producers, as it is to connect with internal elements to create a value creation system. Instead of adding value at a given point, the company creates value for an entire cast of economic actors. According to Normann and Ramírez (1993), the customer becomes a supplier of time, labor and information and the supplier becomes a customer of, for example, information and logistics. The company becomes the star in a value constellation containing all of the essentials to the business (Normann & Ramírez 1993).

Co-production is a way of understanding why customers behave in certain, for the company unfavorable, ways. The offering developed might allow or even make it rational for customers to behave in a troublesome fashion and the same goes for competitors (Normann & Ramírez 1993).

Managerial skills are put to the test because of the stretch invoked by co-production and more elements that might have incompatible priorities come into play (Ramírez 1998). In co-productive value creation the customers' effectiveness becomes as much of a worry as the effectiveness of the own employees. What the customer cannot do or does badly becomes, according to Ramírez (1998), a business opportunity for the company or for its competitors.

According to Ramírez (1998), in order to be able to acquire crucial and complex knowledge it is a possibility to engage a counterpart or a customer to address these issues. This cooperation takes on the form of networks. It is also possible that new, young, entrants have an advantage. They can, according to Ramírez (1998), co-produce value more effectively because they are less affected by dominant ideas that make change difficult. Successful organizations are not easily changed. In older organizations new forms that get successful have to coexist with the traditional ones in a parallel fashion much like parasites. These new forms may also generate new organizations that are free from the constraints of the parent.

Value Migration

If a company, in a mature business with little or no technological progress, continues to do business as usual, value will commence seeping out from the company to movers in the industry that remain innovative (Slywotzky 1996). In order to win battles along the way, Slywotzky (1996) stresses the importance of being able to identify coming competitors. In order to do so, Slywotzky (1996) suggests replacing the narrow-minded competitor identification mindset, the tunnel vision, with a much broader scope, the radar screen. Innovators entering a business may, according to Slywotzky (1996), otherwise come from directions not expected to overthrow accepted norms and traditions in order to acquire market shares. When changes like this occur, growth, according to Slywotzky (1996), will be dependent on the ability to transform business processes rather than technologies. Slywotzky (1996) identifies three different stages of value presence in a company,

- 1. **Value inflow**, when a company through innovative moves creates a product or process that increases value for customers as well as for the producer.
- 2. **Value stability,** where growth slowly declines and it becomes time for the company to acknowledge that change is needed.
- 3. **Value outflow,** where value is leaving the company at an increasing speed to the benefit for innovators in the business.

Slywotzky (1996) claims that companies with great fixed expenses runs the risk of becoming zero profiteers because of their lack of flexibility and unwillingness to change. In order to avoid this, companies must be perceptive to changes in customer preferences and priorities. Business designs that fulfill the most important of these become necessary in order to create value growth.

3.8 Taking Value Creation the Extra Mile: Network Theory

Gulati, Nohria and Zaheer (2000) state that the view of firms competing in an impersonal marketplace is getting inadequate in describing a world in which companies are embedded in different kinds of networks. These networks may, very well, be the competitive advantage of the future as they form long lasting inter-organizational ties that are of great importance to all companies entering them. However, it is important to realize that such networks in some cases may become a constraint rather than a source of opportunities (Gulati, Nohria & Zaheer 2000). According to Gulati (1995), traditional research poses that an alliance makes sense in more intermediate situations, where transaction costs are not so severe as to require hierarchical control, but not so low as to enable market based exchange. However, this research implicitly regards every transaction as a discrete event. Gulati (1995) states that networks might instead be seen as embedded in a history of prior relationships and in a broader network. The transaction cost has to be seen in a historical and much more enduring perspective to enable proper judgment Gulati (1995).

The network itself might become a competitive advantage since it becomes impossible to duplicate. Through a process of *path dependency* (Arthur 1994) small decisions that together

form a unique wholeness forms the network. The network allows the company to access key resources from its environment giving it a possibility to maintain or enhance its own competitive advantages.

The networks must also be generative for all parties (Eneroth & Malm 2001). Exchange of both, novelties and confirmations and sharing of visions, must take place and be complimentary between competencies. A mutual use of the network must be established.

Even though networks are for the benefit of all involved, there is a risk that a partner collects knowledge and then bails out of the network, having created competitive advantage for him only. This might be hindered by the effects that this will have for the bailing part on future networking, since again, networks has to be built on a basis of trust (Gulati, Nohria & Zaheer 2000).

From Product to Service

There are many differences to consider when a company moves from selling products to selling services. According to Normann (1992), examples of these differences are that services are immaterial, they are not possible to re-sell, and direct contact between the customer and producer/ supplier is usually necessary and the customer is participating directly in the production of the service. A company will try to provide an increasing number of different services and in the end become a multi service company. This is by Normann (1992) named broadening and it is a way of taking advantage of the relations with the customers. The broadening of services creates possibilities of bundling (Normann 1992). Bundling is a process where the customer buys a whole array of services and in this array some services carry the cost of others.

Normann (1992) states that there are two different kinds of services, *alleviating* and *facilitating*. In facilitating the suppliers make sure that the customer gets the tools it needs to perform a certain action, while as in alleviating the supplier performs the action for the customer.

3.9 Summary on Theoretical Foundation

The summary of the theoretical foundation will describe how we perceive the different parts that together form a successful business model. The term successful in itself implies that there is a best and/or uniform way of creating success. Instead we would like to interpret the term as follows: What comes out of a business model is entirely up to what we pour in it, this is how the best way becomes impossible. There will be so many different kinds of outcomes, the success that depends on so many different factors, that it becomes impossible to predict the outcome. Instead, we must look at what we have available to pour into the model because

there is a limit to the number of ingredients. So, the theoretical foundation can be seen as an inventory list of the ingredients that we can use to form a model. The durability, look and success of this model can only be speculated in.

How can the theoretical foundation be linked together? What we see are not different theories but rather different sides of the same coin. Actually, the coin is a misleading euphemism since a coin has only two sides but to be sufficient in this case it should have at least three or maybe more. To be able to use the theories we must take a holistic standpoint; a crane must lift us up so that we can see not only the texture of painting, but also the whole of it. In order to get the whole picture we use Spanos and Lioukas (2001) Conceptual Framework and then add our own ideas (Figure 3-8).

Strategy is based, not only on interior resources of the company, but also on exterior possibilities and threats. Sustained competitive advantages can be created in many ways, but the essence is to offer the customers what they want or need at a price that makes the offer even more attractive than that of the competitor. This is done partly through the choice of the strategic options according to the Delta Model (Hax & Wilde II 1999). To make this advantage sustainable the company must always be on its toes¹ trying to find paths that no one has entered before or to exploit these paths in a new fashion. Hindsight creates no masters, foresight do. To be able to create an environment where foresight is highly regarded, again a company must stand on its toes. Gone is the time when on single company could prevail all by itself. Today it is our belief that a company must be linked with other companies and to its customers to get the information and the resources they need. Today and tomorrow, this change of focus together with networks will be the reigning champions in the world of business, networks that include the customer in value creation, co-production and innovation.

¹ Standing on the toes is a term commonly used in boxing. If you stand on your toes it will be possible to launch surprise attacks on your opponent and at the same time avoid to be knocked out, the opposite being standing on your heels.

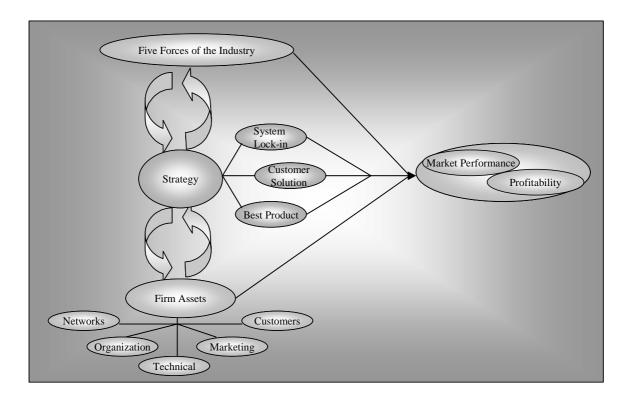


Figure 3-8 Conceptual Framework

Two major parts, the firm's assets (RBV, Barney 1991) and the environment in which the firm has its business (Five Forces, Porter 1980, 1985, 1991) influence the choice of strategic option. These two parts are also influenced by the strategic option chosen by the firm (The Delta Model, Hax & Wilde II 1999, 2001). The assets used in the current strategy are obviously influenced by the strategic choice, but also the assets that may come in use due to a vision of future development. Assets at hand also influence the strategy as well as assets that are possible to develop, thus there are constraints on the possible development or on the speed with which it is possible to fulfill a vision.

In much the same way, the strategy influences its surroundings and the choices made by a firm are sure to make a difference in relations to competitors, suppliers, customers and barriers of entry (Porter 1980, 1985, 1991). These factors also influence the strategic choice of the firm. It channels the strategy to a niche where management feels there is money to be made, the competition modest or bargaining power low.

The strategy option of choice is then implemented on the positioning of the product (Hax & Wilde II 1999, 2001), which in its turn influences the market performance and the profitability of the firm. There has to be a strategic fit (Grant 1998) between all of these parts in order for a business model to become successful.

When looking at companies from a value creating, co-producing, or innovating perspective it will be possible to place them in a continuum beginning with Porters (1985) Value Chain and progressing towards Value Co-production (Normann & Ramírez 1989, 1993, Ramirez 1998) and Value Innovation (Kim & Mauborgne 1997, 1999a,b). The choice of strategic option influences how value is created, as well as how the possibilities of value creation influence the strategic option of choice. In the Value Chain perspective (Porter 1985), focus is not placed on offering a value-enhanced product to satisfy customer needs, but instead on managing processes or discrete activities that are part of the identified value chain. Both the differentiated and low cost approaches (Porter 1980, 1985) are focusing on comparing the performance with that of the competitor, not on creating value per se. Value Innovative (Kim & Mauborgne 1997, 1999a,b) production takes the classical strategic notions of creating sustained competitive advantage through looking in or out one-step ahead. A successful business model should, according to the Value Innovative view (Kim & Mauborgne 1997, 1999a,b), have as its main objective the creation of value for the customers. The extreme of this view would be to totally disregard the competition as well as internal resources, although these are of importance in the value creation process, and just focus on Value Innovation. We view this change in focus as moving from a destructive, better than competitors, focus to a creative one, serve the customers needs. This is also true when looking on the customer's part in the process. Moving from a destructive focus, only destroying the value created by the producer, to a creative one, customers co-create value together with the producer (Normann & Ramírez 1989, 1993). The customers, as well as participation in different networks, are to be perceived as company resources, i.e. that the company regards customers and networks as important tools that make profitability rise if used in a proper manner.

Finally, a business model is to be perceived as a never-ending interaction. Slywotzky's (1996) description of value migration covers this aspect of the process of making business. In order to achieve the vision of a sustainable competitive advantage companies must always be on the look out to find new ways of beating the competition and being able to focus on the customers' demands.

4 Empiric

This chapter commences with the history of SCA. In order to understand the company and the business we have to learn from the past, what has emerged and where we are today. The cases described are chosen to illuminate customer focused business models from different perspectives. The chapter ends in a summary of an Internet survey regarding SCAP competitors and their businesses.

4.1 Understanding the business

In northern Sweden, close to the coast and around the rivers, many small industrial operations were started 300-350 years ago. The basis for these businesses was the woodlands and the rivers for production and transportation. It all started with ironworks and sawmills driven by water. Later on followed shipyards due to the closeness to water and the supply of raw material. The sawmills expanded and steam started to be used in the processes. The technique to use wood for manufacturing of paper was invented in the midst of the 19th century and at the time of the turn of the century manufacturing of pulp and cellulose fiber had started to expand. A number of companies with different origins, due to financial and other reasons, came to be part of what we now know as the SCA Group (Haslum 1993, Fagerfjäll 1998).

Recent Historical Development

In the beginning of the 20th century the Swedish forest industry, mainly situated in the northern of Sweden, Norrland, was in crisis. The sawmills were in stagnation and cellulose productions were emerging. The capital need had risen sharply among other things due to the heavy investments in pulp mills (Haslum 1993). After the 1st World War, the market speculated in rising prices, and when the opposite occurred the price level fell dramatically and the crisis was a fact. This forced the banks, in order to protect their claims, to take possession of ownership in many companies, wholly or partially, due to bad debts. Svenska Handelsbanken collected their shareholding in the forest industry in a company called Handion. In this situation, financier Ivar Kreuger saw an opportunity for a profitable investment. He wanted to consolidate the industry by building larger units and in this way soften the competition between the many scattered firms in the market. It was a total reconstruction of the whole industry. Through his company Kreuger & Toll, he made an agreement with Svenska Handelsbanken and in 1929 purchased their holding company Handion. The same year Handion changed name to Svenska Cellulosa Aktiebolaget (SCA), and a new company was born. The holdings in SCA now contained many companies, some with its historical roots going back to the 17th century (see above), the firms in Holmsund and Ådalen (Svartvik, Obbola, Kramfors etc.) as well as the firms grouped in Sundsvall (Bergvik & Ala, Sunds, Skönvik etc.). After the initial set up, SCA purchased in 1934 a major group of companies, Munksund, from Svenska Handelsbanken (Haslum 1993, Fagerfjäll 1997).

The period until after the 2nd World War was troublesome for the new company SCA, the depression hit the market with full force and prices fell. Reductions in production had to be made, even liquidations occurred and unemployment increased. Svenska Handelsbanken was forced to take over ownership of SCA and a financial reconstruction of the debt-situation was made which kept SCA intact. The bank then sold a majority of SCA to Axel Wennergren. SCA was kept alive and struggled on but showed only small profits until after the 2nd World War when the bank repurchased the shares then held by Wennergren. In the post war era, resources within the group were co-coordinated, investment plans were made, increased activity followed, and SCA has been growing ever since. SCA was introduced on the Swedish stock exchange in 1950, which meant that Svenska Handelsbanken decreased its shareholdings in the company (Haslum 1993 Fagerfjäll 1997).

In 1975, *Mölnlycke* was purchased and hygiene products and tissue paper were added to the operations in SCA. Today the SCA group is divided in three main business areas, *Forest products*, *Hygiene products and Packaging material*, business areas that are relevant for the Nordic and west European markets. In the emerging North American market, all business areas are dealt with as one unit, *North America*. SCA is today also quoted in the stock exchange in London and in the USA through American Depositary Receipts. Turnover in the SCA group is now expanding towards 70 BSEK with a net margin of more than 10 % (Annual Report, SCA Investor report, and www.SCA.com).

SCA Packaging

The investment plans drawn up in 1959 included a new mill for kraftliner in Munksund (Haslum 1993). In order to secure the market for kraftliner and to soften price fluctuations SCA had ideas to diversify into a new business *corrugated paper*. The decision to diversify was taken and the business started when the mill in Munksund was built 1961, although within the boundaries of SCA, it took until 1990 before SCAP (SCA Packaging) was formed as an independent business group with head office in Brussels.

The original decision to diversify into this new business was according to Haslum (1993) based on experiences from USA where the integration between kraftliner and corrugated packaging was rapidly expanding. Although the basis was to secure the demand for the kraftliner capacity from the new mill, it rapidly changed and focus came to be placed on the corrugated market instead. When SCAP was formed it contained *Containerboard* (kraftliner) and *Corrugated Board*, two vertically integrated business units and a third unit was soon added *Recycling* (Haslum 1993, Kalling 1999).

The corrugated business that started in 1961 was growing slowly and in 1964 the first plant outside Sweden was acquired in France. At the end of 1987 a growth strategy through acquisition of competitors, mainly in Western Europe, was initiated. It was a strategy that still is in force. This decision initiated a rapid, still ongoing, growth spiral in SCAP. Today over 200 plants are operating, mainly in Europe, and acquisitions have been made in almost every major West European country where also the main business of SCAP is situated. Investments have also been completed in companies in Eastern Europe, Asia and China and recently in the USA. Growth in volume through acquisitions has triggered net sales and the turnover this year moves in the direction of 30 BSEK. Although many of the products still are low-margin items, SCAP reported a gross operating profit of 17 % for 2001, a handsome profit (www.SCA.com).

SCAP is involved in projects to secure future sales and to improve cost position. *Eurobest* is such a project that is aiming at improving productivity in production through an increased exchange of knowledge. Another is the *Pan-European project* that focuses on segmentation of customers in local or Pan-European groups. The *CBS project* is a computerized business supporting system, supporting activities in producing units, aiming at integrating and controlling Sales, Manufacturing and Logistics activities. This project will create a complete information chain from quotation to payment in the corrugated business process (Haslum 1993, Kalling 1999, Annual Report, SCA Investor report, and www.SCA.com).

4.2 The organization

SCAP has its headquarter in Brussels, Belgium. The company is organized in two main divisions, Containerboard and Corrugated, a structure that we have perceived as an old structure inherited from the past when operations were strictly production focused. In Brussels, at headquarter level, two main departments are located, Technical (R&D) and Sales, mainly functioning as supporting units to Corrugated (Figure 4-1).

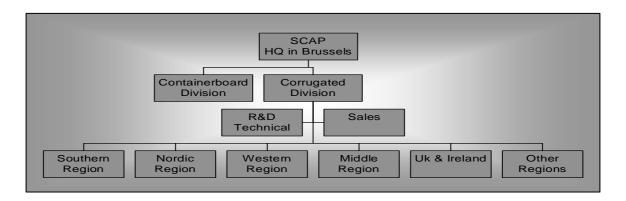


Figure 4-1 SCAP Organizational Chart

In the Corrugated division, the geographical regions are further structured. Differences occur between the regions. UK & Ireland are divided into 7 sub-regions for corrugated packaging and a single region for special operations as packaging services, specialty products etc. The Nordic region, with headquarters in Sweden, on the other hand is divided into 4 sub-regions, Denmark, Finland, Russia and Sweden. (This region also includes Estonia, Latvia and Lithuania). Each sub-division in turn is divided into different operations as corrugation, wholesale, etc. The sub-division SCAP Sweden is divided into operations as Corrugation, Cell-Plastic, Förpackningsservice and Display and divisional departments as Market, Economy, etc. The units within each operation are run like independent operations with sales, economy and production departments. This in turn means that activities across the boarder to other in-group companies tend to be infrequent. The structures in other regions are organized in a similar way.

