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A Capability-Based View on Organizational Renewal: Maintaining Long- and Short-Term Potential for Growth in Large, Established Companies

Silja Korhonen

The author is a Ph.D. student, Department of Forest Economics, University of Helsinki, P.O. Box 27, 00014 University of Helsinki, email: silja.korhonen@helsinki.fi.

ABSTRACT

The purpose of this paper is to contribute to the understanding of sustainable growth and organizational renewal in large established companies operating in a mature industry, namely the wood industry. Ideas from the literature on corporate and strategic entrepreneurship, organizational learning, innovation, and marketing were combined in order to develop a capability-based view for analysis. This paper considers the implications of combining the two types of growth – advantage- and opportunity-seeking – to enhance value creation in a radically changing environment. This combination requires a special organizational context that simultaneously enhances creativity in individuals and ensures control of execution. This can be achieved only by managing both the structural and motivational aspects of the organization. By synthesizing research across various literature streams, this paper intends to help strategic planners manage the tension between the long- and short-term potential for growth and wealth creation and indicate directions for future research in the forest products business.

Keywords: organizational renewal, dual strategies, capabilities, innovation

Introduction

As the forest sector continues to struggle with weak performance and stagnant growth, business practitioners and scholars remain occupied with understanding the drivers of profitability and stakeholder value. The key objectives of companies – wealth creation and growth – are interrelated, since growth is expected to build economies of scale and market power, to decrease the risk of substitution, and attract investors as well as talented employees (Ireland et al. 2003). Even though these broad goals are largely shared among companies, accomplishment is dependent on a complex mixture of firm-external and internal factors. Many of the contributors to company performance are virtually non-influencable, such as raw-material prices, exchange rates, and product prices in general. However, strategic-management scholars increasingly refer to firm-internal factors – resources and capabilities – when explaining persistent performance differences among companies (Ireland et al. 2003, Hitt et al. 2001, King and Zeithaml 2001, Grant 1996).

‘Growth’, from a resource-based view, stands for acquiring, accumulating, and bundling resources into capabilities in on-going processes¹. ‘Sustainable, profitable growth’ necessitates a balance between

the exploitation of existing resources and the development of new ones (Wernerfelt 1984, Penrose 1959). Whereas growth is also a reasonable indicator of innovativeness and an entrepreneurial mindset in new ventures, it is not necessarily so for larger and more mature companies (Davidsson and Henrekson 2002). In older, established firms, it may be the result of the effective coordination and prevention of loss as opposed to instigating renewal and innovation (Hitt et al. 2002). New business-development opportunities are often selected on the basis of technological feasibility and potential market size. Yet, at the early stages of a radical business concept it is difficult to tell which value solution will work for which market segment and with what capabilities. From the perspective of a well-established firm, it is always precarious to risk tried success factors in favor of unproven ones with potential. Geographical dispersion brings additional challenges.

(1) For a more detailed analysis of the growth objective and its interpretation, see Korhonen and Niemelä 2004.

The growth strategy of an established large firm and its implementation incorporate a profound organizational tension that originates from balancing the open-minded search for new opportunities and careful establishment and securing of the current competitive position, i.e., maintaining both long- and short-term potential for growth:

“Firms able to identify opportunities but incapable of exploiting them do not realise their potential wealth creation, thus under-rewarding stakeholders. Similarly, firms with current competitive advantages, but without new opportunities identified to pursue and exploit with their advantages, expose their stakeholders to an increased risk such that market changes may diminish the rate of wealth creation or even reduce previously created wealth” (Ireland et al. 2003: 966).

In the forest business, characterized by chronically low prices and over capacity, only low-cost producers utilizing economies of scale are expected to survive. As such, growth has long been an aim instead of being an outcome of a consistent investment strategy that is directed at approving value-creating projects. However, the trend may be changing. For example, a recent study conducted among the leading wood industry companies gave some indication that, while the growth objective remained, the strategic focus was shifting from volume- (more-of-the-same-type) to value-oriented growth (Korhonen and Niemelä 2004). The need for combining scale efficiencies with innovative offerings has become a frequent topic for discussion in the forest industry in general, and in the poorly performing wood industry in particular. Yet, the implications and implementation of this dual aim have seldom been analyzed.

Traditionally, forest business research has drawn from marketing and management theories, but more specific entrepreneurial, innovation, and organizational-learning perspectives have also recently emerged. Each of these adds a new dimension to the question of how to maintain both long- and short-term potential for growth. While the literature on corporate and strategic entrepreneurship focuses on how to combine opportunity- and advantage-seeking behaviors (e.g., Dess et al. 2003, Ireland et al. 2003, Hitt et al. 2002, McGahan and Silverman 2001, Tushman and O'Reilly 1996), organizational-learning theory specifically examines the exploration-exploitation trade-offs (e.g., Levinthal and March 1993). Innovation studies narrow down the division between radical and incremental innovation (e.g.,

Damanpour 1991), and marketing research produces analyses of the dynamics of the market-driven and market-driving approaches (Carrillat et al. 2004, Kumar et al. 2000).

