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#### Article

## Recent development on key determinants of employees' innovative work behavior in knowledge intensive firms

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#### The International Journal of Management Science and Information Technology (IJMSIT)

NAISIT Publishers

Issue 26 (Oct-Dec 2017)

#### **Table of Contents**

 1
 AN ANALYSIS ON THE MOBILE READINESS OF AMERICAN FORTUNE TOP

 500 COMPANIES' WEBSITES
 JUYUN CHO, Colorado State University, USA

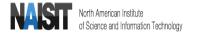
 JONGHEON KIM, Auburn University – Montgomery, USA

21 CRITICAL SUCCESS FACTORS FOR KNOWLEDGE REPOSITORY IMPLEMENTATION: CONTENT, TECHNOLOGY AND PROMOTION NORFATIN FARHANAH ZAMANI , Universiti Teknologi MARA , Malaysia TENGKU ADIL TENGKU IZHAR, Universiti Teknologi MARA, Malaysia

#### A STUDY ON LIBRARY SPACE AND USERS SATISFACTION OF ACADEMIC LIBRARY USERS NEED NUR AINA ALIAA AHMAD LATFI , Universiti Teknologi MARA, Malaysia TENGKU ADIL TENGKU IZHAR, Universiti Teknologi MARA, Malaysia

#### 63 **RECENT DEVELOPMENT ON KEY DETERMINANTS OF EMPLOYEES' INNOVATIVE WORK BEHAVIOR IN KNOWLEDGE INTENSIVE FIRMS** NUR FARHANA ZAIDI, Universiti Teknologi MARA , Malaysia NUR AFIFAH YAKUB , Universiti Teknologi MARA , Malaysia TENGKU ADIL TENGKU IZHAR, Universiti Teknologi MARA , Malaysia

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### Recent Development on Key Determinants of Employees' Innovative Work Behavior in Knowledge Intensive Firms

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#### Abstract

In order to remain competitive in an aggressive business environment, firms are embracing on innovation. Innovation is crucial for the process of identifying new opportunities and keeping the firm to be a few steps ahead of their competitors. Innovation of knowledge intensive firms is dependent to the knowledge workers and their innovative work behavior. In the literature review study, the author highlighted key determinants of employees' innovative work behavior in knowledge intensive firms in Malaysia which are transformation leadership, commitment (affective commitment, continuance commitment and normative commitment) and rewards (intrinsic reward and extrinsic reward). The literature review is significant to knowledge management scholars, policy makers and knowledge workers.

**Keywords**: innovative work behavior; knowledge intensive firm; transformational leadership; commitment; reward

#### 1. Introduction

In order to remain competitive in dynamic and complex environments, firms must analyze more opportunities by enhancing their innovativeness. Innovation in firms relies massively on their human capital and behavior at work. Based on previous literatures, there is a high interest among management scholars in studying possible factors that may influence employees' innovative behavior at work (Shalley et al., 2004; Chen and Huang, 2009; Prieto and Perez-Santana, 2014). In progressive business environments, firms cannot retain their marketability by producing the same services or products over time as it will lead to customers' declination. Innovations are not only can be done in research and development (R&D) laboratories but it is the synthesization of tacit knowledge resides in the human mind through services, products, processes, work methods and market strategies. More specifically, innovations are not only associated with R&D laboratories and technological or scientific work (Kanter, 1988; Smith, 2002; Kheng et al., 2013).

It is very critical for the development of firms to become more innovative and creative by increasing their innovation initiatives. Through innovation, sustainable success and competitive advantage can be determined (Gumusluoglu and Ilsev, 2009b; Hu et al., 2013). In today's business environment, regardless of service or manufacturing sector, innovation is



vital. As of today, it is anticipated that the economic growth of Malaysia is dependent on the services sector. Consistent with the aim of the country, Malaysia in going forward to evolve as a knowledge based economy, the ability of knowledge-intensive business services or knowledge intensive firms must be tapped. Knowledge intensive firms possess one of crucial characteristics on the boost of the knowledge-based economy (Muller and Zenker, 2001; Strambach, 2001; Kheng et al., 2013).

