STRATEGIC POSITIONING FOR SUSTAINABLE COMPETITIVE ADVANTAGE: AN ORGANIZATIONAL LEARNING APPROACH

John I. Njuguna¹ Jomo Kenyatta University of Agriculture and Technology Juja, Kenya

Abstract

Organizational learning is increasingly being considered as one of the fundamental sources of competitive advantage within the context of strategic management. However, most literature has not clearly linked organizational learning with sustainable competitive advantage. This paper, therefore, explores and discusses the role of organizational learning in helping business firms to achieve sustainable competitive advantage. Specifically, it deals with how organizational learning process can be used to develop knowledge resources and capabilities that lead to sustainable competitive advantage. The main method used is analysis and integration of theories to develop a conceptual model. This paper proposes that, through organizational learning a firm can develop hard to imitate knowledge resources and capabilities (human capital as well as organizational capital) that create value which in turn lead to superior performance.

INTRODUCTION

In the 21st century business landscape, firms must compete in a complex and challenging context that is being transformed by many factors from globalization, frequent and uncertain changes to the growing use of information technologies (DeNisi, Hitt and Jackson, 2003). Therefore, achieving a competitive advantage is a major preoccupation of senior managers in the competitive and slow growth markets, which characterize many businesses today and the sources of competitive advantage have been a major concern for scholars and practitioners for the last two decades (Henderson, 1983; Porter, 1985; Coyne, 1986; Prahalad and Hamel, 1990; Barney, 1991; Grant, 1991; Peteraf, 1993). The importance of competitive advantage and distinctive competences as determinants of a firm's success and growth has increased tremendously in the last decade. This increase in importance is as a result of the belief that fundamental basis of above-average performance in the long run is sustainable competitive advantage (Porter, 1985). Practitioners and academicians have centered their studies on firm specific characteristics that are unique, add value to the ultimate consumer and are transferable to many different industrial settings (Coplin, 2002). Thus, it is understood that across sectors most firms should recognize that attaining competitive advantages is the most challenging issue facing firms in the 21st century. This concern has lead to the development of resource-based and knowledge-based theories that examine the relationship between core resources and capabilities; sustainable competitive advantage and above normal performance. According to Barney (1991) a firm is said to have a sustainable competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy. Thus sustained

¹ Dr. John Njuguna sadly passed on in a grisly road accident before this paper was published. He was a lecturer in the School of Entrepreneurship, Procurement and Development at Jomo Kenyatta University of Agriculture and Technology in Nairobi, Kenya. Our condolences to the wife Mrs. Alice Irungu and the children Wambui, Kelvin and little Claire.

competitive advantage exists only after efforts to replicate that advantage have failed. It is for this reason that organizations are focusing on methods and strategies that are difficult to imitate. One of such methods and strategies is organizational learning through which an organization is capable of developing intellectual capital (human capital, social capital and organizational capabilities) that is rare and difficult to imitate.

Ollila (c.f. Harung & Gustavsson, 1994) underscored the role of organizational learning in achieving sustainable competitive advantage by stating that the rate at which an organization learns may become the only sustainable source of competitive advantage. This was also emphasized by Goh (2003) who noted that to remain competitive; many organizations are adopting a strategy of continuous learning. They encourage employees to learn new skills continually to be innovative and to try new processes and work methods in order to achieve the strategic business objectives of the organization.

While there is little opposition to the premise that organizational learning is a competence that all organizations should develop in fast-changing and competitive environments (Prahald and Hamel, 1994; Senge, 1990; Nonaka, 1991; Garvin, 1993), most literary works have not clearly linked organizational learning with sustainable competitive advantage, as is the case with intellectual capital (knowledge-based resources) using resource-based view of the firm. However, resource-based theory puts more emphasis on the linkage of resources and capabilities to sustainable competitive advantage and a firm's performance than on the development of these resources and capabilities. This paper seeks to integrate organizational learning theory and intellectual capital theory and link them with sustainable competitive advantage.

