

Competitive Intelligence Among SMEs: Assessing the Role of Entrepreneurial Attitude Orientation on Innovation Performance

Ainul Abdul Mohsin, Hasliza Abdul Halim, and Noor Haslina Ahmad

Abstract Competitive intelligence is regarded as a significant topic by many practitioners and academics due to its importance in shaping the organization's strategic decision making. Competitive intelligence is key in today's unstable global environment because it leads to creation of ideas and innovation. Two popular areas of study on competitive intelligence are defining what competitive intelligence is and assessment of the organization's intelligence capability. However, research on competitive intelligence as the foundation of strategic management is very much lacking. Furthermore, research on competitive intelligence practice among the SMEs are also scanty. There is a need to investigate the SMEs attitudinal factor motivation for competitive intelligence because these might influence the development of their attitude towards competitive intelligence in their daily business activities. Thus, the intention of this study is to review the literature on entrepreneurial attitude, competitive intelligence and innovative performance and to propose a conceptual model linking these three variables within the Malaysian SME context.

Keywords Competitive intelligence • Entrepreneurial attitude orientation • Innovative performance • SMEs • Entrepreneurship

1 Introduction

In recent years, the Malaysian SMEs sectors have soared in accordance with the global business development. The Malaysian government has always acknowledged the SMEs as the nation's backbone in attracting investment and also as a catalyst in transforming Malaysia into a developed nation by 2020 (PEMANDU 2012). The government has continuously provided various support which includes learning and development programs, funding, matching grants, and outreach programs to escalate the SMEs productivity (PEMANDU 2010).

A.A. Mohsin (✉) • H.A. Halim • N.H. Ahmad
School of Management, Universiti Sains Malaysia, Pulau Pinang, Malaysia
e-mail: ainabdulmohsin@hotmail.com; haslizahalim@usm.my; hazlina@usm.my

Nevertheless, the SME's performance is below the expected level and contributes to only 32.5 % of the country's GDP (Star Business 2013). One of the reasons, for this situation to prevail is that the Malaysian SMEs are falling behind in competitiveness and innovativeness. A survey conducted by the Dhurakij Pundit University Research Centre (DPURC) in 2011 on five ASEAN countries SME competitiveness, ranked Malaysia fourth among the five. Previously, Malaysia was leading among the five countries (Thongtep 2012).

The 2014–2015 Competitive Index chart ranked Malaysia at 20th in terms of competitiveness and at 32nd on the 2013 Global Innovation Index for innovativeness (Benavente et al. 2013; Schwab 2013). From these rankings it is obvious that the Malaysian SMEs must invest in innovation to stay relevant in today's global economy. Thus, the SMEs survival and progress today depend highly on their innovativeness, creativity, technology, knowledge, competitiveness and entrepreneurship (Montaño et al. 2011).

In the western hemisphere and East Asia, Competitive Intelligence (CI) is being heavily utilized by large and smaller organizations (Adidam et al. 2012; Priporas et al. 2005) and has proven to be an important source of competitive advantage for them (Smith and Kossou 2008; Smith et al. 2010; Wright 2010).

The most common benefit of CI is the ability to build information profiles that help the organizations to identify the competitor's strengths, weaknesses, strategies, objectives, market positioning and counterintelligence pattern (Bose 2008). Furthermore, the value of the intelligence produced can be measured for accuracy, usability, relevance, readiness and timeliness (Bose 2008). A review of the literature also shows a positive relationship between CI and innovative performance and also indicates that CI leads to the creation of innovativeness in small businesses (Tanev and Bailetti 2008; Hussein et al. 2011). Hence, to compete effectively, SME must practice CI in their day-to-day business activities. However, far too little researches have centered on the entrepreneur's attitude on CI.

Given the fact that CI is important to the SMEs competitiveness and innovativeness, this concept paper argues that it is essential to understand the attitude of the entrepreneurs that practice CI which leads them to innovative behavior in their business practices. Therefore, the purpose of this paper is to review the literature and subsequently propose a linkage between entrepreneurial attitude on one hand and competitive intelligence and innovative performance on the other among the Malaysian SMEs.

2 Literature Review

2.1 Entrepreneurial Attitude Orientation

Attitude is an evaluation of an object of thought. Attitude objects can comprise anything a person may hold in mind, ranging from the mundane to the abstract,

including things, people, groups, and ideas (Bohner and Dickel 2011). Most researchers agree on these core definitions but there are more complex models on attitude and they vary considerably. Attitude exists at the general level and at a very specific level for many objects and because of this, attitude needs to be matched by measurement specificity (Ajzen 1988; Ajzen and Madden 1986). Robinson et al. (1991) summarize that attitude towards achievement in general (general object) is not the same as attitude towards achievement in an entrepreneurial setting (specific object). Thus, the Entrepreneurial Attitude Orientation (EAO) incorporated an attitude scale to predict entrepreneurial activity (Robinson et al. 1991). EAO is more domain-specific and increases the correlation with the actual behavior and reduces unexplained variability (Gibson et al. 2010). Furthermore, EAO has been tested for validity and the reliability in different social and cultural situations (Miao 2012).

The EAO model is based on four theories which are needs for achievement (McClelland 1961), innovation (Kirton 1984), personal control (Levenson 1973), and self esteem (Crandall 1973). In EAO, the interpretation of achievement, innovation, personal control and self esteem can be interpreted as the business accomplishment and undertakings, creativity in handling a business, self-influence over the business destiny and the self-confidence in running a business. In this study, attitude approach is applied because CI activities is iterative and cumulative and varies from one person to another. Fishbein and Ajzen (1977) suggests that the attitudinal factor signals a person's judgmental attitude towards a behavior and a normative belief signal a person's perceived social pressures to act or not to act on a specific behavior. Thus, EAO may envisage an entrepreneur behavior towards CI.

