Swedish University of Agricultural Sciences
Faculty of Forestry
Umeå, Sweden

Strategy transformations of the Swedish sawmilling sector 1990-2005

MÅRTEN HUGOSSON AND DENISE MCCLUSKEY

SLU, Department of Forest Products, Uppsala

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Abstract

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Prescriptive strategy theories have previously led to conclusions that sawmill firms lack strategy. However, by using Ansoff's (1979) explorative capability approach, we contribute the finding that the Swedish sawmilling sector underwent three unobserved strategy transformations between 1990 and 2005. These transformations, their triggers and outcomes were:

Market channel strategy transformation. The shock of poor financial results in the "unexpected" downturn of the early 1990s triggered a break with traditional agents, who had been the sector's sole market channel. Instead, firms established their own market channels, and built direct relationships with customers. *Product value adding strategy transformation.* Information about customers' needs triggered a transformation in the sector's offerings - from wet commodities to specified goods, which were of higher value to customers. This involved firms enhancing their production capabilities in the mid 1990s. *Service value adding strategy transformation.* Triggered by perceived new SCM opportunities, firms enhanced their distribution logistics capabilities around 2000 so that they could offer customers specific logistics and distribution services.

These three strategy transformations occurred in all sampled firms. Each firm had strategy nuances, regarding its choice of customers and its offerings. The findings also reveal that establishing customer relationships was a key development: product and service value adding strategy transformations were often facilitated by cooperating with customers. Moreover, customer interactions provided a basis for managers to increasingly see the unique value of their firm's particular resources and capabilities; and, focus their business activities on customers who specifically value those attributes. This new interpretation of sawmill firm strategy illustrates the need for applied researchers to assess contemporary theoretical debates, and select analytical frameworks that can give new insights into actual practices.

Keywords: strategy, strategy transformation, sawmill firms, matching customers with resources

Mårten Hugosson, Department of Forest Products,
Swedish University of Agricultural Sciences (SLU),
SE-750 07 Uppsala, Sweden
E-mail: marten.hugosson@sprod.slu.se
Phone: +46 18 67 17 70
Fax: +46 18 67 34 90

Denise McCluskey, Department of Forest Products,
Swedish University of Agricultural Sciences (SLU),
SE-750 07 Uppsala, Sweden
E-mail: denise.mccluskey@sprod.slu.se
Phone: +46 18 67 38 22
Fax: +46 18 67 34 90

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Introduction

The strategy concept concerns the principal business behaviours of firms. It is increasingly important that managers focus attention on their firms' behavioural patterns and the changing business environment so they can sustain competitiveness and viability. (See, for example, Hamel and Prahalad 1989, Barney 1991, Prahalad and Hamel 1994, Leavy 1996, Drucker 1998, Mintzberg et al. 1998, Ghemawat et al. 2000, Prahalad and Ramaswamy 2000, Meyer and De Wit 2004).

Academics and practitioners alike face a wide range of potential choices in selecting strategy theories as a framework to guide analysis and implementation (see, for example, Mintzberg et al. 1998, Ghemawat et al. 2000, Meyer and De Wit 2004). Broadly, there are two underlying perspectives of the nature of strategy: strategy seen as a formal planning instrument; and, strategy viewed as an emergent process. (See, for example, Mintzberg et al. 1998, Meyer and De Wit 2004)

When strategy is regarded as a formal planning instrument, managers are considered to rationally map the future direction of the firm. And, their actions are deemed to be effectively aided by planning tools such as portfolio management and product lifecycles analysis as well as decision making frameworks by the likes of Andrew and Porter (see, for example, Ghemawat et al. 2000, Meyer and De Wit 2004). Accordingly, strategy is seen as a deliberately formulated content. Implicitly, it is only this mapped strategy which will be realised. (See, for example, Leavy 1996, Mintzberg et al. 1998, Ghemawat et al. 2000, Meyer and De Wit 2004)

In the perspective where strategy is seen as an emergent process, a firm's strategy is conceptualised as a coherent set of actual behaviours. Such strategy behaviours can emerge from both deliberate and unplanned processes to form identifiable patterns of behaviours over time. (ibid)

These two strategy perspectives have a common underlying theme: the understanding that a firm's environment is one key to the firm's future competitive success (ibid). Particularly in the 1990s, changes in the environment have been debated. And, concerns raised that phenomenon such as globalisation and changing customer requirements have fundamentally changed the environment. Hence, new business behaviours are required. (See, for example, Hamel and Prahalad 1989, Barney 1991, Prahalad and Hamel 1994, Leavy 1996, Drucker 1998, Prahalad and Ramaswamy 2000, Haeckel 2004, Prahalad 2004)

This paper interprets the above discourse from an applied research perspective, with focus on the Swedish sawmilling sector. The conclusion is that, irrespective of whether academics see strategy as a deliberate plan or emergent process, the issue is that actual changes in the business behaviours of the sector's firms take place (Pye and Pettigrew 2006). It is therefore the phenomenon of *strategy transformations* that is of interest.

Strategy transformation is formally defined as changes to the firm's external linkages with the outside environment, or a change in the firm's internal resource configuration, or both (Ansoff 1979).

Consequently, this applied research perspective is interested in studying changes in behavioural patterns, irrespective of whether new phenomenon are considered to be the result of deliberate strategic plans or are best understood as emergent processes.

Indicators of change in the Swedish sawmilling sector

The Swedish sawmilling sector's business behaviours appear to have changed from the early 1990s.

According to inventories of the Swedish sawmilling sector (Andersson et al. 1991, Warensjö 1997, Staland et al. 2002), in the early 1990s, wood products were mostly commodities. In 2002, it was reported that the extent of product processing increased significantly in the 1990s (Staland et al. 2002). Examples included drying to order, length trimming to order, strength grading, blanks for doors and windows, gluelam production, and finger jointing (ibid). Moreover, in 2005, commodity trading in spot markets accounted for less than 30% of sawmill firms' business volumes (Hugosson and McCluskey 2008).

In the 1980s and early 1990s, middlemen were the traditional market channel of Swedish sawmilling firms (SIND 1980, NUTEK 1992). However, by the year 2000 such agents were reportedly 'dead' (Johnsen and Melander 2005), with sawmill firms now conducting business directly with their customers (Johnsen and Melander 2005, Hugosson and McCluskey 2008). There are also reports of "resurrected agents" in markets were cultural bridges are perceived necessary to facilitate business. In such cases, middlemen's previous roles have developed into close business relationships with the firms they represent. (Torro 2008).

Another seemingly important phenomenon has also appeared: distribution logistic centres. These have been described as a "hot spot" in current Swedish sawmilling sector strategies (Henningsson 2005, Nord 2005). And, logistics services were a key offering of Swedish sawmills (Hugosson and McCluskey 2008).

In conclusion, the above comparison of business behaviours in the early 1990s and 2005 indicates three change phenomena: increased product processing, breaking with agents and focus on distribution logistics. These phenomena imply there were strategy transformations in the Swedish sawmilling sector between 1990 and 2005.

Recent assessment of the sawmilling sectors´strategies

The strategy literature shows that Porter's strategy school has been a dominant theoretical framework in sawmilling firm research (see, for example, Hansen et al. 2002 and Nord 2005).

Porter's school depicts strategy as a formal plan (Mintzberg et al. 1998) and his five forces model is used to examine an industry's structure and that structure's inferred influence on the profitability of its firms (Porter 1980). Porter then prescribes that firms have only three possible generic strategy choices: value adding, low cost and customer focus (ibid). Porter considers hybrid strategies are "unacceptable" because firms will be "stuck in the middle" with low profits and survival prospects: hybrid approaches effectively mean firms have "no" strategy.(ibid)

Accordingly, in sawmilling business research, Rich (1986) accused sawmill firms in the USA of having "no" strategy. Since then, other researchers have similarly concluded that sawmill firms have lacked strategy in the Porter sense (see, for example, Bush and Sinclair 1991, Hansen et al. 2002). Hansen et al elicited this dissonance between sawmills' actual business behaviours and Porter's deterministic concept by posing the questions:

"*If the data do not fully follow the theory, is the theory inadequate, is something wrong with measurement, or are companies mistaken in their development and implementation of strategy?*" Hansen et al. 2002.

In the Swedish context, as indicated above, Porter-based research has empirically identified distribution logistic centres as important to current sawmill strategies (Henningsson 2005, Nord 2005). However, these works have not provided a theoretical explanation of why firms have developed logistics capabilities or why these capabilities are now of strategic significance. Moreover, the phenomena of increased product processing and breaking with agents have not, to our knowledge, been formally explained by the literature. Thus, there is a knowledge gap about the triggers for and possible strategic significance of these three empirically indicated change phenomena.

Choice of theorethical framework

Given the dominant theoretical framework within this applied field has not been able to provide a framework to explain the observed phenomena, it is necessary to seek alternative theoretical ideas. This conclusion is consistent with the strategy field's findings and general developments. (See, for example, Leavy 1996, Drucker 1998, Mintzberg et al. 1999, Barney et al. 2001, Ghemawat et al. 2000, Barney et al. 2001). It also reflects concerns raised by other applied forestry researchers (see, for example, Hansen et al. 2002, Alkbring 2003 and the discussion above).

Our general assessment is that there is a need for a framework that enables the recognition of more than just three generic strategies (see also Prahalad and Hamel 1987, 1994). Moreover, in an increasingly turbulent business environment, there is a need for theories that can provide a useful framework for depicting and explaining strategic change (see the discussion above).

To provide new insights into the strategy transformation process in an increasingly turbulence world, the latest academic research has re-emphasised more dynamic, process- and practice-oriented theorizing. This approach stresses practitioners' perceptions, their actions and interactions. (See for example, Pye and Pettigrew 2006, Jarzabkowski et al. 2007, Regnér P. 2008, Whittington and Cailluet 2008).

