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# THE LINK BETWEEN CORPORATE STRATEGY AND INTELLECTUAL CAPITAL: THEORETHICAL OVERVIEW

Miloš Petković[1]*,
Dang-Huy CAO[2]

[1]Singidunum University,
Belgrade, Serbia

[2]Toulouse School of Management,
Université Toulouse Capitole,
CNRS, France

Abstract:

Company's value maximization is generally considered to be one the most important objectives of every company. In the knowledge economy, the financial performance of a company is always under first observation, not only by internal users of financial information, but by external users as well. The company's financial performance is under direct or indirect influence of invisible assets and resources owned by a particular company. Those invisible assets or resources are called intellectual capital. Various empirical studies proved that intellectual capital itself directly influences financial company performance. Since intellectual capital is the main source of superior financial performance of a knowledge company, it was of high importance to examine the impact of investing in intellectual capital on the company's book value. The purpose of this study is to explore existing literature of corporate strategy based on innovations, ideas and intellectual capital.

Keywords:

corporate strategy, intellectual capital, final performance.

## 1. INTRODUCTION

Over more than 50 years of abundant research, generations of researchers have put their efforts into studying how corporate strategy is determined, the relationship between corporate strategy and its performance as well as the dynamic relationship of a strategy and the organizational environment (For example, see Barton, 1987; Bowman & Helfat, 2001; Caldart & Ricart, 2004; Salem Khalifa, 2008). Because of the complexity and multifaceted characteristics of corporate strategy, taking different views of theories and methodological methods may cause controversial findings among different courses of research. Yet, those debatable research questions still attract many generations of scholars.

Corporate innovation strategy gains prominences among different course of research. Scholars focus on studying how innovation strategy is processed along with its impact on the performance of firms. Indeed, innovation is the process which creates value for firms and promotes growth (Kim & Mauborgne, 2004).

The review of the literature proved that traditional performance measurements paid little attention to the importance of knowledge. Financial performance measurements were heavily criticized (Johnson and Kaplan, 1987; Kaplan, 1983; Thiel and Leeuw, 2002). In the last years, management science literature has paid attention to the role of knowledge in global competitiveness. It is recognized as a durable and more sustainable strategic resource which is necessary to obtain a competitive advantage (Barney, 1991; Drucker, 1988; Grant, 1991). Organizational capabilities are based on knowledge because knowledge is a resource that forms the foundation of a company's capabilities (Prahalad and Hamel, 1990).

Correspondence:
Miloš Petković

e-mail:
mpetkovic@singidunum.ac.rs



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A company's final performance is a result of both individual and organizational activities. At the individual level, it includes personal knowledge and individual skills and talents, whereas at the organizational level, there is infrastructure, networking, technologies, routines, systems, trade secrets and organizational culture (Bontis et al., 1999).The capacity of a company to create value is based on knowledge and competences of its employees (Savage and Savage, 1996). Many companies try to transform themselves into learning organizations that will pursue their objectives of continuous improvement in their knowledge assets (Senge, 2006). Knowledge assets are fundamental strategic levers that manage business performance and enable continuous innovations of a company (Boisot, 1999; Marr and Schiuma, 2001; Mouritsen et al., 2002; Quinn, 1992).

This papers proposes some key points that should improve understanding of the innovation process:

- Companies' efforts with regards to intellectual capital management are possible in developed markets and in knowledge-based economies.
- Human capital is relevant only in long-term returns.
- Structural capital's factors such as strategy, innovation behaviors, company's network do not play the most important role in the value creation process.
- Relational capital's effects differ depending on an asset and a business moment. For instance, a brand generates profit at the beginning, followed by the company's website.

The rich but fragmented knowledge of corporate strategy and innovation-driven strategy has provided many interesting and potential research venues. This paper aims to explore existing literature of corporate strategy based on innovations, ideas and intellectual capital.