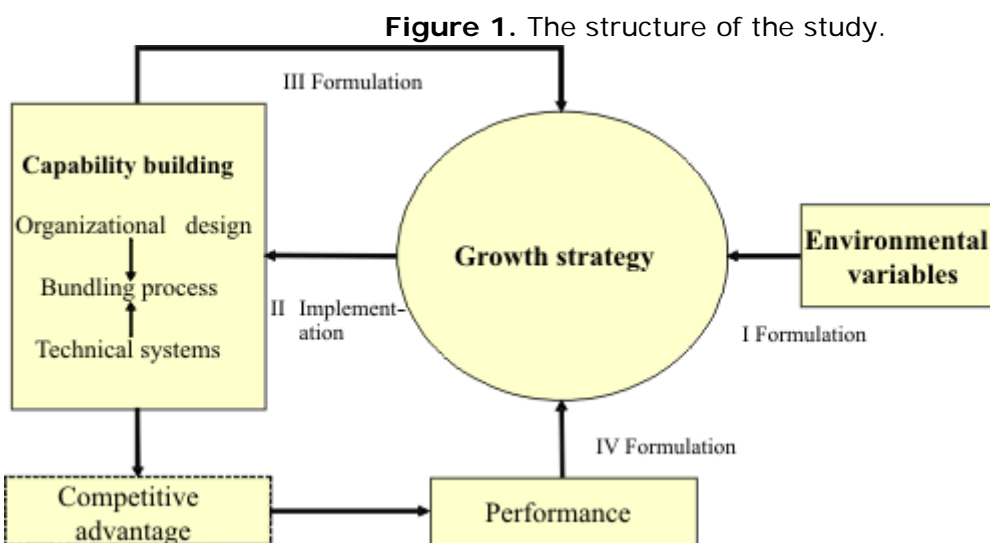
These schools of thought are partly overlapping and integrated, and synthesis would thus aid both strategic planners and researchers in analyzing the aim for sustainable, profitable growth and organizational renewal in large established companies. Organizational renewal refers to a complete business (legally or economically defined) altering its resource pattern to achieve better and sustainable overall economic performance (Stopford and Baden-Fuller 1994). Choice was made to focus on this more modest approach to corporate entrepreneurship, as few companies carry renewal to the point where they transform their whole industry (Stopford and Baden-Fuller 1994). The concept of organizational capabilities was chosen as the starting point for synthesis due to its applicability across the literature streams (Volberda 2004). Capabilities are strongly connected with strategic-management thinking due to their origins in the resource-based view of the firm and evolutionary economics (e.g., Teece et al. 1997, Nelson and Winter 1982). They have been firmly adopted in the marketing literature (e.g., Day 1994). The analysis of capability-building establishes a relationship between innovation and entrepreneurship research and the literature on organizational learning (e.g., Acha et al. 2005, Floyd and Woolridge 1999, Crossan et al. 1999).

The Purpose and Structure of this Paper

The purpose of this paper is 1) to examine the complementarities and links between different research streams in the analysis of sustainable growth and organizational renewal and 2) to enhance our understanding of the growth strategies required to sustain competitive advantage and their implementation in large established companies. Close consideration is given to the implications of combining two types of growth – opportunity- and advantage-seeking – to enhance value creation in a radically changing environment. The specific perspective is that of large established companies operating in a mature industry, namely the Western (European and North American) wood industry.

Figure 1 presents the structure of the study. Four major contingency links were identified and examined:

- link I indicates the influence of the external environment on the growth strategy;
- link II depicts implementation of the chosen strategy through capability building;
- link III illustrates the influence of the existing capabilities on the strategy; and
- link IV shows the influence of performance on the strategy.



This paper focuses on links II, III, and I in **Figure 1**. The first section of the paper ('Sustainable growth through capability building') analyses the implementation of growth strategies at the business level through capability building (links II and III). Special focus is on changes in the organizational design and their effects on the different types of resource-bundling processes within capability building. Capabilities translate into innovations, and their potential to create value (and accordingly, to create and establish competitive advantage) is analyzed. In the second part of the paper ('The effect of the external environment'), different growth strategies are assessed in light of changes in the external environment (link I).

Sustainable Growth Through Capability Building

Defining a Capability

According to Volberda (2004), one of the contemporary synthesizing schools of strategic management is an organizational-capabilities approach, which is an umbrella term for the capabilities, dynamic capabilities, and competence approaches to strategic management (Foss 2003). The focus is on sources of competitive advantage and localized innovative activity, and the aim is to find out what is distinctive about firms as unitary, historical organizations of co-operating individuals (Foss 2003, Langlois and Foss 1999). The theoretical basis of the capabilities school is diverse and includes the resource-based view of the firm, evolutionary economics, and learning theories (Volberda 2004, Foss 2003).

Organizational capability² can be defined as an organizational skill: the capacity of an organization to perform a coordinated set of activities, utilizing its resources, for the purposes of achieving a particular end result (Helfat and Peteraf 2003; Langlois and Foss 1999; Grant 1998, 1996). At the heart of capability is knowledge creation and transfer to different levels of the organization. It can be understood as a system in which dispersed knowledge is integrated, and in this case a firm's capability acquisition cannot be separated from how it manages its knowledge base (Pandza et al. 2003, Loasby 1998, Leonard-Barton 1992). Capabilities are the output of the firm's existing resources, but they simultaneously develop the firm's resource base further and affect future capability selection. They are a by-product of past activities, but they also open up a range of prospects. Accordingly, they provide a conceptual basis for analyzing the tension incorporated in balancing the long- and short-term potential

for growth and wealth creation (Ireland et al. 2003, Hitt et al. 2001, King and Zeithaml 2001, Grant 1996).

(2) Even though attempts have been made to distinguish between competencies and capabilities (see, e.g. Sanchez et al. 1996), this study adopts the viewpoint that the distinction is semantic (for similar argumentation, see e.g., Ritter 2005, Atuahane-Gima 2005, Danneels 2002, Grant 1996, Day 1994) and uses the concept of capability. The specific term 'core competencies' (also 'distinctive competencies') is reserved for non-product-centric capabilities that bring value to the customer and span multiple lines of product markets (Grant 1998, Teece et al. 1997, Hamel and Prahalad 1996, Prahalad and Hamel 1990). The adjective 'core' used to modify the basic term centers attention on not only what a firm can do, but on what it can do better than its competitors (Grant 1998). Accordingly, core competencies are always valued relative to other firms, since they utilize the asymmetries discovered between the company and its competitors (Hamel and Prahalad 1996).

Each capability can be understood as a combination of technical systems, organizational design, and bundling processes (Korhonen and Niemelä 2005, Ireland et al. 2003, Gold et al. 2001).

Technical systems include the technology needed for producing the physical product and the related internal and external support and services. Technology has a profound impact on organizations, affecting the conception and distribution of knowledge, relations of authority, and methods of coordination (Jaffee 2001). Of special interest in capability building are systems that facilitate information flow and assessment throughout the company and enable the combination of tangible and intangible resources. *Business-intelligence techniques* support information gathering from the firm's competitors and other market environment, *collaborative technologies* allow individuals to work together, *discovery technologies* enable the firm to search for both public and private information, *knowledge mapping* allows individuals to find the information they need, and *information- and knowledge-storage technologies* enable the firm to develop databases on its customers, suppliers, partners, and employees (Gold et al. 2001).