Organizational Learning Process

Organizational learning refers to the sum total of individual and collective learning through training programs, experience, experimentation and work interactions within the organization. It is the acquisition, sustenance or changing of meanings shared by people through cultural devices and through the collective actions (Cook and Yanow, 1996). However, the concept of organizational learning is subject to competing formulations and is an ongoing debate (Stewart, 1996). Most definitions deal with the learning processes and are rooted in social and cognitive psychology (Lipshirtz, 2000). However, Miller (1996) defined organizational learning as a process of coordinated systems change, with mechanisms built in for individuals and groups to access, build and use organizational memory, structure and culture to develop long-term organizational capacity. It is a dynamic process of creation, acquisition and integration of knowledge aimed at the development of resources and capabilities that contribute to better organizational performance (Lopez, Peon and Ordas, 2005). Whereas a single instance of organizational learning may be relatively easy for other organizations to imitate, continuous organizational learning has cumulative effects that are much more difficult to imitate (DeNisi et al., 2003).

Previous studies (Huber, 1991; Dale, 1994; Nevis Debila and Gould, 1995; Winter; 2000) have proposed four dimensions or phases of organizational learning process to be knowledge acquisition, distribution, application and translation into

organizational memory. However, according to Dale (1994) organizational learning can be characterized as an intricate three-stage process consisting of knowledge acquisition, dissemination and shared implementation (interpretation). Therefore, organizational learning process involves knowledge acquisition, distribution, application and translation of this knowledge into organization resources (organizational memory) such as databases, procedures and systems that can be used for leveraging the firm.

This implies that, when a firm acquires individual level knowledge resources (human capital) through selection, training or experience and other learning activities, it must find a way to leverage those resources to the team level and eventually to the organizational level (DeNisi, 2000). Otherwise, the effects of these knowledge-based resources on competitiveness will be limited. The firm should develop systems, procedures and processes (organization capital) by which individuals that have the critical knowledge can transmit this information to others who can use it. This implies that for an organization to benefit from the learning process, it should put some effort in the management of knowledge.

INTELLECTUAL CAPITAL AND ORGANIZATIONAL LEARNING

Intellectual capital issues have undergone extraordinary development since the beginning of the 1990s. The increasing difference between company market value and company book value has prompted academics and practioners to consider the concept of intellectual capital as a key determinant of the process of value creation for shareholders, managers and society as a whole (Viedma 2003). The intellectual capital theory was initially developed as a framework for analyzing the value contribution of intangible assets in an organization (Sveiby, 1997; Edvinson and Malone, 1997) but recent theories include strategic perspectives that allow identification and evaluation of the core competencies that help achieve sustainable competitive advantage (Viedma, 2003). As with most emerging theories, there are many definitions of intellectual capital, but over the last few years, there seems to have formed a consensus of dividing a company's resources into three different groups (Roos, Bainbridge and Jacobsen, 2001) as shown in Figure1 below.

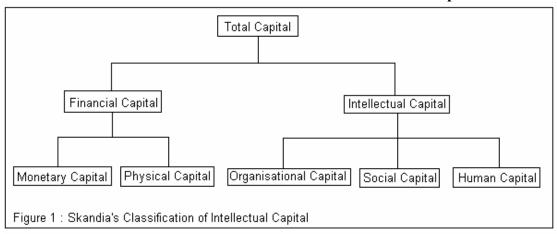


FIGURE 1: Skandia's classification of Intellectual Capital

Human capital, comprises the competence, skills and intellectual agility of the individual employee; relationship capital which represents all the valuable relationships with customers, suppliers and other relevant stakeholders; organizational capital including processes, systems, structure, brands, reputation, intellectual property and other intangibles that are owned by the firm but do not appear on its balance sheet. However, some people such as Viedma (2003) argue that the daily operation of firms show that this division is artificial because in the value-creation processes, all three the types of intellectual capital act together and as such a division never arises. These intellectual capital resources are acquired through the process of organizational learning and are seen as being extremely important for sustaining competitive advantage in today's competitive environment (DeNisi, 2000).