## 2. DETERMINATION OF CORPORATE STRATEGY

Corporate strategy determined the goal, objective and purpose of the firms, in which, value creation for customers and shareholders is at the center (Salem Khalifa, 2008). Corporate strategy determines identification of the firm which makes it stand out from other competitors. Corporate strategy is different from business strategy. Business strategy has to do with how a business deals with its competitors in the market while corporate strategy firms make their strategies so they can manage the set of business (Grant, 1991). Corporate strategy applies to and affects the entire organization. In short, corporate strategy refers to the relationship between the firm and a) environment, b) objectives and c) how they accomplish objectives (Ogbonna & Wilkinson, 1988).

Over 50 years of research, there have been different schools of thought in the field of corporate strategy and scholars still have to deal with a number of controversial research-related questions. The relationship of corporate strategy and competitive advantages and organizational performance is a prominent course of study. They focus is on finding how firms can sustain competitive advantage, generate profit and growth and ultimately, create value for customers and shareholders. In the 90s' study about the effect of companies, industry and corporate on performance, many scholars found that corporate affections to the profit is small (Hitt et al., 1997; Rumelt, 1991). Yet, Bowman and Helfat (2001) argue that corporate strategy matters, although it does not directly influence profitability, but with the conditions of leaderships and corporate management (Bowman & Helfat, 2001). Indeed, besides the framing strategy, how it is also important how it is conducted.

Another stream of research focuses on building competitive advantages. The point of view of competitive advantage is changing with time. Nowadays, the dynamics of the environment such as emergence of new economics, globalization and development of technology changes how strategy is framed and conducted. Competitive advantage is created by the combination of different and temporal strategic moves by mixing several factors such as brand, technology, capabilities and the product itself (Eisenhardt, 2002). This point of view is in contrast to Michael Porter's generic strategies model which focuses on the cost and differentiation of products (Porter, 1985).

The question whether diversification strategy can be used to build long term competitive advantage is also debatable (Markides & Williamson, 2007). Initially, many scholars found that diversification may create negative effects to firm's performance (Hoskisson et al., 1994; Lang & Stulz, 1994). Later studies discovered opposite findings that those negative effects can turn premium if the firm can control its endogeneity of the diversification decision (Villalonga, 2004).

Another course of research focuses on corporate culture and how it shapes corporate strategy and is re-shaped by the corporate strategy (Ogbonna & Wilkinson, 1988). The dynamics relationship of culture, structure of the firm and corporate behavior as well as corporate strategy is an important factor to frame the strategy (Foss, 1997). Other scholars take the time dimension to study a strategy. They argue that setting a short-term, medium-term and long-term strategy would need to focus on different factors such as market, product and competencies, respectively. (Ghemawat, 1991; Nanda, 1996)

In conclusion, the controversies around the question how corporate strategy is determined and how it affects the performance of firms occurred in several courses of research because of the bias on the factor of data based was used and the methodological methods chosen. It shows that the field of corporate strategy research is complex and multifaceted. Issues associated with the corporate strategy are found in literature. As an effort to clear the confusion among different courses of research, in literature review, Khalifa (2007) proposed a framework which states that firms should consider taking a bird's eye view when they making a strategy: a) the interaction between the organization and its environment, e.g., business context, culture, products, technology, capabilities; and b) its strategic orientation, e.g., short, medium or long-term strategy.

## 3. WHAT IS INTELLECTUAL CAPITAL?

Since the moment when intellectual capital theory was introduced, when (Ghemawat, 1991; Nanda, 1996) the term 'intellectual capital' published in an article, many different definitions have been released. Some definitions define intellectual capital as a unique combination of intangible assets that are the basis for a company's further competitive advantage (Andriessen, 2004). Intellectual capital theory is seen as one of the knowledge economy theories determined by the transformation of importance of tangible assets to the intangible ones. Intellectual capital theory has close connections with organizational innovation and challenges of strategic management (Kohl et al., 2014). This theory has been present for almost thirty years and it is not surprising that certain paradigms influence it (Užienė, 2015).