The historical production and range of products are built with focus on vertical production of boxes. Together with norms and believes, SCAP successively developed into a production-oriented operation where technical issues were the keys to success. This has tinted the structure of the organization (Kalling 2001b). To us, it seems like the organization is organized and well suited for traditional production of packaging, but less suited for changes in operations towards a more service-oriented operation such as value-added products, a new focus on packaging services and on the value chain of the customer, etc. The organization today is built around the general manager as the key driver of performance and business development. This structure is not necessarily optimal when it comes to change of focus from production to the customer and when operation is moving from being strictly a local business to becoming more global (Kalling 2001b).

Today, regionally, SCAP has over 200 different plants in total. The number of box plants, with both production of corrugated sheets and conversion of the same, are more than 70. The remaining plants are sheet plants for conversion only, and plants for specialty products, printing, plastic, protective packaging, etc., a minimal number, three, of the plants are sheet feeders, manufacturing corrugated sheets only.

4.3 Production

A box plant, such as the one in Värnamo, is a large production facility. To be able to make corrugated boxes containerboard has to be corrugated, that together with crude cutting is performed in a machine that is 120 meters long. Containerboard produces paper (kraftliner, testliner and fluting) that is used as material in the corrugation process. Kraftliner and testliner are used as outside layers in the corrugated sheet and fluting is used as inner layer between the liner sheets. Manufacturing starts with production of liner and fluting paper material from the containerboard producer. Part of the material is then corrugated and a corrugated sheet is produced. The corrugated sheet normally consists of two layers of liner surrounding a

corrugated inner layer, one piece of liner glued onto the corrugation at a time. The corrugated sheet is finally cut to fit into the conversion process of the manufacturer. These corrugated sheets are then converted into boxes, trays and containers through cutting and printing.

Different plants are used for production. A *Sheet Feeder* is only used to corrugate and produce the corrugated sheets while a *Sheet Plant* is converting the sheets, cutting and printing. In a *Box Plant*, both corrugation and conversion are performed in the same manufacturing facility. The corrugated final products are then delivered as flat pieces although cut and printed on pallets directly to the customer that then has to erect the box or tray in his own production line. For this purpose, special erecting machines are used.

4.4 Värnamo

SCAP in Värnamo has been located in the town of Värnamo for 63 years and it was the first company producing corrugated board to be purchased by SCA. In this location, there has been production of corrugated board since the 1930:s. The SCA purchase took place in 1964. The facility in Värnamo is a box plant with both production and conversion of corrugated sheets. In the Nordic region there are in total 12 box plants and whereof 3 are located in the geographical sub-region of Sweden.

Operating margins, in average, for box plants in SCAP are low, 5,1 % in the year 2000 (Kalling 2001b). The margin is different due to where the box plant is located, i.e. in UK & Ireland with 14 plants the margin is fairly low, but in Germany with 6 plants the margin is even lower, just a couple of percentages. The difference in margins does not only mirror the competition in respective market or lack of the same, but also how the business is conducted, occurrence of value added activities, etc. The box plant in Värnamo is an above average performer within SCAP and is not only cost focused, but also try to keep a higher margin by adding value to the product through complex structural and graphic designs and a closer cooperation with the customer.

The offering presented to customers through SCAP in Värnamo can briefly be described as in figure 4-2.

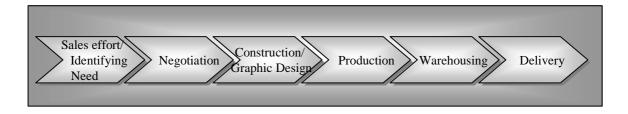


Figure 4-2 The Offering Presented by SCAP Värnamo

The Business Idea

The current business idea is to provide customers with packaging solutions specific to their needs. It is said that the company, at no time, must compete with price alone, instead solutions as ingenious structural and graphic designs provide value to the customers.

Although the described business idea has a customer focus and a holistic view, the main bulk of the business, 75-80 % is still represented by the sale of non-customer-specific solution of brown boxes with or without printing. The business idea is focused on what Värnamo wants to achieve i.e. being able to keep a high margin and still be the local supplier they are today or as Niclas Strand, Customer Service Manager SCAP Värnamo (2001), puts it "yesterday we sold corrugated boxes, today we are selling solutions"

The business in Värnamo is focused on meeting customers' needs through actively deploying structural and graphic design to create customer specific solutions. The business is to a high extent customer driven and focused on creating long lasting bonds with the customer. Additional services such as logistics are added to enhance customer value.

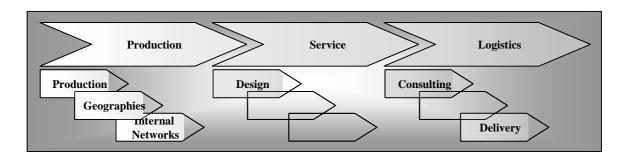


Figure 4-3 Value Chain SCAP Värnamo

Resources

Several resources are of importance for Värnamo to be able to live by the business idea. First, the sales crew has to be able to relate to and bond with the customers. The skill of the sales force i.e. their capability of identifying needs and to be able to relate theses needs to what is possible to produce, makes or breaks business opportunities. Strand (2001) stresses that the sales force need more education. Today personnel, in most cases, are not qualified enough to sell advanced technical solutions. Strand's (2001) solution is to implement some kind of organizational mentorship and to reinforce sales teams with, for example, structural and graphic designers.

The sales organization is area specific in the same way as the box plant. Corrugated board is expensive to transport and if transporting distance exceeds more than 300 kilometers it becomes economically unsound. This has lead to the geographical spread of box plants and their sales departments. The sales organization is strictly geographical. Segmentation of

customers is done to a certain extent within the geographical area. Segmentation is made in customer categories due to purchasing behavior and the service demanded. The customers are categorized after relations, development, procurement, or if they only want standard packaging materials (Strand 2001). Hence, customers are segmented after how much function they want in the packaging solution as well as how large or frequent they are. Another important issue for the sales organization is local area knowledge. Customers are more often than not local and the sales force knowledge of local conditions is of utmost importance. National or international customers are handled by key account managers or by the market staff in Brussels, Belgium. The area specific sales force might stumble into areas that are managed by other SCAP companies a common situation that is normally solved by teaming up in project teams. The problem that is the hardest to resolve in these cases is how the bonuses should be split. Since it is the producing company that gets the bonus a solution, that according to Strand (2001), may lead to suboptimation of the sales force's efforts.

The capabilities possessed by a design team become increasingly important the more customer-oriented the business gets. The designer is able to come up with unique solutions by themselves or use an Intranet, in which many designs and solutions are stored, with solutions accessible to the entire SCA group. This enhances the possibility for a swift customer solution. Many of the designers working today have decades of experiences working with corrugated board. According to Strand (2001), this experience is essential to the success of the more customer-oriented business. The designers are, like the sales force, tied to a specific plant. Therefore, there can be great differences in skills of designers in different plants. For example, the paper widths differ between facilities. Paper width is a fixed measure, in Värnamo's case 2.20 meters that provides the limit for the width of the corrugated board the facility is able to produce. When the new facility is set up the bandwidth will be increased to 2.80 meters.

Graphic designers are tied to the process. Today Värnamo has four graphic designers working together with the structural design teams. The designer's most important job, according to Strand (2001), is to make sure that it is possible to produce the graphics on the box at the price agreed upon by the customer. The graphic designers could, in this context, suggest suitable designs. There is also a new graphical solution underway, a program that is to be incorporated into the current SAP system called DART, Design and ART system and this is meant to enhance and simplify the work of the graphic designers. Strand (2001) expresses the need for customers to deal with the structural and graphic design departments before they approach an advertising agency. The reason for this is that many companies spend lots of money on advertising agencies just to bring a solution to SCAP that is impossible to produce. Strand's (2001) suggestion is to make it the other way around. This would save time and money not only for the box plant, but for the customer as well, and at the same time make production even more efficient in the Värnamo facility, efficiency in production due to the degree of usage of bandwidth, etc. SCAP Sweden provides an in-house solution as an answer

to customers demanding closer co-operation, a solution described in detail below under the heading Value.

Apart from production capability and capacity, the sales force with its knowledge about the local customer and how it is organized, the structural design ability and the graphic design are all, individually as well as put together, important resources for Värnamo. No resource on its own, or if taken together, is rare. The competitors also have these resources. What is making them rare and valuable for Värnamo is the combination of the resources and how they are utilized versus the customer. In this context, one also has to point towards reputation and financial strength of the organization. In this area SCAP is well dressed with the financially strong mother SCA behind the back. Although the competitors have the same toolbox Värnamo, according to Strand (2001), seems to be able to compete successively in the market with quality and customer services without getting into a price competition.

External Forces

The barriers of entering the business of corrugated board and boxes are high. The capital investments that would enable production of corrugated sheets and conversion of the same are several hundred million SEK for a new facility. The three largest companies in the European corrugated market together hold almost 40 % of the market, SCAP approx. 14 % market share, Kappa approx. 11% and Smurfit approx. 13% (SCA Annual Report 2000). The strategy of consolidation that has been in existence for a long time is still ongoing between Packaging Solution Providers. In the Survey, the reader is able to read about the current trends in strategic choices of some of SCAP's competitors. According to Kalling (2001b), there are literally hundreds of small players that, if they are able to find interesting segments customer wise or geographically, run an immediate risk of being taken over. The exit barriers are also high. It is not easy to sell a plant that is either not profitable within a segment or not situated in the right geographical spot. A sale under these circumstances would most probably incur a huge loss of capital.

Supply of raw material for corrugation is the easy part for SCAP. Almost everything that is needed for production is available in-group. There is also an option of source, Värnamo in this case is not, according to Strand (2001), restricted to buy from SCA companies only, although they are strongly recommended to do so, the price paid for flute and liner is actually higher ingroup than on the free market. Supply of complementing materials as plastics for protective packaging or other materials are sourced, if possible, in-group or otherwise purchased on the open market.

Production in Värnamo is totally controlled by customer orders, i.e. all of the current production are based on specific orders from customers; nothing is produced in order to be stock piled (Strand 2001). There are many customers and since the policy of SCAP is to never compete with price alone, the bargaining power of customers is limited. According to Strand

(2001), the company would rather give up a customer in a bidding situation than being forced to compete with price alone.

The corrugated box has been around for a very long time. Originally, the box was standardized in the sense that there were not too many options regarding size or function. Today there are an almost infinite number of choices to be made when designing a corrugated box i.e. size durability, pressure resistance, moist resistance and even a new kind that is covered in latex to prevent wear on furniture during transportation. All of these choices and the possibility to run small series and still make money through customer adaption make the corrugated box superior. However there are substitutes to be found, some of these being plywood and plastic. The problem with these substitutes is that they are not as easy to run in larger series (plywood) or to adapt to customers and run in shorter series (plastic). There is however in one segment where the corrugated board is taking severe beating namely the fast moving consumer goods. Pressure from environmentalist groups has led the fast moving consumer goods industry to review their use of corrugated boxes. The great disadvantage of the corrugated box is that it normally is not reusable even though it is recycled. The destruction of the box is time consuming and puts stress on personnel performing the destruction. The option today is to use plastic containers that are reusable. An extended use of plastic is for the future a real threat against the corrugated box.

As mentioned above, the industry of corrugated board consists, in Europe, of three major players, SCA, Smurfit and Kappa. The competition is intense but Strand (2001) still feels that SCAP is superior when it comes to customer adaption. According to Strand (2001), no other company can provide the customer with a total packaging solution as well as SCAP. The structural design is not only superior, but there is also what is called material neutrality, i.e. the company is able to design the packaging that the customer needs regardless of material, a fact that Strand (2001) sees as an enormous advantage. The competition is fiery when it comes to a standard brown box, the margins being very modest, since, as Strand (2001) puts it, "any idiot with money can produce brown boxes". The positioning of the product has gone from being price sensitive to more of a customer solution since the margins are higher in this segment. However, 75-80 % of the production is still standardized or at least not specially adapted regarding exceptional design solutions (Strand 2001, Murcott 2001). The decreasing margin of the standardized product has intensified Värnamo's efforts to become a solution's provider. This solution with value added products and services are what the sales force promotes the hardest. This is, according to Strand (2001), the future for SCAP.

Value

SCAP Värnamo is moving towards customer solutions with high speed, which means that increasing the value of the customer is the way of conducting business. The idea for SCAP is to enable the customer to focus on their core business and to leave the rest to SCAP and due to Strand (2001) there are no limits to what SCAP can do in order to respond to the requests

of the customer. Another way of adding value to the customer is the connection with the design department. If designers were introduced early into the process, new product changes could easily be made that would enhance or simplify packing, storing and transport. Strand (2001) claims that in this value-added perspective there are differences between Sweden and the rest of Europe. Sweden is less focused on volume and more focused on development and new customers, whereas Europe is the opposite. Another part of the value creation is that SCAP also offers logistics solutions to the customer. The main reason for this is that the customer should not have to care about the boxes before actually using them. "Just in Time" is a phrase that comes to mind. There are though storing and buffers along the road since a breakdown in the production of boxes could cancel the customer's entire production, a problem that SCAP, according to Strand (2001), could not afford since this would affect the future of more complex packaging solutions.

One very interesting solution is the value co-production between SCAP and SCA Hygiene. This solution was brought in, according to Strand (2001), in an "ad hoc" manner when a graphic designer was involved in several projects with SCA Hygiene. The close relationship created led to an in-house solution that is under way today. In SCA Hygiene's office in Västra Frölunda, there are one graphic designer and one structural designer from SCAP working with SCA Hygiene's product development. Initially the purpose was to replace the advertising agency formerly used by SCA Hygiene. This solution leads, according to Strand, to a very strong bond between producer and customer. This solution is something that SCAP will try to implement again, given that the customer is large enough and that the customer's product portfolio is changing fast enough. The consultants, in this case the graphic and structural designers, are paid by the hour of work performed at a rate that is well below what SCA Hygiene would have to pay for these services on the open market (Niklas Rönnäng, Key Account Manager, SCAP Mariestad 2001). For the customer this solution enhances the value delivered by the supplier since the number of reconfigurations in dimensions and looks of the final product increases, when at the same time the cost for packaging decreases.

SCAP is also able to provide pure services. According to Rönnäng (2001), there was a case when SCA Hygiene wanted to have a solution for production in Tunisia where SCAP did not have any facilities. The solution was provided to the customer and charged as a service. This would not have happened if a customer, in a region where SCAP had production possibilities, wanted to use SCAP expertise and then instead choose a lower cost producer. The customer, according to Rönnäng (2001), then would have been asked to either use SCAP production facilities or take their request elsewhere.

Networks

Networks and alliances are common to SCAP, although not in the common sense of the words. Instead of forming alliances SCA has acquired companies that are to be of use to them, although the integration process sometimes, due to Strand (2001), has been more than slow.

Some interesting synergies have been visible in Värnamo. Across the railroad tracks there is a company acquired by SCA that produces plastics like EPS and EPP. These products can be used as cushioning inside corrugated boxes when, for example, electronic devices are packed. The synergy of this acquisition has sprung out of the shortage of space for constructors in the plastic factory. Two of the plastic constructors had to move into the structural design department of SCAP Cr. in Värnamo. This led to an intense co-operation in the development of cushioning for boxes, a synergy of great value to the customer.

Other alliances that have been formed through deals are the ones made with Greencargo and Schenker, two transporting companies. Alliances that are of importance to SCAP in the sense that it enable them to offer logistics solutions in the form of transportation to customers in a more efficient way.

The Offering

SCAP is offering a complete packaging solution as far into the customer's value creating process as possible. When invoicing the solution, Värnamo usually includes the structural and graphic design into the total cost of the box, because the box is the soul of the company and invoicing services is not acceptable to the organization today (Strand 2001).

The offering is adjusted to each customers segment. According to Strand (2001), each customer as well as each sale situation is unique. The offering is then, a function of *what to offer, to whom it is offered* and *how it should be done*. There are, apart from the ordinary offering cases as the one described above, SCA Hygiene, or when SCAP has provided a solution but the potential customer chooses to use the solution elsewhere. SCAP has in the latter case charged the customer with separate costs based on the service or solution provided.

The Future

With the birth of e-commerce, Strand (2001) sees new opportunities, as many of the products sold to an end customers via the Internet are packed in corrugated board i.e. books and records. The increased use of transportation from large warehouses to customers will in the future include some kind of protective packaging. Today, corrugated boxes are primarily used. There is also the possibility of more complex solutions like logistics from customer to customers' customer or physical packing. Strand (2001) implies that the customer must lead the way in creating new solutions and that SCAP Värnamo is no stranger to developing the concept of total packaging solution even further.

Critical Activities

Critical or sensitive activities for Värnamo in negotiations and dealings with the customer can schematically be shown in figure 4-4.

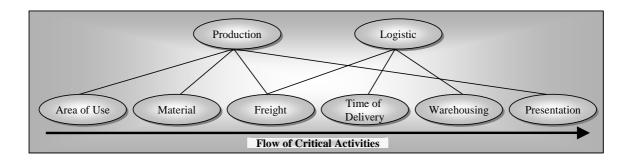


Figure 4-4 Critical Activities SCAP Värnamo

Area of Use: The first discussion between producer and customer in this stage is to identify the area or areas in which the box is going to be used.

Material: After identification of area of use there will be a technical decision, what type of corrugation, coating and form cushioning to use in order to serve the area of use in the best possible way.

Freight: In what ways, how many times and for how long is the box going to be transported. This of course influences the choice of material.

Time of Delivery: Is the delivery supposed to go straight into the customer's production, "Just in Time" as a concept or is the demand on precision for delivery lower?

Warehousing. Should SCAP arrange warehousing or is this an activity performed by the customer? For how long and under what conditions should the warehousing take place?

Presentation: In what environment is the box going to be presented, to end customers as a primary packaging or to production as secondary packaging material.

4.5 Förpackningsservice Västra Frölunda

Förpackningsservice (FPS) is a wholesale dealer that provides a number of different packaging materials and products in order to service the customer with a complete packaging solution. In the overall organization, SCAP Sweden is a sub-division of the Nordic region. FPS in turn is organizationally arranged as a division within SCAP Sweden. FPS, which primarily is a sales organization, wholesale, has warehousing possibilities and conversion capabilities in four sheet plants. The organization is well spread in the southern parts of Sweden although the area of business is the national market.

The reason for SCA acquiring FPS in 1969 was to be able to cover a customer segment where SCAP was too large to act (Bengt Wendel, Managing Director Förpackningsservice, 2001). Initially, FPS customers were small and medium sized companies but this has changed over the years. Today, even large companies like Volvo and Flextronics are FPS customers. FPS has a wide product range containing more or less everything needed for packaging solutions. They are even able to supply erecting machines, although this is through an in-group supplier, Packsystem. The product range covers all material that is needed for a packaging solution as

tape, corrugated boxes, protective material, plastic material, etiquette's, special products, as well as tools for packaging, etc. The products are directed towards packaging solutions mainly within the corrugated segment.