Organizational learning constitutes an idiosyncratic and complex capability difficult to imitate, replicate and transfer (Day, 1994). It results from the change and evolution through the specific history of each firm. Moreover, learning depends not only on investment efforts, but also on the previously accumulated knowledge or experience (absorptive capacity). Furthermore, the learning process is intrinsic, social and collective and occurs not only through the imitation and emulation of individuals, but also on collaboration and interaction in understanding complex problems. The knowledge generated this way is translated into new models of activities, routines and logic in the organization (Teece Pisano and Shuen, 1997). Thus through organizational learning, a firm can develop unique human and organizational capital that are hard to imitate and that evolve continuously with the firm (Armstrong, 2001). Armstrong argues that employees' skills, knowledge and abilities (human capital) are intertwined with organizational culture to form unique resources that other firms cannot acquire and apply. Human capital is hard to imitate because it is formed through an evolutionary process that takes time and is a product of unique organizational learning processes that are part of unique organizational culture (DeNisi et al, 2003). Through social capital, knowledge conversations among all levels take place, that is, from individual to collective to organizational to inter-organizational and vice-versa (Autio Yli-Renko and Sapienza, 2000). Social capital is broadly described by researchers as an asset embedded in the relationship of individuals, committees, networks or societies (Coleman, 1998). Autio *et al*, (2000), argue that the process through which the knowledge is acquired and transferred is unique in each organization and this makes it difficult for others to copy. Organizational capital arises from converting individual and collective knowledge acquired through learning processes, into routines, processes and systems that help develop organizational reputation, competence and capabilities that are rare and difficult to imitate (Armstrong 2001). It is important to note that human capital has a symbiotic relationship with organizational capital in the sense that each provides the prerequisites for one another's use and development. Individual skills, collective skills and knowledge are used to develop work methods and databases which in turn are used as sources of knowledge by individual and groups in future work assignments.

Human capital may be the most important and critical for competitive advantage because it is the most difficult to imitate (DeNisi, et al., 2003). However, human capital is more mobile than other intangible resources (Teece et al, 1997) and therefore may seem an unlikely source of sustained competitive advantage. Yet the mobility of human capital is less a threat to competitive advantage than it would first seem to be because once an organization integrates human capital with other complementary resources and uses this integration to create organizational capabilities, losing one or a few individuals may not lead to a loss of competitive advantage. This means that it is not enough to acquire individuals who have skills, knowledge and abilities; it is also necessary to develop these abilities further and use them to develop structures, systems, procedures and reputation(organizational capital) that allows the organization to exploit the resources and gain competitive advantage (DeNisi et al, 2003). This tripartite concept of intellectual capital indicates that while it is individuals who generate, retain and use knowledge (human capital); this knowledge is enhanced by the social interactions and networks (social capital) to generate the institutionalized knowledge possessed by an organization (Armstrong, 2001).

Organizational Learning and Sustainable Competitive Advantage

Management readings and academic business journals demonstrate that executives and academicians alike devote much attention respectively to organization learning as a social technology (Probst, Raub and Romhardt, 2000) and a theoretical prolegomenon (Crossan, Lane and White, 1999). The reason for this business executive interest is attributed to organization learning as providing a means for combating the sophisticated level of competitive behaviours observable in most consumer goods and industrial marketplaces. This is in agreement with earlier observation in this paper that achieving competitive advantage is a major concern of managers in the competitive and slow growth markets that characterize many businesses today. This paper aims at answering the following research questions: (1) does organizational learning lead to sustained competitive advantage? (2) If so, what is the nature of relationship between organizational learning and sustained competitive advantage?

