Logistic Services As Competitive Means – Segmenting the Retail Market for Softwood Lumber

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Softwood lumber has been considered traditionally as commodity. Subsequently brand names and trademarks were of subordinate value and competition was based on price. Recently, retailers have grown substantially and are forcing their suppliers to improve the production and delivery of products. As retailers are getting more diverse and powerful, suppliers are forced to adapt to the retailers' service requirements. The new situation also brings opportunities for the sawmills to develop their competitive advantage. The retail industry is continuously changing, and in order for sawmills to develop and offer what retailers are asking for, it is necessary that they understand and interpret retailers' requirements correctly. One way for sawmills to be successful is to develop accurate service elements and to use the service elements as a segmentation base in order to structure their customer base. This study shows that retailers place considerable emphasis on delivery and value-added logistical services. It generates three hypotheses concerning the following potential retail segments; turnover, category, and customer base.

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1 Introduction

Over the past few decades manufacturing and distributing companies have been experiencing changes in their business environment and it has become harder for individual companies to build and maintain a competitive advantage through the physical product (Levitt 1980, Christopher 1998). One possibility to handle this situation is to differentiate the products and hence distinguish them from competitors' products by including some form service in the offer (Mattsson 1998). As consumer demands are being more diversified and production processes are becoming more flexible, the complexity of the customer base increases and hence the combination of products and services grows into an immense number of alternatives. In order for a company to build a sustainable com-

petitive advantage, it is necessary to understand what creates value for its customers and how to segment their customer base.

In many industries, existing retailers are growing larger while the number of retailers is decreasing and new retail categories are evolving (Dunne and Kahn 1997). This trend has created a shift in power (Fernie 1994) from the manufacturers towards the retailers. Manufacturers have become more or less forced to focus on and consider the distribution channel from a retailer's perspective. Increased dominance of major retailers has enabled retailers to put pressure on their suppliers in order to cut prices and/or to improve service provided (Blatherwick 1996). A reduction in the number of retailers and the descent of the middle-sized retailing chains will continue to increase the retailers' power in distribution channel (Dunne and Kahn 1997).

1.1 The Distribution Channel for Softwood Lumber to End Consumer

Until now, Swedish sawmills have focused on the supply of raw material (Petersson and Svensson 2000) and on centralisation of production processes. This has resulted in a concentration of production units. Many individual sawmills have comparable production processes and consequently the capacity of producing similar products. As a result, price has been the traditional basis of competition between individual sawmills. Softwood lumber is easily copied and could be produced by any company with access to raw material and required equipment. Competition within the industry, as well as from other materials, is high at the same time as profitability in many sawmills is low (Petersson and Svensson 2000). There is an ongoing change in the retail industry for softwood lumber, where new actors are entering the market. Today, the retail industry consists of different categories of retailers (see table 1) based on organization.

Softwood lumber is usually purchased in full packages each containing 4 m^3 and an average retailer has about seven suppliers of softwood lumber. However, there is an ongoing trend to reduce the supply base. Agreements are made between the actors and the period of the agreement is based on the price situation in that particular situation (Gustafsson 2002).

Table 1. Retail categories, identified by management.

Category	Managed
Centrally managed multiple retailers	Centrally
Private retailers in purchasing co-operatives	Individually, but co-operates
Private retailers with no affiliation	Individually

1.2 Discussion of the Problem

The sawmill industry is experiencing not only an ongoing rivalry between individual sawmills but also between sawmills and retailers. In order for the individual sawmill to survive and develop in this competitive environment, where they have been used to competing only on price, there is an evident possibility to differentiate their products by for instance including additional services (i.e. offering both products and services). In the sawmills' position the knowledge of retailers is essential, because sawmills cannot create service offers unless they know and understand what products and levels of service are important for the retailers (cf. McEachern 1998).

The best way to structure the customer base and to gain a sustainable competitive advantage in a market place where the customer base is diversified, is by segmenting and offering accurate service levels (Sharma and Lambert 1994) to each of the different segments (similar concept "Logistically Distinct Business (LDB)", see concept by Fuller et al. 1993) since different segments have different service requirements (Gilmour 1982). This could be done for instance by offering well-developed logistical solutions. Logistic services are not easily copied and hence they could be successfully used in order to develop a sustainable competitive advantage (Sharma et al. 1995). However, there is not one general set service elements or segmentation variables, and hence sawmills need to find the appropriate service elements (Murphy and Daley 1994) and segmentation variables on their own.

