Crisis Management through Creating and Transferring Knowledge in Project-Based Organizations

Hadi Pourbabaei, Mohsen Tabatabaei, Zohreh Jalalian, Abbas Afrazeh

Department of Industrial Engineering and management systems, Amirkabir University of Technology, Tehran, Iran

ABSTRACT

Creating, organizing and transferring critical knowledge during organizational crisis can contribute to organization's survival and increase risk-taking in current complicated business situations, in addition to help making correct decisions and managing crisis properly. Obviously, fulfilling this important matter requires powerful tools to control conditions and direct related actions. One of the used tools during crisis is context of creating knowledge and knowledge transfer channels. The present research studies managerial solutions to support crisis management by providing context of creating knowledge and knowledge transfer channels. Data was collected through interviews, and research strategy included a combination of case study and Grounded Theory. In the research, there has been studied critical condition for two projects in a project-based organization. In addition to recognize tools of creating knowledge and knowledge transfer channels, the research deals with how impact of the tools and channels on organization's performance. Findings indicate that creating and transferring knowledge play a significant role in crisis management in both projects. Finally, there has been presented a model for crisis management through creating and transferring knowledge, based on the verified experience in these two projects.

KEYWORDS: Crisis management, critical knowledge, creating knowledge, transferring knowledge, project-based organization, Grounded Theory

1- INTRODUCTION

Like natural and technology crises, organizational crises were occurred rarely, but they have severe consequences [2]. Feature of the crises is that they have uncertain causes and effects, and can threaten organizations widely [3]. When organizations are faced with uncertain and complex business environment, they will reduce level of such occurrences to prevent them, in addition to study conditions. And if a crisis occurs, they will minimize its effects [4]. Our country is not excepted in this respect, and even present in the current competitive environment and gain market share is more difficult for some domestic firms in comparison with other countries. Despite improving methodologies of management and technology, which they act as managers' supporter during crisis occurrence, there has been ignored importance of transferring efficiency and effectiveness experiences and conducted few studies in the field [5]. During organizational crisis, organizations are encountered with a unique, stressful and threatening decision-making environment that must deal with it integrate and timely [6].

To achieve effective decision-making during crisis, it is necessary that an organization recognizes what it needs and then transfer the knowledge to people who really need to it. Although academic researches show that key to enable effective transfer of knowledge within an organization is to give a chance to experts to talk with each other, but in practice, it is difficult to accomplish this task, especially when decision-making is combined with stress of "being late" [7]. Therefore, a set of channels for transferring knowledge to crisis management is necessary, in order to organize and transfer critical knowledge for helping decision makers to make on-time and appropriate decisions during crisis [5].

In this paper, in addition to track the used channels of transferring knowledge during organizational crisis, there will be discussed about how their impact on organization's performance. This paper aims to answer the following questions:

What are channels to transfer and create knowledge for improving crisis management? How channels of transferring and creating knowledge help to crisis management? How is relative effectiveness of channels of transferring and creating knowledge on crisis management?

Then there is presented the subject literature in the second part, which it will discuss about concepts of knowledge, knowledge transfer, knowledge management and creation, knowledge transfer and crisis management, knowledge creation and crisis management. The third section describes methodology. The fourth section presents results and finally, the fifth and sixth sections contain conclusions and recommendations for future researches.

2- MATERIALS (LITERATURE REVIEW)

4-1- Knowledge

Explanations range of knowledge is philosophical from practical to conceptual, and it includes limit to wide knowledge from objective perspective. Whig believes that knowledge consists truths and beliefs, concepts and ideas, judgments and expectations, methodologies or principles' science and techniques of how to do them. Knowledge can be

Corresponding author: Hadi Pourbabaei, Amirkabir University of Technology, Department of Industrial Engineering and management systems. pourbabaei@aut.ac.ir, +98 9124177084,

classified from different perspectives: knowledge classification based on multidisciplinary knowledge and skills, types of knowledge based on explicit or tacit knowledge, focused and productive knowledge, knowledge classification according to level of its carriers, knowledge stratification in terms of organization's needs and types of knowledge from complete and accurate view [1].

