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**Guidelines for Sustainable, External Corporate Growth:
A Case Study of the Leading European and North American
Companies in the Wood Industry**

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ABSTRACT

In the wood industry, growth (in terms of increasing revenue, market share, sales, or even production volume) has often been an objective as such rather than an outcome of a value-creating investment strategy. Poor industry-wide profitability and sensitivity to economic fluctuations has lead companies to rethink their growth strategies. This paper 1) offers a fresh perspective on research on basic industries by considering companies in the wood industry as knowledge organizations, 2) contributes to our understanding of the various dimensions of the growth concept by bringing in intangible growth attributes, and 3) describes how the aim toward sustainable, profitable external growth has been implemented in the leading North American and European companies in the wood industry. A multiple case study design was used with primary and secondary data sources. The basic units of analysis were the twenty-seven leading companies in the wood industry in seven countries in both Europe and North America. The findings imply that the importance of efficient, large-scale production has not diminished in the wood industry. However, securing growth in knowledge-attainment resources has gained in importance, and is necessary if the benefits of increased volume are to be realized. The company benefits from belonging to a strong corporation in this integration of opposing aspects.

Keywords: wood industry, corporate growth, knowledge organization

Introduction

The Importance of Corporate Growth

Following the trend set by the pulp and paper industry, the pace of acquisitions, mergers, and divestitures in the fragmented wood industry has remained strong in recent years. Companies in the forest products industry have pursued strategies of industry consolidation and boosting profitability. Most managers agree that their primary mission is to reach “sustained profitable growth”, and the stock market routinely values companies’ displaying growth. A complex web of causes and effects leads to this unanimity.

Intra-industry growth through mergers and acquisitions rests on absorbing competitors within industries. This growth could also be interpreted as a quest for monopoly power. An increase in market power gives companies influence over the prices, quantity, and quality of products.

Furthermore, growth is used to fight imitation and the risk of substitution, particularly in industries in which the competing companies have adopted similar capacity and product-development strategies to improve their productivity (Canals 2001).

Investors, as well as industry practitioners, often link growth with success despite the fact that an increasing amount of academic research has shown that the positive relationship between profitability and growth is not always uniformly correlated (Ramezani et al. 2002; Haspeslagh et al. 2001; Geroski et al. 1997; Varaiya and Kerin 1987; Fruhan 1984; Woo 1984). Niemann (2003) and Ghemawat and Ghadar (2000) explain part of this paradox by referring to the personal ambitions of managers and herd behavior as strong drivers of company growth. Canals (2000) and Gupta and Govindarajan (2000) provide a more extensive explanation in which, sustained industry leadership requires corporate growth, and thus these goals are closely connected. The Growth Imperative (Gupta and Govindarajan 2000) suggests that dominant companies have no choice but to persist in a never-ending quest for growth if they wish to continue attracting capital markets and top talent. For the forest industry, the latter aspect is crucial.

Even though maturity refers more to products than to industries, and a mature industry is more a state of mind than anything else (Grant 1998; Gertz 1995), a mature-industry mindset is surprisingly common among investors and forest-industry practitioners. Therefore, growth combined with enthusiasm about the future and new opportunities help counteract this gloomy outlook and attract not only capital, but also talented people. The latter is vital, because in the new economy, growth is not only about tangible resources, it is also about knowledge (Wikström and Normann 1994), and thus, depends on human resources more than anything else.

The third reason why growth is important is related to the strategic complementarity of resources: economies of both scale and scope result in operational synergies and cost advantage, which is frequently claimed to be the operative imperative of the wood industry (Gimeno and Woo 1999; Grant 1998; Junius 1997; Katz et al. 1997). *Economies of scale* represent the competitive advantage stemming from operational efficiency through resource attainment, and it is usually defined in terms of declining average cost functions. *Economies of scope* represent the competitive advantage that results from the transfer of a particular capability or set of resources. This claim is based on strategic-management theory, according to which businesses can redistribute organizational skills and assets among themselves at a lower cost than if they have to build them up from the beginning (the synergy effect). *Economies of speed* refers to the firm's ability to introduce rapid innovation by utilizing necessary knowledge. This is vital in the era of rapid technological and social change. It is questionable whether companies can pursue economies of scale, scope, and speed simultaneously (Nonaka and Toyoma 2003; Hagel and Singer 1999).

Bringing in the Intangible Aspects of Growth

Given the complexity of corporate growth, it is not surprising that questions concerning why and how firms grow continue to interest academics and industry practitioners alike. Holistic explanations of growth have been provided by Canals (2000)⁽¹⁾, Chandler (1990)⁽²⁾, Penrose (1959)⁽³⁾, and Coase (1937)⁽⁴⁾. Weinzimmer et al. (1998) analyzed the measurement of growth using the most common concepts, i.e., sales growth and number of employees. Management literature usually focuses on describing significant and sustained growth by listing the characteristics of growth companies (Castrogiovanni and Justis 2002; Coyne 2001; Tonge et al. 1998; Taylor 1997; Gertz 1995; Waterman 1994; Goldsmith and Clutterbuck 1984). Studies examining and comparing forms of growth (i.e.,

internal or external) have been conducted by Hemp (2002), James (2002), Hoffmann and Schaper-Rinkel (2001), and Katz et al. (1997).

- (1) Canals (2000) presents a framework and typology of corporate growth.
- (2) Chandler (1990) provides a historical explanation for understanding the birth and growth of certain large companies in some countries, and the factors that have affected their development over time.
- (3) Penrose (1959) claims that the use and transfer of firm's resources at a particular time are crucial for its development and growth.
- (4) Coase (1937) argues that the optimal firm size is where intra-firm transaction costs = market transaction costs.

Recently, however, researchers and industry practitioners have shown increasing interest in growth based on intangible asset accumulation and on a firm as a knowledge-production function. In a world in which rapid change is a constant, investment buys new concepts or the means to create them rather than new machines, and communications technology creates global competition. The growth concept needs a new interpretation. A firm must be able to achieve creativity and efficiency at the same time, and it has to be both local and global. In response to this dilemma, Nonaka and Toyama (2003) introduced the importance of synthesizing existing capabilities and resources instead of optimizing them. By this he meant that the successful company could manage contradictory forces, such as competition and cooperation, creativity and efficiency, by transcending itself through uniting opposing forces. Together with the contributions of Schneider (2001), Doz and Hamel (1998), and Hamel and Prahalad (1994), his study called for research that takes into consideration the multiple dimensions of corporate growth, the strategic complementarity of intangible resources, and their influence on the implementation of sustainable corporate growth.

The Purpose and Implementation of the Study

In theoretical terms, the purpose of this paper is to contribute to our understanding of the various dimensions of the growth concept. This is accomplished by bringing in intangible growth attributes. Empirically, the aim is to determine if the interpretation of the growth concept changed in leading North American and European companies in the wood industry, and if so, how has this affected the implementation of the growth objective. Additionally, the paper offers a fresh insight into research on basic industries by observing these companies as knowledge organizations. The specific research questions in focus are:

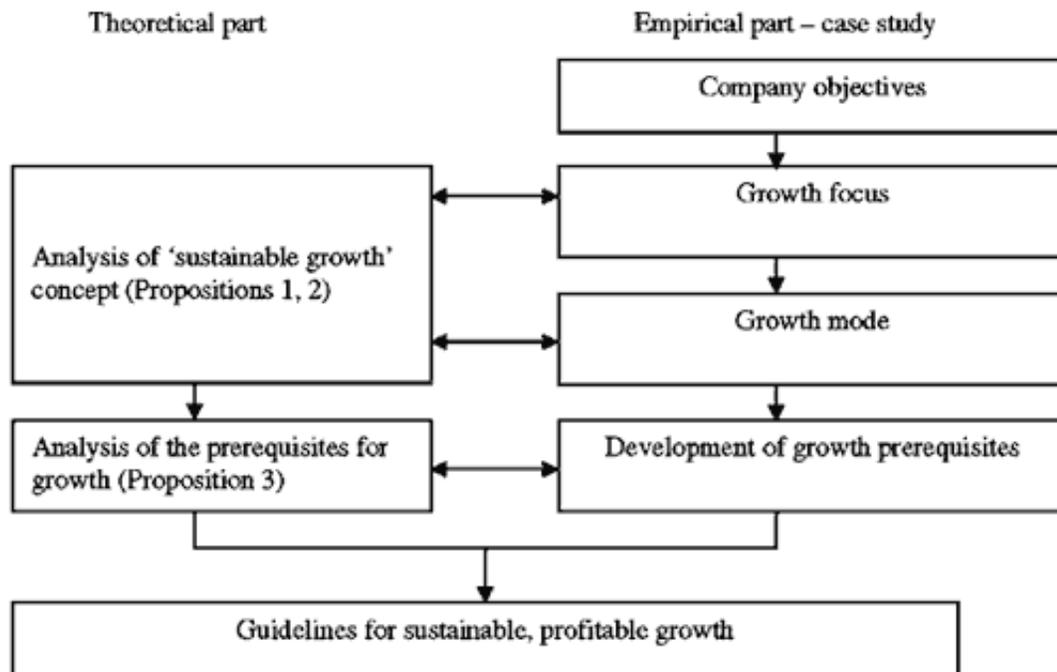
Q1: What kind of growth focus best contributes to long-term competitive advantage?

Q2: What kind of growth mode best contributes to long-term competitive advantage?

Q3: What are the prerequisites for growth that best contribute to long-term competitive advantage?

These research questions are answered in the section entitled Findings. The general outline of this study stemming from the research objectives is presented in **Figure 1**. The study is a descriptive, retrospective case study based on cross-sectional data collected in personal interviews and document analysis. The theoretical background was constructed by combining theories concerning company growth and the knowledge-based view. This resulted in a set of propositions, which were compared with the observations resulting from the four-step case analysis.

Figure 1. General outline of the study.



Theoretical Background and the Emerging Propositions

Finding the Growth Focus

As it is very difficult to move from an unprofitable to a profitable growth situation, correctly evaluating the relationship between growth and profitability early on is vital (Varayia and Kerin 1987). Geroski et al. (1997) suggested that high current-period turnover growth rates are reasonable (if very noisy) predictors of increases in long-run profitability. In contrast, Ramezani et al. (2002) measured growth by using sales- and earnings-growth rates, and claimed that companies with only moderate growth show the highest rates of return and value creation. Reducing prices, for example, increases sales, but does not indicate sustainable growth. The academic debate continues, but we could claim that uncritically associating corporate growth with good profitability and high shareholder value is oversimplified. However, this practice has been commonplace in the investment industry, and it has also influenced managerial compensation schemes (Ramezani et al. 2002).

Recently, the focus on growth-related questions has turned to deeper analysis: where and how should company growth take place to assure sustainable competitive advantage? The emphasis on innovativeness and other intangible and tangible resources as a basis for sustainable growth began with the resource-based view (RBV) of the firm. This was conceptualized in the 1990s based on the ideas of Penrose (1959) and was extended into the knowledge-based view (KBV) (Sveiby 2001; Grant 1996; Nonaka 1994). The breakthrough of the RBV made companies realize that, while growing, they had to manage not only their businesses, but also a portfolio of resources and capabilities. The development of the KBV led to the conclusion that the principal sources of long-term sustainable growth are to be found in context-bound combinations of organizational capabilities and resources. Knowledge has emerged as the most strategically significant resource of the firm (e.g., Dawson 2000; Grant 1996; Nelson 1991; Teece 1980, 1982). The studies conducted by Canals (2001), Haspeslagh et al. (2001), Ghemawat and Ghadar (2000), Romer (1996), Varaiya and Kerin (1987), and Forbis and Mehta (1981) support this claim. They conclude that growth (defined as an increase in tonnes produced over time, turnover, market share, or sales) should not be an objective as such, but rather an outcome of a value-creating investment strategy.

By value creation we simply mean the process of synthesizing the existing knowledge of the company with the knowledge acquired from the market environment, and creating offerings that are a manifestation of that new knowledge (Nonaka and Toyama 2003). This, in turn, promotes customer loyalty, competitive advantage⁽⁵⁾, and increased profits (assuming that external firm factors such as unfavorable exchange rates do not eat away profitability). As Haspeslagh et al. (2001) note, European companies are much less likely to make an explicit commitment to shareholder-value maximization than their North American counterparts, and cater to a variety of stakeholders. A company is thus not viewed as a vehicle of its shareholder-owners, but it focuses on bringing added value to all its stakeholders (Brandenburger and Stuart 1996).

(5) Barney (2001) gives two alternative ways to define competitive advantage at the firm level. First, the firm is said to have a competitive advantage when it is engaging in activities that increase its efficiency and effectiveness in ways that competing firms are not. Second, firms that generate higher returns than were expected by stockholders (at constant levels of risk) have a competitive advantage. However, these two definitions are not totally exclusive. If a company is engaging in activities that improve its margins and its competitors are not able to imitate or substitute the improvement, the company will get higher (i.e., above normal) returns. Our focus in this paper is on the principal sources of competitive advantage (i.e., efficiency and effectiveness increasing activities). Accordingly, we apply the first definition.

Naturally, value creation through growth in knowledge-based resources is more difficult to measure and conceptualize directly than growth in turnover, for example. This is due to the abstract nature of these resources, as well as to the delayed capitalization of investments in intangibles. Yet, new methods have been developed. Balanced Scorecard, which generates information for managing industrial systems, has a 'Learning and Growth perspective'. It aims at sustaining the firm's capacity for constant improvement in order to realize its vision. In 2000, the first Danish companies started to report on how they managed the growth of their intangible asset base, such as their core capabilities, customer relationships, and organizational practices (PWC 2001). Furthermore, a new accounting system brought in systematic analysis of goodwill in mergers and acquisitions. Even though the first changes in practice occurred in knowledge-intensive companies, the tough capital market required the basic industries to reconceptualize the growth objective and their principal sources of profitable growth as well. As Dawson (2000, p. 321) concludes:

"Today virtually all companies can be considered to be knowledge organizations. . . this is most obviously true in services and information based industries but it can be – and often is – applicable in industry sectors such as manufacturing and mining".

In short, sales, market share, and turnover are indicators, but not the only sources, of competitive advantage, and do not necessarily predict long-term competitive advantage. Growth as indicated by the measures usually applied by companies can be achieved in both a sustainable and an unsustainable way, and such measures cannot be used as strategic growth objectives as such. We

suggest that the growth that facilitates sustainable competitive advantage takes place in both the intangible and the tangible asset base, the focus being on intangibles.

P1: A company aiming at sustainable growth shifts its focus from volume-maximizing, tangible-asset-accumulating growth to value creation through the accumulation of intangible assets.

Choosing the Growth Mode

How, then, should a company grow in order to maximize optimal accumulation in its resource base and capabilities? The two prevailing routes to business growth share a common requirement: investment in proprietary assets and capabilities. In order to grow organically (internally), you build them, and to grow externally through mergers and acquisitions (M&A), you buy them. The third way is to expand through alliances and resource leverage. However, as Hagedoorn and Duysters (2002) demonstrate, low-tech sectors that focus on core businesses prefer M&A to alliances. Furthermore, there is no unambiguous answer to the question of which route to business growth is preferable in order to maximize sustainable value creation.

