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Studying the Mediating Role of Knowledge Sharing and Market Orientation to Enhance the Intellectual Capital Effect on the Organizational Innovation (Supervision of Insurance Companies in Lorestan Province)

Neda Shahsiah and Reza Sepahvand
Department of Business Management, Lorestan University, Lorestan, Iran

Abstract: The success of today's organizations is dependent to more knowledge of customers, competitors and other factors affecting the market. Experience has shown that organizations that to make better use of knowledge and their intellectual resources are more oriented to the market mechanism. The purpose of this study was the mediating role of knowledge sharing and market orientation to enhance the intellectual capital effect on the organizational innovation. In this study, in terms of target is applied and in terms of method is described. The population of this study is employees of insurance companies in Lorestan province and because of the limitation of the society, the whole members of the community were selected to the census sampling method that the numbers of them are 121 people. In this study to examine hypotheses and conceptual models were used partial least squares method and the Smart PLS Software. Results was to show that the intellectual capital has a direct and significant impact on market orientation, knowledge sharing and innovation; sharing knowledge has direct and significant impact on market orientation and innovation and market orientation has direct and significant impact on innovation.

Key words: Intellectual capital, market orientation, knowledge sharing, innovation, supervision of insurance companies, significant

INTRODUCTION

The present organizations are living in a complicated and competitive era and must adopt themselves to the changes of the surround environment in order to survive using the new methods of production and service is one of the efficient mechanisms for this problem. In other words, for increasing their abilities of providing better quality services, reducing production expenses, continued quality improving, providing the customers' needs and acquiring the customers' satisfaction, the organizations are to adopt new and efficient approaches instead of the inefficient and traditional approaches. One of the most fundamental changes in management thought in recent years has been the recognition that businesses often fail to maintain a focus on the customers and markets it serves. A market focus involves orienting the activities of the business to satisfying customer needs and wants. This shift in management's attitudes toward the customer has been driven by a more competitive international marketplace, rapid changes in technology which have shortened product life cycles and the relatively poor financial performance of many firms. Further, consumers are increasingly better organized have greater information and are generally more demanding. As a result of this shift in management's attitudes toward the market, many organizations have embarked on formal programs to improve quality in production, enhance the responsiveness of services offered and to foster a renewed commitment to serving the customer. These activities reflect the conscious attempts by management to develop and maintain a market orientation within the firm. In this regard, considering the intellectual capital and acquiring the customers' satisfaction is one of the most important concerns of the organization managers and leaders. The intellectual capital falls in the category of intangible assets. Now a days, the inclinations towards assessing the intellectual capital are growing. The increasing difference between the clerckial value and the market value, name the intellectual capital has increased the significance of the intellectual capital (the human capital, the structural capital and the customer or relational capital). This is the most important asset of the organization (Maditinos *et al*., 2011).

Efficiently used knowledge is not only an important intellectual asset but also a useful tool for organizations to effectively compete in the increased levels of market competition (Alavi and Leidner, 2001). According to Drucker (1992), knowledge has become the key economic resource and the dominant and perhaps even the only-source of comparative advantage.

According to Parlby and Taylor, knowledge management is a business process which relates to creating new knowledge and ensuring usage of

Corresponding Author: Neda Shahsiah, Department of Business Management, Lorestan University, Lorestan, Iran

