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Marketing Competencies of Swedish Sawmill Firms

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ABSTRACT

To address the new strategic concern of business innovation, the literature concludes that firms need new marketing competencies. This work, therefore, investigates Swedish sawmilling firms' marketing competencies to sustain cooperative relationships and deliver offerings according to customers' perceptions of value. The views of both sawmill firms and innovative customers on their business interactions were assessed using a qualitative research approach.

It was found that the studied firms have established cooperative relationships with innovative customers in all market segments. These relationships involve mutual exchange of sensitive business information in daily business operations and joint business development initiatives. Cooperative relationships are an important basis for sawmill business development.

These relationship interactions deliver service-based offerings, which generate 70 percent of sawmill firms' business volumes. Customers' perceptions of value are favorable, particularly due to service aspects such as logistics management and long-term business commitments.

These findings are significant because they describe the hard business values of soft relationship marketing practices and express a service-based view of sawmilling. This contrasts sharply with traditional commodity views found in research paradigms that solely focus on the value of product properties.

The significant challenge for researchers and practitioners is to manage the complexity of handling and developing relationship-based businesses, while making effective business use of spot markets.

Keywords: marketing competencies, relationship types, offeriong, customer perceptions of value

Introduction

Swedish society has a practical concern about sustaining its forestry sectors due to their significant contribution to Sweden's exports earnings (Swedish Trade Council 2006). Concerns are often articulated by governmental reports that advise the sawmill sector to enhance its marketing abilities (NUTEK 1992; Näringsdepartementet 2004; SIND 1980, 1986a, 1986b). The reports, however, are unclear on what actual marketing abilities are needed, and the reports also imply that firms do not understand their own business situation.

One fundamental criteria for understanding a firm's business situation is an assessment of the business environment (Ghemawat et al. 2000, Meyer and De Wit 2004), which is also a crucial factor in the success of Swedish sawmill firms (Alkbring 2003, Hugosson and McCluskey 2008). Since phenomenon such as globalization and changing customer requirements have fundamentally changed the business environment, the resource-based view (RBV) strategy literature advocates that new business practices are currently required (Drucker 1998, Hamel 1998, Prahalad and Ramaswamy 2000). In particular, a shift from a firm-centric to a network-centric perspective of business is proposed. This shift has two aspects:

1. Beyond products:
   A shift from the view that only products themselves are of value to a concept where value can be generated by innovative ways of combining the firms' and other actors' resources for service delivery (Hamel 1998, Drucker 1998).

2. Cooperation:
   A shift from the firm-centric view that firms compete with customers to the perspective that firms can cooperate with customers to co-create value for both (Drucker 1998, Hamel 1998, Prahalad and Ramaswamy 2000).

Accordingly, firms need new abilities, including recognizing customers' values and delivering that value (Hamel 2000, Margretta 2002). How value is delivered reflects the ways in which firms interact with customers and suppliers (Hamel 2000, Margretta 2002), which are fundamental marketing behaviors (Grönroos 2000, Hunt et al. 2006, Håkansson and Snehota 2000, Parvatiyar and Sheth 2000, Payne 2000). The relationship marketing literature has the potential to give insights into practicing such strategies (Dyer and Singh 1998, Hunt and Lambe 2000, Hunt et al. 2006, Morgan et al. 2000). In this paper, therefore, relationship marketing concepts are examined to establish a framework for assessing whether firms in the Swedish sawmill sector have the marketing abilities advocated for this new business environment.

Cooperation

Cooperation with customers became an established business practice in industrial markets during the 1990s (Prahalad and Ramaswamy 2000). Cooperation is a fundamental topic in the emerging relationship marketing field, which studies the operations between firms and their customers (Eiriz and Wilson 2006, Grönroos 2000, Hunt et al. 2006, Håkansson and Snehota 2000, Parvatiyar and Sheth 2000, Payne 2000).

Swedish sawmill firms tend to have other firms as their customers, and the sector's customer firms are distinguished into three segments: builders' merchants, do-it-yourself (DIY) retailers, and wood products manufacturers (Nord 2005). Relationships between sawmill firms and their customer firms have not yet been assessed. Using various theoretical and empirical frameworks, however, researchers have found that relationships are important to sawmill firms' business and product developments (Kozak and Cohen 1997, Korhonen and Niemelä 2004, Korhonen 2005, Hovgaard and Hansen 2004, Hugosson and McCluskey 2008, Stendahl et al. 2007, Wilson and Vlosky 1997).

As a whole, these studies imply the importance of two categories of behaviors: activities that foster the open sharing of information and conduct concerned with ensuring mutual business success. These two categories of behaviors are key distinguishing features that are associated with term cooperation in both the strategy and relationship fields (Cannon and Perreault 1999, Morgan and Hunt 1999, Prahalad and Ramaswamy 2000, Sheth and Parvatiyar 2000, Eiriz and Wilson 2006).

Yet, the various manners in which sawmill and customer firms relate and conduct business together are generally unknown. In assessing the nature of relationships, the literature generally raises the importance of various behavioral characteristics, and then models these as reducing onto a uni-dimensional range. The end-points of that uni-dimensional range are i) traditional transactions and ii) relationships, implicitly cooperative ones (Blois and Ivens 2006, Golfetto and Gibber 2006). Moreover, in applied research, researchers tend to assume that relationship types are either transactional or cooperative (Blois and Ivens 2006, Coviello et al. 2002, Wilson and Vlosky 1997).

But, relationships are more complex and multi-dimensional than this uni-dimensional modeling implies (Canon and Perreault 1999). Cannon and Perreault (1999), therefore, developed a model that has multiple dimensions, each of which is allowed to vary independently from the others. The various dimensions of the model arose from a synthesis of milestone relationship marketing concepts, and include information sharing and behavioral norms. Moreover, using the model as a basis to assess over 400 actual business relationships, a taxonomy describing a spectrum of relationship types was identified (Canon and Perreault 1999). Canon and Perreault's (1999) theory thereby constitutes a major development in our understanding of business relationships, including cooperative ones.

Beyond Products

The relationship marketing literature is also recognized for addressing the shift from a product-centric view of business to an awareness of the significance of the non-product aspects of offerings, particularly services such as tailor-made design and just-in-time logistics (Ford et al. 2002; Grönroos 2000, 2006). Moreover, addressing customer perceptions of the value of these offerings has become a fundamental marketing issue (Graf and Mass 2008, Khalif 2004, Payne et al. 2000). Grönroos has been influential in developing these concepts in a service perspective of marketing (2000,2006). He emphasizes that customers perceive the value of an offering in a holistic way, which includes selling the firm's friendliness, trustworthiness, and timeliness (Grönroos 1999).

The applied sawmilling research field has tended to focus on product development (Warensjö 1997, Staland et al. 2002, Roos et al. 2002, Nord 2005, Stendahl et al. 2007). Nord (2005) nonetheless identified logistics as a strategic 'hot spot' and Henningsson (2005) found logistics services were a core need of customers in the UK's DIY retailers and builders' merchants segments. Smith (2002) concluded that customers' value perceptions could be enhanced if sawmill firms ensured that their logistics delivery precision and product qualities were consistent, as well as providing tailored offerings to market segments.

Framework for Assessing New Marketing Competencies

Based on the RBV-strategist views that there is a need to shift to a network-centric perspective of business, the RBV-business model literature concludes that firms now need new abilities to recognize customers' values and to deliver that value (Hamel 2000, Margretta 2002).

Javidan (1998) was concerned that RBV researchers tended to use various competence terms as synonyms and therefore proposed a hierarchy for the terms resources, capabilities, and competencies. At the bottom of his hierarchy lie *resources*, which can be physical, human and organizational (Barney 1991). Javidan (1998) considers resources to be the building blocks of competencies. While each firm comprises its own firm-specific resource bundles, not every firm can deploy its resources effectively. The term *capability* is, therefore, used to describe the firm's ability to exploit its resources via the use of processes and routines to manage interactions between different resources. Thus, capabilities are placed on the hierarchy's second level. Capabilities, however, tend to be constrained to a particular sub-organizational function such as marketing or logistics. Therefore, the firm needs to coordinate and integrate capabilities across its functions, and it is this ability that is classified as the organization's *competencies*, which is the third level in the hierarchy (Javidan 1998).