Knowledge intensive firms in Malaysia are built in a niche sector comprising medical services, information technology consulting, creative services, environmental engineering, civil and mechanical engineering, accounting services and project management. Most of the time, knowledge intensive firms do not have an isolated R&D department. They are relying on the knowledge of their knowledge workers as in the innovative engagement and creativity (Bessant, 2003; Kheng et al., 2013). The term of knowledge worker was established and made widely popular by Peter Drucker in 1968. He characterized knowledge workers as the man or woman doing productive work ideas, information and theories rather than manual skill. Knowledge workers can be among engineers, doctors, managers, lawyers, teachers and other experienced professionals (Lund et al., 2009; Schlechter et al., 2015).

The study aims to review recent literature review regarding key determinants of employees' innovative work behavior in a knowledge intensive firm in Malaysia consisting transformational leadership, affective commitment, normative commitment, continuance commitment, extrinsic reward, intrinsic reward as independent variables and innovative work behavior as dependent variable.

#### 2. Literature Review

#### 2.1. Innovative work behavior

Innovative work behavior is determined as intentional efforts of knowledge workers that can provide benefits to the firms they are employed (Janssen, 2000; Prieto and Perez-Santana; 2014). Until today, there is no universal definition of innovation. However, innovation can be defined as the implementation of relevant ideas, procedures, processes and products that will produce significant benefit to an individual, group or firm. Innovation is also a social process happened in the interaction of people who innovated and people influenced by the innovation. The innovative work behavior can also be termed as the action of a knowledge worker in the creation, application and execution of original ideas, processes, procedures and products into their designation, unit or firm (West and Farr, 1989; Kheng et al., 2013). Innovation is an essential factor as a means to achieve organizational success and competitiveness. In some theories, innovation consists of two main stages which are



initiation and implementation (Zaltman et al., 1973; Nusair et al., 2012). A new idea will be generated and implemented in a new process, product or service such as to a system, process, device, program, service or product as long as it is also new to the firm. The success of creative ideas implementation in a firm can also be defined as innovation (Urabe et al., 1988; Nusair et al., 2012).

Innovation is a complex process and it can only happen if a new idea is created and implemented in practice. Furthermore, innovation will produce a valuable creation regardless of service and products of any firm. As in this paper, innovative work behavior is regarding the efforts of knowledge workers' that can be tapped to promote initiation and implementation of ideas to bring success to the firms. Knowledge workers' innovative work behavior is crucial to the firms as they must be quick in adapting and responding to technological and environmental changes. Innovation initiatives must be continuous and attained frequently by execution of operational initiatives and effective strategies (Kellermanns et al., 2008; Oldham and Cummings, 1996; Scott and Bruce, 1994; Nusair et al., 2012).

#### 2.2. Transformational leadership

Transformational leadership is a now a new style of leadership. It is a situation where a leader and his employees raising each other's motivation. Transformational leadership happens when people are encouraged to look further than self-interest to the organizational interests and when this engagement is tapped, it will raise leaders and employees' level of morality and motivation (Burns, 1978; Nusair et al., 2012). Leadership plays a vital aspect in order to support and practice innovation and creativity in knowledge intensive firms. Based on literatures, there are many types of leadership, however transformational leadership takes the most attention among scholars. Many researchers have made the relationship of organizational creativity and innovation and transformational leadership as the prime focus of their studies (Hu et al., 2013).