Organizational design with its formal and informal sides develops the context for pooling tangible and intangible resources, and binds the resources to the company values and vision through the organizational culture (Siggelkow 2002, Gold et al. 2001, Leonard-Barton 1992). It concerns how a firm is governed and how decisions are made and carried out, thus creating a platform for developing new capabilities or for reinforcing old ones (Jaffee 2001, Nelson 1991). Although design is often thought of in terms of organizational structure, organizational design is a more complex construct that refers to the process of assessing and selecting the structure and formal system of communication, the division of labor, and the coordination, control, authority, and responsibility required to achieve the organization's goals (Trent 2004). It highlights patterns of interaction and the coordination of technology, tasks, and human components (Trent 2004).

Resource-bundling processes include creating (developing new capabilities), entrenching (maintaining or reinforcing an existing capability), and trimming (deleting capabilities) (Sirmon et al. 2005, Siggelkow 2002, Ahuja and Lampert 2001, Brown and Eisenhardt 1999). From a knowledge perspective, the different types of resource-bundling processes in capability building emphasize either the assimilation of new learning (creating) or the utilization of what has been learned (entrenching). The life cycle of a capability begins with its creation, when a group of individuals organizes around a common objective or idea and begins to develop it through the search for viable alternatives (Helfat and Peteraf 2003). Capabilities are exercised regularly during the maturity stage. They may then be replicated, redeployed to a different product market, recombined with another capability, or renewed through entry into a new development stage (Helfat and Peteraf 2003). Finally, a firm may consciously retire a capability or there may be a gradual decline in the level of a capability (Helfat and Peteraf 2003).

Implementing a Growth Strategy Through Capability Building

It is proposed in this paper that capability building aimed at sustainable growth rests on two basic principles: 1) **a growth focus** that accumulates both tangible and intangible resource bases and 2) **a growth mode** that balances diversity and homogeneity.

A growth focus quite simply means that, in practice, a deep knowledge base (intangible resources) is meaningless if a company cannot develop its actual offerings due to a lack of required technology or raw material (tangible resources), and vice versa. For example, a new coating machine may trigger a new product family of interior decorative panels, and even though the modern technology itself may not offer sustainable competitive advantage, the timing and underlying strategic thinking in the investments may do so.

Growth mode entails the balancing of diversity and homogeneity. Resource diversity ensures that companies have the potential to rapidly respond to the changes in their market environment by creating new capabilities. Homogeneity, in turn, enables maximum efficiency through scale advantages and secures competitive advantage under present conditions. Finding the right balance is contingent on the competitive environment.

Organizational learning theories discuss trade-offs related to growth mode in terms of explorative and exploitative organizational behavior (Kyriakopoulos and Moorman 2004, Crossan et al. 1999, March 1991). More broadly speaking, they could also be interpreted as the two different ways of developing the resource base of the firm. Exploration can be described as a combination of search, experimentation, trial, and free discovery and is concerned with creating variety in experience (Holmqvist 2004, Levinthal and March 1993, March 1991). It builds on the ability to search for and acquire new knowledge, and it is linked with the creation of capabilities (Sirmon et al. 2005, Levinthal and March 1993, Anderson and Tushman 1990). In turn, exploitation includes concepts such as refinement, efficiency, implementation, and focused attention, and it is about developing reliability of experience (Holmqvist 2004, Levinthal and March 1993, March 1991). It emphasizes the transfer and sharing of what already exists and utilizing what is already learned, and thus it is akin to entrenching the existing capabilities of a firm (Hitt et al. 2002, Levinthal and March 1993). It is dependent on exploration: the prerequisite for exploration is simply the desire to discover something new, whereas

the precursor of exploitation is existing knowledge (Rothaermel and Deeds 2004). Similarly, without the initial creation phase, there are no capabilities to entrench.

A large body of literature on marketing and business strategy suggests, either implicitly or explicitly, that exploration and exploitation represent competing behaviors, that combining them is counterproductive, and that there are greater returns on specialization (e.g., Kotler 1994, Porter 1980). Recently, however, focus has shifted to analyzing their complementary nature, even though the tension between the two behaviors is acknowledged (He and Wong 2004, Knott 2002).

As previously stated, organizational design represents the context for pooling and developing tangible and intangible resources and accordingly is a significant contributor to the balance between exploration and exploitation. In order to combine both types of behavior in capability building, companies may pursue one or the other at different points in time (Tushman and Anderson 1986), in different business units (Mintzberg 1979), or in different types of alliances (Rothaermel and Deeds 2004). It is also possible to distribute both over the organization so that each employee is assumed to be able to combine exploration and exploitation, as advocated in this paper (Birkinshaw 1997). Within a large company, the critical issues involved in this kind of dispersed design³ are communication and information sharing, openness to new ideas, support for innovations, and tolerance of risk and failure (Elfring 2005). Levinthal and March (1993) concluded that the primary challenge in terms of maintaining an optimal balance of exploration and exploitation is the tendency for the latter to drive out the former. In their view, sustaining exploration occurs through incentives, influencing individual risk preference, and altering organizational design.

(3) Also known as contextual ambidexterity (Birkinshaw and Gibson 2004).

Korhonen and Niemelä (2004) noted that, in an attempt to combine efficiencies of scale, scope, and speed while growing, large companies in the wood industry carry out two main measures: changing the organizational design and getting closer to the markets, i.e., altering both the form and the cultural aspects of the organization. Changes in design and culture are intended to ensure information flow from the market to the company and within the organization, and to achieve more holistic thinking within a corporate context.

A recent study examined organizational changes in the wood industry in terms of formal hierarchical design and informal lateral relations (Korhonen 2005). Changes in informal relations could be facilitated by changing the formal design so as to transform the occurrence and the context of the ties between knowledge seekers and sources. Specifically, the formal design influenced the accountability and predictability of individual behavior, the number of potential contact channels, the ease of access to information sources, and resource allocation (Korhonen 2005). The findings indicated that shared cognitive frames⁴ and high levels of trust between organizational members improved knowledge transfer and integration (exploitation), enabled smooth organizational transitions, and improved efficiency by revealing the range of employee expertise and enabling the contextualization of information and knowledge. Simultaneously, the shared frame significantly improved the spread and acceptance of new ideas (exploration), since explaining them became easier. Thus, both exposure and receptiveness to new knowledge improved, provided that the communication network was not closed.