FPS organization today employs 117 persons. The turnover has expanded from 100 MSEK in 1990 to approximately 320 MSEK last year, with a profit margin of 8 % (Wendel 2001). The estimated turnover for 2001 is 338 MSEK. According to Wendel (2001), the materials dealt with in FPS are to 54 % corrugated finished products mainly purchased in-group, to 25 % sheet plant related products (production by FPS), and to 21 % miscellaneous packaging products as rip tape, band, tools, etc. The organization today has 8000 customers ranging from the very small one-man operation to the very large companies. The stock of customers is changing each year with 1400 to 1600 customers and the number of gains and losses are approximately the same (Wendel 2001). Many of the customers are one-time assignments, which makes it important to be active all the time in the search of new customers. The single largest customer is SCI, former Nokia, with an annual worth of 25 MSEK.

The Business Idea

FPS has a strategic goal to be the leading wholesaler in the Nordic area. The business idea is to provide complex packaging solutions to all types of customers in an integrated way, from the very small to the very large. The solution provided is material neutral but in most cases corrugated board is used. Solutions also contain storage facilities if necessary.

Through moving from an unbundled to a bundled concept, value is created to customers by adding parts and products, stripes, etc and through adding services, warehousing and logistics. FPS is looking into the complete packaging solution of the customer and it is able to offer packaging management, i.e. all services included in being a one stop-packaging supplier. FPS wants the relation to customers to be long lasting and value is created with these customers through co-production.

The operation in FPS is built around sales, production, sourcing of products and warehousing. Key factors for the wholesale operations, according to Wendel (2001), are closeness to the customer, a variety of standard packaging products, in house conversion, know-how in the sales organization and the possibility to access know-how in-group and that the offering is an SCA offering. Through these factors, FPS can act as a total supplier of the offered solution and is therefore also viewed as a packaging specialist. In FPS, as in Värnamo, pricing is not the primary mean of competition, instead, Wendel (2001) points to the close co-operation with the customer and the management of the customer, as well as with the suppliers, whether in-group or not.

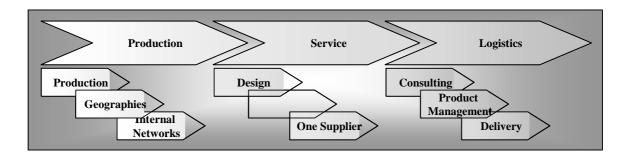


Figure 4-5 Value Chain SCAP Förpackningsservice

Resources

As in the case of Värnamo, one of the most important resources is the sales force. Their competencies can enhance the possibility of making a sale of an integrated solution to a customer. Wendel (2001) emphasizes the importance of the sales force, which is in the direct contact with the customers whose needs are identified and their possible solutions presented. One key success factor is, according to Wendel (2001), that there is transfer of knowledge between the customer and the sales person. The sales force is often teaming up with sales people from other companies within SCAP in case there are controversies over jurisdiction to provide solutions to customers. Wendel (2001) says that there would be benefits in centralizing the sales organization, in this regard, but the current way of working is more efficient in the contact with the customer. The local placement of a salesperson is a very important part of selling solutions. The sales person gets to know the specific needs of the local customers and is able to build a steady relationship with them. Another benefit of the current situation is, according to Wendel (2001), that it is working. A change of organizational structure would, due to Wendel (2001), probably just create disruption and inefficiency in the work of the sales personnel.

Another resource is the large variety of packaging products that FPS can offer their customers. All from the tiniest tape or clip via the corrugated box and protective packaging to even erecting machines and workstations for packaging. The sourcing of products, where a large part is supplied in-group, is also an important function and FPS is the largest purchaser of corrugated products from SCAP. Cellular plastic products, as well as displays, are also sourced from in-group organizations. Conversion of corrugated sheets for small and medium sized orders is also a resource FPS possesses. Together with their own skills, FPS has the advantage of being able to use structural and graphic design that is available in the box plants, i.e. in-group.

External Forces

According to Wendel (2001), it takes time to build solid relations with the customers and to build a name in the business FPS is in. The back up that FPS has in belonging to the SCA

group simplifies this. However, if the approach of brokers is applied to FPS business, the barriers of entry decline more or less because, in this case, any one with knowledge of the packaging industry can get into the business.

As stated above, no company within SCA is to compete by price alone so the reason for customers using FPS, as provider of solutions, is the wish to cut the number of suppliers to a minimum. Wendel (2001) states that FPS is the only company that is able to provide such complex solutions in Sweden today.

Since solutions are tailor made for the customer's needs, there are difficulties in identifying substitutes today. Wendel (2001) believes that there is not enough competence around to build pure broker organizations that are able to compete with FPS. He claims that companies have to be production focused or related to production in order to be able to create the highest possible value for the customer. The same reasons are brought up when discussing the possible entry of third party logistics providers. Competence is not around for such an entrance to become a threat to total packaging solutions today, due to that the packaging industry is more complicated than just the handling of the logistics (transports). Wendel (2001) sees possibilities of a future alliance with such companies, implying that it is possible to commoditize the transport itself, outsourcing being the best way to go.

There are many competing companies on the market today, most of these companies have no attachment to production, through conversion or corrugation facilities, but are working as wholesalers anyway. Many competitors have focused on retailing other kinds of goods, like candles and napkins. Wendel (2001) claims that FPS focuses on packaging solutions alone and the combination with the support from the SCA group makes FPS unique.

Value

Value is created through intimate co-operation with the customers and also by FPS through acting as an integrated one-stop supplier. Through accepting parts of the customers business, like warehousing or "Just in Time" delivery, FPS enables the customer to focus on their core business. In structural design FPS is working together with SCAP, so that the best solutions are found. Efforts are also made to tighten relations between customers and FPS and since many customers want a single packaging supplier, these visions of tight relations are possible. That FPS is being the sole supplier of a solution means great bargaining power against customers, but this power is, instead, according to Wendel (2001), to be viewed as relations that are long lasting and profitable for both parties.

An example of such a single supplier solution is Flextronics in Karlskrona. Although this is an odd case in the sense that Flextronics approached FPS in order to provide a single supplier solution. Initially, Flextronics made an inventory of their packaging needs after realizing that they, at the point of inventory, had 11 suppliers of packaging materials. Their goal was to

minimize the number of packaging suppliers and FPS, considering themselves as the only company in Sweden today to be able to provide such an extensive packaging solution, won the bidding. The set up is that FPS supplies an intermediary warehouse with whatever packaging material that is needed. FPS in turn delivers this packaging to the Flextronics factory four times a day. The solution provides savings for Flextronics even though the actual price per box has increased.

An example of another extensive solution is the one under preparation for Volvo at Torslanda. On direct request from Volvo, FPS is reviewing all of the packaging materials and procedures needed in production. The next step will be to provide a single supplier solution to Volvo's needs and to deliver products on a "Just in Time" basis. The supply schedule is divided into several different phases, two of which are described above. Future phases will include inhouse supply of structural and graphic designs, to enhance efficiency in production through modification of old packaging solutions and/or supply of new solutions. Perhaps, even the physical packing of automobile parts into boxes. In the latter case, FPS will be prepared to supply even the personnel needed for packaging as a part of the complete solution provided.

Networks

Alliances are functioning in the same way as for SCAP in Värnamo, whatever is needed it is bought from an external source unless the quantities are large, then SCA may instead take the decision to acquire the supplier. Alliances or networks with companies' exterior to the SCA group have not been a large issue as of yet. However, there is networking going on in-group. Examples are the teamwork that is initiated in order to serve large customers. In this case, sales personnel, structural and graphic designers team up to provide solutions.

The Offering

FPS offers complete packaging solutions to all kinds of customers, from small to national or even multinational companies at the national level. The offer contains everything needed for the packaging solution, even logistics and certain production forecasting and is largely customer driven according to Wendel (2001). The solution is invoiced as number of boxes or packaging material, no special invoice is issued for services provided. Everything is split up and collected in the price for the box or material sold.

The Future

One possible future development is that customers will desire, an even more, complex solution perhaps even including logistics services from the customer to the customer's customer. This kind of solution may not be too far ahead according to Wendel (2001).

Another possibility, due to Wendel (2001), is that packaging solutions will include the physical packing of the goods into a box. In this case, it is possible for the PSP to step into the actual production of the customer, a solution that would mean possibilities for an even greater focus on the core production for the customer

There would also be possibilities to invoice the service instead of the box or the physical packaging material. Wendel (2001), however, thinks that the box is the soul of SCAP and that a change in invoicing policy would create more downsides than upsides, so instead FPS is very specific when invoicing their products/services. Everything is specified so that the customer can have full control over prices.

FPS and a similar company in Denmark are, according to Wendel (2001), the only businesses of their kind within SCAP. There are though plans to acquire similar companies in different parts of Europe to be able to offer the same solutions to a much larger market. FPS is in this respect to be look at as a raw model for this type of wholesale business.

Critical Activities

Critical activities for FPS in negotiations and dealings with the customer can schematically be shown as in figure 4-6.

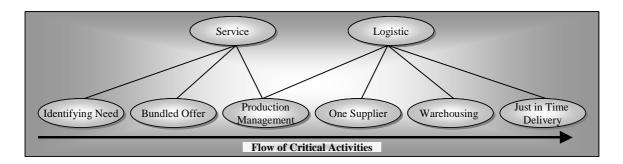


Figure 4-6 Critical Activities SCAP Förpackningsservice

Identifying Need: Sales personnel will, in direct contact with customer's assist in identifying needs for packaging solutions.

Bundled offer: Through connecting different parts of the product portfolio, both products and services, a bundled offer is presented in order to solve the customer's needs.

Production Management: Customer production is reviewed, efficiency suggestions are made.

One Supplier: Capabilities coordinated by FPS are deployed in order to become a single supplier of packaging materials and services to the customer.

Warehousing: In order to serve the customers, FPS can arrange to stock different packaging materials until needed for delivery.

Just in Time Delivery: To alleviate customers of warehousing, "Just in Time" delivery can be offered.

4.6 SCAP Cr Pollokshaws/The Czech Republic

SCAP Cr Pollokshaws is a book printing facility with machinery for high color printing, specialized in fine printing of booklets, manuals, etc. The facility in Scotland was purchased from Rexam during 1998 and has, until now, been the only one of its kind in the SCA group. It organizationally belongs to the UK & Ireland Region as a special operation (Brian Price, Manager of Operation in the Czech Republic, 2001). A major part of the business in Pollokshaws was earlier connected to Compaq. During the year 2001, Compaq made a decision to outsource 75 % of the production to the Czech Republic. SCA Scotland won a major part of the printed documentation and CD kits for Compaq. In turn this meant winning the business of Compaq's subcontractors in the Czech Republic. The expansion of the business for Pollokshaws into the Czech Republic was not only caused by the move of Compaq's production, but the latter company's relocation did, according to Price (2001), had a major part in the decision.

SCAP Pollokshaws, after the acquisition from Rexam, grew from book printing into printing for the packaging industry. The service provided by the company is a high margin operation. Last year Pollokshaws showed an operating margin way above those shown by for example box plants (Price 2001). The Pollokshaws operation in the Czech Republic today is a *Pan-European project*. In the Czech Republic, a new manufacturing site with warehouse, distribution center and manufacturing facility for printing has just been established. The *Pan-European project* in the Czech Republic has the possibility to offer three distinctive products in an integrated way, corrugated boxes, foam cushioning and fine printed manuals. These products are bundled in an offer for a packaging solution.

The Business Idea

The business idea is to add as much value as possible to a packaging solution. This is done through specific knowledge of fine printing, manufacturing, product management and other kinds of logistics, especially product management.

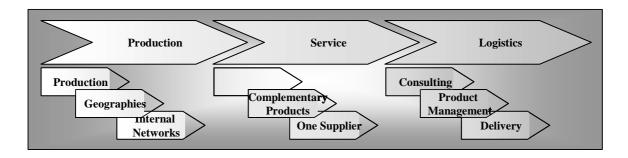


Figure 4-7 Value Chain SCAP Pollokshaws/The Czech Republic

Resources

Fine printing is one of the core competencies of Pollokshaws but, from a SCAP perspective, is slightly different to the production of corrugated boxes due to its complexity. Documentation is very complex due to the number of languages involved since complex logistics solutions are needed to match printing for the rest of the production. Fine printing of language specific booklets and manuals are especially complex and time-consuming processes for manufacturers that do not have this in their core competence (Price 2001). Knowledge of distribution and warehousing are other activities that, according to Price (2001), may be difficult to handle for companies that have other core competencies.

According to Price (2001), the Pollokshaws facility developed an IT-based infrastructure for procurement and stock management when working with Compaq in Scotland. This infrastructure, due to Price, is an important competitive advantage for SCAP and a contributing reason for winning major businesses in the Czech Republic. There is another part of the logistics solution that Price (2001) emphasizes, the possibility to add forecast management. Through a single forecast model, SCAP Pollokshaws is able to supply up to five different types of commodities "Just in Time".

Brokerage, that is management of purchased parts, is another of Pollokshaws specialties but is only added when it is appropriate to complement the existing business. Brokerage is not dealt with as a separate business and Price (2001) claims that brokerage would mean an unnecessary exposure to risk, since nothing would then stop the customer from going directly to the source in order to cut costs.

Through acting as a broker, SCAP in the Czech Republic, purchases products from SCAP Pollokshaws and this creates an important advantage. The reason is IPR, Inward Processing Regime, a treaty that simplifies VAT payments when a product is manufactured or sold within the country. The possibility to invoice in local currency becomes an advantage for SCAP according to Price (2001).

External Forces

Experience of logistics solutions is necessary in order to sell a competitive product and a barrier to entry is the ICT system that has emerged through the existing business in Pollokshaws. The current system is based on years of experience in logistics and product management (Price2001).

The relation to the customer is very tight and, because of the complexity of the offering, it is not easy for the customer to change supplier. To make business easier for both parties, it is important that SCAP has an initiated insight into the customer's business. When SCAP gets this deep into the production of the customer they also have built a strong and durable relation with them. The idea for SCAP is to try to expand the offer, once they are selling one

commodity, in this case the documentation, they try to add other SCAP products as well, e.g. boxes and form cushioning. In the Czech Republic, the close relation to the customer is getting visible and the SCAP production facility is bordering the customer, Foxcon's, production facility.

Value

The business model is to possess core manufacturing and then add a lot of value to the product. Value is created, more or less, simultaneously in order to enable customers to focus on their core business. In Central and Eastern Europe, the process of adding value to products is difficult. In most cases, a manufacturer is simply asked to make a part from a specific blueprint and there are no openings or opportunities to develop or add value to the ordered product (Price 2001). The segment that SCAP found is to add more and more products, as distribution and warehousing, to their initial offer so that value is added for the customer. As Price (2001) says, "There is no possibility to add value to the product up front".

Networks

According to Price (2001), a global label manufacturer has been contacted by SCAP to share the facility in the Czech Republic. This possible co-operation would enable an offering of a much more complex and value added product. According to Price (2001), the markets in the Czech Republic and Hungary are the most competitive sub-contracting markets in Europe. Over 20 of the worlds largest sub-contracting companies are present in the area and a strong foothold here would mean prosperous opportunities in offering complex solutions to customers, even including labels and etiquettes.

The Offering

SCAP's strength is that they can supply three very distinct products in-group, corrugated packaging, foam cushioning and documentation. Price (2001) means that any bundled offer has great potential when deployed. The solution in the Czech Republic is a Pan-European project that in part was initiated from Brussels. The responsibility of the project has now been moved to the Czech Republic.

The offer consists of two main competencies, the *key business*, that is that the company has to have a product to sell and the *product management*, that is the possibility to manage distribution and warehousing. The process starts with forecasts and ends in "Just in Time" delivery.

The offer is invoiced in a single invoice every week, specified, with all commodities included and this makes the customer's invoice handling much easier. This is another reason why,

according to Price (2001), companies are more inclined to choose a single supplier of packaging solutions.

The Future

The business today is, according to Price (2001), a framework to develop further. A near future solution is to set up small and flexible hubs or warehouses and to implement SCAP infrastructure within these hubs or warehouses, to form a network of locally placed but centrally managed entities.

The development of additional software is becoming increasingly important so that centralized management of complex processes in different locations is made possible. One example of this is the PP, Production control Planning, a program specifically written to cope with assembly and manufacturing of products and another is the E-Fax, developed in Pollokshaws. E-Fax is, according to Price (2001), an advanced solution for both procurement and client monitoring and the program is soon to be written into SAP/R3 and incorporated into the current logistics solution.

Development through additional component management is another opportunity in the future, for example, laser printing of keyboards, a competence not far from today's products. In the case of computer manufacturers as customers, the production of keys to keyboards could, accord to Price (2001), lead to a take over of all the packaging. SCAP would then own all of the commodities needed to offer a complete solution to, for example, FIC or Foxcon. Discussions are even ongoing that SCAP should take over the actual packing in FIC facilities, hence, physically placing the product in a box. One supplier, in this case SCAP, would then take over the most time consuming and difficult part of FIC's operation. Managing individual language components is extremely time consuming and through taking care of the entire solution SCAP makes it possible for the customer to focus on the core production (Price 2001). Way down the line, Price (2001) thinks that it may become interesting to organize transportation to the customers' customer. However, this is a complex and expensive process because of the thousands of distribution places or points that are required for an efficient transport of goods to retailers.

Logistics companies are not considered a direct threat because the gap in skills needed between outbound logistics and the operation in Pollokshaws/The Czech Republic are much larger than the other way around (Price 2001). It is not likely that logistics companies, in the near future, will enter the SCAP business. Actually, SCAP is closing the gap to the logistics companies faster than the other way around (Price 2001).

Other interesting areas of operation than computers are, according to Price (2001), for example, Panasonic mobile phones. SCAP would manufacture small, highly decorated, corrugated boxes, the documentation and buy the accessories needed and then Panasonic or

SCAP itself drops the phone into the box. Other potential clients are Matsushita (television sets), and Black and Decker (power tools).