According to Alderson (1965) firms should strive for unique characteristics in order to distinguish themselves from competitors in the eyes of the consumer for a long period of time (that is, sustainable competitive advantage). Thus, sustainable competitive

advantage is the ability to offer superior customer value on an enduring or consistent basis, a situation in which competitors are unable to easily imitate the firm's capacity for value creation (Collis and Montgomery, 1995). According to Barney (1991), sustainable competitive advantage arises when the firm's resources are valuable (the resources help the firm create valuable products and services), rare (competitors do not have access to them), inimitable (competitors cannot easily replicate them) and appropriate (the firm owns them and can exploit them at will). Acquiring and preserving sustainable competitive advantage and superior performance are a function of the resources and capabilities brought to the competition (Aaker, 1989; Barney, 1995). These knowledge resources and capabilities, resulting from learning processes implies an improvement in response capacity through a broader understanding of the environment (Dodgson, 1993; Sinkula, 1994). The organizational learning process helps people discover why problems are seen in a one dimensional frame work posing questions of the current systems and challenging paradoxes as they occur (Murray and Donegan, 2003). A superior capability to learn is critical because of the acceleration of markets and technological changes, explosion of available market data and importance of anticipatory action. It is a valuable source of competitive advantage because of its complexity, usefulness and difficulty to imitate (Day, 1994; Slater and Naver, 1995). Hitt, Hoskisson and Ireland (1990) conclude in their empirical study that the source of distinctive competencies are internal rather than external and are derived from the way an enterprise uses its resources relative to its competition. In agreement with these considerations, learning through better understanding facilitates behavior change that leads to improved performance. The resource-based theory (Barney, 1991; Prahalad and Hamel, 1990; Wernerfelt, 1984), complementing the traditional Porter's (1985) model of competitive advantage stresses the importance of the intangible resources and capabilities of the firm in the context of the competitive environment (Collis and Montgomery, 1995). In this way, the firms that devote their internal forces to exploit the opportunities of the environment and to neutralize threats while avoiding weak points are most likely to obtain competitive advantages than those that do not do the same (Barney, 1995) and they are able to build a good reputation.

On the other hand the knowledge-based view depicts firms as repositories of knowledge and competencies. According to this view, the organizational advantage of firms over markets arises from their superior capability in creating and transferring knowledge (Ghoshal and Moran 1996). In this way, firms are able to improve their real and perceived market value. Therefore, accumulation of knowledge through learning constitutes a driving force in development and growth of firms, because acquisition of knowledge enhances the firms' ability to sustain a competitive position vis-à-vis its competitors (Penrose, 1959; Spender and Grant, 1996). This added to the fact that the ability to learn faster than competitors may be the only sustainable competitive advantage (De Geus, 1988; Stata, 1989) makes organizational learning a competence that all organizations should develop in fast-changing and competitive environment (Senge, 1990; Nonaka, 1991; Garvin, 1993) that is being witnessed today in businesses. Therefore, this paper proposes a model that links organizational learning to sustainable competitive advantage through intellectual capital elements. It argues that a firm can achieve above average performance over a long period of time if it pursues organizational

learning strategies that lead competitive advantage and are to hard to imitate. Human, social and organizational capital (Intellectual capital) but of course with effective knowledge management systems to enhance the transfer of knowledge across the boundaries of individuals, departments, units and organizations lead to sustainable competitive advantage. The model is represented in Figure 2:

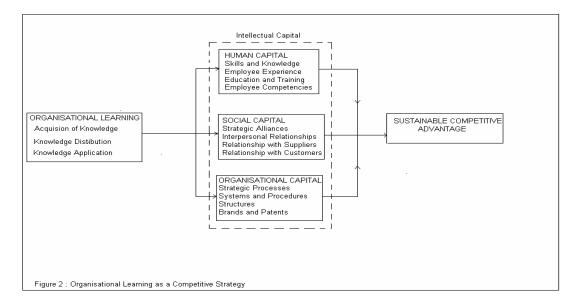


FIGURE 2: Organization Learning as a Competitive Strategy

Thus in this model, sustainable competitive advantage is the dependent variable, organizational learning the independent variable while human capital, social and organizational capital are the intervening or mediating variables which have interactional effects that influence each other.