The output of the firm's competencies can be seen through the firm's operational behaviors in the external environment (Javidan 1998). The literature considers marketing behaviors, such as delivering an offering or sustaining a relationship's interactions, to require coordination and integration of capabilities across a firm's marketing and production and logistics functions (Cunningham and Homse 2002, Möller and Rajala 2002). Therefore, according to Javidian's notion about seeing competencies through external operational behaviors, we argue that a firm's offerings and relationship interactions are the tangible outputs of that firm's marketing competencies. Furthermore, if firms generate business value in a network-centric way, we argue that the marketing competencies observable in business practices would be:

- competencies to establish and sustain cooperative relationship types with important customers;
- competencies to provide offerings that have a service emphasis; and
- competencies to ensure that customers have high perceptions of value of those offerings.

Table 1 shows how contemporary strategy and business model literature can be mapped to relationship marketing concepts, which make it feasible to assess firm's actual marketing competencies.

Table 1. Theoretical framework for this study.

Contemporary strategy developments	Corresponding business model competencies	Corresponding relationship marketing articulation of competencies in operational practice (see Section 2).
A shift from a product-centric view of business to innovation of the business model itself (Hamel 1998, Drucker 1998).	Competencies to find suitable customers and identify what these particular	The delivery of valuable *offerings* that have a service emphasis (Grönroos 2000, and Ford et al. 2002)

	customers value (Hamel 2000, Margretta 2002).	and *Customers' perception of value* is high (Grönroos 2000).
A shift from the firm-centric view that firms compete with customers to the perspective that firms can cooperate with customers to co-create value for both parties (Prahalad and Ramaswamy 2000).	Competencies to deliver value to customers through relationships and networks (Hamel 2000, Margretta 2002).	The establishment and maintenance of *cooperative relationships* (Cannon and Perreault 1999).

Research Rationale, Focus, and Questions

This work is theoretically motivated by the literature's current emphasis on cooperative business approaches, which also advocates that firms develop new relationship interaction competencies. We argue that these competencies can be assessed from firms' actual operational behaviors and propose that the relationship marketing field provides a strong analytical framework.

Studying firms within the Swedish sawmill sector is also generally motivated by the fact that Sweden is recognized as an interesting forestry nation with its world leading forest production rates and efficiencies (Juslin and Hansen 2003). It is an important wood supplier to markets such as Japan, France, and Britain (The Swedish Export Council 2006).

To assess marketing competencies in operational practice, our research questions are accordingly: *What are the marketing competencies of firms in Swedish sawmilling sector, articulated in terms of:*

- *abilities to establish and sustain cooperative relationship types;*
- *abilities to provide service-based offerings; and*
- *abilities to ensure high customers perceptions of value.*

The following text firstly describes the analytical framework for assessing marketing competencies and the methodological approach of this work. Next, the findings are reported and discussed in the context of the general discourse.

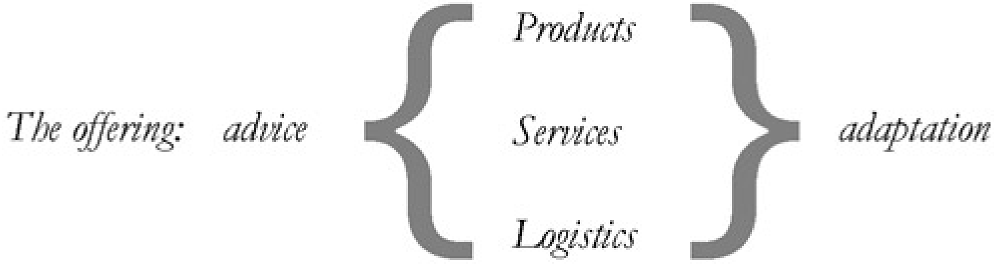
Marketing Competencies Analysis Framework

This section describes the relationship interaction theories that this paper uses to assess marketing competencies in operational practice.

Firms' Offerings and Customers' Perceived Value

Relationship interactions between buying and selling firms are emphasized in the literature (Eiriz and Wilson 2006, Grönroos 2000, Håkansson and Snehota 2000, Parvatiyar and Sheth 2000, Payne 2000). One aspect of the interaction is the selling firm's offerings to their customer firms, which should help solve the customer firm's needs (Grönroos 2000, Håkansson and Snehota 2000, Ford et al. 2002). Ford et al. (2002) model a selling firm's offering as comprising five interdependent elements: *products, service, logistics, advice,* and *adaptation* (Ford et al. 2002). The latter two elements encapsulate the former three as illustrated in **Figure 1**.

Figure 1. The offering and its five elements (Ford et al. 2002).



Product elements are goods, which may be traditional commodities. *Service elements* include tailor-made designs, deliveries, customer-orientated invoicing, etc. *Logistics elements* can be tailored just-in-time (JIT) logistics. Such products, services, and logistics elements are the traditional core of an *offering* (Grönroos 2000, Ford et al. 2002).

The relationship marketing field discerns *advice* and *adaptation* as the relational elements that encompass the offering's core goods or services (Grönroos 2000, Ford et al. 2002), and Grönroos (2000) emphasizes that customers require the offering's goods or services to be provided in a friendly, trustworthy, and timely manner.

Moreover, through their relationship and interaction with suppliers, customers shape their own perception of the holistic value of the offering (Grönroos 2000, Ford et al. 2002). Addressing customer perceptions of value is a fundamental marketing issue (Graf and Mass 2008, Khalif 2004, Payne and Holt 2001). Grönroos (2000) categorizes *customer perceived value* in two terms: *core value* and the notion of *added value*:

$$\textit{customer perceived value} = \textit{core value} \pm \textit{added value}$$

where: *core value* is the benefits of the solution compared to price paid for it and *added value* is shaped by services around the core offering, which include softer service aspects such as friendliness.

Added value, however, may be negative. That is, value is destroyed by behaviors such as untimely deliveries or a lack of necessary information. In such instances, the value enhancing effect of new services are counteracted, and perhaps even offset, by value destruction of the existing services that customers perceive in a negative way (Grönroos 2000).

It is implicit from the above definitions that a firm requires the ability to coordinate capabilities across its marketing, production, and logistics functions to deliver an *offering* which has a high *customer perception of value*. Therefore, according to Javidan's (1998) rationale, the *offering* and *customer perceptions of value* are measures of the firm's marketing competencies.

Relationship Interactions and Relationship Types

Relationship-based business approaches, and cooperation as a principal business behavior, is a fundamental topic in the emerging relationship marketing field (Eiriz and Wilson 2006, Grönroos 2000, Håkansson and Snehota 2000, Parvatiyar and Sheth 2000, Payne 2000).

With the perspective that relationships are multi-dimensional, and with a potential spectrum of possible relationship types, Cannon and Perreault (1999) developed a comprehensive theory of relationship interactions. This theory arose from a synthesis of milestone relationship marketing concepts. It categorizes relationship activities into distinct classes of interaction and assesses the kinds of operational activities in each interaction class (Cannon and Perreault 1999).

This theory's synthesis of interaction classes, and the range of possible operational activity levels within each interaction class, are defined as follows (Cannon and Perreault 1999):

1. *Information exchange* is defined as expectations of open sharing of information that may be useful to both parties. High levels of information exchange are indicated by the sharing of important information such as opening books and sharing cost information, discussing future product development plans, or jointly providing supply and demand forecasts.

2. *Operational linkages* are defined as the activities and processes between the buying and selling firms that facilitate the flow of goods, services, or information. When operational links are low, the two organizations operate independently – at arms length to one another. At the other extreme, inter-coupled systems handle inventory, orders, JIT, etc.

3. *Legal bonds* are defined as the level at which the parties formalize their obligations to one another. Levels can range from an informal 'handshake' to a detailed and binding contractual agreement that specifies the obligations and roles of both parties and perhaps even the relationship's governance mechanisms.

4. *Cooperative norms* are defined as the parties' expectations about how they will work together to jointly achieve both the mutual goals of the relationship as well as the individual goals of each of the parties.

5. *Adaptations* by sellers/buyers are defined as investments or changes to processes, products, or procedures that are specific to the needs or capabilities of the buyer/seller.

Cannon and Perreault (1999) then used this synthesized theory as a foundation for a comprehensive survey of actual business relationships. By assessing the levels of interaction in each interaction category, a taxonomy of seven common relationship types in general business practice was statistically identified (Cannon and Perreault 1999).