Price (2001) claims that the SCA group are undersold. SCAP have a lot of capabilities and strengths that are not made obvious to the customer because of the lack of knowledge on behalf of the sales personnel. The persons selling boxes have little or no knowledge of form cushioning or documentation and they are frightened of raising the issue because the shortage in knowledge. Many products are, due to this situation, not being promoted enough. Neither the sales personnel, nor the customers are able to see the width of the organization or the synergetic effects possible. This is according to Price (2001), a problem of a very serious kind since it would be a significant strength to SCA if the different parts could be combined. Through these shortcomings, there are large potentials of developing businesses through sales persons. Price (2001) sees the hiring of himself as a beginning of integrating the company's different parts into a single offer.

Critical Activities

Critical activities for Pollokshaws in negotiations and dealings with the customer can schematically be shown as in figure 4-8.

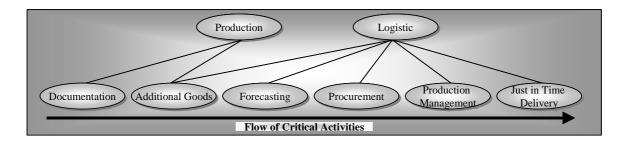


Figure 4-8 Critical Activities SCAP Pollokshaws/The Czech Republic

Documentation: In this phase, decisions are made based on customer specifications. Language, quality and size are defined here.

Additional Goods: Is additional goods needed to satisfy the customer. Does SCAP need plastic bags, cords, etc?

Forecasting: When does the customer need delivery, how much does the customer need? Forecasting is controlled via Information and Communication Technology (ICT).

Procurement: When is procurement of the essence and to what extent. Procurement is dependent on production forecasting, i.e. ICT.

Production Management: Control and management of production flows both inside SCAP and at the customer.

Just-in-Time Delivery: To minimize customer's warehousing and securing access to packaging products.

4.7 LINPAC/ RECOPAC, Eslöv

LINPAC Group Ltd. (UK) is a privately owned company with 12,000 employees. The company has grown out of the beverage industry and is today a diversified manufacturer in materials handling and in packaging (Mats Rabe, Managing Director LINPAC Materials Handling Skandinavien AB, 2001). LINPAC is engaged in different kinds of materials, mostly plastic and corrugated board for packaging, but also in molding plastic parts for the car industry as well as for the packaging industry. The focus in the company today is placed on packaging, to create packaging solutions to the customers (Rabe 2001). RECOPAC is an independent company in the LINPAC group and, to our knowledge, the name of a patented, technical solution for reusable plastic boxes sold by the company. The solution, i.e. the company RECOPAC, was purchased by LINPAC who saw this as an important complement to their product portfolio.

The RECOPAC concept is a reusable and durable form of packaging designed for a long-term use. The boxes are injection molded in plastics with patented hinges that are fully integrated into the material of the box enabling the box to be repeatedly erected and collapsed without damage or wear. Due to the cost for molding tools, this type of packaging has to be manufactured in large series to be cost efficient compared to the corrugated box (Rabe 2001). For return transportation, the boxes are folded out completely flat. Due to the patented solution, a pallet for return transport could contain up to 700 flat standard size RECOPAC boxes, an important factor in keeping costs down for transportation. The box has an extremely high fill factor that allows over 90 % of the transported volume to be utilized and is very hygienic and therefore well suited for packaging for the fresh food industry (Rabe 2001).

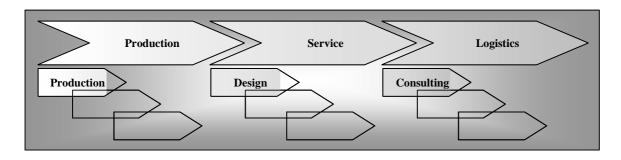


Figure 4-9 Value Chain LINPAC/ RECOPAC

The Business Idea

The business idea of RECOPAC, according to Rabe (2001), is to sell large systems of reusable packaging primarily to the fresh food industry. The technique used in the production of RECOPAC represents a considerable investment, even though it is more cost efficient than

traditional injection molding and only economically sound when run in large series of a least 100 000 items each. One molding tool can only produce one type of box, and the tools to perform the procedure cost several million SEK each. Due to a large volume and high initial costs for the boxes (the cost for molding tools are spread out over the entire order), each order has to be well prepared and negotiated with the customer. Sales procedures involves many technical discussions and only a large customer can be the target for a customer specific solution of this type of product although RECOPAC carries products with standardized measurements for sale to smaller customers (Rabe 2001).

The RECOPAC packaging solution requires a system where all actors are co-operating in utilizing the box, much like the use of PET-bottles in Sweden. This involves delivery to the store, collapsing of the box, return freight, washing as well as erecting and reuse of the box for the next delivery. A system for reuse can schematically be shown as in figure 4.10.

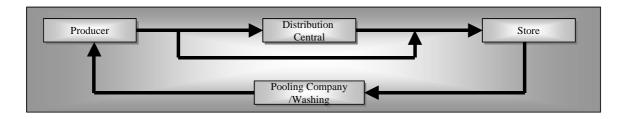


Figure 4-10 System for Reusable Packaging

Resources

The obvious resource for RECOPAC is the patented solution. There are a couple of factors involved in a customer decision to use this kind of system. The system normally works through a pooling company, which delivers, washes and transport boxes both to producers and from end users. The pooling company then charges a kind of rent to the companies using the product. The box has to be washed before use and the transportation to and from the washing unit is the crucial point since it is expensive, the more boxes that fit one pallet the better. While a standard plastic solution today only stacks to approximately 150 per pallet and corrugated boxes stacks to about 450, RECOPAC stacks 700 per pallet. This means that it becomes economically sound to send RECOPAC to and from washing i.e. reuse the boxes. Another advantage of RECOPAC is that the box lasts for an estimated average of 75 cycles, actually, Rabe (2001) claims this to be a very low estimate; 400 cycles would be closer to the truth. This is to be compared to a corrugated box that normally only last for one cycle and then has to be destructed. Rabe (2001) also points out that a RECOPAC box is much easier to wash than similar solutions, an added effect of the design with homogenous sides. The environmental argument is used for implementing large systems of reusable packaging; Rabe (2001) claims that the effects on the environment are smaller with a reusable solution than with a corrugated one.

Costs could be compared between the corrugated box and the RECOPAC box when handling of the boxes are included, see figure 4-11.

Cost/Type	Corrugated Box	Standard Plastic	RECOPAC
1 Unit Cost of Purchase	3,00	35,00/75 = 0,47	35,00/75 = 0,47
Cost for Destruction	10% = 0,30	0	0
Cost for Washing 1 Unit	or Washing 1 Unit 0		1,00
ReTransport 1 Unit	0	300,00/ 144= 2,10	300,00/700=0,43
Total Cost Per Box	Cost Per Box 3,30		1,90

Figure 4-11 Comparing Costs

External Forces

Production of reusable plastic solutions is almost as expensive as production of corrugated board and boxes, not only is production capabilities capital intense, but it is only possible to sell the product in large quantities. This call for a significant penetration of the market before a decision can be made to take on production of a solution such as RECOPAC. The initial investment in molding tools is spread out over the entire number of boxes in the order indicating that for very large orders. The price for the RECOPAC box will be lower and a serious threat to the corrugated box will occur.

The customers have a great deal of bargaining power when it comes to a solution such as RECOPAC since, in order to sell a system, it is important to have close relations with the customers and also to be patient. Rabe (2001) states that a sale can take more than a year but when the customer has chosen the product, they are normally stuck with one supplier. An example here is a German pooling company, FICO, a company that owns the boxes in a recycling system and then rents them to users, that owns more than 40 million boxes that are reused. It is not hard to imagine the costs combined in exchanging these boxes. There is also customer bargaining power in that large stores, like ICA and Coop, demand that suppliers use reusable packaging.

The competition for RECOPAC is twofold. First, there are other, already existing, plastic packaging solutions. However, as described above, they lack the stacking capability of RECOPAC. An advantage that the existing solutions have is that they are already in the market. They have already created a systems lock-in regardless of their technical qualities. Second, the corrugated box has several advantages, like the ability to manufacture small series at economic profit and the possibilities of printing. Printing is possible on plastic as well but not very convenient in a system where boxes from many suppliers are reused. RECOPAC solved this problem by making the sides of the box in transparent plastic, which provides the user a possibility to display printed paper-material through the walls of the box. It is however

in smaller systems, due to the molding injection used, possible to color the plastic for different parts of the box during manufacturing.

There is also in Sweden a decision among the larger fast moving consumer goods companies, e.g. ICA and COOP, to start using only reusable boxes. Rabe (2001) claims that the environmental effects in Sweden, due to use of reusable packaging, are negligible since the market is small compared to for example Germany, and the transportation distances are long. Hence, compared to corrugated boxes, a reusable system in Sweden would have little or no benefits from an environmental perspective.

Networks

LINPAC offers financial services as a supporting activity in selling the RECOPAC solution through a strategic alliance program. Since costs involved in investing in a larger system as the one described above are immense, this activity is well needed. Rabe (2001) describes the service as a mean to convince customers that using the RECOPAC system is to be considered an investment and not a cost.

Value

Value is created for RECOPAC customers through the technical specifications of the product. LINPAC also offers a few other services linked to a total packaging solution through RECOPAC, however, LINPAC as a group, according to Rabe (2001), can offer packaging in almost any material as well as packaging solutions of different kinds. Value for the customer, in the case of RECOPAC, increases by the number of products purchased.

The Offering

The offer from LINPAC/RECOPAC consists of a superior technical solution that, besides the advantages mentioned above, also has a higher degree of filling. In a given size of a RECOPAC box, there is more volume than in a corresponding corrugated box due to thickness of box walls. Since selling of RECOPAC means selling of a system, there is also a commitment to deliver boxes over a longer period of time (Rabe 2001).

The Future

Rabe (2001) views increasing environmental concern as a potential golden age for the RECOPAC solution, the more end consumers that demand ecologically durable solutions, the more pooling companies will be created as an answer to these demands. This, in turn, will increase business opportunities for companies that provide a reusable solution. There are also development possibilities outside of the fresh food and fast moving consumer goods industry since the RECOPAC box can be filled with any type of cushioning.

Critical Activities

Critical activities for LINPAC/ RECOPAC towards customers can be shown as in figure 4-12.

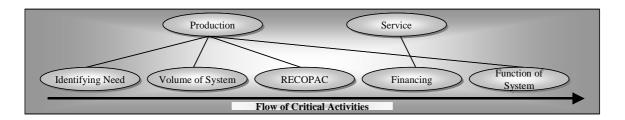


Figure 4-12 Critical Activities LINPAC/ RECOPAC

Identifying Need: Currents in society influencing the choice of a reusable packaging system affects the customer. The end consumer is a major influence in such a decision.

Volume of System: The size of the potential system influences the choice of solution. For such a system to be economically justified, critical volume has to be reached. This volume corresponds to approximately 100, 000 units.

RECOPAC: There are several systems on the market to choose from. The technical specifications and the system economics of RECOPAC affect the choice of system.

Financing: LINPAC offers, through its strategic alliances program, financial solutions, both financing and leasing, as services to influence the choice of RECOPAC.

Function of System: The boxes in the system have to be easy to handle, i.e. they have to be light and ergonomic, transport, i.e. stacking possibilities, has to be good, and wash, i.e. hygienically acceptable after cleaning. The pooling company chooses a solution based on the design of the entire system, the product must alleviate the function of the system.

4.8 The Case of an Attacker: Packplanet

Packplanet was originally designed as an answer to a perceived market condition within the packaging industry (Johan Apel, Co-Founder of Packplanet, 2001). The founders came from the food and fast moving consumer goods industry and saw potential in this business due to several market imperfections, e.g. that all knowledge of packaging was locked in with the supplier who kept all the specifications of the final product. This created problems for the customers in the sense that they became bound to one supplier and had small opportunities to compare prices from other suppliers, etc (Apel 2001). Packplanet was a small expert organization with only 30 persons employed including several industry specialists, such as packaging designers and ICT-specialists, to be able to bridge the information gap they thought existed between suppliers and customers (Apel 2001). Due to the general recession during 2000 and 2001, Packplanet seized to exist and is today nothing more than a homepage without information.

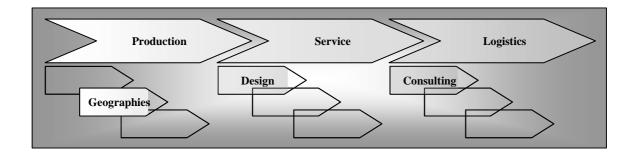


Figure 4-13 Value Chain Packplanet

The Business Idea

The original business idea of Packplanet was to act as a neutral expert organization to bridge the information gap between suppliers and customers and through this, enable transparency in the market, i.e. increasing customer leverage and lower the market prices for the benefit of the customers. Money was to be made as a percentage of the customer's savings and through the availability of an e-commerce site to be used for, among other things, reversed auctions. The main reason for the concept not working was twofold. Firstly, the company was not able to achieve a critical mass of customers and for that reason, survive on their own and secondly, their owner, a venture capital firm, was among the first to perish during the death of dotcom. Hence, the company was not able to get enough funding to reach critical mass.

Resources

Packplanet employed several persons initiated in the packaging industry, i.e. structural designers and procurement managers. Resources that, combined with the knowledge of ICT-specialists, enabled the business idea. The work of the structural designers was to draw up specifications for already existing packaging solutions, in general the corrugated box, to give the customer the information needed in order to negotiate a lower price. The supplier, i.e. the producing company, normally holds these specifications. The knowledge of former procurement managers brought along insight into, as Apel (2001) puts it, "an industry that rarely delivered in time or in the right quality". The founders also brought along connections needed to create a critical mass of customers wanting to explore this new business idea. The company was a knowledge based service provider without any production capabilities.

External Forces

Apel (2001) describes the former company's relation to customers as long lasting and that the customer, as opposed to the traditional industry, was given bargaining power and leverage by the existence of Packplanet. Apel (2001) claims that since the packaging company possesses all vital information of the packaging solution, no customer has any bargaining power against the packaging companies, no matter how customer focused these companies say they are. Apel (2001) also claims that it would be possible, or even desirable, to create a common

purchase organization to lower prices, or as Apel (2001) puts it "To finally achieve truly market related pricing in a market dominated by a cartel consisting of the large manufacturers/suppliers". Packplanet provided such a solution.

The Future

Apel (2001) thinks that the time is now to start a business like Packplanet. The issues that initially inspired the idea of a brokerage/software supplier in the packaging industry are still very much alive. Apel (2001) thinks that it would be possible to commoditize the corrugated industry through providing the customer with so much information on packaging, that the design departments of the large packaging companies becomes redundant. Apel (2001) suggests that this would make the large manufacturers virtually unprofitable. Apel (2001) also claims that a solution such as Packplanet is one of the traditional packaging industry's worst nightmares.

Critical Activities

The critical activities of Packplanet can briefly be described as in figure 4-14.

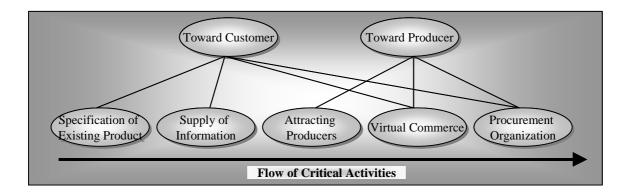


Figure 4-14 Critical Activities Packplanet

Specification of Existing Product: The customer has an operational solution but is not aware of its technical specifications. This specification is supplied through structural designers specialized in packaging solutions.

Supply of Information: The technical specification is supplied to the customer and the information gap between customer and producer is closed.

Attracting Producers: Packplanet tries to attract producers that are willing to compete on price to their virtual solution.

Virtual Commerce: The specific solution of the customer is presented to interested producers that are able to bid the right to produce in a reverse auction. Money is made for Packplanet through a percentage of the difference between the customer's original cost, before specification, and the costs after virtual commerce.

Procurement Organization: After critical mass of customers has been reached, it would be possible to bundle customers with similar or identical solutions and leverage this bundle towards a single producer.

4.9 Internet Survey Competitors; Summary

In order to see if Värnamo, FPS and Pollokshaws/ Czech Republic way of adding or creating value could bee viewed as good examples of development within packaging solutions, we briefly introduce five other PSPs (Appendix 2). We will summarize the competitors under the three variables stated under the PSP value chain. In the end, we will categorize the different strategies of the five cases and the five other PSPs mentioned in the appendix using the Delta Model classification. By doing this, we introduce the reader to different strategies possible for PSPs. This step closes the gap between the empiric and analysis and includes some analytical parts such as strategy identification.

Production

Looking at production, all PSPs own their own production facilities and are dispersed globally, regionally and nationally. Geographically dispersed production facilities create value to customers. Important is, that structural and graphic design supports production efficiency (Strand 2001). Expansion through acquisitions seems to be a common strategy to add value and gain competitive advantage through geographical coverage, for example, Jefferson Smurfit has an acquiring strategy specialized in identifying under-performing companies on the market (Appendix 2). According to Wendel (2001), there is seldom time enough to grow organically, instead growth through acquisitions is preferred.

When looking at internal resources and how they are integrated, internal networking can establish new and valuable innovations. David S. Smith and Kappa have established a material-neutral status that does not limit them to one specific material or packaging solution (Appendix 2). SCAP is currently working with integration between plastic and corrugated towards a neutral status regarding raw materiel. This trend has resulted in one further step in the development of integrated solutions, i.e. cushioning. SCAP's acquisition of Tuscarora Inc., with its focus on protective cushioning, enables SCAP to offer solutions not restricted by the choice of material (SCA Investor rapport, 2/01).

Services

Most PSPs today are offering a broad scope of products and services. When looking at value added functions, PSPs are commonly working actively with graphic and structural design (Appendix 2). Adding value can be achieved in many different steps. The most basic way of adding value is through moving downstream in the value chain within the scope of existing capabilities, e.g. production/design. A value-added strategy is implemented through expanding the existing product mix through more specialized grades of containerboard as

Jefferson Smurfit (Appendix 2). These grades are then supposed to generate a higher margin than the conventional ones.

When coordinating internal knowledge within structural and graphic design a common strategy is to use ICT. Intranet provides information on previous technical solutions (Appendix 2). Other ways of working towards customer to add value is to offer in-house solutions including services as design and printing like David S. Smith (Appendix 2).

Material integration discussed under production is not only dependent on networking ingroup, but also on the PSP's capabilities and competencies within structural and graphic design. Paper can be value added when integrated with other materials such as plastic, latex, etc. (Strand 2001). With this strategy, customer segments are of importance; not all customers need this type of solution (Kalling 2001i). Within cushioning, we find, for example, furniture and high-technological manufacturers as customers.

