

Corporate entrepreneurship as a strategic approach for internal innovation performance

Cheng Tseng

The Undergraduate College, University of Chicago, Chicago, Illinois, USA, and

Chien-Chi Tseng

*School of Business and Management, Morgan State University,
Baltimore, Maryland, USA*

Abstract

Purpose – The purpose of this paper is to explore corporate entrepreneurship and the relationship between intrapreneurship and the proposed strategic models through a literature review. This paper reviews the strategic approach for increasing internal innovation performance at corporations.

Design/methodology/approach – Key words were identified to use in the literature search: corporate entrepreneurship, innovation performance and entrepreneurial environment. Then, all of the several electronic databases available in the university's electronic library, including Harvard Business Review and The University of Chicago Press, as well as journals, books, Google Scholar and other institutional resources.

Findings – The six innovative outcomes are motivating individuals to engage in innovative behavior, concentrating entrepreneurial ventures through a newly minted organization within a corporation, helping innovative-minded people to reach their full potential, rewarding a corporate entrepreneur, encouraging people to look at the organization from a broad perspective and educating employees about corporate entrepreneurship.

Research limitations/implications – The study was exploratory, based on a literature review. Further studies are needed using empirical research to examine why corporate entrepreneurship was attributed to be the strategic approach for internal innovation performance.

Practical implications – By implementing the strategic approaches, corporate management professionals can realize their entrepreneurial intentions for the firm and maintain their responsibility to shareholders in terms of other business and development goals.

Originality/value – The research constructs an input-process-output framework that minimizes external mergers and acquisitions and maximizes internal innovation performance. Value was created when corporate entrepreneurship was identified as a strategic approach for internal innovation performance.

Keywords Innovation performance, Corporate entrepreneurship, Entrepreneurial environment

Paper type Research paper

1. Introduction

History has proven time and again that businesses should be able to quickly innovate, change and transform to meet the expectations of a fast-changing marketplace. To swiftly



adapt, corporations need to enhance their innovation prowess and companies need to tap into the creative power of their employees (Lee and Pati, 2017). The need for corporate entrepreneurship is obvious, especially given the pressing circumstances that corporations face today. These circumstances threaten a corporation's productivity and growth potential, and they include a rapid increase in the number of new and sophisticated competitors, a sense of distrust in the conventional methods of corporate management, the downsizing of major corporations and an exodus of key inventors (Kuratko *et al.*, 2015; Miles and Covin, 2002).

To minimize the impact of the abovementioned circumstances, this paper explores specific innovative strategies that corporations could adopt to enter new markets and achieve growth (Zahra, 2015). Following these innovative strategies is important, because doing otherwise would encourage stagflation, loss of personnel and the risk of becoming completely obsolete (Kuratko, 2013). So what do these specific innovative strategies look like? How can managers and executives implement the strategic approaches within a corporate setting?

By organizing, integrating and evaluating previously published works in a comprehensive literature review, this article aims to devise strategic approaches for increasing corporate entrepreneurial behavior and identify the relationship between the strategies and a corporation's internal innovation performance. First, this paper argues that corporations have a responsibility to practice these strategies. Although mergers and acquisitions are useful organizational instruments for market expansion, corporate entrepreneurship significantly enhances a company's potential for success by encouraging pro-activeness and risk-taking behavior (Sebora and Theerapatvong, 2010). Corporate entrepreneurship can also improve economic productivity by introducing radical and disruptive product/process innovations (Carree and Thurik, 2003). Second, this study shows that the strategic approaches would not only help corporations become more innovative but also bolster their organizational growth and profitability as well. Third, this paper contends that corporations should be able to accept failure, whether from an individual or group perspective. Rather than punish employees, companies must recognize that failure is a likely result of innovation and be able to learn from it.

The purpose of this research is to explore the importance of corporate entrepreneurship in our ever-industrializing world and the relationships between the strategic approaches and internal innovation performance. This paper proposes a conceptual framework that minimizes external mergers and acquisitions and focuses on improving internal innovation performance. This research discusses the relationships among the inputs and outputs and finds that internal innovation performance will increase and that employees will be more inclined to demonstrate corporate entrepreneurial behavior once the strategic approaches are implemented as inputs. Thus, when a firm seeks to obtain the outcomes of the strategic framework, it is important to understand the following research questions:

- RQ1. What key factors are necessary in enhancing internal innovation performance?
- RQ2. What is the relationship between the strategic framework and corporate entrepreneurial behavior?
- RQ3. What are possible outcomes of the strategic approaches and how can they influence future business development?

To establish a theoretical background, this paper first identifies a number of keywords used in the literature search: corporate entrepreneurship, innovation and entrepreneurial environment. This article then discusses the details of these keywords. These discussions

will include their definitions and impacts on corporate entrepreneurship as a whole. Finally, this paper identifies the resources used for the literature search. Electronic databases available in many different university's electronic libraries are used for this research. Such databases include Harvard Business Review and The University of Chicago Press, as well as journals, books, Google Scholar and other institutional resources.

