Leveraging on Entrepreneurial Competencies and Innovative Performance: Is Competitive Intelligence A Missing Link?

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ABSTRACT
Competitive intelligence is regarded as a significant focal point because it emphasises on understanding and measuring an organisation's external competitive environment and also the unstructured information that influence an organisation's strategic decision making. In fact, it also assists in creation of ideas and innovation. Yet, research on competitive intelligence practice among entrepreneurs is quite scanty. There is a need to investigate whether the impact of entrepreneurial competencies among the entrepreneurs on innovative performance will be influenced by the competitive intelligence. Thus, the intention of this study is to review the literature on entrepreneurial competencies, and innovative performance and to investigate whether competitive intelligence is a missing link in this proposed conceptual model within the Malaysian SME context.

Keywords: Competitive intelligence, entrepreneurial competencies, innovative performance, SME.

I INTRODUCTION

In recent years, the Malaysian SMEs sectors have multiplied in conformity to the global business development. The Malaysian Government acknowledged that SMEs sector is the nation's backbone in attracting investment and a catalyst in transforming Malaysia into a developed nation by 2020 (PEMANDU, 2012). The government has been aggressively imparting various funding and development programmes to intensify the SMEs productivity (PEMANDU, 2010). Nevertheless, the SME’s performance is below the expected level and contributes to only 32.5% of the country's GDP (Star Business, 2013). A deduction for this situation is that the Malaysian SMEs are declining in its competitiveness and innovativeness. A survey conducted by the Dhurakij Pundit University Research Centre (DPURC) in 2011 on five ASEAN countries on SME competitiveness has ranked Malaysia fourth among the five. Previously, Malaysia was leading among the five countries (Thongtep, 2012). The 2013-2014 Competitive Index chart ranked Malaysia at twenty-forth in terms of competitiveness and at thirty-second on the 2013 Global Innovation Index for innovativeness (Benavente, Dutta, Lanvin, & Wunsch-Vincent, 2013; World Economic Forum, 2013). From these rankings it is apparent that the Malaysian SMEs must enhance its innovativeness to be able to sustain in today's dynamic global economy.

Today, SMEs survival depends highly on their innovativeness, creativity, technology, knowledge, competitivenes and entrepreneurship (Montaño, Ortega, Corona, & Hernández, 2011). In the Western and East Asia countries, competitive intelligence (CI) is being heavily utilised by large and small businesses (Adidam, Banerjee, & Shukla, 2012) and has proven to be an important source of competitive advantage (Smith & Kassou, 2008; Smith, Wright & Pickton, 2010; Wright, 2011). Furthermore, the value of the intelligence produced by CI can be measured for accuracy, usability, relevance, readiness and timeliness (Bose,2008). A review of the literature also shows there is a positive relationship between CI and innovative performance in large businesses but it also indicates that CI leads to the creation of innovativeness in small businesses (Hussein, Farzaneh, & Amiri, 2011; Tanev & Bailleti, 2008). Hence, to compete effectively, SME must practice CI in their day-to-day business activities. However, far too little research is conducted on entrepreneurial competencies and CI in the SME sector. Given the fact that CI is important to the SME's competitiveness and innovativeness, this concept paper argues that it is essential to investigate the role of CI as a missing link between the entrepreneurs' entrepreneurial competencies and innovative behaviour in their business practices. Therefore, the purpose of this paper is to review the literature and subsequently propose a linkage between entrepreneurial competencies on one hand and competitive intelligence and innovative performance on the other, among the Malaysian SMEs.
II LITERATURE REVIEW

A. Entrepreneurial Competencies

Frey and Ruppert (2013) categorise competencies as belonging either to personal or organisation categories. Personal competencies are the abilities acquired by individuals such as knowledge, skills, abilities, experience, and personality, whereas organisation competencies are the embedded processes and structures that inhabit within an organisation even when the individuals leave the organisation. These two types of categories are not exclusively independent because all the personal techniques in the organisation process or the work culture can be embedded in the organisation. According to Spencer and Spencer (1993) competency is driven by the need to achieve a superior performance and acquire economic gain and business success.

For entrepreneurial competencies (EC), it has been identified as a specific group of competencies that are relevant to be implemented for a successful entrepreneurship (Mitchelmore & Rowley, 2010). Man, Lau, and Chan (2002) clarify that EC are both managerial and entrepreneurial competencies. Man et al. (2002) view is that the EC is the total ability package of an entrepreneur to perform the job role successfully and to also transform the businesses. Other than the entrepreneurial and managerial competencies, an entrepreneur needs to also master the technical functional role (Camuffo, Gerli, & Paolo, 2012). The EC constructs are from Man (2001) and (Ahmad, 2007) which are used to build the framework for this conceptual paper. They are opportunity, strategic, relationship, conceptual and technical competencies all of which influence directly or indirectly to the CI process.