When looking at extended offerings, there are different ways and combinations to be found that make it possible to create a unique offer. One mutual idea among PSPs is the effort to include complementors in offering a more complex solution. Through a downstream integration in the value chain most of the PSPs try to add value to their customers. This can be performed by all PSPs, except from Jefferson Smurfit that focuses on fully featured products instead of a broad product range (Appendix 2). Other complementing aspects are the packaging machines and the more complex systems offered to customers that increase production efficiency. Value is added to customers by PSP competencies within erecting, filling and sealing. For example, StoraEnso offer services that includes installation, operator training, maintenance and the supply of spare parts of packaging machinery (Appendix 2).

Logistics

Different levels of product management are offered to customers in order to support customers business. Many of the PSPs seem to work in close relation with customers (Appendix 2) or, as Price (2001) puts it, "there have to be a close relationship to customer to be able to offer more complex solutions".

When looking at extending the offer even further to more complex solution, different levels of logistics services, which could include "Just in Time" and warehousing, could be combined into actually offering a complete logistics solution as in the case of International Paper (Appendix 2). International Paper differs from other PSPs in how they have solved their logistics. They are the only company that owns their own logistics operation.

4.10 Categorization of Cases and Competitors

With the variables scope, scale and bonding it is possible to categorize both the cases and the competitors in the survey within the strategic options of the Delta Model. We have identified that most PSPs are working with a broad product range. Three different ways of scale have been identified, these are: Focus on corrugated products, integrated solutions not limited to material and total supply chain management including different scales of logistics. When looking at the last variable bonding, we have found that there are many ways to create a strong bond to customers and establish a competitive advantage towards competitors (See figure 4-15, 4-16).

I	Värnamo	Förpackningsservice	Pollokshaws	LINPAC/ RECOPAC	Packplanet
Scope	Fully featured product	Broad product range	Broad product range	Fully Featured Product	Broad Range of Services
Scale	Able to offer integrated solutions through networks.	Able to provide services at demand from customer focusing on acquiring more and more of the customer's packaging related business	Offers complete solutions including product management, logistics, machines and different packaging materials	Offers a complete solutions including product management and complementing products	Offers a single product achieving market shares through focusing on system sales Supplying a multitude of services focused on one product only.
Bonding	Creating customer lock-in through being the keeper of information and through adding on services on demand.	Locking out competitors through customer responsiveness. Locking in customers through portfolio configuration. Locking out competitors through establishing one supplier status	Creating customer lock- in through being able to supply special knowledge in fine printing and customer lock out through knowledge in logistics.	Establishing system lock in once a deal has been closed with a customer. Does not engage complementors but instead match specifications with existing standards on the market.	Bonding through establishing a dominant design and leveraging this. No customers lock in through the company's previous form
Strategic Option	Total Customer Solution	Total Customer Solution	Total Customer Solution	System Lock-in/ Best Product	Best Product

Figure 4-15 Strategic Options; Cases

M	David S Smith	International Paper	Jefferson Smurfit	Карра	Stora Enso
Scope	Broad Product Range	Broad Product Range	Fully featured product	Broad Product Range	Broad Product Range
Scale	Total Supply Chain management Integrated solutions not limited to material or packaging.	Complete solutions including Logistics and In-store detailing services	Achieving market share through acquiring, focusing on corrugated product	Offering integrated solutions not limited to material or packaging	Offering value added products and complementing packaging systems.
Bonding	Locking in customer through supplying packaging management and closed loop distribution systems for reusable packaging.	Locking in customers through multitude of products, logistic solutions and packaging systems. Locking out competitors through owning distribution	Bonding through product development. Expanding existing capabilities within corrugated and containerboard.	Locking in customers through customization of product and supply of packaging systems.	Locking in customers through customization of product and supply of advanced packaging systems, services and education
Strategic Option	Total Customer Solution	Total Customer Solution	Best Product	Total Customer Solution	Total Customer Solution

Figure 4-16 Strategic Options; Survey

5 Analysis

"Skepticism is the ability to oppose phenomena and concepts in every thinkable way"
- Sextus Empiricus

This chapter will commence in the clarification of the adaptive processes that show how the categorized strategy within The Delta Model is linked to execution. After this clarification, we will analyze how the industry influences the strategic options. From this stage on, we will go through the nine detailed parts of the PSP's value chain, as described in the empiric, and analyze how SCAP will add or create value to their customers. Finally, we will discuss which Key Success Factors that create sustained competitive advantage for customer-focused business models within SCAP.

5.1 Strategic Options

In a business with decreasing margins, there is no clear way to go to make money and still profit from experiences. A total customer solution provides opportunity to increase margins and to make use of production experience in order to provide, for example, "Just in Time" solutions that add value to customers. The choice of strategy also influences the production since focus no longer solely has to be on cutting costs, but rather to develop efficiency in production flows and management.

The choice of a total customer solutions strategy is a natural way to develop business, since the scope of production is getting broader through the acquisitions of additional companies. SCAP is expanding horizontally through these acquisitions, but also vertically into activities previously performed by the customer through synergetic effects of the acquired companies. In figure 5-1, we describe how the cases within SCAP are utilizing different adaptive processes according to the Delta Model, i.e. how the strategic options are executed. The acquisitions previously mentioned influence the barriers of entry through a broadened product portfolio and through more intertwined connections to customers. Through strengthening the bond to the customer, the barriers of entry into the industry increases due to the difficulty involved in duplicating relations to customers, and the way that they were formed.

Adaptive Process/ Company	SCAP Värnamo	SCAP FPS	SCAP Pollokshaws
Operational Effectiveness	Focus on production to cut costs. Trying to improve customer economics through structural and graphic design.	Improving customer economics through single supplier solutions and offering logistic possibilities such as production management etc.	Improve horizontal linkages in the components of total solution. Improves customer economics through specialization of production, services and logistic.
Customer Targeting	Geographical spread to obtain low cost of distribution with a focus at scope.	Extensive relations to key customers. Exploring opportunities like Flextronics and Volvo to add value.	Exploring alliances to offer extended bundled solution. Accepting activities previously performed by customer through close relation to customer.
Innovation	Develop customer- focused product portfolio with focus on high technology segment.	Increasing customer lock-in through learning and customization. Expending value chain of customer.	Creating customer lock-in through owning commodities and through customization and learning.

Figure 5-1 Adaptive Processes; SCAP Cases

There has been, as mentioned above (Apel 2001), discussions about the existence of hidden understandings and division of the market between large PSPs, so called cartels. Value innovation, as described by Kim and Mauborgne (1999 a,b), suggests that the only way to make business today is to focus on customer needs and wants. A cartel is one way of doing this since it enables a company to focus solely on the customer and disregard the competition. If a cartel has been a fact in Sweden, this could explain why the customer focus in Värnamo is much higher developed than Kalling (2001i) reports it to be in the UK & Ireland. The lack of competition would enable focus on customer to a much higher extent than possible in countries where battles have to be fought against competitive opponents. The interesting question is instead why SCAP Värnamo and the rest of the Swedish division have not progressed more in this, customer-focused aspect. There could be two answers to this question, one, the lack of competition makes the company slow in developing new businesses, since there is no real competition and two, all changes have to be customer initiated and therefore, the development of new businesses is dependent on customer demand. A comparison worth making is that ICT-companies, in the end of the 90s often supplied highly sophisticated solutions that were in lack of customer demand. Another example, could be the telecom business where new solutions are offered at such a high pace that one of the hot products with consumers today, SMS, is regarded as "stone age technology".

Value Migration

There are, apart from the large competitors, literally hundreds of smaller actors that compete on local markets (Kalling 2001i). The existing competitive situation means decreasing margins and a wish of driving the business into other directions. A circumstance that adds to the competitive situation is that, as Strand (2001) puts it, "Any idiot with money can produce brown boxes". The choice and development of a customer-focused strategy may change the rules of the game completely. Instead of battling along with product quality and price, most of the competitors seem to be recognizing the fact that there is money to be made through adding on different kinds of services to the original product, the corrugated box. For SCAP it has become the time to be loud and clear about what the company stands for and to take advantage of synergies existing in-group. Examples of such synergies are the co-operation of structural designers, both plastic and corrugated in Värnamo, as well as the business in Pollokshaws and the Czech Republic. As Price (2001) puts it, "There is great strength in a bundled offer when deployed".

Most of the PSPs are experiencing slow organic growth and in some ways intensified competition. However, the largest threat to the survival and continued prosperity of these companies lies in the fact that the present cash cow, the undifferentiated brown box, is beginning to show signs of what Slywotzky (1996) describes as value migration. Value is transferring from traditional businesses to businesses redefined as customer focused. Clear signs of this change being the margins in the traditional box plants, on average being only about 5,1 % (Kalling 2001b), while the margins of both Pollokshaws and the box plant in Värnamo exceed this average margin by far. Similar trends can be observed in the activities of competitors, many of who are rearranging their business models to keep up with the changing demands from customers, as well as the pressure from the competition (Figures 5.1 and 5.2). Our survey and the categorization of different strategic options, as well as our categorization of the cases, suggests that PSPs already are at a customer solution focus, an approach that can be viewed as an answer to commencing value migration. Both Strand (2001) and Kalling (2001i) suggest that PSPs are traditional and as Normann 1975 (1984) points out, not inclined to change because of earlier successes. In our view, these facts suggest that the PSP will change, although, in most cases, not at the speed needed. Any company that takes the lead in this process of change may have a competitive advantage that enables above average performance and profitability.

The choice of a total customer solution strategy is a way to turn value outflow, the decreasing margins of production-focused business, into value inflow, increasing margins through customer focused business models. Offering logistics solutions provide a way of changing the business one step further before all competitors have finished moving into product related customer-focused business models. This extra change, daring to change before the pack, seems to be a conflicting issue to SCAP. On one hand, headquarters in Brussels wants to

initiate changes (Price 2001), on the other hand, the spread of the organization makes it difficult to maneuver.

New Entrants

To be able to lead the way in this struggle for market supremacy SCAP must, according to Slywotzky's theory (1996), try to change their business models even more than the competition and a sign of this is to be viewed in the Pollokshaws operation. Value has to be added to the product in different ways and perhaps new ones, so that customers are tied to the supplier for different reasons than the ones Apel stated. Packplanet's attempted attack on the value chain of PSP's, showed important weaknesses in the old business structure and that the threat of commoditization of the undifferentiated box was imminent. To defend themselves, SCAP must choose to increase the bonding with the customer through making the solution provided contain much more than a box and the specific design solution connected to it. The box should become the Trojan horse of PSPs since it is the only way to get in touch with the customers in the first place.

Virtual PSPs are still a very potent and tangible threat to traditional PSPs. In many cases, virtual PSPs went bankrupt during the death of dotcom. If they had succeeded in acquiring capital, they would have posed a severe threat to different PSPs. There is a possibility that in the next wave of eligible risk capital, virtual PSPs will stand in line waiting to cut in on some of the segments of the corrugated business. Examples of such companies are Packtion, an American company that cancelled their operation in the mid 2001, before loosing all of their capital, Empriva Technologies that still is in business in the USA and finally, Packplanet that seized to exist during 2000. In terms of the value chain, Packplanet would have launched an attack on the end of the production and beginning of the service part disintermediating the internal networks and structural design to commoditize these parts and, as a consequence, the corrugation. As an isolated disintermediation, this poses severe problems for SCAP since structural design is an important competitive advantage (Figure 5.3). The loss of this advantage would mean that SCAP moves into a segment of constant price battling and rapidly decreasing margins. As a defense, SCAP would provide a total customer solution and hence, being able to avoid this threat. Close bonding and interaction between customer and supplier, along with the offer of different logistics services make SCAP more than a packaging provider. Then, what companies like Packplanet would have been forced to overcome was the intimate and efficient underway operation between SCAP and its clients. Packplanet, in the latter case, would have been dedicated to a market of, at least in the future, lesser interest to SCAP. This in turn refers Packplanet to existing solutions in low margin segments and without ability to interrupt the serving of total customer solutions.

To defend itself from virtual PSPs, SCAP is able to use several methods, one being the increased bonding with customers, others increasing the width of the product portfolio or initiating external alliances and networks. The best line of defense, at least when looking at

attacks from virtual PSPs or TPLs, would be to increase bonding with customers to a level where attacks on the value chain becomes irrelevant or at least not crucial to performance. Kim and Mauborgne (1999a,b) describe this as a quantum leap in value. We perceive it differently. Value does not increase but disintermediation or attacks lack importance to the customer, since they are locked so far into business with the supplier, in this case SCAP.

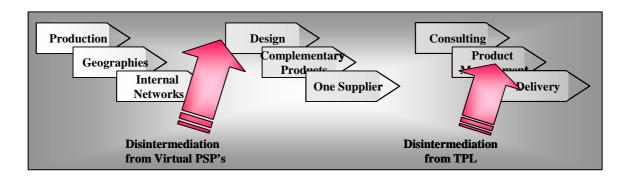


Figure 5-2 Disintermediation and Attack on the PSP Value Chain

There is also the threat of TPL's entering the business of packaging, substituting the solutions offered by SCAP and attacking the logistics part of the value chain, in both product management and delivery. This threat is to be taken seriously, although, in defending these parts, packaging solutions are much more than logistics and the logistics involved are intertwined with the construction and production of the corrugated box. The added effect of a TPL provider would be to transport goods from the customer to the customer's customer. SCAP, today, already provides logistics solutions to customers, both through external alliances, as Schenker and Greencargo, and through in-group capabilities. SCAP views the threat of TPL providers as minimal or, as Wendel (2001) puts it, "the leap from TPL into the packaging industry is larger than the step from the packaging industry to TPL". The total customer solution enables flexibility in actions taken as response to market development. Since the strategy is customer driven, based on the demand or need of the customer, expansion of logistics is an opportunity, and as Wendel (2001), Strand (2001) and Price (2001) all put it, not a very large leap for SCAP. The strategy also influences the possibility of entrance for TPL providers since a major step into TPL already has been taken by SCAP, as a response to the customers needs. Management of production, forecasting, warehousing and "Just in Time" deliveries to customers are all examples of this.

We think that it might be possible to create lock-in or lock-out effects (Hax &Wilde II 1999, 2001), through using networks as competitive tools. One example of this is the possibility of coordinated operations with a global label maker in the Czech Republic. Through this operation, SCAP is able to extend their offer even further and lock out competitors who do not have this extended ability. At the same time, customers are locked in when no other suppliers have this capability. Another network of this kind could be the cooperation between SCAP, Schenker and Greencargo. Through such a network, SCAP is able to extend the

logistics offer much further without heavy investments. Through creating networks with significant actors, it is possible to consume the time that this actor has to form networks with others (Gulati, Nohria and Zaheer 2000). This is a possibility in the case of interesting new solutions, such as RECOPAC. Through locking in LINPAC in a time consuming alliance, it is possible to exclude competitors from accessing an interesting segment or solution. Another way is to agree on exclusivity and this could be a possibility in alliances with global TPLs. Through agreeing on exclusivity, as presented by Gulati, Nohria and Zaheer (2000), the TPL is prevented from entering other alliances or business where SCAP is present. Although in the same sentence, it is possible that this alliance prevents the TPL from competing with SCAP competitors. Firms with great bargaining powers might try to avoid this kind of exclusivity through creating multiple alliances.

Substitutes

The case of RECOPAC, where a single solution, in this case: Reusable packaging, threatens the existence of a product segment. The fast moving consumer goods shows that SCAP should carefully consider if there is a future in the specific segment. In this case, we believe that the future is unclear. Today, the segment provides the bulk of the corrugated business (Strand 2001), but not the bulk of profits. Perhaps this segment could be abandoned in favor of entering the business of substitutes to cover this demand: Perhaps focus could be turned towards capital intense consumer goods and other kinds of electronics, i.e. more profitable segments. SCAP, through the strategic positioning in the business models presented, is not bound by just supplying a product and is therefore, in the event of a powerful substitute, able to act with flexibility if all of the organization is willing to adapt a total customer solution strategy. The RECOPAC solution is especially interesting since it threatens a complete segment through being all that a corrugated box can be and more. The public opinion must be taken serious in this respect. Reusable packaging is not considered as a large threat to the environment as that of corrugated boxes.

The total customer solution strategy makes substitutes, as much a possibility as a threat, either ridding the company of redundant business or providing them with new profitable ones. New solutions can be included into business through external suppliers or networks, as long as SCAP is aware of the benefits of such solutions. This means that additional customers can be tied to SCAP through vertical integration into value systems with an offer that was not possible before the emergence of the substitute. It is about not being caught with the guard down and releasing prestige on behalf of profit meaning that possible substitutes should be carefully examined and the impact of them analyzed.

Defense against a substitute is more difficult than defense against, for example, a virtual PSP, especially when the use of the substitute is initiated through public opinion. The defense, we believe, is based on the choice of segment, and in the product portfolio. Not all segments are worth retaining. When a specific segment is less inclined to make use of the value added

capabilities that provide increased margins to SCAP, this segment has to be reviewed carefully. Broadening the product portfolio is another line of defense, pursued, either by existing capabilities, or by new acquisitions, there are for example traditional PSP that have establish reusable packaging system (Appendix 2). However, we believe that the role of the fast moving consumer goods industry has to be considered even though the large companies in this industry are substantial customers to SCAP. The increase in margins lay, in our view, in other segments.

Barriers of Entry

Through choosing the strategy of a total customer solution, exiting can be avoided although barriers will not decrease since there still has to be a tie to production. New business opportunities will occur because of value added services being incorporated into the business. The choice of a more customer-oriented strategy will also have an effect on the exiting barriers. Firstly, more services provided, the less dependent the business may become of capital intense production. Goods can be bought through external suppliers that become commoditized and less investment into new production possibilities has to be performed. Secondly, the competitive situation makes exits interesting opportunities to acquire geographically interesting businesses and enter markets previously dominated by competitors. Increasing the barriers of entry will influence the profitability of SCAP, since customer lockin will occur and competitors, or potential competitors, will have problems in snitching customers from SCAP. The chosen strategy implies tighter bonds to customers and thereby, increasing switching costs for them, thus, increasing the unwillingness to switch supplier. These factors could, if pursued properly increase margins for SCAP through the possibility of invoicing services. The fact that SCAP is an integrated part of the customers business and hence provides substantial value that customers are willing to pay for.

Customer Bargaining Power

Initially, the customer has the freedom of choice. When customers want a packaging solution, they are able to scan the market for a proper solution at the right price. Depending on the specification of the solution and the price of the product to be packed into it, price becomes more or less important. The more expensive the product the less important the price of the solution becomes, e.g. the packaging of food vs. computers. Depending on the transportation distance and cost, the solution becomes important in respect of the degree of filling since the transport of air comes at a high price.