Kuratko's (2009) research is used as the foundation of this article, with additional input emerging from the literature search to provide information on the inputs and outputs associated with the strategic framework. The study of Morris *et al.* (2010) further illustrates the significance of internal innovation performance and builds upon the relationships between our strategic approaches and their respective outcomes. For instance, Morris *et al.* (2010) discuss rules that are associated with several inputs within our strategic framework, such as creating a market for talent and encouraging new voices to be heard.

2. Theoretical background

2.1 Corporate entrepreneurship

The concept of corporate entrepreneurship has been explored by many scholars (Amore *et al.*, 2013; Bai *et al.*, 2016; Huse *et al.*, 2005; Sharma and Chrisman, 2007; Morris *et al.*, 2010; Tian and Wang, 2014). Huse *et al.* (2005) investigate the characteristics of the modern business environment and how they influence corporate innovation performance. Of another perspective, Bai *et al.* (2016) argue that innovation performance is the result of networking capability and that networking capability has a positive influence on the provision of international business knowledge, which is essential to the innovation.

One of the most significant contributions of corporate entrepreneurial behavior is found in the organizational learning processes that strengthen employees' ability to analyze markets and formulate new products (Zahra, 2015; Zahra *et al.*, 1999). Nonetheless, strategies that could increase corporate entrepreneurial behavior include the following: develop a system of positive reinforcement, produce Innovation Teams (I-Teams), support and foster an entrepreneurial environment, provide intra-capital for corporate entrepreneurs, reduce organizational boundaries and facilitate top management support.

Han and Park (2017) state that if a firm has corporate entrepreneurship, innovation (i.e. transformation of the existing firm, the birth of new business organization and innovation) happens. In sum, corporate entrepreneurship plays a role to pursue to be a first mover from a latecomer by encompassing the three phenomena (Han and Park, 2017). Therefore, corporate entrepreneurship becomes an important role of inspiration for the happening of innovation.

Corporations are accountable to their shareholders and have a responsibility to attain their business and developmental goals. To do so, enterprises need to focus on aligning the strategic approaches and process innovations, gaining economic value and first-mover advantage in the process (Zadek, 2004). Simply focusing on the outputs-the benefits gained from using this strategic framework-however, is not enough. Entrepreneurs and key managers should wholly understand each of the strategic approaches, clarify the relationships between the strategies and intrapreneurship and create an implementation process that would maximize the firm's internal innovation performance.

The definition of corporate entrepreneurship has evolved over the past couple of decades. Some researchers define corporate entrepreneurship as a broad concept, while others define it as a narrower concept of innovation. Kuratko (2009) contends that most researchers view corporate entrepreneurship as a term that "refers to entrepreneurial activities [which] receive organizational sanction and resource commitments for the purpose of innovation results" (p. 55). Vanacker *et al.* (2017) provide a key definition of corporate entrepreneurship which

characterizes this term as formal or informal activities aimed at creating new businesses in established companies through product and process innovations and market developments. These formal or informal activities may take place at the corporate, division, functional or project levels as long as the unifying objective is to improve a company's competitive position and financial performance.

Furthermore, corporate entrepreneurship is extensively concerned with practice. According to [Morris et al. \(2010\)](#), corporate entrepreneurship consists of two distinct domains: corporate venturing and strategic entrepreneurship. The first domain, corporate venturing, is the addition of new businesses or portions of new businesses via equity investments. Corporate venturing can be accomplished through three implementations: internal corporate venturing, cooperative corporate venturing and external corporate venturing ([Morris et al., 2010](#)). The second domain, strategic entrepreneurship, is the integration of entrepreneurial and strategic perspectives in developing and taking actions designed to create wealth ([Hitt et al., 2001](#)). Like corporate venturing, strategic entrepreneurship also has many different areas of implementations: strategic renewal, sustained regeneration, domain redefinition, organizational rejuvenation and business model reconstruction ([Morris et al., 2010](#)).

2.2 Entrepreneurial environment

[Grundstén \(2004\)](#) defines entrepreneurial environment as the regional, physical, psychological and social environment of the nascent entrepreneur. The four-dimensional framework proposed by the study of [Landstrom et al. \(2016\)](#) characterizes an entrepreneurial environment with several attributes, including accessibility of suppliers, proximity of universities, accessibility to customers or markets, technically skilled labor force, presence of experienced entrepreneurs and venture capital availability. These characteristics of entrepreneurial environments were comprehensively analyzed by [Martinez-Fierro et al. \(2016\)](#), who diagnosed the characteristics of the entrepreneurial environment and examined whether a relationship exists between these characteristics and innovation performance.

[Bird and Schjoedt \(2017\)](#) and [Miles and Covin \(2002\)](#) further suggest that, for employees to exhibit heightened entrepreneurial behavior, companies should provide nurturing and information-sharing activities. Additionally, companies may also develop an entrepreneurial environment that will not only assist innovative-minded employees in achieving their full potential but also reduce the turnover rate of such individuals. Any attempt to foster entrepreneurial behavior may focus on an employee's perception of the entrepreneurial environment, as this perception is critical for stressing the importance of management's commitment to the organization's people and the innovative projects.