4-2- Knowledge Management and knowledge Transfer
Knowledge management is a process of receiving and using collective knowledge [8]. The key to understand phenomena associated with knowledge is to emphasize on identifying and testing processes that deal with knowledge [9]. Processes such as creating knowledge (production and acquisition), knowledge storage, knowledge distribution (identification, transfer and sharing) and applying knowledge have been widely discussed by academics and industrialists [10]. Knowledge transfer is one of the most important managerial issues among processes of knowledge management that can be occurred at any place and time, in individual, group and organizational levels [10]. One of definitions for knowledge transfer is as follows [7]:

Transfer= Send + absorption and utilization

Based on this definition, during knowledge transfer, it should be sent to right place at right time so that it can be absorbed and utilized at the time and place [11]. Knowledge transfer dynamics are often studied in terms of knowledge flows [12]. They have been studied especially from two points of view: first, type of the transferred knowledge such as classification of procedural and tacit knowledge [13], traditional distinction between tacit and explicit knowledge [14] and recent categories such as knowledge of what, know-how and know-why [15]; and second, entities and situations that knowledge is transferred between them such as people, projects, groups, departments and organizations [16]. Knowledge is not obtained through the structured instruments such documents, but it can be transferred through formal or informal interpersonal interaction [7]. The biggest obstacle to implement organizational knowledge is the channel between knowledge holders and seekers [10]. Therefore, scientists have emphasized on importance of effective and efficient multiple channels to transfer knowledge in KM success [7] and [17].

4-3- Knowledge Management and Knowledge Creation
New knowledge may be created inside or outside of an organization. Process of knowledge creation within the organization is achieved through learning, research, development, gathering experiences and learning through activities. External sources of knowledge can be achieved and shared via interactions with customers, suppliers and competitors. Ability to acquire knowledge can has substantial positive impact on technical innovation and operational knowledge. External environment and organizational culture also has significant effects on acquisition and creation of knowledge in organization [25].

Knowledge is created through interaction between tacit and explicit knowledge. Process of knowledge conversion requires producing new knowledge. Knowledge conversion process consists four elements: socialization, detection, combination and internalization. Socialization refers to process of converting tacit knowledge into explicit knowledge [25].

Knowledge creation should focus on exchanging and sharing information. Some conventional adopted methods by companies include brainstorming, training workshops and communication approaches such as grouping. Knowledge creation focuses on releasing and obtaining information flows within organization.

4-4- Knowledge Transfer and Crisis Management
Organizational crises are events with low probability and high impact that can threaten organization's main goals and even its survival [2]. An organizational crisis can be differentiated and characterized based on its attributes and types [21] and [22]. Crisis key phenomena can be detected by separating event to successive stages of crisis life cycle [21]. In addition, preparation or vulnerability of organization against crisis can be studied in terms of different perspectives such as business ethics, communications, organizational science and information management [23] and [24].

By considering role of knowledge transfer in crisis management, studies show that during critical times, decision makers must make critical decisions based on limit knowledge and information with time pressure in situations with high level of uncertainty and ambiguity [6]. Scientists claim that one of main challenges in organization's crisis management is to recognize experts with necessary knowledge and on-time description that knowledge for employees who are directly related with crisis through activities of knowledge transfer such as training sessions and meetings as well as other social activities including face to face relation between the employed people in different units of organization. Therefore, having effective and efficient tools for knowledge transfer from knowledge holders to knowledge seekers is very important because they need the tools for appropriate and timely decisions during crisis [22].

However, there have been systematically conducted few studies to investigate relationship between knowledge transfer and organizational crises. For example, there was investigated how to minimize organization's vulnerability against crisis through understanding social implications by interpersonal interactions and detecting individuals' feelings [24]. There were also studied channels of knowledge transfer during crisis and relation between the channels and crisis properties [5]. The research is also limited to few case studies, and it cannot be generalized. Therefore, studying the topic can be interesting and may lead to discover new facts. Especially studying this issue in Iran can help to enrich the literature because it has not been investigated in the country.

4-5- Knowledge Creation and Crisis Management

The created challenges in decision-making process during crisis and effectiveness of the challenges threaten organization's life. Meanwhile, critical events with low probability and high impact can provide an atmosphere full of ambiguity to detect reasons of occurring crisis. A creative decision is a new and valuable one that it is made in unique, unusual and unconventional conditions, despite previous decisions. In other words, it is an innovative approach beyond natural conditions and methods that can return organization into normal business space [26].

Given to features of organizational crisis such as complexity and variety, many believe that organizational crisis can be effectively managed through creative solutions. During organizational crisis, decision makers are face with unusual challenges such as fast and scattered information flows, various stakeholders and time constraints. Crisis may be a wonderful phenomena or a predictable event. Although timeliness is essential in these circumstances, but it cannot be ignored quality because of speed. Every challenge will complicate decision-making. [26].

3- METHODS (METHODOLOGY)

The research is an applicable one that has been conducted by combining strategy of case study and Grounded Theory. The research studied two crises in an Iranian company (Raahbar Informatics Services Co.). Both crises were about projects that were implemented in the country for the first time. Therefore, there were studied two projects titled "Designing and Implementing a Center for Electronic Certification" and "System of Cement Distribution Management in the Country". Data were collected through interviews with the project managers and then they were analyzed qualitatively. Open coding was used to analyze the interviews.

