Development of Analytical Framework for SME's Competitiveness Based on Competency Approach

Krishantha Wisenthige, Cheng Guoping School of Management, Wuhan University of Technology, Wuhan, P.R. China, 430070 (E-mail: wpkrishantha@yahoo.com, chenggp@whut.edu.cn)

Abstract: The purpose of this paper is to provide a theoretical rationale for investigating the relationship between entrepreneurial characteristics and the SME's performance at the firm level through adopting the concept of competitiveness incorporated with entrepreneurial competencies. The model distinguishes between two dimensions of competitiveness, assets and process and six areas of competencies of an entrepreneur with the in creating competitiveness scope and capabilities of the firm. A major contribution of the theoretical framework is the organization of the existing theories and findings in entrepreneurial characteristics, and future theoretical development and empirical studies of SME competitiveness can be made based on this framework.

Key words: SMEs; Competitiveness; Entrepreneurial competencies; Competency approach

1 Introduction

The Small and Medium enterprises (SMEs) have given much attention in the recent entrepreneurship researches due to their vital contributions in the global economy. The role of SMEs is very important specially in all developing countries where SMEs assist economic growth; improve income distribution, productivity, efficiency and economic structure during the economic downturn (Abdullah & Manan, 2011). The review by Rasmussen et al., 2011and Man, Lau, & Snape, 2008 has pointed out the use of sound theoretical frameworks in further investigating the relationships between a SME's competitiveness and its antecedents. The purpose of this paper is to develop a conceptual model linking the characteristics of SMEs' entrepreneur and firm performances based on the concept of competitiveness and the competency approach. The use of the concept of competitiveness therefore provides with a rationale for investigating the long term performance of SMEs. Following a review of the literature on SME competitiveness, three key aspects affecting an SME's competitiveness have been identified, including the internal firm factors, external environment and the influence of the entrepreneur. These factors in turn impact the performance of the firm. In particular, the influence of the entrepreneur is addressed by the competency approach from a process or behavioral perspective. Entrepreneurial competencies are considered a higher level characteristic encompassing personality traits, skills and knowledge and therefore can be seen as the total ability of the entrepreneur to perform his/her role successfully. This paper will conceptualize analytical framework to investigate the relationship of entrepreneurial competencies and firm level competitiveness of SMEs. In the proposed analytical framework, SME competitiveness dimensions are based on the world competitiveness formula introduced by Institute of Management Development and World Economic Forum in 1993.

2 SME Competitiveness

2.1 Competitiveness as a concept

Concept of competitiveness is applied in various level of studies including individual firm level, microeconomic level for industry and macroeconomic level for the national economies (Nelson, 2012). A review by Waheeduzzaman and Ryans (2006) also pointed out that the competitiveness concept involves different disciplines, such as comparative advantage, price competitiveness, the strategy and management perspective as well as the historical and sociocultural perspectives. Competitiveness can also be treated as a dependent, independent, or intermediary variable, depending on the perspectives from which we approach the issue (Mulatu, 2016). Competitiveness is a multidimensional concept, in simple terms, it is the ability to compete. It has become the name of the game today to describe economic strength of a country or industry or firm with respect to its competitors in the global market economy in which goods, services, people, skills and ideas move freely across geographical borders (Murths, 2008). Whatever the level of focus, competitiveness is ultimately concerned with the long term performance of the subject related to its competitors, which is the result of being competitive.

2.2 Models of competitiveness

There has been inadequate research on such practical importance of these competitiveness related frameworks and models. Porter (1998) defined competitiveness as implementation of value creating

strategy by a firm which cannot simultaneously implemented by competitor and particular strategy cannot be easily duplicated. Moving away from the traditional Ricardo idea of comparative advantage, Porter's diamond model aims to explain the competitive advantages of the nations. The competitive position of a nation depends on the factor endowments, demand conditions, the support of related industries, and the firms' strategy, structure and rivalry, argues Porter. Over years there have been many new developments in the field of competition. According to the Mulatu (2016), there is a two dimensional approach; one is at the level of analysis (nation, industry and firm) and the other is the types of used variables. In the "world competitiveness formula", "competitiveness" is a combination of assets, which are inherited or created, as well as processes, which transform assets into economic results. When using the term competitiveness, we need to consider not only the resulting performance or the potential or asset to generate this performance, but also the process for doing so.