An inherent benefit of possessing an entrepreneurial environment is the free communication among a firm's founders, managers and employees ([Zahra and Filatotchev, 2004](#)). Social interaction between employees and employers generates supportive and collaborative networks, driving internal innovation performance as a result. In addition, having an entrepreneurial environment will not only inspire employees to innovate but also motivate them to develop an entrepreneurial mindset, one that is crucial to the success of the firm. Therefore, entrepreneurship is one of the key elements that will lead to a successful business performance under highly uncertain business environment ([Cho and Lee, 2018](#)).

2.3 Innovation

Innovation has been the subject of extensive research; scholars in the past few decades have examined innovation in regards to organizational structure, strategic management, and economic wellbeing ([Baregheh et al., 2009](#); [Hitt et al., 2012](#); [Huang and Li, 2017](#); [Wong et al., 2005](#)). [Damanpour \(1991\)](#) contends that innovation can be a new product or service, an

administrative system, or a new plan or program that pertains to organizational members. Meanwhile, [Van de Ven \(2017\)](#) defines innovation as the development and implementation of new ideas by people who over time engage in transactions with others within an institutional order. In addition, according to [Drucker \(2002\)](#), innovation is the “specific function of entrepreneurship [. . .] It is the means by which the entrepreneur either creates new wealth-producing resources or endows existing resources with enhanced potential for creating wealth” (p. 5).

[Donkor et al. \(2018\)](#) perform the study of innovation capability, strategic goals and financial performance and find that a necessity for longer-term innovation perspectives and a higher level of the importance of the application and assessment of strategic goals. [Kim et al. \(2018\)](#) provide implications for the necessary of detailed methodology among supporting policies for technical innovative enterprises and to establish innovative strategies of enterprises. They indicate that innovative enterprise strategies are critical for maintaining sustainable competitiveness and securing market share. Hence, strategic goals have a positive and important relationship with innovation.

Instead of a single description of innovation, [Rogers \(1998\)](#) asserts that there are five types of innovation:

- (1) introduction of a new product or a qualitative change in an existing product;
- (2) process innovations that are new to an industry;
- (3) the opening of a new market;
- (4) the development of new sources of supply for raw materials or other inputs, and
- (5) changes in industrial organization.

Furthermore, [Rogers \(1998\)](#) believes that there can be a difference in the nature of innovation. For example, an innovation can be characterized as either a radical innovation or an incremental innovation. Radical innovation is the launching of inaugural breakthroughs. It is a type of innovation that has significant impacts on a market and the economic productivity of firms in that market. Radical innovations can also change the structure of the market, create new markets or render existing products obsolete. Incremental innovation, on the other hand, refers to the systematic evolution of a product or service into newer or larger markets ([Dent, 1990](#)). Structure, financing and formal systems are typical of a corporation that can help implement incremental innovation ([Kuratko, 2009](#)).

2.4 Innovation teams (I-Teams)

I-Teams are internal corporate teams formulated for the purpose of creating new innovations ([Kuratko, 2009](#)). I-Teams have been recognized as a productivity breakthrough of the twenty-first century, hence its increasing popularity and recognition in academic literature ([Kratzer et al., 2006](#); [Pearce and Ensley, 2004](#)).

According to [Kuratko \(2009\)](#), I-Teams are quite semiautonomous. They have their own budget and management, and they are generally free to make decisions within broad guidelines. In fact, I-Teams are often separated from other parts of a corporation, especially those involved in day-to-day operations. Apparently, corporate management professionals want to prevent the unit from engaging in procedures that can stifle innovation activities. However, if the innovation later proves to be successful, the I-Team will be integrated into the larger organization, eventually receiving the same treatment as the other outputs of an organization ([Ireland et al., 2006](#)).

In examining entrepreneurial development within corporations, [Reich \(2002\)](#) finds that entrepreneurial thinking is diffused throughout the company, not just within the sole

province of its management. Reich (2002) identifies this phenomenon as collective entrepreneurship and defines this term as follows:

In collective entrepreneurship, individual skills are integrated into a group; this collective capacity to innovate becomes something greater than the sum of its parts. Over time, as the group works through various problems and approaches, they learn about each other's abilities. They learn how they can help one another perform better, what each can contribute to a particular project, and how they can best take advantage of one another's experience. Each participant is constantly on the lookout for small adjustments that will speed and smooth the evolution of the whole. The net result of many such small-scale adaptations, effected throughout the organization, is to propel the enterprise forward (p. 81).

With the above definition in mind, it is important to add that I-Teams accomplish the main objectives of collective entrepreneurship. I-Teams offer corporations the opportunity to use the talents of individuals without losing a sense of teamwork (Kuratko, 2009).