(4) A cognitive frame is the schema that enables people to locate, perceive, identify, and label activities within their lives (Aldrich 1999).

One type of common cognitive framework has attracted specific attention in recent marketing and management research: market orientation is suggested to offer a unifying focus for the efforts and projects of the organization (Kyriakopoulos and Moorman 2004, Kohli and Jaworski 1990). It entails focusing on customers, competitors, and broader market conditions and refers to the organization-wide generation of market intelligence, the dissemination of intelligence across the company, and organization-wide responsiveness to changes occurring in the environment (Kohli and Jaworski 1990). Market intelligence includes not only the monitoring of a customer's needs and preferences, but also the analysis of how that customer may be affected by environmental forces (Kara et al. 2005).

Market orientation encompasses both market-driven and market-driving approaches (Jaworski et al. 2000). Market-driven strategies are based on the firm's adaptation to changes in the marketplace (Carrillat et al. 2004). Market-driven companies retain competitive advantage by identifying, understanding, attracting and keeping valuable customers and by responding to stakeholder perceptions and behaviors within a given market structure (Jaworski et al. 2000, Day 1994). Market-driving strategies, on the other hand, include strengthening the firm's ability to develop innovative products and disrupt the market (Kumar et al. 2000, Jaworski et al. 2000). The inspiration for introducing a radical business concept often comes from a visionary, not from traditional market research. Market-driving organizations gain competitive advantage by changing the roles, composition, and behavior of the players in the market and proposing offerings that carry more value for consumers than those of the competitors (Carrillat et al. 2004). It is suggested that highly successful firms are able to be both market-driven and to drive the markets (Jaworski et al. 2000, Abell 1993).

Atuahene-Gima (2005) concluded that market orientation could enable a firm to combine strategic and operational thinking by simultaneously engendering capability exploitation and exploration. Kyriakopoulos and Moorman (2004) found evidence that high market orientation enabled companies to financially benefit from combining exploration and exploitation. Contemporary research on market orientation views it as more of a cultural than behavioral phenomenon (Homburg and Pflesser 2000), and this could partly explain why it has a strong impact on the successful combination of exploration and exploitation. On the company level, the organizational culture forms the context of resource assignment. Institutional theorists argue that such decisions may be so strongly endorsed by the company's prevailing culture that managers no longer question the appropriateness or rationality of these activities (Oliver 1997). Companies will be willing to defy the status quo and are more likely to acquire new resources when declining performance, economic crisis, or increasingly outdated processes make the need for change more obvious or urgent (Oliver 1997). Initiating the development of new capabilities without the presence of such a clear threat requires special determination. Market orientation could affect the attitudes of organizational members regarding the need for proactive change and could help justify the rationality of these decisions. It could also offer an adequate common framework to facilitate the reaching of consensus concerning priorities in operations and enhance understanding of different problem-solving, reasoning, and judgment processes. It would thus foster improvement in both exploration and exploitation.

Korhonen and Niemelä (2004) report one example of an attempt to increase market orientation in the wood industry. The companies defined their target markets and key customers in order to give themselves scale advantages in the form of centralized segmented production, to obtain in-depth knowledge of their customers, and to create long-term customer relationships. Furthermore, this enabled prioritization under conditions of resource scarcity. Strong emphasis was placed on improving customer relationships and service and on supporting the pooling of knowledge between sales and production.

Capabilities as a Source of Competitive Advantage

The value of a firm's capabilities and their ability to create competitive advantage must be understood in a specific market context. Also, interaction occurs over time between the capability portfolio and the competitive environment (Priem and Butler 2001, Hunt and Morgan 1995).

Capabilities and resources can be identified and classified on both industry and firm levels, distinction being made between 'industry-significant capabilities' and 'firm-specific capabilities,' both of which are valuable, but for different reasons (Korhonen and Niemelä 2005). The former are closely related to industry recipes – the organizational routines necessary to compete in a particular industry – and they provide a basis for guiding managerial actions (Spender 1989). An in-depth knowledge of these recipes together with creativity, enhances the likelihood of identifying and building new and distinct capabilities. Firm-specific capabilities are potentially able to establish the firm's competitive advantage through differentiation, while industry and market contexts determine which resources and capabilities are basic requirements and which ones might differentiate the firm from its competitors.

Nonaka and Toyama (2003) define value creation as the process of synthesizing the existing knowledge of the company with the knowledge acquired from the market environment and developing offerings that are a manifestation of that new knowledge. In other words, in order to develop superior products and services that bring differentiation, it is necessary to match the market opportunities with the firm's capabilities (Day 1994). This is done through developing a value proposition that refers to the combination of *benefits*, *acquisition efforts/costs*, and *price* offered to the customer (Kumar et al. 2000). Value propositions, in turn, determine the guidelines for a customer/segment-specific value solution that consists of the total offering: target-specific services and products and customer-interface configurations. Each value solution is based on a specific set of capabilities, i.e., the capabilities translate into a solution that customers evaluate. A company obtains comparative advantage when it can produce a market offering that, relative to extant offerings by competitors, is perceived by some market segments to have superior value and/or can be produced at lower cost (Hunt and Morgan 1995). This may result in competitive advantage – an inherently dynamic state – depending on the competitors' positioning. Amit and Zott (2001) and Jaworski et al. (2000) suggested several ways in which to enhance value creation: offering complementary products/services and incentives to create high switching costs for customers and partners, maintaining efficiency of purchase, and pursuing novelty in a product/service that is recognized as being pioneering. Of these measures, the latter entails the greatest potential for value creation.

A focus on innovation perceived as the manifestation of capability building is now proposed. Innovation can be defined as the creation and/or adoption of new ideas, processes, products, or services that are intended to contribute to the performance or effectiveness of the firm (Damanpour

1991). Innovations, most notably those resulting in new-product development, represent the critical means by which organizations diversify, adapt, and reinvent themselves to match environmental change (Brown and Eisenhardt 1995, Weiss and Heide 1993). Others believe that innovation provides a way for firms to determine the directions in which an industry will evolve (Hitt et al. 2001). Innovation is centered on two closely linked concepts: novelty and risk-taking.

