Surveying the effects of CKMP of strategic managers on supply chain performance in Iran oil industry

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Abstract: The argument attempts to elaborate the study of the effect of collaborative knowledge management practice (CKMP) on supply chain performance (SCP) in Iranian oil industry to find out the relation of organisational infrastructure, and elements of knowledge management practice in Iranian oil industry. This study is conducted among the 120 managers who work at the oil companies. The self-administrated questionnaire was performed to gather data and to process and analyse the data descriptive and inferential statistics were used. The findings illustrated that the success of collaborative KMP is created on: 1) organisational factors like managerial engagement, supportive culture, employee devotedness; 2) technology capability to handle like large scale inter organisational system; 3) facilitating environmental factors like high operational uncertainty and collaborative trading partners; 4) compatible knowledge bases of all parties. Likewise, the outcome indicates that collaborating with each trading partners in KM can enhance the knowledge quality, integration with partners and SCP.

Keywords: collaborative knowledge management practice; CKMP; supply chain performance; SCP; oil industry.
1 Introduction

In today’s competitive business environment, supply chains must respond to rapid technological change environment. Therefore, firms must engage in collaborative relationships that facilitate knowledge transfer and assist in sharing experiential and context-rich understanding about technological change (Hung et al., 2008).

Thus, a key challenge supply chain managers are facing is how to coordinate partner efforts to efficiently generate new knowledge and capability and how to collaborate across the border to exploit the already developed but scattered knowledge.

In a period of knowledge-based competition and knowledge market, a company or organisation must be capable of protected different kinds of benefits knowledge and increase their value of strategic in supply chain management. In order that, several organisations have started to re-examine and redesign their strategies, business process, information technologies and structures of organisational from success factors of knowledge management perspective to develop the chain management (Alam and Hoque, 2010).

A numerous competing companies are implementing knowledge management and cooperative work to produce and sustain these crucial success factors. Collaborative works in a company and among companies cannot only distribute the work depend upon capability of each member, but attain a seamless information flow between the cooperative team members knowledge sharing has verified to enhance decision quality and productivity of the partaking organisations. The knowledge management is critical and essential approach in order to have efficient collaborative work in supply chain management (Li and Lai, 2005).
Collaborative knowledge management practices (CKMP) in the context of supply chain are the collective activities that trading partners engage into create, transfer and apply supply chain knowledge. The broad intent of these practices is to engage in collaborative decision-making and spread the costs and risks of innovation in the supply chain. By establishing CKMP, firms can lower the costs and increase the effectiveness of managing knowledge within the supply chain (Wagner and Buko, 2005).

The lack of theoretical framework and the conceptual disorder in supply chain wide knowledge management study hinders the expansion of new academia knowledge as well as supply chain cooperation practices in real corporate world. There are several issues exist in the arranging knowledge management attempts for supply chain participants, yet.

While the existing literature on knowledge sharing in supply chains makes important contributions to our understanding on supply chain collaboration, it has significant shortcomings. The literature does not identify specific knowledge collaboration activities, and does not establish cause-and-effect relationships between CKMP and supply chain performance (SCP) (Feller et al., 2009).

Oil industry plays a crucial role in Iran’s economy and is the driving force of country’s progress. Effective performance of this industry will lead to the growth and development of the country. Knowledge management practices (KMPs) play an important role in the development of efficient and effective operations in the supply chain of oil industry.

This is due to the fact that KMPs can support the oil companies in a situation in which technology and innovation-based competition in the industry has been intensified and there is great need for technological collaboration between companies.

It should be noted that while global oil industry has benefited from knowledge management for more than thirty years, in Iran’s oil industry the KMPs and their impact on SCP has not received serious attention.

This study illustrated an effort to present the framework and origin concept of KMP on supply chain management in Iranian oil companies. These processes are detected by analysing the technological and organisational foundations as well as the appropriate factors that drives like practices and empirically test. Likewise, the effects of collaborative KMP to assist supply chain management and develop complete performance of supply chain.

In general, the most important aim of this research is to investigate, illustrate and describe the investigation of collaboration KMP of strategic managers on SCP in Iran oil industry. So, the specific objectives of this study are as following:

1. to determine the perceived of KMP on SCP
2. to explain the effect of organisational characteristics and dimensions of KMPs of strategic managers on SCP.