3. Study design

3.1 Study methodology

For this research, we first identified key words to use in the literature search: corporate entrepreneurship, entrepreneurial environment, innovation and innovation teams. Second, we identified the databases to search; all of the several electronic databases available, including the University of Chicago's electronic library, including both journal and book sources, were used, as well as Google Scholar and online library resources.

3.2 Study framework

To achieve the desired results-heightened rates of internal entrepreneurial behavior – corporations need to integrate the strategic approaches into every aspect and operation of the organization. As the effects of the six strategic approaches may not be easily analyzed, a strategic framework examining the inputs, process and outputs could be useful.

Indeed, a strategic framework, detailed in Figure 1, with the six strategic approaches for increasing internal innovation performance as the inputs, the adaptation and implementation of these strategic approaches as the process, and the beneficial effects on the corporation as systematic outputs could provide a clear illustration of our research inquiries. The study trusts that the strategic approaches would positively influence a corporation's internal innovation performance and serve a proactive role in stimulating economic prosperity.

Although the benefits of the proposed strategies could be felt in almost any corporation, the effects would be maximized if the inputs are used in a supportive environment where there is a clear link between the strategic approaches and entrepreneurial behavior. Furthermore, the outputs are not mutually exclusive but interrelated in such a way that corporate management could use all or a combination of the strategies to simultaneously direct and control innovation.

4. Results

4.1 Relationships between the strategies and corporate entrepreneurship

According to the strategic framework, the six strategic approaches serving as innovative inputs are examined below:

To develop a system of positive reinforcement: By rewarding employees for entrepreneurial behavior, they will be encouraged to contribute to the success of the corporation. Gogia and Soni (2017) believe that successful organizations must provide rewards for outstanding performance because entrepreneurship relies on individuals who

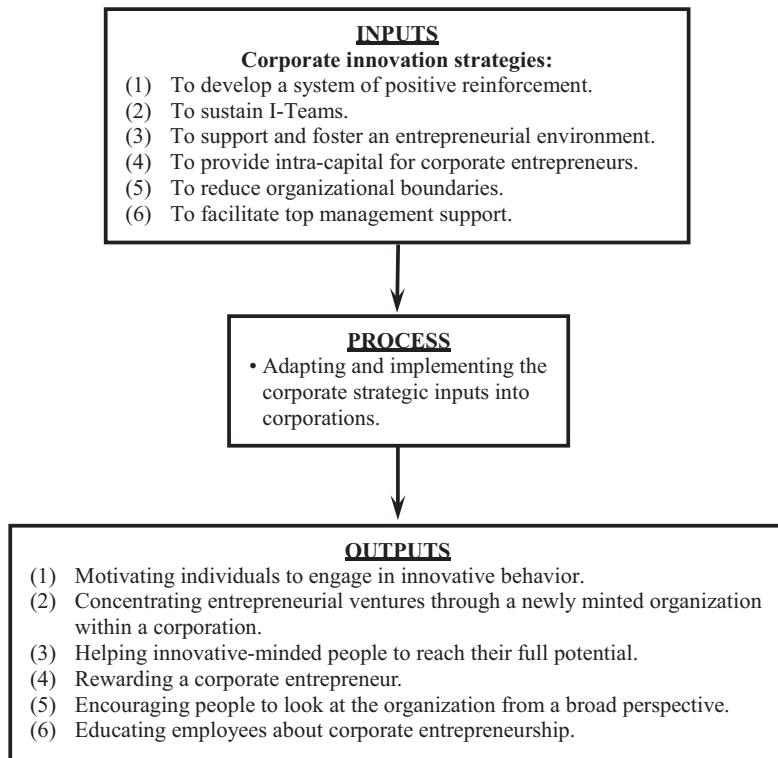


Figure 1.
Strategic framework
for increasing
corporate internal
innovation
performance

think and behave as risk takers. Developing a system of positive reinforcement would stimulate productivity and communicate the importance of innovative behavior.

To sustain I-Teams: The primary focus for I-Teams is producing new innovations. Corporate management may assign employees from different backgrounds, such as marketing, sales and product development, to build on the organization's global business strengths and areas with potential for growth. One advantage of I-Teams is directed focus on research and development instead of daily operations. I-Team's principal responsibility is cultivating and executing an entrepreneurial idea, and its behavior is much like a small business operating within a larger one (Kuratko, 2009).

To support and foster an entrepreneurial environment: A critical step in attaining higher internal innovation performance, especially in today's corporate environment, is to invest heavily in entrepreneurial activities that would facilitate the exchange of new ideas. Brazeal (1993) asserts that corporate entrepreneurship is an internal process that embraces the ultimate goal of growth through the development of innovative products, processes and technologies. Thus, organizations might concentrate on the joint function of individual and organizational factors. Individual factors, such as values and behavioral orientation, will merge with organizational factors, such as structure and reward system, to determine an employee's job attitudes and behavioral intentions (Brazeal, 1993).

To provide intra-capital for corporate entrepreneurs: Intra-capital is a special kind of capital that should be set aside for corporate entrepreneurs to use whenever they need money to further their innovative ideas. This type of capital can be viewed as a sort of

reward for the corporate entrepreneur. Intra-capital serves as an incentive for innovative behavior (Kanter, 1994).