Out of these possible approaches, this paper is focused on the firm level analytical framework. The Porter's view is not the only way to examine the competitiveness of the businesses (Ambastha & Momaya, 2004) besides traditional theories such as the Structure Conduct Performance (SPC) and the competency theories which provides a useful alternative to Porter's argument. The competency theories include the Resource Based Theory(RBT), the Dynamic Capabilities Theory (DCT) and the Knowledge Based Theory (KBT). A common characteristic of these theories that they give a decisive importance "to the firm's internal rather than to its external conditions for understanding its competitive market position" (Ambastha & Momaya, 2004). It is proposed to use the framework of assets, process and performances as proposed by Ambastha and Momaya (2004) and tested empirical data by Patlan-perez and Lara in 2012. Man et al. (2002) suggests three key factors for competitiveness of small and medium firms that have direct influence on the firm's performance: 1) internal factors, 2) environmental factors and 3) the influence of the entrepreneur. According to Man et al., (2002); in this paper we consider the dimensions related to the influence of the entrepreneur on competitiveness. According to the Patlan-perez and Lara, (2012); assets and processes have a direct positive relationship with competitive performance of the firm based on which dimensions analytical framework is developed.

Table 1 Dimensions and Constructs	
Dimensions	Constructs
Assest	Financial, Operational, Human Resources, Technological, Image & reputation
Process	Strategic Management Processes (Competencies, Competitive strategy, Flexibility, Adaptability) Human Resources Process (Design and deploy talents)
	Technological Processes (Innovation, Systems, IT)
	Operational Processes (Manufacturing, Design, Quality)
	Marketing Processes (Marketing, Managing relationships, Persuading power)

Source: Ambastha & Momaya (2004) and Patlan-Perez & Lara (2012)

3 Entrepreneurial Competencies

3.1 Influence of the entrepreneur

More importantly, for an SME, the process of achieving competitiveness is strongly influenced by the key players, highlighted as entrepreneurship factors in the framework. Even in the literature emphasizing the internal or external sources of competitiveness, these entrepreneurial factors are also stressed. For example, according Man et al. (2002), "basic role played by the owner/manager" is one of the major determinants of SME competitiveness because of the concentration of decision-making power in the owner/manager in an SME environment, consequently affecting the firm's overall strategy. This emphasis on the human factor is the key distinctive competence of small firms is the experience, knowledge, and skills of the owners and workers. Two of the critical success factors highlighted in the study of Mitchelmore and Rowley, (2010), are the "experience" and "goal orientation" of the small business owners. Mitchelmore and Rowley, (2010), also suggested that the "total competitiveness" is positively influenced by a founder who can pay attention to the detailed operations of the business when the business is small. In sum, all of these studies imply the influential role of the entrepreneur particularly in affecting the performance of the firm.

3.2 Entrepreneurial competencies

Entrepreneurial competencies are considered a higher level characteristics encompassing personality traits, skills and knowledge. Therefore, it can be seen as the total ability of the entrepreneur

to perform a role successfully. Entrepreneurial competencies are related with the performance of the firm and its competitiveness (Man et al., 2002), growth and success of business (Colombo & Grilli, 2005). The competencies are learnable; therefore, it is crucial to recognize the importance of competencies. Colombo & Grilli (2005) referred entrepreneurial competencies to the underlying characteristics such as traits, self-images, specific knowledge, motives, social roles and skills that lead to venture birth, survival its growth whereas Man et al. (2002) defined them as the entrepreneur's ability to successfully perform a job role. Thus, there is a general consensus that the competencies of entrepreneurs are possessed by those individuals who start and further develop their businesses. The small and medium businesses require skills and entrepreneurial competencies that are very much different than from larger organizations.