According to Lev and Schwartz (1971), all company's intangibles make up its own intellectual capital. Intellectual capital is everything known by everybody in a company, and it brings a necessary competitive advantage to the company (Serenko and Bontis, 2004; Stewart, 1991). If a company places importance on intellectual capital, then the company can survive for many years and obtain a competitive advantage and perspective performance. Company's innovative work is described as an individual work that is directed at introducing new and innovative ideas, processes and products (Mura et al., 2012). Intellectual capital is in the current center of economic reality and it is generated from knowledge and intelligence, but only when intellectual capital comes to certain financial benefits through precise valuation of intangible assets (Stewart, 2001). Intellectual capital is the difference or a gap between the total market of a company and its total book value (Edvinsson and Malone, 1997). Unlike physical capital, intellectual capital stimulates growth mainly because the initial cost of creating certain knowledge is not repeated and brings the economies of scale (Mignon and Walliser, 2015).

The competitive advantage of a company lies in the complexity of these types of intellectual capital. Success of a company depends on the strategic management of the selected components of intellectual capital (Bayburina and Golovko, 2009). Knowledge has become one of the most important strategic resources for all types of companies, from start-ups and small-medium size business, to multi-national corporations (Holsapple and Joshi, 2000).

## 4. THE LINK BETWEEN CORPORATE STRATEGY, INTELLECTUAL CAPITAL AND INNOVATIONS

By analyzing a sample of US firms from 1992–2012, Jia (2017) we have discovered that firms more inclined to the exploration-oriented innovation strategy will be perceived more positive and attentive by analysts, higher forecast error and dispersion. Somehow, it contrasts with the findings by Benner (2010). They found that a corporate strategy that focuses on exploitation, which means preserving and extending current technology, would receive a more positive perception from analysts. The findings are different because of the difference in sample selection, yet they all show positive perception of capital market towards firms which have innovation driven strategies. Explorative orientation strategy has a U-shape relationship with financial performance which depends on the R&D intensity of the industry (Uotila et al., 2009). Interaction between explorative and exploitative innovation strategies has positive effects on the sales growth rate after having examined 206 manufacturing firms (He & Wong, 2004).

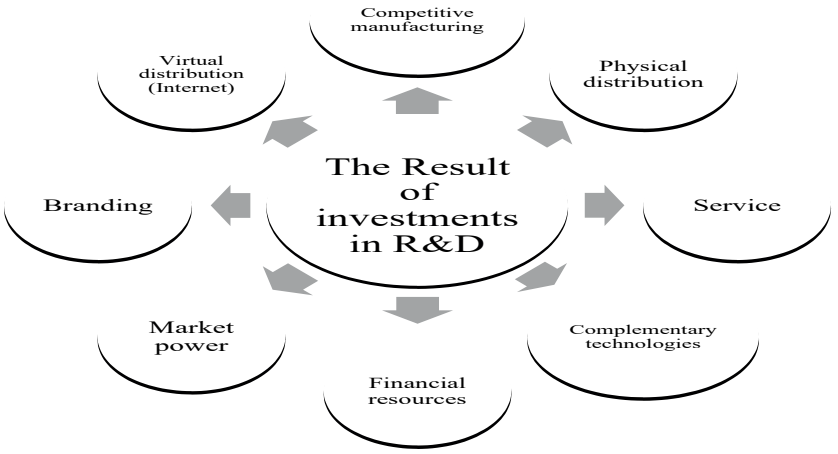
Another way for firms to boost their innovation is through M&A activities. M&A can become a means for a firm to acquire external knowledge and capabilities and boost the combining firms' cooperative work (Ahuja & Katila, 2001; Cefis, 2010). They can also attain higher speed to the market rate in comparison with the long processes to develop it internally (Desyllas & Hughes, 2010; Prabhu et al., 2005), especially in high-tech and knowledge-intensive industries (Inkpen et al., 2000; Yakob et al., 2018).

Megna and Klock (1993) stated that an investment in research and development is directly related to the number of patents, or, to be more precise, directly related to increasing a company's book value. Lev (2004) mentioned investment in research and development of the textile company DuPont in the period from 1985 to 2000. The investment has influence on two thirds of the increase in the value generated within a company.