Hilton (2003) and Hagel III (2002) represent a common mindset in their view that the pursuit of growth above everything almost always narrows profit margins, at least over the short term and in the worst case, forever. Katz et al. (1997) and Gertz (1995), in turn, suggest that current growth through M&A might imply a trade-off between managerial commitment and innovation, and jeopardize competitiveness. Firms lose competitive advantage in the long run if they focus too much on value-transferring activities (such as M&A) instead of value-creating activities (such as building R&D capabilities) (Katz et al. 1997; James 2002). This is particularly true if they use debt to finance an acquisition, and limit projects with high risk and high rewards as debt holders increase their power (Katz et al. 1997). Still, companies are tempted to use M&A because it offers a quick route to turnover growth, market dominance, and acquired expertise. Furthermore, it may be difficult to build up certain crucial networks, such as distribution, organically.

With the coming of knowledge-based competition, capability and resource transfer provide a strong motive to engage in M&A activities in the 1990s (Haagedorn and Duysters, 2002). Companies pursuing economies of scale would acquire targets with similar resources, whereas gaining economies of scope would require seeking different but complementary resources (Ireland et al. 2002; Schneider 2001). Harrison et al. (1991) claim that firms acquiring other companies with highly similar resources would not perform as well as those acquiring dissimilar yet complementary resources. KBV provides an explanation by highlighting knowledge differences between firms. Such differences provide the foundation for the benefits of linking companies in order to exchange knowledge and build capabilities internally (Hoffmann and Schaper-Rinkel 2001). By synthesizing different resources and capabilities instead of trying to look for similarities, it is possible for a firm to transcend and create something instead of optimizing what already exists (Nonaka and Toyama 2003).

It is possible to argue that, from an industry viewpoint, M&A means reassigning revenues and profits from one firm to another, whereas organic growth is the only 'true' source of growth⁽⁶⁾. However, from the perspective of *intangible* asset accumulation, we could claim that both organic expansion and M&A can (or cannot) be a source of industry growth. Mergers that are driven only by cost-cutting motivations fail to create a platform for future business growth, as they do not support developing new capabilities through enriching the existing resource base (James 2002; Canals 2001;

Gertz 1995). Similarly, organic growth that is based on copying existing technologies and business solutions from firm-external or -internal sources does not introduce new knowledge into the industry. Value creation through capability building (knowledge conversion) and cost cutting through economies of scale or scope may run counter to each other.

(6) We are grateful for an anonymous reviewer of this comment.

P2: A company aiming at sustainable growth focuses on enriching and complementing its existing resource base rather than seeking instantaneous cost advantage by pruning and homogenizing.

Creating the Prerequisites for Sustainable Growth

A growing body of research focuses on describing the characteristics of growth companies. From existing survey studies conducted among medium and large-sized companies around the world in different industries, we were able to identify five main groups of attributes and critical success factors that growth companies employ: *flexible organization, motivated employees, focus on niche markets and higher-margin products, frequent innovation, and customer orientation*.

Flexible organization. A company capable of sustainable growth is flexible and capable of constant adaptation, given the fast-changing market environment (Gertz 1995; Mondiano and Nichionna 1986). The more flexible an organization is, the less it has to invest in the forecasting abilities required for reliable long-term planning. It can also react more quickly. Furthermore, a growth company needs a questioning mindset: it cannot afford to be arrogant, because past growth and success are not predictors of future growth and success (Canals 2001; Coyne 2001). *Motivated employees* are closely connected to a flexible organization. A growth company devotes time to motivating, holding, and attracting quality staff. As the business gets larger in size, company culture and the role of leadership and management change: they become more important, and in many ways also more challenging to implement (Tonge et al. 1998; Page and Jones 1990; Clifford and Cavanagh 1985).

Focus on niche markets and higher-margin products. Finding niche markets allows growth companies to avoid direct competition and to benefit from low-entry barriers (Tonge et al. 1998; Taylor 1997; Taylor et al. 1990; Mondiano and Nichionna 1986; Clifford and Cavanagh 1985). Economies of scale and scope can be achieved by capitalizing a niche market on a global scale (Gimeno and Woo 1999). The capability of offering higher-margin and high-quality products is closely connected to *frequent innovation* and *customer orientation* (Coyne 2001; Tonge et al. 1998; Gertz 1995; Taylor et al. 1990; Mondiano and Nichionna 1986; Clifford and Cavanagh 1985).

How, then, can the importance of these corporate attributes be assessed from the knowledge-based view of the firm and linked to sustainable growth? The multinational presence created through M&A activities particularly highlights the importance of two of these attributes, namely frequent innovation and a flexible organization. A multinational firm has to deal with various environments, which may make sharing knowledge (an absolute prerequisite for innovation) difficult, but could also offer great opportunities (Nonaka and Toyama 2003). If the company manages to overcome these problems, it has the capacity to capture under-exploited pockets of knowledge worldwide through its acquired businesses. This, in turn, gives it the possibility to leapfrog its competitors when it comes to

finding lead markets and innovative customer trends, specialist technologies and attractive manufacturing locations, for example. As distance breaks down the natural mechanisms of innovation (such as a high frequency of interaction, serendipity, and the synchronization of activities), the basic problem companies have is “how to innovate globally instead of locally” (Williamson 2003). Specialized subsidiaries could offer a solution to this problem. On the one hand, they operate independently at the local level, utilizing their scale effects within niche markets, while on the other hand, they enrich their resource and capability base through the parent company.

In the long run, a firm can exist only if its knowledge-conversion rate is higher than that of the market (Nonaka and Toyama 2003). Thus, a growth company is strongly but not uncritically customer-oriented. By not taking everything a customer says at face value, companies avoid pursuing the same goals that have been described to every supplier. Porter (1996) warned of the dangers of benchmarking mainly for the same reasons.

P3: A company preparing for sustainable growth creates organizational competencies with the aim of combining rapid knowledge conversion with scale advantages.

Methodology and Data

Methodology and Case Selection

This study entailed supporting or rejecting theoretically derived patterns and conjectures related to the nature of corporate growth, rather than measuring the frequency of events. We were concerned with a contemporary phenomenon in a real-life context, and our focus was on the why and the how. We were interested in future strategies of sustainable corporate growth rather than tracking down the paths that had historically lead to success. Thus, the chosen method was to carry out a descriptive multiple case study as advocated by Hall and Rist (1999), Remenyi and Williams (1998), Yin (1994), and Eisenhardt (1989) among others. The main methodological problem was to combine a profound analysis of rich data with generalizability and objectivity.

In tackling this problem, we relied on ‘purposive sampling’ in our case selection (Silverman 2000). This requires thinking critically about the population parameters and selecting the cases that best illustrate a feature or process to which the research is theoretically relevant. This approach is similar to Yin’s (1994) ‘replication logic’. We were interested in the change of thinking related to the growth concept and its implementation in basic-industry companies. We decided to focus on the leading companies in the wood industry in 1998–2001 for the following reasons.

1. By observing companies in the basic industry in which volume-oriented growth based on tangible resources has been the norm rather than the exception, we were better able to capture the transformation in thinking related to the intangible aspects of growth attributes, assuming that such a change exists.
2. The period 1998–2001 included both an economic upswing and a slowdown, which made these companies rethink their strategies and objectives. Accordingly, the research issue was relevant and topical in most of the companies, and the amount of data was controllable.
3. The leading-edge companies are in many ways the forerunners in their industry. They have a wide geographical scope, they have more resources to fund innovation and their customer

base connects them to a wide network that can be used in market sensing. Thus, observing the leading companies enabled us to describe the general trends in the industry in foresight.

The unit of analysis was an independent company in the wood industry or, if the company was part of a larger corporation, a subsidiary or part of it. The research focus on the North American and European companies was motivated by their accessibility, and by the fact that worldwide industry consolidation has resulted in the concentration of the leading companies in these two continents. We believe that the worldwide presence of the case companies enabled us to broaden the geographical scope of the research.