Cannon and Perreault (1999) described the characteristics of identified relationship types and attributed metaphor names to each type. Their taxonomy is:

> *Bare bones*. Here, there are minimal operational connections and adaptations between buying and selling firms, with low levels of buyer trust in sellers and thus only low levels of information exchange and cooperation.
>
> *Basic buying and selling*. In comparison to bare bones, buyers in basic buying and selling relationship types have higher levels of trust in sellers and there are moderately high levels of information exchange and cooperation within the relationship.

Custom supply. This type is similar to a basic buying and selling relationship type but with higher levels of seller adaption and lower levels of trust.

Collaborative. This type corresponds to the popular image of partnering. In this type of relationship, there are high levels of mutual cooperation between buyers and sellers. Parties, however, do not make high levels of adaptations to one another.

Mutually adaptive. Although parties make high levels of adaptations to one another, buyers, who source solely from one supplier, do not trust the supplier.

Customer is king. Buyers trust their suppliers, with the supplier making high levels of adaptations to the seller.

Cooperative. Buyers and sellers have high levels of operational linkages, cooperation, and information exchange. This relationship type has low levels of formal legal contracts. Instead, it is based on trust, with the highest levels of trust of all relationship types.

We consider a *bare bone* relationship type's minimal levels of interactions are an archetypal transactional approach to business, and this type is also indicative of firm-centric business approaches. By comparing *bare bones* and *cooperative* relationship activity levels in each of the model's interaction categories, it is evident that firms need to develop new competencies to establish and sustain the cooperative types of relationships that are proposed by the current strategy literature (Hamel 1998, 2000, Prahalad and Ramaswamy 2000). Therefore, according to Javidan's (1998) rationale, the ability to establish and sustain a *cooperative relationship type* is one key measure of a firm's marketing competencies.

Research Approach

Since the marketing competencies of sawmill firms have not yet been studied, and the phenomena to be assessed include attitudes towards events, processes, and experiences, the choice of a qualitative research approach is appropriate (Bliss and Martin 1989, Denzin and Lincoln 2000, Gummesson 1991, Miles and Huberman 1994, Silverman 2005, Strauss and Corbin 1990).

Purposive Sampling

Data gathering took place according to a *purposive sampling* framework (Arbnor and Bjerke 2008, Gummesson 1991). To enable discoveries and descriptions of both general and specific traits of a phenomenon, the qualitative design approach generally emphasizes capturing varied qualities and characteristics and *purposive sampling* can be used as a means to capturing both diversity and particular attributes (Arbnor and Bjerke 2008, Gummesson 1991). Moreover, in this study, it is reasonable to assume that both selling and buying parties can give vital information about *relationship interactions*. Therefore, both sawmill and customer actors were sampled.

Customer Selection Criteria

The Swedish sawmilling sector's traditional customer segmentation is as follows: wood products manufacturers, also called industrial end users; DIY retailers; and, builders' merchants (Nord 2005). Given that segments by definition have different needs, it was assumed that different offerings were required for success in each segment. Accordingly, one criterion for customer selection was their business segment.

It is generally recognized that innovative customers have particularly good market and supply chain information – and thus have a critical awareness of their particular suppliers' competencies. Accordingly, innovativeness was the other customer selection criterion.

Sawmill Firm Selection Criteria

The largest 20 sawmill firms comprise our operational definition of the population of the Swedish sawmilling sector since these firms constitute 80 percent of Sweden's sawmilling business (see Appendix 1).

It is well known that raw material influences product elements. In Sweden, log properties are particularly influenced by their geographical source and three regions are distinguished: northern Sweden's boreal forests, southern Sweden where mixed temperate forests grow, and regions comprising both boreal and mixed temperate forests. Thus, geographic location was chosen as a criterion for sawmill firm selection.

The literature considers that a sawmill firm's business behavior is dependent on its ownership structure (Nord 2005, Stendahl et al. 2007). To provide scope to address any such potential differences, it was also considered important to recognize ownership aspects as the other sawmill firm selection criterion.

The Sampling Procedure

The sampling procedure followed a *snowballing* principle, where sampling of actors took place in a sequence. Actors that had already been sampled were asked to actively participate in the remainder of the sampling process by suggesting other actors who could potentially provide personal insights about the topics addressed in this study (Gummesson 1991, Silverman 2005).

Such a *snowballing* process was initiated through discussions with a handful of well-respected sector representatives, who were all independently asked to suggest an innovative customer firm and contact person within that firm. All of the representatives named both the same firm and contact person, and so this actor was sampled first.

At the end of this first interview, we asked for the contact details of other actors. These suggestions were checked against the lists for customer selection, sawmill selection, and our population definition. We then selected our next actor, who was again asked to suggest other actors. All of the interviewees in both customer and sawmill firms contributed further study actors. We continued this process until we sampled eight customer firms and twelve sawmill firms, with the studied firms including:

- two or three customer firms in each of the sector's three main market segments;
- all five Swedish fiber conglomerates and seven of the fifteen independently owned firms, which are SMEs; and
- three (of six) sawmill firms that source raw materials solely from Sweden's boreal forests, three (of six) that source solely from mixed temperate forests, and six (of eight) that source a mixture of boreal and mixed temperate forests.

The Interview Process

Within the sampled firms, due to the *snowballing* information and *purposive* actor sampling criteria, the particular persons interviewed all had significant personal experience of either marketing or purchasing activities. They also held senior positions within the firms. Appendices 2 and 3 profile the eight customer and twelve sawmill interviewees and the firms that they represented.

Before the interview round, *thematic interview guides* were constructed as a basis for discussions. **Table 2** shows how the thematic questions map to the research analysis framework.

Interviews were conducted from spring 2006 to late summer 2007 and were held face-to-face at the respondents' offices. To contribute to *reliability* (Silverman 2005), interviews were recorded digitally, with one author taking simultaneous notes, while the other author focused on shaping the dialogue. Interviews were typically 1-1/2 to 2 hours. After each interview, interview notes were checked against the taped discourse and notes typed in English. From that *reliability* control process, summaries of the interviews were written and these formed our emerging field notes (Silverman 2005).

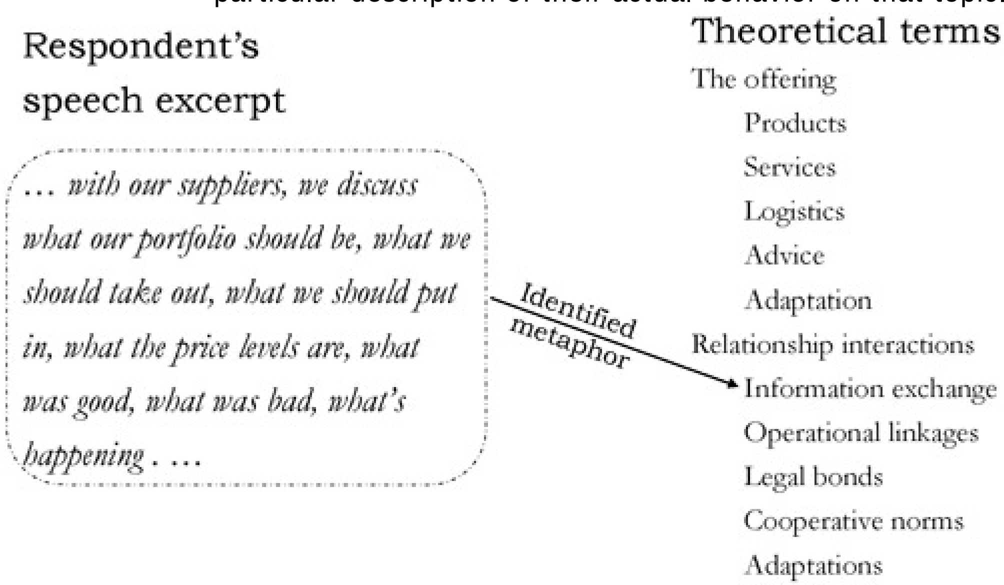
Table 2. Thematic interview guide correlating the thematic questions posed to sawmill or customer actor respondents with corresponding theoretical concepts.