DISCUSSION AND CONCLUSIONS

Competing on the basis of knowledge will be critical for organizational success in the coming years (DeNisi, 2000). Although many of the activities that organizations can use to enhance and leverage their knowledge resources occur at the level of individuals and work teams, organizational effectiveness also requires developing organizational capabilities for leveraging and exploiting knowledge. Organizational learning can help firms achieve a knowledge-based competitive advantage. It is the process of knowledge acquisition by individuals and groups who are willing to apply it in their jobs in making decisions and influencing others to accomplish tasks important for the organization (Miller, 1996). Whereas a single instance of organizational learning may be relatively easy for other organizations to imitate, continuous organizational learning has cumulative effects that are much more difficult to imitate. Thus, continuous learning is an important capability that can serve as a source of sustainable competitive advantage. To remain competitive organizations should invest in developing the capability for continuous organizational learning.

Business organizations should use training and development programs to promote organizational learning. Such programs should seek to increase the human capital and to a lesser extent, the social capital of employees. Most training and development programs focus on ensuring that employees have the most up-to-date and explicit knowledge in their respective areas of specialization. Because explicit knowledge is well known, programs for its dissemination can be easily imitated. Although it is necessary to maintain competitive parity, explicit knowledge usually cannot serve as the basis for a competitive advantage. However, tacit knowledge is not easily disseminated. It must be learned by using it and this often requires extended periods of social interaction. Because tacit knowledge is learned by experience, the transfer of such knowledge is generally a slow and complex process (Teece et al, 1997). Thus, management practices aimed at leveraging tacit knowledge are more difficult for competitors to understand and imitate successfully. A strategic alliance such as a joint venture can be useful for transferring tacit knowledge because it allows partners employees to get close enough to transfer tacit knowledge (Lane and Lubatkin, 1998) in DeNisi (2000). Another approach to transferring tacit knowledge is to assign more experienced workers to lead teams of less experienced workers. Over time, the less experienced professional learn the more experienced workers' tacit skills (Hitt et al., 1990). Therefore, to promote learning, organizations must understand the importance of both tacit and explicit knowledge in order to have significant learning capabilities.

Whatever resources are acquired, no matter the manner in which they are acquired, they need to be aggregated to the highest level of use or application. That is, if a firm acquires individual level knowledge resources through selection, training or experience, it must find a way to leverage those resources to the team level and eventually to the organizational level (DeNisi, 2000). Even if a firm acquires a special expertise through a merger or strategic alliance, it is necessary to diffuse that expertise throughout the entire organization (DeNisi *et al.*, 2003). Otherwise, the effects of these knowledge-based resources on competitiveness will be limited.

In conclusion, we suggest that firms should develop systems, procedures and processes by which individuals that have the critical knowledge transmit this information to others who can use it. In addition to implementing structures for effective communications, organizations must encourage employees to try new ideas. Specifically, managers should focus on developing and continuously improving knowledge acquisition, distribution and interpretation systems in order to achieve sustainable competitive advantage and better performance. This will generally improve the firm's internal resources and capabilities that are rare and difficult for others to copy. To achieve this, firms are encouraged to continually experiment new ideas and approaches on work methods and develop a consolidated and resourceful research and development policy in order to internally acquire valuable knowledge. The firms should also regularly get in touch with external professionals and experts and encourage their workers to join formal or informal networks made of people from out side their organizations. This will enhance external acquisition of knowledge that help in understanding how other firms solve their problems and adapt these strategies to the firm's internal components in order to create better ways of solving organizational problems. In order to distribute the acquired knowledge effectively, the firms should develop systems of informing all employees about the aims of the firm at all times and regularly hold meetings to inform the workers about the latest innovations, methods and best practices. The firms should also ensure that there is shared interpretation of this knowledge by designing mechanisms that guarantee sharing of knowledge and experiences across functional departments and encouraging all employees to regularly interact with each other in order to exchange ideas and knowledge. When firms combine its knowledge resources with management practices such as these, it can create intellectual capabilities it needs to compete successfully in the present competition landscape.