In order to identify the leading wood-industry companies in each country, we used a multi-phase case-selection process. This enabled us to pick out the leading companies by using a multi-dimensional performance measurement based on financial performance, operational performance, and organizational effectiveness (Venkatraman and Ramanujam 1986). Our first step was to create a list of 120 leading forest-industry companies from 12 countries. In that task we utilized already existing lists such as PriceWaterhouseCooper's Top 100 companies from 1998–2001. We then ruled out 80 companies according to the following three criteria:

- The company had no activities in the wood industry (panel, sawmilling or engineered wood products), or such activities accounted for less than 10% of its revenue in 2000
- The company was not an established one. For the purposes of this study, we defined an established company as one that was more than 10 years old and was among the 10 largest companies in its home country measured by revenue and production figures
- Not enough secondary information was available to enable us to decide whether the company met the criteria.

The remaining 40 companies were analyzed in detail from the available secondary material in order to identify the industry leaders, and the lists were compared and discussed with seven Scandinavian, long-serving wood-industry experts from forest-industry co-operative organizations and companies. The contributions of the experts were valuable, particularly in the case of private companies with relatively little published information.

The case-selection strategy we used within the industry was based on a division by core businesses and business culture, and resulted in a group of 27 case companies from seven countries (as an example of a similar selection strategy, see Gersick 1988 and Harris and Sutton 1986). They were chosen on the grounds that they represented the leading edge of the industry in three sectors (panels, sawmilling, and engineered wood products (EWP)). Albeit closely linked, they all had strong characteristics of their own. Thus, it was necessary to examine the predicted patterns in all of these sectors. For the sake of comparison, the companies were also grouped into Anglo-Saxon, Germanic and Scandinavian cases according to their business culture and organization type. This division was based on studies by Ferner et al. (2001), Fincham and Rhodes (1999), and Rodgers (1986) about cultural differences and their effect on business.

Primary data was collected from 11 case companies, which were selected to represent each business culture and the three main core businesses (timber, panel, and EWP) (**Table 1**). Four cases were further selected for in-depth study, again chosen on the grounds of representing each business culture and the main business. This was done to control different types of environmental variation in

order to explore the predicted growth pattern within the selected group of companies.

Table 1. Background variables of the case companies.

Background variables	Number of cases		
	27	11	4
Business culture			
Anglo-Saxon (the U.S., Canada, the U.K.)	12	6	21
Germanic (Austria, Germany)	9	2	1
Scandinavian (Sweden, Finland)	6	3	1
Core business in the wood industry			
Timber	4	2	2
Panel	5	3	1
Panel + timber	4		
EWP + panel	2		
EWP + timber	4	1	1
EWP + timber + panel	8	5	
EWP (engineered wood products) = glued laminated timber (glulam); structural composite lumber (SCL) consisting of laminated veneer lumber (LVL), parallel strand lumber, and oriented strand lumber; wood I-beams. Panel = fiberboard (including MDF), particleboard (including OSB), and plywood.			

The study followed a multiple case replication logic (Yin 1994) and a ‘T-design’ (Thölke et al. 2001). Accordingly, the purpose of analyzing the first 27 cases was to explore the general phenomenon, i.e., growth among other objectives. The second group of 11 cases served to probe into the growth focus and the growth mode, thus forming the horizontal dimension of the T-design. The final set of four cases showed how the companies had created prerequisites for future growth, and explored the research domain in-depth (i.e., the vertical dimension of the T-design). Within each of the three groups of cases, we used the principle of literal replication, according to which each case is considered analogous to an experimental logic (Yin 1994).

Data and Analysis

The data for the study reported in this paper was gathered during 2002–2003 in connection with a study that aimed at identifying how the leading European and North American companies in the wood industry adapted to the changes in the market environment in 1998–2001 in order to maintain or improve their competitive position (Korhonen and Niemelä 2003).

First, a detailed analysis was conducted based on available secondary material about the 27 companies in order to explore the problem area and map their overall objectives. In addition, secondary material was used throughout the research to provide background information, to ensure construct validity and reliability, and to minimize the time spent in the companies (**Table 2**).

Table 2. Data sources.

Data source	Number
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Secondary data	
Annual reports, environmental reports 1998–2001	53
Newspaper clippings and articles 1998–2001	298
Company brochures and other printed material, videos	14
Company web pages (mainly for access to public speeches and press releases 1998–2001)	
Primary data	
Interviews, Anglo-Saxon companies	20
Interviews, Germanic companies	6
Interviews, Scandinavian companies	5
<i>Total number of interviews (length from 45 minutes to 3 hours)</i>	<i>31</i>

Following the analysis of the secondary material, we conducted interviews in the case companies in two phases. The interviewees were vice presidents of the wood-industry SBUs, deputy managing directors, R&D directors and marketing directors, or their assignments were otherwise related to strategic planning and business development.

During the first-phase interviews (11 companies), the interview format was semi-structured, and was drawn from the analysis of the secondary material that followed the theoretically derived growth pattern formed by the three propositions. It was piloted and tested on six Scandinavian mechanical-forest-industry experts. The first-phase interviews were transcribed and analyzed, and 11 cases were written and approved by the informants before we moved on to the second-phase interviews.

During the second phase (4 companies), three of the companies had already participated in the first-phase interviews, and we interactively added one in order to test the emerging generalizations from the first phase (Silverman 2000; Mason 1996). Again, multiple informants from each company reviewed and commented on the cases that were written up based on the interviews in their own organization. In order to ensure the anonymity of the case companies, the interviewees were not informed about the other participants in the research, and their geographical location by country was also kept confidential.

As advocated by Yin (1994) and Eisenhardt (1989), the chosen general analytic strategy was to use pattern matching relying on theoretical propositions. This kind of logic compares an empirically based pattern with a predicted one, and it is also relevant in descriptive case studies as long as the pattern is determined beforehand. The predicted pattern is then shaped and refined by iterating between theory and data. The final product may be concepts, conceptual frameworks, propositions, or midrange theories (Eisenhardt 1989). In this study, it was a growth pattern for companies in mature, volume-oriented industries aiming at sustainable competitive advantage. This technique, which relies on a predetermined conceptual pattern, was used, for example, by Stopford and Baden-Fuller (1994) in their study of corporate entrepreneurship, Stiles (2001) in his research on the impact of the board on strategy, and Burgelman (1994) in his comparative study of the strategic business exit in dynamic environments.

Within our general analytic strategy, we used the following three-stage technique devised by Miles and Hubermann (1994):

1. *data reduction* (taking the raw data and simplifying and transforming it by using codes),

2. *data display* (displaying the data in an organized assembly of information that permits the drawing of conclusions and the comparison of the findings with the theoretical pattern), and
3. *conclusion drawing and verification* (analyzing and identifying the links in and between the theme clusters, and determining the validity of these conclusions).

In the data reduction and display, we utilized thematic coding as presented by Boyatzis (1998). Thematic analysis is a process for encoding qualitative information. A code may be a list of themes, or a complex model with themes, indicators and qualifications that are causally related; or it may be something in between. A theme is a pattern found in the information that describes and organizes the possible observations. We used three themes (**Table 3**) that were identifiable at the manifest level, i.e., they were directly observable in the information.

Table 3. List of themes.

<p>Theme 1 Label: Growth focus (interpreting growth) Definition: Description of how the company interprets its growth objective Indicator: Coded when the company describes its growth objectives and its motives for growth. Proposition 1: A company aiming at sustainable growth shifts its focus from volume-maximizing, tangible-asset-accumulating growth to value creation through the accumulation of intangible assets.</p>
<p>Theme 2 Label: Growth mode (implementing growth) Definition: Description of increase or decrease in the company's resource base, and of its richness. Indicator: Coded when a company describes its 1) M&A / organic growth activities, and/or 2) lay outs, putting investments on hold and selling or closing factories, and the motives for these activities. Proposition 2: A company aiming at sustainable growth focuses on enriching and complementing its existing resource base rather than seeking instantaneous cost advantage by pruning and homogenizing.</p>
<p>Theme 3 Label: Growth prerequisites (facilitating growth) Definition: Description of the measures that a company has taken in order to ensure sustainable growth in the future. Indicator: Coded when a company mentions any measure taken to provoke, stimulate, cause, or lead to sustainable growth in the future. Proposition 3: A company preparing for sustainable growth creates organizational competencies with the aim of combining rapid knowledge conversion with scale advantages.</p>

In our conclusion drawing and verification, we used case-study tactics recommended by Silverman (2000) and Yin (1994) for the four design tests in order to safeguard the quality of the research design (**Table 4**).