Transformational leaders possess an ability to encourage their employees to lift up their aspirations and needs by transforming employees' self-concepts and personal values. Employees or knowledge workers' creativity can be facilitated through transformational leadership as transformational leaders can be characterized as charismatic. Charismatic leaders are often can attract respect and admiration from their employees. Once the employees develop the feeling of respectfulness to their leaders, they tend to be loyal as well. The behavior of transformational leader can intensify knowledge workers' capability in developing new ideas during working operations. Transformational leaders support intellectual engagement and become the creative champion to their employees. Moreover,



transformational leaders help their employees to conquer their doubt and anxiety in challenging their status quo by showing empathy, giving support and consideration thus directing them to a higher level of creativity (Gong et al, 2009). In the working environment with transformational leaders, employees are given an enormous extent of autonomy, making them empowered to be self-starters, take initiatives and actively participate in any situation in firms (Jung et al., 2002; Hu et al., 2013). Researchers stand in majority of transformational leaders is the champion in rising employees' innovative work behavior. With the combination of promoting inspirational motivation and exploratory thinking, transformational leaders are able to encourage employees to deliver beyond expectations (Mumford, 2002; Hu et al., 2013).

#### 2.3. Commitment

There are three types of commitment which are affective commitment, continuance commitment and normative commitment.

#### 2.3.1. Affective commitment

Affective commitment is a type of employees' emotional attachment to the firms they are employed. Alternatively stated as it is a position where employees stay with the firms because they want to as they feel there is an attachment and involvement in the firms. Employees that want to keep on working at the same firms are usually satisfied with positive work experiences provided by the firms so the firms are valuable to them and they expect to continue working in the same firms. Job challenge and comforting working environment are popular factors that can retain employees in a firm (Meyer and Allen, 1991; Fatemeh et al., 2016). Employees or knowledge workers that possess affective commitment likely to be innovative and involve in knowledge sharing. When employees are affectively commitmed to their firms, there is a tendency to intensify employees' innovativeness, learning and work engagement. In the past research, it is examined that there is indirect relationship between innovative behavior and affective commitment (Chughtai, 2013). Positive work engagement between employees can inculcate a feeling of commitment and create collaboration between team members such as technical knowledge sharing that can be transformed to innovative products or services as well as securing firm's sustainability (Liu et al., 2011; Fatemeh et al., 2016).

#### 2.3.2. Normative commitment

The second type of commitment is normative commitment. It is when employees feel they are accountable to stay with the firms (Meyer and Allen, 1991; Chang and Lin, 2008; Fatemeh et al., 2016). However, it is not due to the age, pay or education but it is a mutual



feeling of trust where they feel it is their responsibility to remain in the firms (Munene and Dul, 1989; Fatemeh et al., 2016). It has been determined that employees that posses a normative commitment to the firms they are currently employed, their level of organizational trust is higher and it can enhance their work behavior reflecting to their job performance, organizational citizenship and work attendance (Powell et al., 2006; Muhwezi, 2008; Ozag, 2006; Fatemeh et al, 2016). Normative commitment is also a dominant force of organizational participation (Malewicki, 2005).

#### 2.3.3. Continuance commitment

The third type of commitment is continuance commitment which can be considered as the employees have to remain in the firm because the leaving cost is too high. High leaving cost means they are reluctant to stop working at the current firm but they are afraid it may affect them by feeling frustrated and influenced inappropriate behavior. However, even though they do not want to leave the firms, it does not mean they want to be partly responsible for the success of their employed firms (Meyer and Allen, 1991; Fatemeh et al., 2016).

#### 2.4. Rewards

Nowadays, firms offer different types of rewards to their employees in order to step up their performance. It is crucial to determine the effectiveness of rewards as it will influence employees' innovative working behavior and affect organizational goals (Bandura, 1997; Luthans, 2002; Ghosh et al., 2016). There are two types of rewards which are monetary and non-monetary rewards. Based on previous literatures, the rewards can externally control behavior of people and even increasing it to the next level. Non-monetary rewards such as recognition is also a significant motivator in determining employees' behavior. However, rewards without recognition cannot motivate employees in a long run and vice versa because many employees want to be recognized and rewarded at the same time for their phenomenal performance. Thus, employees' motivation can be boosted up when rewards and recognition come in a package (De Lacy, 2009; Ghosh et al., 2016).