The purpose of this paper is therefore to develop and empirically test a framework analysing the relationship of CKMP with SCP. Our results are based on a study of Iran oil industry. It is expected that this research will provide important insights and useful guidance for organisations and especially Iranian companies of oil industry to streamline their KMPs externally with trading partners.
2 Literature review and hypothesis development

2.1 Supply chain management

According to Bowersox (2010), “supply chain management offers an integrated philosophy for managing organizations’ purchasing and distribution processes based on a marketing perspective and supply chain management is a homogenous management concept”. “In order to achieve the objectives of supply chain management individual companies should coordinate and integrate their activities with other companies along the material flow in win-win relationships and focus their joint effort on the end customer” (Aman and Aitken, 2011).

“Supply chain management includes the management of flows between and within stages in a supply chain to maximize total productivity” (Carmeli, 2004). “Supply chain management is the integration and management of supply chain organizations and activities through cooperative organizational associations, effective business processes, and a high level of information sharing to make high performing value systems that prepare member organizations sustainable competitive advantage” [Halliday, (2003), p.8; Teo and Pian, 2004; Park, 2006].

The goal of supply chain management is to seamlessly and effectively integrate manufacturing processes and logistical functions to fulfil customer orders and demand (Hart and Warne, 2008; Jones and Ranchhod, 2007; Carmeli, 2004). “A well-integrated supply chain will coordinate the flow of materials and information between suppliers, manufacturers and customers” (Park, 2006; Varma et al., 2006; Carmeli, 2004; Teo and Pian, 2004), and implement product postponement and mass customisation (Varma et al., 2006; Wang and Disney, 2016). Accordingly, supply chain management entails using of a set of synchronised decisions and activities to create the flow of material, information, and finance through a supply chain network (Coyle, 2009) and to efficiently merge suppliers, manufacturers, warehouses, distributors, retailers, and customers. Ultimately, the supply chain will serve to minimise system-wide costs and satisfy customer service requirements, by ensuring that the right products or services are distributed in the right quantities, to the right locations, at the right time and to the right customers (Bowersox, 2010; Hart and Warne, 2008).

2.2 Collaborative knowledge management practices

Supply chain knowledge may take different formats such as forecasts, product design, competitor analysis, demand analysis, customer analysis and specific problem solutions.

Supply chain knowledge flows can be classified into two categories. Formally structured (explicit) knowledge flows include transaction-related information such as purchase orders, invoices and delivery schedules.

The flow of tacit knowledge in the supply chain is more context-specific, largely unstructured, and embedded in the relationships between supply chain partners. It includes two components: the technological know-how is defined as “work-related practical knowledge learned informally on the job”. The cognitive component consists of beliefs, values, attitudes, ideals, mental maps and schemata that are related to the cultural shaping of the individual and the group (Beamer and Varner, 2001).
Collaborative knowledge management refers to knowledge management in a collaborative environment within and between organisations. Collaborative knowledge management allows individuals to share documents, make comments, engage in discussion, create schematic diagrams, and thus provides valuable support to organisational learning (Jones, 2001).

CKMP is thus defined as a regular pattern of processes and interactions that allow firms to generate, store, access, disseminate and apply supply chain knowledge across organisational boundaries to achieve their objectives with respect to the supply chain. We propose it as a multi-dimensional concept.

2.3 The collaboration of KMP and SCP

As Carmeli (2004) notes, the supply chain links the various activities and entities involved in the operation of an organisation over a series of time horizons. Therefore, management of the supply chain involves overseeing a system of collaboration where explicitly defined processes, responsibilities and structures of entities are aligned with specific operational activities and the overall objectives of the supply chain. As Simatupang and Sridharan (2002) point out, supply chains are typically complex and dynamic structures and this poses challenges for developing effective collaboration. For instance, value is added to raw materials at a number of stages and through various activities before becoming the item or final product purchased by the end customer. The entities along this supply chain cannot compete independently, as they have to act as part of a unified system and organise with each other to sustain competitiveness. Therefore, supply chain collaboration comes into focus in the development of effective and efficient relationships between entities to enhance and develop the performance of the entire supply chain. Moreover, the uncertainty and complexity of decisions regarding interrelated supply chain activities, such as customers’ different requirements and the different resources required, as well as increasing rates of unanticipated change and levels of goal difficulty among supply chain entities, also lead to a need for supply chain collaboration (Hart and Warne, 2008; Stank and Goldsby, 2000).