In order to assess the degree of value creation and change potential in innovations, it is necessary to consider to whom the innovation is new and how new (Johannessen et al. 2001). Innovations can be defined in terms of both newness to the company (industry) and newness to the market (Kotabe and Swan 1995), and managers may differ in their opinions, depending on their familiarity and experience (Dewar and Dutton 1986).

Product development results from a process in which new knowledge is incorporated into a product and in which exploration-exploitation activities are sequential (Madhavan and Grover 1998). During the early discovery stages of the process, the firm pursues an exploratory search that includes basic research, invention, risk-taking, and building new capabilities (Rothaermel and Deeds 2004). When the necessary skills have been acquired, the firm turns to exploitation through routines and the implementation of knowledge. Thus, both exploration and exploitation require a little dose of the other to enhance radical innovations (Atuahene-Gima 2005). The recent literature describes innovations along a continuum from the exploration-oriented (radical, disruptive) to the exploitation-oriented (incremental, sustaining) depending on the degree of new knowledge embedded in them.

Incremental or sustained innovation is the result of exploiting existing capabilities and an outcome of adaptive learning (Ireland et al. 2003). It occurs within the bounds of established premises, policies, and customary views (Elfring and Hulsink 2003), and signifies capability-enhancing measures that are often oriented to developing new processes rather than new goods or services (Ireland et al. 2003). It does not fundamentally differ from current knowledge or change an organization's mental models (Baker and Sinkula 2002). The aim is to sustain current competitive advantage, create and ensure predictable returns, and steadily improve product commercialization and process implementation (Simsek et al. 2003, Hitt et al. 2001, Levinthal and March 1993).

Radical, rapid, or disruptive innovation is the result of generative learning that substitutes obsolete mental models and creates new resources with which to build new capabilities (Baker and Sinkula 2002). It implies fundamental changes in organizational routines and approaches to products, processes, and markets (Simsek et al. 2003, Elfring and Hulsink 2003). The most ground-breaking innovations may realign the entire industry. Radical innovation enables the company to stay ahead of the competition and create future competitive advantage, to redefine the heuristics and concepts surrounding the product and process design, and to generate more uncertain but potentially higher returns than are possible through incremental innovation (Simsek et al. 2003, Hitt et al. 2001, Levinthal and March 1993, Tushman and Anderson 1986). It is suggested as one of the main sources of market change particularly in the realm of technology (McGahan 2004, Gersick 1991).

The newness of the innovation to the company and market creates risk. Risk-taking is the willingness to undertake actions that may undermine something that is currently valuable in order to prioritize something that is potentially more valuable. Taking risks is a vital aspect of a firm's

innovative capacity and can affect both the market structure and behavior of its actors (Carrillat et al. 2004): the higher the risk, the higher the value-creation potential. Organizations face a risk if they propose offerings that do not necessarily correspond to existing consumers' needs or external expectations of acceptable practice: developing novel offerings requires organizational change that may destroy the existing routines of the company at the cost of reliability and effectiveness. Thus, the concept of change (and the fit between firm-external and -internal change, in particular) is crucial to understanding sustainable growth.

The Effect of the External Environment

Firm External Change

Changes in the external environment can be divided into those that have an effect on what customers need, those that affect how the firm survives competition, and those that occur in the general political, economic, social, and technological spheres of the environment (Juslin and Hansen 2002, Grant 1998, Schendel and Hofer 1979). These changes shape the dynamics of industrial structure, boundaries and recipes, market demand and supply, and the availability of critical resources (Castrogiovanni 1991, Porter 1980).

Recent changes in the external environment have reshaped the wood-industry business. The largest companies are losing political identity as corporations merge, consolidate and form national and international marketing alliances. At the same time, the forest sector remains heavily regulated in many countries, and non-governmental organizations (NGO) have an interest in influencing business. Thus, the location of production and decision-making, the sources of raw material, and the distribution of economic benefit are becoming increasingly complex issues. The electronic business channel is expanding and is already changing the way wood products are traded. Prices are becoming uniform as the trade is becoming global. The bargaining power of buyers is increasing as the customer base is consolidating, and the direct customer is becoming more sophisticated and informed about product specifications and market trends. As an example of the legislative changes, building codes all over the world are becoming performance-based, meaning that builders, architects, and specifiers could take full advantage of the properties of engineered wood products. Finally, the wider societal changes could be tracked down to the individual level: higher education means that practice in learning new things continues later in life, people criticize and question, and international experiences create awareness of alternatives. The generations of today form very different organizations than those of yesterday, and this has to be taken into consideration in both recruitment and management practices.

It is important to be aware of general features and trends in the external environment and also to distinguish between the gradual change that operates through normal selection pressures of competition (there are always changes in the market) and punctuational change that rapidly restructures environmental conditions (Gersick 1991). McGahan (2004) classified industry evolution along the following four degrees of change: radical, creative, intermediating, and progressive. *Radical change* poses a threat both to industry's core activities and to the resources that have historically made organizations unique. It usually follows the ground-breaking introduction of a new technology or some regulatory change (e.g., plywood being substituted for other material in parquet manufacturing, or prohibition of PEFC-certificated wood in the UK market). *Creative change* threatens core resources but leaves core activities stable. This type of change is most visible in biotechnology and information-

technology companies that continuously launch new products and patents, but maintain relatively stable relationships with their customers and suppliers. *Intermediating change* maintains core resources, but threatens core activities. One example is when individual timber agencies gradually lose control of inventory management to larger integrated suppliers – a change that is visible in UK markets. *Progressive change* occurs within the existing framework of the business and industry recipes – either resources or activities – are not under threat of becoming obsolete.

Firm-Internal Change – Vital or Detrimental to a Company?

Kreiser and Marino (2002) state that firms respond to environment as it is perceived and interpreted by decision makers, and these managerial perceptions ultimately shape strategy formation. Both complexity and the rate of environmental change play a major role in influencing perceived environmental uncertainty that stems from lacking information needed to identify and understand the causal effects of market changes (Sirmon et al. 2005). When numerous diverse external activities and events shifts rapidly, decision makers cannot fully understand them and perceived uncertainty increases (Daft et al. 1988). Labelling issues as opportunities rather than threats improves the ability of a company to adopt voluntary (as opposed to compulsory) strategies (Sharma 2000). Successful companies are those that can fluently function in a market environment in which there is a large degree of uncertainty. However, the findings of Korhonen and Niemelä (2004) imply that companies in the wood industry believe in minimizing precariousness rather than accepting it as an inseparable part of the future market environment.

