The Growth of Innovative Performance among SMEs: Leveraging on Organisational Culture and Innovative Human Capital

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Abstract

The concept of innovation is becoming very pervasive and the Malaysian government has embarked on numerous approaches to promote innovation. One of the approaches is to foster the culture of innovation in the organisation particularly the small and medium enterprises (SMEs). SMEs need to enhance their innovative capabilities. Unfortunately, the concept of innovation as a culture to promote innovative human capital among the SMEs is still in its infancy. Many SMEs do not realize that a bright future of SMEs is portrayed by having the power to embed innovation in their organisational culture which may nurture innovative human capital. Therefore, the purpose of this paper is to examine the influence of organisational culture on innovative human capital by leveraging on the innovative human capital. This study adds to the present literature by explaining conceptually the linkages between organizational culture on innovative human capital as well as innovative performance. It provides a better understanding on the specific factors that nurture the innovation culture and human capital which are crucial for the venture creation.

Keyword: Innovative performance, organisational culture, human capital, small and medium enterprises (SMEs)

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1. Introduction

Malaysia government has started to set the foundation for the knowledge-based economy in the mid-1990s, among others, with the launching of the National IT Agenda and the Multimedia Super Corridor (MSC). The knowledge-based economy will provide the platform to sustain a rapid rate of economic growth and enhance international competitiveness so as to achieve the objectives of Vision 2020 (National Economic Advisory, 2010). As reported in the Economic Transformation Programme Report, Malaysia’s strategic plan to transform its economy focuses on strengthening and escalating culture of innovation and the development of innovative human capital (National Economic Advisory, 2010). As clearly highlighted by the Prime Minister of Malaysia, Dato Seri Najib Tun Razak, Malaysia aspires to reach the highest standards with regard to the skills, knowledge and abilities of its human capital as well as to foster entrepreneurial spirit especially in the innovation-centred economy.

In line with this aspiration, Malaysian government also has also recognized that SMEs act as a catalyst to inject investment and transform Malaysia into a developed nation by 2020. In fact, SMEs in Malaysia are playing a significant contribution in the economic development which is driven predominantly by the services sector of 86.6% followed by manufacturing with 7.2% and 6.2% from agriculture sector (Department of Statistic Malaysia, 2008). Nevertheless, the contribution of Malaysian SME to the national Gross Domestic Product (GDP) is relatively low as compared to other countries as shown in Figure 1 (Department of Statistics Malaysia, 2011).

![Figure 1: SME contribution to GDP in Percentage](image-url)

Source: Department of Statistics Malaysia (2011)
Figure 1 shows that Japan was the highest among other countries with 55% contribution to GDP, followed by South Korea and Hong Kong with 49% each. Unfortunately, Malaysia was placed at the last position with only 31% contribution to GDP.

According to Lim (2012), SME businesses form a very large part of Malaysia’s economy and this is supported by the Tenth Malaysia Plan which reported that 99.2% or 518,996 of total established businesses in Malaysia are SMEs and only 0.8% or 4,136 are large establishments (EPU, 2010). Nevertheless, the SMEs contributions were low as depicted in Figure 1. This scenario is very interesting and presumably the main factor may be due to the businesses context in Malaysia. In this case, the competition in the industry is very high which forces the companies to differentiate their products and services as compared to their competitors. The competition requires the companies to offer facilitating and supporting products innovation along with the core business (Aho et al., 2012). Those who offered the most attractive products and services will survive and gain bigger market share. And those who failed to capture the needs of the market will suffer and be left behind. In line with this, SMEs are considered as a backbone of the national economy (Muhammad-Khalique et al., 2011) and to strengthen the performance and competitiveness, SMEs need to enhance their innovative capabilities. Innovation and competitive advantage have deep roots in the creation of something new, different and unique (Bessant, 2002). As a result Malaysian government has put extra effort to nurture the innovativeness among the SMEs especially to move Malaysia into the innovation-led economy.