Table 4. Tactics for ensuring the quality of the research design.

Tests	Tactics used in this study	Phase of research in which the tactic was used
Construct validity (correct operational measures for the concepts being studied)	<ul style="list-style-type: none"> –multiple sources of evidence (data triangulation) –key informants reviewed draft case-study reports 	data collection and composition
External validity	–replication logic in the context of	research design and

External validity (the domain to which a study's findings can be generalized)	<ul style="list-style-type: none"> -replication logic in the context of multiple case design -purposive and theoretical sampling -comparing the case results with already existing cognate studies 	research design and composition
Reliability (the operations of the study can be repeated with the same results)	<ul style="list-style-type: none"> -case-study database -data collection 	data collection

Findings

Mapping the Objectives

After strong growth and an increasing demand for forest products, the North American and European economies slowed considerably in mid-2000. Overcapacity was a problem throughout the wood industry, and in the panel business in particular: a price collapse hit the structural panel markets in North America and Europe in 2000. Profitability virtually collapsed in 2001 compared to the previous year. Against this background, it is no surprise that the case companies further emphasized their overall objective of significantly increasing profitability and shareholder value (**Table 5**).

Table 5. The main objectives of the case companies, based on published information^a.

Main objectives of case companies (N=27)	Number of case companies			
	Scandinavian (N=6)	Anglo-Saxon (N=12)	Germanic (N=9)	Total (N=27)
Profitability	6	12	9	27
Growth	6	12	9	27
Cost-effectiveness	4	9	5	18
Leadership	5	6	4	14

^a If the company had not clearly formulated its main objectives (goals), they were derived from its published statements, which included phrases such as, "The company aims at", "Our focus is", and "We are committed to become".

The biggest Scandinavian case companies aimed at pursuing worldwide leadership and expansion in all their activities. Those that were slightly smaller and in whose business portfolio the wood industry had a proportionally higher status than in the biggest corporations, focused first and foremost on achieving European leadership, or leadership in a clearly defined niche market. The Anglo-Saxon companies included the world's largest wood-products manufacturers. Their goal for leadership was similar to that of the leading Scandinavian companies in this research. The Germanic cases included the smallest companies in this research measured by turnover, and a number of them had their roots firmly in family businesses. Their main objective was to grow either strongly, aiming at market leadership, or more carefully, by combining traditions with innovations for the future and maintaining family ownership.

In sum, the matter-of-course aim for profitability in the leading companies in the wood industry was supplemented with other aims that could be divided into three groups: objectives for growth,

leadership, and cost-effectiveness. All of the case companies shared the profitability aim and the growth objective.

Growth Focus

Managers in the wood industry have shared a common strategic orientation: “growth now, profitability later”. The case companies often emphasized that they had to play by the existing rules of a mature and partly declining industry. The pressure to increase production figures, sales, or market share at any cost led to a situation in which overcapacity and price wars lurked to destroy profitability. The interviewees illustrated this as follows:

“Really I think we have been driven so much by volume over the years. The volume is the driver, get the volume through and you keep your cost down, get the volume over the gate and you are turning it into cash. Now that volume too often has meant that we’ll just sink the price to get the volume going.” Director, Marketing / Europe

“More tons like more capital are usually not better.” CEO / North America

“Before 1998 we were always thinking to be big, the biggest producer. . . Five years ago the main skills were in making two billion in turnover, the first target of the company. They were thinking that if we are big, we are the best.” Plant manager / Europe

Given the difficult economic situation, the companies faced the paradox of managing for growth on a capital-constrained market, and had to prepare to finance this growth with their own cash flow. As it takes not only capital, but also time and patience to weld two organizations into one team, many companies decided to put their most ambitious expansion plans temporarily on hold and look for alternative ways to grow.

Accordingly, in this study, we were able to recognize two broader areas of growth focus: 1) growth in production volumes and capacity, and 2) growth in knowledge-attainment resources. The third alternative was to optimize the already existing resources (both tangible and intangible) and put growth on hold. The growth patterns of the case companies are presented in **Table 6**.

Table 6. Patterns of growth focus in the case companies (N=11).

Case	Past growth focus	Current growth focus (2000–2002)	Future growth focus
1	Maximum capacity utilization	Growth in production capacity, re-evaluating the current resource base	Growth in production capacity. Growth in human resources and knowledge attainment resources
2	Maximum capacity utilization	Maximum capacity utilization, re-evaluating the current resource base	Growth in production capacity and knowledge attainment resources
3	Growth in production capacity, re-evaluating the current resource base	Growth in human resources and knowledge attainment resources	Growth in production capacity and knowledge attainment resources

	the current resource base	attainment resources	resources
4	Rapid growth in turnover and production volumes	Growth in production capacity, re-evaluating current resource base	Growth in human resources and knowledge attainment resources
5	Rapid growth in turnover and production volumes	Maximum capacity utilization, re-evaluating the current resource base	Growth in human resources and knowledge attainment resources
6	Maximum capacity utilization	Growth in production capacity, re-evaluating the current resource base	Growth in human resources and knowledge attainment resources
7	Rapid growth in turnover and production volumes	Maximum capacity utilization, re-evaluating the current resource base	Growth in production capacity and knowledge attainment resources
8	Rapid growth in turnover and production volumes	Maximum capacity utilization, re-evaluating the current resource base	Growth in production capacity and knowledge attainment resources
9	Maximum capacity utilization, re-evaluating the current resource base	Growth in production capacity	Growth in human resources
10	Rapid growth in turnover and production volumes	Maximum capacity utilization, re-evaluating the current resource base	Growth in production capacity and knowledge attainment resources
11	Growth in production capacity. Maximum capacity utilization	Growth in production capacity. Maximum capacity utilization	Growth in production capacity. Maximum capacity utilization
= Growth on hold = Growth in production capacity = Growth in knowledge attainment resources and human resources			

Growth focus on production capacity and achieving economies of scale in production. This period was characterized by rapid increases in production figures and turnover. The case companies wished to ensure the efficient, large-scale production they thought was the prerequisite for staying in business. The drawback of this growth focus was the rapid increase in production volumes which was followed by stagnating or decreasing demand and overcapacity in the industry. This created pressure in sales to decrease prices, and the profit margins started to taper. In the worst case, this resulted in a situation in which the indebted companies focused on day-to-day fire fighting and could not maintain or further develop their production technology or organizational resources. In the words of one interviewee:

“The second big milestone in our history was when we acquired the [group name] with more than 14 mills spread all over [foreign country] and for me, and we all agreed on that, the trouble started then. Because these plants have always been in the red and we had to spend considerable sums of money in order to update the existing equipment in that company but what we never managed to do was really to integrate that group into ours...” Product director / Europe

Putting growth on hold and focusing on resource optimization. The period of resource optimization resulted from two phenomena. Firstly, the difficult economic situation did not encourage companies to engage in acquisitions. Secondly, the rapid growth period and overcapacity left them in a situation in which they needed to focus on increasing profit margins and re-evaluating their resource base. In practice, this often meant cost cutting and divestments. The resource-optimization phase involved not only utilizing already-existing production capacity at the maximum level, but also appraising human resources and organizational structures, clarifying the vision of the company, and preparing for the next growth period. Here is an example of a typical response:

“We need to fix what we have right now before we go out and buy more. I think the acquiring . . . we certainly need to do that. First of all we really don’t need to go out in buying [company name] or buying [company name] right now because it would upset the deck again and we would go back into a huge transitional mess. However, once we get fixed, once we optimize our portfolio that we have right now . . . of course earnings have to improve . . . we would probably be in a position again to look at acquisitions. Now it doesn’t mean, how long that is, is that a year or two years I am not really sure, that doesn’t mean that in the meantime that we can’t be looking at spot acquisitions.” Director, Strategic planning / North America

Growth focus on knowledge-attainment resources (know-what, know-how and know-why⁽⁷⁾) and human resources. Interestingly, the future plans for growth were directed toward increasing the ability to attain, integrate and manage the companies’ knowledge base in order to differentiate them from their competitors. The main problem in the case companies was not the lack of information, but the difficulties in focusing on the essentials and in integrating the new information into existing knowledge. Furthermore, they realized that they did not utilize the total knowledge of the corporation effectively enough:

“We need to have IT skills to be able to do EDI transactions, in order to take cost out of customers’ operations, in order to become very efficient. We need the skill with regard to IT in our own organization. I think we are probably very typical, we produce huge amounts of data and turn that data into information. So we need the skills to be able to understand the information. I think of skills differently in regard to being able to understand data and information. In this business people do not understand that difference.” CEO / Europe

(7) The knowledge attainment in an organization can be categorized into the *Know-What*, *Know-How*, and *Know-Why* levels.

Know-What: The fundamental stage where an organization collects, gathers and stores the cognitive type of knowledge. The companies have some knowledge; they do not always know when and how to apply such knowledge for effective problem solving.

Know-How: The ability to translate one’s knowledge to yield practical results. The companies know when to use which knowledge to solve real-world, complex problems.

Know-Why: The in-depth knowledge of the complex cause-and-effect relationships in knowledge creation.

Q1: *What kind of growth focus best contributes to long-term competitive advantage?*

The case analysis revealed that the growth focuses appeared in sequences and were partly overlapping. The first phase focused on increasing capacity and achieving economies of scale in production, and the second on obtaining knowledge-attainment resources with a view of improving the ability to attain, integrate, and manage the company's knowledge base.

Volume-maximizing growth (e.g., investments in up-to-date production technology) that is directed at ensuring efficient production is an operative imperative in the wood industry, and thus, it is a premise for sustainable growth. However, the differentiation that brings the competitive advantage arises through growth in knowledge-attainment resources.

Growth Mode

Within the main growth focus (growth in production capacity or in knowledge-attainment resources), the following modes occurred.

Companies increased production capacity by building a new mill or through M&A activities. In most of the cases, growth resulted from a series of big acquisitions and mergers, but in two companies it was mainly a result of building greenfield mills as part of the corporate strategy. Capacity increases could also stem from massive investments in the up-to-date production technology that was used in already existing mills.

Companies increased their knowledge-attainment resources by building them internally (for example, by investing in recruitment and training), through M&A activities or by utilizing Group resources. Future growth plans were strongly directed toward investments in human resources and creating networks, in the form of both IT systems and business and social networks within and outside the companies (**Table 7**). These investments were mostly to do with organic growth, but they were also a driver for the M&A activities. The aim for critical mass had often been interpreted as a quest for economies of scale in production. However, the current and future emphasis was on creating critical mass in the knowledge base as well:

“We have critical mass, particularly in the [name] business. We have developed an expertise in building plants because we have been learning, been on the learning cycle for 20 years. So we have got people and we have got knowledge through people as well as the technology and a strong relationship with the key suppliers. We have a scale, we move people around within the country, the knowledge that we have of the industry and of the production processes and the product processes we have moved from one product line to another. So people and knowledge.” Deputy managing director / Europe

Table 7. Future growth mode of the case companies (N=11).

Case	Future growth mode
1	Increasing production volumes through M&A and building new mills. Increasing and diversifying knowledge base by utilizing the Group resources and through M&A.
2	Increasing production volumes and investing in knowledge base through M&A. Targeting similar resources in order to achieve critical mass both in production and in the knowledge base.
3	Increasing production volumes and investing in knowledge base through M&A. Targeting similar resources in order to achieve critical mass both in production and in the knowledge base.
4	Investing in human resources (at both shop-floor and management levels) and knowledge management through recruiting, training, and new data-mining systems. Increasing and diversifying the knowledge base by utilizing the Group resources as well. Utilizing diverse resources to build new capabilities internally.
5	Investing in human resources (at both shop-floor and management levels) and knowledge management through recruiting, training, and new data-mining systems. Utilizing the diverse resources to build new capabilities internally.
6	Investing in human resources (both at the shop floor and management) and knowledge management through recruiting, training, and new data mining systems. Utilizing diverse resources to build new capabilities internally.
7	Increasing production volumes through M&A and building new mills. Targeting similar resources in order to achieve critical mass both in production and in the knowledge base. Copying best practices from the old to the new mills. Increasing and diversifying knowledge base by utilizing the Group resources.
8	Increasing production volumes and investing in knowledge base through M&A. Targeting similar resources in order to achieve critical mass both in production and in the knowledge base.
9	Investing in human resources (at both shop-floor and management levels) through recruiting and training.
10	Increasing production volumes through M&A and building new mills. Targeting similar resources in order to achieve critical mass both in production and in the knowledge base. Copying best practices from the old to the new mills. Increasing and diversifying knowledge base by utilizing the Group resources.
11	Increasing production volumes and capacity through investments in the existing mills and M&A. Maximum capacity utilization. Targeting similar resources.
= Aiming at a homogenous resource base = Aiming at a heterogeneous resource base = Combining a heterogeneous and a homogenous resource base	

It is also noticeable that, even though the company did not grow in terms of turnover or production volumes, there may also have been growth in intangible resources during the optimization period. This growth did not capitalize until later on:

“When a company is acquired . . . there is a transitional phase that will probably last a couple of years, a year and a half. And during that transitional phase, what will happen is that best practices, better in place in that acquired company, will be stimulated. And of course the worst practices will go away. So that’s what has happened over the years. That is one of the competitive advantages our company has, that we have acquired a really lot of good best practices from these companies that have been acquired. And I think the company has done reasonably well in ensuring that these practices

continue and are capitalized as we move forward.” Director, Strategic planning / North America

The preference for organic growth or growth through M&A did not in itself tell us anything about the aim of increasing or decreasing the richness of the existing resource base. However, the majority of the case companies directed their M&A activities at acquiring similar resources and were characterized by a relentless cost focus in order to increase profit margins. This, together with a focus on the core business, led to a search for economies of scale and of scope. This, in turn, required looking for acquisition objects that had the same or a closely related set of capabilities and resources. Massive divestment and reorganization programs usually followed the merger or acquisition. Instead of synthesizing their business portfolio, the companies tried to optimize it. Case company 1 was an exception, because it wished to gain new knowledge both in new product lines and in new markets through M&A and building new mills. Case company 5 had already had this extension period in the late 1990s.

The strive for economies of scope could be interpreted in two ways. From the perspective of one non-integrated company in the wood industry operating in one business only, this meant copying the already existing best practices from one mill to another, while for a subsidiary in the wood industry belonging to a larger corporation, it could be interpreted as enriching the resource base (**Table 7**, companies 1, 4, 7, 10). This could mean, for example, utilizing the corporate databases, business intelligence, R&D networks, managerial resources, or process know-how, and applying the information to the business. Paradoxically, this new know-how could also be about achieving maximum economies of scale (see company 11 in **Table 7**). The emerging trend to establish ‘industrial parks’ in which mills belonging to the same company or to several companies were in close geographical proximity also enhanced the opportunities for knowledge transfer.

However, two case companies made a distinction in modes of growth between growth in knowledge-attainment resources and growth in production capacity (**Table 7**, companies 7, 10). They were enriching and diversifying their knowledge base either through M&A or by building capabilities internally and investing in human resources. At the same time, they were looking for economies of scale and scope in terms of production processes. The logic behind this dual-growth mode was that, in order to be able to compete in the wood industry, one must have enough production volume and a relentless cost focus. On the other hand, in order to gain competitive advantage, one must be different from the competitors. The ultimate source of differentiation is the people and the knowledge that is stored and developed within the organization.