Lastly, this paper highlights some of the limitations of the application of the proposed model. First and foremost, there is no empirical data to support these arguments. The absence of such data casts some doubts on the relationships between the variables as proposed in the model. This paper only provides useful insights for practicing managers through theoretical arguments to refine their thinking about the role of organizational learning in creating sustainable competitive advantage. However, the model suggests the types of variables that need to be included in future empirical tests of the relationship between organizational learning and competitive advantage. In addition there are organizational characteristics such as size, age, industry, organizational culture, leadership, *et cetera* that may influence organizational learning process but are not discussed in this paper.

REFERENCES

- Aaker, D. (1989). Managing assets and Skills: the key to a sustainable competitive Advantage, *California Management Review*, 31, 2: 91-106.
- Alderson, W. (1965). Cited by Hoffman, N.P. (2000). An Examination of the Sustainable Competitive Advantage Concept: Past, Present, Future. Academy of Marketing Science Review, 2000:4.
- Armstrong, M. (2001). *A Handbook of Human Resource Management and Practices*. London: Kogan Page.
- Autio, E., Yli Renko, H., and Sapienza, H. J. (2002). Social Capital, Knowledge Acquisitionand Competitive Advantage in Technology –Based Young Firms. *Strategic Management Journal*, Special Issue on Entrepreneurial Strategies and Wealth Creation in the 21st Century.
- Barney, J. B. (1991). Firm resources and Sustained competitive advantage. *Journal of Management*, 17: 1, 99-120.
- Barney, J. B. (1995). Looking inside competitive advantage. Academy of Management *Executive*. 17, 4: 49-61.
- Coleman, J. (1998). Social Capital in the creation of Human Capital. American Journal of Sociology, 94: 95-120.
- Collis, D. J., and Montgoemry, B. (1995). Competing on Resources strategy in 1990's. *Harvard Business Review*, July-August: 118-128.

- Cook, S. D., and Yanow, D. (1993). Culture and Organizational learning. *Journal of Management Inquiry*, 2: 373-394.
- Coplin, L. H. (2002). Competitive Advantages and the SMEs: *The role of Distinctive Competences as Determinants of Success*, PhD Thesis, Universitat Autononma De Barcelona.
- Coyne, K. P. (1986). Sustainable Competitive Advantage: What it is and what it isn't. *Business Horizons*, January: 54-61.
- Crossan, M., Lane, W., and White, R (1999). An organizational learning Framework: From Institution to Institution, *Academy of Management Review*, 24, 3: 522-537.
- Dale, W. (1994). Learning Organizations in Managing Learning. London: Routledge.
- Day, G. (1994). Continuous learning about markets, *California Management Review*, 36, Summer: 9-31.
- De Geus, A. (1988). Planning as learning, Harvard Business Review, 66: 70-4.
- DeNisi, A.S. (2000). Performance appraisal and performance Management: A multilevel analysis. In K. Klein and S. Kozlowski (Eds.) *Multilevel theory, Research and Methods in Organizations*. San Francisco: Jossey–Bass.
- DeNisi, A. S., Hitt, M. A., and Jackson, S. E. (2003). The Knowledge Based Approach to Sustainable Competitive Advantage. New York: Oxford University press.
- Dodgson, M. (1993). Technological learning, technology strategy and competitive pressures. *British Journal of Management*, 2: 3.
- Edvinson, L., and Malone, M. S. (1997). Cited by Edvinson, L. (1997). Developing intellectual capital at Skandia. *Long Range Planning*, 30, 3: 366-373.
- Grant, R. M. (1991). *Contemporary Strategy Analysis: Concepts, Techniques and Applications*. Cambridge: Black-well Publishers.
- Garvin, D. (1993). Building a learning Organization, Harvard Business Review, 71, 4: 78-91.
- Ghoshal, F., and Morgan, L. K. (1996). Cited by DeNisi, A.S., Hitt, M.A., and Jackson, S. E.,(2003). *The Knowledge Based Approach to Sustainable competitive Advantage*. New York: Oxford University press.
- Goh, S.C. (2003). Improving Organizational Learning Capability: Lessons Form Two Case Studies. *The learning Organization*, 10, 4: 216-227.
- Henderson, B. (1983). The Anatomy of Competition. Journal of Marketing, 47: 7-11.
- Hitt, M. A., Hoskisson, R. E., and Ireland, R. D. (1990). Mergers and Acquisitions and Managerial Commitment to Innovation in M-form Firms. *Strategic Management Journal*, 11: 29-47.