Shafirad & Atei (2012) put forward that creativity and innovation are crucial to encourage innovation and this situation is driven by the culture of the organisations. It implies that organisational culture is the core of innovation. What would an innovative organizational look like? It would be the one in which entrepreneurs are motivated and confident enough to continually try new things out. To this end, an entrepreneur would become innovative and be equipped with the right types of knowledge, skills and abilities to be effectively generated and implemented new ideas. However, innovation will only flourish if the work environment is supportive of these efforts (Kaasa & Vadi, 2008). This indicates that the SMEs must be given opportunities to explore, investigate and experiment, so that they can produce creative products and services to organisation (Fauzi et al., 2010).
In this manner, innovation is crucial for the survival of business organization, government agencies and institutions (Wan Khairuzzaman & Abdmajid, 2007). In such a way as to compete and sustain locally and globally, organisations should have the structures and processes to allow smooth innovation to prosper. Managing innovation is about creating a culture where new ideas are generated, valued and supported (Streets & Boundary, 2004). Achieving such an “innovation performance” status is not an easy task without a proper road map or strategies being outlined and put into practice (Raduan et al. 2009). In this sense organizational culture may affect innovation and can make it pervasive or rare in different parts of organizations (Sharifirad & Ataei, 2012). In fact, organisational culture may stimulate or kill creativity and innovation if the culture is not properly nurtured (Gandotra, 2010). In this sense, organisational culture affects the innovativeness and the creativity of the human capital in order to achieve innovative performance. In the light of the above, the primary objective of this study is to investigate conceptually the relationship between organization culture and innovative performance among SMEs in Malaysia which is mediated by innovative human capital. This paper is organised in the following manner. The next section reviews the literature on organisational culture, human capital and innovation. It also develops the hypotheses. The third section presents the methods used. The final section presents the discussion, limitations and conclusions.

2. Literature Review

2.1 Innovative Performance

Weerawardena et al. (2006) state that innovation is critical in securing sustainable competitive advantage in the marketplace as well as to increase creativity and innovation in product lines, management practices and production processes (Damanpour, 1991: Parnaby, 1991). According to Lokshin et al., (2009) in order to remain relevant and to compete with other organization, management must focus on both end of the process which are generating creative ideas frequently and utilizing its innovation process to realize the potential value of those ideas. When an organization chooses to pursue innovation as a way of success, the starting point is to develop and publish its definition of innovation (Chen & Huang, 2009). Innovation is the generating of creative ideas and a process of taking those ideas to market or to usefulness (Ryan, 2002).
A successful organization that focuses on innovation is looking for achievements in which innovation shows up in the quality and quantity of ideas and the efficiency and effectiveness of implementation of those ideas. These two parameters are independent, but when combined they form the definition of innovative performance.

In Malaysia, being innovative is imperative because the economic development depends on the industrial growth and is also the driving force for social development (Zeng, Xie, & Tam, 2010) and businesses are moving away from focusing on cost reduction and are directed towards innovation for long term success. In this respect, innovativeness is required as an organization’s tendency to support new ideas, novelty, experimentation, and creative processes that may result in new products, services or technological processes, as well as the pursuit of creative, unusual, or new solutions to problems (Madhousi et al., 2011; Certo et al., 2009). Many studies on innovation concentrate on the intra-organisation elements which scrutinise the organisational structure, culture, strategic and managerial concepts when determine the innovative performance (Madhousi et al., 2011; Zeng et al., 2010). These studies suggest that these intra-organisational elements are the resources and capabilities that facilitate the organisation to keep track of the external environment and adjust to the changes and influence the innovation performance. This also indicates that the development of new products and process involves extensive and intensive organizational culture. Organizations with successful innovation tend to rely on organization cultures which are the actions and behavior of employees (Madhousi et al., 2011).