Ignor Ansoff, who foresaw the increased turbulence in the business environment that has is now general knowledge (Hussey 1999, Antoniou and Sullivan 2006), was an early pioneer of this perspective. He is also recognised as a major contributor to the strategy discipline (ibid). Ansoff's early work focussed on theories for planning strategies, while his latter work contributes a framework for exploring and explaining strategy transformations (Hussey 1999). The latter takes a behavioural capability perspective (Ansoff 1979). Moreover, Ansoff (1979) anticipated contemporary phenomenon such as increasing globalisation and changing ways of working with customers.

Ansoff's behaviour model of strategy transformation addresses the dynamic interactions of firms with their environment. The model itself has a broad scope and rich content: it assesses and describes various strategy transformation processes, their intricacies and interdependencies. Table 1 defines key terms. Figure 1 illustrates three major notions in Ansoff's dynamic model, and their connections that lead to a transformation of a firm's business behaviours.

The noteworthy instances in the model's dynamic change process are:

1. Its starting point is the manager's personal mental model of his firm's environment, his *perceptions of the environment*. These perceptions may be *altered* by environmental changes that the manager observes over time.

2. If observed changes in the environment *alter* the manager's perception of the environment, particularly his views on the firm's future sustainability, then the manager is prompted to take action.

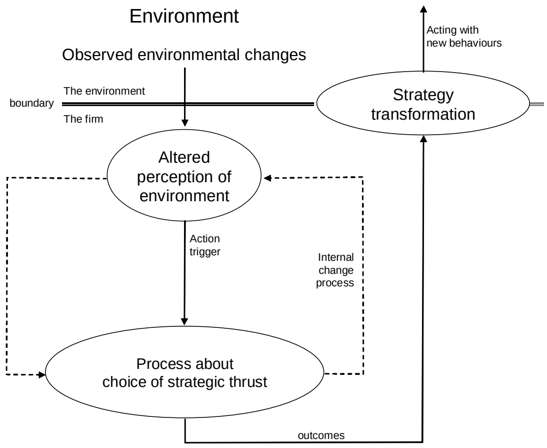
3. Such *action triggers* lead managers to engage in processes where they reflect on the key characteristics of their firm's strategic behaviours – their *choices of strategic thrust*.

4. The outcomes of these processes are modified behavioural characteristics – either a change to the firm's external linkages with the outside environment, or a change in the firm's internal resource configuration, or both. This is Ansoff's definition of a *strategy transformation.*(ibid)

Research rationale, focus and questions

The rationale for this research focus is that three change phenomena have been empirically observed in the Swedish sawmill sector – increased product processing, breaking with agents and focus on distribution logistics. These phenomena imply that firms underwent strategy transformations in the period 1990 to 2005. Yet, the field's strategy literature does not address the reasons for or significance of these changes.

In accordance with contemporary strategy theorising, to provide new insights, the focus of this work will be practitioners' perspectives and their outcomes in terms of firms' key business behaviours.



F*igure 1*. An overview of three major notions in Ansoff's model of strategic behaviour, with a simplification of their dynamic steps in strategy transformation processes. (Adapted from Ansoff 1979).

Contemporary theorising advocates a dynamic processes perspective. Thus, we argue Ansoff's (1979) model of strategy behaviour is an appropriate analysis framework since it explores change processes based on managers' perceptions. The issues that will be assessed are:

- Can the phenomena of increased product processing, breaking with agents, and focus on distribution logistics be interpreted as strategy transformations?

If so …

- What are the implications for the sector's practices and applied research?

Delimitations

Ansoff's (1979) model of strategic behaviour addresses in detail the firm's internal change processes that occur during a strategy transformation. In this work, our research focus is on triggers and outcomes, in a dynamic environment. Therefore, details of internal change processes will be outside the scope of this work. That is, we will use Frankelius's (2002) simplified version of Ansoff model as an analysis framework (see "*Theoretical framework*").

In this research, the Swedish Forest Industries Federation's listing of Sweden's top twenty sawmilling firms in 2005, ranked according to their production volumes, comprises the Swedish sawmill sector's population refered to in this work (see "*Research approach*").

Table 1. *Definition of Ansoff's key theoretical concepts used in this paper's analysis*

Ansoff's term	**Definition (Ansoff 1979)**
Perception of the environment	A manager's personal image of his firm's environment
Altered perception of the environment	A change in a manager's personal image of his firm's environment that arises from observed turbulent changes in the environment that the manager judges to be significant
Action trigger	The initiation of activity changes, which is prompted from altered perception of the environment
Process about choice of strategic thrust	The firm's explicit or implicit internal processes that re-examine the firm's choices of strategic direction and behaviour
Strategy transformation	A change to the firm's external linkages with the outside environment, or a change in the firm's internal resource configuration, or both
Strategic thrust	The key characteristics of a firm's pattern of strategic behaviour

Disposition

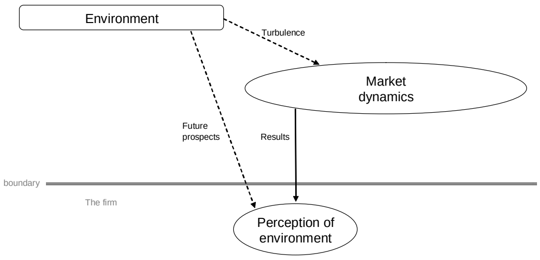
The section *"Research approach"* describes the standard qualitative approaches used to sample and collect data from thirteen of Sweden's twenty largest sawmill firms about their behavioural developments in the period 1990-2005. Using Ansoff's model as an analytical framework, which is described in *"Theoretical framework"*, this material was assessed and findings reported in *"Findings"*. Firstly, strategy transformations were identified. Narratives of the environmental situation triggering change and the outcomes are then presented. Finally, the causal development of strategy transformations is assessed. The section *"Conclusions and discussion"* then goes on to assess the significance of these findings in the context of the general theoretical discourse.

Theoretical framework

Understanding the firm's environment is one key concept in strategy. (See, for example, Porter 1980, Hamel and Prahalad 1989, Ghemawat et al. 2000, Meyer and De Wit 2004, de Kluyver and Pearce 2006) There are however many examples of firms potentially having the same environmental information, with some firms apparently failing to see obvious signals calling for change, whereas other firms appear to anticipate emerging opportunities. (See, for example, Hamel and Prahalad 1989, van der Heijden 1996, Collins 2001) Consequently, it is managers' perceptions of the environment, particularly their capabilities to retrieve and elaborate meaningful information from the environment, that heavily influences whether firms develop sustainable strategies or not. (See, for example, Ansoff 1979, Hamel and Prahalad 1989, van der Heijden 1996, Leavey 1996, Drucker 1998, Colins 2001).

Ansoff (1979) explains the significance of a manager's perceptions of the environment by firstly distinguishing environmental information into categories: the firm's immediate financial results; and, the firm's future prospects.

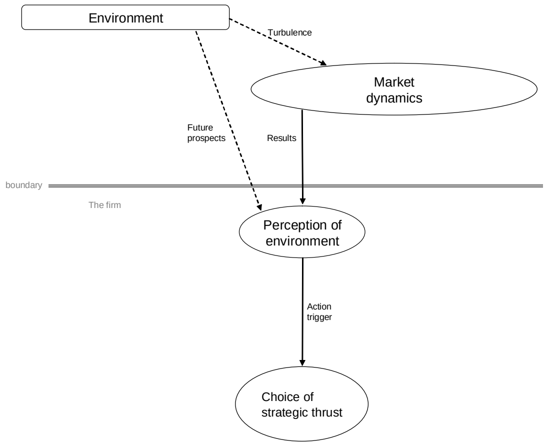
Ansoff's experience was that some managers only pay attention to their firm's immediate financial results. In such cases, it is only when environmental changes directly manifest themselves as turbulence that affects market dynamics – and causes red results – that these managers perceive problems. Such management behaviour is labelled myopic: the firm's perception of the environment is too narrow to capture the full scope of environmental turbulence. Ansoff argues that when myopic firms eventually recognise their weakness, they are often to late to respond strategically to the environmental change.



Ansoff therefore argues the need for managers to detect 'weak' turbulent signals in the environment at an early stage so the firm has a realistic opportunity to put appropriate strategies in place. This requires managers collect general environmental information. His experience is that many managers do this. When managers who collect information are capable, and their firms have a culture that is open to different information, this information may influence manager's perceptions about the firm's future prospects and therefore ideas about appropriate strategies. When the scope of a firm's perceptions matches the environmental turbulence, Ansoff labels firms as in tune with the environment. When the scope of a firm's perception exceeds current environmental turbulence levels, Ansoff labels firm as foresightfull.

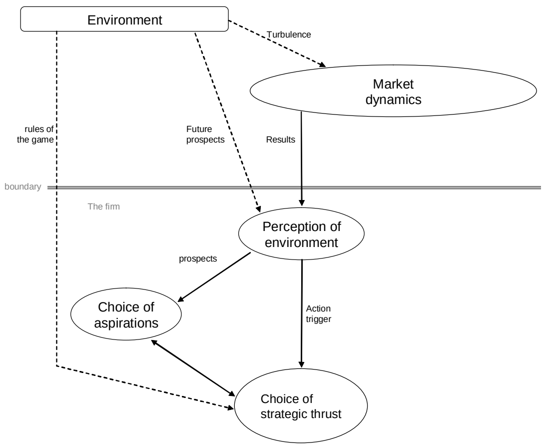
When observed changes in the general environment, or poor financial results, alter perceptions of the environment and perceptions about the sustainability of the firm, managers are prompted to take action. Such action triggers initiate an internal process where firms consider their choices about the key characteristics of their firm's strategic behaviour – choices of strategic thrust. And, implicitly, an associated internal change process also takes place.

Ansoff considers the choice of strategic thrust is a process, which includes assessing the complex interdependencies between the choice of strategic thrust and the level of financial performance the firm



aims to obtain – its choice of aspirations. Moreover, the choice of aspirations is also heavily influenced by the business prospects managers perceive to be possible. Perceptions about prospects also arise from manager's mental models of the environment.

Additionally, to account for the effect of governmental constraints on the firm's operations, Ansoff's model also includes rules of the game as an environmental factor that can influence the firm's choice of strategic thrust.