1.3 Previous Research

Research conducted in the specific area of softwood lumber is primarily focused on ranking of predetermined service requirement in relation to for instance product quality issues. However, they are handling all customer categories indiscriminately or are based on industrial users only. Hence no research has been conducted on specifying service elements nor on segmentation of retailers for softwood lumber.

A study (Hansen and Bush 1996, see also Hansen et al. 1996) based on a questionnaire sent to industrial users, wood treaters and Home centers (could be considered as DIY multiple retailers = retailers which sell products to private consumers and the private consumer undertakes the required work in order to install the products), suggests the following ranking: lumber characteristics (such as straightness and absence of end split), supplier/sales characteristics (for instance consistency in schedule deliveries and accuracy in billing system), lumber performance (for instance ease of nailing and stiffness), supplier services (such as protective wrapping and credit terms) and supplier facilities (for instance physical facilities and equipment).

Weinfurter and Hansen (1999) defined the gap in perception of importance between sawmills and their customers. Supplier/salesperson (such as supplier understanding needs and friendliness) and lumber characteristics (for instance straightness and accuracy and consistency in grading) were rated most important according to the customers. Items of dimension lumber performance (for instance durability and fastener retention) were rated slightly lower and dimension supplier services (for instance credit terms) were rated lowest. All dimensions received fairly high ratings and the spread of ratings was largest in supplier services.

Järvinen et al. (2002) stated the following ranking between factors when German companies trading wood products choose suppliers; high product quality, reliability of supplier, price level and consistency in price, customer oriented services (willingness to provide customised products and fast deliveries). At the same time, they came to the conclusion that construction material retailers and DIY multiple retailers put more emphasis on payment arrangement and reliability than wood product wholesalers do.

Table 2. Ranking order of importance ratings.

1994	1998
Strength, Straightness	Straightness
Availability, Overall price level	Strength
Price stability, Lack of defects	Availability
	Lack of defects
	Overall price level

A comparison between importance ratings of selected material attributes influencing U.S. homebuilders' purchase decision in 1994 and 1998 gave the ranking order described in Table 2 (Eastin et al. 2001).

Eastin et al. (1998) state that industrial users value reliability of supply, price, and price stability over quality.

Ankarling (1995) in his master thesis considers service requirements stated by strictly industrial users. The study contributes with delivery service requirements stated by industrial users. The study claims that the Scandinavian industrial users generally perceive product availability, order cycle time, physical distribution and information as the most important delivery service elements. However, in sophistication the customers regard information about order changes, delivery precision, notification, the accurate product is delivered complete, and that deliveries are made on time mostly. The study also contains the following marketing variables; Product, Price, Delivery service.

1.4 Purpose

The purpose of this work is to specify retailers' basic logistic service requirements, quantify the requirements and to distinguish potential retail segments regarding these requirements.

The work specifies retailers' service requirements and gives an indication of potential segments. The indication is summarised in three hypotheses, which ought to be tested further.

1.5 Theoretical Framework

1.5.1 Service

Customers experience a company by interacting with its products, services, and actions (Lanning 1998) and hence the combinations of these elements determine to what degree they are satisfied with the company and its offers (Sharma et al. 1995). As service increases in importance in the business transaction, the understanding of its components is becoming more essential (Mattsson 1999). Service could be defined as (La Londe et al. 1988):
"A process for providing significant value-added benefits to the supply chain in a cost effective way".

According to Mattsson (1998) customer service can be divided into the following three parts: delivery service, information service and logistic service. Which service element that is most important is determined by the situation. *Delivery service* is considered to be such services as delivery time and delivery precision. *Information service* is the customers' possibility to obtain information during the business transaction concerning for instance order status, and delivery notification. *Logistic service* is referred to be the other services that are complementary to the physical product. This service element constitutes amongst other things bar-coding, special packages, and Vendor Managed Inventories. Logistic services have increased in importance, more than the other customer service elements, during the last years (Mattsson 1998).