***Q2:** What kind of growth mode best contributes to long-term competitive advantage?*

The case analysis revealed that the companies whose main focus was on growth in their knowledge attainment and human resources aimed at diversifying their resource base, while those focusing mainly on growth in production capacity aimed at a homogeneous resource base.

The utilization of Group resources could be interpreted in two ways. On the one hand, it meant enriching the subsidiary’s resource base and considerably expanding its resource pool. On the other hand, if this kind of resource leverage was based on recycling existing concepts rather than creating new ones, it did not necessarily contribute to

enhancing the resource base of the whole corporation.

In terms of production, seeking similarities in the resource base and copying the best practices enabled the companies to utilize economies of scale and scope. At the same time, they invested in human resources and knowledge management in order to benefit from the richness of their knowledge base. The study showed that it was possible to combine the benefits of heterogeneity and homogeneity in this context. Even though growth in terms of turnover or capacity increase was put on hold, growth could still take place in the company's intangible-resource base.

Prerequisites for Growth

The four case companies chosen for the in-depth analysis had had a period of rapid growth in production volumes either through M&A or through building new mills (**Table 8**). However, they had experienced problems in realizing profits from their massive investments. Company 1 survived with the help of a financially strong Group; Company 2 faced a hostile takeover and became part of a large, multinational corporation; and Company 3 and Company 4 had severe problems with their current profitability, but they were able to survive due to their past success. As a result of previous investments in production, they all already had up-to-date production technology, and they had decided to put further growth on hold in terms of M&A and building new mills. They were all aiming for future growth through enriching their knowledge-attainment resources with a view to ensuring competitive advantage through differentiation. Yet, they also had cost-effectiveness motives. The case analysis aimed at determining how the companies were preparing for future growth while maintaining their cost control.

Table 8. Prerequisites for growth in the case companies (N=4).

	Company 1	Company 2	Company 3	Company 4
Core business	Sawmilling + EWP	Panels	Sawmilling	Sawmilling
Number of interviews	3	6	5	7
Business culture	Scandinavian	Germanic	Anglo-Saxon	Anglo-Saxon
Past growth mode	External growth (M&A) and organic growth	External growth (M&A)	External growth (M&A)	Organic growth
Internal problems	<ul style="list-style-type: none"> –Focus on growing volume instead of profit –Inability to change growth strategies that had been successful in the past –Uncritical internal corporate image 			
	–Problems in realizing profits from significant mill investments and acquisitions	–Inability to integrate acquired companies: lost synergy benefits		
		–Massive investments in unprofitable acquisitions resulted in resource scarcity in the company	–Extreme focus on cost efficiency resulted in resource scarcity	
Problems contributed	Weak profitability over	Deep losses and hostile takeover	Losing competitive advantage; being big in terms of production volumes and turnover,	

to ...	several years		but a small player in terms of market credibility , weak profitability	
Measures taken to create the prerequisites for future growth ...	<ul style="list-style-type: none"> -Focusing on profit margins and cash flow with strong cost control -Putting external growth on hold until the potential of the existing resource base had been exhausted - Improving long-term planning - Redefining target markets and focusing on them - Investing in customer relationships and customer service - Improving internal information flows, and particularly connections between production and sales - Investing in recruiting and training: encouraging entrepreneurial thinking 			
	<ul style="list-style-type: none"> -Focusing on high-value products and reducing the product range -Strengthening the connection between forest operations and the rest of the supply chain 	<ul style="list-style-type: none"> -Emphasizing innovation but changing the R&D function to become more reactive in terms of customer wishes -Maintaining a broad product range -Instead of cutting prices, finding new applications and customer segments in order to maintain high capacity utilization -Utilizing the local knowledge for the benefit of the multinational corporation 	<ul style="list-style-type: none"> -Picking high-value products -Expanding the Japanese export program and applying the lessons learned from it to domestic sales 	<ul style="list-style-type: none"> -Emphasizing innovation but changing the R&D function to become more reactive in terms of customer wishes -Broadening the product range in the direction of high-value products -Broadening the geographical scope

The case analysis supports the often-repeated claim that growth generated through M&A is more risky than internally generated growth (Gertz 1995), particularly if the motive for external expansion has been rapid growth in turnover or sales. The problems in the case companies arose from the inability to integrate acquired companies into the parent company and to merge two business cultures. Badly designed and implemented M&A strategies resulted in curtailed organic growth as well, given the resource scarcity and poor internal communication. In Companies 3 and 4, misplaced cost control was a managerial guideline that crippled the investment programs that could have enabled it to react or even to act proactively in the new business environment. Company 1 benefited from belonging to a financially strong parent company that was able to prolong the period before a resource shortage started to affect the business. In short, the companies had to close many potential doors because of their impoverished resource base.

The companies ended up applying very similar remedies in order to improve profitability and remain competitive. One interviewee summed up the changes in his organization:

“So up till now or in 1998 the mills would produce whatever was best for them in lumber recovery and production and we would sell what they made. Now we are very much more taking those two things into consideration, but also looking more acutely at the value of the wood. . . So better communication but also a fundamental change in the way we produce which is we are here to make money we are not here to make lumber.” CFO / North America

The case companies decided to put external growth on hold and exhaust the existing resource base. The next stage was to start systematically building an organization in which information flow from the market to the company was controllable and internal information flows in the organization were manageable. This included improving long-range planning, which was in line with the objective of boosting long-term profitability instead of opting for instantaneous cashing in. Another important reason for improving long-term planning was the need to control the uncertainty of the business environment.

The first step was to redefine the target markets and to focus on them. Strong emphasis was put on improving customer relationships and customer service. Together, these two measures enabled the companies to achieve critical mass in both production and knowledge within a certain segment. There was a clear trend toward high-value products, but only Company 1 had clearly decided to reduce and refocus its product range. It had a history of the small-scale production of a variety of products, and reducing the product range was considered to be essential in order to improve profitability.

The companies started to utilize their local knowledge in order to benefit from it on the corporate level. They saw themselves as part of a larger corporate network, in which their role was both to contribute to the resource base of the Group and to utilize the common resources. Company 1 sought new ways in which to cooperate with the papermaking part of the Group; Company 2 was in itself a local unit in a multinational corporation; Company 3 utilized its Japanese dimension; and Company 4 broadened its geographical scope by establishing a subsidiary in a new country. In practice this meant, for example, that the company utilized Group resources in recruitment and training, but was ready to contribute to the common pool of employee know-how. The organizational changes supported the combining of knowledge, and special emphasis was put on enhancing connections between sales and production.

The most problematic issue was related to turning know-what into know-how, i.e., applying knowledge in practice. Given the emphasis on customer service, the R&D function had also changed in order to react to customer wishes, and the cost-control system hindered innovation through trial and error. The companies only wanted to “bet on definite winners”. All this resulted in product and process modification and improvements (‘kaizen-mentality’) instead of true innovations, as the following comment illustrates:

“Well, our changes [in products and processes] are more or less fine tuning. In the future, we do have need for more investments in the R&D, but there’s no mentality for that. We do have need for innovations but no mentality.”
CEO / North America

This change was particularly eye-catching in Company 2, which had a long history of frontline innovations in the panel industry, as the following excerpt from the interview reveals:

“We are not able to get real profit from this [being innovative], if you are starting these new things, we are running too fast in the phase that we have these products, our sales guys are commodity sales guys and not for specialists. . . The market is very conservative and you see it also in our branch.” Plant manager / Europe

Q3: *What are the prerequisites for growth that best contribute to long-term competitive advantage?*

As a result of the rapid expansion through M&A and mill investments, the manufacturing processes and production technology of the case companies were up-to-date. This was the prerequisite for staying in business and remaining competitive. The case companies aimed at combining efficiency of scale, scope, and speed while growing. The prerequisites for this were as follows:

- 1) Defining the target market(s). This enabled the companies to have scale advantages in production while simultaneously achieving deep knowledge about their customers and creating long-term customer relationships. However, the amount of market information was controllable and manageable.
- 2) Conducting organizational changes. These were intended to ensure information flow from market to company and within the organization. The investments in IT were directed at storing and, more importantly, mining the data. More holistic thinking meant that each subsidiary within a Group had a clear role, but operated and made decisions in the context of the whole corporation.