To reduce organizational boundaries: Byrne *et al.* (2016) suggest four areas that corporations should focus on to break down organizational boundaries and facilitate innovative behavior. The first area is encouraging entrepreneurial activity by using financial incentives instead of stringent rules and procedures. The second area is the proper control of human resource policies. Managers in the corporation need to remain in positions long enough to familiarize themselves with an industry or a particular division. Occasionally moving managers within a corporation – also known as selected rotation – could expose them to different but related territories. The third area of importance is to have faith in entrepreneurial initiatives. Many innovative projects take time to gain momentum, and corporate entrepreneurs and key managers should understand that failure will inevitably occur and that they provide excellent learning opportunities. The final area is to bet on people instead of analysis. When analyzing a project's progression, always critique in a supportive style. A friendly, yet encouraging critique would help corporate entrepreneurs realize their errors and complete a more beneficial self-analysis.

To facilitate top management support: Top management support is crucial in developing entrepreneurial intentions among employees. This support leads employees to believe that entrepreneurship is a part of the role set of all organizational members. According to Swink (2000), integrating top management support (using incentives such as financial rewards, recognition and work discretion) with other strategic practices has been correlated with better time-based performance, design quality and financial performance.

4.2 Relationships between the implementation of the innovative strategies and their outcomes

Although many scholars have applied strategic approaches to a variety of scenarios, such as improving economic productivity, enhancing a firm's competitive edge and predicting consumer behavior, there is still much to be explored regarding corporate entrepreneurship. Kuratko (2009) points out three advantages to developing a corporate entrepreneurial philosophy. First, this philosophy leads to the development of new products and services, which helps the organization to grow and gain a competitive advantage. A second benefit is a revolution in corporate management – the reduction of organizational barriers and promotion of an entrepreneurial mindset among employees. The third advantage is that an entrepreneurial philosophy promotes an environment conducive to innovators and helps the corporation retain its best and brightest employees. But how exactly do the strategic inputs proposed affect corporate entrepreneurship? This paper lists the six resulting outputs below and briefly describes their respective impacts on corporate entrepreneurship.

Motivating individuals to engage in innovative behavior. Developing a system of positive reinforcement encourages employees to engage in innovative behavior. Positive reinforcement, as well as work discretion and autonomy, helps to retain key innovators and prevent the loss of human capital to competition (Kuratko, 2009).

Concentrating entrepreneurial ventures through a newly minted organization within a corporation. I-Teams hold a strong potential for producing innovative results. They often develop new knowledge, advance technologies and create process innovations that improve a firm's products or services. In fact, this modern breed of work team, often referred to as self-directing, self-managing and high performing, can be a very effective strategy for many corporations (Francis and Sandberg, 2000; Kratzer *et al.*, 2004).

Helping innovative-minded people to reach their full potential. An entrepreneurial environment is crucial to a firm's success. Having this unique idea-driven atmosphere, in

which individual motivating factors are meticulously melded with organizational factors of structure and reward, could strengthen an employee's organizational commitment and job satisfaction significantly. Indeed, the tremendous support given to employees could stimulate entrepreneurial intentions and, ultimately, assist them in realizing their true potential (Brazeal, 1993).

Rewarding a corporate entrepreneur. Intra-capital gives corporate entrepreneurs a strong incentive to innovate. In fact, intra-capital is mutually beneficial, an employee who obtains financial and other intangible rewards for his or her innovations will be more inclined to exhibit entrepreneurial behavior in the future (Kuratko, 2009).

Encouraging people to look at the organization from a broad perspective. Organizational boundaries not only prevent people from looking at problems outside of their own jobs but also create a dependence on narrow job descriptions and performance standards. Employees restricted by these organizational boundaries do not have the autonomy to execute their own creative ideas. They are limited to nearsighted goals and often do not pay attention to the company's long-run performance (Hornsby *et al.*, 2009; Hornsby *et al.*, 2002). By focusing on the four areas discussed by Byrne *et al.* (2016) and breaking down such boundaries, employees are encouraged to look at the organization and their own jobs from a broader perspective.

Educating employees about entrepreneurship. According to Raposo and Paço (2011), an entrepreneurship education does not simply teach someone how to run a business or sub-organization but also emphasize certain beliefs, values and attitudes that are characteristic of an entrepreneur. Educating employees about entrepreneurship can reap additional benefits, such as promoting other innovative ventures, stimulating entrepreneurial skills and cultivating more resilient attitudes toward risk.

5. Implications

Innovation is a key factor to success for many businesses. As businesses seek to improve their productivity and ensure sustained growth, they will need to improve their capacity to innovate. Therefore, it would be worthwhile to note additional corporate entrepreneurship strategies, as such strategies may not only benefit a firm's internal innovation performance but also advance the firm's productivity, marketability and competitive advantage (Tseng and Tseng, 2016).

