

Fostering the Innovative Work Behavior of Knowledge Workers in Malaysia's Knowledge Intensive Business Services: A Social Capital Perspective

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Abstract

This study was undertaken to investigate the relationship between social capital and innovative work behavior among the knowledge workers in Malaysia. Past literatures reported that social capital and innovative work behavior to have a significant relationship in various business sectors, but none of the research was conducted in knowledge intensive business services. Moreover, some researchers concluded that the relationship is rather weak and inconclusive. This study utilized mail survey by distributing 1520 questionnaires to knowledge workers, but only 310 were useful for analysis using SPSS, therefore 20.6 % response rate was registered. The results established that there was a significant relationship between social capitals and the innovative work behavior of knowledge workers in KIBS in Malaysia.

Keywords: Innovative Work Behavior; Social Capital; Knowledge-Intensive Business Services; Knowledge Worker

1. Introduction

In a highly dynamic business environment, innovation was the only lifeblood for organizations seeking to remain relevant in the marketplace, and secure distinct differentiation to gain competitive advantage (Kanter, 1983; Peters & Waterman, 1982). Many existing organizations suffered decline and ultimately cease their existence because they are oblivion to the power of innovation (Drucker, 1989). Through past research in innovation, most literatures were based on Schumpeterian paradigms where Schumpeter posited that research and development (R&D) laboratory was the only method to produce new knowledge and new product innovation (Romer, 1990). But this paradigm of innovation was not in sync with today's business landscape. Not all innovation is linked with scientist doing research lab work per se (Smith, 2002). Business innovations like new hybrid of product services, creative business strategies, profit-spinning business models, (Kanter, 1988), are considered more of a genuine product of the worker creativity and innovation (Kanter, 1988), where tacit knowledge resides and not necessarily produced in R&D laboratory. At Innovation Nation Convention 2010, Prime Minister of Malaysia acknowledged this new paradigm of innovation in knowledge-intensive business services (KIBS) and it's significant to the Malaysia's new knowledge economy.

Research on innovation is still in nascent stage and not much is known about it in Malaysia especially in the context of knowledge intensive business services (Meriam, 2006). De Jong and Den Hartog (2007) highlighted that knowledge-intensive business services (KIBS) as an industry are highly relevant to individual innovation but the perusal of past literatures revealed limited study. Miles (2005, 2008), and den Hertog (2000) found that the categorization of KIBS as an industry were not widely used in Malaysia context despite its significant economy and innovation contribution. In Malaysia's academic literatures, terms like information technology, shared service center, knowledge process outsourcing, business analysis

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consultancy, market research, and Multimedia Super Corridor (MSC) Status Company had been widely used, but none of the researcher in Malaysia adopts the concept of KIBS in the realm of innovation (www.epu.gov.my, 2009). The above stated nature of knowledge-intensive business implies that such firms must be able to produce incremental innovations to remain competitive in market place and stay close to customer demands (Bilderbeek, den Hertog, Marklund & Miles, 1998). Hislop (2005) observed that there were surge of knowledge and innovation –intensity of work during the period of 1975 – 2000 in many business sectors including KIBS all over the world but research on knowledge workers’s innovative work behavior in KIBS are quite scanty. In addition, Mumford (2003) opined that empirical research into the knowledge-intensive professions such as financial and banking analyst, computer programmers, business management consultants, engineers and marketing researcher were often ignored in the realm of innovation. Thus, the research objective of this study is to determine the significant relationship between social capital and innovative work behavior (IWB) of knowledge workers (KW) in Malaysia’s KIBS.

2. Literature Review

• Innovative Work Behavior

Innovation, undisputedly, has played an significant role in today’s highly competitive business landscape. Therefore, many researchers had focused their attention in this research area. However, due to the innovation’s ambiguity nature and its complex application context, there is no widely accepted definition. There are many definitions covering the very specific nature of innovation to something very broad that being understood by many laymen (Patterson, 2000). West and Farr (1990) defined innovation as the purposive creation and application (within a unit of adoption such as individual, department or firm) of ideas, products or processes which are new and unique and with intention to bring about significant improvement to the specific unit of adoption. Jain (2010) defined innovation as a dynamic social exchange that involve an interaction between the person who innovate and the user of the innovation; and one’s innovation intertwined with others and create many other beneficial spin-offs. Thus, to innovate means to introduce new ideas and concepts; thus introduce new changes. Based on West and Farr (1989) article, this study adopt the definition that innovative work behavior as an employee’s behavior specifically aimed at the three stages of innovation, namely the generation, application and implementation of new and unique methods, ideas, products, and processes, to the employee’s job position, or functional unit, or organization. In the context of KIBS, the author has operationalized the definition of innovative work behavior using the work of Kanter’s (1988) innovation model. It’s a preferred model because it succinctly describes the work behaviors of an employee (knowledge worker as a unit of analysis) engage in at each stage of the innovation process. This model specifically highlights the individual tasks involved in innovation as:

- a) Idea generation;
- b) Key stakeholders building that are crucial to turn the idea into reality;
- c) Idea crystallization that transform the idea into prototype that can be design and test;
- d) Idea diffusion that lead to the commercialization of the product.