1.5.2 Segmentation

The segmentation concept emerged in the 1950s (Wedel and Kamakura 1999) and has become a popular area for marketing research. Segmentation is used for structuring the customer base and resource allocation and aims at effectiveness and customer satisfaction (Murphy and Daley 1994). During the years, segmentation research has given considerably more attention to segmentation of consumer markets in relation to industrial market segmentation (Bonoma and Shapiro 1983). According to Sharma and Lambert (1994), there are two bases for segmentation: the first is the identifiable-/accessible group and the second is the needs/benefits group. Customer service is considered as a "needs/benefits base" and is hence based on the underlying needs and benefits of the buying organization. This segmentation base implies that the companies make individual offers to each individual segment (Sharma and Lambert 1994).

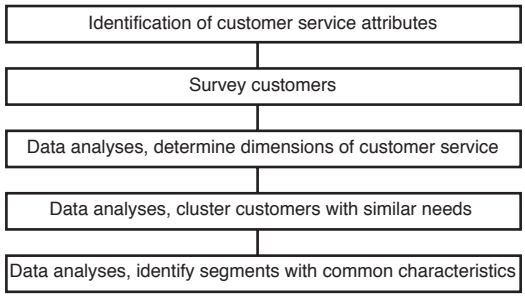

Fig. 1. Working model for segmenting industrial markets (based on customer service).

In order to find the appropriate service elements and to identify relevant segments Sharma and Lambert (1994) suggest a working model presented in Fig. 1.

1.6 Operationalization and Measurement

1.6.1 Operationalization and Working Method

Mattsson (1998) addresses only logistic aspects of service and divides it into three parts. However, as all elements stem from logistics and logistic related activities, the classification of the service elements, as done by Mattsson, is in one way confusing. In order not to cause any misunderstandings, I suggest the interpretation presented in Fig. 2 of Mattsson's concept of "service".

The element (named logistics services by Mattsson (1998)) is hereafter called "Value-added logistical services" and the embracing term is "Logistic service". There are other models of service, for instance the classical elements (pre-transaction, transaction, and post-transaction) put forward by La Londe and Zinzer (1976). However, according to Nilsson (1987), they are less applicable in the

Table 3. Information of potential retail segments.

Segmentation variables	Potential retail segments	Abb. variable	Number of respondents (Tot 113)
Supply base	Sawmill	Sawmill	96
	Wholesaler	Wholes.	13
	Other	Other	4
Turnover[1)]	Less than 1 mill. Euro	Small	19
	1.0–1.6 mill. Euro	Medium	14
	over 1.6 mill. Euro	Large	80
Category	Industrial distributors of building material	Ind distr	16
	Privat retailers with no affiliation	No aff	54
	Private retailers in purchasing co-operatives	Co-op	43
Customer base	End consumers	End con	31
	Builder´s merchants	B M	82

[1)] The intervals are recommended by Björn Rådström, CEO for "Union for Softwood Lumber Dealers and Timber Merchans" 2002-05-06.

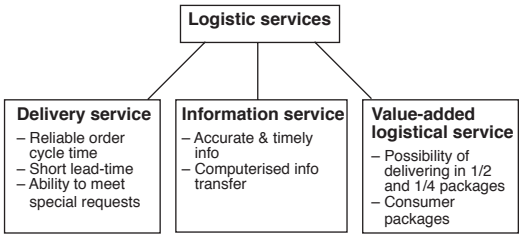

Fig. 2. Logistic service and service elements.

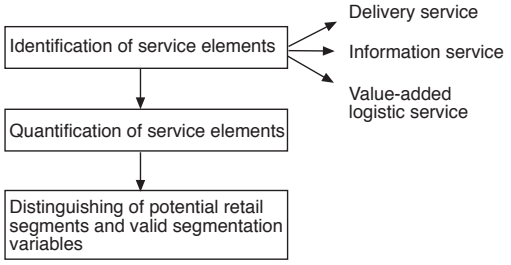

Fig. 3. Working method for this study.

Swedish industry environment.

In order to identify service elements and distinguish potential retail segments, a working method described in Fig. 3 has been developed.

Earlier studies indicate the following segmentation variables; turnover (Rao and Wang 1995, Sharma and Lambert 1990); category (Gilmour 1982); customer base (Sharma and Lambert 1990); product mix (Sharma and Lambert 1990); product type and uncertainty (Cardozo 1980); product type (Zinzer 1997); strategy (Verhallen et al. 1998); structure of purchasing decision (Choffray and Lilien 1978).

Research conducted by Nachum (1994) concludes that there is no need to use a large set of variables in order to perform an industrial segmentation study. Using few segmentation variables ought to facilitate the data handling, reduce complexity, and reduce the cost of data collection. Therefore the segmentation variables, shown in Table 3, were chosen.