As there was no history for project of "Designing and Implementing a Center for Digital Certification" in the country, it was carried out in partnership with a foreign company. Because of available sensitivities, the project team was faced with heavy pressure during activities. The project actually was in crisis after about one year of starting.

Due to crisis of cement production and distribution in the country, "System of Cement Distribution Management in the Country" was defined and implemented by Ministry of Commerce. Developing construction operations, mass housing and need of active industries in urban area were some factors that led to lack of the related productions especially cement. Specific conditions were guided to directions that stakeholders followed carrying out activities and operations vigorously. Indeed available sensitivities entered the company in a difficult crisis.

After extracting concepts and concluding them, there was conducted a survey among experts (25 employees). The extracted criteria were ranked and weighted in SAW method.

4- RESULTS AND DISCUSSION

There were identified several concepts based on analyzing and coding interviews. In the following, each concept has been explained because in fact, they are strategies to create and transfer knowledge in critical conditions.

Table 1 shows the identified and analyzed channels of knowledge transfer in this research. In this table, each Knowledge transfer channels has been identified from total 100 that play greater role in creating and transferring knowledge in organization. Table 1 shows weighting channels of knowledge transfer in SAW method:

Channels of knowledge transfer	Training	Academic consultation	Job flow in organization	Employing new force	information boards	Email	Informal sessions
Importance (0-100)	25	20	15	10	10	5	5

TABLE 1: WEIGHTING CHANNELS OF KNOWLEDGE TRANSFER IN SAW METHOD

According to the obtained results, channels of creating and transferring knowledge were prioritized as Fig. 1. This figure indicates importance percent of the channels that have the most impact on creating and transferring knowledge to organization. Diagram 1 shows importance percentage of knowledge creation and transfer channels:
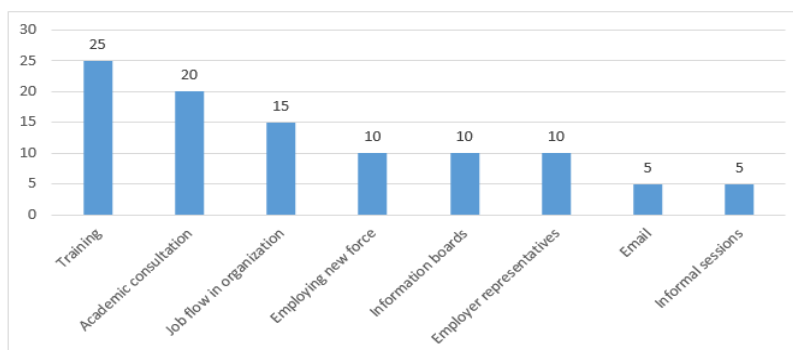

DIAGRAM 1: IMPORTANCE PERCENTAGE OF KNOWLEDGE CREATION AND TRANSFER CHANNELS FROM 100

Then there is described each channel and its impact on organization.

6-1- Channels of Knowledge Transfer
I.Job Rotation in Organization

In this research, there was considered a mechanism for job rotation in the company's management agenda to improve understanding current crisis space. People were shifted within the corporate units by considering their backgrounds and experiences, and they regarded problems from a new perspective. Impact of such an approach is very important because long-term employment of personnel in an organizational unit may cause an unexpected thought fall, and then they will be challenged to analyze their problems. Job rotation prevents knowledge passiveness and it is shared with a different structure in comparison with before. For example, displacing people in analysis unit with design unit created new solutions for project management to response problems in implementing step of projects due to proximity of their dominant mindset. However, as there were no integrated crisis management and knowledge management systems in the company, but in practice, there were considered some actions for knowledge management in sessions and interactions. Certainly, if there were implemented such systems, there would conducted fewer redundant operations and the organization consumed less energy to identify channels of critical knowledge management and knowledge transfer.

II.Training

Training people to deal with crisis and the selected channels for knowledge obtaining and sharing of individual during a crisis could help to monitor conditions and critical knowledge management. In the research, it was identified that as some projects have few executive histories inside the country and there were available similar experiences, transferring knowledge through training and visiting similar foreign sites could help the project team to explain problems and removing employer's concerns. Because lack of similar experience and knowledge about obstacles in project implementation phase will provide many challenges for the project team. In this regard, there was provides conditions for the project team to visit a foreign similar site and attend in a specialized course to reduce tension and crisis management, in addition to transfer the related knowledge. This training course caused to transfer experiences of similar projects operationally, the used strategies by other countries were localized appropriately and provided for other members of the project team. Important achievements of this period were to reduce costs of hardware requirements, which it caused a heavy loss because of high costs of personnel error.