The outcome of the choice process is realised patterns of actual business behaviours – choice of strategic thrust. This manifests itself as a strategy transformation. Ansoff defines a strategy transformation as a change to the firm's external linkages with the outside environment, or a change in the firm's internal resource configuration, or both.

It is the patterns of business behaviours, the thrust, of any strategy transformations that intercepts the emerging market dynamics, affecting the firm's interaction with the market, the next round of financial results, managerial perceptions and so on. (Ansoff 1979)

A key concern in Ansoff's concept of strategy behaviour is the necessity of ensuring the emergence of new strategic thrusts is well-timed with the moment that environmental turbulence impacts the firm's market dynamics. Ansoff considered managerial capability and the firm's culture both had a significant impact on such development of apt strategies and their timeliness. Appendix 1 illustrates his model of the details of the internal change process. In this work, our research focus is on triggers and outcomes and so we will use Frankelius's (2002) simplified version, illustrated in Figure 2.

Research approach

The aim of this work was to gain knowledge about any strategic transformations of the Swedish sawmill sector during the period 1990 to 2005.

Since little was formally known about the empirically indicated phenomena, a standard qualitative research method was chosen as research method (see, for example, Miles and Huberman 1994, Bliss and Martin, 1989, Strauss and Corbin 1990, Gummesson 1991, Denzin and Lincoln 2000, Silverman 2005). Moreover, a qualitative narrative method is theoretically motivated by recent developments in the literature that advocate actively including practitioners' perspectives and establishing new knowledge based on an understanding of actual practices. (See, for example, Pye and Pettigrew 2006, Jarzabkowski et al. 2007, Regnér 2008, Whittington and Cailluet 2008).

Within the field of strategy analysis, a general research process for studying strategic change was proposed by Mintzberg and McHugh (1985). This process comprises four steps: collection of data, inference of strategies and periods, deep analysis of each period, and theoretical analysis. In this study, these steps were addressed as illustrated in Table 2.

Population, source critique and sampling

The Swedish Forest Industries Federation's listing of Sweden's top twenty sawmilling firms, ranked according to their production volumes (Swedish Forest Industries Federation 2006), defines the Swedish sawmill sector population used in this research. These largest 20 firms account for more than 80 percent of Sweden's total production (Swedish Forest Industries Federation 2006, Swedish Trade Council 2006). This choice of population therefore represents the vast majority of the business activities within the Swedish sector. This study purposely sampled thirteen of the twenty firms in that population.

One concern when selecting firms was that their respondents should have the capability to provide insights into the development of their firm's actual

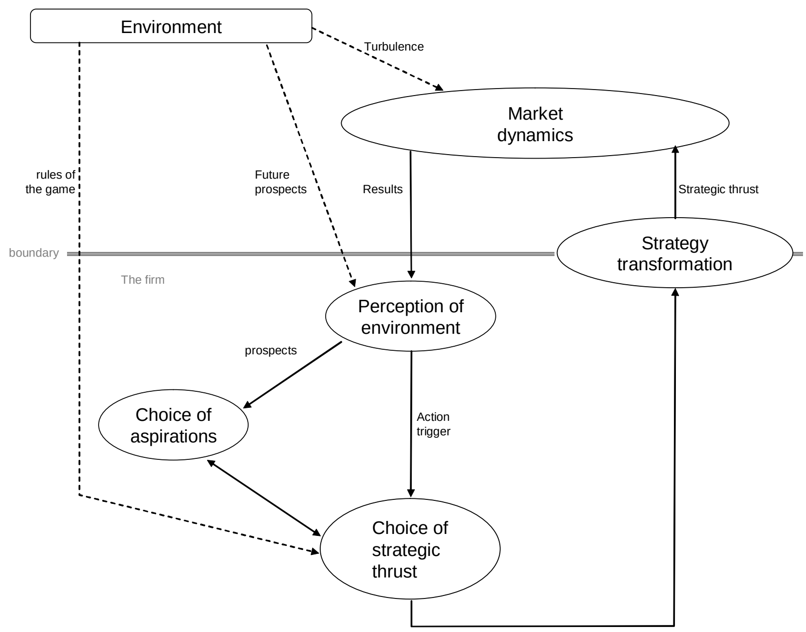


Figure 2. Frankelius simplified overview of Ansoff's model of strategic behaviour. (Frankelius 2002).

Table 2. *The steps of this research process*

Step	Activity
Purposive sampling	Population defined as "top 20" Sources assessed to ensure response in period 1990-2005 Concern about sampling firms across Fibre conglomerates or Independents Raw material types
Collection of data	Semi structured interviewing Emerging field notes collected
Inference of strategies	Content analysis and abstraction to identify the sector's strategy transformations and their time lines
Analysis of each period	Thematic images narrated Content analysis identified strategy metaphors Constant comparative analysis to identify key outcomes of the change process Deviant case analysis to identify strategy nuances
Theoretical analysis	Abstract casual picture formed using Ansoff's model

strategic behaviours. The operational criteria for selecting respondents were therefore that they should:

- Have held senior positions in the firm during the past ten to fifteen years and so have an insight into the firm's development over time.

- Have been actively involved in their firm's marketing practices and so have significant personal experience of the firm's actual strategic thrust.

Our purposive sampling was additionally concerned with capturing possible differences that may arise from whether the firm was independent or part of a fibre conglomerate; and, the firms' sources of raw materials.

Previous research on this sector has assumed that there may be differences in business behaviours between independent firms and sawmill business units that are part of fibre conglomerate holding groups (see, for example, Nord 2005, Stendahl et al. 2007). This study provided scope for assessing such possible differences by sampling all five Swedish fibre conglomerates and seven of the fifteen independents.

According to the resource based view of the firm, raw materials can influence strategy (see, for example, Barney 1991). Additionally, within the sector, it is well known that the geographical source of logs largely determines a particular sawmill unit's possible production. Accordingly, the firms sampled in this study represented three (of six) firms that source logs solely from Sweden's boreal[1] forests, three (of six) that source logs solely in southern Sweden where mixed temperate forests[2] grow, and six (of eight) that sourced logs from regions comprising both boreal and mixed temperate forests.

Appendix 2 profiles the sawmill firms and the particular respondents selected for the study. It also summarises the type of information obtained from each interview.

Step 1 Collection of data

Prior to the data collection, a thematic interview guide was formulated. The intention was to raise relevant topics during the interviews, without restricting the subject's scope to interpret and respond in ways that they found appropriate (Silverman 2005). Table 3 shows how the thematic questions map to the theoretical framework of this study.

Additionally, specific questions about the firm's recent investments were asked since they may represent new strategy transformations. These questions were based on a pre-interview survey of the sampled firm's recent annual reports (source: Affärsdata).

Table 3. *Thematic interview guide correlating the thematic questions posed to sawmill informants with their corresponding theoretical concepts*

Thematic question as it was posed	**Anticipated material, classified in Ansoff's (1979) theoretical terms**
What changes has your organisation made regarding how you work, and/or how you work towards markets?	Choice of strategic thrust, particularly strategy transformations
Why did you make any such changes?	Managers' perceptions of the environment, particularly action triggers
What are the main effects of any such changes to your ways of working, and ways of working towards your markets?	Strategic transformation and thrust

Interviews were held face-to-face at the respondents' premises and conducted in Swedish. The interviews were recorded, and extensive field notes were also made. Interviews were typically 1½-2 hours. After each interview, field notes were checked against the recorded discourse and a summary of the interview was typed in English. These formed our study's *emerging field notes* (Silverman 2005). This data material was eventually subject to content analysis in search for triggers for change, strategy transformations, and outcomes. The unit of analysis was individual clauses or sentences of the informant's discourse.

During interviews, interviewees' statements were mainly about themselves, or their firm, as an actor. Interviewees therefore acted primarily as respondents (Holme and Solvang 1997). However, interviewees also made statements and interpretations concerning other actors in the sector or the sector as a whole. This means they also expressed some second order interpretations during the interviews and so also acted as informants (ibid). Appendix 2 notes where interviewees acted as respondents or informants.

Step 2 Inference of strategies and periods

This step involved identifying respondents' responses to the thematic question: *What changes has your organisation made regarding how you work, and how you work towards markets*? We then made an abstraction of portal notions of change. And, these abstractions were mapped in time.

Step 3 Analysis of each period

The further analysis of each portal notion of change included the construction of thematic narratives for each inferred strategy transformation. This involved firstly sorting individual statement into Ansoff's theoretical categories: *altered perception of the environment, action trigger, choice of strategic thrust* and s*trategy transformation*. Figure 3 illustrates this analysis. The sorted material was then checked for similarities and differences. Similarities were identified within a constant comparative approach, and any differences by a deviant case approach (Silverman 2005). For each of the theoretical concepts an image was constructed including examples of the original taped discourse.

[1]Boreal forests grow in sub arctic climate zones, and the forests are characterised by the dominance of coniferous treas. The year rings of trees from boreal forests are closely spaced, so the wood is dense. Also, the trees side branches tend to be symmetrically and regularly spaced. Both the close year rings and symmetric branches give wood from boreal forest trees a particular aesthetic feel.

[2]Mixed temperate forests grow in climate areas with distinct warm and cool seasons, and the forests are characterised by their mix of broadleaf and coniferous trees. The year rings of trees from mix temperate forests are more widely spaced than those from boreal forests. The wood is therefore less dense.

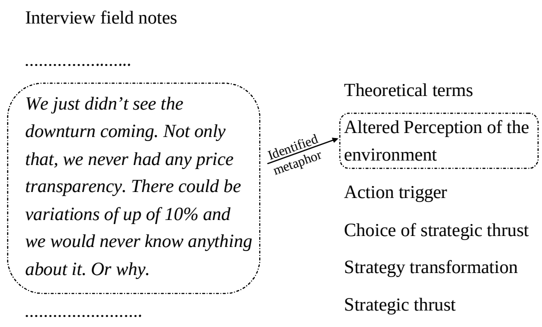


Figure 3. Illustration of the content analysis of field notes about the respondents' responses. An excerpt of respondent's speech was considered a metaphor for a specific theoretical term if it provided a particular description of their actual behaviour on that topic.