knowledge within organization whenever it is necessary. Knowledge management process facilitates another important process in organizations, namely learning process. Effective knowledge management can also increase the amount of knowledge required for organizational members and facilitate the rapid diffusion of knowledge within the organization. Hence, knowledge management has a profound effect on transforming power of knowledge into innovation processes (Huang, 2009). According to Parlby and Taylor, knowledge management is a business process which relates to creating new knowledge and ensuring usage of knowledge within organization whenever it is necessary. Knowledge management process facilitates another important process in organizations, namely learning process. Effective knowledge management can also increase the amount of knowledge required for organizational members and facilitate the rapid diffusion of knowledge within the organization. Hence, knowledge management has a profound effect on transforming power of knowledge into innovation processes (Huang, 2009). Many scholars have thus far argued that effective management of knowledge leads to organizational innovation (Huang, 2009; Lin and Lee, 2006). Organizational innovation is a multidimensional concept that pertains to various parts and operations of an organization. The nature of the activities in each innovation type is different and they necessitate different strategies. There are three pairs of organizational innovation which are administrative and technical, product and process and radical and incremental that has gained significant attention in previous research (Gopalakrishnan and Damanpour, 2000). Edvinsson and Sullivan (1966) and Damanpour (1989) state that the distinction between administrative and technical innovations is particularly important for studies in organizational innovation bcause it reflects a more general distinction between social structure and technology and the two innovation types can represent changes introduced in a wide range of tasks within organizations.

Insurance services play an important role in the Lorestan economy and have profound effects on behavior of economic various sectors. But due to fundamental changes in the Iran's economy, these companies also are experiencing major changes. For this purpose, Lorestan insurance companies as market-oriented organizations should facilitating new opportunities to competitive through create the intellectual capital and induces high levels of knowledge and new ideas. So, active companies at Lorestan's insurance industry using the results of this study can identify and fix the possible obstacles to their work areas and ultimately provide the necessary context for the knowledge sharing and extraction tacit knowledge in hidden layers of the mind of scientists. Thus, considering the importance of the issue and also the lack of adequate research in this area, this research attempts to empirically examine the effect of intellectual capital and knowledge sharing on market orientation in Lorestan's insurance companies. Therefore, the main question of present research is: what the effect of intellectual capital on market orientation and innovation with respect to the role of knowledge sharing in the insurance companies?

Market orientation: The challenge for any business in seeking to remain competitive is to determine what its customer's want which in essence is the philosophy behind marketing. The marketing concept suggests that the long-term purpose of a firm is to satisfy customer needs for the purpose of maximizing corporate profits (Kohli and Jaworski, 1990). The term "market orientation" refers to the degree to which a firm implements the marketing concept. Although, different definitions of market orientation are available, this study is based on the definition used by Narver and Slater (1990) as it outperforms all the other definitions.

Narver and Slater (1990) have hypothesized market orientation as a one dimensional construct consisting of three behavioral components customer orientation, competitor orientation and interfunctional coordination and two decision criteria a long term focus and profit objective. They define market orientation in term of culture and relate it to the fundamental characteristics of the organization. Market orientation is seen to be "the organization culture that most effectively creates the necessary behaviors for the creation of superior value for buyers and thus continuous superior performance for the business".

Innovation: Innovation is considered as an important factor of empowering organizations for creating values and preserving the competitive advantage in the very complicated and unpredictable environment at the present. In the modern accelerated world, innovation is regarded as a competitive advantage for the organization, while its long- term preservation can not be possible. The only approach for creating values is dependent on the acceptance of innovation, intellectual resources and the creativity of human resources or the intellectual capital. Many of the organizations confront several problems in their environment. Due to the rapid pace of changes in the environment from the growing development of information technology and the increased level of customer's several needs and wants, the scarcity of the resources happens. In this regard, the managers and the staff should employ their power of creativity and innovation to keep up with the rapid pace of changes. Beats and Khasavneh define innovation as the adaption and using new methods and knowledge, involving the

capability of the organization to adopt or create new ideas and employing them in developing and correcting products, services and work approaches and processes. From the competitive viewpoint, the organization in which the innovation is preached to achieve competitive advantage, the managers' and staff's knowledge and new ideas are employed to produce new products and services to meet the customers' needs. Some innovations appear in the new products, services, technologies and managerial approaches. Gopalakrishnan and Damanpour (2000) classify the innovation into three groups: administrative and managerial innovations, process innovations and principle gradual and product innovation. Prajogo and Ahmed have identified two groups of innovations: the product-performance innovations and the process innovations. The product innovation includes the products or services which are profitable for the client. The process innovations include knowledge, equipment and approaches toadminister management which are employed in the process of production or providing services. Also, gradual innovations are usually classified as the innovations under the market pressure because most of their ideas are derived from the market. The organizations use the innovation as a tool for creating organizational adaptation, confronting severe competitive pressures and the changes of customer demands via innovation, the organizations achieve effective accountability to the environmental demands and as a result the organizational performance is preserved and improved.