In the large body of studies devoted to examining organizational evolution, change is portrayed as being both vital for and detrimental to survival. The classical contingency approach maintains that companies rationally and continuously adjust their practices to ensure a better fit between the firm and its environment, and organizational change is considered to be beneficial (Homburg et al. 1999, Delacroix and Swaminathan 1991). However, all change involves at least some destruction of existing practices, and thus organizational change always includes an element of risk-taking.

Organizational routines and actions are path-dependent and based on the interpretation and outcomes of past actions. Thus, as Haveman (1992) suggested, organizational change is beneficial and less distracting if it builds on already established routines and capabilities. This notion has been emphasized in the theory of structural inertia, which suggests organizations have little capacity for change, because routines are disrupted and competency and reliability are lost (Hannan and Freeman 1984, Nelson and Winter 1982). Thus, in contrast to the strategic-management perspective, firm-internal change is infrequent, potentially deleterious, difficult, and even less common than environmental change, according to organizational literature particularly organizational ecology (Sorensen and Stuart 2000, Delacroix and Swaminathan 1991, Hannan and Freeman 1984). The institutional perspective supports these claims, since organizational actions and structures are affected by the pressures of legitimacy and conformity that arise from the operational environment (Homburg et al. 1999). For example, advocating efficiencies of scale, centralization, and overall streamlining may satisfy stock analysts and financiers, whereas establishing a research and development department may be a strong signal aimed at customers. Kelly and Amburgey (1991) found no support for the claim that environmental change would increase the probability of corporate-level change.

These seemingly conflicting views are not necessarily in opposition; however, research has shown that an organizational transition can be both adaptive and disruptive (Amburgey et al. 1993, Haveman 1992). The underlying assumptions adopted here are that firm-internal change may benefit organizational performance and increase survival depending on its fit with the environmental change, and firms continuously adapt to their environment while social systems do not change as readily and or continuously as their environments.

Theories of corporate and strategic entrepreneurship focus on explaining the process whereby an individual or a group of individual in association with an existing organization create a new organization or instigate renewal or innovation within the old one (Dess et al. 2003, Sharma and Chrisman 1999). In summarizing the recent research on corporate entrepreneurship (CE), Covin and Miles (1999) and Dess et al. (2003) introduced four forms of organizational renewal through CE that display various degrees of novelty in organizational activities: *sustained regeneration*, *organizational rejuvenation*, *domain redefinition*, and *strategic renewal*.

Firms involved in *sustained regeneration* develop cultures, capabilities, and structures to facilitate the continuous flow of incremental product innovations in their current markets as well as entry with existing products into novel markets. The focus of *organizational rejuvenation* is on improving the firm's ability to execute strategies and often involves changes in value-chain-support activities in the form of process and administrative innovations. Through *domain redefinition*, the firm is able to create a new product-market position, and the focus is more on exploring opportunities than on exploiting what is currently available in order to establish first-mover advantages. Finally, *strategic renewal* seeks ways to change the firm's competitive strategy with change being both inward- and outward-bound. Strategic renewal has been defined as the opposite of corporate venturing, involving reconfiguration of the strategies and or structures of the existing business. Conversely, corporate venturing leads to the creation of new business (Sharma and Chrisman 1999). The firm tries to reposition itself with the intent of mediating the company-environment interface. This is often best achieved by driving incremental change in established activities and conducting selective experiments in developing new resources and activities (Dess et al. 2003). Structurally complex firms, such as those engaging in product/market diversification, may adopt many of these CE forms simultaneously in different parts of the company (Dess et al. 2003).

It is proposed in this paper that these CE change types are roughly analogous to the three types of business strategies identified by Miles and Snow (1978): *defender*, *prospector*, and *analyzer*. Defenders are engaged in sustained regeneration and organizational rejuvenation. They achieve growth incrementally through market penetration and after having chosen their products and markets they offer a select few high-quality services and competitive prices (Forte et al. 2000). *Prospectors* stress domain redefinition, since they have a broad market domain that is continuously expanding. They have high costs, a great variety of service offerings, and high operating slack (Forte et al. 2000). Growth is achieved through product and market development and technological processes used are flexible enough to launch new offerings. *Analyzers* are a combination of prospectors and defenders; they have the dual technological capacity to meet both stable and changing environments. They have lower costs and lower operating slack than prospectors, but offer more services than defenders (Forte et al. 2000). Growth occurs through both market penetration and market and product development. As such, analyzers reflect strategic renewal as defined by Dess et al. (2003).

The above CE and business-strategy types are also linked to the recent literature on strategic entrepreneurship that advocates a combination of opportunity and advantage seeking (Hitt et al. 2002). Opportunity seeking results in new economic activities. It calls for creation of new capabilities and divestment of old ones, since the value-creating potential of resources and capabilities varies over time. Advantage seeking, in turn, is based on entrenchment of already existing capabilities, and assures current wealth through incremental enhancement. It is proposed here that advantage-seeking growth strategies stem from sustained regeneration or organizational rejuvenation, whereas opportunity-seeking growth is linked with domain redefinition. Strategic renewal combines opportunity- and advantage-seeking – in other words it has both adjustment and experimental features.

Reconciling External and Internal Change

Strategic repositioning is a widely used concept for the conscious act of reconciling firm-internal and -external environments by finding a match between market requirements and the firm's ability to serve them (Turner 2003). It often represents a fundamental shift in the value proposition of a company seeking to change its targeted market segments and/or its basis of differentiation (Porter 1996). Repositioning is driven by a gap between needs of the market and capabilities of the enterprise (Turner 2003).