Deviances were also addressed as strategy nuances i.e. particularities of an individual firm that were not seen as fully consistent with the image of the strategy transformation. Appendix 2 also distinguishes when respondents contributed material that represented an image of the sector's strategy transformation from strategy nuances of their particular firm.

Finally, to test the reliability of these groupings, we returned yet again to the original recordings of the interviews in order to assess whether the constructed images made sense when compared with the recorded discourses as a whole.

Step 4 Theoretical analysis

Ansoff's model addresses key stages in the transformation processes and so the material was also assessed from the model's process perspective.

Findings

Our major finding is that the Swedish sawmill sector underwent three strategy transformations in the period 1990 to 2005. These transformations were:

1. *Market channel strategy transformation.*

This transformation concerned the means firms used to get goods to markets: instead of using traditional agents as the sole market channel, in important markets, sawmill firms established their own marketing channels and built direct relationships with customers. Moreover, sawmill firms have established close business relationships with any middlemen that now represent them.

This market channel strategy transformation occurred in the early 1990s. Sawmill firms now regularly review the performance of their market channels, and adapt accordingly.

The section *"The market channel transformation process"* contains an image of this strategy transformation and its business context, including important business behaviours.

2. *Product value adding strategy transformation.*

This transformation concerned customer needs for products with more exacting specifications. The basis for this transformation was the acquisition of new customer information about customers' needs and willingness. To ensure more highly specified products could be systematically produced, firms enhanced their production equipment and production processes.

This product value adding strategy transformation took off in the mid 1990s. Firms now regularly review their product categories, product specifications and production processes. Currently, when sawmill managers perceive new opportunities, additional investments are made in order to increase the business value of products.

The section *"The product value adding transformation process"* contains an image of this strategy transformation and its business context, including important business behaviours.

3. *Service value adding strategy transformation.*

This transformation concerned firms enhancing their distribution logistics capabilities so that sawmill firms could offer customer-specific logistics and services.

This transformation emerged around the year 2000. Currently, as more customers become aware of the benefits of cooperatively managing logistics flows with suppliers, the impact of this transformation is increasing.

The section *"The service value adding transformation process"* contains an image of this strategy transformation and its business context, including important business behaviours. Figure 4 illustrates the time periods over which these three strategy transformations occurred.

The market channel transformation process

Middlemen, called agents in the sector, were historically sawmill firms' channels to markets. Middlemen handled business from the sawmill firm's gates to customers both in Sweden and internationally. Broadly, in export markets, at least two types of middlemen were involved: exporters who handled trade from Sweden to middlemen in other

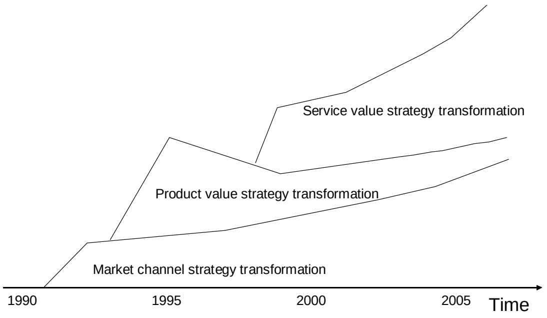


Figure 4. Illustration of the time periods of the Swedish sawmilling sector's strategy transformations.

countries; and, middlemen who imported Swedish goods from exporting middlemen and then sold on these goods to customers in their country. The role of such traditional middlemen was …

> *"… to hold a stock of a broad portfolio of wood products - different dimensions, different qualities – lumber, boards etc. that their customers could easily get access to."*
>
> Respondent 1

The business practice between Swedish sawmill firms and exporting middlemen was:

> *"Agents would phone round or send faxes to sawmills stating what they wanted. If we had it in stock we'd fax back and agree a price. Then, they'd send a truck. We didn't know who the customer was or what they'd do with it."*
>
> Respondent 2

Sawmill managers considered middlemen "filtered" information, and so managers perceived they had little insight into market dynamics and the actual prices customers paid.

Altered perceptions of the environment

In the early 1990s there was a downturn in the business cycle, which was perceived by managers as an "unexpected" event.

> *"We just didn't see the downturn coming. Not only that we never had any price transparency. There could be variations of up of 10% and we would never know anything about it. Or why."*
>
> Respondent 3

Managers perceived this was a tough time for sawmill firms. The effects of the downturn were illustrated by 20% devaluation of the Swedish currency in 1992. This crisis hit the bottom line of sawmilling firms, who were reliant on exports via agents.

The action trigger that managers reported was:

> *"we realised we just couldn't continue to do business in the way we had always done"*
>
> Respondent 3

Outcome of the process about choice of strategic thrust

All managers said it was in the early-mid 1990s that they decided that the widespread use of middlemen was no longer a viable way of sustaining their businesses. Instead, managers decided to acquire insight into market dynamics, as well as knowledge about customers and their needs. Sawmill firms therefore choose to break with traditional middlemen and work directly with customers in a systematic way.

Strategy thrust

Sawmill firms' managers went out to meet customers and also opened their sawmilling operations to visiting customers.

By serendipity, as new potential customers, Japanese house building firms arrived on the Swedish scene: managers said the Japanese market was traditionally supplied from Canada. However, Japanese timber frame building firms became concerned about the risk of declining supplies from Canada and so sought contact with European sawmill firms. The Japanese also experienced the "surprise" of an overnight doubling of Canadian timber prices in the early 1990s.

> *"From the end of World War II, the Canadians dominated the Japanese market. It was 'theirs'. But they hadn't been managing their forests and were starting to run into raw material supply problems. Then they started to increase prices. They even doubled prices overnight. This opened up for us to go in"*
>
> Respondent 4

An Austrian saw miller made many introductions:

> *"We heard about the Japanese from him (sic The Austrian saw miller). The Japanese came here to Sweden to visit and then several of us (Swedish*

sawmilling firm managers) went there. They raised demands – it wasn't easy – and we weren't used to that. Some (sic sawmill firms) declined to go further. We decided to go ahead and try."

Respondent 5

Swedish sawmill firms therefore began to directly interact with Japanese customer firms form the mid 1990s. And, currently, the Japanese market is important for the Swedish sawmill sector.

Managers also reported that they started to work directly with actors in the Danish furniture and wood products sectors from the early 1990s. Such customer firms had contacted Swedish sawmill firms in the north of Sweden partly to secure the quality of supplies they needed, and, partly to enhance their supply chain management. Currently, the Danish market is important for the Swedish sawmill sector.

Managers also reported that they started to work directly with customers in the Swedish furniture and wood products sectors. Customer firms sought direct contact with sawmill firms as part of the customers' business renewal process. Again, this started in the early 1990s and is still an ongoing practice.

As well as ensuring direct access to customer information, in comparison to commodity trading, managers perceived customer relationships provided the business benefit of more long term stability.

"Stability is the world's secret to break. … Long term business (sic relationships) gives stability, which is just as important to us as it is to our customers. There is value in that."

Respondent 6

Strategy nuances

Within the Swedish sawmill sector, sawmill firms have differing legal forms for conducting business through their market channels: some firms invest in their own sales organisations in various countries; others choose to use middlemen as their "extended arm" and as a "cultural bridge" in various markets. Many sawmills do both:

"In markets that are important to us, or we think will be important in the future, we invest in our own sales organisation. In other markets, where business volumes are small and we don't see the market developing in a way that would benefit us, we use agents. We are pleased that agents can manage the business in these markets since that is more cost-effective for us. We now work more closely with agents to support them and have regular business links (sic with both them and customers)."

Respondent 2

This philosophy continues today.

Managers emphasised a general interest in "moving closer to customers". A noteworthy point however is that profiles of customers and customers' needs varied within the Swedish sawmilling sector: essentially, managers select to work with customers whose quality needs match the given sawmill firm's particular raw materials:

"Our business concept is to supply quality goods that are of value just to our customers."

Respondent 4

"It's customers in the USA and UK that value our wood's qualities."

Respondent 7

The size of the customer's organisation leads to another nuance, with the larger conglomerates tending to emphasise that they do business with larger customers.

"We are a large firm and likewise are customers are large firms. We're not really cut out to do business with smaller firms."

Respondent 8

Similarly, sawmill firms that are SMEs tend to emphasise that as family run firms they often do business with customers who are also family run firms.

Prior to the 1990s, some managers informed us that a few individual managers were 'entrepreneurial'. These entrepreneurs had informally established direct relationships with some customers at an earlier period.

"We've never focused on volumes. We always focused on customers, and customer specific needs. And we try to find the right stuff for our customers. Our raw material is good for this."

Respondent 9

Analysis

These changes in approach to market channels, from solely using agents to establishing direct contacts with customers and markets, is interpreted as a strategy transformation since it is a change to firm's external linkages with the outside environment. This market channel strategy transformation helps us interpret the phenomenon of "the agent is dead".

Prior to the transformation, managers' environmental perception was broadly constrained to events within the sawmill gates. Since the early 1990s business downturn was "unexpected", and the appearance of customers with new needs was serendipitous, managers' environmental awareness was generally myopic.

Figure 5 illustrates an abstraction of the overall process of transformation of strategic behaviour. The process stages are:

Environmental turbulence

- Environmental turbulence manifests itself in the forms of both threats and opportunities. The threats were a business cycle downturn and currency fluctuations. The opportunities were customer discontent with traditional suppliers and/or supply chain management approaches.

Perception of the environment

- Since customer interaction is the exclusive behaviour of traditional middlemen, who 'filter' environmental information, the Swedish sawmill sector's managers lack information about both the emerging crisis and opportunities. The sector is myopic.

Altered perception of the environment

- In managers' minds, the 'surprise' business cycle and exchange rate crises questioned the firm's traditional business practices of using middlemen as a market channel.

Action trigger

- The financial shock of this unforeseen crisis triggers a change of perception about the viability of traditional middlemen as market channels.

Outcome of the process about choice of strategic thrust

- Sawmill managers decided to break with traditional middlemen and establish direct relationships with customers. The legal channel for conducting business relationship was either the sawmill firm's own sales subsidiary or a new type of middleman who facilitates information exchange.