Thematic questions	**Sawmill actor interviews Anticipated material, classified in terms of the analysis frameworkl**	**Customer actor interviews Anticipated material, classified in terms of the analysis framework**
What is your business idea?	Market and customer segmentation The selling firm's perception of its offering (Grönroos 2000, Ford et al. 2002)	Researchers' understanding of the customer's contextual situation that could influence the customer's perception of the selling firm's business offering
What do you offer your markets/customers?	The selling firm's perception of its offering (Grönroos 2000, Ford et al. 2002)	
Who do you see as your customers/suppliers?	Customer segmentation	
And, how do you work with them? – How do you help them? – How do they help you? Do you work with all customers/suppliers in this way?	Relationship interactions (Cannon and Perreault 1999)	Relationship interactions (Cannon and Perreault 1999) Sawmill firm's offerings (Grönroos 1999, Ford et al. 2002) Customer perceptions of value (Grönroos 1999)

Data Analysis

The field notes were subjected to *content analysis* by both authors, who used theory as a framework for assessing the gathered data in a structured way (Hillebrand et al. 2001, Silverman 2005). Accordingly, this content analysis entailed that the units of analysis – sentences and clauses of the respondents discourse – were interpreted, compared, and sorted. In this *structured* process, the categories for interpretation and sorting were the *offering* and *relationship interaction* theoretical categories described in the above theory section. **Figure 2** illustrates this sorting.

Figure 2. Illustration of the *structured content analysis* of field notes. A respondent's speech excerpt was considered a metaphor for a specific theoretical term if it provided a particular description of their actual behavior on that topic.



To assess compatibilities within each category, a second content analysis stage judged whether there were similarities or differences between different excerpts. A general principle for this was that similarities in units of analysis were identified with a *constant comparative* approach, and any differences by a *deviant case* approach (Silverman 2005). Similarities and differences were compared and discussed between the authors and a negotiated common synthesis was reached. The outcome was the following narratives:

- Two images of customer relationship interactions. Extracts from all of the customer firms contributed to these images: the first image comprised material from at least six of the eight sampled customer respondents, while the second image comprised material from up to two of the eight sampled customer respondents. Appendix 4 describes these attributions.

- Three images of sawmill firms' offerings, which were dependent upon the customers' market segment. All of the sampled sawmill firms contributed to all three segment offerings, except firms that source raw materials solely in southern Sweden where mixed temperate forests grow. Such firms did not supply to the wood products segment. It is noted that ownership structure did not influence these images.

To test these narratives/images, the authors 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.

As a second order analysis, the images describing *relationship interactions* were compared with the taxonomy of *relationship types*. Where the image corresponded to the characteristics of a given taxonomy classification, that image was then assigned the taxonomy's metaphor name.

The images describing firm's offerings for each segment were abstracted into a form that resembles **Figure 1**.

Finally, issues that Grönroos (2000) considers to significantly influence *customers*' holistic *perceptions of value* were identified from the images of relationship interactions. It was also assessed whether *added value* was positive or negative.

Validity and Reliability

The intent with the above method was to capture an accurate account of this study's phenomenon (Denscombe 2007, Silverman 2005), that being sawmill firms' marketing competencies. The accuracy of an account is often termed internal *validity* in the general method literature (Denscombe 2007, Silverman 2005) and *credibility* in the naturalistic literature (Denscombe 2007, Lincoln and Guba 1985). Moreover, researchers should show that captured information is assessed and presented in a *reliable* or *dependable way* (Denscombe 2007, Silverman 2005, respectively, Denscombe 2007, Lincoln and Guba 1985). Accordingly, this study of marketing competencies aims to enhance *validity/credibility* with regards to data gathering and analysis.

The technique used to enhance the *validity* of the gathered data was *snowballing/purposive sampling*, which meant that:

1. All respondents were actively involved in customer/supplier marketing activities and, therefore, had personal experiences of the phenomenon; and
2. Innovative customer respondents had an enhanced critical awareness of the environment.

While this technique is, therefore, intended to capture the phenomenon, it does not necessarily claim to represent all customer or sawmill firms. But, because the selection of sawmill firms was made on the basis of their ownership structure and raw material source (see above), the 12 studied sawmill firms could be seen as being representative of the Swedish sawmilling sector. This issue is discussed in the results section under generalization, indications, and future research.

Regarding the *validity/credibility* of data analysis, the techniques used within the *structured* data analysis process were:

1. *Constant comparative* method to test the usefulness of the concepts of offerings and relationship interactions, as well as to sort and interpret the data;

2. *Comprehensive data treatment* that included all of the data, which resulted in offering data being distinguished by market segment; and

3. *Deviant case analysis* so that the relationship interaction data that did not 'fit' the cooperative relationship concept could be included (i.e., image 2 of the relationship interaction).

Moreover, *reliability/dependability* in reporting the gathered data can be demonstrated by use of:

1. Digital tape recorders to accurately capture respondent's views;

2. Two researchers to interpret the interview material; and

3. Quotes from respondents so that readers can freely see the original material without inferences from the authors.

Findings

This section presents findings regarding Swedish sawmill firms' contemporary marketing competencies. To set these findings in context, sawmill firms' overall view of customer relationships are presented first. The two images of the *relationship interactions* between sawmill and customer firms are then presented before describing the images of sawmill firms' *offerings* in each of the sector's three main market segments. Finally, assessments of *relationship types* and *customer perceptions of value* are made.

Types of Customers

Sawmill firms' managers emphasized that it is important to sawmill firms' businesses that their particular customers considered their specific firm to be a trusted supplier. Firms shared a common market segmentation model that comprised three segments: builders' merchants, DIY retailers, or wood products manufacturers. Across all market segments, customer firms are distinguished according to mutual business commitment levels. Sawmill firms' common customer groupings are:

1. *Key customers*. Sawmill firms classify a customer firm as a key customer if the sawmill firm considers it has a close business relationship with that customer firm; one which contributes to the sawmill firm's business development. Moreover, sawmill firms consider such key customers often generate business volumes that are noteworthy for their particular sawmill firm.

2. *Regular customers*. Sawmill firms classify a particular customer firm as a regular customer if the sawmill firm considers that they can rely upon conducting business with that customer on a regular basis. Such relationships constitute business volumes that are often important to the sawmill firm's business.

3. *Spot customers*. These represent actors who conduct ad hoc transactions of goods with sawmill firms on commodity markets.

Typically 70 to 80 percent of the studied firms' business volumes were found to be generated from relationship-based business – i.e., business with key and regular customers. Relationship-based business was reported to have largely replaced traditional commodity spot market business, which now generally accounts for only 20 to 30 percent of business volumes. The relative importance of these three customer groupings is typically illustrated:

> We have around four hundred customers here in Scandinavia. Of these, we do regular business with forty and that accounts for 80% of our business volumes. Within these forty, we have particularly close relationships with a handful. We like to work with these innovators because they are particularly demanding and we can learn and enhance our business performance. We then offer the benefits of our development to other customers. ... Then there's the spot market – customers call and ask if we have particular volumes in stock and if we do we just transport it out. We don't have any relationships with customers in the spot market.

Sawmill firm respondent 1

It is important to have a balanced mix of key, regular, and spot customers: business with key and regular customers provides relatively stable business volumes over time and extra profits can be made by quickly responding to spot market fluctuations. Regarding the significance of stable business relationships, a typically comment was:

> Stability is the world's secret. It's the code 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.

Sawmill firm respondent 2

During the time frame of our interviews, spot market prices were increasing and sawmill respondents considered the potential to make significant short-term profits in that market. They also recognized, however, the necessity of securing long-term business stability via relationships with key and regular customers. By expanding production, sawmill firms aimed to both secure long-term business and take advantage of short-term opportunities, although the latter possibility was constrained by limited raw material supplies.

While sawmill firms did *not* have long-term legal contracts in place, sawmill respondents considered that they essentially had informal agreements with each of their key and regular customers regarding business volumes. When planning production, sawmill firms, therefore, reserved the volumes they estimated their key and regular customers would need so that they could confidently deliver to these particular customers. After securing that relationship business, sawmill firms produced and directed the remainder of their production to the spot markets that they anticipated would pay the most.

> We continually plan our production two years in advance. Even although we don't have contracts that far ahead, we account for the volumes that we think our regular customers will need – and reserve these. Above those secure volumes, we then see what business we can do in the spot market.
>
> Sawmill firm respondent 3

Relationship Interactions

Two images of relationship interactions are identified from the eight customer respondents: image one comprises material from between six and eight respondents, while image two comprises material from up to two respondents (see Appendix 4).

Information exchange

Customer firms have open dialogues with their supplying sawmill firms. One dialogue forum is regularly scheduled meetings that address strategies and operations, including forecasts, pricing, logistics, and quality performance.