2.2 Organisational Culture

The organization culture propels the organization towards establishment of innovation. According to Martins & Terblanche (2003), organization culture has an influence on the degree where innovation and creativity are stimulated in an organization. An organization’s culture is revealed in the actions and behavior of employees. It is the shared social knowledge within an organization regarding the rules, norms, and values that form the attitude and behaviors of its employees (Colquitt et al., 2009). This explanation highlights three critical points. First, organization culture can be developed from the interactions of employees.
Second, it illustrates the rules, norms, and values within an organization and lastly, it creates and strengthens the leaders’ attitudes through a system of controls over employees (Colquitt et al., 2009). Organizations attempt to select candidates who are likely to share their values and possess similar values with the organizations. This implies that innovative individuals can encourage innovativeness in the organizations which can be fostered by suitable organisational culture (Ancona & Chong, 1996; Haugen, 2010).

Haugen (2010) posits that organization culture is related to the subjective aspects of the organizations. This is because organization culture involves with some subtle and tacit concepts such as values and norms which are not easily identified. Despite of these, the effects and results of them are crucial and evidently injected into the workplace climate. In fact, the impact of culture on organisational performance is very crucial. Denison et al. (2003) describe that from the context of North America, Europe and Asia, the relationship between culture and performance indicates positive connection. Previous study has discussed widely on the significant of specific cultural traits as the predictor to the performance. However, the majority of literatures on culture focus on examining the direct effect of specific cultural traits on organisational performance (Denison, 1990, 2000; Denison et al., 2000; Denison & Mishra, 1995). Therefore, there is a little understanding of how these traits may impact the innovation performance. In this context, four main streams of organisational culture namely involvement, consistency, adaptability, and mission are discussed as below.

2.2.1 Involvement

Organization culture becomes more effective if organizations empower their employees, enhance the teams work, and strengthen human embeddedness at all levels. By doing this, all level of employees can feel a sense of belonging to their organisations and at the same time portray their effectiveness and commitment. In turn, this situation will affect their works which is directly connected to the innovation performance (Ehtesham et al., 2011). According to Yilmaz & Ergun, 2008, there are three factors of these traits that is empowerment, team capability and human embeddedness. Empowerment can bring more participation in organization and participative decision making increases involvement and commitment which lead to innovation (Sharifirad & Atei, 2011). In this respect, empowerment can be one of the parameter of structures which can impact creativity and innovation.
In contrast, team capability demonstrates teams' interaction and interface which may influence innovative performance. Human embeddedness may trigger the deployment of skills in order to nurture creative capability.

2.2.2 Adaptability

Adaptability on the other hand is the ability of the organizations to scan the external environment and respond to the ever changing need of its customers and other stakeholders (Ehtesan et al., 2011; Sharifirad & Atei, 2011). Adaptability attributes consist of understanding the customer needs, addressing to their requests, organizational learning and experience in creating changes. They are continuously changing the system so that they can enhance the organizations’ ability to provide value for their customers (Stalk, 1988; Ehtesan et al., 2011). Innovation is known as an adoption of a new idea or behavior towards organizations. The innovation can be known as a product or a service, an organization process or administrative program, a technology or a policy to organization members. In fact market orientation which involved with developing something new or make a different in market conditions may be viewed as innovation (Jaworski & Kohli, 1993). According to Kotter & Heskett (1992) an innovation is a learning culture to nurture and foster an innovation as well as gaining knowledge. It is very important for innovation because it enables an organization to adapt from the changing environment. From organizational learning perspectives, it can be seen as a critical catalyst for creativity and innovation since it supports inquiry, risk taking and experimentation which indirectly may impact the innovative performance.

2.2.3 Consistency

The strong cultures that are highly consistent, well coordinated, and well integrated will drive organization in effective way which refers to the level of cohesion, integration or agreement around values and norms. Behavior is rooted in a set of core value (Ehtesham et al., 2011). In addition, different functions and units of the organizations are able to work together to achieve common goals (Pirayeh et al., 2011). Consistency is a powerful source of stability and internal integration. Normally, the trait is measured with three indexes which are core values, agreement and coordination, and integration (Denison et al., 2000).
The consistent trait within the culture will enable the employees and the organization to respond in a predictable manner. As described previously, consistency represents value alignment and internal integration in organizations and Kotra et al. (2011), highlight the positive impact that consistency has on execution and performance in the organizations. Indeed, they also argue that consistency may give positively or negatively impact on performance where it is depends on whether it is coupled with strengths or weaknesses in other areas of culture in relation to innovation performance.

