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## Investigation of knowledge Management Effect on Strategic Orientation and Organizational Performance: A Case Study of Steel Producing Companies

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Received: Dec. 2014 & Published: Feb. 2015

**Abstract:** This research investigates the impact of knowledge management on strategic orientation and organizational performance by using structural equations. 219 managers or employees of steel producing companies were included in the study. They answered the questioners of knowledge management, strategic orientation and firm performance. The results of the correlation coefficient showed that “there is a significant positive correlation between knowledge management, strategic orientation and firm performance”. The results of analysis showed that the impact of knowledge management on strategic orientation and organizational performance is positive and significant. In addition, knowledge management has a significantly positive effect on firm performance indirectly through strategic orientation. Impact of strategic orientation on organizational performance is positive and significant. In general, the results-of this research confirm the effect of knowledge management on strategic orientation and organizational performance.

**Keywords:** knowledge management, strategic orientation, performance.

### 1. Introduction

Knowledge is a set of recognitions and skills to solve a problem therefore, if the available information could solve a problem, it can be said that the knowledge exist. Also, it should have the capability to convert to practical plan and action (Rahman seresht, 2005:57). The most popular categories of knowledge divide it into two parts: The tacit Knowledge and explicit knowledge. Explicit knowledge is easily transferable and can transfer via the help of some of the symptoms such as letters and numbers (Polanyi, 1959:251) (North, 1993:246). Tacit knowledge is obtained by internal individual processes and is stored in person’s personality (Newman, 1991: 234)(Heidari hui, 2004) while explicit knowledge is stored in a mechanical or technical device such as documents or databases (Newman, 1991: 235).

The technique that is used to transform tacit knowledge into explicit one is the modeling of the view of experts (Zarabadi pour & Zargar pour, 2007). Knowledge management is a challenging process because it was difficult to recognize its real value and its appropriate utilization for the organization's competitive advantage is more difficult ).Nemati & Jamshidi, 2007). The purpose of knowledge management is to maximize profitability and increase organizational effectiveness .In the era of central intelligence, knowledge management has a particular importance place (Ganji, 2004) (Davenport & Prusak, 1998:287). Companies need knowledge to increase their capability to improve their goods and

services and benefit their customers and consumers .In today's global economy, knowledge is introduced as a most important alternative capital of human and physical assets and today the knowledge management and intellectual capital importance is more than the return of employed financial capital in companies and organizations and it plays significant role in the development and improvement of deals in different ways. Nowadays, organizations seek ways to discover new advantages or to strengthen their existing benefits to be able to stay in the modern economic system (Wong, 2005).

Accordingly, one of the challenges of managers is the understanding the importance and impact of organizational characteristics on its performance. Due to the increasing competitiveness in the domestic market and in order to have continued active presence in foreign markets, enterprises should pay more attention to their performance and the factors influencing it .There is no doubt that the modern era has substantial differences with other eras. The motion of industrial economy toward a knowledge-based economy and emphasizing on the importance of knowledge and intellectual capital instead of material and physical assets gives this age such an important feature .Effective management of knowledge enables organizations to fully recognize the needs of their stakeholders, customers and to the competitive market and to identify gaps and opportunities for better performance and competition .On the other hand, one of the critical variables in strategic orientation is to improve organizational performance (Ferraresi et al. 2012) .Strategic orientation is defines as the understanding and management of internal and external characteristics of the organization, preparation of attitude, skills, motives, and desires to guide strategic planning and strategic development process. In other words, strategic orientation is managers' perceptions of the competitive environment and their comprehensive and rapid response with regard to long-term goals (Spanjol et al. 2012).

Strategic orientation provides a superior ability for organizations to deal with the external and internal phenomena and changes and enables managers to make correct decisions and it could influence on the company's performance in this way (Morgan & Strong, 2003) ( Griffith et al.,2012). Unfortunately, the studies of companies with lower lifetime show that they have very poorly perform in the field of knowledge management and intellectual capital and they don't have a strong strategic orientation and these factors lead to their poor performance compared to other competitors and this weakness ultimately defeated them (Johnson et al., 2012 ). Knowledge management is the process of approval, delivery, distribution and application of knowledge as well as the letters that aims to harness and to apply the knowledge and create the perfect access for all employees in an organization with the goal to do a better job (Zarabadi pour & Zargar pour, 2007)( Gatignon & Xuereb, 1997).