The choice of a customer-focused strategy decreases the bargaining power of the customer. This might sound as a disadvantage to the customer, however, we perceive it the other way around. Through close connections, the customer ensures the possibility of focusing strictly on their core business. It becomes the interest of the supplier that the customer's business is thriving. In the same way that the customer is bonded to SCAP, SCAP is tied to the customer.

If the customer could acquire the complex production information needed to go elsewhere, the bargaining power of the customer increases rapidly and the profitability of the producing company is likely to decrease. This type of bargaining power was the business idea of Packplanet and could mean the decrease of margins of the PSP. In the case of a total customer solution strategy, this information might as well be delivered by SCAP to the customer since the specific packaging solution, i.e., the corrugated box represents such a small value. The services added would in this case be of a much higher importance to the customer.

By a simple product, we indicate a standard corrugated box with little, if any, printing or added features. Since it is much easier for a customer to choose another supplier of the box, the customer in this case is probably much more sensitive to pricing. A large customer that is in need of a simple solution could in this case exercise major bargaining power and hence influence profitability for the producer, a problem that in SCAP's case could be avoided through the deployment of a total customer solution. Since it is SCAP policy to never compete with price alone, the total customer solution is a natural development. The business of simple solutions is, however, still the main business of SCAP.

5.2 SCAP Value Creating Activities: Production

Production of vertically linked corrugated sheets and boxes is the backbone of the SCAP business and has been so since the start of the packaging business. In order for the organization to be able to move further down the value chain of the business in SCAP, it is important to have the support of production capacity, even though this capacity does not contain any advanced value adding activities. This string of the value chain represents between 75-80 % of the turn over in SCAP, whereof a large portion is coming from the fast moving consumer goods industry.

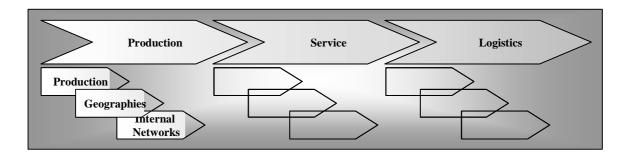


Figure 5-3 Activities in Production

Production: Production of packaging material.

Geographies: Geographically dispersed production facilities create value to customers.

Internal Networks: Integration between corrugation and other product-areas in-group to achieve raw material neutrality, structural and graphic design supports production efficiency.

Production

For a long time SCAP has had focus on increasing internal efficiency, a process that is still going on, Strand (2001) provides many examples of this mindset. In Värnamo, the roots from the industrial age with norms and beliefs and the rational thinking directed towards production is clearly visible, goals are set up in terms of production quantity and quality and not in terms of, for example, customer satisfaction. The long experience from production is in itself also a valuable, although not rare, resource. However, the deployment of this experience may very well be a competitive advantage, since the experience in production and of production flow of materials for packaging makes the company well suited to understand the customer and provide the customer with consultation concerning specific packaging solutions. In this way, SCAP already embodies an embryo of knowledge that could be further utilized in expanding the offering.

Geographies

In Barneys (1991) view of RBV, the geographical spread of SCAP is extremely costly to imitate, especially in the current market situation when large companies, taking part in the race for market shares, are trying to acquire everything in view that may be profitable. The geographical spread is also valuable in the sense that the spread provides access to large customers with Pan European businesses. This resource of owning production facilities is however, neither rare (other large companies are, according to our survey, organized in much the same way), nor efficiently organized. The geographical spread is an important resource relative to the competitors, but it is not in general providing a sustainable competitive advantage.

When viewing this spread from a customer focused perspective, the advantage becomes more visible, markets are already penetrated and the name of SCA is well known. This in turn leads to the possibility of deploying customer focused business models, where applicable. Although, in some countries it may not be possible in an open manner due to culture, as in the Czech Republic and Hungary, where the pressure is laid on the supplier to deliver only specified goods and not adding services (Price 2001). The geographical spread should primarily be focused towards companies and countries where profitable segments, such as electronic equipment, are located. The reduction in production costs through geographical location should in this case become a secondary issue.

Internal Networks

Backward integration of production capacity is an important resource for SCAP. Through this integration, SCAP minimizes the risk for disturbances in deliveries, both to production and to the customer. The integration is effectively organized as well as valuable and costly to imitate, but not rare. According to our survey, other companies do this as well, many of them have their roots in the forest industry like SCAP.

Diversity in the product portfolio is a resource that enables SCAP to offer highly complex packaging solutions as well as material neutrality. To have this resource in-group means great flexibility toward customers. But there are problems since both Price (2001) and Strand (2001) mention that synergetic effects from acquisitions are rare and that integration of newly acquired business is generally slow, most new businesses are more or less left alone and the only thing really changing through acquisitions being ownership. In FPS, synergies are utilized when structural and graphic designers from a box plant are used for specific business solutions and in Värnamo the cooperation between structural designers of both corrugated and plastics is proof of synergies at work.

When providing a total packaging solution to customers, diversity is necessary. The diversity of the product portfolio today, is however, not a result of a conscious acquiring strategy; i.e. the companies acquired were not acquired because of their fit in a grand scheme, but rather because of good economic performance and profitability. This was the way that SCAP acquired Pollokshaws. We believe that it is essential to SCAP to create a strategy for acquisitions, a strategy that should include asking questions; in what business are SCAP, where could they be and how should they behave in order to get there. Today SCAP looks much like a quilt piece patched on as they go along. This is a harsh way to put it since the focus is on acquiring production units. Still, acquisitions should be carried out in harmony with the strategy of choice.

To efficiently make use of capabilities in-group, the sales organization needs education regarding the offerings possible to deploy from SCAP. Knowledge of this kind is not as well developed on a local level as on Pan-European level. This is however, not the only area with a need for change since the bonus system today is being directed towards production. For the customer focused business model to be successful, remuneration needs to be connected to sales rather than production. The sales force must have incentives to promote all of the SCAP capabilities instead of just promoting the local production facility.

5.3 SCAP Value Creating Activities: Service

SCAP began adding service to their production many decades ago and the acquisition of FPS in 1969 is an evidence of this. The service segment of SCAP business is growing rapidly with an increasing focus on customer needs. Today, diversity of the product portfolio, advanced construction and graphic design enables leverage as a single supplier.

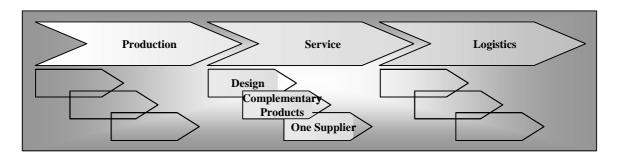


Figure 5-4 Activities in Service

Structural and Graphic Design: Adding value to customers through specific solutions. Inhouse solutions provide value through proximity and minimizing the number of remakes necessary in production through entering the customer R&D earlier.

Complementary products: Through supply of additional products supply SCAP creates customer lock-in.

One Supplier: Creating integrated sale-teams in order to solve customer demand. Pan-European sales organization coordinates sales activities to larger customers. Through synergetic effects, SCAP is able to manage a bundled solution to become a single supplier of packaging solutions.

Design

Today, design is considered a competitive advantage for SCAP in enabling specific customer adapted solutions in an integrated way. SCAP tries to develop structural design in order to maintain competitive advantage. We believe that if SCAP chooses to add more value to the product, there is a possibility that the importance of structural design may decline. It may no longer be crucial to have the skill of the designer, since so many services are added to the offer and the value of the structural design therefore decreases. The other side of this coin is that most logistics is based on a packaging solution that actually works. Without the solution it will not be possible to maximize the efficiency of the production flow, the warehousing, or the degree of filling. The development of structural design is in large parts dependant on the experience of the individual designer. Experience is, according to Strand (2001), the basis of the structural designer's skill and it is achieved through many years working with corrugated production. Design is an important part of the offering and therefore viewed as a resource valuable to the local production facility. Every single unit develops their own level of design

knowledge in order to be able to serve customers, although it is possible to share knowledge through Intranet solutions and through coming business system solutions, such as the DART. The Intranet provides information on previous technical solutions. DART is focused on the design and display of boxes and is an important resource when trying to achieve sustained competitive advantage.

The possibilities of design of corrugated material could be said to be in different levels where value is added or created for a customer. The first level is of importance when looking at production. The core function of structural design is to enhance production efficiency and thereby enables an offer of a competitive price to the customer. Since SCAP has as policy to never compete with price alone, other ways of adding value become of interest. In this level of structural design there are possibilities to meet customers demand with different solutions.

A critical resource is the knowledge gap between supplier and customer of the packaging solution itself. Through the information of customers' specific packaging solutions, a bond to customers could be established. Hence, it is a value in itself to be on the supplier list when customers look into new packaging solutions. Other PSPs are offering packaging solutions in the same way (Appendix 2).

The integration between corrugated board and other materials provides the possibility of integrated solutions not limited by material. This could be considered the third level of design. SCAP, David S. Smith, International Paper and Kappa all have a material neutral status today (Appendix 2).

Other ways to create value is to offer complex packaging solutions, such as in-house concepts, like the solution between SCAP and SCA Hygiene in Västra Frölunda. In-house solutions are a win-win situation, that create value to customers through co-production in order to relieve customers from activities that are performed badly or that can be performed better by a supplier (Ramírez, 1998). Through entering the customer's activities earlier in the value chain, the number of remakes is likely to decrease, which reduces customer's R&D costs. Another advantage of entering the customer's value chain at an early stage is the possibility of an active discussion regarding both structural and graphic design. This discussion reduces the probability of the supplier having to reconfigure the suggestions delivered by the advertising agency utilized by the customer. The interaction between the customer and the supplier implies that it is not only important to make the offerings more intelligent, but also to make the customer more intelligent as well. Co-production results in stronger bonds between producer and customer and is a favorable way of offering solutions when the competition increases. Normann and Ramírez (1993) claim that this means less competition between companies than competition to get the attention, time and money from the customer. Since a single company rarely provides everything that is needed to satisfy customers anymore, the most attractive offerings will, in order to create value, consist of an interaction between customers and suppliers. SCAP is almost alone to offer this kind of packaging solutions even though David S. Smith seems to have something quite similar (Appendix 2).

Complementary products

When the offer provided is expanded through different kinds of merchandise like tape, labels, etc., the customer becomes alleviated from looking at single aspects needed for their packaging. Other complementary products are machines and workstations for packaging. We have found that this is not just been offered by SCAP, it is also something that is offered by other PSPs as well (Appendix 2). When a PSP such as FPS looks into customer's production and adds more and more merchandise the supplier's integration into the customer's production result in a downstream movement in the value chain. This, in turn, means that FPS can design and adapt a proper packaging solution for the customer and results in a stronger bond to the customer.

Complementary products could also focus on customer's products as in Pollokshaws/The Czech Republic. Through supply of additional products used by the customer's customer, value is created through integration into customers' activities, i.e. product offer. This integration results in a downstream movement in the value chain as with Compaq. Value is here created through control of commodities such as cords and country kits and even extended in the future with keyboards. However, the value could be extended even further. Through possibilities to combine movement both upstream and downstream within the value chain, value creation can be established. The relationships between the actors will then result in a simultaneous creation of value, rather than a sequential one as in the traditional value chain (Wikström & Normann 1994). Value creation is a great opportunity to strengthen the bonding between customer and supplier. This is something that already is done partly at the Pollokshaws/Czech Republic and could be extended in the future.

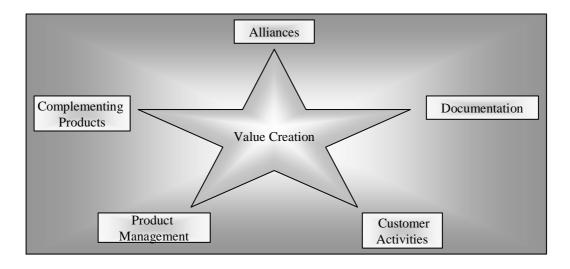


Figure 5-5 The Value Star of SCAP Pollokshaws/The Czech Republic

The value will, through value creation as in the value star, according to Wikström & Normann et al. (1994), be improved and it forces the company to be active in every activity that takes place in the customer's value creation. This is not something that is fully achieved today. Through closer bonds and extended integration, the PSP achieves the knowledge of what could be the next activity to include in the current offer. Normann and Ramírez (1993) claim that what a company must consider is not only the potential of its main assets, the knowledge base and the customer base, but also the creation of a better fit between the company's competencies and the value creating activities of the customers. This is all according to the strategy of Pollokshaws/The Czech Republic when putting the customer in focus.

One Supplier

To be able to provide a "one stop shopping" approach, it is critical to create integrated salesteams and to utilize their knowledge of sourcing and possibilities in-group, especially at a local level. Through synergetic effects, SCAP is able to manage the transition from an unbundled to a bundled offer in order to become a single supplier of packaging solutions. Value is sliding from being very static and tied, to one product to getting denser, i.e. containing many more variables than before (Normann & Ramírez 1993).

The internal co-operation combined with sourcing results in a complex solution that reduces the time customers spend on different suppliers, which in turn causes a reduction of transaction costs. Normann and Ramírez (1993) claims that boundaries are becoming more permeable and overlapping and co-production means bringing firms together to view new partners as organizational resources instead of threats. In the case of Pollokshaws/ Czech Republic, there is always a process of looking for new partners to enable extension of the existing offer. It becomes increasingly difficult for the customer to change supplier when integration has occurred. Switching costs increase by the complexity of the packaging solution. The more complex the solution, the more dependent the customer is of the supplier, this implies the occurrence of a customer lock in situation. In turn, this means heavy transaction costs for the customer, if disrupting or de-bonding the situation.

5.4 SCAP Value Creating Activities: Logistics

Logistics solutions are a growing part of SCAP business. The packaging business itself contains the implicit need of logistics skills since many customers want delivery in a "Just in Time" fashion. SCAP has the possibility to provide logistics solutions even to the customer's customer, through alliances and external networks, even though this is not done today. The skills required to present logistics solutions are acquired through experience and knowledge of production flows.

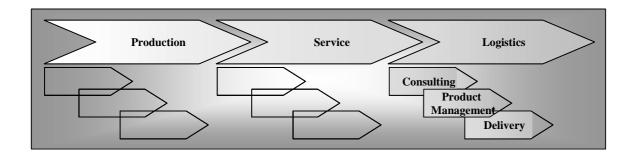


Figure 5-6 Activities in Logistics

Consulting: Increasing customer production efficiency through consulting efforts, such as identifying and minimizing the number of suppliers, different types of packaging materials and solutions.

Product Management: Forecasting, procurement and warehousing are parts of alleviating customers of activities that are not their core business. Product management is concerned with controlling the integrated flow of production between customers and suppliers.

Delivery: Delivery Continuum, level of complexity from delivery to customer (low) to instore detailing (high).

Consulting

Consulting is the first step into providing an integrated logistics solution to customers, increasing bonds and switching costs and co-produce value, as described by Normann and Ramírez (1993). Through the supply of consulting services, SCAP gets an in depth understanding of customers' business and value creating processes. Sales personnel have an important part in this, since providing solutions to packaging related problems through their knowledge of capabilities in-group could be viewed as their daily work, as in the case of FPS. Wendel (2001) states that, in business with Volvo and Flextronics, the consulting role of FPS and the ability to manage production flows from a packaging perspective are imperative. Through consulting efforts, SCAP secures bonding with the customer and adds on to services already performed in order to add value to the offer provided. There is an enormous potential in offering consulting services since most companies throughout the world, except service companies, at one time or another must package their product. High quality consulting will doubtlessly save money for producing companies through increased efficiency and enabling focus on core production. Viewed from a resource perspective, consulting is a rare and valuable resource. However, since the resource is built mainly on production knowledge, other producing companies could be able to perform such services. From an industry perspective, the performance of consultant services could change the competitive landscape. The knots tied with customers grow stronger and thereby exclude competitors from the game.

When SCAP act as consultants, they are backed by a well-known brand name, a fact that we believe makes it easier for a customer to enter into close co-operation. In our view, this poses interesting possibilities for future consulting work. It could be possible for SCAP to engage in a completely separate enterprise, only promoting consulting services. The upside of this solution could be increasing margins at a factor rate, while at the same time, decreasing the exposure to the financial risk common to PSPs. The downside could be threefold. Firstly, the consulting firm would not have the backup from a powerful production network, a risk that is acceptable to a consultant only providing solutions, although this would consequently mean loosing competence. Secondly, SCAP would not have the built in profitability in every step of the process, from raw material to the finished and delivered product. Money would be earned through only one discrete activity. Thirdly, the lack of direct connection to production would impair consulting, because the idea is to be able to provide complex packaging solutions through a simple and connected flow from SCAP to the customer. Only providing consulting services could mean loosing customers, as well as focus, as the idea of consulting is to prevent multiple suppliers and to facilitate single supplier solutions. Instead of being able to solve the customer's problem, a sole consulting firm could be tied up in arranging delivery and supply from several actors.

To be able to get compensation for consulting, SCAP has to be able to charge services performed in one way or another. Two alternatives exist: First, services can be charged separately, and second, they can be incorporated into the cost of the physical packaging. The first alternative is simpler in many ways, although customers have to be convinced that they need the services offered. It is easier to be upfront with costs and the customer-supplier trust will also increase. One downside to this could be that margins will be cut and that extreme performers will experience lowering margins, another downside is that, as Wendel (2001) expresses it, "The box is the soul of SCAP". This could create reluctance to change both on a local and on a Pan-European level and make customers less eager to incorporate services into the existing SCAP business. The second alternative is a smoother way for SCAP to cover the margins induced by offering services, but perhaps hinder them from achieving the full value of the offer. In the light of the box as a Trojan horse, however, the second alternative is to prefer.

Product Management

Product management contains three large parts, forecasting, procurement, warehousing, and one smaller, co-packing. Within the SCAP organization, this type of knowledge provides a unique opportunity to create value for customers, as well as for SCAP. Product management provides SCAP with unique opportunities to bond closely to customers. Kim and Mauborgne (1999a,b) are talking about the possibility of a quantum leap in value and product management may very well be the opportunity for SCAP to take this leap. Product management is a key to customer lock-in and competitor lock-out, as described by Hax and Wilde (1999, 2001). Product management is also a possibility to increase margins in the

company through 1) Enabling the invoicing of services and 2) Increasing the value of the product provided without any additional investments on behalf of SCAP.