In this study, this multistage conceptualization of innovation provides the working definition of employee’s innovative work behavior.

• Social Capital

Algezaui and Filieri (2010) reported that Judson Hanifan was the person that had used the term social capital in a study that looked at the sustainability of the democracy and development of the urban communities. The idea of social capital was captured in the following phrase by Hanifa (1916):

“...The individual is helpless socially, if left to himself. . . If he comes into contact with his neighbors, and they with other neighbors, there will be an accumulation of social capital, which may immediately satisfy his social needs and which may bear a social potentiality sufficient to the substantial improvement of

living conditions in the whole community” (Hanifan, 1916 p.130). Along the same vein, different scholars have found that social capital is related with different phenomena, such as innovation (Maskell, 2000), and intellectual capital (Hargadon & Sutton, 1997), in this study, the dimensions proposed by Nahapiet and Ghoshal (1998) are adopted. They categorized social capital into three dimensions, namely: the structural, the relational, and the cognitive. In the context of social capital, this three dimensions are highly interrelated (Liao & Welsch, 2005), and therefore can be measured as single dimension.

• **Social Capital and Innovative Work Behavior**

Socialization is defined as a mutual process of communication, interaction and engagement that will ultimately lead to the formation of trust and reciprocity among the members of the organization, society and nation (Oh, Myung-Ho & Labianca, 2004). Thus, the existence of trust and reciprocity lead to the formation of social capital (Albrecht & Ropp, 1984). From the knowledge workers standpoint, the socialization will serve as a conduit where tacit knowledge from single knowledge worker can be converted into explicit knowledge and shared among the other knowledge workers (Tovstiga, 1999). Inkpen and Tsang (2005) argued that the origin of organizational social capital comes from the individual social capital as organizations are made up of employees thus; there is no distinction between them. Employee innovative work behavior has a close relationship with their social capital. In addition, Nonaka and Takeuchi (1995) observed that the imparting process of tacit knowledge among employees will happen when employees were able to monitor, apply and mimic other employees during the exchanges of complex experiences involved technical details and sharing of procedural knowledge in a socialization process.

Success in acquitting knowledge through the socialization process will assist the individuals in the group of network in developing an inventory of innovative ideas that can be utilized when necessary. Therefore the individuals’ social capital in turns will become the social capital of the organizations (Nahapiet & Ghoshal, 1998). Further to that, high level of innovation can be the result of high levels of communication and abundance of information and this condition is indeed relevant to knowledge workers such as programmers and engineers (Monge, Cozzens & Contractor, 1992). In addition, building and maintaining external networks are essential to sufficiently produce a service and be updated about new trends and developments (Kline & Rosenberg, 1986). External networks are like meeting with customers and suppliers, attending trade fair, exhibitions and conferences. Thus, in an effort to obtain constructive feedback on their service offerings, knowledge-intensive service organizations will keep in touch with their customers and other stakeholders in a regular basis so that they can maintain good relationship (Davison et al., 1989). This condition often found in various organizations such as consultancy, accountancy, engineering and advertising agencies in which continuous usage of service subject directly to the workers’ knowledge and skills (Den Hertog, 2000; Bilderbeek, Den Hertog). In relation to innovative work behavior, De Jong, Den Hartog and Zoetermeer (2003) suggested that the chance of engaging in innovative behavior among those workers who are in regular external communications will greater as compared to those that have less external communications. This tendency was echoed by past researches (Kline & Rosenberg, 1986). Additionally, organizations can also improve their existing service offerings when they keep in touch with their customers regularly as they are able to obtain feedback and identify the needs of the customers more accurately. The same also vital when regular information exchange amongst the industry competitors through various means like chamber commerce organized’s meetings and conferences. Based on the above empirical narration, organizations should strategically manage their employees’ relationships with internal and external stakeholders; in order to fully capitalize on the positive effects of their employee’s social capital (Ancona & Caldwell, 1992). Therefore, it is a challenge for organizations to develop effective social capital throughout the organization (Reick & Benbasat, 2000).

3. Methodology

In this study, Multimedia Super Corridor (MSC) status companies were selected as the sampling frame because they have the most knowledge workers in Malaysia due to MSC’s nature of business. A total of

1,520 knowledge workers were selected to participate through mail questionnaire that have been validated through a pilot study.

The questionnaire used summated rating scales to measure the strength of agreement about the the relationship between social capital and innovative work behavior. These two variables were measured using the seven-point Likert scale. The more the scale the more accurate the measurement between these two variables. The questionnaire for innovative work behavior has adopted the instrument by Janssen (2000) with a reported reliability alpha value of 0.89 and the questionnaire for social capital has adopted from Siegel and Kaemmerer (1978) with reported alpha of .664.