To measure the size of knowledge management the questionnaires of Phyllis et al (2000) and Gold et al (2001) was used with some adjustments. In Knowledge management, the knowledge-centered and people-centered thinking is the alternative of investments-centered thinking and sharing knowledge and experience is the major axis.(Nemati & Jamshidi, 2007). In order to have a technological foundation to manage knowledge, it offered by a consortium of American companies and the implication of knowledge management is defined as managerial activity that focuses on the development and control of knowledge to achieve organizational goals (Adli, 2005). Wiig (1999) distinguishes three generations of knowledge management and expressed them as follows:

The period of 1990-1995, a source of information and intellectual capital was presented by focusing on the information society. The second generation makes the implications of knowledge, social learning and tacit knowledge into consideration. The second generation of knowledge management appeared around 1996 (Tuomi, 1999:153). The second generation of knowledge management believes that processing and storage of information is sufficient. The

third generation of knowledge management emphasizes on the relationship between work and idea. According Wiig (1999) one difference of third generation of "Knowledge management from other generations is that the third generation of knowledge management is integrated with philosophy, strategy, objectives, methods, systems and procedures of recognition and inverted into the daily work of employees and their motivation". It seems that the third generation emphasize on the link between knowledge and action. By the Knowledge expression in the language and signs format, knowledge can be distributed, reviewed and analyzed, and increased in the other way. Knowledge is a tool in which people's demonstrate their actions or acquire new knowledge. Malhotra suggests that knowledge management includes organizational processes that search the synergistic combination of data and information processing capacity of information technologies and the creativity and innovation of individuals.

Coobs and Hull categorized knowledge management activities under three main headings: Process knowledge, domain knowledge, and knowledge formalization. Nonaka and Taguchi model and Mitre model are among the models of knowledge management investigations (Talebi et al., 2007). Strategic Formation has embedded in the strategic management for more than three decades and is related to the effectiveness of the strategies that are formed within the organizations (Slater et al., 2006).

Strategic orientation means the company's strategic direction in order to establish appropriate behavior to achieve superior performance of the team. The vision of strategic formation extensively is investigated to study the role of strategic orientation. Organizations invest their resources in activities that reflect the strategic orientation (Gatignon & Xuereb, 1997). Strategic orientation is usually placed at the center of organizational decision (Murray2012). Formation of strategic orientation is influenced by environmental factors such as structure, culture and organizational systems (Zhou et al., 2005) (Rahimnia & Sadeghian,2011). Strategic orientation is examined in the three aspects of anatomical approach (narrative) to classification approach and competitive approach.

## **2. Active strategic orientation and Reactive strategic orientation**

Performance refers to the result of the work scale. In another definition, it is the results obtained by an individual, team, organization or process .Commercial performance is referred to all the qualitative and quantitative characteristics of companies or organizations in profitability, customer satisfaction, productivity, business performance area (Cho et al., 2006). In Rahim nia and Sadeghian research (2011) on the export companies located in Mashhad, they discovered that strategic orientation has a positive impact on export success and expected future export success. Amani (2008) examined the relationship between knowledge management and organizational learning and organizational innovations in school administrators of 4<sup>th</sup> and 9<sup>th</sup> region of educational system in Tehran. The results showed that knowledge management and organizational learning aspects and their dimensions have a significant and positive relationship with organizational innovation variables.

Safarzadeh et al (2012) began investigated the impact of knowledge management strategies on innovation and organizational performance (A case study of the health centers in the northern of Fars) . The results of this study indicated that knowledge personalization and knowledge coding, has positive impact on innovation and organizational performance and also has a positive impact on organizational performance variables through innovation and the relationship between innovation and organizational

performance is positive and significant. The Odosiou et al (2012) in a study titled "The strategic orientation, marketing capabilities and firm performance: an empirical investigation of executive managers in service organizations" investigate the relationship between strategic orientation and firm performance in the management of the Bank of Greece. The results showed that the strategic orientation and marketing capabilities have significant positive impact on corporate performance.