Conclusions

Conclusions

We will conclude this study by examining and refining the growth pattern presented in the section entitled Theoretical Background and the Emerging Propositions in the form of three propositions.

Proposition 1: *a company aiming at sustainable growth shifts its focus from volume-maximizing, tangible-asset-accumulating growth to value creation through the accumulation of intangible assets.*

Our study shows that a company in the wood industry first focuses on growth that aims at maximizing its production efficiency. This happens mainly through investing in up-to-date production and process technology, which is the operative imperative of the wood industry. Then it shifts its growth focus to the knowledge-attainment resources that make the company distinctive. These resources may be both tangible and intangible. We therefore revise proposition 1 as follows: a company aiming at sustainable growth first focuses on volume-maximizing growth and then shifts to value creation through the accumulation of knowledge-creating assets.

Proposition 2: *a company aiming at sustainable growth focuses on enriching and complementing its existing resource base rather than on seeking instantaneous cost advantage by pruning and homogenizing.*

Our study indicates that companies in the wood industry first seek economies of scale and homogenous resources in manufacturing. Afterwards or at the same time, they diversify their knowledge base through investing in human resources and information and knowledge management. We therefore revise proposition 2 as follows: a company aiming at sustainable growth combines a

diverse resource base in knowledge attainment with a homogenous resource base in large-scale manufacturing.

Proposition 3: *a company preparing for sustainable growth creates organizational competencies with the aim of combining rapid knowledge conversion with scale advantages.*

Our study indicates that, by defining a clear target market, the companies combined deep knowledge about the customer and a manageable amount of information with economies of scale in production. Proposition 3 is supported.

The findings of this study imply that it is essential for a basic-industry company aiming at sustainable growth in a knowledge economy to be able to combine requirements for cost efficiency and for innovativeness. In other words, it has to achieve economies of scale and scope, and also economies of speed (rapidly converting the necessary knowledge into customization and shorter production runs, for example) and of patience (building the knowledge base). In this integration of opposing aspects, a company in the wood industry benefits from belonging to a strong corporation. This conclusion is in line with Nonaka's (2003) notion that knowledge creation is a synthesizing process.

The importance of developing a resource base that aims at efficient, large-scale production has not diminished in the wood industry. However, securing growth in knowledge-attainment resources has gained in importance and is necessary if the benefits of increased volume are to be realized.

Discussion

This study has not touched on the concept of leveraged growth because the focus of the wood industry has remained on M&A and organic growth. Leveraged growth is based on the idea that it is not always necessary to own the assets required to expand (Hagel III 2002), and it allows for loose couplings among asset owners. Nevertheless, this kind of growth strategy may well be the future, as new organizational structures enable companies to manage close yet flexible relationships. The case analysis also hinted at that possibility.

We did not report the exact profitability figures of the case companies in this study. There were three reasons for this. Firstly, the figures we had access to, if published, would have enabled the case companies to be recognized. The requirement to maintain case-company anonymity set limits on reporting the findings in general. Secondly, issues such as different transfer prices of raw material within the companies could have affected the profitability of the subsidiaries. Thirdly, the aim of the study was to find out how, in the light of KBV theories, the leading companies prepared themselves for future growth and combined different, often seemingly contradictory, objectives. The investments made in an intangible resource base do not capitalize immediately. Thus, in order to determine whether the measures taken by the case companies at the time of the interviews resulted in better profits, we should conduct a follow-up study.

We did not explicitly address the differences among the case companies stemming from the different tax and investment policies and other location-specific factors. However, our grouping into Scandinavian, Anglo-Saxon, and Germanic companies ensured that we had examples from each geographical area, and we could see if there were differences between the companies that were clearly due to their geographical location. This study did not reveal such differences in the growth patterns

we were examining. We could also claim that, in the case of the multinational companies, tax and investment policies were the factors that mainly affected the location of the new mills, but not the actual growth focus or mode. We focused on firm-internal growth factors, but also acknowledge the effect of economic fluctuation on the nature of growth: companies focus on increasing capacity when they also expect demand to rise in the future. However, our study showed that knowledge-focused growth is gaining in importance, and that it is needed in order to capitalize the investments made in production.

The case analysis revealed some discrepancies. Paradoxically, a strong customer orientation could counteract the innovation benefit resulting from improved internal information flow. If a company relies only on customer feedback to drive its product and process development, it does not transcend the market knowledge but only combines it. The main source of innovation should be based on internal knowledge creation, in which listening to the customer is just one part of the process. Truly demanding customers require forerunners.

Another interesting issue concerned the organizational changes in the case companies. Even though the goal of a more fluent information flow and the use of local knowledge imply a more flexible⁽⁸⁾ organization, the strong emphasis on long-term planning suggests that the aim was for predictability and not for flexibility. The managerial view was that, by gathering enough information and by minimizing surprises, different company functions, such as production, could optimize the processes. Furthermore, the companies wanted to be able to act proactively.

(8) Flexibility is defined as an ability to rapidly combine knowledge within an organization as a response to market demands.

Why, then, should a company prefer flexibility? The underlying principle is that, in a rapidly changing market environment, it is more effective to be able to react to changes more quickly than your competitors than to invest in massive forecasting capability. This means that data gathering and market sensing remain extremely important, but they are used to react rather than to predict. In short, according to this logic, the successful companies are those that can fluently function in a market environment that has a great amount of uncertainty. However, our findings imply that companies in the wood industry still believe in minimizing precariousness rather than accepting it as an inseparable part of the future market environment.

Research and Managerial Implications

The idea of looking at the wood industry from a knowledge-based view is, as far as we know, a novel one. We believe that applying the latest research results on knowledge management and innovation to those of studies on basic industries would benefit both academics and industry practitioners. Thus, we invite researchers to utilize the latest results and further develop the theoretical KBV applications in the field of forest-industry studies.

Previous research on business and management in particular has either been dominated by the pulp and paper industry, or then forest industry companies have been entirely neglected. As far as forest products marketing is concerned, the prevailing research method has been the survey conducted within one forest industry segment, mainly paper or sawmilling. This study attempts to redress the balance.

Even though this case study has shown that practitioners in the wood industry are changing their way of thinking, we could also suggest that the transformation is a slow one and is still in process. The most notable adjustments have been made in terms of abandoning a business culture based on maximizing volumes and shifting toward ensuring long-term competitive advantage. The facts of business, such as enhancing customer orientation, innovation, and improving employee motivation, are increasing in importance and could be interpreted in a new way if seen in the light of changes in the market environment. Thus, we invite growth-oriented industry practitioners to question the customer-knows-best safety net and to put more emphasis on innovation through trial and error. We accept the importance of cost efficiency, but recommend growth organizations to maintain the richness of their resource base in order to be able to build new company characteristics to meet market demands.

This paper has put emphasis on the intangible aspects of an organization. However, any industry could be thought of as consisting of two layers. The first layer comprises efficient production processes, up-to-date technology and firm cost control. Yet, this is not enough. A second layer is needed that incorporates innovation, the creative use of information and the combination of new knowledge. If the solid basis of the industry is not trimmed, innovations cannot root and become profitable. Nevertheless, if a solid basis is all that companies have, the result is the never-ending circulation and optimization of old assets, and a declining industry. We now encourage companies in the wood industry aiming at growth to take the next step, to build the layer of knowledge creation.

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