Intellectual capital: The term 'intellectual capital'was first proposed by Galberis on 1969. Over recent years, different studies have evaluated the role of knowledge assets and their effect on the organizational efficiency. For example, we can mention these studies by Bontis *et al*. (2002). The intellectual capital provides a new resource base to enable the organizations to be able of competing. At present, the activities of the successful organizations have moved from product-orientation to knowledge- orientation. Upon entering into the era of knowledge-oriented organizations, the organizations knowledge has gained high importance like all other assets such as land, technology, etc. In general, the organizational assets can be divided into two groups: tangible assets such as physical and financial assets which are recorded in the organization balance sheet and the intangible assets such as royalties, copyright, patents, deductibles, registered marks and trademarks and the intellectual capital which most of them are not reflected in the balance sheet and using them is not depreciated (Nahapiet and Ghoshal, 1998). The intellectual capital is the tangible asset of the organization. It is considered as a valuable tool for developing the key assets of the organization. The intellectual capital is born in knowledge and science arena and plays a very efficient role in the continued success of the organization. Bonties (1998) points to three kinds of human capital, structural capital and intellectual assets or properties. The human capital signifies the level of workers' knowledge in the organization which is implied. The structural capital involves all the non-human assets or organizational capability which makes the market needs and wants come true. By the bridging capital, it is meant all the knowledge put available in the relations of the organization with its environment including the customers, the suppliers, the scientific circles, etc., which according to Bonties, the most important part of the bridging capital is the customer capital (Edvinsson and Sullivan,1996). In general, the intellectual capital means being knowledgeable, employing experience, organizational technology, making relations with customers and suppliers and the professional abilities which absorb a competitive advantage of the market for the agency. This capital is much influential on the organizational performance, creativity, innovation and the overall improvement of the organizational performance.

Knowledge sharing: All activities related to the transmission or distribution of knowledge of an individual or organization, an individual, group or organization, called the spreading or sharing. (Lee, 2001). Knowledge sharing is the activity of transmission and distribution (overt and covert) of a person, group or organization to a group or organization. Knowledge can be divided into two categories of explicit and implicit. Explicit knowledge can be recorded, classified and stored easily and is simple and easy move it in an official language. On the other hand, implicit knowledge hidden, rooted in everyday activities and individual mental models.

Literature review: In the end, Ferraresi research entitles "knowledge management, market orientation, innovation and organizational output" in the Brazilian companies show that knowledge management has a positive effect on market orientation and helps to orientation directly but it requires a clear strategic direction to achieving the organization's innovation and output. Therefore, in order to measure this relationship, the following hypothesis is offered.

Bidokhti Amin in their study as the impact of intellectual capital on knowledge sharing by examining the role of organizational learning mediation to the conclusion that there is a positive and significant relationship between intellectual capital and knowledge sharing.

Moreover, Egbu (2004) in his research investigated the role of knowledge management and intellectual capital on increasing organizational innovation. Results showed a significant and positive correlation among knowledge

management, intellectual capital and organizational innovation. Thus, the knowledge assets within the organization by involving opinions and new ideas of members and also highlight this opinions and ideas, promote the members innovation performance and this can leads to organizational innovation. Therefore, it can be expected that intellectual capital can indirectly improve the organizations performance and strengthen the conditions in the market.

Yousefi in a study entitled, the study of intellectual capital with a market orientation in the insurance industry of Iran, showed that the dimensions of intellectual capital has a significant impact on market orientation which means that however, the status of intellectual capital was high in the insurance companies and consequently has been higher the morale of market orientation in that company.

Bontis (2001) deals with to the study about the intellectual capital in the organization and its role in knowledge management and found that intellectual capital has a positive and significant impact on knowledge management that this dimensions in addition to communication deep with each other, also plays a major influence in the management of the organization.