Teece (2002) thinks that investments in R&D alone are not sufficient. To be successful, investments in R&D must produce a complementary asset that will be packed into products or services to yield value. He distinguished three types of complementary assets:

- **Generic Assets** need to be tailored according to innovation, such as generalized equipment and skills;
- **Specialized Assets** with unilateral dependence, such as marketing and distribution channels;
- **Co-Specialized Assets** with bilateral dependence, such as repair facilities and machines.

**Figure 1.** Possible complementary assets produced from the investments in R&D




*Suorce:* (Teece, 2002)

Figure 1 above presents potential and possible complementary assets that can be produced, capitalized and developed when investing in R&D. There are eight potential types of complementary assets and those are: competitive manufacturing, physical distribution, service, complementary technologies, financial resources, market power, branding and virtual distribution (adapted from Teece, 2002).

Taking into consideration all advantages and benefits of investments in R&D, we have also created a list of limitations that can be grouped as follows (European Commission, 2003):

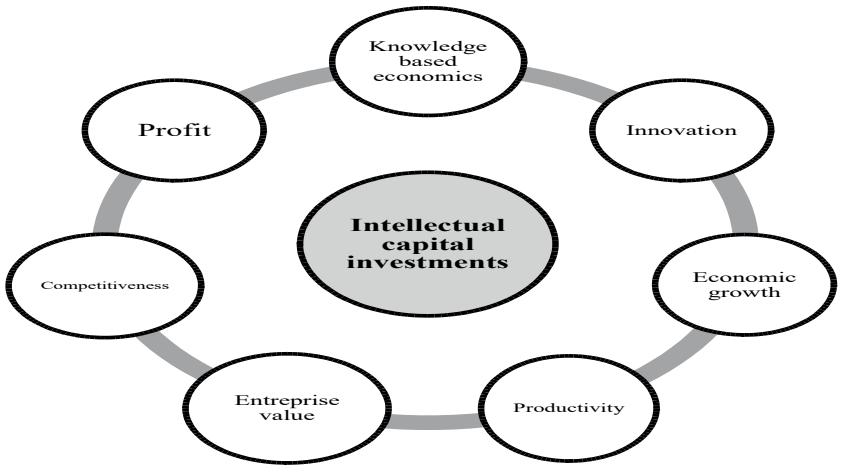
I. **Financial Resources** – There are many reasons why it is difficult to raise money from banks, financial institutions or investors to prove a suitable business proposition. This is because investments in research and development are highly risky and it is very often difficult to predict the final result. Raising money is a much more difficult task for start-up companies than it is for large corporations that will easily find a way to generate profits;

II. **Knowledge** – A combination of external and internal knowledge is necessary when introducing new innovations onto the market. In order to be innovative, it is highly important to take a broader knowledge base than the one from the past. External and internal knowledge sources must be managed properly;

III. **Human Capital** – Skilled and talented people are a very important element in the whole research and development process. Developing and managing human capital is a highly important part for successful, highly innovative companies. Michie (1999) thinks that the skill-shortage is a serious obstacle in the research process.

IV. **Management Competences** – Lack of management competences in the segment of marketing, organization and innovation is another key reason why companies do not invest more in R&D. Lack of management competences makes it difficult to plan and implement R&D in a successful manner.

**Figure 2.** Concepts related to the intellectual capital investments potential outputs




*Suorce:* (Lentjushenkova and Lapina, 2014)

Based on Figure 2 above, there are seven main intellectual capital investments potential outputs that can come from intellectual capital investments, and those are knowledge-based economics, profit, innovation, competitiveness, economic growth, enterprise value and productivity (Lentjushenkova and Lapina, 2014).

Researchers define investments in intellectual capital as different kinds of costs or expenditures, such as R&D expenditures, advertising expenditures, labor costs etc. This approach is used mainly because it is easy to collect this kind of financial information from financial statements and annual reports. (Lentjushenkova & Lapina, 2014).