Hind (2008) in a study titled "Introduction to Knowledge Management for Creativity and Innovation" explores the relationship between knowledge management and innovation among the managers of education institutions in the United States. His results showed that the knowledge management variable has positive and significant effect on creativity and innovation variables. Also the creativity variable has a significant positive effect on innovation variable. Creativity and knowledge management variables in total were able to explain 25% of the variance in innovation. Morgan and Strong (2003) in a study titled "Business performance and dimensions of strategic orientation" investigated the relationship between strategic orientation dimensions on business performance of companies in the ICT industry in the UK. Their findings suggest that the company's emphasis on analysis, strength and foresight in strategic orientation has a positive impact on organizational performance. Aragon and Marín (2005) examined the impact of strategic orientation and organizational performance management characteristics of small and medium enterprises in Spain. Their findings suggest that strategic direction has significant impact to improve the performance of small and medium enterprises in the world.

Grawe et al (2009) in a study titled "The relationship between strategic orientation, service innovation and performance," investigated the effects of strategic orientation and service innovation on business performance in the staff of China's electronics industry. Their findings indicate that more investment in innovation will lead to enhanced performance of the provided services. Ferraresi et al. (2012) in a study titled "Knowledge management and strategic orientation: influence of innovations and practices" examine the effectiveness of knowledge management and strategic orientation on organizational performance in 241 Brazilian company. Their findings suggest that effective knowledge management and strategic orientation has a significant impact on performance and strategic direction act like an interface between knowledge management and organizational performance.

Due to the above content and influence of knowledge management, strategic direction and their role in corporate performance improvement, companies requires detailed knowledge of these variables. The importance of this study arises from this point that a research that considers the impact of knowledge management and strategic orientation on organizational performance in a structural equation models is not observed. On the other hand, the interface role of the strategic orientation between Knowledge Management and organizational performance and the lack of previous research emphasized the need for new research. Finally, by conducting this study in steel producing companies, it can be possible to provide appropriate recommendations to improve organizational performance through the lens of knowledge management and strategic direction.

### **3. Research method**

The case study is all managers and professionals of steel producing companies. According to information obtained from these companies, 512 managers and professionals are working in these companies.

Cochran formula is used to estimate a sufficient sample size in this study

$$n = \frac{Nt^2s^2}{Nd^2 + t^2s^2}$$

In this formula :

t = the percentage of acceptable standard error confidence

d = degree of confidence or potential efficiency

s = proportion of the population without a specific attribute

N = Number of individuals in society

$$n = \frac{512(1/96)^2(0/5)^2}{512(0/05)^2 + (1/96)^2(0/5)^2} = \frac{491/72}{2/24} = 219$$

Therefore 219 employees of the said companies have been diagnosed sufficient to distribute and the questionnaire data collection. In this study, sampling method is random sampling and Cronbach's alpha was used to determine the reliability of the test. Measurement reliability was performed using Cronbach's alpha and 18 SPSS software. Therefore reliability was calculated with Cronbach's alpha coefficient by using data obtained from the questionnaire and SPSS software that is reported in the measurement tools section. For data analysis, descriptive and inferential statistics were used in this study. To analyse research data, SPSS and LISREL software will be used.

#### 4. Results

The findings indicated that 15% of respondents were female while 85% of respondents were male. Findings showed that about 75% of respondents have undergraduate degree and 25% of respondents have a graduate degree. The results show that 30% of respondent have work experience of 1 to 5 years, 25% of respondent have work experience of 6-10 years, 30% of respondent have work experience of 11-20 years and 15% of respondent have work experience of more than 21 years. Research findings show that 55% of persons of our sample are managers and the rest 45% of the sample size are experts.

In order to determine the validity of knowledge acquisition, confirmatory factor analysis was used. The structures consist of 7 item that two questions were excluded from the analysis because insignificantly lower loadings. The results showed that appropriateness of indicator of the load factor (FAQ) and the appropriateness of the factor loadings for each component as an indicator of knowledge management effect on anticipation of this variable. Table 1 shows the descriptive index of research variables.