1.6.2 Questions

In order to distinguish potential retail segments, the questionnaire requested the respondents to state their major supplier, turnover for year 2000, category, and customer base.

To make it possible to quantify service elements, the respondents were asked to specify their required and actual delivery time, if they were satisfied with their existing suppliers, if their suppliers fulfilled their requirements concerning delivery precision, and if a shorter delivery time would increase their competitiveness. The respondents were also asked to state their average delivery size, if they would prefer smaller quantities and as a result higher frequency (and the opposite), average package sizes, what package sizes they would prefer in the future, and if there were any requirements missing.

2 Data and Analysis

2.1 Design of the Study

This study contains two parts. The first part is to specify retailers' service requirements and this is done through an explorative study, which is based on a series of interviews. The second part is to quantify logistic service requirements and to distinguish potential retail segment regarding the service requirements. The latter and verification of the interviews are done through sending a questionnaire to Swedish purchase managers for softwood lumber.

2.1.1 Interviews

In order to find basic service elements of particular interest to the retailers, a series of *interviews* were performed. Respondents (purchasers and purchasing managers of seven Swedish retailers) answered specific questions, but were also asked to speak freely about their service requirements on and relationships with their suppliers. The respondents were asked to state basic logistic service requirements and their satisfaction with their suppliers.

2.1.2 Questionnaire

The interviews ended up in specific areas of interest and a *questionnaire* was constructed (based on those areas). The aim of the questionnaire was to quantify the logistic service elements, verify interviews, and to identify structural segmentation variables.

Data was collected by a mail survey and questionnaires were sent to purchasing managers in Sweden (members of "Union for Softwood Lumber Dealers and Timber Merchants" – union for retailers selling with softwood lumber). Before the questionnaires were sent out, a draft questionnaire was constructed and tested on both retailers and other researchers (recommended by Dahmström 2000). They were asked to identify unclear questions, make comments on the existing questions, and add missing issues. No vital comments were made and the final questionnaire was sent to the Swedish retailers on the first of October 2001. Questionnaires were sent to 381 retailers (i.e. total population of Swedish retailers for softwood products).

Table 4. Information about the population.

Total number of questionnaires	381
Undelivered	1
Did not apply to their company	98
Population	282
Responses unable to use	4
Number of responses (able to use)	113
Response rate	40%

When working with a questionnaire, using total population is favorable because then no sampling errors, frame errors or selection errors exist, and hence it provides more accurate information than when using a sample. Two letters reminding the respondents that had not answered the questionnaire followed the first mailing (recommended by Dillman 1978), the first mailing contained 281 letters that were sent out and the second 208 letters. Each respondent was sent an introductory letter, a questionnaire, and a postage-paid reply envelope. The introductory letter clarified the purpose of the questionnaire, assured the anonymity, promised a summary of the results and asked them to mark, and return the questionnaire if it did not apply to their company (recommended by Dillman 1978). A total of 98 returned the questionnaire referring that it did not apply to their company because of for instance gone out of business, had their own sawmill, or used a small amount of softwood products. Therefore the population was reduced to 282.

An analysis of the respondents vs. non-respondents does not indicate a non-response bias. Comparisons between the earliest and latest answers have been done and no major differences appeared.

2.2 Data Analysis and Limitations

Basic data have been analysed through frequency analysis and it is thereafter used as basis for segmentation. χ^2-analysis has been conducted in order to find differences between potential retail segments.

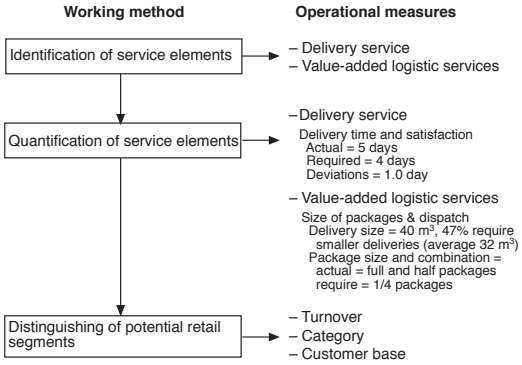

Fig. 4. Working method including conclusion.