Supply chain collaboration is a central lever of supply chain management. It involves collaboration and the reasonable sharing of benefits and risks among supply chain entities over time, and can be characterised by efficient information exchange, communication, partnering and performance monitoring, joint planning, and joint product development (Hart and Warne, 2008; Arnott, 2007; Stank and Goldsby, 2000). Moreover, supply chain cooperation can serve as a vehicle for redesigning the decision making, workflow, and resources assigned to individual entities to developed the overall performance of the supply chain, through higher profit margins, improved customer service and/or faster response times (Moshabbaki and Jahanyan, 2009; Jones and Ranchhod, 2007; Lee, 2007; Simatupang and Sridharan, 2002). Thus, supply chain collaboration is a prominent strategic response to the challenges increasing from interdependent supply chain entities that has the potential to develop the performance of the entire supply chain.

Collaboration is a prerequisite for integrating the operations of discrete entities to achieve common objectives, which involves managing the relations between interdependent supply chain entities so that they work together towards mutually defined goals. The mutual benefits of supply chain collaboration include the elimination of excessive inventory, the decrease of lead times, improved sales and revenue, developed customer service, more proficient product design and development, lower manufacturing
costs, increased flexibility in manufacturing, and increased customer retention (Lee, 2007; Garud and Kumaraswamy, 2005; Teo and Pian, 2004; Harrison, 2003; Sahay, 2003). However, studies also show that a lack of collaboration can have a range of adverse influences on SCP, involving inaccurate demand forecasts, low capacity utilisation, low quality products, excess/redundant inventory, inadequate customer service, and high logistics costs (Garud and Kumaraswamy, 2005; Harrison, 2003; Sahay, 2003; Tan, 2001).

2.4 Conceptual framework

The supply chain management initiatives contribute significantly to the result of the company, therefore implementation of those practices is crucial for the companies today. The supply chain links the various activities and entities involved in the operation of an organisation over a series of time horizons. Therefore, management of the supply chain involves overseeing a system of collaboration where explicitly defined processes, responsibilities and structures of entities are aligned with specific operational activities and the overall objectives of the supply chain.

Firm specific knowledge and competencies have long been regarded as the source of sustainable competitiveness. Thus, the efforts to enhance organisational KMPs would deliver considerable operational benefits. Figure 1 shows the research framework developed in this study. The framework proposes that CKMP will have positive impact on SCP. CKMP, a new concept, is a second-order construct that embodies practices and routines associated with collaborative knowledge management. SCP is constructs that have been operationalised in the literature (Wixom and Watson, 2001; Frohlich and Westbrook, 2002; Narasimhan and Kim, 2001). We will define and operationalise CKMP.

Figure 1 The research design framework
this study confirms that supply chain practice can contribute significantly to organisation infrastructure level improvement as well as KMPs, which is closely involved the perceived KMP, collaboration KMP, and KMP impacts on the performance of supply chain in companies; it is therefore seen as a key driver of long term competitiveness of the companies. Given the association among financial performance and mature supply chain practices, the companies were also asked how much they expect to increase their development level in the next two years. Participants expect to proceed only about 0.6 stages of maturity over the next two years. These expectations reflect their perceptive of the challenges included in increasing new supply chain capabilities and practices. Based on the above explanation, therefore, the following research hypotheses attempts to illustrate more concretely:

Ha1 There is relationship between elements of organisational infrastructure.

Ha2 There are relationships between dimensions of collaborative KMP.

Ha3 There are relationships among KMPs (KMP perceived, KMP benefits, KMP impacts).

Ha4 There are correlations of the organisational infrastructure, and KMPs on SCP.

Ha5 There are no combinations of organiaational infrastructure, KMP perceived, KMP benefits, KMP impacts on SCP.

3 Research methodology

All research aim formulation can be classified as being qualitative or quantitative. Quantitative research is the systematic scientific examination of data and their associations as well as the quantitative instruments, such as the questionnaire, test or scale, which take less time and are more economical to administer as the reason for applying the quantitative method in social science researches. The quantitative approach, moreover, also permits the researcher to obtain a number of subjects, as suggested in Creswell (2009).

A quantitative research has been done when the findings are according to statistics and numbers that are indicated in figures and graphs. For providing the questionnaires the qualitative research has been employed and data analysing is based on quantitative approaches. As there is no control group and treatment in this research and researcher utilised the relation to explore the cause and effect relationships between the independent and dependent variables within the same groups of the subjects on the same variables. Hence, the design selected for the quantitative phase is co-relational.