- Huber, G. P. (1991). The Contributing Processes and the Literatures. *Organization Science*, 2, 1: 88-115.
- Lipshirtz, R. (2000). Cited by Sun, P. Y., and Scott, J. L., (2003). Exploring the divide-Organizational learning and learning Organization. *The learning Organization*, 10, 4: 202-215.
- Lopez, S. P., Peon, J. M., and Ordas, J. V., (2005). Organizational Learning as a Determining Factor in Business Performance. *The Learning Organization*, 12, 3: 227-245.
- Miller, D. A. (1996). A preliminary typology of Organizational learning: Synthesizing the Literature. *Strategic Management Journal*, 22: 484-505.
- Murray, P., and Donegan, K. (2003). Empirical linkages between firm competencies and organizational learning. *The Learning Organization*, 10, 3: 51-62.
- Nevis, E. C., Debila, A. J., and Gould, J. M., (1995). Cited by Lopez, S. P. *et al*,. (2005). Organizational Learning as a Determining Factor in Business Performance. *The Learning Organization*, 12, 3: 227-245.
- Nonaka, I. (1991). The knowledge-creating company. Harvard Business Review, 69, 6: 96-104.
- Ollila, J. (1994). Cited by Harung, H. S., and Gustavsson, B. (1994). Organizational Learning based on Transforming Collective Consciousness. *The Learning Organization*, 1, 1: 33-40.
- Penrose, E. T. (1959). The Theory of the Growth of the Firm. Oxford: Basil Blackwell.
- Peteraf, M. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14: 179-191.
- Porter, M. E. (1985). *Competitive Advantage; Creating and Sustaining Superior Performance*. New York: The Free Press.
- Prahalad, C. K., and Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68, 3: 79-91.
- Prahalad, C. K., and Hamel, G. (1994). Competing for the future. *Harvard Business Review*, 72, 4: 122-128.
- Probst, G., Raub, S. and Romhardt, K. (2000). Managing Knowledge: Building Blocks for Success. New York: Wiley.
- Roos, G., Bainbridge, A., and Jacobsen, K. (2001). Intellectual Capital Analysis as a Strategic Tool. Strategy and leadership Journal, 29, 4: 21-26.
- Senge, P. (1990). *The Fifth Discipline: The Art and Practice of the learning Organization*. New York: Doubleday/Currency.

- Sinkula, J. M. (1994). Market Information Processing and Organizational Learning. *Journal of Marketing*, 58, January: 35-45.
- Slater, S F., and Naver, J. C. (1995). Market orientation and the learning organization. *Journal of Marketing*, 59, July: 63-74.
- Spender, J. C., and Grant, R. (1996). Knowledge and the firm: Overview. *Strategic Management Journal*, Special Issue: 5-11.
- Stata, R. (1989). Organizational learning: The key to management innovation. *Sloan Management Review*, 30, Spring: 63-74.
- Stewart, J. (1996). *Managing Change through Training and Development*. London: Kogan Page.
- Sveiby, K-E. (1997). *The New Organizational Wealth: Managing and Measuring Knowledge Based Asset.* San Francisco: Berret Koehler.
- Teece, D., Pisano, G., and Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18, 7: 509-533.
- Viedma, J. M. (2003). In Search of an Intellectual capital General Theory. *Electronic Journal on Knowledge Management*, 1, 2: 213-226.
- Wernerfelt, B. (1984). A Resource-Based View of the Firm. *Strategic Management Journal*, 5: 171-180.
- Winter, S. (2000). The Satisfying Principle in Capability Learning, *Strategic Management Journal*, 21: 981-96.