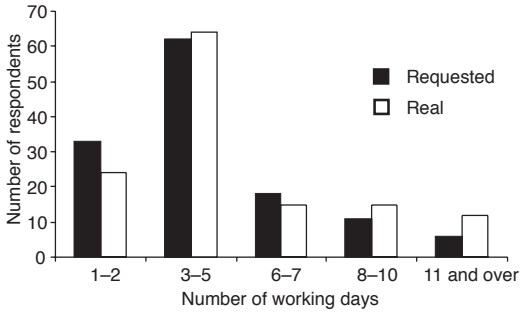

Fig. 5. Actual and required delivery time (working days).

The questionnaire contained four pre-defined segmentation variables. According to theory, there are no universal segmentation bases and the choice of segmentation variables should be kept to a limited number. There might be a risk that the selected variables were not the most accurate for this industry and that other would have resulted in clear segments.

The requirements stated in the interviews might not have given the complete picture of requirements. In order to add missing requirements, the questionnaire contained a question asking the respondents about missing requirements. However, no additional requirements were added.

3 Results

3.1 Completion of the Working Model

In order to fulfil the purpose the following working method has been used. The working method and operational measures are presented in Fig. 4.

3.2 Identification of Service Elements

Basic service requirements identified in the interviews are time and size of packages and dispatch (verified in the questionnaire). These requirements could be considered as delivery and value-added logistical services respectively and hence information service is excluded:

– *Time*. Retailers state that the actual and required delivery time are important requirements. Actual and required delivery time differ between the retailers. Required delivery time is referred to the time that the retailers ask for when placing a sub-order. The difference in delivery time is (both actual and required) from 2 days to 4 weeks while the satisfaction with the delivery time is perceived to be very high (over 95%).
– *Size of packages and dispatch*. Retailers are placing suborders when they are running short of products. Products are normally delivered in full packages (1 package is a typical delivery unit and it contains 4 m^3. One package usually contains only one type of product). Retailers order products in order to fill a truckload. However, some retailers state that they only accept half packages and that they require the assortment to vary within one package.

3.3 Quantification of Service Elements

3.3.1 Delivery Time and Satisfaction

The actual and required delivery times are shown in Fig. 5 and the number of days are referred to as working days measured from the time the order is placed until the products are delivered or are available at the sawmill (depending on the agreement. The agreements state the conditions for delivery for instance FOB and other delivery conditions such as for instance frequency of suborders, time between suborder and delivery, and amount of products to be delivered at each suborder).

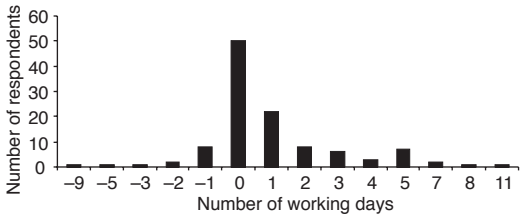

Fig. 6. Deviation between actual and required delivery time.

Of the total deliveries, 67% are performed within one working week and 91% are delivered within two working weeks (i.e. ten working days). Of the total respondents, 73% require having their deliveries within one working week and 95% require having their deliveries within two working weeks. The respondents experience a difference between actual and required delivery time. The retailers require deliveries within less than one week; however there is a difference between actual (5 working days) and required delivery time (4 working days) of about one day. Of the total respondents, 63% state that a shorter delivery time would increase their competitiveness by for instance their being able to offer their customers a shorter delivery time (for non stock deliveries). The gap (deviation) between actual and required delivery time (in working days) is shown in Fig. 6.

A majority of the retailers get their deliveries ahead of or on their required delivery day. However, the retailers appear to be satisfied with the delivery precision offered by the sawmills (average = 3.7 on 1–5 scale where 1 is not at all and 5 is completely). They accept deviations of about 1 working day on average (median) between required and actual delivery time, before they take action.

3.3.2 Size of Packages and Dispatch

Delivery size (median) is about 40 cubic meters (but it does vary between 4 and 1500 cubic meters). Of the total respondents, 30% receive deliveries equal or less than 20 cubic meters and 45% receive deliveries equal to or less than 32 cubic meters. However, 47% of respondents would like to have smaller quantities and hence more deliveries.Today, retailers are purchasing different sizes of package. Table 5 shows the retailers average distribution of purchases (share of purchases).

Table 5. Distribution of package sizes.

Full packages (containing one assortment)	50%
Half packages (containing one assortment)	42%
1/4 packages (containing one assortment)	4%
Packages containing different assortments	4%
Total	100%

Table 6. Share of retailers that would like deliveries in different package sizes.