According to Zikmund (2000), there are three non-probability samplings namely;

1 convenience

2 quota

3 snow ball sampling method.
Therefore, the method of sampling which is applied in this research is convenience sampling. The research setting is conducted in Tehran, Iran. The population of this study will be the total number of varied level of managers who had worked in oil companies and the total 120 questionnaires were collected among the respondents after omitting missing values and outliers.

The target of this study was to perform this skill by questionnaire while in order to select on-line or off-line questionnaire initially the accurate sample had to be selected. The KMP questionnaire was probing into the ‘know-how’ on the respondent by addressing the problem in five principle areas that was developed in the year 2003. The five-point Likert scale of survey extracted according to the other relevant studies of knowledge management as well as it was focused to reconsider of the literature, cross checks on the ground and extra distilled the many significant concerns to crucial in knowledge management success. Additional, the fundamentals were got together to describe the basic issues by 78-items from 1 to 5 (very low to very high) in five sections, supporting quantitative analysis, covering the organisational infrastructure (top management, employee collaboration, employee freedom), perceived KMP, collaborative KMP (creating, storage, accessing, dissemination, applying), KMP impacts on supply chain management.

The data were coded and entered into the Statistical Package for Social Science [SPSS version 16], to prepare and analyse data. The data was examined firstly in detail by using the exploratory data analysis. This step was important to ensure that the data was normally distributed and all variance were equal. Since all data met the assumption of normality, the researcher proceeded to the next step for the descriptive analysis. In the present research, both categories of statistics, descriptive and inferential, were carried out. Descriptive (such as means, standard deviation, variance, frequency, and percentage) were carried out to determine the demographics of the respondents and inferential statistics (such as Pearson product moment correlation, multiple liner regression) were applied to answer the research hypotheses and demonstrated the association between the dependent and independent variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of items</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management</td>
<td>5</td>
<td>.734</td>
</tr>
<tr>
<td>Employee collaboration</td>
<td>5</td>
<td>.701</td>
</tr>
<tr>
<td>Employee freedom</td>
<td>4</td>
<td>.732</td>
</tr>
<tr>
<td>• Organisational infrastructure</td>
<td>14</td>
<td>.834</td>
</tr>
<tr>
<td>• Perceived KMP benefits</td>
<td>13</td>
<td>.732</td>
</tr>
<tr>
<td>Creating</td>
<td>5</td>
<td>.764</td>
</tr>
<tr>
<td>Storage</td>
<td>5</td>
<td>.716</td>
</tr>
<tr>
<td>Accessing</td>
<td>5</td>
<td>.783</td>
</tr>
<tr>
<td>Dissemination</td>
<td>4</td>
<td>.876</td>
</tr>
<tr>
<td>Applying</td>
<td>6</td>
<td>.783</td>
</tr>
<tr>
<td>• Collaborative KMP</td>
<td>25</td>
<td>.715</td>
</tr>
<tr>
<td>• KMP impacts</td>
<td>5</td>
<td>.758</td>
</tr>
<tr>
<td>• Supply chain performance</td>
<td>21</td>
<td>.749</td>
</tr>
</tbody>
</table>
For determining the variables contingency, consequently, the test of reliability was performed by using the Cronbach’s alpha on most variables to evaluate the inter-item reliability (as shown in Table 2). These findings, hence, indicate that inventory has acceptable reliability.

4 Result

4.1 The dimensions of organisational infrastructure

The three aspects of organisational infrastructure are specifically ‘top management’, ‘employee collaboration’, and ‘employee freedom’. The correlations among factors were investigated by way of a Pearson product moment correlation analysis. As shown in Table 3, hence, depicts the organisational infrastructure factors correlation matrix. Each variable is positively related to each other as indicated by the high scores on one variable, which were related with the high scores on the second variable. The r-values differ generally, with the coefficients which range from .781 (the strongest) to .322 (the weakest).

Table 3

<table>
<thead>
<tr>
<th></th>
<th>Top management</th>
<th>Employee collaboration</th>
<th>Employee freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee collaboration</td>
<td>.413**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Employee freedom</td>
<td>.322**</td>
<td>.376**</td>
<td>1</td>
</tr>
<tr>
<td>Organisational</td>
<td>.743**</td>
<td>.781**</td>
<td>.760**</td>
</tr>
</tbody>
</table>

Notes: **Correlation is significant at the .01 level (two-tailed); n = 120

4.2 The dimensions of CKMP

The five sets of questions were pursued to comprehend the collaboration KMP is namely ‘creating’, ‘storage’, ‘accessing’, ‘dissemination’, and ‘applying’. As shown in correlation matrix table, there are positive associations among the collaboration CKMP factors; consequently, the second hypothesis is also supported.