Strategy thrust

- Strategy transformation of the Swedish sawmill sector's market channels takes place, where the key new behaviour of sawmill firms was to establish customer contact.

- Serendipitously, customers who wish to secure supplies and/or enhance management of their supply chains are also willing to establish direct

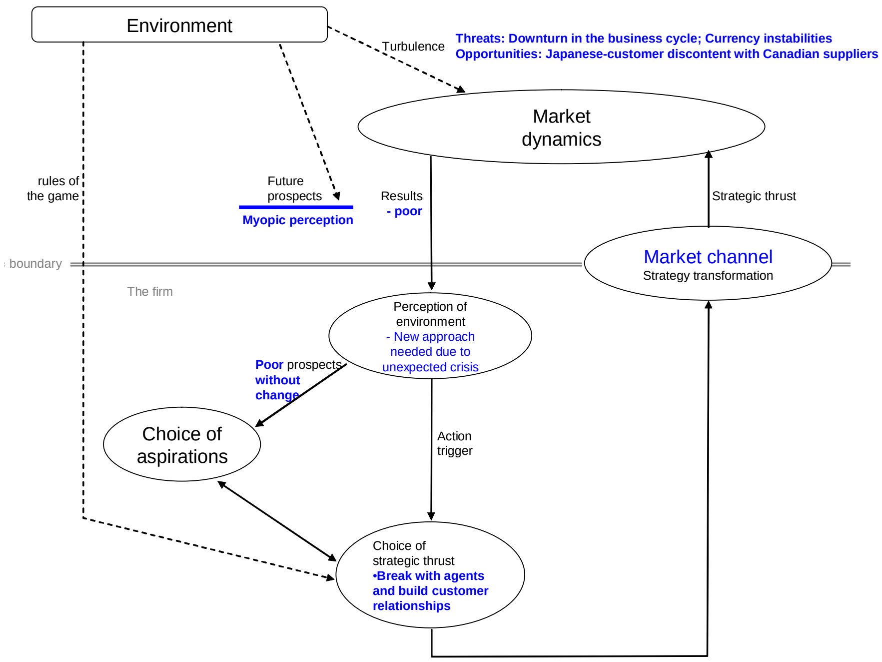


Figure 5. Model of strategic behaviour in the market channel transformation process.

relationships with their sawmill suppliers.

Altered perception of the environmental

- Once direct relationships with customers are established, in sawmill managers' minds, the market is no longer anonymous sales figures per country. Instead, markets comprise customers, who are clearly identifiable and have particular needs.

The product value adding transformation process

Around the early 1990s, sawmill managers considered that their traditional products were somewhat undefined, wood products tended to have nominal dimensions, and lengths were "as felled". Additionally, often only price was important, which negatively influenced quality.

> *"The Builders merchants branch has a whole has only focused on price. So everything was done around the margin, size … material's quality … Quality was adjusted according to price, rather than price to quality."*
>
> Respondent 6

The moisture content of the wood was "shipping dry", with moisture contents of around 20% or so – enough to prevent the wood decaying. Customers then pre-processed these raw materials, cutting and drying the wood, to obtain the input elements their production processes required.

Altered perceptions of the environment

By working directly with customers, managers obtained new information about customers' needs.

One example of managers' new perceptions of customers needs was their realisation of the significance of reliable quality for Japanese timber housing customers who used JIT in their construction process:

> *"We worked with one of our Japanese customers so that we could deliver the specific wood quality they were after - particular dimensions, and moisture content levels. The customer put the wood straight into their production line. At first they took a few containers at a time until they were sure we could deliver. Then we started to get some bigger orders. One day we got a phone call - their factory was at a standstill. We flew out immediately. When we arrived at the customer's site only the owner was there – kicking the dirt in the yard, holding a tape measure. He had sent all his staff off to a holiday resort for a few days. Together we measured all the wood in all twenty containers. Every piece was a few millimetres out – our saw was slightly off angle. They just couldn't use it. After that we always checked before shipping."*
>
> Respondent 5

Information from working with Japanese customers also made another important contribution to managers' altered perceptions: they "re-learned" their appreciation of the natural beauty of wood from Sweden's managed boreal and mixed temperate forests.

> *"I'm a typical boy from the Swedish forests - wood is everywhere and we just take it for granted. Now I've been to Japan almost 100 times and see things with our customers' eyes: they really have a different eye for things. Not only the look and feel of wood – although that is crucial. But they also see how the wood is stacked, packaged – everything. It gives you a different perspective and an appreciation of the special quality of what we have here in Sweden."*
>
> Respondent 6

Another important category of customers that influenced managers' perceptions were firms in the Danish furniture and wood product segment. Dialogues with Danish firms revealed customer firms were seeking to secure supplies of quality raw materials. Moreover managers stated that many Danish firms were also enhancing their firms' production and supply chain management processes. For that reason, customer firms sought cooperation with potential sawmill suppliers.

Customer firms in the Swedish interiors and wood product segments were also an important information source that influenced perceptions within the Swedish sawmill sector. Managers said customer firms in these segments were similarly seeking to enhance their raw material input and supply chain management. The reason the Swedish interior firms were seeking new input was that they were transforming themselves – from traditional product suppliers to firms that create modern interior design elements. The theme of these design elements was natural aesthetic qualities that have a contemporary yet traditional appeal, and an environmentally friendly image. Such customer firms needed more refined materials from their suppliers so that they could focus on their design and finish.

As well as a given product's specific form, dimension and aesthetics considerations, a new insight was gained:

> *"The quality of the finished goods was better with one stage drying."*
>
> Respondent 4

Sawmill firms' managers gained new perceptions about customers' needs for reliable quality, including rigorously sized dimensions and moisture content levels and, optionally, aesthetic appearance and mechanical strength.

These new perceptions resulted in an action trigger to enhance product specifications and thereby production processes.

Outcomes of the process about choice of strategic thrust

Managers decided to develop their firms' production capabilities so they could reliably deliver enhanced finished objects that were of higher value to their customers.

Managers stated that cutting to precise dimensions was a major cultural challenge for their firms. Nonetheless, tests and fine adjustments were made to existing sawmilling plant and machinery to produce precise dimension, without the need for capital investments.

> *"There was a cultural problem with everybody saying it just wasn't possible to get precise dimensions. But we experimented with using the saw and in the end got it right."*
>
> Respondent 3

Drying capacity investments were made. And, sawmill firms worked with drying techniques to ensure that wood could be dried reliability down to particular moisture content levels – without deformation and cracking. Both sawmill and customer firms could be confident about the final dimensions of the object if it was dried down to low moisture content levels at the sawmill. As part of this process, planing of objects became a standard practice.

Investments were also made in new gluelam and finger jointing production capabilities as well as strength grading capabilities.

Strategy thrust

Instead of wet, bulky commodities, the Swedish sawmill sector began to offer its customers precision objects.

Strategy nuances

One strategy nuance is that the goods sawmilling firms produce tend to be firm specific: it depends upon firms' sources of raw materials, with raw material source also correlated with customers' needs. Due to the unique aesthetic qualities of Swedish boreal forest wood, several sawmill firms in northern Sweden tend to specialise in objects for use in interior design, window frames and visible load bearing elements. Firms that source logs solely from mixed temperate forests in southern Sweden mainly produce construction wood. Sawmill firms that source logs from both boreal and mixed temperate forests tend to emphasise Engineered Wood products.

A key strategy nuance was some customers were directly involved in defining the products and their values. A typical example of this nuance was:

> *"Our development projects are run in cooperation with our key customers. Not only do we develop the product together – experimenting on the alternatives so we get a product the customer needs and can directly use in their production, yet is economical for us to produce – we also make joint input to our business case: customers give us information about how much they are willing to pay and the volumes they will need over time."*
>
> Respondent 2

This phenomenon of direct customer participation in product and business case development occurred with Danish, Swedish and Japanese customer firms.

Another interesting strategy nuance was that some sawmill firms took the initiative to propose new types of products that were tailored to particular customer firms. Customer firms reciprocated with long term legal commitments to purchase these new products so that they could facilitate investment decision making within the sawmill firm.

We also observed that a number of the managers we interviewed were recruited from customer organisations into sawmill firms. (See Appendix 2. Profile of interviewees and their firms.)

Analysis

The above developments described in this section are interpreted as a strategic transformation since it was a change in the sector's internal resource configuration: both production resources and production process capabilities were developed. This was also a change in the sectors' links to the outside environment since the sector interacted more intensely with customers to specify goods and their values. Information obtained directly from customers was a key factor in triggering this transformation.

This product value adding strategy transformation helps us interpret the phenomenon of increased product processing.

In this product value strategy transformation, the action triggers were prompted by perceived opportunities. The sector was able to develop goods in response to customer information about their needs, overcoming conservative production cultures in the transformation process. Therefore, the sector's environmental awareness was in tune with the emerging market dynamics. Moreover, in cases where the sector proposed new goods to customers, managers' environmental awareness was foresight full.

Figure 6 illustrates an abstraction of the overall process of transformation of strategic behaviour. The process stages are:

Environmental turbulence
- Environmental turbulence manifests itself as customers directly seeking to enhance the specification of their product supplies and informing the Swedish sawmilling sector about opportunities.

Perception of the environment
- Sawmill managers can distinguish between the general market and specific customers because of their earlier strategy transformation to break with agents and work directly with customers.

Altered perception of the environment
- Working directly with customers gives sawmill managers input to future prospects since they have new information about customer's needs. And, in some cases, sawmill managers even have detailed information about a particular customer's long term willingness to pay for given objects.

Choice of aspirations
- Enhanced products are perceived to bring higher margins and more stable business volumes.

Action trigger
- Managers perceive this new environment enhances their particular sawmilling firm's future prospects - on the prerequisite that they develop their products. And even enhance some customer relationships.

Outcome of the process about choice of strategic thrust
- Sawmills invest in equipment and processes so that instead of outputting wet unrefined commodities they can offer customers precision objects.