Future research should also verify the factors and directions of the strategic approaches suggested in Figure 1, as there may be discrepancies between various corporations or industries. In that regard, it would be interesting to research the effects our strategic approaches will have on various types of firms. In applying our strategic approaches to a small business or a limited liability company, for example, will the resulting internal innovation performance be different compared to a corporation? If so, what strategies could other types of businesses use to further stimulate its entrepreneurial performance?

Additionally, future investigations could examine the outcomes posed in the strategic framework. Since different effects could result from a specific strategic input, we believe it would be worthwhile to investigate the process that leads to this divergence. This also points to a need to solidify the link between the strategic inputs and outputs, which could help corporate management execute the strategic approaches that would maximize their firm's internal innovation performance. Finally, as this literature review focuses predominantly on firms in the high-technology industry, examining innovative approaches for firms in other industries would be worthwhile. We believe that corporations belonging to different industries may exhibit differing attitudes toward internal innovation and that our strategic approaches may have varied effects on firms in other industries.

6. Conclusion

6.1 Contributions

First, this research contributes to both theory and practice by analyzing the relationship between corporate entrepreneurial approaches and internal innovation performance. Without the use of external methods for innovation, such as mergers and acquisitions, corporations cannot maintain the innovativeness, pro-activeness and risk-taking behavior of employees unless they focused on internal innovation. The advantages of using innovative strategies are notable, as corporate entrepreneurship has proven to facilitate innovative behavior within many globally recognized corporations and sustain corporate competitiveness (Sebora and Theerapatvong, 2010). Accordingly, many institutions from around the world have been paying heightened attention to corporate entrepreneurship, partly because of the inherent benefits of internal innovation and competitive advantage but also due to heightened economic productivity that could result from these means (China Productivity Center, 2006).

Another contribution of this research is sharing the corporate entrepreneurial vision. We hope that our study will help others understand the importance of corporate entrepreneurship and develop new strategic approaches for enhancing internal innovation performance. The systematic framework we propose could act as a guide for corporate management. Instead of relentlessly pursuing the objective of generating higher corporate entrepreneurial performance, management could use our framework to focus on the details of this goal. The visions of this literature review are to promote corporate entrepreneurship and build an environment conducive to innovators. By stating specific objectives and processes for applying the strategic approaches, we have provided the direction for future study and practice.

6.2 Recommendations

From this research, we find that when the six strategic approaches are used as inputs, the internal innovation performance of corporations may increase.

By implementing the strategic approaches, corporate management professionals can realize their entrepreneurial intentions for the firm and maintain their responsibility to shareholders in terms of other business and development goals. The innovative techniques, illustrated in Figure 1, include developing a system of positive reinforcement, sustaining I-Teams, supporting and fostering an entrepreneurial environment, providing intra-capital for corporate entrepreneurs, reducing organizational boundaries and facilitating top management support.

This study recommends that corporations take the initiative to learn and apply these strategic approaches and obtain the general outcome of implementation, which is increasing corporate entrepreneurial behavior. The general outcome is the result of several small, specific outcomes, however, and these specific outcomes include motivating individuals to engage in innovative behavior, concentrating entrepreneurial ventures through a newly minted organization within a corporation, helping innovative-minded people to reach their full potential, rewarding a corporate entrepreneur, encouraging people to look at the organization from a broad perspective, and educating employees about entrepreneurship.

References

- Amore, M.D., Schneider, C. and Žaldokas, A. (2013), "Credit supply and corporate innovation", *Journal of Financial Economics*, Vol. 109 No. 3, pp. 835-855.
- Bai, W., Lind, C.H. and Johanson, M. (2016), "The performance of international returnee ventures: the role of networking capability and the usefulness of international business knowledge", *Entrepreneurship and Regional Development*, Vol. 28 Nos 9/10, pp. 657-680.