Table 4

<table>
<thead>
<tr>
<th></th>
<th>Creating</th>
<th>Storage</th>
<th>Accessing</th>
<th>Dissemination</th>
<th>Applying</th>
</tr>
</thead>
<tbody>
<tr>
<td>CKMP</td>
<td>.569**</td>
<td>.609**</td>
<td>.633**</td>
<td>.694**</td>
<td>.570**</td>
</tr>
</tbody>
</table>

Notes: **Correlation is significant at the .01 level (two-tailed); n = 120

4.3 Relationship among CKMPs on SCP

The correlations of the CKMP were explored through a Pearson product moment correlation analysis by three main categories are namely ‘perceived KMP’, ‘collaborative KMP’, and ‘KMP impacts’. As well, the correlations of the organisational infrastructure, and KMPs on SCP were explored through the same analysis. Table 5 displayed the
r-values vary widely, with the coefficients ranging from .567 to .661. Moreover, it can conclude that the next hypothesis is accepted, so there are correlations of the organisational infrastructure, and KMPs on SCP.

Table 5  Relationship among CKMPs and SCP

<table>
<thead>
<tr>
<th></th>
<th>Organisational infrastructure</th>
<th>Perceived KMP</th>
<th>CKMP</th>
<th>KMP impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCP</td>
<td>.657**</td>
<td>.623**</td>
<td>.661**</td>
<td>.567**</td>
</tr>
</tbody>
</table>

Notes: **Correlation is significant at the .01 level (two-tailed); n = 120

4.4 The combination among variables

To find out the best set of predictors of SCP, multiple regressions was carried out to illustrate the best linear combination of predictor variables. These variables are organisational infrastructure (X1), perceived KMP (X2), KMP benefits (X3), KMP impacts (X4), for predicting the SCP (Y). The assumptions of normally distributed errors, linearity, and uncorrelated errors was checked and met. Therefore, the equation of the proposed multiple linear regression model (Zikmund, 2000) is as follows:

\[ Y(WA) = b_0 + b_1(X_1) + b_2(X_2) + b_3(X_3) + b_4(X_4) + e \]

To determine the best set of predictor variables in SCP, an enter regression method was applied. In accord with the enter method used, all four elements of KMPs were found to be of significance in explaining SCP. Moreover, as displayed in the coefficient table, the estimate of the model coefficient for \( b_0 \) is –.187, so the estimated model (Zikmund, 2000) is as below:

\[ Y(WA) = -.187 + .771(X_2) + .054(X_3) + .771(X_7) + .172(X_8) + .163(X_9) + e \]

The mean, standard deviation, and inter-correlations of the predictors variables can be find in Table 6.

Table 6  Means, standard deviations, and inter-correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCP</td>
<td>3.41</td>
<td>.618</td>
<td>.657</td>
<td>.623</td>
<td>.661</td>
<td>.567</td>
</tr>
<tr>
<td>X1, Organisational infrastructure</td>
<td>3.34</td>
<td>.622</td>
<td>1.00</td>
<td>.578</td>
<td>.550</td>
<td>.500</td>
</tr>
<tr>
<td>X2, Perceived KMP</td>
<td>3.36</td>
<td>.642</td>
<td>1.00</td>
<td>.579</td>
<td>.442</td>
<td></td>
</tr>
<tr>
<td>X3, KMP benefits</td>
<td>3.45</td>
<td>.498</td>
<td>1.00</td>
<td>.502</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X4, KMP impacts</td>
<td>3.33</td>
<td>.841</td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

This combination of variables significantly predicted SCP, \( F(4,115) = 45.693, p < .001 \), with all four variables significantly contributing to the prediction. The value of adjusted R squared was .600. This value reveals that 78% of the variance/variation in purchase intension was explained by the model. This is a good and respectable result. The ANOVA table indicated that the F-statistics (4,115) that based on Cohen (2004), this is a large effect and the corresponding p-value is highly significantly (.001) and lower than the alpha value of .05. That is to say that the estimated linear regression model line’ slope
is not equal to zero confirming that there is linear association among purchase intention and the five predictor variables.