#### 2.4.1. Extrinsic reward

Extrinsic reward is a compensation type of reward given to employees when they have contributed something to the firm they are employed. In a knowledge based economy, knowledge is valued as a crucial factor of organizational competitive advantage. Thus, in order to motivate the employees to become more innovative, extrinsic rewards will be compensated based on employee contribution (Liu and Li, 2017). Extrinsic reward is also



known as financial incentives such as bonus and incentive pay. Based on literatures, extrinsic rewards have an ability to intensify employees' innovative behavior at work. Assessing extrinsic rewards can be done in a scale of "When I perform creatively, I receive financial rewards, such as incentives or bonuses", "When an employee exhibits creative performance, my company offers some treats such as a celebration dinner" and "When I perform creatively at work, my company offers corresponding benefits in return" (Ghosh et al., 2017).

#### 2.4.2. Intrinsic reward

Extrinsic reward is associated with financial elements while the intrinsic reward is related to non-financial elements. Today, firms are focusing on providing various offers of intrinsic rewards in motivating employees to be creative and attracting the best talent. Intrinsic reward is intangible such as learning and development, flexibility of working hours, training and career opportunities and career advancement. It is believed that intrinsic rewards can influence employees' motivation and work behavior. Furthermore, firms that practice on work-life balance can be termed as a situation where its programmes and policies actively provide support to employees to be successful within and outside of the workplace. Moreover, employees are motivated when their individual effort and achievement for the organization are recognized. Special attention from recognition can affect employees' behavior and performance at work. Careers opportunities and advancement are intended to improve employees' competencies and skills thus they are able to go after their career goals through the initiatives (Pregnolato, 2010; Schlechter et al., 2015).

#### 3. Analysis of Review

An analysis of review table has been developed in order to show summarization of related previous studies. All of the previous studies are focusing on fostering innovative work behavior in knowledge intensive firms. However, each of previous study has different antecedents in exploring their effects towards employees' innovative behavior. There is a study by Fatemeh et. al (2016) on the Importance of commitment in encouraging employees' innovative behavior of employees. There are three independent variables which are affective commitment, continuous commitment and normative commitment while its dependent variable is employees' innovative behavior. Some previous studies discussed on employees' innovative work behavior and connecting it with transformational leadership (Hu et al., 2013; Kheng et al., 2013 and Nusair et al., 2012). Other previous studies by Kheng et al. (2013), Liu and Li

(2017), Prieto and Perez-Santana (2014) and Schlechter et al. (2015) discussed on the effect of extrinsic and intrinsic rewards on employees' innovative work behavior.

Authors	Independent and Dependent Variables						
	Innovative work behavior	Transformational leadership	Affective commitment	Normative commitment	Continuance commitment	Extrinsic reward	Intrinsic reward
Fatemeh et al. (2016)	✓		~	~	✓		
Hu et al. (2013)	~	~					
Kheng et al. (2013)	V	✓				~	*
Liu and Li (2017)	V					~	
Nusair et al. (2012)	√	✓					
Prieto and Perez- Santana (2014)	~						¥
Schlechter et al. (2015)	~					✓	✓

#### Table 1. Analysis Review for Literature Review Study

#### 4. Conclusion

Knowledge intensive firms are a driver and catalyst for Malaysia in their transformation process into a knowledge based economy. Knowledge based economy requires employees or termed as knowledge workers to elevate their creativity and support organizational goals through their continuous innovation initiatives (Kheng et al., 2013). Continuous innovation can help knowledge intensive firms to become a crucial role in sustaining their competitiveness. This literature review study is focusing on important issues associated with knowledge workers and their innovative work behavior. Therefore, this study will inspire researchers on theory building and become a good reference for private or public organization policy maker to look beyond current perspectives in enhancing employees' innovative work behavior.

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