Strategic thrust
- Strategy transformation of production processes occurs, with sawmill firms tailoring their offerings to specific customers by producing precision objects and delivering these to order.

The service value adding transformation process

From around the turn of the century, after a period of working closely with customers, managers stated that they had gained new knowledge about customers' general business needs, which inspired overall new service-based approaches to business.

Altered perceptions of the environment

Managers emphasised general developments in Supply Chain Management and logistics thinking had occurred in all industry sectors. Customers were much more aware of optimising input materials, optimising inventory levels and minimising wastage. And, many customers used logistics and other services from their suppliers' to achieve this. Managers therefore perceived this provided the Swedish sawmill sector with business development opportunities. And, the impact of such opportunities has the potential to increase in the future.

Managers perceived that particularly from the late 1990s the builders merchants segment was experiencing growth due to growth in the housing sector. They considered the builders merchants and DIY sectors are currently undergoing change, with large chains emerging and independent actors forming cooperatives to leverage their purchasing power. In meeting the needs of customers, managers consider services are now a key aspect of sawmills offerings.

> *"Building products are not just planed wood products – they are a concept that includes delivery, different product groups, stock levels, etc. … We must have goods in stock… We must deliver within a specified time."*
>
> Respondent 1

In the construction sector, once the quality of their products was developed and established, managers perceived there was now little need to develop basic

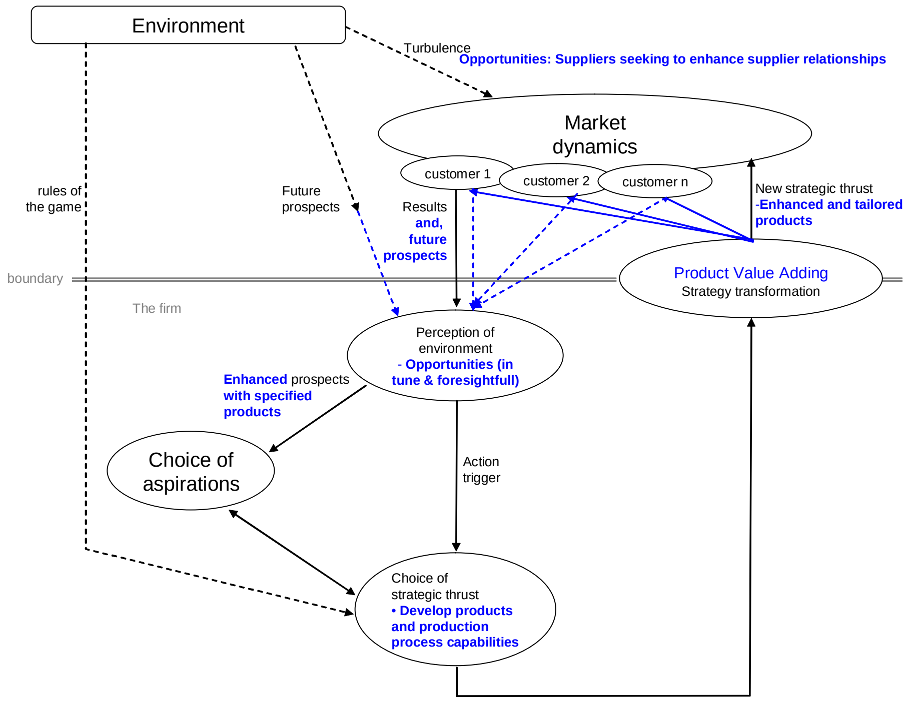


Figure 6. Model of strategic behaviour in the product value adding transformation.

building products "since a 2 × 4 was a 2 × 4" and planing of sawn goods was now standard. Instead, managers perceived new opportunities could be gained if they developed service based business practices:

> *"In the building industry (segment), business occurs directly with builders' merchants and the housing industry. We have rather long agreements, with many connections and cooperation. ... That means that a supplier and a customer can sit together over a longer period and develop more together. … This is where the world has developed. … Changing a (product) dimension isn't development. It's not good enough. Either you should develop your business, how you sell and how you are available for your customers. … Logistics centres is one type of development in the UK."*
>
> Respondent 1

A new market segment was also perceived. This was related to the construction of wood-based prefabricated housing elements, particularly in the British market. Some wood-specialist customer firms had emerged during the 1990s and these specialists were increasingly frustrated by the limited wood portfolio available from builders merchants. Managers noted they already had established logistics centres to meet the service needs of their builders merchants and DIY retailing customers. Therefore, sawmill firms essentially had a 'builders yard' on location. These could potentially offer tailored wood orders to actors in the timber framed housing segment. The benefit to customers was they could gain production process improvements by inputting specified dimensions into their production. Furthermore, customer firms no longer needed to have large stocks of timber goods.

The multiplicity of perceived opportunities lead firms to develop service based offerings:

- To customers who were builders merchants, sawmill firms could develop their businesses and offer customers warehousing and distribution services. This type of services could also be offered in geographical markets that are new to the Swedish sawmilling sector.

- To customers in the emerging DIY retailing sector, sawmill firms could develop their businesses and offer customers warehousing and distribution services. Again, this type of services could also be offered in geographical markets that are new to the Swedish sawmilling sector.

- To customers in the wood product manufacturing sector, sawmill firms could develop their businesses and offer customers warehousing and JIT delivery services.

- To customers in the timber framed housing sector, sawmill firms could develop their businesses and offer customers a broad specialised wood portfolio, customised goods and deliveries, and JIT delivery services.

Outcome of the process about choice of strategic thrust

Managers said they have recently made investments in logistics capabilities and distribution centres, also in new markets. Such investments included decisions to develop new distribution logistics competences and processes, as well as investments in physical resources such as rail tracks, trains, warehouses and distribution centres.

> *"(Our logistics services) are different in different markets. In the UK we have stock and invested in distribution logistics and we can go right out to customers' customers. In Sweden, we hold stock for Swedish builders merchants at our sawmills.*
> *….*
> *… What we do that is special is to deliver quality packets of standard wood at the right time."*
> Respondent 10

Investments in such service based business concepts have also been made in geographical markets that were new to sawmill firms. For example:

> *"We have established our own warehouses (in the market), which we stock from Sweden. … From our site we can deliver to customers within 24 or 48 hours. Our competitors (who sell from their home country) have two weeks delivery."*
> Respondent 7

Strategic thrust

Managers consider their firms have recently developed a service-oriented business concept, which was to be "a trusted supplier" to their particular customers.

Strategy nuances

A noteworthy point is that services, since these are directly linked with particular customers' operations, are specific to each sawmill firm's particular customers.

Some sawmill firms have chosen to develop their own business units as builders merchants and/or timber frame manufacturers.

Analysis

This service value adding approach is interpreted as a strategy transformation since market-oriented logistics capabilities are an enhancement of the sector's internal resource configuration and, implicitly, such service capabilities directly link with customers in the outside environment.

This service value adding strategy transformation helps us understand the phenomenon of logistics as strategy hot spots.

The action triggers for this strategy transformation were prompted by perceived opportunities. The sector was able to develop services in response to a general awareness of the need to improve supply chain management. Therefore, managers' environmental awareness is considered to be in tune with existing customers, and, foresightfull with customers in new segments.

Figure 7 illustrates an abstraction of the overall process of transformation of strategic behaviour. The process stages are:

Perception of the environment
- The sector's mangers distinguish between attractive and less attractive customers and markets because of their earlier strategy transformation to work cooperatively with customers.
- Managers gain information about general market turbulence, particularly opportunities relating to supply chain management optimisation.

Choice of aspirations
- Managers consider they can sustain their competitiveness, and increase their margins, by offering logistics services.

Trigger
- The opportunities they anticipate include SCM optimisation; new purchasing approaches by Builders Merchants and DIY chains; and, tailored timber deliveries to specialist timber construction firms.

Choice of strategic thrust
- Managers make a strategic choice to develop their

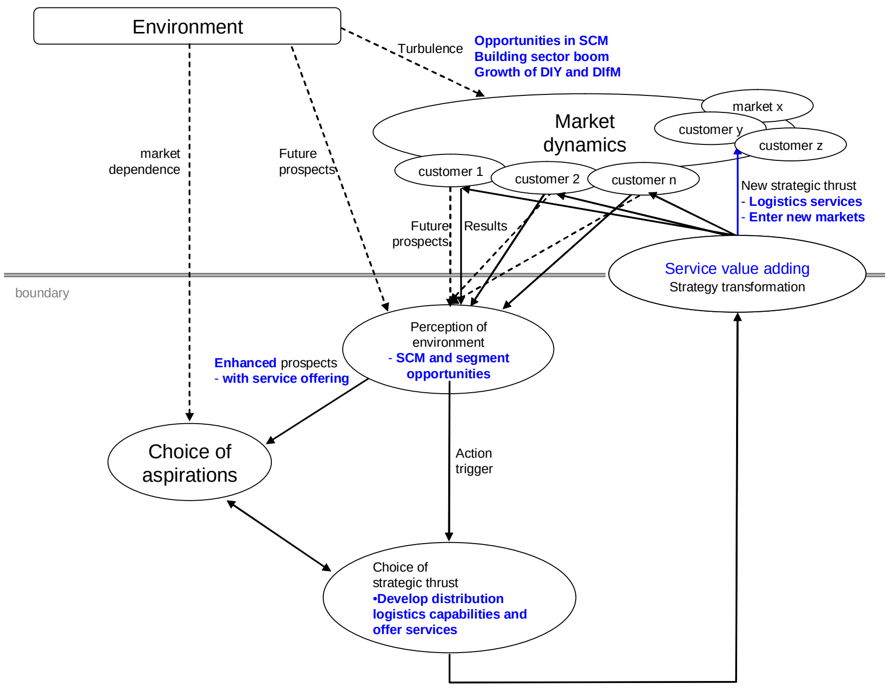


Figure 7. Model of strategic behaviour in the service value adding strategy transformation process.

logistics capabilities and seek new service based business with potentially attractive customers.

Strategic thrust

- Sawmill firms have service-based business behaviours, which they offer to new customers and markets.