2.2.4 Mission

Mission trait defines successful organizations which have a clear sense of purpose and direction where it shapes and form the goals as well as the strategic objectives. Besides, mission is also expressed as a vision of how an organization will drives to the future (Hamel & Prahalad, 1994; Sharifirad & Atei, 2011; Ehtesham et al., 2011). The attributes of mission are vision, strategic direction and intent, and goals and objectives. A clear purpose of vision is described as conductive to teams associated with the implementation of innovation. Team objectives are shared and agreed upon before implementing an integrated care pathway or an evidence retrieval system. Task orientation in service of learning may contribute to organizational effectiveness and innovative team climate directly can enhance innovation performance. Quinn (1988) and Sharifirad & Atei (2011) believes that organizational with a long term strategic horizon is more likely to innovate. Martin & Terblanche (2003) posit that employees who understand the mission and vision are able to act creatively and innovatively. Organizational goals and objectives reflect the priorities and values of organizations which may promote innovation.

2.3 Innovative Human Capital

According to Edvinsson & Malone (1997), human capital encompasses knowledge, skills, innovativeness and the ability to perform tasks. In general, human capital could be explained from three main dimensions namely knowledge, abilities and behaviours. Knowledge refer to the knowledge of the employees possess about things and to perform their tasks excellently (Martin-de-Castro et al., 2011).
Abilities on the other hand refers to the knowhow and the way of doing thing such as individual learning, communication, leadership and collaboration-team work and finally is behaviours which represent knowledge about the incipient sources that lead individuals to do their tasks (Martin-de-Castro et al., 2011). As such, to achieve innovative performance, SMEs must possess innovative human capital. In this sense, innovative human capital comprises human resources with values and uniqueness in the organization.

Cabello-Medina et al. (2011), and Ripolles & Blesa (2005) advocate that innovative human capital must embrace distinctiveness and uniqueness than competitor, skills to creating innovation and the first to introduce innovation than others. On the same note, De Jong & Wennekers (2008) posit that values, uniqueness, creativity, innovativeness and proactiveness are the most pertinent features for innovation. In addition, innovative human capital also embodies factors related to the resources of the organisations which are irreplaceable such as competencies, attitude, aptitude, knowhow, tacit knowledge and personal network (Vashishthha et al., 2012). From this onset, innovative human capital is an important element that promotes innovation and progress within the organization.

2.4 Organisational Culture and Innovative Human Capital

Many of previous studies looked into the relationship between organisational culture and intellectual capital (Lai, 2002; Wang, 2012) in which they posit that a high-efficiency, supportive culture lead to enhancement of intellectual capital i.e. human capital, innovation capital and process capital. These assumptions raise issues on which characteristics of culture that promotes knowledge which enable innovation. This is because creative people must deal with novel, fresh and ambiguous problems, they tend to display strong, valuable and irreplaceable knowledge and skills (Mumford, 2000). These conditions can only be produced by innovative human capital, which is positively triggered by positive organisational culture (Ehtesham et al., 2011). Employees with abilities are willing to experiment and apply new knowledge (Taggar, 2002). Moreover, Lai (2002) posits that organisational culture has a significant influence on human capital in the sense that appropriate culture is a perquisite for crafting innovativeness, creativity, unique knowledge and distinctiveness in order to foster innovation.
2.5 Innovative Human Capital and Innovative Performance

Previous research has identified human resources (HR) as important sources of innovation and competitiveness – but not all employees have strategic value. Only HR that are valuable, rare, and unique and organised can provide a competitive advantage. Other employees who perform secondary, repetitive tasks are not generating value (Barney & Wright, 1998). In other words, human capital is defined as the set of knowledge, skills and abilities possesses by employed workers (Subramaniam & Youndt, 2005). This perspective has crucial implications for research in HRM and is compatible with both the resource based view of the organisation and the knowledge-based view.