> (At least four times a year ... .) with our suppliers, we discuss what our portfolio should be, what we should take out, what we should put in, what the price levels are, what was good, what was bad, what's happening. ... We don't talk about our margins, but they can calculate what they are. We are very intimate. If it's bad for us, it's bad for them (sic and so both firms cooperate to secure business for both parties).
>
> Customer respondent 1

At these meetings, customer participants are typically responsible for purchasing, logistics, staff, products, and area sales. Sawmill firm participants are typically sales and marketing, logistics, and quality managers.

Customer firms consider their business environment to be dynamic, so it is a challenge to secure necessary raw material volume flows. To ensure a smooth flow, updated forecasts and orders are communicated to suppliers, often on weekly or biweekly bases.

Employees at all levels in both sawmill and customer firms visit each other's premises a few times a year. The intent of such visits is to ensure staff get a look and feel for the other party's operations.

Operational links – image 1

As well as the above mentioned meetings, order handling and delivery activities, receiving goods and services involves exchanges between customer and sawmill firms. Such exchanges are part of a supply chain process that actively involves both parties in the following ways.

Emphasis is placed on the practical operational issue of ensuring that goods are always on the customer's shelf, while minimizing stock levels. There is also a need to optimize the balance between minimal stock levels and delivery costs and frequencies.

> We can't drive around with half empty trucks ... Yet we can't have too much arrive at the same time because the stores aren't that big ... and they can't always sell a truckload at a time ...
>
> Customer respondent 1

Joint logistics planning is required to balance these conflicting requirements, which involves an open sharing of cost information.

> For us, it is vital to know that things will come in time. .... And the trucks must be full. We sit down with our suppliers and calculate the costs of different alternatives and improvements. We then split the difference in savings.
>
> Customer respondent 2

Quality control is another major operational link. Customers often specify the visual and mechanical properties of the product-element that they require. Strength grading is a common example for the builders' merchants segment. Examples in the wood products manufacturing segment include ensuring a natural, yet symmetrical pattern on flooring elements, while for window elements, acceptable knot size tolerance ranges are specified in order to maximize throughput in the customers' production.

> Here is our album. ... These are photos of the aesthetic qualities we want. ... These are examples of the aesthetic qualities our suppliers are to avoid.
>
> Customer respondent 3

When starting new business, customer and sawmill firms often work together to optimize understanding of the other party's situation and thereby enhance the sawmill firm's quality control processes.

> We work with our suppliers so that everyone – sales, production and also delivery – understand the qualities that are important to us.
>
> Customer respondent 3

Operational links – image 2

The operational links of two customer firms with their suppliers are constrained to the exchange of forecast and order information, which is discussed in the above image of information exchange.

Legal bonds

Business is conducted within Framework Agreements, which are legal terms and conditions that essentially set the level of business volumes and prices, as well as formalize delivery terms and conditions. The duration of these Framework Agreements are mostly three or sometimes six months. During the period of the Frame Agreement, orders are placed under the Frame Agreement’s terms and conditions.

If commodity prices fluctuate significantly, Framework Agreements contain force majeure clauses which state that higher prices can be charged.

> There is only one other industry that I know of that’s like sawmilling, where you get a fax late at night saying the price is going up the next morning – and that’s the oil industry.

Customer respondent 2

Whether such clauses are invoked, however, appears to be determined by the particular relationship’s cooperative norms.

Cooperative norms – image 1

The general sentiment between sawmill firms and key customers[1] is:

> The red thread in our business is that partners need to collaborate.

(1) As reported above, sawmill respondents considered it is important to prioritize long-term business with their key and regular customers. Only six of the eight customer firms in this section were considered to be key customers by their suppliers.

Customer respondent 1

Firms do not wish to solve problems with detailed legal contracts. Instead, to ensure flexibility in addressing issues, the need to understand “ways of doing business” is preferred:

> If our suppliers know our concept, and know how we work, then we can always work things out together.

Customer respondent 2

Interviews were held at a time of increasing spot market prices, where the general market perception was of wood shortages and delivery uncertainty. Nonetheless, key customers are confident that they have a secure supply of goods from their specific suppliers despite the lack of long-term legal agreements.

> We have a wood expert who keeps us informed about what's generally happening in supply markets. We know that there are shortages and delivery problems out there. But we can rely on our suppliers. We've not seen any supply problems.

Customer respondent 2

Firms are aware that *force majeure* clause can potentially be invoked. Unexpected price increases can also be problematic with customers' customers. For example, retail campaigns and their published advertisements are planned a long time in advance, and consumers are sensitive to changes in published pricing. Between sawmill firms and *key customers*, there is, therefore, an informal agreement that evens out price fluctuations; customer firms continue to pay higher prices for a period when prices are decreasing, while sawmill firms hold back price rises when raw material prices are increasing.

> We know our supplier has had three major raw material price increases so far this year. He's held these back. Generally, he holds back prices when they are increasing. And, we continue to pay a little more for a while when prices are decreasing. That way, we even out fluctuations, which benefits us all.

Customer respondent 6

Cooperative norms – image 2

The second image of cooperative norms reports that, in general, the builders' merchant segment approach tends to 'shop around' and place orders with the lowest bidder.

Adaptation – image 1

To ensure competitiveness in a dynamic business context, a focus area is development of logistics capabilities. To ensure mutually beneficial business development, it is also important for sawmill and customer firms to work "together".

Another common example of working together is product development initiatives where customers join the sawmill firm's project team, specifying their needs, appraising their benefits/gains in manufacturing and prices, and developing the sawmill firm's business case for the investment.

> 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.

Sawmill firm respondent 1

In the construction sector, however, there is little need to develop basic wood products “since a 2 × 4 is a 2 × 4” and planing of sawn goods is now standard. Instead, the key issue is to develop business practices:

> 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 centers is one type of development in the UK. ...

Sawmill firm respondent 2

Adaptation – image 2

‘Traditional’ business practices are considered an obstacle to working together, particularly in the construction segment.

> It’s a conservative market and we don’t have the close customer relationships there that we have elsewhere. Often we don’t even know the customer – England is by tradition, traditional. We are trying to establish closer connections to customers, but it takes time.

Sawmill firm respondent 4

Sawmill firms are concerned that the current high spot market prices (see above) are an obstacle to development of the Swedish sawmilling sector. ‘Anybody’ can make money at the moment. Customer respondents in the builders’ merchants segment are similarly concerned about the boom[2] in the construction industry, perceiving many firms did not see the need to develop their operations with suppliers.

(2) Interviews were held during a boom time. Nonetheless, interestingly, firms were all aware that the underlying trends indicated there could be a business cycle downturn.

Nonetheless, to enhance cooperation, some firms are focusing on building common understandings through dialogue. Also, sawmill respondents think that it is crucial that they consistently ensure logistics reliability and high product quality (dimensional accuracy and straightness).

Sawmill Firms’ Offerings in the Wood Products Segment

The business emphasis of offerings to the wood products segment is quality assurance since the finish of goods is of key importance to customer firms. Many customers consider the aesthetic appearance of product elements to be important or customers may wish to avoid flaws so that they can minimize waste in their manufacturing process.

Products

The offering's product elements are a wide range of finished wood and wood-based objects (e.g., work tops, wood for furniture, windows, doors, and flooring).

Product elements such as blanks for windows or doors are cut and shaped to precise dimensions from sawn wood with low moisture contents. Production processes are designed to ensure that visible wood or laminate finishes have high finish quality, and optionally, high aesthetic appeal.

To verify that goods are produced using sustainable social and environmental approaches, many sawmill respondents state products are required to have a Forest Stewardship Council (FSC) label.

Due to the unique aesthetic qualities of boreal forest wood, respondents from firms in northern Sweden tend to state that their firms specialize in material for use in interior design where wood finishes are aesthetically important.

Sawmill firms that source raw materials from Sweden's mixed temperate forests tend to supply goods that are manufactured into hidden structural components, such as windows or door blanks, which are often produced using engineered wood approaches.

Services

Some sawmill firms offer their customers the option of a range of customized services so that tailored product elements can be manufactured to suit the preproduction needs of customers.

Sawmill firms who offered engineered wood products emphasize that their expertise and volume production capabilities enables them to consistently avoid knots and other surface irregularities and thus consistently "manufacture high quality into their customers' components" (Sawmill firm respondent 6). This quality control measure is considered by sawmill respondents as a key service aspect of their offering. If the product has few knots or flaws, then at the customers' factory, production stoppages, material waste, and discoloration of painted surfaces can be minimized.