3.3 Competencies and SME success

The competencies of entrepreneurs make a business more successful and may lead towards its sustainable competitive advantage as well. Entrepreneurial competencies are related with the performance of the firm and its competitiveness (Man et al., 2002), growth and success of business (Colombo & Grilli, 2005). According to Mitchelmore and Rowley, (2010); the literature emphasizes different approaches to reveal the impact of competencies on performance. For instance, the entrepreneurs seek for better opportunities for their ventures and management competencies of entrepreneurs are related to formulate venture strategy that better fit with their businesses. Man et al. (2002) indicated ten areas of competencies of entrepreneurs which are innovative, learning, opportunity, analytical, human, relationship & commitment, strategic, operational and personal competencies. In terms of a causal relationship, behavior is closer to performance than other entrepreneurial characteristics, such as personality traits, intentions or motivations (Colombo & Grilli, 2005). According to Ambastha and Momaya (2004), competencies are seen as behavioral and observable but only partly intra psychic characteristics of an entrepreneur. Consequently, competencies are changeable and learnable, allowing intervention in terms of the selection and teaching of entrepreneurship. These natures allow entrepreneurial competencies to indicate the controllability characteristic of competitiveness

According to Mitchelmore and Rowley (2010), the literature emphasizes different approaches to reveal the impact of competencies on competitiveness. For instance, the entrepreneurs seek for better opportunities for their ventures and management competencies of entrepreneurs are related to formulate venture strategy that better fit with their businesses. Ambastha and Momaya (2004) referred competency to the quality of entrepreneur's action that contributes to venture outcomes. Colombo & Grilli (2005), clustered the entrepreneur's competencies identified through the literature according to three basic roles such as technical skills, entrepreneurial skills and managerial role. They found that entrepreneur's competencies in an attempt to categorize all of the identified competencies into relevant activities or behavior in an SME context. Consequently, six competency areas are grouped together as opportunity competencies, relationship competencies, conceptual competencies, organizing competencies, strategic competencies and commitment competencies which are the independent variables in proposed analytical framework.

4 Analytical Framework

As per the framework, the characteristics of entrepreneurial competencies can be investigated from a process perspective, reflecting the actual behavior of the entrepreneur. These aspects are fit into the long term orientated, dynamic and controllable natures of SME competitiveness. They can be considered as higher level characteristics, representing the ability of the entrepreneur to perform a job role successfully and encompassing personality traits, skills and knowledge. Formwork is designed answer the primary question of how competencies impacting competiveness by creating competitive scope and firm capabilities. The construct of competitive scope represents the perceived breadth for the firm to act. Previous studies have highlighted several measures to capture this construct, including technological sophistication, market heterogeneity, dynamism, market attractiveness, product/industry life cycle, environmental munificence, perceived opportunity, market demand, and competitive concentration (Colombo & Grilli, 2005; Ahmad, 2007, and Mitchelmore and Rowley, 2010). According to the Patlan-perez and Lara, (2012); business assets and processes have a direct positive relationship on competitive performance of the firm. According to the Mulatu, (2016), competitiveness can also be treated as a dependent, independent, or intermediary variable, depending on the perspectives from which

we approach the issue. Firm level competitiveness will be treated as dependent variable in this framework and asset competitiveness and process competitiveness will be the two major dimensions which will contribute to the overall firm level competitiveness. There are four measures have been identified to measure dimension of asset competiveness as; Financial Assets, Technological Assets, HR Capabilities, Image and Reputation as well as four measures to assess the competitiveness of the processes as Strategic Management Processes, Human Resources Process, Technological & Operational Processes and Marketing Processes.



Figure 2 Conceptual Model (Source: Author Compilied, 2016)

To investigate the relationship between entrepreneurial characteristics and SME's long term performance, the concept of competitiveness has adopted and incorporated with entrepreneurial competencies to provide a theoretical rationale. The model distinguishes between two dimensions of competitiveness, assets and process, and six areas of competencies of an entrepreneur with the scopes of creating competitiveness scope and capabilities of the firm. The use of the competency approach in particular provides us with a means of studying entrepreneurial characteristics as a kind of variable, which is less operationalized yet higher level and closer to performance. This should provide us with a more significant relationship than by using easily operationalized but lower level variables such as the entrepreneur's educational background, age, and experience.