Kor and Maden (2013) began to examines the relationship between effective knowledge management processes and innovation types in organizations as well as shedding light on the mediating effect of innovativeness on the link between knowledge management process and innovation types. Survey data collected from 103 participants in Turkey. The results of the study show that knowledge management processes relate positively to innovativeness which in turn increases innovations in organizations.

Aghania (2015) began to examine the mediating role of job satisfaction in the relationship between intellectual capital and vorganizational innovation. The results of this study showed that the intellectual capital directly describes 0.43 of the variation of the organizational innovation variance and it indirectly describes 0.35 of the variation via the variable of the job satisfaction.

Soltani in a study entitled, investigation the effects of intellectual capital on market orientation in Kalleh meat products and dairy company in Mazandaran Province to the conclusion that intellectual capital has impact on market orientation. Among the three dimensions of intellectual capital, human capital and customer capital is effective on the market orientation but not confirmed the effect of structural capital on market orientation.

Ngah and Ibrahim in their study as the influence of intellectual capital on knowledge sharing in the small and medium enterprises' perspective to the conclusion that relational capital has a positive impact on knowledge sharing while human capital and structural capital has negative impact on knowledge sharing. All the intellectual capital dimensions contributed a significant impact on knowledge sharing.

Nikookar examined the role of intellectual capital to facilitate actions of managers and employees of the County knowledge sharing in one of the southern provinces. For this purpose investigated the effect of three main aspects of intellectual capital (human capital, structural and customer) on sharing knowledge. The results showed that all the components of intellectual capital have a positive and significant impact on knowledge sharing.

Talebipour and Khoshnood, began to examine the intellectual capital and market orientation in Azhand companies and studied the relationship between the three elements of intellectual capital ie (human capital, structural capital, customer capital) with market orientation. The results of this study showed that there is a significant positive correlation between intellectual capital and market orientation.

Ferraresi began to knowledge management, market orientation, innovativeness and organizational outcomes in the companies operating in brazil. The evidence found indicates that knowledge management directly contributes to market orientation but it requires a clearly defined strategic direction to achieve results and innovativeness.

MATERIALS AND METHODS

Based on theoretical principles and literature, we can offer the following conceptual model (Fig. 1). As is clear from the model relationships between research variables can be found in the form of research hypotheses as follows:

- H_1: intellectual capital has a direct and significant impact on market orientation
- H_2: intellectual capital has a direct and significant impact on knowledge sharing
- H_3: intellectual capital has a direct and significant impact on innovation
- H_4: sharing knowledge has direct and significant impact on market orientation
- H_5: sharing knowledge has direct and significant impact on innovation
- H_6: market orientation has direct and significant impact on innovation

This study in terms of target is applied and in terms of data collection is a descriptive study and field studies branch and in terms of the relationship between researches variables are causal. In the present research used a questionnaire with 72 items to collect data as

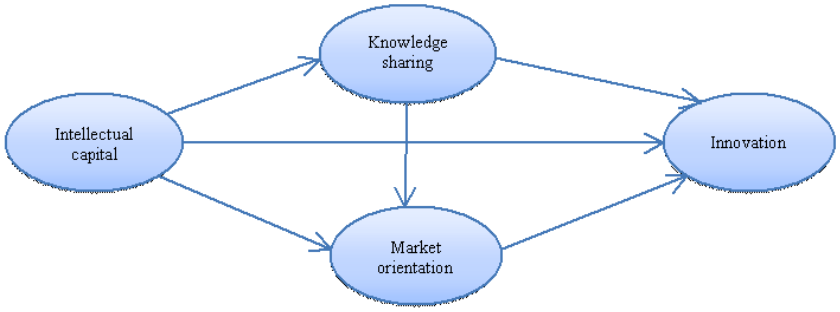

Fig. 1: Conceptual model

follows: Bontis (1998) intellectual capital questionnaire with 42 items; Narver and Slater (1990) market orientation questionnaire with 15 item; Wanga and Wang innovation questionnaire with 10 items and knowledge sharing from Buck questionnaire with 5 items. In addition for measured the response Likert's five-item scale was used.