Sawmill firms' attitudes to quality control processes are considered by customers to be an important factor in determining supplier selection. Securing supply volumes is another. Generally, customer respondents consider sawmill firms' open flexible approaches to such operational and business development activities to be an important service aspect.

Customer firms also appreciate the "softer side" of their suppliers' services. Examples include the truck driver's attitude, and the administrator's handling of invoices, as well as general levels of professionalism.

> Their whole organization is good to work with. How they deliver. How they deal with invoices. Everything. They are nice people, very professional. We like doing business with them.

Customer respondent 4

Logistics

Sawmill firms' attitudes to quality control processes are considered by customers to be an important factor in determining supplier selection. Securing supply volumes as previously discussed in this section is another. Generally, customer respondents consider sawmill firms' open flexible approaches to such operational and business development activities to be an important service aspect.

Sawmill Firms' Offerings to the DIY Retailing Segment

The business emphasis in offerings to the DIY retailing segment is tailored logistics services since retailers need to ensure that goods are consistently on the shelf, while avoiding the cost of unnecessarily high stock levels, as well as minimizing transportation costs.

Products

Construction wood is a noteworthy product category supplied to DIY retailers. A concern is consumers' perceptions of the wood's quality since this affects consumers' views about the attractiveness of the DIY outlet. Accordingly, it is important that the construction wood is straight, cut to standard lengths, and has no waned edges. It should also be possible to stack the wood neatly on shelves.

> Consumers aren't like professional wood users – they can't deal with irregularities and waned edges. So if the wood isn't perfect and straight they'll pull out bits until they get what they think they want. And we're left with a pig sty and a lot of waste.

Customer respondent 2

Interior fittings (e.g., worktops and moldings), which consumers can pick off the shelf, are another product category. To ensure an attractive display in the DIY store, it is important these are straight, of uniform dimensions, and shrink wrapped.

Some customer firms needed guarantees that goods are produced sustainably and so FSC labelling is important.

Logistics

DIY business success depends on ensuring goods are constantly "on the shelf," while minimizing storage and transportation costs. Logistics is, accordingly, a key service to DIY retail customers and so to serve this market segment, many sawmill firms have invested in logistics resources and capabilities, including distribution centers, trains, and rail tracks.

> We've invested in a train and a rail track to connect us to the main network so we can handle our distribution logistics effectively when getting goods to the ports. Most of the inland sawmills now have their own trains.

Sawmill firm respondent 5

> We're now a gold supplier to that customer in one of their regions. We've built one of our logistics centres there, from which we can supply the stores within 12 to 24 hours.
>
> Sawmill firm respondent 10

Services

Logistics considerations also include practices such as getting goods on the DIY store's shelf in a straightforward manner. One service, for example, is packaging construction wood in half pallets to make it more manageable to handle within the store.

Shrink wrapping and bar coding of interior design goods means that DIY store shelves look attractive and consumers should be able to smoothly flow through the store and its check-out. Barcodes are also an important stock control feature for retailers.

When the retail store's concept includes advice to consumers, sawmill firms provide a training service about the store's wood products and their uses so that DIY stores can meet the challenge of ensuring their staff have the necessary knowledge to give such advice.

Sawmill Firms' Offerings to the Builders' Merchant Segment

Sawmill firms' business emphasis to the builders' merchants segment is distribution centers and logistics. Such services are an increasingly important aspect of the offering:

> 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.
>
> Sawmill firm respondent 2

Products

To ensure wood remains straight when constructed into building structures, drying wood to particular moisture content levels, and then planing to precise dimensions, is now a standard aspect of production.

> Quality is basic. Our (Swedish) wood is fairly homogenous. It is planed well. And, each packet comprises the same species. That looks much better compared with ... (the other country's) packets.
>
> Sawmill firm respondent 8

Strength grading of wood and laminates is important. Each load-bearing construction element is strength tested and graded to European Union, Japanese, or American standards.

> We have a license ... to label and sort each wood item. When we're sorting to Japanese standards this also includes aesthetics.
>
> Sawmill firm respondent 9

Aesthetics is an important product attribute for glulam beams, especially for the Japanese market. Standards to sort and grade the wood's visual aesthetics have, therefore, been developed and implemented in quality control processes.

Depending upon the market, FSC labelling may be important.

Logistics and services

Logistics services are important for builders' merchants. Sawmill firms have, therefore, recently made extensive investments in logistics and established new warehouses and distribution centers in several markets.

> We have three sales people and the same number of administrative personnel. 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.
>
> Sawmill firm respondent 8

Assessment of Relationship Types, Offerings, and Customers' Perceptions of Value

The first image of relationship interactions reflects a situation where both sawmill and customer firms consider mutual cooperation to be important. Customers are classified by sawmill firms as *key customers*. This first image can be summarized as *relationship interactions* that comprise high levels of operational linkages, cooperative norms and information exchange, with low formalization of *legal bonds*. There is also a fundamental sense of trust. If we compare this summary to Cannon and Perreault's taxonomy (see analysis framework above), then two relationship types are candidate metaphors. These are the *collaborative* and *cooperative relationship types*. Due to the fundamental sense of trust, we judge this image's characteristics to correspond most closely with a cooperative relationship type. Consequently, it is concluded that the studied Swedish sawmill firms have the competencies to establish cooperative relationship types.

In the second image, customer firms are classified as important *regular customers*. An effective choice of not to collaborate, however, is made by either the sawmill or customer firm (Prahalad and Ramaswamy 2000). In one case, the sawmill firm sees the customer's own planning activities leaves the sawmill with a strategic dilemma (Morgan and Hunt 1999). In the other case, the customer firm takes a traditional cost price based procurement approach. These effective choices affect the relationships. Thus, there are only low to moderate levels of trust and hence low levels of *operational linkages* and *cooperative norms*. There is also a lack of *adaptations*. We, therefore, classify this relationship type as basic buying and selling, according to Cannon and Perreault's taxonomy.

In spot market transactions, we assess that there are minimal operational linkages with customers and the lowest possible levels of information exchange. According to Cannon and Perreault's taxonomy, this relationship type is, therefore, bare bones.

The image of the sawmill firms' offerings to wood products manufacturing customers shows a focus on customers' quality needs. Securing delivery was also generally important. In a form that resembles **Figure 1**, **Table 3** shows our abstraction of the studied sawmill firms' offerings to customer firms in this segment.

The image of the sawmill firms' offerings to DIY retailing customers shows a focus on tailored logistics, where delivery reliability and responsiveness are key business aspects. In a form that resembles **Figure 1**, **Table 4** shows our attribution of the studied sawmill firms' offerings to customer firms in this segment.

The image of sawmill firms' offerings to builders' merchants customers shows an emphasis on customers' tailored logistics needs. In a form that resembles **Figure 1**, **Table 5** shows our abstraction of sawmill firms' offerings to customer firms in this segment.

Considering the first image of relationship interactions, which describes a cooperative relationship type, it is concluded that customer perceptions of value are high. Customers appreciate their particular sawmill supplier's efforts to ensure price and delivery stability in times of insecurity. Secondly, customers generally appreciate the business value of their suppliers' quality control processes, tailored logistics services, and service flexibility. Moreover, where visual aesthetics are important to customers, value is generated by constructing goods from boreal forest wood.

Considering the second image of relationship interactions, which describes a basic buying and selling relationship type, it is concluded that customer perceptions of value are low. This is primarily due to perceptions that supplies are unstable and prices are inflated. Perceived poor delivery performance is also a factor. This situation is textbook example of Grönroos' concept of negative added value.

Considering the issues raised in both of the above positive and negative customer perceptions of value, we conclude that customer firms have a holistic perception of value as Grönroos (1999) proposes.

Table 3. Studied Swedish sawmill firms' offerings to customer firms in the wood products segment.

A service-based, quality assurance *offering* =

advice

Mutual assessments of combined supply chain concerning quality, cost and production issues

Products

Finished wood and wood-based objects that are:

- Cut and shaped to precise dimensions
- Have a specified finish, with the option of a particular aesthetic look
- Produced according to sustainable environmental and social approaches (e.g. FSC) (optional)

Services

Customized preproduction (e.g. wide range of wood treatment and finishes and subassembly)

Customized quality assurance

Logistics

Being consistently reliable in securing deliveries

adaptati

Joint R&D develc
wood and wood-b

Table 4. Studied Swedish sawmill firms' offerings to customer firms in the DIY retailer segment.