**Table 1: descriptive index of research variables**

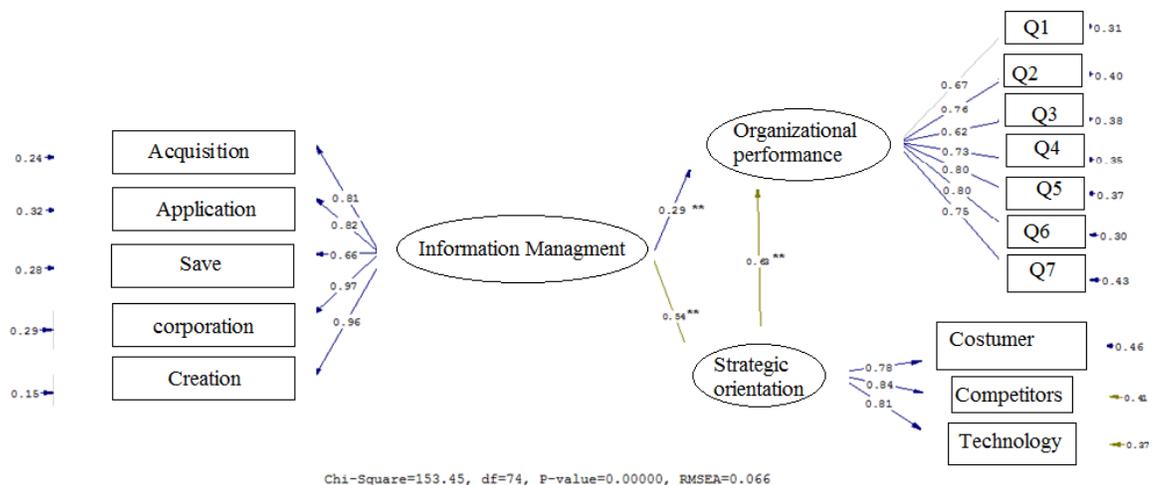
Variable	Mean	Standard deviation	The lowest score	The highest score
Knowledge management	3.45	0.59	1.54	4.70
Strategic orientation	3.25	0.62	1.33	4.83
Organizational performance	3.66	0.83	1	5

**Table 2: The correlation matrix of research structure**

Variable	1	2	3
Knowledge management	1		
Strategic orientation	0.62**	1	
Organizational performance	0.55**	0.61**	1

\* p < 0.05 \*\* p < 0.01

The results of the correlation coefficient between variables are listed in Table 2 .Results show that the correlation coefficient between knowledge management, strategic orientation and organizational performance is positive and significant at the 0.01 level. Strategic orientation has a higher correlation coefficient with organizational performance. In Figure 1, the model tested for the main hypothesis of the study is listed with standardized values for each path. Results show that the coefficient of KM path to strategic orientation and organizational performance is positive and significant at the 0.01 level. The path coefficient of performance of an organization's strategic direction is positive and significant at the 0.01 level.



**Figure 1: the tested model in the research**

## 5. Discussion

### **The first hypothesis : knowledge management has a positive impact on the strategic orientation**

The results of structural equations showed that the impact of knowledge management on strategic direction is positive and significant at the 0.01 level .These findings are consistent with the results of Ferraresi et al. (2012). These findings suggest that knowledge management will increase organizational knowledge through the acquisition of external knowledge, hiring experienced staff, inviting experienced staff to record their experiences and knowledge, encourage employees to find suitable solutions to support the company's proposals, analyzing the errors and mistakes to better use in the future, selection and organization information for storage in the enterprise, documentation and maintenance of project-related information recorded in the form of administrative documents such as manuals, working procedures, organizational standards, guiding less experienced staff ;availability of knowledge obtained from projects for the entire company, encouragement of employees to share knowledge, providing opportunities for knowledge sharing and encouragement of creative ideas and subsequently the appropriate orientation of the company in order to identify the needs of our customers and their satisfaction and improvement the ability of the company to deal with competitors and the acceptance and use of new technologies in the organization. In other words we can say that an organization's strategic orientation is not created in a vacuum and requires knowledge or knowledge management improvement in organizations. Wiig (1993: 187) states that knowledge management helps organizations to find, select, organize and publish a selection important information and proficiency is essential for activities such as the observation, dynamic learning and decision making.