Accordingly, it is suggested in this paper that if prevailing industry recipes are not questioned, product life-cycles are long, and it is possible to focus on the development of a core business: sustained regeneration and organizational rejuvenation with incremental improvements are the preferred and advantageous forms of change for established companies. In other words, the growth strategy should be advantage-seeking because, even though new, entrepreneurial companies may favor a make-or-break business strategy. Most incumbent companies have too much to lose to justify a single-minded focus on radical business innovation. Thus, assuming that the market environment is stable and change is progressive, established firms should devote the majority of their business efforts to traditional market- and customer-driven activities (Kumar et al. 2000). This would imply incremental innovation and growth within chosen markets, a focus on the core business, engagement in market research, offering of a clearly defined set of high-quality, competitively-priced services, little organizational resource slack, and the promotion of an overall incremental-improvement mentality.

However, when the degree of firm-external change is high and the probability of environmental shock is considerable, established companies need the flexibility to change their prevailing sources of competitiveness or risk being overtaken by current competitors or upstart market drivers. Under such conditions, early-moving firms benefit from employing a staggered, risk-minimizing strategy that combines opportunity- and advantage-seeking in various degrees (McGahan 2004). This is also an effective strategy to adopt in preparing for the possibility of punctuational change, i.e., exogenous shocks in the market environment. Even though risk-taking is commonly related to entrepreneurship, Stopford and Baden-Fuller (1994) advocate the view that entrepreneurial companies are simultaneously innovative and financially risk-averse, aiming to spread and minimize risks by initiating many different projects⁵. It is thus suggested here that if environmental change threatens companies' core activities and/or resources, rendering them obsolete or reducing their value, established firms should combine advantage-seeking and opportunity-seeking growth.

(5) It has been noted in the more recent research that room for radical business innovation can be created by having assets (resources and capabilities) as real options. Real-option logic is better known from financial theory, according to which the limited initial, explorative investment yields information on the wealth-creation potential of the business opportunity (Ireland et al. 2003).

A full focus on opportunity-seeking growth could be justified in large established companies that have no existing comparative advantage, rapidly deteriorating value, and no clear core business to be cannibalized. Such a firm would then attempt to establish a new product-market position, and the focus would be on exploring opportunities.

Results of recent research support the above. Forte et al. (2000) found that analyzer- and prospector-type hospitals outperformed defenders following major legislative change. Defenders may be the least likely, and find it the most challenging, to move outside of their 'strategic comfort zones'. Furthermore, Zajac and Shortell (1989) found that the analyzer promoted the best organizational strategy following environmental shift.

Managerial and Research Implications

Managerial implications

Large, established, companies in the wood industry following the dual-growth strategy advocated in this paper should simultaneously strive for incremental change in their established operations and selective experimentation in the development of new activities. This combination requires a special environment that supports creativity in individuals and at the same time ensures control of execution. This type of flexibility calls for managing both structural and motivational organizational aspects.

Table 1 presents some examples of how large established companies could facilitate innovation without losing operational efficiency.

Table 1. Facilitating innovation in large established companies.

Possible ways of facilitating innovation in large established companies
<p>1 Establishing formal structures and processes to bridge the silos</p> <p>Resource center</p> <ul style="list-style-type: none"> • funding, connections, and staff for the business units and intrapreneurs there Senior business leaders • provide leadership and approve funding for more capital-intensive projects Cross-departmental organization <ul style="list-style-type: none"> • approves new projects and provides mentoring Business-unit-level organization • meets informally to discuss the ideas on which people are working
<p>2 Promoting systematic experimentation and a customer-pull approach</p> <p>Structured innovation committee</p> <ul style="list-style-type: none"> • defines a small set of innovation themes each year, direction to innovation efforts, and corporate priorities • selects 4 to 6 teams of 8 to 10 people to identify 3 significant opportunities with 1 theme, the goal being to generate around 10 innovations annually <ul style="list-style-type: none"> • for 3 to 4 months, a quarter of their time devoted to the projects <p>Standardized innovation processes</p> <ul style="list-style-type: none"> • e.g., ping-pong process: the team is split into two, one proposes the idea, the second improves it, and the process continues in this iterative mode

<ul style="list-style-type: none"> • the final proposal for the committee articulates the targeted segment, the benefits for the customer and the bottom-line impact for the company
<p style="text-align: center;">3 Supporting free search and internal innovation cells</p> <p style="text-align: center;">Web-based implementation</p> <ul style="list-style-type: none"> • aligning web-pages for easy intranet search • internal courses, programs, and specialist forums <ul style="list-style-type: none"> • business intelligence for middle managers (password-protected executive corner and freedom to purchase external information) <ul style="list-style-type: none"> • web resources for competence and knowledge exchange <p style="text-align: center;">Face-to-face implementation</p> <ul style="list-style-type: none"> • special unit – ‘venture cap’ – with the purpose of finding business ideas inside, advice, and supporting networks available for every employee, heavy support at the startup phase by constructing innovation cells of people with the common goal

As **Table 1** shows, ways of building flexibility into organizational design include setting up matrices that allow for dual roles (Example 1), introducing a leaner design that brings the organizational members closer to the action, and forming networks (Examples 2 and 3). Whatever the form, it should allow space for serendipity, bring contrasting pairs of people together, and ensure that an idea generator has multiple channels through which to seek support for new projects. The downside of having a leaner design is that there are fewer people to bring ideas to the executive level. If these key persons are too busy or lack necessary communication skills, the company may not benefit from its innovative potential. In terms of motivating individual employees, trialing should be encouraged and mistakes tolerated: organizational slack allows for this. Incentives systems could also be established to increase the upside potential of individual risk-taking. Time is a valuable resource and is as important in terms of facilitating innovation as money. Managerial attitudes toward change play a major role in the creation of a flexible organization and unavoidable failures are the price that a company must pay for opportunity-seeking, although reasonable precautions can be taken.

The spread and acceptance of new ideas require trust and a common cognitive framework (‘a common language’) among the organizational members. Intra-organizational boundaries between departments, teams and business units, for example, are where different experiences are shared and this is the key to implementing a dual-growth strategy as advocated in this paper. If the cognitive frames are too different, no fruitful interaction occurs, boundaries become a source of separation and misunderstanding, and capabilities cannot be created or improved. On the other hand, if frameworks are too similar, the organization loses much of its potential to generate novel ideas and capabilities, since no new perspectives are opened up. For example, bridges across boundaries can also be built by instituting shared processes and brokering (Wenger 2000). The advantage of shared processes (including routines) is they allow people to co-ordinate their actions across boundaries (Wenger 2000). Conversely, brokering involves some people acting as ‘brokers’ and introducing new elements of practice to one another. They may go physically from place to place, create connections, bring back news from the front line, and explore new territories (Wenger 2000). They may undertake visits, engage in discussions, or even go on sabbaticals, and thus get direct experience with practices that could be shared later. These people must have gained enough legitimacy and trust to be listened to and enjoy working on the periphery of the working communities: they probably do not have a strong group identity or sense of belonging. Thus, the task of brokering is a delicate one, it is not necessarily part of the formal arrangement accepted at the executive level.