A logistics-based service *offering* =

advice

Mutual assessments of their combined supply chain

Products

Finished construction objects that are cut and planed to precise dimensions

Interior design elements

Optionally, elements can be FSC labeled, showing the goods are produced in an environmentally and socially sustainable way

Services

Packaging (e.g. shrink wrapping and bar coding) of individual interior design objects

Packing (e.g. construction wood delivered on half-pallets)

Training of DIY retailer's staff

Logistics

Flexible delivery volumes and delivery schedules that account for the retailer's sales fluctuations and campaigns

Ensuring consistently reliable delivery precision

adaptati

Filtering instabili
price levels

Adjustment of de
and delivery sche
account for fluctu
retailers campaig

Design of interio
wood-based elem
renewal of the ra
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contemporary ap

Table 5. Studied Swedish sawmill firms' offerings to customer firms in the builders' merchant segment.

A logistics-based *offering* =

advice

Mutual assessments of their common supply chain addressing supply stability, cost and quality issues (cooperative relationships only)

Information about cooperative ways of working and their benefits (basic buying and selling relationships)

Products

Sustainable environmental and social approaches (FSC) in the production (optional) of finished wood and laminate construction objects that are cut and planed to precise dimensions

Services

Testing and grading each load-bearing wood, or laminate, construction element to either EU, Japanese or American standards

Logistics

Logistics services

Ensuring consistently reliable volumes (cooperative relationships only)

Filtering instabilities in price levels (cooperative relationships only)

adap

Adjustmen deliveries delivery s account fc fluctuatior (cooperati relationshi

Discussion and Conclusions

Main Findings and Their Implications

Our main results show that the 12 studied Swedish sawmill firms have the marketing competencies to establish cooperative relationship types with innovative customers in all market segments and to provide service-based offerings where logistics is key to customers' perceptions of value. These competencies are summarized in **Table 6**, which also illustrates firms' abilities to differentiate their offerings toward the sector's three main market segments.

Overall, we found that relationship-marketing business accounts for typically 70 percent of the studied sawmill firms' business volumes and have largely replaced traditional commodity business. Accordingly, these sawmill firms have, therefore, made the strategic shift beyond a product-centric view of business (Drucker 1998, Hamel 1998, Prahalad 2004).

Table 6. Summary of the studied Swedish sawmill firms' marketing competencies.

	Market segment		
	Wood products manufacturers	**DIY retailers**	**Builders' merchants**
Relationship metaphors	Cooperative	Cooperative	Cooperative; basic buying and selling

Sawmill offerings	Service-based, with focus on ensuring customers have wood elements that are direct production inputs	Service-based, with a logistics focus that considers sales fluctuations and minimizes distribution costs	Service focus on logistics
Customers' perceptions of value	High	High	High for cooperative relationship types; Low for basic buying and selling relationship types

The exchange of sensitive business information is a key aspect of the cooperative relationships between sawmill firms and their customer firms, and firms actively work together to design new products, improve production techniques, and assess acceptable price ranges for products and services. Customers are also involved in supply chain improvements and share information about industry developments. Sawmill firms use these various types of information in business planning and development as shown in **Table 7**. The strategic concept of co-opting customer competencies (Prahalad and Ramaswamy 2000) is, therefore, a reality in these Swedish sawmill firms.

Accordingly, we assess sawmill firms' statements that they seek to enhance customer cooperation to develop their businesses as being motivated (Ansoff 1979, Ghemawat et al. 2000, Morgan and Hunt 1999, Meyer and De Wit 2004).

Table 7. Summary of the contributions cooperative relationships make to the business development of the studied Swedish sawmill firms.

	Market segment		
	Wood products manufacturers	**DIY retailers**	**Builders' merchants**
Significance of cooperative relationships for sawmill firms	Information for new product development, with 'known' business risks	Reliable information about future business prognoses and supply chain management	Credible information about future business prognoses and developments in the construction industry

Generalizations, Indications, and Future Research

Since we studied 12 of the 20 firms in our working definition of the Swedish sawmilling sector (Appendix 1), it is reasonable to argue that our marketing competencies findings are also generalizable/credible for the remaining eight firms. Such a generalization may also be relevant to other sawmilling sectors since various researchers also imply other nation's sawmill firms have some level of customer cooperation (Korhonen and Niemelä 2004, Korhonen 2005, Kozak and Cohen 1997, Hovgaard and Hansen 2004, Stendahl et al. 2007, Wilson and Vlosky 1997). It would, therefore, be interesting to formally assess other country's sawmilling sectors from a marketing competencies perspective. Such work could also simultaneously collect information about the relative significance of relationship-based business volumes compared with commodity business volumes.

Cooperative relationships with innovative customer firms were found in all three market segments: wood products manufacturers, DIY, and builders' merchants. In our study, the innovative customers in the former two segments all enjoyed cooperative relationships with their supplying sawmill firms. Only one of the three studied customers in the builders' merchant segment, however, enjoyed a cooperative relationship. It would, therefore, be interesting to ascertain whether the builders' merchants segment lags other segments regarding cooperative ways of working.

Our results show that the studied Swedish sawmill firms generally have three types of relationships with their customers: cooperative, basic buying and selling, and bare bones. This mix of relationship types, and intents to seek more cooperative business relationships, implies that firms have abilities to manage the dynamics of a diverse portfolio of customer relationships. Customer portfolio management is likely to become an increasing challenge for sawmill firms since business complexity is intensifying due to factors such as housing market instability and unanticipated high harvest levels that arise from environmental change. Assessing sawmill firms' customer portfolio management abilities would, therefore, be an area of interest to both sawmill practitioners and researchers. The challenge is to manage the complexity of handling and developing service- and relationship-based businesses, while simultaneously making effective business use of spot markets.

When designing future studies of marketing competencies, we consider it advisable to reflect on the choice to purposively sample innovative customer firms as well as to distinguish between: i) competencies to establish a cooperative relationship type (Cannon and Perreault 1999) and ii) the choice to establish a cooperative relation with a particular customer (Morgan and Hunt 1999). It is only when both parties have made an actual choice to cooperate that such cooperative marketing competencies are likely to be seen.

Significance of Theoretical Frameworks

Our finding that relationship and service-based offerings are a dominant marketing approach in the studied Swedish sawmill firms is consistent with strategy and innovation research findings about the renewal of sawmill firms (Alkbring 2003, Korhonen and Niemelä 2004, Korhonen 2006, Hugosson and McCluskey 2008). In particular, sawmill managers appear to actively match customers' needs with their particular sawmill's resources (Alkbring 2003, Hugosson and McCluskey 2008).

But, our finding that 70 percent of business volumes are generated from relationship-based practices is not consistent with other researchers who have recently assumed that the traditional commodity view of the Swedish sawmill sector 'still widely holds' (Nord 2005, Henningsson 2005). Since only 30 percent of sawmill business volumes are generated by spot market transactions, commodities are not sawmill firms' dominant business. We argue that commodity interpretations arise from the Porter-based theoretical framework (Porter 1980), which has been dominant in sawmilling sector research (Rich 1986, Bush and Sinclair 1991, Hansen et al. 2002, Nord 2005). This late-1970s framework was developed prior to the emergence of logistics and services business concepts and has a defacto product focus. This focus dissociates product-elements from their logistics and service context, and thereby sees 'just' the '2 x 4' product-element. It is, therefore, unsurprising that commodity conclusions are drawn because the value of logistics is excluded.

Prudence is similarly advised with regard to Porter's generic product value-adding framework, which Swedish sawmill firms have previously been urged to adopt (NUTEK 1992; Näringsdepartementet 2004; SIND 1980, 1986a, 1986b). When operating small sawmills in Northern Sweden, this product value adding framework does *not* influence business success (Alkbring 2003). In the general literature, these sorts of frameworks are particularly criticized for constraining managers' perceived strategy options and thereby business development (Hamel and Prahalad 1989, Drucker 1998, Mintzberg et al. 1998, Prahalad 2004). The key to success lies in the sawmill manager's active matching of customers' needs with their particular sawmill's resources (Alkbring 2003, Hugosson and McCluskey 2008).