4. Data Analysis

A total of 1,520 knowledge workers in MSC status companies were selected to participate through mail questionnaire. But only 355 questionnaires received, this registered the response rate of 20.9 percentages; and is considered to be good as academic mail survey is usually low in response rate (Sekaran, 2003). The factor analysis was used to test construct validity. Both Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett’s Test of Sphericity were used to gauge the suitability of this test. Items with factor loadings of more than 0.3 will be retained to represent a factor because it meets the minimum threshold for interpretation of the structure (Hair et al., 2006 & Sekaran, 2003).

Table 1 below shows the result of factor analysis of innovative work behavior. Items were chosen to identify with a factor with loadings greater than 0.3 according to Hair et al. (2006). According to Kline (1994), when factor loading is greater than 0.6, it can be considered as high while any factor loading that is greater than 0.3 are considered as moderately high (Raza & Hanif, 2013; Ali & Raza, 2015). Thus, innovative work behavior had all nine questions loaded onto a single factor with eigenvalue more than 1.0. As for Table 2, twelve questions used to measure the social capital and loaded onto single factor eigenvalue more than 1.0. The single factor extracted 70.39 percent of the total variance in response.

Table 1: Summary of factor loadings for innovative work behavior

Questions	Component
	1
IWB1 I create new ideas for difficult issues	.815
IWB2 I search out new technologies, processes, working methods, techniques, and/or product ideas.	.772
IWB3 I generate original solutions for problems.	.623
IWB4 I mobilize support for innovative ideas.	.618
IWB8 I introduce ideas into the work environment in a systematic way.	.776
IWB9 I evaluate the utility (benefits) of innovative idea.	.703
IWB7 I transform innovative ideas into useful applications.	.679
IWB5 I make organizational members enthusiastic for innovative ideas.	.813
IWB6 I try to acquire approval for innovative ideas.	.649
Eigen values	5.294
Percentage of variance explained = 58.82%	
KMO= 0.645	
Bartlett's Test of Sphericity :	
Approx Chi-square = 493.700	
df = 36	
Sig = .000	

Table 2: Summary of factor loadings for social capital

Questions	Component
	1
SC 7 My organization has effective policies and procedures for knowledge sharing in place.	.787
SC 8 My organization has trainings and workshops that focus around sharing knowledge.	.716
SC 6 In my organization, senior management models the knowledge sharing behaviors they want to see.	.694
SC 2 I have frequent contacts with suppliers of my company.	.857
SC 1 I have frequent contacts with the customers of our company.	.848
SC 4 I always perceived my colleagues as important sources of professional advice, when I have a work-related problem, or when I want advice on a decision that I have to make.	.758
SC 5 I always perceived my colleagues as a group of person that I can count on, whom I view as allies, who are dependable in times of crisis (support).	.709
SC 3 I often talk to other professionals from other companies in our industry.	.683
SC 10 My organization uses organizational learning to support existing core competencies and create new ones.	.778
SC 9 My organization has company-wide social events which provide opportunities for knowledge sharing.	.758
SC 12 Knowledge sharing is linked to employee advancement.	.865
SC 11 My organization provides me with the time and resources to share knowledge.	.816
Eigenvalues	8.446
Percentage of variance explained = 70.39 %	
KMO = 0.560	
Bartlett's Test of Sphericity :	
Approx Chi-square = 927.541	
df = 66	
Sig = .000	

Findings

Table 3 below shows that social capital is significantly correlated to innovative work behavior ($r = 0.436, p < 0.0$). This result is consistently in line with much past research (Alguezaui & Filieri, 2010; Inkpen & Tsang, 2005; Oh, Myung-Ho & Labianca, 2004; De Jong, Den Hartog & Zoetermeer 2003; Reick & Benbasat, 2000; Tovstiga, 1999; Nonaka and Takeuchi 1995; Monge, Cozzens & Contractor, 1992; Ancona & Caldwell, 1992; Kline & Rosenberg, 1986; Albrecht & Ropp, 1984). Thus, this study has empirically confirmed that the innovative work behavior of knowledge workers had a significant correlation with social capital in Malaysia’s knowledge-intensive business services.

Table 3: Relationship between innovative work behavior and social capital

	Innovative Work Behavior (r)	Sig.
Social capital	+ 0.436	.000

5. Conclusions

This study empirically confirmed that there is a significant positive relationship between social capital and innovative work behavior. Researching employee’s innovative behavior in a workplace is highly complex and arduous task because the understudy variables are often difficult to validate, and are often subjected to perceptual measures only. However, as organizations face with highly competitive environments and innovation becomes the pivotal tool to success in marketplace, the urgency for this research domain is ever increasing especially in the context of employee’s innovative work behavior. This study provides a good reference for policy maker at the organizations and government agencies to increase the level of innovative

work behavior of knowledge workers; as KIBS will become a catalyst and driver in Malaysia's transformation into a knowledge economy.

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