- Baregheh, A., Rowley, J. and Sambrook, S. (2009), "Towards a multidisciplinary definition of innovation", *Management Decision*, Vol. 47 No. 8, pp. 1323-1339.
- Bird, B. and Schjoedt, L. (2017), "Entrepreneurial behavior: its nature, scope, recent research, and agenda for future research", in Brännback, M. and Carsrud, A. (Eds), *Revisiting the Entrepreneurial Mind. International Studies in Entrepreneurship*, Springer, Cham, pp. 379-409.
- Brazeal, D.V. (1993), "Organizing for internally developed corporate ventures", *Journal of Business Venturing*, Vol. 8 No. 1, pp. 75-90.
- Byrne, J., Delmar, F., Fayolle, A. and Lamine, W. (2016), "Training corporate entrepreneurs: an action learning approach", *Small Business Economics*, Vol. 47 No. 2, pp. 479-506.
- Carree, M.A. and Thurik, A.R. (2003), "The impact of entrepreneurship on economic growth", in Acs Z.J. and Audretsch D.B. (Eds), *Handbook of Entrepreneurship Research*, Springer, Boston, MA, pp. 437-471.
- China Productivity Center (2006), "Taiwan's incubation policy", available at: http://incub.cpc.org.tw/incub_english/IncubatorProspective.htm (accessed 14 March 2014).
- Cho, Y.H. and Lee, J.H. (2018), "Entrepreneurial orientation, entrepreneurial education and performance", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 12 No. 2, pp. 124-134.
- Damanpour, F. (1991), "Organizational innovation: a meta-analysis of effects of determinants and moderators", *Academy of Management Journal*, Vol. 34 No. 3, pp. 555-590.
- Dent, H.S. Jr (1990), "Reinventing corporate innovation", Small Business Report, pp. 31-42.
- Donkor, J., Donkor, G.N.A., Kankam-Kwarteng, C. and Aidoo, E. (2018), "Innovation capability, strategic goals and financial performance of SMEs in Ghana", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 12 No. 2, pp. 238-254.
- Drucker, P.F. (2002), "The discipline of innovation", *Harvard Business Review*, Vol. 80 No. 8, pp. 95-104.
- Francis, D.H. and Sandberg, W.R. (2000), "Friendship within entrepreneurial teams and its association with team and venture performance", *Entrepreneurship Theory and Practice*, Vol. 25 No. 2, pp. 5-26.
- Gogia, S.K. and Soni, M. (2017), "Impact of reward management system on organizational performance with special reference to hotel industry in Jaipur: a literature review", *Journal of Modern Management and Entrepreneurship*, Vol. 7 No. 4, pp. 115-124.
- Grundstén, H. (2004), *Entrepreneurial Intentions and the Entrepreneurial Environment: A Study of Technology-based New Venture Creation*, Helsinki University of Technology, Helsinki, Finland.
- Han, J. and Park, C. (2017), "Case study on adoption of new technology for innovation: perspective of institutional and corporate entrepreneurship", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 11 No. 2, pp. 144-158.
- Hitt, M.A., Ireland, R.D. and Hoskisson, R.E. (2012), *Strategic Management Cases: competitiveness and Globalization*, South-Western Cengage Learning, Mason, OH.
- Hitt, M.A., Ireland, R.D., Camp, S.M. and Sexton, D.L. (2001), "Strategic entrepreneurship: entrepreneurial strategies for wealth creation", *Strategic Management Journal*, Vol. 22 No. 6-7, pp. 479-491.
- Hornsby, J.S., Kuratko, D.F. and Zahra, S.A. (2002), "Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale", *Journal of Business Venturing*, Vol. 17 No. 3, pp. 253-273.
- Hornsby, J.S., Kuratko, D.F., Shepherd, D.A. and Bott, J.P. (2009), "Managers' corporate entrepreneurial actions: examining perception and position", *Journal of Business Venturing*, Vol. 24 No. 3, pp. 236-247.
- Huang, J.W. and Li, Y.H. (2017), "Green innovation and performance: the view of organizational capability and social reciprocity", *Journal of Business Ethics*, Vol. 145 No. 2, pp. 309-324.

-
- Huse, M., Neubaum, D.O. and Gabrielsson, J. (2005), "Corporate innovation and competitive environment", *The International Entrepreneurship and Management Journal*, Vol. 1 No. 3, pp. 313-333.
- Ireland, R.D., Kuratko, D.F. and Morris, M.H. (2006), "A health audit for corporate entrepreneurship: innovation at all levels: part I", *Journal of Business Strategy*, Vol. 27 No. 1, pp. 10-17.
- Kanter, R.M. (1994), *Innovative Reward Systems for the Changing Workplace*, McGraw-Hill, New York, NY.
- Kim, M., Kim, J., Sawng, Y. and Lim, K. (2018), "Impacts of innovation type SME's R&D capability on patent and new product development", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 12 No. 1, pp. 45-61.
- Kratzer, J., Leenders, O.T.A. and Van Engelen, J.M. (2004), "Stimulating the potential: creative performance and communication in innovation teams", *Creativity and Innovation Management*, Vol. 13 No. 1, pp. 63-71.
- Kratzer, J., Leenders, R.T.A. and Van Engelen, J.M. (2006), "Team polarity and creative performance in innovation teams", *Creativity and Innovation Management*, Vol. 15 No. 1, pp. 96-104.
- Kuratko, D.F. (2009), *Entrepreneurship, Theory, Process, and Practice*, South-Western Cengage Learning, Masson, OH.
- Kuratko, D.F. (2013), *Entrepreneurship: Theory, Process, and Practice*, South-Western Cengage Learning, Masson, OH.
- Kuratko, D.F., Hornsby, J.S. and Hayton, J. (2015), "Corporate entrepreneurship: the innovative challenge for a new global economic reality", *Small Business Economics*, Vol. 45 No. 2, pp. 245-253.
- Landstrom, H., Gartner, W.B. and Bergland, K. (2016), "The institutionalization of entrepreneurship: questioning the status quo and re-gaining hope for entrepreneurship research", *Journal of Entrepreneurship and Regional Development*, Vol. 28 Nos 7/8, pp. 477-486.
- Lee, J. and Pati, N. (2017), "A study of the effect of corporate diversification strategy on technological innovation and strength in technology-oriented multinational corporations across countries", *International Journal of Business Innovation and Research*, Vol. 13 No. 1, pp. 1-29.
- Martinez-Fierro, S., Biedma-Ferrer, J.M. and Ruiz-Navarro, J. (2016), "Entrepreneurship and strategies for economic development", *Small Business Economics*, Vol. 47 No. 4, pp. 835-851.
- Miles, M.P. and Covin, J.G. (2002), "Exploring the practice of corporate venturing: some common forms and their organizational implications", *Entrepreneurship Theory and Practice*, Vol. 26 No. 3, pp. 21-40.
- Morris, M., Kuratko, D. and Covin, J. (2010), *Corporate Entrepreneurship and Innovation*, Cengage Learning, Boston, MA.
- Pearce, C.L. and Ensley, M.D. (2004), "A reciprocal and longitudinal investigation of the innovation process: the central role of shared vision in product and process innovation teams (PPITs)", *Journal of Organizational Behavior*, Vol. 25 No. 2, pp. 259-278.
- Raposo, M. and Paço, A.D. (2011), "Entrepreneurship education: relationship between education and entrepreneurial activity", *Psicothema*, Vol. 23 No. 3, pp. 453-457.
- Reich, R.B. (2002), *The Future of Success: Working and Living in the New Economy*, Random House, New York, NY.
- Rogers, M. (1998), *The Definition and Measurement of Innovation*, Melbourne Institute of Applied Economic and Social Research, Parkville, VIC.
- Sebora, T.C. and Theerapatvong, T. (2010), "Corporate entrepreneurship: a test of external and internal influences on managers' idea generation, risk taking, and proactiveness", *International Entrepreneurship and Management Journal*, Vol. 6 No. 3, pp. 331-350.
- Sharma, P. and Chrisman, S.J.J. (2007), "Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship", *Entrepreneurship: Concepts, Theory and Perspective*, Springer, Berlin, Heidelberg, pp. 83-103.