## 5. CONCLUSION

In short, proper answers for the research question - how corporate strategy is formulated and how it affects an organization - is still debatable. Differences in theory perspectives and research methodology can lead to different findings. It shows the complex and multifaceted characteristics of corporate strategy studies. The strategy is formulated and affects not only the organization but also has a dynamic relationship with the context and environment in which businesses are run.

Based on the study developed by previous studies the following conclusions were made: Intellectual capital investments influence both financial and non-financial performance of a company; Intellectual capital investment influences a company's market value in a positive way and company's expenditures can be seen as intellectual capital investments only if they can be reflected in accountancy; Expenditures are more often used in research than investments that later influence the value or performance of a company. Finally, the most frequently used terms for intellectual capital investments are: human capital investments, R&D expenditures, IT expenditures, labor costs and training costs. Intellectual capital investments are often very risky because of an unpredictable outcome.

## 6. LITERATURE

Ahuja, G., & Katila, R. (2001). Technological acquisitions and the innovation performance of acquiring firms: A longitudinal study. Strategic Management Journal, 22(3), 197–220. https://doi.org/10.1002/smj.157

Andriessen, D. (2004). Making sense of intellectual capital: Designing a method for the valuation of intangibles. Elsevier.

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. Journal of Management, 17(1), 99–120. https://doi.org/10.1177/014920639101700108

Barton, S. L. (1987). Corporate Strategy: Useful Perspective for the Study of Capital Structure? 10.

Baruch Lev. (2004). Sharpening the Intangibles Edge. Harvard Business Review, 9.

Baruch Lev & Schwartz, A. (1971). On the use of the economic concept of human capital in financial statements. The Accounting Review, 52, 3–5.

Bayburina, E., & Golovko, T. (2009). Design of Sustainable Development: Intellectual Value of Large BRIC Companies and Factors of their Growth. Electronic Journal of Knowledge Management, 7(5), 535–558.

Benner, M. J. (2010). Securities Analysts and Incumbent Response to Radical Technological Change: Evidence from Digital Photography and Internet Telephony. Organization Science, 21(1), 42–62. https://doi.org/10.1287/orsc.1080.0395

Boisot, M. (1999). Knowledge assets: Securing competitive advantage in the information economy (1st paperback ed). Oxford University Press.

Bontis, N., Dragonetti, N. C., Jacobsen, K., & Roos, G. (1999). The knowledge toolbox: European Management Journal, 17(4), 391–402. https://doi.org/10.1016/S0263-2373(99)00019-5

Bowman, E. H., & Helfat, C. E. (2001). Does Corporate Strategy Matter? 24.

Caldart, A. A., & Ricart, J. E. (2004). Corporate strategy revisited: A view from complexity theory. European Management Review, 1(1), 96–104. https://doi.org/10.1057/palgrave.emr.1500005

Cefis, E. (2010). The impact of M&A on technology sourcing strategies. Economics of Innovation and New Technology, 19(1), 27–51. https://doi.org/10.1080/10438590903016385

Desyllas, P., & Hughes, A. (2010). Do high technology acquirers become more innovative? Research Policy, 39(8), 1105–1121. https://doi.org/10.1016/j.respol.2010.05.005

Drucker, P.F. (1988). The coming of the new organization. Harvard Business Review.

Edvinsson, L., & Malone, M. S. (1997). Intellectual capital: Realizing your company's true value by finding its hidden brainpower (1st ed). HarperBusiness.

Eisenhardt, K. M. (2002, January 15). Has Strategy Changed? MIT Sloan Management Review. https://sloanreview.mit.edu/article/has-strategy-changed/

European Commission. (2003). Observatory of European SMEs 2003, no. 2, SMEs and access to finance. European Commission Luxembourg.

Foss, N. J. (Ed.). (1997). Resources, firms, and strategies: A reader in the resource-based perspective. Oxford University Press.

Ghemawat, P. (1991). Commitment: The dynamic of strategy. Free Press ; Maxwell Macmillan Canada; Maxwell Macmillan International.