According to Boxall (1996), organisations could generate human capital by recruiting and retaining outstanding people and the HR must be scarce and inimitable and their knowledge, skills must also generate value for the customer (Barney, 1991; Collis & Montgomery, 1995). Considering the human capital approach, the value, uniqueness, creativity, innovativeness and proactiveness are the most relevant features for innovation (De Jong & Wennekers, 2008). Since the knowledge possesses by an organisation’s personnel is closely connected to its products and services, it is clear that an organisation’s ability to produce new products and otherwise extend its organisational capabilities is linked to its human capital (McKelvie & Davidsson, 2006). In this case, the most distinctive and inimitable resources enables the organisations to manipulate and transform organisational resources effectively (Foss, 2007) and play an essential role in the organisations’ ability to innovate (Galunic & Rodan, 1998).

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Nevertheless, while valuable knowledge is a perquisite for innovation, knowledge itself cannot develop new products. R&D departments not only exploit
the human capital but also require creativity, unique knowledge, social embeddedness and organisational support to foster innovations.

2.6 Innovative Human Capital mediates the relationship between Organisational Culture and Innovative Performance

Huang (2009) posits that organisational culture is very crucial in the evaluation of the organisation’s competitiveness and with innovative culture; the organisation is able to reflect an organisation’s uniqueness, innovativeness or distinctive qualities which may enhance the innovative performance of the organisation. Organisational culture is shaped and evolved over a long period of time and some researchers argue that the organisational culture is a code of conduct prepared for employees and hopefully would slowly change the employees’ behavioural inclination (Wu, 1998; Wang, 2012). Therefore, organisational culture may result in enhancing innovative human capital for instance, knowledge, embedded in the organisational employees, experience and abilities as well as personal behaviours, willingness or attitudes, towards the creativity and innovativeness of their tasks. In turn, the organisation may be able to enjoy higher organisational competitiveness and innovative performance.

In similar vein, Li (2002) advocates that organisational culture comprises all the values, beliefs, senses and action within the organisation which offers substantial guidance for the behaviour/ conduct of the employees. Therefore, excellent culture may enhance the quality of the employees which simultaneously improving the performance of the organisations. In short, innovative performance is enhanced by leveraging on the innovative human capital through innovative organisational culture. Based on the above argument, Figure 2 exhibits the conceptual framework in this study. This study is mainly probed into the relationship between the organizational culture, innovative human capital and innovative performance.

Figure 2: Conceptual Framework
From the proposed research model below hypotheses were formed to examine the relationship between the elements of partnership quality and HR outsourcing success.

H1: There is a positive relationship between organisational culture and innovative human capital.
H2: There is a positive relationship between innovative human capital and innovative performance
H3: Innovative human capital mediates the relationship between organisational culture and innovative performance

3. Methodology

This empirical research is quantitative in nature and data will be collected by means of self-administered questionnaires which will be distributed to small and medium enterprises (SMEs) via purposive sampling. The subjects in this study will consist of business owners of small and medium-sized enterprises (SMEs) operating in Peninsular Malaysia. This study is a cross-sectional type of inquiry in which data will be collected at one point of time in an uncontrolled setting. Since this study focus mainly on SME entrepreneurs, the definitions of SMEs provided by Small and Medium Industries Development Corporation (SME Corps, 2011) Malaysia will be used to identify appropriate businesses for inclusion in the study. The SME directory provided by SME Corps will be used to identify sample that meet the following specifications for inclusion: (1) the organisation is classified as belonging to an innovative sector; (2) the business must have less than 150 employees for manufacturing sector and less than 50 employees for service sector; and (3) the business must be a stand-alone firm, not a franchise or part of a larger organization. SMEs that are franchised or part of a larger firm will be excluded because in most cases, these firms have a lack of control over their operations. Shefsky (1994, p. 82) states that “there does not seem to be much room to do your own thing” among franchisees since they are commonly monitored by the parent company and have to abide by specific rules and regulations.
3.1 Preliminary on-Site Interview