Our use of contemporary research frameworks has facilitated a new perspective of current sawmilling sector business concepts and practices. The insights regarding the contributions that cooperative relationships make to sawmill firm businesses and business developments are significant because they describe the hard business values of soft, relationship marketing practices and express a service-based view of sawmilling.

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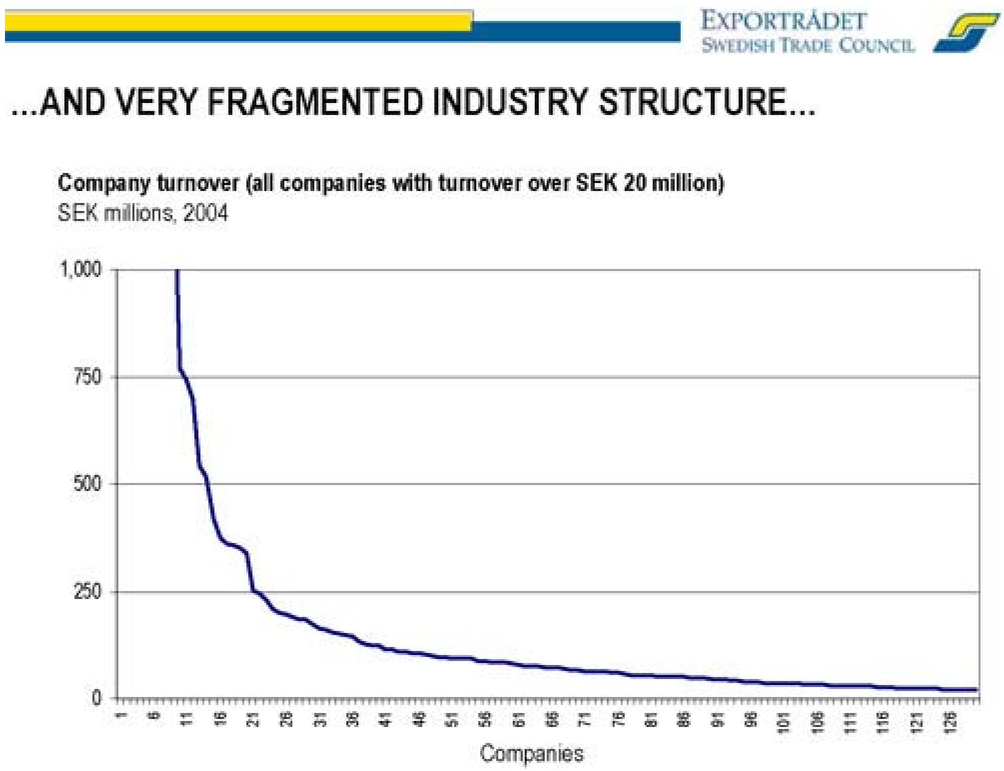
Appendix 1. Relative Output of Swedish Sawmill Firms

There are more than 100 sawmill firms in Sweden (Swedish Forest Industries Federation 2006, Swedish Trade Council 2006). There is a noteworthy difference in the volume of business activities of the largest 20 and the remaining hundred or so (Swedish Forest Industries Federation 2006, Swedish Trade Council 2006). The clear cut-off in volume around the twentieth firm is illustrated in the figure below. Furthermore, the largest 20 account for more than 80 percent of Swedish sawmilling production and have expanded their businesses during the 1990s (Staland et al. 2002). The largest 20 sawmill firms, therefore, comprise our operational definition of the Swedish sawmilling sector.



Source: The Swedish Trade Council 2006.

Sawmill firms have been ranked according to their business turnover. This plot shows business turnover as the vertical axis and the firm's ranking as the horizontal axis. This plot illustrates the clear cutoff in the turnover of firms after the largest twentieth.

Appendix 2. Profile of Sampled Sawmill Firms and Interviewees

Sawmill Firm Respondent 1

This fiber conglomerate has sawmilling, production, and operations in many countries. The respondent has worked in a builders' merchants. In sawmilling, he has held various marketing-related positions. Today he is responsible for sales and marketing in the Scandinavian market.

Sawmill Firm Respondent 2

This is a large concern with several sawmilling operations. The respondent has worked in the firm for over 20 years and is responsible for sales and marketing.

Sawmill Firm Respondent 3

This is a family-owned sawmilling concern. The respondent had worked in the firm for almost 30 years and is responsible for sales and marketing.

Sawmill Firm Respondent 4

This sawmill firm is part of a fiber conglomerate concern. The respondent, who is responsible for sales and marketing, has almost 30 years of branch experience.

Sawmill Firm Respondent 5

This is a family-owned sawmilling firm. The respondent has worked in the firm for almost 25 years and is the marketing director.

Sawmill Firm Respondent 6

This fiber conglomerate concern has sawmilling, production, and operations in many countries. The respondent, who has an engineering background, has worked in both sawmill and customer firms for almost 15 years. He is currently responsible for the sawmill firm's timber products business.

Sawmill Firm Respondent 7

This is a large concern with several sawmilling operations in different countries. The respondent has worked in the builders' merchants segment for over 10 years and is now a sales and marketing manager.

Sawmill Firm Respondent 8

This is a family-owned sawmilling concern. The respondent, who was raised in the industry, has worked in the firm for almost 10 years. He is now the managing director.

Sawmill Firm Respondent 9

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.

Sawmill Firm Respondent 10

This is a family-owned sawmilling concern. The respondent, who had a financial background, has worked in the firm for almost 15 years and is responsible for its operations.

Sawmill Firm Respondent 11

This is a large concern with several sawmilling operations. The respondent has worked in the branch for over 20 years and is the firm's managing director.

Sawmill Firm Respondent 12

This is a large concern with several sawmilling operations. The respondent has worked in the firm for almost 25 years and is responsible for business development.

Appendix 3. Profile of Sampled Customers Firms and Interviewees

DIY Retail Firms

Customer respondent 1

This Scandinavian retailing firm established their store concept in the 1990s and has grown since then. Their concept is to provide the basic range of core DIY products at low prices, with customers serving themselves. The respondent, who has almost 20 years experience in the builders' merchant trade, is one of the co-founders of the firm and is currently responsible for purchasing and logistics.

Customer respondent 2

This European retailing firm has had a long presence in the Swedish market. The respondent has worked for 30 years in retailing and is currently responsible for the DIY portfolio.

Wood Products Manufacturing Firms

All three studied firms' current business concept addressed the design and creation modern interior design elements, with natural aesthetic qualities that have a contemporary yet traditional appeal, and an environmentally friendly image.

Customer respondent 3

This is a Swedish family-owned concern. The respondent has worked in the firm for more than 10 years and is its managing director. The production manager was also present during discussions.

Customer respondent 4

This is a Swedish family-owned concern. The respondent has worked in the branch for more than 15 years and is responsible for purchasing and production.

Customer respondent 5

This is a Swedish family-owned concern. The respondent, who has worked in the branch for almost 25 years, is responsible for the units operations.

Builders' Merchants

Customer respondent 6

This British SME offers construction services to large housing constructors. These include engineering design, prefabrication of bespoke building elements to market standards, on-site construction, and project management services. The firm systematically uses JIT concepts from supply through to assembly. Since its establishment a decade ago, the firm has grown at a sustained rate, providing its services beyond its original region of operations toward more national coverage. The respondent was one of a small team of owner-managers, with more than 25 years of experience as a building engineer.

Customer respondent 7

This British family-owned builders' merchant has been in business for more than 100 years. As well as being a traditional builders' merchant, for the past decade, services include the production of bespoke building elements in a factory-type environment. This particular service has expanded beyond its original region of operations toward more national coverage. The respondent is responsible for production planning, with more than 10 years experience as a building engineer.

Customer respondent 8

This Swedish family-owned firm has been in business for more than a century. They offer a range of services to their local metropolitan market. For the past decade, this has included the production of bespoke building elements in a factory-type environment. The respondent is responsible for operations, with more than 30 years of experience in the branch.

Appendix 4. Attribution to Relationship Interaction Images

The findings section comprises two images of relationship interactions. The attribution of customer respondents to these images is as follows.

Relationship interaction class	Image 1	Image 2
Information exchange	Customer respondents 1 through 8	
Operational linkages	Customer respondents 1 through 6	Customer respondents 7 through 8
Legal bonds	Customer respondents 1 through 8	
Cooperative norms	Customer respondents 1 through 6	Customer respondents 7 through 8
Adaptations	Customer respondents 1 through 7	Customer respondent 8