The integration between SCAP and customer production flows intertwines the customer and supplier organizations and makes them mutually dependent upon each other. Forecasting and procurement are closely linked to production, whereas warehousing is a service provided so that customer will not have to secure supply of packaging material themselves. An example of warehousing is the one FPS provides for Flextronics, where an intermediate warehouse is put into operation to provide a buffer for the "Just-in-Time" agreement between SCAP and Flextronics, a solution that provides security for both parties.

The development of an ICT instrument for production management in Pollokshaws may prove to be an important competitive advantage, when entering the offering of logistics solutions on a SCAP level. The instrument, when written into an SAP/R3 platform, will be easy to spread in-group and provides an important tool for competing, as well as preventing value from migrating towards competitors. The solution presented in Pollokshaws is, to the best of our knowledge, unique among PSPs and it may be the way for SCAP to change the rules of the game enough to create a sustained competitive advantage. Another advantage of the system is that it was developed through years of experience of working with production management, making it difficult to duplicate.

Co-packing is another possibility of closing the gap between product management and delivery. Bonding between customer and supplier becomes tangible since SCAP personnel would be on location participating in customer operations. The co-packing solution would increase switching costs, since SCAP would be at the end of customer production and thereby being able to exert some bargaining power in negotiations. In addition, there would be mutual dependency regarding performance, e.g. if the customer performs badly, SCAP would be out of business at that location and if SCAP performs badly, they would both be out of business.

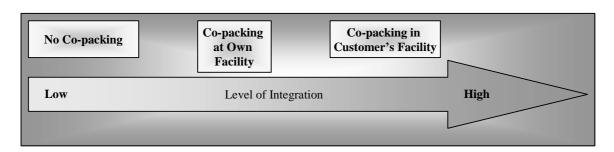


Figure 5-7 Co-Packing Continuum

Co-packing is not performed by SCAP today in the highest level of the co-packing continuum (Figure 5-7), but is a possible road to take if SCAP wants to tighten customer relations even further. In the Pollokshaws Compaq-operation, co-packing existed in the sense that SCAP

Pollokshaws packed complete "country kits" and then delivered these to the customer. The downside of co-packing is related to the upside. In tightening relations, SCAP becomes less flexible in operations through the employment of personnel for co-packing purposes.

Delivery

Delivery from production to customer is best described as a continuum of opportunities for both customers and SCAP. The continuum, as described in figure 5-8, spans from a very simple, outsourced delivery to a customer that warehouses the goods itself to a highly integrated delivery solution for SCAP that includes in-store detailing services as well as ownership of the distribution network. The latter provides endless possibilities for SCAP regarding the logistics solution provided to customer; i.e. taking over everything that is not customer core business and providing multiple services. In the highest level in the delivery continuum, the solution will result in customer lock-in and competitors lock-out. Complementors in the packaging solution, such as TPLs, will be utilized until the third level of complexity in the delivery continuum. After this level, no logistics complementors are utilized since the ownership of the resources needed is in the hands of the supplier. The only PSP we have found performing this today, is International Paper (Appendix 2).



Figure 5-8 Delivery Continuum

The problem facing this complete solution is that it is very expensive to control and operate a distribution network with literally thousands of contact nodes, all having to be supplied for a single customer. Another problem would be that this service has to be provided to many customers with many different contact nodes, which increases the size of the network by a factor. These shortcomings may overshadow the benefits if a complete network is acquired. We think that it is questionable to have this type of solution in-house since the complexity of the operation may draw attention from core business. Through sourcing this delivery solution, there will be less exposure to financial and organizational risk for SCAP. Sourcing the delivery solution provides possibilities to work with the top local delivery providers, instead of having to expand the company delivery network through further acquisitions.

The solutions that SCAP is operating today are the simple delivery to customer, concerning firstly smaller customers with little or no demands on fitting delivery into production. The "Just-In-Time" based solution is used for customers demanding fit between delivery and

production, such as Flextronics and Volvo. The simple solution is actually the one most frequently used where customers themselves are warehousing packaging materials. "Just-In-Time" based delivery demands fit throughout SCAP value chain to enable cost efficient and fitting supply of packaging material to the customer. This end of the value chain demands fit through geographic location, maximization of the degree of filling, usage of the right kind of materials, supply of the right kind of packaging at a given time and the right product management to enforce all of this. Value is created, or actually co-produced, through decreasing the investment of capital on behalf of the customer as well as securing delivery fit into production. SCAP, in the case of Flextronics, manages this fit through establishing intermediate warehousing, a solution that is an opportunity to satisfy other customers' future demands.

Delivery is the part of the logistics where external alliances and networks are the most likely to occur, the apparatus needed for handling delivery internally is very expensive and time consuming to establish. Today, only local agreements, or at least national ones, are closed to ensure that the exposure to risk stays at a minimum. Effectiveness of such alliances is essential to the success of logistics solutions, especially when SCAP provides "Just-In-Time" to customers. This is also, in our view, the only possible entrance of TPLs into the business of PSPs.

5.5 Key Success Factors

Below, the reader will find the key success factors in the selected SCAP cases together with the strategic options according to the Delta Model.

SCAP Värnamo, Total Customer Solution

Production: Long-term experience from producing and converting corrugated products resulting in production efficiency.

Design: Development of design, both structural and graphic, to fit production and adding value to the products.

Responsiveness to customer needs/ Flexibility: Openness to new solutions and innovations.

Förpackningsservice, Total Customer Solution

Product portfolio: A diverse product portfolio provides possibilities to supply customers with nearly everything from the simple product to the complex packaging solution.

Knowledge of Product Management: Knowledge and control of production flows concerning packaging materials renders FPS possibilities to act as consultants.

Coordination capability: Ability to provide bundled offers and act as single supplier of complex solutions even for goods not available in-group.

Sales force knowledge of group capabilities: Knowledge covering a wide span from small customers to the very large, as well as from simple to complex solutions. Sales force must be able to provide solutions from the entire SCAP group.

Market coverage: Through acting as a superior sales organization, without the pressure from production related bonuses, it provides opportunities to sell SCAP group production instead of giving priority to the sale of own production, hence optimizing group profitability and increasing customer value.

Pollokshaws/The Czech Republic, Total Customer Solution

Fine printing capability: Within SCAP, this unique production capability provides added opportunities in offering a complete packaging solution.

Product management capability: The ability to manage flows of packaging materials in production adds value to the fine printing capability.

Customer responsiveness: Ability to serve and develop businesses together with customers.

Utilizing synergies: Pan-European project aiming at utilizing synergies from different capabilities within the SCAP group. One effect of this could be the ability to serve the customer as a single supplier.

6 Conclusions

The chapter contains a summary of our analytical findings and answers to the questions posed in Areas of inquiry. After this, we suggest aspects that we believe have to be considered by SCAP to become a successful PSP. We then discuss critical aspects of our thesis. The chapter is concluded with suggestions for future research.

In the beginning of our thesis, we saw that SCAP had chosen customer focused business models in order to enhance growth and, because of this, management had to promote and initiate new ideas into the organization. The small projects that started this way are today responsible for less than 20 % of the turnover in SCAP, but they are steadily growing and looked upon as a possibility for future growth in the organization. By doing this, SCAP are moving from a market with fierce competition and the risk for commoditization of the product into a more differentiated market with higher margins, but at the same time more complex packaging solutions.

6.1 Answering the Questions

How do the identified business models within SCAP create a higher value for the company and for their customers?

Co-dependency: Through creating stronger bonds with customers, a lock-in situation is created. Performance of both parties becomes essential since businesses are intertwined.

Focus on core competence: The customer's ability to focus on its core competence enables SCAP to receive a higher premium for services provided.

Synergetic effects: Through the SCAP ability to offer solutions that are complex, customers benefit by being able to focus on core competence and by using a single supplier for their packaging need.

Changing businesses to suit customers: Responsiveness toward customer needs becomes a focus for SCAP enabling the utilizing of the full potential of the SCA group, as well as being open to new ways of doing business.

Invoicing services: Through invoicing services, separately disconnected from production, the market coverage is likely to increase, a benefit both to customers normally not inclined to use services provided by a large PSP and to SCAP.

Less vulnerability to attacks from substitutes and disintermediaries: By offering solutions that are more complex the "customer lock-in, competitor lock-out" creates bonding between customer and supplier that are hard to break. Through increasing switching costs, attacks are avoided.

What components or combination of variables are behind this increased value?

Synergies: Benefits from synergetic possibilities in the current organization provides increased value and future acquisitions can more easily be incorporated into the organization.

Focus: Customer orientation, as opposed to focus on production, provides value through increased flexibility and through moving into the value chain of the customer.

Logistics capabilities: The development and deployment of these capabilities provide value through expansion of the offering possible.

Sales force: Through increased knowledge, on behalf of the sales force, the selling of group capabilities will increase.

What Key Success Factors exist for SCAP in customer focused business models?

Roots in Production: The background in production of packaging materials is important for the ability to supply packaging in an integrated way. The production also provides security to the customer in terms of sustained deliveries.

Design skills: Design, both structural and graphic, is the key to sustainable packaging solutions that increase value for both customer, through ingenious solutions, and producer, through efficient utilization of production capabilities.

Sales force knowledge: To be competent, sell the capabilities of the SCA group. The knowledge of the sales force is imperative to be able to utilize all of the synergies possible within SCA group.

Using synergies/ Product portfolio: The diversity of SCAP is essential in providing the customer with a complete and complex packaging solution; existing and potential synergies are essential in the same way.

Perceptiveness to customer needs: To be able to deploy a customer focused business model, it is essential to be perceptive to what the customer needs and wants. The strict focus on the customer will also provide a possibility to minimize the competition. Knowledge about the customer's value-chain and production flows is a key factor.

How do competitors influence the existing KSF?

Commoditization of designer skills and production through disintermediation: Fast movers, such as virtual PSPs, are able to disintermediate into the value chain of SCAP. The only way to avoid this or at least to minimize the damage of it, is to choose the strategy of customer focused business models.

Customer responsiveness: If competitors enter the same road traveled as SCAP, margins in this, customer focused, segment will decrease. The customer will then be able yet again to put pressure on pricing.

Other PSP that create a lock-in: If a competitor first establish a strong bond to the customer, this results in a lock-out for SCAP and SCAP will not be able to deploy a customer focused business model.

Are there any visible trends in strategic options chosen by Packaging Solution Providers?

Customer solution focus: Most competitors are moving towards different degrees of customer solutions. This trend is clear and signals that SCAP is not unique. Other companies such as International Paper has even developed the customer orientation further through their transportation company Xpedx.

Expansion of solutions and value adding activities: Companies are trying to maintain their focus on production and add on services in order to change strategic focus from production to customer orientation.

6.2 Suggestions for SCAP

In order for SCAP to become a successful PSP some actions must, according to us, be considered. First of all SCAP, must stay in contact with the roots of the business, i.e. the production of corrugated board and boxes, since this can be perceived as a Trojan horse in which all of the services SCAP are able to supply are included. Without a connection, we believe that business will decline since there will not be any natural way of entering the customer's lair. It is also time to review business segments where the corrugated box runs a risk of becoming commoditized and where there are small possibilities to add services, i.e. the fast moving consumer goods industry. This review has to take the form of a cost/benefit analysis where benefits can be, for example, the increased learning of production flows, the maintenance of production capability and geographical presence. No margins and/or redundant production capacity may represent costs.

Furthermore, SCAP must increase benefits from synergies and make communication and knowledge sharing an integrated platform to increase the overall efficiency. In some cases,

this may lead to increased centralization of, for example, the sales force in order to increase knowledge of the overall capabilities of the entire group, so that customers can be met at every level of the organization and still be provided with a complete solution. The deployment of the FPS concept as a Pan-European project to handle, the sales and coordination of bundled offers could lead to synergetic effects, like the ones witnessed in Pollokshaws/The Czech Republic.

Although the production remains as the backbone or the Trojan horse, SCAP must be flexible enough to provide services without involving production. The providing of services brings SCAP closer to charging, not only physical products delivered, but also services performed. In the strengthening of bonds to customers charging services is a question of trust, letting the box carry the whole cost could imply attempt to cover up margins in a bundled invoice.

It is imperative when deploying customer focused business models to make customers dependent on the solutions provided. In selling the box to a customer, the customer chooses a solution through which they partially become dependent on the supplier, because of the information gap. This is where the box becomes the Trojan horse and the added services its soldiers. Through expanding into adding services, the customer get more entangled with the supplier. Through expanding into co-packing and logistics, the mutual dependency increase and it is possible to establish a more or less permanent relation to the customer. However, we consider the expansion into TPL and delivery to customer's customer as increasing the exposure to risk without the benefits of such exposure. Instead, we suggest that SCAP form alliances on a local or headquarter level with TPL to marginalize the importance of transportation. After all, a truck is nothing more than a box on wheels.

6.3 Reflections

When reflecting over our work, the concept of pattern matching comes to mind. Pattern matching can be viewed as issues not addressed, due to our choice of theory, or variables not analyzed because of our initial theoretical choices. It can also be viewed as questions that we were not able to answer due to theoretical choices.

As we perceive it, the thesis could have gotten a deeper sense if we had included the customers into the chosen cases, for what way is better to study customer focused business models by, than asking the customers directly? This would have increased our understanding of how value is created and bonding established, as well as for what characteristics customers appreciate in a PSP. This survey or case study would have been more complete if just a few key customers had been included, such as Flextronics or Compaq.

In our research, we have not particularly looked into organizational matters, as how various parts of SCAP are organized. The organization at different levels is an important issue that

has to be further dealt with. This is especially true when considering how to breach the gap between the sales organizations at different levels. This, we have discussed from a RBV perspective, but not from strictly organizational theories. We feel this interesting perspective did not match our theoretical framework and occurred outside our focus of analysis. Some questions have emerged because of this perspective, but they are phenomenons outside our pattern of theories.

Other questions that occurred which we can not answer due to limitations in our theoretical framework are:

- Should the sales force be the target for reorganization?
- Does every production facility need a sales force?
- How does the communication occur between different production sites and headquarter functions and what is the result of this communication?
- Is the organizational structure optimized to benefit from different kinds of synergies when new companies are acquired?

A final issue that has an impact on the research is the change in the operations from production orientation towards customer orientation and the implications that this could bring about. To accurately answer these questions, we would have had to incorporate theories of strategic process. However, what we did find without the incorporation of these theories is that most of the changes, at least in the cases viewed, occurred in an ad hoc manner, thus being much more difficult to study.

6.4 Future Research

We have, during our journey in completing this thesis, noted a number of areas outside of our inquiry that we perceive to be of great interest. For further research, it would be interesting to look at the possibilities for a company, such as SCAP, to develop a virtual platform for packaging solutions. What strategy should this virtual packaging platform carry and what competitive advantage could such a resource add to a customer focused business model?

Trends tell us that a more complex logistics solution is not to far away in the customer focused business model. Strategic questions for future research would be interesting, with a focus on how far an offer from SCAP can be expandable to a customer. We clarified the logistics continuum. This would be an interesting approach when looking at the strategy behind such a continuum. Interesting questions could then be asked: Should SCAP source or have the resources in-house? Who should alliances be created with? What should the new packaging solution offer look like?

7 References

7.1 Printed Sources

Alt R., Zimmerman H-D. (2001) "Business Models", Electronic Markets, Vol 11:1, pp 3-9

Alvesson, M., Sköldberg, K. (1994) **Tolkning och reflektion**, Studentlitteratur, Lund, 1994

Amit & Zott (2000) "Value Drivers of E-commerce Business Models", INSEAD Working Paper 2000/06

Amit & Zott (2001) "Value Creation in E-Business", **Strategic Management Journal**, Vol. 22, pp. 493-520

Arthur, W. B., (1994) **Increasing Returns and Path Dependency in the Economy,** The University of Michigan Press, 1994, Ch 1-2.

Barney, J. (1986) "Strategic factor markets, expectations, luck and business strategy", Management Science, Vol. 42, pp. 1231-1241

Barney, J. (1991), "Firm Resources and Sustained Competitive Advantage", **Journal of Management**, pp. 99-120

Eneroth, K., Malm, A. T., (1999) "Knowledge Webs and Generative Relations- A Network Approach to Developing Competencies", European Management Journal, Vol. 9, Issue 2, pp. 174-182

Eriksson, L. T., Wiedersheim-Paul, F. (1997) Att utreda, forska och rapportera, Liber Ekonomi, Stockholm

Fagerfjäll R. (1997) **Från Gustav de Lavals finanshärva till Kreuger-kraschen**, Norstedts Förlag AB, Stockholm

Fagerfjäll R. (1998) **Från Wallenbergs sidobolag till Wickmans statsföretag**, Norstedts Förlag AB, Stockholm

Gilje, N., Grimen, H. (1993) Samhällsvetenskapernas förutsättningar, Daidalos, Göteborg

Grant, R. M. (1998) **Contemporary Strategy Analysis**, Blackwell Publishers Ltd. Oxford, 1998, Third edition

Gulati, R., Nohria, N., Zaheer, A., (2000) "Strategic Networks", Strategic Management Journal, Vol. 21, pp.203-215

Hax, A., Wilde II, D. L., (1999) "The Delta Model: Adaptive Management for a Changing World", Sloan Management Review, pp. 11-28, Winter

Hax, A., Wilde II, D. L., (2001) "The Delta Model- Discovering New Sources of Profitability in a Networked Economy", European Management Journal, Vol.19, No. 4 pp. 379-391,

Heene, A., Sanchez, R. (1996) "Competence-based Strategic Management: Concepts and Issues for Theory, Research, and Practice", Competence-based strategic management, Ed., Wiley, Chichester

Holme, I. M., Solvang, B. K. (1991) Forskningsmetodik, Studentlitteratur, Lund,

Kalling, T. (1999) Gaining Competitive Advantage through Information Technology, Doctoral Dissertation, Lund Business Press, Lund

Kalling, T. (2001a) "Introducing the Business Model and the Resource Management Model: An attempt to integrate the Dominant Strategy Perspectives of Industrial Organisation, the Resource-Based View and Process Perspective", The Paper and Packaging Research Programme, The Institute of Economic Research, University of Lund, Working Paper.

