

# *Relationship between Knowledge Sharing and Innovation*

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## *Abstract*

**Knowledge sharing is one of the main factors of the knowledge management. This paper aims to show how knowledge sharing can affect innovation. Extant research highlighted technological innovation and administrative innovation. Knowledge sharing can be measured by knowledge collecting and knowledge donating. The proposed framework of this study links both dimensions of knowledge sharing with two types of innovation**

**Keywords: Knowledge sharing; Innovation; Technological innovation; Administrative innovation; Knowledge collecting; Knowledge donating**

## I. INTRODUCTION

Impact of innovation on firm's performance has been point of interest for policy makers and economist for decades (Hashi & Stojci 2013). According to (OECD/Eurostat, 2004) the innovation can transform countries by increasing production volumes in a higher value and boosting their growth rate.

According to (Hashi and Stojci, 2013; Manafi and Subramaniam, 2015), innovation is a combination of activity that involve technological, scientific, financial, commercial, and organizational components with aims to produce new products and scientifically improve it. Innovative ideas can motivate by a new thought, and action of an economic agent. Innovative idea can increase organization's efficiency that leads to firm's production and cost efficient in compare to its competitors. Also, it can help to expand market by introducing new product to consumers. Researchers consider innovation as

an important factor for companies, to be ahead in the market (Hu, 2012).

Several features such as organizational learning, organizational commitment and job satisfaction can contribute to innovation performance of an organization (García-Morales et al., 2007; Jiménez-Jiménez and Sanz-Valle, 2011) (Low and Mohammed 2005; Morrow et al., 2012). Despite the consent on mentioned feature, some industry, such as electronic is more rely on knowledge than innovation. Paper (Zohoori et al. (2013)), (Asgharian et al. (2013)) and (manafi and Subramaniam (2015)) introduced knowledge as the main features for innovation in electronic industry. Based on their finding in-house knowledge sharing can increase innovation of organizations.

Their finding about the importance of knowledge sharing for innovation is based on previous researches (Dimitris et al., 2007; Wang et al., 2009; Chiang & Hung, 2010; Wang and Wang, 2012). Although these studies focus on mechanism of knowledge sharing and try to find how it can affect innovation, it is necessary to know about measurement of knowledge sharing and innovation.

## II. LITERATURE REVIEW

### A. Knowledge Sharing and Innovation

Set of particular behavioral practice and beliefs that are associated with expansion of learning among individuals or group can form knowledge sharing in an organization (Moorman and Miner, 1998). Paper (Shao et al. 2012) define knowledge into two dimensions, namely explicit knowledge and tacit knowledge sharing.

Papers (Kogut and Zander, 1992; Henderson and Cockburn, 1994; Szulanski, 1996; Tsai and Ghoshal, 1998; Dyer and Nobeoka, 2000; Tsai, 2002; Chen and Huang 2009) believes that effectiveness of knowledge sharing is due to an improvement in level of innovation withing organizations. Also, they mentioned that knowledge sharing had been defined as new integration of knowledge that exist on its own which would possibly end up in new products or process improvements (Tsai and Ghoshal, 1998; as cited in Chen and Huang 2009).

Given that, tacit knowledge is with employees and departments of the firm, it is necessary to share this knowledge for a new set up of mental models and practices (Nonaka and Takeuchi, 1995; Galunic and Rodan, 1998; Chen and Huang 2009; Manafi and Subramaniam, 2015). Innovations are apparent when staff use their technical skill to transform their tacit knowledge to explicit knowledge and produce new product (Nonaka and Konno, 1998; Chen and Huang 2009). Hence it is more likely to be innovated company if the organization share their knowledge effectively with each other (Chen and Huang 2009; Manafi and Subramaniam, 2015).

In a recent study in 2013 by (Asgharian et al), individual factors introduced as main reason of weakness in knowledge sharing in electronic industry of Iran. Manafi and Subramaniam, 2015 applied two dimensions defined by Van Den Hoof and De Ridder (2004). They defined two facets; collecting/receiving and donating/disseminating. Knowledge donating is defined as “communication based upon and individual’s own wish to transfer intellectual capital”. Knowledge collecting is “attempting to persuade others to share what they know”.

Along to this, Lin (2007) introduces these dimensions as measurement for knowledge sharing behaviors.

### B. Type of Innovation

Innovation is consisting of two steps: (i) developing a plan and fittingly actualizing them and (ii) conclusions which are the final comes about of execution. The procedure can be ways that the ideas will get into action, while outcomes are end point of any procedure that literally is result of any service or manufacturing firm.

There are two primary inputs. First the staff must be capable to setup imaginative plans, then in second step; they should choose which thoughts are applicable worthy (Skarzynski & Gibson, 2008). Hurmelinna-Laukkanen, et al., (2008) believe that it is a necessity for organization to be familiar with innovation methods, they argue that each organization need to know how to treat and respond with any type of innovation and creativity. According to Kim, Kumar, and Kumar (2012) there are too many types of innovation but three more highlighted are: “incremental versus radical innovation; technological versus administrative innovation; and product versus process innovation (Zhao, 2005).”

#### a. Technological innovation versus administrative innovation

Adopting new technologies into process or product is called technological innovation (Damanpour, 1988). The promise for this type of innovation is long term success in competitive

advantages and so, in the market (Grover, Purvis, & Segars, 2007). While managerial improvement alludes to the usage of new plans enhance organizational methodologies, schedules, structures, or frameworks (Elenkov, Judge, & Wright, 2005). Sustainable development is result of inner methods supporting the conveyance of an administration or item.

#### b. Product Innovation versus Process Innovation

Technological innovation consists of two dimensions: product innovation and procedure innovation. If there is a boost in quality of a product or service, or equally an innovation in creating a new good or product, it is called product innovation (Burgelman, Wheelwright, & Christensen, 2009). Process innovation is the name for innovative procedures created to enhance effectiveness of production (Tarafdar & Gordon, 2007).

#### c. Radical Innovation versus Incremental Innovation

Radical innovation is a new kind of innovations. It is totally different from other innovations (Golder, Shacham, & Mitra, 2009). Radical innovations are different from other innovation or it should have an effect on the feature innovations. The more they are new and exceptionally different from others to the world, the more they are radical. While Incremental improvements include corrections or changes to existing items or administrations (Burgelman, et al., 2009). they made by adding new factors to the service or product. They may alter or enhance customer satisfaction.

## III. PROPOSED FRAMEWORK

Followed by above discussion, there are enough evidence to support the relationship between knowledge sharing and innovation (See Fig1)

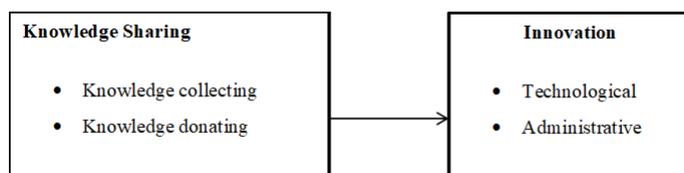


Fig 1. Relationship between knowledge sharing and innovation

This framework shows that knowledge sharing can be measured by two factors knowledge collecting and knowledge donating. Both dimensions have potential affect technical innovation and administrative innovation.

## IV. CONCLUSION

Knowledge sharing is one of the main factors of the knowledge management. This paper tried to show how knowledge sharing can affect innovation. Extant research highlighted technological innovation and administrative innovation. Knowledge sharing can be measures by knowledge collecting and knowledge donating. The proposed framework of this study links both dimensions of knowledge sharing with two types of innovation.

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