According to Man et al. (2002) an entrepreneur who encompasses all these roles will impact positively on the entrepreneurial decisions and actions that directly affect the business strategy and capabilities which include innovative ability (new products, services, and processes), quality (maintain high quality and image), cost-effectiveness (competitive price) and organicity (flexible organisation structure and system to achieve production speed and responsiveness). Furthermore, by understanding the EC, the audience can appreciate the similarity of the EC and the competencies needed to run a successful CI program.

A study by Sarasvathy, Simon, and Lave (1998) shows that entrepreneurs have specific characteristics compared to other groups of individuals especially in the processing, collecting and using of information and the remedy actions taken in uncertain conditions due to the external environment (McGee & Sawyer, 2003). Their researches make an important observation that is very relevant to CI. According to them, SMEs decision makers source for information from multiple sources and monitoring the external environment frequently. Marcati et al. (2008) also notes that with the SMEs the decision making process is mostly centralised and the entrepreneur’s competencies play a strong role in it. In CI, transforming information into intelligence, requires the individual to be able to plan, collect, interpret, distribute and give feedback (Ranjan, 2009). Muller (2002) has identified very specific skills required to conduct competitive intelligence which are similar to entrepreneurial competencies.

A study by Ahmad, Ramayah, Wilson, and Kummerow (2010) on Malaysian SMEs in the service sector confirmed that EC are also strong predictors of business success. The result validates Gibb (2005) argument that SMEs competitive advantage is achieved and sustained by the ability of the entrepreneur and not the size of the organisation. The study by Ahmad et al. (2010) clearly explains that entrepreneurs are capable in minimising the negative impact of the business environment if they always equip themselves with the necessary competencies.

B. Competitive Intelligence

To understand what is CI, one needs to understand the definition of intelligence. According to Liebowitz (2006), intelligence refers to the collective value-added benefits obtained from the intangible assets such as knowledge from the employees, management, stakeholders, and customers. Knowledge and experience go hand in hand in developing intelligence. According to Kahaner (1996) and Drucker (1988), information is factual and intelligence is information that has been screened, distilled and analysed. Thus, CI is a product and also a process (Priporac, Gastoris, & Zacharis, 2005). As a process, CI has several specific steps to be followed.

CI process includes the constructs of planning, collection, analysis, communication, and organisational awareness for decision makers in deciding action (Bose, 2008; Saayman et al., 2008; Strauss & du Toit, 2010). CI is a product when the intelligence produced assists the decision makers in formulating a strategy and in making a choice (Adidam et al., 2012). In short, CI is both a process and a product when an organisation gathers actionable information about the business environment and utilises the intelligence in the decision making practice to improve the organisation's performance. It is an ongoing process of analysing data and information into intelligence.
by applying psychological techniques and new technology to develop competitive edge (Fuld, 2010).

Many literature argues that CI is only popular among the larger organisations but there are several empirical evidences that CI is applied by SMEs to improve the ability to assess the risk awareness and risk prevention (Zha & Chen, 2009). Canadian and Iranian small businesses are also involved in CI to increase their innovative performance (Hussein et al., 2011; Tanev & Bailetti, 2008; Tarrafi & Molz, 2006) and regards CI as crucial to their business success. SMEs in the European Union also have direct support from their governments to support the use of CI by raising awareness campaign and assisting in skill development (Larivet, 2009; Smith et al., 2010). For SMEs to be able to be competitive and innovative, Wright, Bisson, and Duffy (2012) advocate SMEs to invest and perform in CI.

C. Innovative Performance

Innovation is defined as the adoption of an idea or behaviour that is new to an organisation (Daft, 1978; Damanpour & Evan, 1984). Innovation is a process that includes generation, development and implementation of new ideas or behaviours. Innovation can either be an adoption or an adaptation of new information and practices which lead to new ideas to improvise new products, services, processes and procedures (Bates & Khasawneh, 2005). The definition of innovation has evolved into different categories which include products, production methods and technologies, markets, services and organisational structure. An assumption is made that the source of information varies between different types of innovation (Freel & de Jong, 2009; Tödtling, Lehner, & Kaufmann, 2009). Innovation can either be radical which is revolutionary and original (Green, Gavin, & Aiman-Smith, 1995) or incremental which are small improvements on an established process, products or services. Innovation is practiced by all types of businesses regardless of size because it is proven that organisations that are innovative has higher profits and market share (Prajogo & Ahmed, 2006). For the purpose of this conceptual paper, innovative performance is defined as incremental product, service and process innovation because SME’s innovation activities are more likely to be ad hoc or project driven (Hoffman, Parejo, Bessant, & Perren, 1998).