**Table 7** Simultaneous multiple regression analysis for predictors variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SEB</th>
<th>(\beta)</th>
<th>(t)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X₁, Organisational infrastructure</td>
<td>.280</td>
<td>.077</td>
<td>.282</td>
<td>.343</td>
<td>.732</td>
</tr>
<tr>
<td>X₂, Perceived KMP</td>
<td>.201</td>
<td>.074</td>
<td>.209</td>
<td>3.635</td>
<td>.000</td>
</tr>
<tr>
<td>X₃, KMP benefits</td>
<td>.362</td>
<td>.097</td>
<td>.291</td>
<td>2.695</td>
<td>.008</td>
</tr>
<tr>
<td>X₄, KMP impacts</td>
<td>.138</td>
<td>.052</td>
<td>.187</td>
<td>3.745</td>
<td>.000</td>
</tr>
<tr>
<td>Constant</td>
<td>.090</td>
<td>.262</td>
<td></td>
<td>2.643</td>
<td>.009</td>
</tr>
</tbody>
</table>

Notes: \(R = .783; R^2 = .614; \) adj. \(R^2 = .600; F(4,115) = 45.693, p < .001, n = 120 \)

\*\(p < .05; **p < .01\)

The beta weights presented in Table 7, was suggested that largest beta coefficient is .362 that is for KMP benefits scale. The higher range of this variable makes the strongest unique contribution to describing the SCP, and that being also contributed to this prediction when the variance illustrated by all other predictor variables in the model is controlled for the SCP. While the value of Beta for KMP impacts is the smallest (.138) and indicate that it made the least contribution. Therefore, the last null hypothesis is rejected. That is to say, there are combinations of organisational infrastructure, KMP perceived, KMP benefits, KMP impacts on SCP.

**5 Conclusions**

This study developed an integrated model to examine knowledge throughout its entire life cycle, and formulated a theoretical framework to explore the antecedents and consequences of collaborative knowledge management. Based on the data collected, the model was tested using structural equation modelling methodology. The test results confirmed that:

1. organisational infrastructures and knowledge complementarily significantly has causal relationships with KMP implementation
2. by involving collaboration KMP with one’s trading partners would significantly improve the performance level of the entire supply chain.

There are still most important restrictions to performing a successful KMP; thus, there are numerous areas for enhancement. Similarly, the hypothesis on strategy, systems and an organisational infrastructure is supported by the findings on KMP implementation. The knowledge procedures are frequently not administered as processes in and of themselves. The same was felt for the resources committed for ongoing training and development of individuals. Moreover, the uninterrupted education involves individual employee association in knowledge sharing process and KMP organisations for the firm, as supported by the hypothesis. These findings exhibit require for a robust KMP effective and systematic processes that evade work duplication, and explain the exact meaning of the kind of knowledge that necessarily to be distributed, documented, and handled by the workers through the SCP. Therefore, the first step to a successful KMP attitude and also
the pre-requisites for KMP success is effective and systematic processes that as one of organisational infrastructure for KMP implementation is supported by this study results. Effective means are situated properly and functional of knowledge sharing and recording. From KMP perspective, much needs to be still done for advanced team efforts on successful KMP achievement.

The requirement to instil a knowledge insight is essential to create a stable base for knowledge management services which is grow overtime and flexible and for others, they can find that a further informal organisation is more desirable.

The present study examine at how organisations collaborate in knowledge management regardless of the type of industry they are in. As indicated by Simatupang and Sridharan (2002), effective and responsive supply chains have various requirements for information. Organisations in efficient supply chain are believed to less depend on information from supplier and customers for scheming their operations. It would be an interesting research to contrast how various the practices will be toward organisational knowledge and how knowledge is management across organisational boundaries in those two forms of supply chains.

Then, future research can expand the research to an international context. This current study limited its scope to Iranian oil industry. With the trend of globalisation, more and more supply chains have international participants. Foreign companies have different culture, different way of approaching problems, thus it would be challenging for these firms to collaborate for knowledge management. Future studies can include additional contextual variables in the model to evaluate how cross-national and cross-culture supply chain knowledge sharing can be handled. Next, applying other theories could yield more refined views of knowledge management among any type of SCP. Likewise, in upcoming research, the combination firms from various countries could be utilised as a sampling frame in order to prepare a more international insight to the subject.

Finally, the data of this study were drawn only from managers with located in one crowded city while the other kind of data can be more affected than. Historical, financial, and technological data and the firm-specific factors like skill intensity, operation size, intensity of the technologies adoption, wage rates, international orientation, labour productivity, profit margins could be considered in the analysis for further researches. Moreover, the type of strategies used and the scale of operations for SCP can also emerge as an important determinant of export performance.

References


Surveying the effects of CKMP of strategic managers