Research Implications

Theories of strategic management, entrepreneurship, organizational learning, innovation, and marketing all offer a specific view on the tension between the long- and short-term generation of wealth and growth. It is suggested in this article that these perspectives are complementary, and that building bridges is necessary in order to understand strategy development within a changing environment. Whenever closely related theories are synthesized, problems of concept definition and level of analysis arise.

It is suggested that within the capability approach, which is a synthesizing school in itself, the exploration-exploitation construct may offer the key to empirical testing of various resource-bundling processes and facilitate the linking of several theoretical viewpoints. Although relatively novel as a conceptual framework, it has attracted increasing interest among scholars in the fields of organizational learning and strategic management. The recent empirical work carried out by Jansen et al. (2005), Atuahene-Gima (2005), He and Wong (2004), Kyriakopoulos and Moorman (2004), Ichijo (2002), and Knott (2002) is relevant to those interested in the operationalization of the construct and possible research methods (Antoncic and Hisrich 2001). In turn, review the possible variables defining entrepreneurship within existing organizations and test the resulting intrapreneurship model within a cross-cultural setting. Multiple economic and financial measures should be adopted in order to exploit the outcomes of combining opportunity-seeking and advantage-seeking growth. This requires recognition of multiple forms of capital in the knowledge-based economy: human, intellectual, and social. Since the outcomes of explorative initiatives may not be realized for several accounting periods, both market and accounting measures of financial performance are recommended. The balanced-scorecard concept is a useful, although not uncontroversial, reminder of the measures that could drive future performance.

The main contribution of the present paper to forest business research is that it could be used as a basis for combining a variety of theoretical viewpoints and for relating the increasing interest in innovation dynamics to the larger framework of strategic management and organizational learning. There are several potential research avenues that could be explored:

- It would be useful to conduct a market analysis that would clarify the precise nature and perceived degree of environmental change from the customer perspective (the customer understood as part of a network, influenced by various stakeholders) and classify customers based on their strategies. A starting point for such an analysis could be the strategy classification presented by Miles and Snow (1978) incorporating refinements and linkages proposed in this paper. Depending on its business strategy and total number and role differentiation of its suppliers, a 'defender' customer expects different degrees of flexibility and proactiveness from its individual suppliers than a 'prospector'. After assessing customer response to changing markets, suppliers can evaluate their potential to serve those customers' needs.
- There is a need to determine under what conditions combining exploration and exploitation would be a feasible approach, and whether there would be an outcome difference between the various structural and motivational approaches to managing resulting tension. One question worth asking would be how companies gain internal support for new capabilities

that run counter to traditions. There could also be a more specific focus on the organizational culture.

- In addition, it would be beneficial to analyze the reasons for current advantage-seeking growth strategies in the forest business and to study the role of managers and social exchanges in supporting exploration after major reorganizations.
- Finally, it would be relevant to examine how the locus and nature of innovation (incremental vs. radical, customer's perceptions being the benchmark for novelty) changes after the establishment of an R&D department. The argument could be made that it improves explorative behavior, but it could also reduce the initiative to implement inventions elsewhere in the company and support only incremental development according to customer wishes.

Conclusions

Sustainable, profitable growth remains the number one objective of large established companies, but a broad consensus prevails that the ways in which business is conducted are fundamentally changing, and the new competitive landscape is one of considerable uncertainty. Traditional sources of competitiveness (e.g., economies of scale in production and access to distribution channels) prevail, but knowledge-intensive factors have also assumed importance. The wood industry is no exception to this general transformation pressure on industries. As firms become successful, well-tried patterns often become strategic frames of reference, and even if these static frames sharpen the focus, effectiveness, and efficiency, repetition may also blindfold the company (Snell 1999). Thus, managing organizational renewal has become particularly important for practitioners, and incremental changes in current activities may not be enough to maintain growth and profit targets in the long run.

The restructuring of firm-internal factors – resources and capabilities – has a key role in successful organizational renewal that supports the growth strategy. The stronger the company's exploitative behavior, the better it strengthens its existing capabilities and increases the potential for incremental innovation – which is a requirement for implementing an advantage-seeking growth strategy. The stronger the company's explorative behavior, the better it is able to create new capabilities and the greater is the potential for radical innovation – which is a requirement of an opportunity-seeking growth strategy. It is proposed in this paper that when the degree of environmental change is high, large established firms should pursue a growth strategy that is both opportunity- and advantage-seeking. Companies should thus simultaneously show explorative and exploitative organizational behavior, i.e., become ambidextrous (Tushman and O'Reilly 1996).

This paper also advocates the development of new activities *within* a company instead of structurally separating old and new. Every employee is assumed to be capable of combining exploration with exploitation, i.e., entrepreneurial thinking with the efficient execution of current tasks. This kind of dispersed design facilitates the sensing of a greater variety of opportunities than the semi-autonomous new-venture division and also avoids some of the worst co-ordination problems that easily decrease efficiency (Birkinshaw and Gibson 2004, Birkinshaw 1997). The critical aspects of dispersed design are communication and information sharing, openness to new ideas, support for innovation, and tolerance of risk and failure (Elfring 2005).

Provided that the communication network is not closed, high levels of trust among organizational members and strong common cognitive frames (such as the market orientation represents) facilitate the combination of explorative and exploitative behavior. Furthermore, the better the company's ability to combine investments in its knowledge base with corresponding investments in new technology, the better it will both strengthen and create capabilities. Organizational formality, low complexity, lack of slack resources, and high physical proximity among its members strengthen exploitative behavior. In this respect, the current cost-reduction strategies, rationalization, and right-sizing in the wood industry have created a situation in which exploitation easily drives out exploration.

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