III THEORETICAL FRAMEWORK

Based on the afore-mentioned literature review, the proposed framework is depicted in Figure 1. The entrepreneurial competencies constructs are represented by opportunity competency, relationship competency, conceptual competency, strategic competency and technical competency and viewed as possible probabilistic estimate of competitive intelligence and innovative performance. Based on the above literature review, the following propositions are anticipated.

Given the fact that entrepreneurial competencies have similarities with competitive intelligence skills, it can be anticipated that there is a positive relationship between an entrepreneur with high EC and CI. CI is also empirically proven to increase innovative performance in SMEs.

Proposition 1: There is a positive relationship between an entrepreneurial competencies and competitive intelligence.

Proposition 2: There is a positive relationship between competitive intelligence and innovative performance.

Proposition 3: Competitive intelligence mediates the relationship between entrepreneurial competencies and innovative performance.

![Figure 1. Proposed Conceptual Framework.](image)

IV METHODOLOGY

The quantitative empirical method will be utilised in this research and data will be collected through a self-administered questionnaires which are targeted at the small and medium enterprises (SME) in Malaysia. This is a purposive sampling and the respondents are Malaysian entrepreneurs who are also SME business owners that have been in operation for more than three years. Research has shown that small organisations may involve in innovation after that period of time (Johannessen, Dolva, & Kolvereid, 1997). This study is classified as a cross-sectional study because it is carried out only once at one point of time in an uncontrolled setting. Only active current SMEs is considered to reflect the actual present-day SME environment. Therefore, this study uses the latest updated database provided by the SMECorp.
Prior to conducting quantitative data collection, preliminary interview will be carried out among 10-15 SMEs to obtain their perception on competitive intelligence and innovation. This follows Morse and Richards (2002) who argue that employing a qualitative approach is appropriate if the purpose is to learn from the participants in a setting or process the way they experience it, the meaning they put on it, and how they interpret what they experience. Data obtained from these preliminary interviews will be used to refine the survey instrument based on the local context.

A pretesting will also be conducted to test the content validity and relevance of the survey instrument. The survey instrument will be in dual languages as many Malaysian SMEs owners are more comfortable in answering surveys in Bahasa Malaysia. The translation in this study, will use the extended parallel translation procedure known as collaborative translation. This method assists in achieving equivalence in meaning and capture the intended sense of statement (Douglas & Craig, 2007; Limpanitgul & Robson, 2009; Saunders, Lewis, & Thornhill, 2007).

The model will be tested by means of the Structural Equation Modeling (SEM) procedure using SmartPLS. Prior to testing the model, the goodness of measure for all constructs will be examined in order to test for their validity and reliability. The items’ loadings for reflective constructs must meet the cut-off value of 0.5 as recommended by Hair, Black, Babin, and Anderson (2010). To measure the convergent validity, Cronbach's alphas, composite reliability (CR) and average variance extracted (AVE) must be approximately 0.70, 0.70 and 0.50 respectively because these are the acceptable value in many literature (Fornell & Larcker, 1987). Furthermore, Götz, Liehr-Gobbers, and Krafft (2010) argued that CR is a closer approximation of internal consistency compared to the Cronbach’s alpha. Thus, particular attention shall be given to AVE and CR when examining for validity and reliability of the constructs.

V CONCLUSION
Entrepreneurship is indeed an important source for Malaysia economic success. The success of the Malaysian SMEs is very much affected by their entrepreneurial competencies in applying competitive intelligence to increase their innovative performance. Although many studies postulate that entrepreneurial competencies give impact on innovative performance, the intervening role of competitive intelligence will enhance further these relationships. Furthermore, study on CI among the SME is scanty. Nevertheless, there is a consensus that entrepreneurial competencies is a crucial factor in engaging competitive intelligence. On the whole, a review of above-mentioned literature indicates that competitive intelligence boosts innovative performance. As a result, a conceptual model stipulates that competitive intelligence is a powerful tool that bridges the relationship between entrepreneurial competencies and innovative performance among SMEs in Malaysia.

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