Package size	Present	Future
Full packages (one assortment)	79%	51%
Half packages (one assortment)	80%	82%
1/4 packages (one assortment)	17%	29%
Packages containing different assortment	21%	22%

Retailers require their softwood lumber to be delivered in different package sizes. Table 6 shows the percentage of retailers that would like to purchase the different package size at the present time as well as in the future (as a share of total purchases).

3.4 Potential segments

3.4.1 Delivery service

The potential segmentation variable that demonstrated differences between the respondents was "turnover" (see turnover in Table 3). Fig. 7 shows the actual delivery time (required delivery time hardly shows any differences) for potential segmentation variable "turnover".

"Small" (79%) and "medium" (86%) receive larger amount of their deliveries within one working week than "large" (64%) does. Fig. 7 indicates that "large" might have a longer delivery time than the "small" and "medium" sized retailers. In order to determine whether "turnover" (small, medium, or large) is an appropriate segmentation variable a χ^2-test was used (see also Table 7).

Table 7. Data for the χ^2-test.

	Expected number of respondents			Observed number of respondents		
	1–3 [a]	4–5 [a]	6 ≤ [a]	1–3 [a]	4–5 [a]	6 ≤ [a]
Small	6.1	7.1	5.9	4	11	4
Medium	4.5	5.2	4.3	7	5	2
Large	25.5	29.7	24.7	25	26	29

[a] number of days

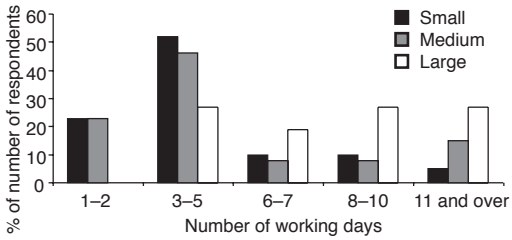

Fig. 7. Actual delivery time by size of retailer (turnover).

Table 8. Structural characteristics of retailers with rigorous delivery service requirements.

	Segmentation variables			
	Supply base	Turnover	Category	Customer base
Actual delivery time = 1 wd [a]	Sawmill 66%	Small 100%	Co-op 66%	End con 66%
Required delivery time = 1 wd [a]	Sawmill 100%	Small 88%	Co-op 62%	End con 88%
Deviation = 0	Sawmill 83%	Small 56%	Co-op 46%	End con 30%

[a] working day

Table 9. Potential segments share of total population.

	Segmentation variables			
	Supply base	Turnover	Category	Customer base
Share of total population	Sawmill 85%	Small 17%	Co-op 38%	End con 27%

$\chi^2 = 7.43$ $\chi^2_{95\,(4)} = 9.49 \Rightarrow 7.43 < 9.49$

The χ^2-test indicates no significant difference between the potential retail segments on 95% level and hence turnover is too cursory and further studies need to be done. Significance difference could not be proven even though the expected valve was less than 5 in two cells. Another χ^2-test has been conducted with the following time interval; 1–3 and 4 and over, and still no significant difference was indicated.

In order to distinguish potential segments it is necessary to use a simplified method. Continuos work study the most rigorous requirements in detail (the strictest requirements placed by retailers are in this case: Actual delivery time = 1 working day, Required delivery time = 1 working day, and no acceptance of deviations). Table 8 illustrates the most rigorous requirements, stated by retailers, while Table 9 illustrates the population of potential segmentation variable (percentage of the segmentation variable that have placed the requirement) (for instance: 66% of the retailers that require Actual delivery time = 1 working day bought their softwood lumber directly from the sawmills). The share of the potential retail segments ought to be put in relation to the figures in Table 9.

Tables 8 and 9 show that an exceptional part of the most rigorous requirements are placed by retailers regarded as "Small" and "Private retailers in purchasing co-operatives (compared to their share of the total population). This indicates that potential retail segments are turnover and category.

Table 10. Structural characteristics of retailers with rigorous value-added logistical services requirements.

	Segmentation variables			
	Supply base	Turnover	Category	Customer base
Actual delivery size < 20 cubic meter	Sawmill 78%	Large 67%	No aff 61%	End con 56%
Actual deliveries in half packages > 90%	Sawmill 78%	Large 72%	No aff 61%	End con 56%

Table 11. Potential segments share of total population.