Conclusions and discussion

Our major finding is that the Swedish sawmilling sector underwent three strategy transformations between 1990 and 2005. The key characteristics of these transformations, and the phenomena they interpret, are:

1. *Market channel strategy transformation.* Myopic to warning signals due to perceived "filtering" of information by the sector's market channel middlemen, the sector's results were hit by an "unexpected" downturn in the early 1990s. This triggered a break with traditional middlemen and firms built their own marketing capabilities, establishing direct relationships with customers. This result contributes an understanding of the empirically indicated phenomenon of "the agent is dead".

2. *Product value adding strategy transformation.* In the mid 1990s, using customer information that the sector had recently gained direct access to, the sector transformed its goods from wet commodities to specified goods that were of higher value to customers. This involved firms enhancing their production capabilities. Firms acted in tune with, and in some cases with foresight of, emerging environmental turbulence. This result contributes an understanding of the empirically indicated phenomenon of increased product processing.

3. *Service value adding strategy transformation.* Perceiving new business opportunities, firms enhanced their distribution logistics capabilities to offer customers specific logistics and distribution services - not just products. This started around the year 2000 and such new services are currently diffusing to customers. Firms acted with foresight to generate services in awareness of general environmental discussions about supply chain management possibilities. This result contributes an understanding of the empirically indicated phenomenon of focus on distribution logistics.

These three general images of strategy transformations occurred in all sampled firms.

The latter service value adding strategy transformation is significant because it represents the Swedish sawmilling sector's capabilities to innovate their business concepts beyond products (Prahalad and Hamel 1994).

The significance of establishing direct customer relationships

The reports in the *"Findings"* section show customer interaction is a key source of environmental information: customer information was key to both the sector's product value adding and service value adding strategy transformations. Working with customer information, and interacting directly with customers, to test and develop product and service ideas enabled firms' managers to assess the viability of business ideas and make investments with "known" risks. Relationships with customers therefore contributed to firms staying in tune with the environment and its dynamics, and even acting with strategic foresight. Developments in theory have similarly observed that information obtained from customer relationships can be a source of sustained competitive advantage (Morgan and Hunt 1999). The importance of interacting with customers was anticipated by Ansoff (1979) and became a general business behaviour in most industries in the 1990s (Prahalad and Ramswamy 2000).

Furthermore, we assess customers' direct participation in product and service development as an example of sawmill firms "co-opting customer competence" (ibid). That is, the general paradigmatic shift, from firm-centric business approaches to a perspective where suppliers and customers mutually co-create business value also occurred in the Swedish sawmill sector in the 1990s. Similarly, customers' long term legal commitments to purchase new products are also considered examples of customers recognising the need to mutually co-create business value with suppliers. (Ibid)

Moreover, interactions with customers provided a basis for sawmill managers to view their firms' operations from customers' perspectives: managers gained insight into the particular value of their firm's specific raw material resources as well as their firm's capabilities to manage service delivery of a broad portfolio of products/services. Such insights enabled firms to focus their development efforts on customers and markets that would value their firms firm's specific offerings. This implies that sawmill firm's manager's implicitly have a resource based view of the firm (see, for example, Barney 1991, Barney et al. 2001).

Development of sawmill managers' strategic behaviours

During the period of this study, Swedish sawmill firms' managers appear to be increasingly capable of:

1. Continually reviewing changes in the business environment, reassessing who are innovative customers and who are followers; and, what market segments are emerging or declining.

2. Seeing the unique value of their firm's specific resources and capabilities.

3. Matching their firm's resources and capabilities with customers and innovators who appreciate the particular value of those specific assets. And, developing and sustaining relationships with innovative customers.

4. Facilitating the organisational development of their firms so that the firm has appropriate organisational competences.

Matching is a key competence, and this capability has emerged and developed.

Such enhanced management capabilities are illustrated in Figure 8. These capabilities are evident from the three strategy transformations that have taken place in the past decade. These findings therefore also contribute to the current strategy perspective that emphasises practitioners' perceptions and actions (see, for example, Pye and Pettigrew 2006, Jarzabkowski et al. 2007, Regnér P. 2008, Whittington and Cailluet 2008).

Implications for future research

These findings about strategy transformations and managers' capability development are in sharp contrast to conclusions from Porter-based research that sawmill firms lack strategy. By using Ansoff's explorative framework we have found that sawmill firms have developed new strategic behaviours from the early 1990s - but not those prescribed by Porter (1980). This, together with the fact that Porter-based perspectives could not explain the strategic significance of sawmill firms' focus on distribution logistics, illustrates the need for applied researchers

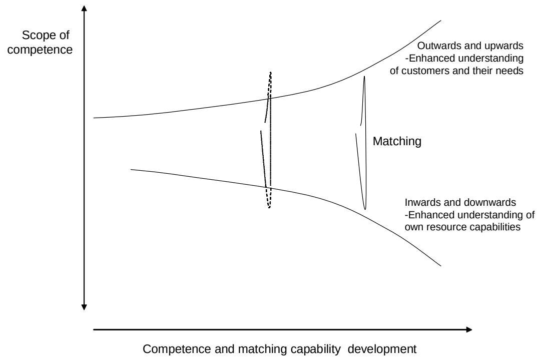


Figure 8. Illustration of sawmill managers' capability development, where matching customers who value with their particular sawmill firm's specific resources is key.

to assess contemporary theoretical debates, and select analytical frameworks that can give new insights into the sawmill sector's practices.

It would be of interest to explore whether other countries' sawmilling sectors have similarly undergone strategy transformations that have been unnoticed.

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We note both authors made equivalent contributions to this article.

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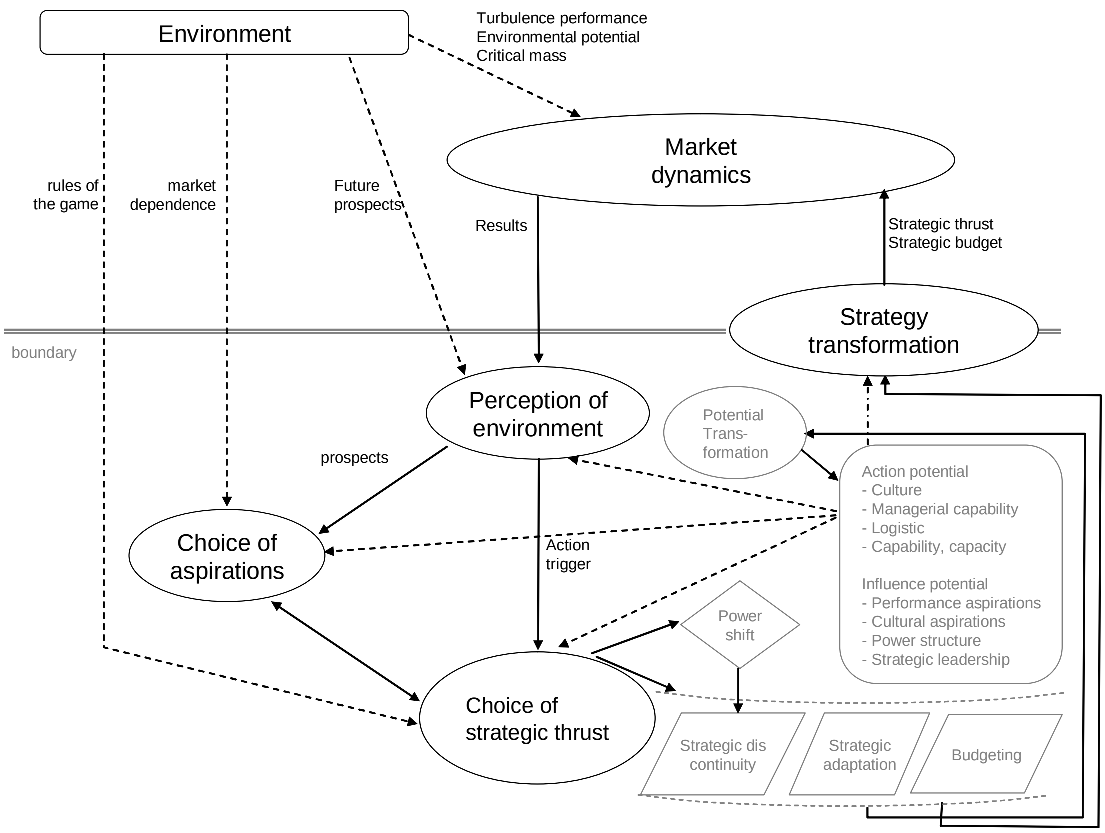
Appendix 1. Ansoff's full model of strategic behaviour



Ansoff's full model of an organisation's strategic behaviour (Ansoff 1979).

Appendix 2. Profile of interviewees and their firms

Respondent 1

This is a large concern with several sawmilling operations. The informant has worked in the firm for over 20 years and is responsible for sales and marketing. The material he contributed to this work is summarised as:

Strategy transformation	Narrative	Strategy nuances
Market channel	As a respondent, provided detailed *inform*ation about his - historical ways of working - perception of crisis in early 1990s - experiences of establishing customer relationships.	As a respondent, gave examples of establishing and sustaining relationships with particular Scandinavian customers.
Product value adding	As a respondent, discussed the firm's work to increase the value of their products to meet their customers' needs. Moreover, the discourse addressed how their portfolio was a construct of cu*stomers' needs and* their need to use raw material resources effectively.	As an informant, discussed the sector's work to increase the value of their products to meet their customers' needs. And, challenges in conservative market segments.
Service value adding	As a respondent, discussed the firm's approach to establishing logistics capabilities and providing their customers with logistics services.	As an informant, gave a detailed overview of the sector's need to innovative business approaches in several market segments.