Prior to conducting pilot study and quantitative data collection, preliminary interviews will be carried out among 10-15 SMEs to obtain a “fresh” view of their experiences in managing their business; in particular, the issues on culture, human capital and innovation. This follows Morse & 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 (p. 28). Data obtained from this preliminary on-site interview will also be used, when necessary, to: (1) modify the framework on innovation via human capital accordingly and (2) develop/refine the survey instrument based on the local context.

Prior to data collection, a pilot study will be conducted to test the usability of and to refine the survey instrument. At this stage, the time taken to complete the questionnaire will be recorded and at the same time feedback on the clarity of words and instructions will be sought to enhance the quality of the questionnaire.

3.2 Data Analysis

The model will be tested by means of the Structural Equation Modeling (SEM) procedure using SmartPLS. Prior to testing the model, the psychometric properties and the goodness of fit of the constructs studied will be undertaken. In particular, the reliability and validity of the variables will be assessed. Once the psychometric properties of the variables are determined, the subsequent step is testing the causal pathways among all studied variables. The central point in analyzing structural models is the extent to which the hypothesized model “fits” or adequately describes the sample data (Byrne, 2001). A model fit can be evaluated by examining several goodness of fit indices which include: $\chi^2$, $\chi^2/df$, GFI, TLI, CFI, and RMSEA. Besides fit statistics, of particular interest is the path significance indicated by the standardised regression estimate ($\beta$) that assesses the effect of one variable on another. The significance level will be set at $p < .05$. 
4. Discussion and Conclusion

The concept of innovation has become an important agenda in the Malaysian Government Transformation Program and the momentum around innovative performance is accelerating. However, it seems that the issue has escaped the attention of previous researchers. It is certain that good research in the area of organisational culture, innovative human capital and innovation will contribute to the existing literature on strategic HRM, knowledge management and business innovation. Empirical research is required in understanding the concept of innovative human capital that is to provide a better description of the influence exerted by organisational culture on innovative performance. In this sense, the understanding of the direct and combined effects on innovative performance will add to the body of knowledge in strategic HRM literature.

This is even more important in the context of Malaysia as the Government has envisaged transforming Malaysia from a knowledge-based economy to innovation-centred economy by leveraging on the productivity, innovativeness and participation of all in the economic activity. Insights obtained from this research will assist organisations to achieve competitiveness and sustain in the dynamic business environment by investing in innovative human capital. If the innovative performance in an organisation is low, then the quality of human resources should be increased. By embracing the element of organisational culture that is pro-innovation, the innovative human capital could be enhanced and lead to a major jump in innovative performance.

This study also offers a benchmark for SMEs which are breathing in high-volatility environments and are required to constantly acquire information on effective strategies to survive by being innovative. Organizations with suitable innovation cultures are motivated to focus their attention and effort towards innovation. This study assists researchers and practitioners of management to evaluate their organisations and illustrate good future through enhancing the level of involvement, adaptability, consistency and mission in order to acquire a culture which provides the message of more and more innovation in the daily operations of organisations.
Policy makers will be able to better understand the issues of organisational culture, innovative human capital and innovation and to provide support for organisations in their effort to stimulate innovative capability via innovative human resources. In realising the transformation of Malaysia’s economy, the SMEs should foster supportive and innovative culture among the workforce to boost creativity and innovativeness and subsequently achieve organisational performance and competitiveness.

Acknowledgement

1. We would like to thank the Ministry of Higher Education Malaysia for funding this project under the FRGS S-203/ PMGT/ 6711251.
2. This paper was presented at 2013 International Conference on Technology Management, Business and Entrepreneurship 2013, 4-5 December 2013, Malacca Malaysia.

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