Kalling, T (2001b) "Strategic and Organisational Challenges to SCA Packaging. Opportunities and Barriers to Change" The Paper and Packaging Research Programme, The Institute of Economic Research, Lund University, Working Report

Kim, W. C., Mauborgne, R (1997) "Value Innovation: The Strategic Logic of High Growth" **Harvard Business Review**, January-February, pp.103-112

Kim, W. C., Mauborgne, R (1999a) "Creating New Market Space", Harvard Business Review, January-February, pp.83-93

Kim, W. C., Mauborgne, R (1999b) "Strategy, Value Innovation, and the Knowledge Economy", Sloan Management Review, Spring 1999, pp.41-54

Lundahl, U., Skärvad, P-H. (1992) **Utredningsmetodik för samhällsvetare och ekonomer**, Studentlitteratur, Lund,

Malm, A. T. (2001) "The Paper and Packaging Industry in the Coming Decade. Critical Issues for Managers and Research", Institute of Economic Research, School of Economics and Management, Lund University

Normann, R. (1975) **Skapande Företagsledning**, Bonnier Fakta, 5: ed.

Normann, R. (1992) Service Management -ledning och strategi i tjänsteproduktionen, Liber-Hermods, Malmö, 1992, Revised edition

Normann, R. (2001) **Reframing Business: When the Map Changes the Landscape**, John Wiley & Sons, Ltd, Chichester

Normann, R., Ramírez, R. (1989) "A Theory of the Offering: Toward a neo-industrial business strategy", **Strategy**, **Organization and Human Resource Management**, Ed. Snow C.C., JAI Press, Greenwich, pp 111- 128

Normann, R., Ramírez, R. (1993) "From Value Chain to Value Constellation: Designing Interactive Strategy", Harvard Business Review, July-August, pp 65-77

Oliver, C. (1997)"Sustainable competitive advantage: Combining institutional and resource based views", **Strategic Management Journal**, Vol. 18, pp. 697-713

Pitt, L. (2001) "Total E-clipse; Five New Forces for Strategy in the Digital Age", **Journal of General Management 2001**: Summer Vol. 26:4, pp. 1-15

Porter, M. E. (1980) Competitive strategy, Free Press, New York

Porter, M. E. (1985) Competitive advantage, Free Press, New York

Porter, M. E. (1991) "Towards a Dynamic Theory of Strategy", Strategic Management Journal, Vol. 12, pp. 95-117

Porter, M. E. (2001) "Strategy and the Internet", **Harvard Business Review**, March 2001, pp. 63-78

Ramírez, R. (1998) "Value Co-Production: Intellectual Origins and Implications for Practice and Research", **Strategic Management Review**, Vol. 20, pp. 49-65

SCA (2000) Annual Report

SCA Investor report (2001) No 2

SCA Investor report (2001) No 3

Sheats J. R. (2000) "Information Technology, Sustainable Development and Developing Nations" Greener Management International, Vol. 32 pp 33-42

Slywotzky A. J. (1996) "Value Migration- How to think several steps ahead of the competition", Harvard Business School Press, Boston

Spanos, Y. E., Lioukas, S. (2000) "An Examination into the Causal Logic of Rent Generation: Contrasting Porter's Competitive Strategy Framework and the Resource-Based Perspective", Strategic Management Journal, Vol.22, pp. 907-934

Wikström, S., Normann, R. et al (1994) **Knowledge and Value**, Routledge, London

Yin, R. (1994) Case study research- Design and Methods, Sage Publication, Thousand Oaks CA.

7.2 Electronic Sources

www.davidssmith.com Last visited 7-12-01

http://helecon.hkkk.fi Last visited 13-11-01

www.internationalpaper.com Last visited 15-01-02

www.kappa-packaging.nl Last visited 15-01-02

www.libris.kb.se Last visited 07-12-01

www.lub.lu.se/ub/lovisa Last visited12-12-01

www.lub.lu.se/sql/dode Last visited 6-12-01

www.packplanet.com Last visited 17-12-01

www.packstrat.com Last visited 05-01-02

www.sca.com Last visited 15-01-02

www.scapackaging.com Last visited 15-01-02

www.search.epnet.com Last visited 05-11-02

www.smurfit.ie Last visited 15-01-02

www.storaenso.com Last visited 15-01-02

7.3 Informants

Apel, Johan Co-Founder of Packplanet. Interview conducted via telephone on the 27th of December 2001

Kalling, Thomas Assistant Professor, Lund School of Economics and Management Interview conducted on the 6th of December 2001

Price, Brian Manager of SCAP Pollokshaws' Operations in the Czech Republic. Interview conducted via telephone on the 21st of December 2001

Rabe, Mats Managing Director LINPAC Materials Handling Skandinavien AB. Interview conducted on the 18th of December 2001

Rönnäng, Niklas Key Account Manager SCAP Mariestad Division. Interview conducted on the 13th of December 2001

Strand, Niclas Manager of Customer Service at SCAP Värnamo Division. Interview conducted on the 11th of December 2001

Wendel, Bengt Managing Director of Förpackningsservice. Interview conducted on the 13th of December 2001

8 Appendix 1

Interview questions

Niclas Strand, SCAP Värnamo, Niclas Rönnäng, SCAP Mariestad

Which activities do you consider a part of SCA Packaging?

What is the purpose of your business?

Describe your business idea.

Describe the emergence of this business idea and decisions influencing this emergence.

Describe the benefits and disadvantages of your business.

What resources are demanded in order to be able to run the production?

Which are the critical factors of your success?

Describe the positioning of your products compared to that of the competitors.

Describe your product offer.

Describe your sales force organization, benefits/disadvantages.

How do you perceive dividing responsibilities into geographical areas, benefits/disadvantages?

Are there any alternatives to this division?

Describe your customer relations.

Describe what possibility customers have in influencing your production.

How do you approach customers?

How do you obtain information on customer needs?

How do you benefit from this information?

How do you handle customers' geographical spread?

Describe how the company is organized.

Describe the paths of decision-making, benefits/disadvantages.

Describe your relationship with suppliers that are able to influence your production.

Describe your current business model.

What potential of development is embedded in this model?

Describe the incentives for developing new ideas on a local level.

Who controls the development of new ideas?

Describe your view of the future, the development of the company, new business ideas

Describe your view of alliances and networks, create or acquire?

In what way do you benefit from potential synergetic effects of acquisitions?

How well dispersed is the service mindset in the organization?

What differences in content are there between offering a service and offering a product?

How well prepared is the organization to undertake production of services?

Describe any activities or incentives existing in order to increase the amount of services offered.

Bengt Wendel, SCAP Förpackningsservice

What is the purpose of your business?

Describe your business idea.

Describe the emergence of this business idea and decisions influencing this emergence.

Which are the critical factors of your success?

Describe your sales force organization, benefits/disadvantages.

How do you perceive dividing responsibilities into geographical areas, benefits/disadvantages?

Describe your customer relations.

How do you handle customers' geographical spread?

Describe how the company is organized.

Describe the paths of decision-making, benefits/disadvantages.

Describe your current business model.

What potential of development is embedded in this model?

Describe the incentives for developing new ideas on a local level.

Who controls the development of new ideas?

Describe your view of the future, the development of the company and new business ideas.

What differences in content are there between offering a service and offering a product?

Describe how business emerges for Förpackningsservice.

Describe any activities or incentives existing in order to increase the amount of services offered.

Brian Price Pollokshaws, Mats Rabe LINPAC

Which activities do you consider a part of SCA Packaging?

What is the purpose of your business?

Describe your business idea.

What are your core competencies (In-house or Source)?

Describe the emergence of this business idea and decisions influencing this emergence.

Describe the benefits and disadvantages of your business.

What resources are demanded in order to be able to run the production?

Which are the critical factors of your success?

Describe the positioning of your products compared to that of the competitors.

Describe your product offer.

How do you invoice your offer?

Describe your sales force organization, benefits/disadvantages.

How do you perceive dividing responsibilities into geographical areas, benefits/disadvantages?

Are there any alternatives to this division?

Describe your customer relations.

Describe what possibility customers have in influencing your production.

How do you approach customers?

How do you obtain information of customer needs?

Hoe do you benefit from this information?

How far into your customers value chain do integrate your business.

How do you handle customers' geographical spread?

Describe how the company is organized.

Describe the paths of decision-making, benefits/disadvantages.

Describe your relationship to suppliers that are able to influence your production.

Describe your current business model.

What potential of development is embedded in this model?

Describe the incentives for developing new ideas on a local level.

Who controls the development of new ideas?

Describe your view of the future, the development of the company, new business ideas.

Describe your view of alliances and networks, create or acquire?

In what way do you benefit from potential synergetic effects of acquisitions?

How well dispersed is the service mindset in the organization?

What differences in content are there between offering a service and offering a product?

How well prepared is the organization to undertake production of services?

Describe any activities or incentives existing in order to increase the amount of services offered.

Johan Apel, Packplanet.com

What activities was a part of Packplanet.com?

What was the purpose of Pakplanet.com?

Describe your business idea.

Which considerations were behind the creation of Packlanet.com?

Which were the benefits/ disadvantages of the concept?

Which resources were needed in order to deliver the product/services?

Describe the factors deemed critical to your success.

Describe the positioning of your products compared to that of the competitors.

Describe your offering.

Describe your organizational structure, benefits/disadvantages.

Describe your customer relations.

How did you approach customers?

How did you obtain information on customer needs?

How did you benefit from this information?

How would you describe the potential for development of your concept today?

Did you enter any alliances or networks, if yes, describe them?

Describe the main reason or reasons to the failing of your concept.

9 Appendix 2

The Competitors

David S. Smith

David S. Smith Packaging consists of 17 operations throughout the UK and has an annual turnover of £700 million. Principal activity in David S. Smith Packaging Division is the manufacturing and supply of corrugated packaging products along with design and distribution.

Strategy - Flexibility and rapid response to customer needs and demands are the main driving factors behind their business strategy

Design / Construction - By creating new ways of packing or improving existing packaging David S. Smith can help their clients at any stage from concept to sale of products.

Logistics - David S. Smith has an ordinary, business to customer, logistics service.

Packaging Systems - Through research and co-operation with global machinery manufacturers, David S. Smith can provide its customers with mechanical systems for all stages of the production line, from handling of the product and multi-packaging to case packing and distribution. The emphasis is focused on the use of machinery and packaging design to improve efficiency and reduce downtime, without compromising the presentation and impact of the packaging.

Packaging Services Management - Through a team of packaging specialists David S. Smith can help clients manage every aspect of their packaging requirements, from packaging consultation through development, to sourcing and delivery. For in-house point of purchase packing products David S. Smith provides a range of services including design, consultation in printing and sourcing. David S. Smith claims to be able to provide the total supply chain management of reusable packaging in closed loop distribution systems. This can include asset management, inspection and repairs, packaging design and solutions to support the change from corrugated to reusable packaging.

Other material – David S. Smith Plastics operates in 4 key areas of activity: liquid packaging and dispensing, returnable transit packaging, packaging logistics, and semi-finished products. They employ 1300 people, they are present in 45 countries worldwide and they have an annual turnover of over £162 million.

International Paper

International Paper has global businesses in paper, distribution of paper, packaging and forest products, including building materials. The company has operations in nearly 50 countries, it employs more than 117,000 people and it exports products too more than 130 nations. Sales of almost \$30 billion annually are derived from businesses located primarily in the United States, Europe, Latin America, Asia/Pacific and Canada.

Strategy - International Paper strives to be a strategic partner to their customers by leveraging their technology base and by creating the most diverse line of products in the industry.

Design / Construction - International Paper Graphics Group has the capability and flexibility to meet customers point-of-purchase packaging and display needs all from a nationwide network committed to customer satisfaction. They provide complete retail merchandise solutions. From the initial concept and through to the finished package, their packaging professionals offer a full spectrum of designs and production services to meet customers' requirements.

Logistics - International Paper operates its distribution business under the Xpedx name. Dedicated to provide quality products and services, Xpedx is a customer-driven distributor of printing paper, packaging supplies and equipment, facility supplies and graphic imaging prepress equipment and supplies. Xpedx delivers solutions for its customers through nearly 120 wholesale distribution centers and more than 200 stores. In addition to a comprehensive product list, Xpedx offers store-door and cross-dock delivery, dedicated warehousing, "Just-In-Time" services, electronic data interchange and technical support. With more than 275 warehouses and store locations coast to coast plus a nationwide delivery fleet, Xpedx is the single-source solution for all needs of basic business products.

Xpedx customers get the productivity of international buying power, state-of-the-art information resources and centralized planning plus the personal responsiveness that can come only from local distribution centers and local service representatives.

Packaging Systems - Evergreen Packaging Equipment (EPE) designs, manufactures and markets packaging machinery for use by the world's fluid dairy, fruit juice, non-carbonated beverage and liquid food markets. Certain non-food products, such as fabric softeners, are also applicable. EPE machinery is currently filling the needs of customers in over 70 countries. A network, employed by local International Paper companies or joint venture enterprises, provides technical service and replacement of parts requirements.

Packaging Service Management - International Paper services includes packaging design, design preflight, complete pre-press services, production runs, "Just-In-Time"/inventory and purchasing management programs, material testing and machinery support. IP fulfillment services range from customer packaging to drop-ship delivery and in-store detailing services.

Other material - International Paper manufactures a large variety of packaging materials and packages for consumer products, which are sold worldwide. It is a major resource for dairies, fast food and other kinds of restaurants, department stores, bakeries, food companies, pharmaceutical manufacturers, electronics, entertainment and software producers, and any company that manufactures consumer packaged goods.

Jefferson Smurfit

Jefferson Smurfit Group plc (JSG) is a geographically balanced paper-based packaging group with integrated operations in USA, Europe, Latin America and a modest presence in Asia. Based in Dublin, Ireland, JSG is Europe's largest producer of paperboard and claims to command a leading share of the European corrugated box market. JSG is also Latin America's leading paperboard producer with operations in Mexico, Colombia, Venezuela and Argentina. Together with its associates, JSG is the leading paper-based packaging company with a combined capacity of 13 million metric tons, including 10 million metric tons of containerboard for which they have a global market share of 12%. Smurfit Packaging and Smurfit Sisa, the Italian Subsidiaries of the Smurfit Group, are committed to supply quality packaging products and to service Customers' needs through innovative packaging design, continuous technological and process improvement, raw material integration, logistics territory coverage and flexible responsiveness to market demand.

Including associates, Jefferson Smurfit holds a 12% share of global corrugated sales. Operations now span 4 continents and over 30 countries. Jefferson Smurfit is an effective leader in USA (20%), Europe (15%) and Latin America (10%) and recently has an emerging presence in Asia. Jefferson Smurfit continues to expand its geographic reach and develops leading positions in all of the countries in which it operates. Global customers mean global producers - today Jefferson Smurfit is the leading global player.

Jefferson Smurfit is committed to moving up the value chain within the scope of their core competence. They continue to grow the business and enhance the existing product-mix by expanding capability into specialty grades of containerboard. These grades, such as micro flute and white top, have comparatively higher growth prospects and command higher prices than conventional grades.

Strategy - The Jefferson Smurfit Group's key strength has been the ability to identify, acquire and rationalize under-performing assets at the right time and at the right price. The Group is known within the paper and forest products industry as an acquirer - the acquisition strategy has propelled Jefferson Smurfit from being a small locally based Irish company to become a significant competitor.

Design / Construction - Boxboard, E-Flute and Corrugated Packaging Design, specialized Packaging Consulting Service.

Logistics - Jefferson Smurfit has ordinary, business to customer, logistics service.

Packaging Systems

- Top-load Packaging Lines
- Multi-packaging
- Carton and Tray Erecting Machines
- Case Erectors and Bag Inserters
- Product Handling
- Customized Packaging Lines Design

Packaging Service Management - Jefferson Smurfit is not offering any services at management level to the customer.

Other material - Jefferson Smurfit continues to maintain a focused product portfolio, focusing on the business it knows and understands best, paper-based packaging. In their Italian subsidiaries, they are working with raw material integration.

Kappa

Kappa Packaging is one of Europe's largest innovative companies operating in production, development and sale of containerboard, solid board, corrugated and solid-board packaging and graphic and specialty board. With a workforce numbering around 17,000, Kappa Packaging achieves sales of over €3.0 billion in over 100 operating companies in 17 countries spread over all Europe. Kappa Packaging focuses its products primarily on the business-to-business segment of the packaging market.

Strategy - Kappa Packaging is working on quickly expanding its E-Business solutions to all their companies in Europe. They are dedicated to provide customers convenient access to information and transactions they need - from ordering to account status and product information. Kappa Packaging's main E-Business targets are, to focus on customer-optimized business processes and to create real value for the customers.

Design / Construction - Integrated knowledge of material properties and construction principles generate innovative concepts with enhanced physical performance and improved efficiency. Value added packaging concepts provide natural conservation of perishable products. Other constructions of packaging concepts are based on creating a bundle or unit of smaller items and break it up when needed. These concepts support process efficiency by single sizes in manufacturing and packing lines.

Logistics - Effectively support the sequence of packing, logistics, handling and end-user processes.

Packaging Systems - Advanced packaging systems contribute to cost effective and reliable packaging equipment for their customers.

Packaging Service Management - Kappa Packaging has a decentralized Euro Account Management that guarantees coordinated access to all Kappa Packaging's locations at any time. At customers' request, a single point of contact and an Euro Account team will handle customers' Europe-wide affairs.

Other material - Kappa Packaging offers integrated solutions, which are not limited to material or packaging. As the company has a comprehensive European knowledge network of its own, a large number of answers have been developed to meet demands for innovation and savings. An example of this is integrated applications of fundamental knowledge of material and construction properties in order to develop packaging concepts.

StoraEnso

StoraEnso had €13 billion of sales in the year 2000 and about 15 million tons of annual paper and board production capacity. Some 45,000 persons are employed in more than 40 countries with focus on Europe, but also in USA and Malaysia.

Strategy - The strategy of StoraEnso Packaging Board's division is to secure a high market share in selected products and market segments and to offer superior value to customers. Environmentally sound processes will play a key role in this concept. Growth will be based on the existing product portfolio.

Design/Construction - StoraEnso Packaging structural designers work closely with the marketing departments to be able to recommend the best solutions in order to meet the communication targets of a campaign.

Logistics - Effectively support the sequence of packing, logistics, handling and end-user processes.

Packaging Systems - StoraEnso Packaging is a supplier of packaging systems. The design and manufacturing of the machinery is their responsibility to long-term partners. All the machinery and equipment are delivered "ready to roll", delivery-tested with the final product and the final corrugated packaging material. StoraEnso takes care of the installation, operator training, maintenance and the supply of spare parts.

Packaging Service Management - StoraEnso is not offering any services at management level to the customer.

Other material - StoraEnso's mission has no other material than papers/ fibers included.