Moreover, the research statistical population is employees of insurance companies in Lorestan. Because of the limitation of the population, the whole members of population were selected to the census sampling method that the numbers of them are 131 people. It should be noted that among the distributed questionnaires, 121 questionnaires were returned and eventually was used in the analysis.

Moreover, to adjust, classification and statistical calculation, we used PLS software. PLS software applies to measurement the research's overall model and hypotheses test using Structural Equation Modeling (SEM) technique. SEM is a powerful and general technique of multiple regression groups. In other words, its development of the general liner model that allow to researchers for testing the set of regression equations at the same time. There are various methods for implementing SEM that one of the newest approaches is Partial Least Squares (PLS) method. This method instead of reproducing the empirical covariance matrix, focus on the maximum explained variance of dependent variable by the independent variables. PLS algorithms for data analysis and conceptual model fit summarized in three steps.

First has ensured from validity of the existing in measurement models by using the criteria of reliability and validity and then paid to review and interpretation of existing relationships in section of structure as well as the final phase is an outcome of overall fit of the model. It should be noted that only the relationship section of structure are significant and interpretation that relations and section of measured models values are acceptable. In the following will be discussed to analysis of the data by PLS Software.

Table 1: Results of the three categories of Cronbach's alpha, combines reliability and convergent validity

Factors	Cronbach's alpha	AVE	Cv
Intellectual capital	0.840	0.605	0.723
knowledge sharing	0.764	0.527	0.794
Market orientation	0.759	0.521	0.850
Innovation	0.719	0.594	0.756

Table 2: Result of t-value and R^2 for research variable

Factors	R^2
Intellectual capital	-
knowledge sharing	0.735
Innovation	0.854
Market orientation	0.789

RESULTS AND DISCUSSION

Empirical results

Evaluation of measurement models: In order to evaluation of measurement models used criteria such as Cronbach's alpha, coefficient of Combined Reliability (CR), convergent validity (AVE) which those result presented in Table 1.

Thus, according to the appropriate amount for Cronbach alpha is 0.7 for a combination reliability is 0.7 and for the average variance extracted AVE is 0.5 (Fornell and Larcker, 1981) and in accordance with the detailed results in the table above, all of these criteria have taken the right amount in the case of latent variables which can be confirmed the suitability situation of reliability and concurrent validity of this study.

Evaluation of structural and overall models: To review the structural research model can be used to several criteria that most important criteria is a significant Z coefficient or the t-values. Structural model fit by using of t coefficient is in this way that this coefficient should be >1.96, so as to confirm that they are making significant at a confidence level of 95% thus, if the value of t statistic is <1.96, at a confidence level of 95% and if the amount of t statistic is <2.58 is significant of coefficient the path at a confidence level of 99%. Other key criterion in evaluation of structural model fit is R^2. After running the Smart PLS Software, t-value and R^2 results displayed in Table 2. In

Table 3: The results of this test hypotheses with partial least squares method

Research hypotheses	Path coefficient	t-values	Sig.	Results
Intellectual capital→market orientation	0.781	5.342	0.05>	Confirm
Intellectual capital→knowledge sharing	0.758	5.752	0.05>	Confirm
Intellectual capital→Innovation	0.658	3.478	0.05>	Confirm
Knowledge sharing→market orientation	0.589	2.874	0.05>	Confirm
Knowledge sharing→innovation	0.698	3.542	0.05>	Confirm
Market orientation→innovation	0.712	4.562	0.05>	Confirm

addition, for general model (measurement model and structural model) as well as used the GOF criteria. Wetzels have introduced three values: 0.01, 0.25 and 0.36 as the amount of weak, medium and strong for GOF.

