

The Effect of Strategic Knowledge Management Intentions on Firm Innovativeness: A Study with Reference to Software Development Industry in Sri Lanka

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Introduction

Knowledge forms an important asset in modern organizations. In order to gain and sustain competitive advantage, knowledge has to be managed. Based on the resource based view, Strategic Knowledge Management (SKM) is known as the center of a business concerned that leads the organizations forward success by creating competitive edge. Grant (1996) suggests that early resource based view of a firm strategically changed to the knowledge centered. In addition, Day and Wendler (1998) explain that the development of knowledge management strategies includes all the operations related to the creation, acquisition, integration, storage, transmission, protection and application of knowledge. Knowledge management is observed as an important subject in contributing to a firm’s achievement of competitive advantage through innovation (Foss, 1999).According to the OSLO Manual (2005), an innovation is the implementation of a new or significantly improved product, or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations. The organizations innovations and its success are depending on the various variables and modern organizations are keen with their SKM. The overall research is focused on the results of the question, whether SKM intentions affect on firm innovativeness (FI).Consequently, this research has conducted to investigate the relationship between SKM on FI in Software development industry.

Methodology

Methodology is designed to create the framework for the research collaborative with below working variables. A structured questionnaire and an interview method were used to collect data. The questionnaire consists of 3 parts namely general information, SKM and FI. In addition, few open ended questions were included to capture overall picture about the knowledge management mechanisms.

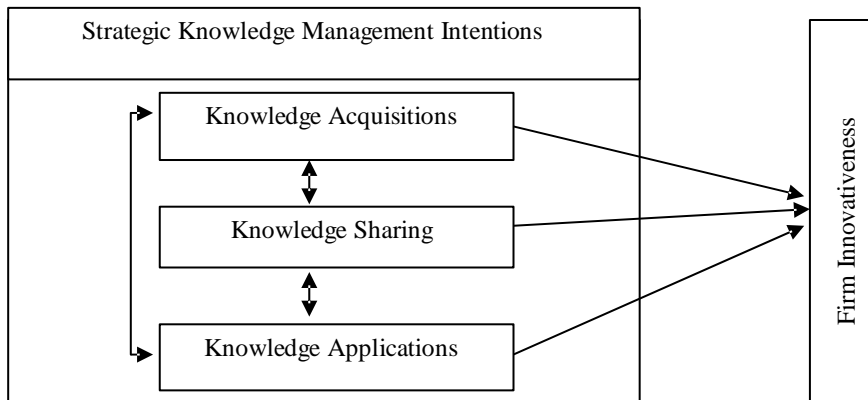


Figure 1. Conceptual framework and working variables

In knowledge management literature, more knowledge management processes and cycles can be observed. However, the above dimensions (Figure-1) are taken in to account by having deep

analysis especially on Sri Lankan Software development industry. By considering above conceptual framework, the researcher supposed to check the following hypothesis.

H1: There is a relationship between Knowledge acquisition intention and firm innovativeness.

H2: There is a relationship between Knowledge sharing intention and firm innovativeness.

H3: There is a relationship between Knowledge application intention and firm innovativeness.

This study mainly focuses on overall software development companies that are registered under Export Development Board of Sri Lanka (EDB). Therefore, the population of this research would be whole 43 software development companies in Sri Lanka. In this study, the whole population was tested. Thus, population is 47 software development companies. Hence, in this research, the unit of analysis is one independent software development company and within one company, three respondents were contacted on behalf of getting the overall picture about knowledge management mechanisms. Since the Knowledge Management Mechanisms cannot be performed individually, it is a collaborative effort of employees in all the levels of the organization.

Results and Discussion

According to the table of descriptive analysis, almost all input variable averages fall under the range of $3.5 < X < 4.0$. Further, all dimensions are exceedingly close to the average 4. This illustrates that almost all software development companies have an intention on strategic knowledge management within their organizations on knowledge acquisition, knowledge sharing and knowledge applications. The respective mean value of the dependent variable is 4.2772, which it denotes that innovativeness of the software development industry in Sri Lanka is in a high level and it varies by 0.27897 from the mean value.

The multiple regression analysis implies independent predictors and explains that dependent variable by 47.4%. Further, the coefficients of the predictors have indicated positive impact on firm innovativeness. The positive changing one unit of knowledge acquisition leads increase firm innovativeness by 0.142. The positive changing of one unit of knowledge sharing leads to increase firm innovativeness by 0.076. The positive changing of one unit of knowledge application leads to increase firm innovativeness by 0.393. It is obvious that knowledge sharing has a low impact on firm innovativeness.

Table 1. Correlations details of independent variables

Input variable	Pearson Correlation	Sig. (2-tailed)
Knowledge Acquisition	0.520**	.000
Knowledge Sharing	0.501**	.000
Knowledge Application	0.674**	.000

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Field survey

Furthermore, the correlation analysis (Table 1) was conducted to test the developed hypothesis and determine the strength of relationship, relative contribution of independent variables on dependent variables. It shows that all three independent variables have strong positive relationships with firm innovativeness at a significance level of 0.000. It indicates that there is no enough evidence to accept all three null hypothesis and all three alternative hypotheses are accepted. Further, analysis of correlations of knowledge management intentions on firm innovativeness among different level of management in the software development industry

shows that top level managers have strong positive intentions on knowledge applications and acquisition while positive low intentions on Knowledge sharing. In addition, project managers have strong positive intention on knowledge acquisitions. Moreover, software engineers are keen to have high intentions on knowledge application and sharing.

Conclusions

The results revealed that the SKM intentions positively affect the FI in the software development industry. Considering the relationship between SKM intentions and FI, there is a strong positive relationship between knowledge acquisitions, knowledge sharing, knowledge application and FI. The results imply that effect of knowledge applications on FI is higher than other relationships. In addition, in the software development industry the level of intentions of SKM differ within the organizations' level of management hierarchy. Therefore, it is needed to have a collaborative effort of those all peers of an organization to achieve the success.

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