Grant, R. M. (1991). Contemporary strategy analysis: Concepts, techniques, applications (3. ed., repr). Blackwell Publishers.

He, Z.-L., & Wong, P.-K. (2004). Exploration vs. Exploitation: An Empirical Test of the Ambidexterity Hypothesis. Organization Science, 15(4), 481–494.

Hitt, M. A., Hoskisson, R. E., & Kim, H. (1997). International diversification: Effects on innovation and firm performance in product-diversified firms. Academy of Management Journal, 40(4), 767–798. https://doi.org/10.2307/256948

Holsapple, C. W., & Joshi, K. D. (2000). An investigation of factors that influence the management of knowledge in organizations. The Journal of Strategic Information Systems, 9(2–3), 235–261. https://doi.org/10.1016/S0963-8687(00)00046-9

Hoskisson, R. E., Johnson, R. A., & Moesel, D. D. (1994). Corporate divestiture intensity in restructuring firms: Effects of governance, strategy, and performance. Academy of Management Journal, 37(5), 1207–1251. https://doi.org/10.2307/256671

Inkpen, A. C., Sundaram, A. K., & Rockwood, K. (2000). Cross-Border Acquisitions of U.S. Technology Assets. California Management Review, 42(3), 50–71. https://doi.org/10.2307/41166042

Jia, N. (2017). Corporate Innovation Strategy, Analyst Forecasting Activities and the Economic Consequences: Corporate innovation strategy, Analyst forecasting activities. Journal of Business Finance & Accounting, 44(5–6), 812–853. https://doi.org/10.1111/jbfa.12242

Johnson, T.H., & Kaplan, R. S. (1987). Relevance Lost: The Rise and the Fall of Management Accounting. Harvard Business School.

Kaplan, R. S. (1983). Measuring manufacturing performance: A new challenge for managerial accounting research. In C. Emmanuel, D. Otley, & K. Merchant (Eds.), Readings in Accounting for Management Control (pp. 284–306). Springer US. https://doi.org/10.1007/978-1-4899-7138-8_14

Kim, W. C., & Mauborgne, R. (2004). Value Innovation: The Strategic Logic of High Growth. Havard Business Review. https://hbr.org/2004/07/value-innovation-the-strategic-logic-of-high-growth

Kohl, H., Geleitzke, M., Steinhofel, E., & Orth, R. (2014). Strategic intellectual capital management as a driver of organizational innovation. 9. http://www.researchgate.net/publication/262379267

Lang, L. H. P., & Stulz, R. M. (1994). Tobin's q, Corporate Diversification, and Firm Performance. Journal of Political Economy, 102(6), 1248–1280.

Mariya Anatolievna Molodchik, Elena Anatolievna Shakina, & Anna Andreevna Bykova. (2012). Intellectual Capital Transformation Evaluating Model. Journal of Intellectual Capital, 18.

Markides, C. C., & Williamson, P. J. (2007). Related diversification, core competences and corporate performance. Strategic Management Journal, 15(S2), 149–165. https://doi.org/10.1002/smj.4250151010

Marr, B., & Schiuma, G. (2001). Measuring and Managing Intellectual Capital and Knowledge Assets in New Economy Organization. Bourne, M (eds) - Handbook of Performance Measurement.

Megna & Klock. (1993). The impact of intangible capital on Tobin's Q ratio in the semiconductor industry. The American Economic Review, 8, 265.

Michie, J. (1999). HRM practices, R&D expenditure and innovative investment: Evidence from the UK's 1990 workplace industrial relations survey (WIRS). Industrial and Corporate Change, 8(2), 211–234. https://doi.org/10.1093/icc/8.2.211

Mignon, S., & Walliser, E. (2015). Éditorial. Connaissances, capital intellectuel et management de l'innovation. Innovations, 47(2), 5. https://doi.org/10.3917/inno.047.0005

Mouritsen, J., Bukh, P. N., Larsen, H. T., & Johnson, T.H. (2002). Developing and managing knowledge through intellectual capital statements. Journal of Intellectual Capital, 3(1), 10–29.