Respondent 2

This fibre conglomerate has sawmilling, productions and operations in many countries. The informant has worked in at a builders' merchants. In the sawmilling sector, he has held various marketing-related positions for almost twenty years. Today he is responsible for sales and marketing in the Scandinavian market. The material he contributed to this work is summarised as:

Strategy transformation	Narrative	Strategy nuances
Market channel	As a respondent, provided information about his firm's - perception of crisis in early 1990s - experiences with breaking with agents - experiences with establishing direct customer relationships.	As a respondent, gave examples of establishing relationships with Japanese, Danish and Swedish customers.
Product value adding	As a respondent, discussed the firm's work to increase the value of their products to meet their customers' needs. Moreover, the discourse addressed how their portfolio was a construct of customers' needs and their need to use raw material resources effectively.	As a respondent, gave examples and discussed the firm's thinking regarding: - cooperating with customers in product development - building a portfolio of customers in a given product niche - rediscovering the aesthetic value of Swedish wood.
Service value adding	As a respondent, discussed in detail the firm's approach to establishing logistics capabilities to provide their customers with logistics services.	As an informant, gave an overview of the firm's logistics developments in other market segments.

Respondent 3

This sawmill is part of a fibre conglomerate concern. The informant, who is responsible for sales and marketing, has almost 30 years of branch experience. The material he contributed to this work is summarised as:

Strategy transformation	Narrative	Strategy nuances
Market channel	As a respondent, provided particularly detailed information about his - perception of crisis in early 1990s - experiences with establishing direct customer relationships.	As a respondent, gave examples of establishing and sustaining relationships with Scandinavian customers.
Product value adding	As a respondent, discussed the firm's investments and initiatives to increase the value of their products to meet their customers' needs.	As a respondent, gave detailed examples of involving customers in product development.
Service value adding	As a respondent, discussed the firm's approach to establishing logistics capabilities to provide their customers with logistics services.	As a respondent gave an overview of the firm's approaches to current business development.

Respondent 4

This is a family-owned sawmilling firm. The informant has worked in the firm for almost 25 years and is its marketing director. The material he contributed to this work is summarised as:

Strategy transformation	Narrative	Strategy nuances
Market channel	As a respondent, provided information about his firm's - perception of crisis in early 1990s - experiences with establishing direct customer relationships.	As a respondent, gave examples of: - transforming agent relationships
Product value adding	As a respondent, discussed the firm's work to increase product value, investing in drying, planning and gluelam processes. Moreover illustrated how they produced exclusively to customer order, where objects were clearly specified.	As a respondent, discussed the firm's work to increase realised product value, by selecting customers who appreciated the value: - of just their raw materials - and appreciated the value of being able to optimise the properties of objects to suit their production needs.
Service value adding	As a respondent, discussed the firm's development of distribution logistics capabilities so they could optimise raw material selection to suit their customers' needs. And, effectively deliver.	

Respondent 5

This is a family-owned concern. The informant, who has worked in the branch for almost 25 years, was responsible for the units operations. *The material he contributed to this work is summarised as:*

Strategy transformation	Narrative	Strategy nuances
Market channel	As a respondent, provided information about his firm's - perception of crisis in early 1990s - decision to break with traditional agents - experiences with establishing direct customer relationships	As a respondent, gave particularly detailed examples of: - establishing direct relationships with Japanese and Swedish customers
Product value adding	As a respondent, discussed the firm's motives and work to increase product value both using customer information and by cooperating with customers.	As both a respondent and informant, gave examples of: - working cooperatively with some customers - identifying customers who would appreciate the value of material that was a bi product of another process
Service value adding logistics.	As an informant, discussed the holding group's development of services, including	

Respondent 6

This is a large concern with several sawmilling operations in different countries. The informant has worked in the builders' merchants branch for over 10 years and is now a sales and marketing manager. The material he contributed to this work is summarised as:

Strategy transformation	Narrative	Strategy nuances
Market channel	As a respondent, provided information about his firm's approaches to establishing and sustaining a portfolio of customer relationships in various market segments.	As a respondent, described how enhancing direct customer relationships and enhancing customer dialogue via middlemen.
Product value adding	As a respondent, discussed the firm's approaches to reshaping interior design products for customers as design trends changed.	As a respondent, discussed the firm's approaches to managing efficiently a portfolio of basic and high value products, for their customers.
Service value adding	As a respondent, gave an overview of their firm's thinking about its logistics effectiveness. And, a detailed example of their how their firm worked together with customers to mutually manage joint SCM issues and tailor the logistics services to the customer's business needs.	

Respondent 7

This is a family-owned sawmilling concern. The informant, who was raised in the industry, has worked in the firm for almost 10 years. He is now the managing director. The material he contributed to this work is summarised as:

Strategy transformation	Narrative	Strategy nuances
Market channel	As an informant, provided information about his firm's - perception of crisis in early 1990s - experiences with breaking with agents - experiences with establishing direct customer relationships.	As a respondent, gave examples of: - establishing direct customer relationships - establishing sales operations - transforming agent relationships
Product value adding	As a respondent, discussed the firm's work to increase the value of their products to meet their customers' needs. Moreover, the discourse addressed how their portfolio was a construct of customers needs and their need to use resources effectively.	As a respondent, discussed the firm's thinking regarding matching their raw materials' qualities with customers that would appreciate the value of those qualities.
Service value adding	As a respondent, discussed the firm's approach to establishing logistics capabilities to provide their first customer withlogistics services. And, how they developed their logistics competences so they could provide this service more cost effectively. Thereafter, logistics operations were expanded so services could be offered to other customers and markets.	As a respondent, illustrated how different customers were proactive in demanding services whereas other customers were happy to receive a service after its benefits were offered.

Respondent 8

This is a large concern with several sawmilling operations. The informant has worked in the firm for almost 25 years and is responsible for business development. The material he contributed to this work is summarised as:

Strategy transformation	Narrative	Strategy nuances
Market channel	As a respondent, provided information about his firm's strategy to break with agents and work directly with customers.	Focused on the builders merchants and construction sector.
Product value adding	As a respondent, discussed the firm's work to increase the value of their products to meet their customers' needs.	Focused on industrialised building products.
Service value adding	As an informant, discussed the firm's and sawmilling sector's needs to make supply chains more effective by shortening them, delivering high value products directly to customers.	

Respondent 9

This is a family-owned sawmilling concern. The informant had worked in the firm for almost 30 years and is responsible for sales and marketing. The material he contributed to this work is summarised as:

Strategy transformation	Narrative	Strategy nuances
Market channel	As a respondent, provided information about his experiences with establishing direct customer relationships.	As a respondent, gave examples of his firm's historically entrepreneurial approach of working closely with customers.
Product value adding	As a respondent, described work production processes for products that meet their customers' needs. Moreover, the discourse addressed how their portfolio was a construct of customers needs and their need to use resources effectively. Also informed about the firm's broad portfolio of Engineered Wood products.	As a respondent, gave examples of working with specific customers to develop products and product quality. As a respondent, gave examples of the firm's thinking regarding minimising customer risk exposure.
Service value adding	As an informant, discussed the holding group's development of a broad portfolio of products and services.	

Respondent 10

This is a large concern with several sawmilling operations. The informant has worked in the branch for over 20 years and is the firm's managing director. The material he contributed to this work is summarised as:

Strategy transformation	Narrative	Strategy nuances
Market channel	As both respondent and informant, provided information about the sector's - historical ways of working - perception of crisis in early 1990s - decision to break with middlemen and work directly with customers	As a respondent, described his current firm's thinking regarding its market unit organisation.
Product value adding	As a sector informant, discussed the patterns of investments that were made to enhance the specifications and value of products.	As a respondent, discussed his firm's work to increase the effectiveness and robustness of their production processes so quality goods could be produced reliably.
Service value adding	As a respondent, discussed the firm's approach to establishing logistics capabilities so they could provide effective service delivery to their customers in a number of markets segments.	

Respondent 11

This is a family-owned sawmilling concern. The respondent, who has an engineering background, has worked in the firm for almost 10 years and is its marketing director. The material he contributed to this work is summarised as:

Strategy transformation	Narrative	Strategy nuances
Market channel	As an informant, provided information about his firm's strategic approach to increase business conducted directly with customers.	As a respondent, gave examples of establishing direct customer relationships. And, increasing customer dialogue vi middlemen.
Product value adding	As a respondent, discussed in detail tailoring product specifications to suit customers' needs in several market segments. And, gave examples of the firm's work to increase the value of their products to meet their customers' needs, including investments in Engineered Wood products and their production processes.	As a respondent, discussed the firm's thinking regarding matching their raw materials' qualities with customers that would appreciate the value of those qualities. In particular, rediscovering aesthetic value of Swedish wood.
Service value adding	As a respondent, discussed the firm's approach to developing logistics capabilities.	As an informant, discussed the holding group's development of other service business units.

Respondent 12

This fibre conglomerate concern has sawmilling, production and operations in many countries. The informant, who had an engineering background, has worked in both sawmilling and customer firms for almost 15 years. He is currently responsible for timber products business. The material he contributed to this work is summarised as:

Strategy transformation	Narrative	Strategy nuances
Market channel	As an informant, provided information about his firm's market unit operations in various countries.	
Product value adding	As a respondent, detailed the firm's work in a particular segment to create products of high value, investing in Engineered Wood production processes. Moreover illustrated how they optimised raw material selection to suit their customers' needs yet produce goods economically.	As a respondent, gave examples of: - working together with customers on sawmill investment cases. - the firm's work build a portfolio of customers in a new niche product segment.
Service value adding	As a respondent, discussed the firm's development of product, production and quality processes so they could effectively produce and deliver into customers' JIT production processes.	

Respondent 13

This is a family-owned sawmilling concern. The informant, who had a financial background, has worked in the firm for almost 15 years and is responsible for its operations. The material he contributed to this work is summarised as:

Strategy transformation	Narrative	Strategy nuances
Market channel	As a respondent, provided information about his firm's development of cooperative business relationships with customers, also in new markets.	
Product value adding	As a respondent, discussed the firm's work to create new types of products for specific customers. And, to improve quality and production process reliability.	As a respondent, discussed the firms work increase customers' perceptions of the value of using quality products.
Service value adding	As a respondent, discussed the firm's approach to establishing logistics capabilities to provide their customers with logistics services. Also, for new customers in a new markets.	As a respondent, gave examples illustrating how some customers and market segments were proactive in demanding services whereas other customers were happy to receive a service after its benefits were offered.