As the theoretical framework focuses on the role of the entrepreneur in firm competitiveness, this will give better results with firms which are smaller in size and have a dominating entrepreneur, who is most likely to be the founder of the business. It is less readily applicable to SMEs without a dominating or founding entrepreneur, or to larger firms. This condition will have some limitations on the generalizability of the framework. However, upon modification, it can also be applied to the study of the strategic business unit for larger corporations. Another important factor of this framework is that an entrepreneur needs a balance between various competencies. Overemphasis on a few competency areas will not ensure the firm's long-term performance, which could be seen as a result of the moderating or interactive relationships of competencies and descendants of competencies. To illustrate, the lack of organizing competencies hinders the development of organizational capabilities, which in turn limits the use of strategic and commitment competencies

5 Conclusions

A major contribution of this theoretical framework is the organization of the existing theories and findings in entrepreneurial characteristics and firm performance around three entrepreneurial tasks, so

that further theoretical development and empirical studies can be made based on this framework. For instance, in terms of theoretical considerations, as it focuses on the central role of the entrepreneurial competencies in entrepreneurial tasks, it highlights the importance of the role of the entrepreneur in determining the firm's performance. Another implication from the framework is that an entrepreneur needs a balance between various competencies. Overemphasis on a few competency areas cannot ensure the firm's long term performance, which can be seen as a result of the moderating or interactive relationships of competencies and descendants of competencies. To illustrate, the lack of organizing competencies hinders the development of organizational capabilities, which in turn limits the use of strategic and commitment competencies

The model also calls for several related directions for empirical studies. First of all, while we have distinguished between six competency areas and other major constructs, we still need to identify which individual competencies lie in each area, as well as the appropriate variables within each construct. Further empirical studies in the form of qualitative methods are appropriate for investigating the competency areas in detail. It would also be of great value to carry out interindustry or cross-cultural comparisons of different competency areas, and look at how they affect other constructs of SME competitiveness.

References

- Abdullah, M. A., Manan, S. K. A. Small and Medium Enterprises and Their Financing Patterns: Evidence from Malaysia[J]. Journal of Economic Cooperation and Development, 2011, 32(2): 1-18
- [2] Ahmad N. A Cross-cultural Study of Entrepreneurial Competencies and Entrepreneurial Success in SMEs in Australia and Malaysia[M]. Doctoral thesis, University of Adelaide, 2007
- [3] Ajitabh A, Momaya K S. Competitiveness of Firms: Review of Theory, Frameworks and Models[J]. Singapore Management Review, 2003, 26(1): 45-45
- [4] Colombo, M. G. & Grilli, L. Founders Human Capital and the Growth of New Technology-based firms: A Competence-based View[M]. Research Policy, 2005, 34(6): 795-816
- [5] Man, T. W., Lau, T. & Chan, K. F. The Competitiveness of Small and Medium Enterprises: A Conceptualization with Focus on Entrepreneurial Competencies[J]. Journal of Business Venturing, 2002, 17(2): 123 -142
- [6] Man, T. W., Lau, T. & Snape, E. Entrepreneurial Competencies and the Performance of Small and Medium Enterprises: An Investigation through a Framework of Competitiveness[J]. Journal of Small Business & Entrepreneurship, 2008, 21(3): 257 -276
- [7] Mitchelmore, S., & Rowley, J. Entrepreneurial Competencies: A Literature Review and Development Agenda[J]. International Journal of Entrepreneurial Behaviour & Research, 2010, 16(2): 92 -111
- [8] Mulatu A. On the Concept of Competitiveness and its Usefulness for Policy[J]. Structural Change & Economic Dynamics, 2015(36): 50-62
- [9] Murths, T.P et al. Country Capabilities and the Strategic State: How National Political Institutions Affect MNC Strategies[J]. Strategic Management Journal, 2008(15): 113 -129
- [10] Nelson R. Recent Writings on Competitiveness: Boxing the Compass[J]. California Management Review, 1992, 34(2):127-137
- [11] Patlán-Pérez J, de Lara P V. Competitive Potential of Small Business to Attract Human Talent[J]. African Journal of Business Management, 2012, 6(38): 10273 -10284
- [12] Porter, M. The Competitive Advantage of Nations: With a New Introduction[J]. Macmillan Business, 1998, 7: 33-33
- [13] Rasmussen E, Mosey S, Wright M. The Transformation of Network Ties to Develop Entrepreneurial Competencies for University Spin-offs[J]. Entrepreneurship & Regional Development, 2015, 27(7-8): 430-457
- [14] Waheeduzzaman A.N., Ryans J.J. Definition, Perspectives, and Understanding of International Competitiveness: A Quest for a Common Ground[J]. Competitiveness Review: An International Business Journal, 1996, 6(2): 7-26