Mura, M., Lettieri, E., Spiller, N., & Radaelli, G. (2012). Intellectual Capital and Innovative Work Behaviour: Opening the Black Box. International Journal of Engineering Business Management, 4, 39. https://doi.org/10.5772/54976

Nanda, A. (1996). Resources, Capabilities and Competencies. In Organizational Learning and Competitive Advantage (pp. 93–120). SAGE Publications Ltd. https://doi.org/10.4135/9781446250228.n6

Ogbonna, E., & Wilkinson, B. (1988). Corporate Strategy And Corporate Culture: The Management Of Change In The Uk Supermarket Industry. Personnel Review, 17(6), 10–14. https://doi.org/10.1108/eb055602

Porter, M. E. (1985). Competitive Advantage. The Free Press.

Prabhu, J. C., Chandy, R. K., & Ellis, M. E. (2005). The Impact of Acquisitions on Innovation: Poison Pill, Placebo, or Tonic? Journal of Marketing, 69(1), 114–130. https://doi.org/10.1509/jmkg.69.1.114.55514

Prahalad, C.K., & Hamel, G. (1990). The core competence of the corporation. Harvard Business Review, 68(3), 79–91.

Quinn, J. B. (1992). Intelligent enterprise: A knowledge and service based paradigm for industry. Free Press ; Maxwell Macmillan Canada ; Maxwell Macmillan International.

Rumelt, R. P. (1991). How much does industry matter? Strategic Management Journal, 12(3), 167–185. https://doi.org/10.1002/smj.4250120302

Salem Khalifa, A. (2008). The "strategy frame" and the four Es of strategy drivers. Management Decision, 46(6), 894–917. https://doi.org/10.1108/00251740810882662

Savage, C. M., & Savage, C. M. (1996). Fifth generation management: Co-creating through virtual enterprising, dynamic teaming, and knowledge networking (Rev. ed). Butterworth-Heinemann.

Senge, P. M. (2006). The fifth discipline: The art and practice of the learning organization (Rev. and updated). Doubleday/Currency.

Serenko, A., & Bontis, N. (2004). Meta-review of knowledge management and intellectual capital literature: Citation impact and research productivity rankings. Knowledge and Process Management, 11(3), 185–198. https://doi.org/10.1002/kpm.203

Stewart, T. (1991). BRAINPOWER Intellectual capital is becoming corporate America's most valuable asset and can be its sharpest competitive weapon. The challenge is to find what you have—And use it. Fortune Magazine. http://archive.fortune.com/magazines/fortune/fortune_archive/1991/06/03/75096/index.htm

Stewart, T. A. (2001). The wealth of knowledge: Intellectual capital and the twenty-first century organization (1st ed). Currency.

Teece, D. J. (2002). Managing intellectual capital: Organizational, strategic, and policy dimensions. Oxford Univ. Press.

Thiel, S. V., & Leeuw, F. L. (2002). The Performance Paradox in the Public Sector. Public Performance & Management Review, 25(3), 267. https://doi.org/10.2307/3381236

Uotila, J., Maula, M., Keil, T., & Zahra, S. A. (2009). Exploration, exploitation, and financial performance: Analysis of S&P 500 corporations. Strategic Management Journal, 30(2), 221–231. https://doi.org/10.1002/smj.738

Užienė, L. (2015). Open Innovation, Knowledge Flows and Intellectual Capital. Procedia - Social and Behavioral Sciences, 213, 1057–1062. https://doi.org/10.1016/j.sbspro.2015.11.525

Villalonga, B. (2004). Does Diversification Cause the "Diversification Discount"? Financial Management, 33(2), 5–27.

Yakob, R., Nakamura, H. R., & Ström, P. (2018). Chinese foreign acquisitions aimed for strategic asset-creation and innovation upgrading: The case of Geely and Volvo Cars. Technovation, 70–71, 59–72. https://doi.org/10.1016/j.technovation.2018.02.011