2.2 Innovative Performance

In today's innovation-led economy, all organizations in the world are forced to compete with one another for survival. Innovation is essential in achieving competitive edge in the business world since the 1930s. The dynamic technology development has become an enabling factor for many organizations and nations in improving their efficiency and productivity. Innovation assists in economic growth and the Malaysian Third Industrial Plan is committed to focus innovation among the SMEs either in manufacturing or services. The ability to innovate and continuously competent to upgrade the products and services are important in formatting the SMEs competitiveness (Varis and Littunen 2010).

Innovation is defined as the adoption of an idea or behavior that is new to an organization (Daft 1978; Damanpour and Evan 1984). The adoption of innovation is described as a process that includes generation, development and implementation of new ideas or behaviors. Innovation is not just an adoption but also an adaptation of new information and practices which lead to the ability to create new ideas and apply them to improvise new products, services, processes and procedures (Bates and Khasaweh 2005).

The definition of innovation has evolved into different categories which include products, production methods and technologies, markets, services and organizational structure and an assumption is made that the source of information varies between different types of innovation (Tödtling et al. 2009; Freel and de Jong 2009). Innovation can either be radical which is revolutionary and original (Green et al. 1995) or incremental which are small improvements on an established process, products or services. A thorough assessment on incremental innovations can be defined as expansions or improvements of the current products, services, processes, technical or administrative conditions. Incremental innovation will not cause any major revolutionization from the current circumstances but radical innovations in products, services, and processes will cause foremost transformation and alteration to the product, services or process extensively. Innovation adapted or adopted by organizations may differ in their life stages. An organization innovation may be at the initial stage or at the execution stage which are factors that influence an organization's innovation behavior. Nevertheless, innovation is practiced by all types of organizations regardless of size because it is proven that organizations that are innovative has higher profits and market share (Prajogo and 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 et al. 1998). Furthermore, SMEs are likely to focus on incremental innovation as posit by Oke et al. (2007).

2.3 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 analyzed.

Interestingly, CI is a product and also a process (Priporas et al. 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 (Strauss and du Toit 2010; Saayman et al. 2008; Bose 2008). 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 organization gathers actionable information about the business environment and utilizes the intelligence in the decision making practice to improve the organization's performance. It is an ongoing process of analyzing 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 organizations 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 and Chen 2009). Canadian and Iranian small businesses are also involved in CI to increase their innovative performance (Tanev and Bailetti 2008; Hussein et al. 2011; Tarraf and 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 et al. (2012) advocate SMEs to invest and perform in CI. Based on the above literature review, theoretically an entrepreneur with high score of EAO is highly likely to be innovative as established by the EAO model constructs. Entrepreneur with high score of EAO may also engage in CI based on the high necessity to be creative in running and to accomplish business undertakings. In addition, competitive intelligence is also proven to increase innovative performance. Thus, EAO and CI is positively related to innovation.

3 Theoretical Framework

Based on the afore-mentioned literature review, the proposed framework is depicted in Fig. 1. Entrepreneurial Attitude Orientation constructs are represented by needs for achievement, innovation, personal control, and self esteem and viewed as possible predictors of competitive intelligence application and innovative performance. Competitive intelligence is also a predictor of innovative performance.

Based on the above literature review, the following propositions are anticipated.

Given the role played by attitudinal factor which can signal a person's judgmental attitude towards a behavior, it can be anticipated that there will be a positive relationship between an entrepreneur with high EAO score and CI.

CI is also empirically proven to increase innovative performance in SMEs. In view of the fact that EAO model is also based on innovation theory, it is anticipated that an entrepreneur with high EAO score will experience innovative performance.

Proposition 1: There will be a positive relationship between an entrepreneur with high EAO score and CI.

Proposition 2: There will be a positive relationship between CI and innovative performance.

Proposition 3: There will be a positive relationship between an entrepreneur with high EAO score and innovative performance.

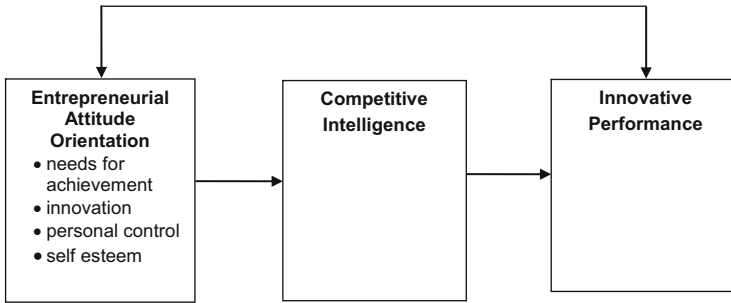


Fig. 1 Proposed conceptual framework

4 Conclusion

Entrepreneurship is indeed an important source for Malaysia economic success. The success of the Malaysian SMEs is very much affected by their attitude in engaging new behaviors to experience innovative performance. There is a consensus that the entrepreneur attitude is the decisive factor in engaging competitive intelligence. As Malaysia aspires to become a developed country, it is important that it increase its innovativeness to be at par with other countries. Nevertheless, a dedicated and a true entrepreneur will engaged in competitive intelligence to achieve innovative behavior. A review of prior literature indicates that competitive intelligence boosts innovative performance. Therefore, it is important for Malaysia to encourage its SME to be accustomed and involved in competitive intelligence. However, before any implementation is executed, it is wise to start with an awareness program. As a result, a conceptual model has been developed where EAO has been proposed as a significant predictor of competitive intelligence and innovative performance.

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