	Segmentation variables			
	Supply base	Turnover	Category	Customer base
Share of total population	Sawmill 85%	Large 71%	No aff 48%	End con 27%

3.4.2 Value-Added Logistical Services

The potential retail segment that shows considerable differences between respondents is customer base. However, in order to distinguish potential segmentation variables, the same method as above was used (see explanation above).

Tables 10 and 11 indicate that the retailers that are considered as "Private retailers with no affiliation" or have "End customers" as their customer base place the most rigorous requirements (considering value-added logistical services).

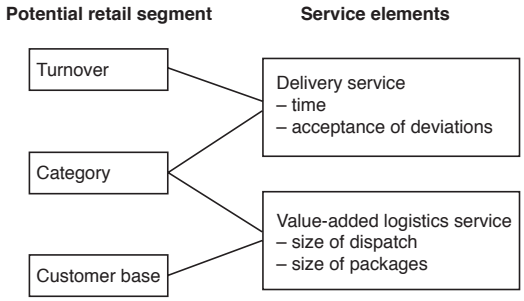

Fig. 8. Potential retail segments for service elements.

4 Discussion and Conclusion

There are differences between potential retail segments regarding the two basic service requirements. Fig. 8 shows potential retail segments and service elements respectively.

Turnover is a potential segmentation variable for delivery service requirements (Rao and Wang 1995, Sharma and Lambert 1990). Small retailers seem to have more strict requirements (regarding delivery service) than other retailers do. One reason could be that small retailers do not have the possibility to keep inventories in the same way as other retailers do or that they place a high value on loss of sales. Another possibility is that small retailers might pursue a differentiating strategy (see the concept of Generic Strategies by e.g. Porter 1985) and hence place more strict requirements for deliveries on their suppliers. There is also a possibility that "large" retailers accept longer delivery times because they have well-developed routines and hence order products before they are actually needed.

Category is representative for ownership and structure (Gilmour 1982). Retailers that are considered as "Private retailers in purchasing co-operatives" seem to have more strict delivery service requirements, at the same time as "Private retailers with no affiliation" seem to place stricter conditions on value-added logistical services than do other retailers. "Private retailers in purchasing co-operatives" might consider softwood lumber as any other product and are hence making purchases of softwood lumber in the same way as they purchase other products. "Private retailers

with no affiliation" ought to stress that they have a small staff in order to handle administrative tasks and that they place these requirements on their suppliers in order to be able to keep this low staffing. Another possibility is that "Private retailers with no affiliation" pursue a differentiating strategy (see the concept of Generic Strategies by e.g. Porter 1985) and hence place more strict requirements for deliveries on their suppliers.

Customer base is a potential segmentation variable for value-added logistical services (Sharma and Lambert 1990). Retailers with a majority of end customers need to have fewer and more customised products in their stores. If the retailers do not adopt the products themselves, they need to purchase them from another actor in the distribution channel, preferable their supplier.

The retailers' dominance in the distribution channel is increasing and will probably continue to increase in the future. This tendency seems to be true even for the distribution channel for softwood lumber. In order for the sawmills to handle this developing situation, it is evident that they need to adopt a different view of softwood lumber and the retailers. However, this should not only be seen as problematic for the sawmills. Adding accurate service levels, using service elements for segmentation in order structuring their customer base, and developing different logistical strategies for each segment ought to give the sawmills a profound foundation for building competitive advantage. The retail industry for softwood lumber is not static. The segmentation bases identified are most likely to change, some might even disappear and new appear. Hence sawmills that are about to start working with building their competitive advantage, need to structure their customers base as well as to consider the development in the retail industry with a focus on the development of potential segments.

4.1 Conclusion and Further Research

This work has generated the following hypotheses, which ought to be tested further in order for the sawmills to identity the accurate segments and actively start working with segmentation. (The hypotheses could be tested through for instance cluster analysis).

Hypothesis 1: "Small retailers in purchasing co-operatives" place stricter requirements on delivery service elements than do other retailers.

Hypothesis 2: "Private retailers with no affiliation" place stricter requirements on value-added logistical services than other retailers do.

Hypothesis 3: Retailers with "end consumers" as their customer base place stricter requirements on value-added logistical services than do other retailers.

Retailers seem to be sensitive in their requirements and hence there is a possibility to segment the retail market and to use logistic services in order to achieve competitive advantage.

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