According to the above table, all t-value coefficients are greater than 1.96 which the results showed a good fit to research structure. T-value coefficients related to hypotheses will be provided in hypotheses testing section. Furthermore, the values of R^2 related to the three endogenous variables of the model (knowledge sharing: 0.735 and market orientation: 0.789, innovation: 0.854) is higher than average for this measure the 0.33 which is a sign of goodness of fit for the structural model. In this study GOF criterion also was equal to 0.667 which is indicated the very good fit of overall research model.

Research hypothesis testing: To investigate the hypothesis testing use of t-value and to assess the impact been used the standardized path coefficient. The results of the hypotheses test presented briefly present in Table 3.

To calculate be significant paths the model, there are different methods including z methods (values t-values) that in this way to prove be significant the path, must the path between the variables be a figure >1.96 to able confirm the correct of path and also the significance of all the questions and variables relationships at the level of confidence of 95%.

Today's organizations are forced to use of knowledge and intellectual capital as their marketing facilitator strategies to achieve and sustain competitive advantage. Thus, in today's knowledge-driven world, the organizational capabilities have been based on the knowledge and market orientation and managers need to understand what capabilities are needed to sustain competitive advantages. This study is to evaluate the mediating role of knowledge sharing and market orientation to enhance the intellectual capital effect on the organizational innovation and is consists of six hypotheses.

Moreover, the results of testing the frist hypothesis suggest that intellectual capital has a direct and significant effect on market orientation at the level of 0.95. On the other hand, standardized path coefficient between intellectual capital and market orientation represent this content that 0.78 of market orientation changes is impact of intellectual capital. The results of this study are consistent with Soltani.

The findings of the second hypothesis prove to the direct effect of intellectual capital on knowledge sharing at the level of 0.95. Salim and Khalil found in their studies that knowledge sharing and intellectual capital impacting on each other and this mutual relationship plays a vital importance for the effectiveness of the organization. Haas at his research also, concluded that the components of intellectual capital (human capital, structural capital and relational capital) are an important input for the creation and dissemination of knowledge in the organization.

In addition, the findings of the third hypothesis prove to the direct effect of intellectual capital on innovation at the level of 0.95. On the other hand, standardized path coefficient between intellectual capital and innovation represent this content that 0.65 of innovation changes is impact of intellectual capital. The results of this study are consistent with Aghania (2015).

The fourth hypothesis focused on the effect of knowledge sharing on market orientation. The results of testing this hypothesis confirmed the directly effect of knowledge sharing on market orientation at the level of 0.95. The standardized path coefficient between knowledge sharing and market orientation is representative of this material which is 0.58 of market orientation change is affected by the knowledge sharing. The results of this hypothesis are consistent with research Anthony Fararasi. Enterprise knowledge management is one of the most important success factors in insurance companies in the information age and current competitive conditions. The importance of this issue is to the extent that today, a number of organizations to measure knowledge and use it as an indicator to achieve customer satisfaction in the market.

The findings of the fifth hypothesis prove to the direct effect of knowledge sharing on innovation at the level of 0.95. The standardized path coefficient between knowledge sharing and innovation is representative of this material which is 0.69 of innovation change is affected by the knowledge sharing. The results of this study are consistent with Kor and Maden (2013).

The findings of the sixth hypothesis prove to the direct effect of market orientation on innovation at the level of 0.95. The standardized path coefficient between

knowledge sharing and Innovation is representative of this material which is 0.71 of innovation change is affected by the market orientation.

Thus, according to the results of hypotheses testing, it is recommended to organizations and insurance companies' managers in line of achieve the goals of change and development addressing the following actions. Among the measures that could be addressed in order to achieve the goals of development and the development of insurance companies are that the insurance companies for being pioneer in the highly competitive market of this industry to action to grow and development intellectual capital of entrepreneurs value their employees, so in this way, with a focus on market orientation approach and satisfy the diverse needs of customers can steal outstripped of competitors. In addition, managers of insurance companies that must think measures to professional staff and their knowledge to share their implicit knowledge with other staff so that, added to the synergy of knowledge and company performance. Also, using the transfer explicit key knowledge and experiences among employees, encourage them to creativity and innovation to develop new laws and new projects, according to the needs of society.

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