### **The second hypothesis: knowledge management has a positive impact on organizational performance .**

Results of structural equation in conjunction with the above hypothesis show that the impact of knowledge management on organizational performance is positive and significant at the 0.01 level. This finding is consistent with results of Ahmadi (2012), Safarzadeh et al (2012), Zheng et al (2010), Wang and Wang (2012), Lee and Choi (2003) and McKeen & Zack (2006). These findings suggest that knowledge management in enterprises makes it possible for employees to grow and advance in their career opportunities, to be more successful in their job tasks, to be provided required knowledge and information for them to do their job better, to get support from organizational units, to be sponsored better, to have more participation in decisions related to their work, to have more passion for their duties and serve in their company .Dier and Noyoka (2000) state that knowledge management helps that different groups of people work together, the knowledge exchange become more facile, their learning and the ability of individual and organizational goals achievement increase and as a result organizational performance will increase in this way.

In addition, companies should have competitive advantage to improve organizational performance, deal with competitors, have superior performance and protect their market in a complex and changing conditions .Companies interest to gain competitive advantage and superior performance, has changed from the investment in tangible resources towards investments in intangible resources (Sinai et al., 2011). In the new economy, knowledge as a strategic factor in achieving a sustainable competitive advantage is considered as the power, but only having the assets of knowledge could not create power and value and

management and sharing it with other members within the organization external assets and the creation of new knowledge will provide the base for knowledge asset that are value creative (Gholizdeh, 2010) and leads to better organization performance.

**The third hypothesis: Strategic orientation has a positive impact on organizational performance .**

Structural equation results showed that the impact of strategic orientation on organizational performance is positive and significant at the 0.01 level. This finding is consistent with research findings of Rahim nia and Sadeghian (2011), Theodosiou et al (2012), AragónSánchez, & SánchezMarín (2005) and Grawe et al (2009). These findings suggest that understanding customer needs, attention to customer satisfaction, customer satisfaction measurement, attention to after-sales service, sharing competitors' information with customers, discussion about competitors by the management of the company, the use of advanced technology for production of the new products, acceptance of the company's technological innovations and management projects have a positive impact on organizational performance and increase organizational performance. So for the explanation of this finding, it can be said that Strategic direction improve organizational performance by identifying customers and attention to customer satisfaction, the ability to deal with competitors and the use of new technologies in the production.

**The forth hypothesis: Knowledge Management has a positive impact on organizational performance through strategic orientation.**

The results showed that the indirect impact of knowledge management on organizational performance through strategic orientation is positive and significant at the 0.01 level. Therefore, knowledge management has positive and significant indirect effect on organizational performance through strategic orientation and the mediating role of strategic orientation on the relationship between knowledge management and organizational performance is confirmed .To explain these findings, we can say that the knowledge, background and necessary knowledge for an organization provides strategic direction and thereby affects the performance of the company.

## **6. Conclusion**

The aim of this study was to evaluate the impact of knowledge management on strategic orientation and organizational performance: A case study of steel producing companies. Overall results showed that when employees transfer their knowledge to others. and expand the knowledge base of company by this way provide a basis for the strategic orientation of the organization towards the continuous development and changes of organizational and as a result effect on firm performance .Key points in knowledge exchange includes the following features: partners are motivated and willing to offer their knowledge, systems and structures support the process of knowledge transfer and throughout the organization, knowledge exchange is recognized and supported .This process enables stakeholders to be able to use the knowledge and solve organizational problems. Exploitation of knowledge to solve a specific problem or issue may create new knowledge and this knowledge is stored and evaluated. In general, knowledge of the organization should be employed to establish processes, services and products practically. If an organization fails to use its established knowledge practically, it will not be able to achieve a competitive advantage.

While knowledge and intellectual capital is the core of competencies as well as the strategic foundation for better performance, when the knowledge has the strategic role that the organization can use

it in value creative activities and exploit it in the practical means to take the advantages of the opportunities in the competitive market . It is not possible anymore for companies to maintain their competitive advantage by doing things faster and better. A competitive advantage when become possible that it takes action and it cannot be imitate by others. In sustainable competitive advantage achievement, both considering the available knowledge and making effective use of it and creation of a structure for the use of new knowledge is important. Organizations need to be aware of all things because knowledge management as a business strategy, simultaneously, operates all over the organization, and it is considered as the tool advancement of an organization's in overall program .In addition, the strategic direction of the organization in relation to customers, competitors and Technology Company provides a basis to improve performance because it can identify customer needs and improve their satisfaction and cause using new technologies in production and provide the ability to rapidly respond to threats that endanger their company.

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