- Swink, M. (2000), "Technological innovativeness as a moderator of new product design integration and top management support", *Journal of Product Innovation Management*, Vol. 17 No. 3, pp. 208-220.
- Tian, X. and Wang, T.Y. (2014), "Tolerance for failure and corporate innovation", *Review of Financial Studies*, Vol. 27 No. 1, pp. 211-255.
- Tseng, C. and Tseng, C.C. (2016), "Strategy for increasing innovation at post-IPO firms", *International Journal of Entrepreneurship*, Vol. 20, p. 84.
- Vanacker, T.R., Zahra, S.A. and Holmes, R.M. (2017), "Corporate entrepreneurship, firm performance, and institutions: evidence from European firms", paper presented at the 2017 Academy of Management Annual Meeting, Atlanta, GA, available at: www.aom.org
- Van de Ven, A.H. (2017), "The innovation journey: you can't control it, but you can learn to maneuver it", *Innovation: Organization and Management*, Vol. 19 No. 1, pp. 39-42.
- Zadek, S. (2004), "The path to corporate responsibility", *Harvard Business Review*, December, pp. 1-8.
- Wong, P.K., Ho, Y.P. and Autio, E. (2005), "Entrepreneurship, innovation and economic growth: evidence from GEM data", *Small Business Economics*, Vol. 24 No. 3, pp. 335-350.
- Zahra, S.A. (2015), "Corporate entrepreneurship as knowledge creation and conversion: the role of entrepreneurial hubs", *Small Business Economics*, Vol. 44 No. 4, pp. 727-735.
- Zahra, S.A. and Filatotchev, I. (2004), "Governance of the entrepreneurial threshold firm: a knowledge-based perspective", *Journal of Management Studies*, Vol. 41 No. 5, pp. 885-897.
- Zahra, S.A., Nielsen, A.P. and Bogner, W.C. (1999), "Corporate entrepreneurship, knowledge, and competence development", *Entrepreneurship: Theory and Practice*, Vol. 23 No. 3, pp. 169-169.

Further reading

- Bruno, A.V. and Tyebjee, T.T. (1982), "The environment for entrepreneurship", *Encyclopedia of Entrepreneurship*, Vol. 2 No. 4, pp. 288-315.

About the authors

Cheng Tseng is currently a sophomore at the University of Chicago studying Economics and Computer Science. He is a research assistant at the Booth School of Business, and his research interests include entrepreneurship, business dynamism and behavioral economics. Besides conducting research and attending school, Cheng also enjoys playing tennis and running cross-country. Cheng Tseng is the corresponding author and can be contacted at: ctseng1@uchicago.edu

Chien-Chi Tseng is an Assistant Professor of Entrepreneurship in the School of Business and Management at Morgan State University. His research lies in the broad topics of entrepreneurship, innovation, organizational development and organizational learning. His articles have been published in the *International Journal of Business and Emerging Markets*, *Journal of Entrepreneurship, Management, Innovation*, *International Journal of Entrepreneurial Behavior and Research*, etc.