III.Academic Counseling

One of major carried out actions by the project management team was to invite academic consultants and experts to projects' guidance committee and transfer their experiences inside the company. Its result was to transfer the related knowledge executively. Despite continuous efforts of the project team to control situations and as some of actions in knowledge transfer was done unconsciously, but the company was still in a deep challenge because of crisis. In these conditions, the company decided to employ some of scientific mission members in its guidance committee. Combining theoretical and academic discussions alongside practical experiences of the project team reduce crisis level and control available conditions in an optimized manner. Scientific perspectives on projects' decisions increased ability to discuss exchange views with employer through scientific channels and theoretical justification of many technical problems was possible. Inviting academic consultants and experts to collaborate and produce the required knowledge for the project team was effective in achieving organizational goals. They transferred the necessary knowledge in a managed and controlled manner, in addition to provide scientific opinions on meetings of project guidance committee. Interestingly, employer satisfaction about adopting this approach on the company was quite noticeable and noteworthy in the received reports.

IV.Information Boards

In critical conditions, one of main concerns in the company was to align individuals' views to control critical conditions and transfer the obtained knowledge to different people constantly. For this purpose, it was tried to prepare variety reports as statistical and applicable charts in a short time, and they are exposed for persons at the company. The reports were prepared in such a way that people at different levels can understand and analyze them. In most cases, reports and charts were prepared by cooperating employer's representatives. Drawing diagrams to describe state of the organization caused to participate employees for identifying the required knowledge and transferring it to proper channels. One of effects of the reports was awareness of personnel from main concerns of employer and the company's main challenge areas. Results of these actions reduce time and cost of transferring cases to the company's personnel significantly, because the analytical reports were regularly installed on the company board and problems resulting crisis were constantly available for people.

V.Informal Meetings

The project team was under pressure as which it was possible to revise the tender and transfer it to another contractor. There were hold numerous meetings inside the company and sometimes with representatives of foreign company to manage crisis and mechanisms to transfer knowledge to the project team and employer personnel. Besides these official acts, some problems and critical situations were solved out of the company because of close relationship between project team members. Informal meetings, which took place in a space without stressful working conditions, provided conditions to emerge latent individuals' ideas and knowledge. Sometimes, the sessions included detecting

mechanisms to discover channels for knowledge transfer in the company, and its role to reduce the organization's vulnerability against crisis was quietly evident. The sessions were hold in an appropriate environment outside the company and their results were submitted for the project team as tacit knowledge with applicable approaches and without tension. It helped to reduce tension and the company success to control crisis.

VI. Email

Results showed that there should be collected opinions of individuals inside and outside the company to decrease crisis level and gain the required knowledge. It was done by sending letter and mail formally and informally. Of course, there were sometimes reluctant to participate due to crisis high level and lack of experiences of similar projects. However, in some cases, it encourages people to post several technical and expertise comments. The mentioned procedure, which it was conducted by a simple recall at a limited level, helped submitting some related opinions by students and researchers to the company that was effective in reducing level of crisis. The little money was spent to collect data. These measures indicated that with regard to views of experts from outside the company, crisis will be managed and controlled in an optimized manner, while also facilitating prediction of the required measures. The knowledge transfer channel was important because in some cases, lack of controlling conditions was compensated by losing good history of the company and lack of controlling crisis, which it was heavy for management.

VII. Recruiting New Force

According to management opinion, there were employed some experts in the related fields with projects. Their mission was to cooperate with projects' team, analyze situation of the company in terms of existing knowledge, help raising staff knowledge and institutionalize them in all projects of the company. This action required changes in project teams as well as some available processes in the company; but projects' managers resisted against it strongly. In some cases, they reluctant to transfer and share their knowledge because of bad communications. Solving conflicts and justify people required spending a lot of time that it was challenging in some cases. Finally, the company's management insists on using these experts were found in their activities, and it had appropriate results due to attendance of representatives of employer and observing actions completely. Submitting analytical reports with a different approach to one of project stakeholders in another procedure was one of obvious consequences of this decision of the company's management.

VIII. Employer Representatives

After holding many correspondences and project meetings under name crisis management and finishing them without necessary conclusions and with many tensions, the company management decided to consider a place to be employer representatives beside the project team permanently. By using such an approach, the requested reports were prepared and submitted in the defined frames by consulting with the representatives. In fact, employer representatives were one of channels for knowledge transfer who they attended alongside the project team as partner and supervisor continuously and reported daily problems to employer. Some employer's needs were considered in documents without being mentioned previously.

As managers and project team supporter, the people reduced crisis level and transferred the considered knowledge to employer properly. Presence of these representatives was very useful in the rapid identification of people who needed knowledge. They played determinant role to reduce time of access to knowledge and success of crisis management because of constant communication with the project team and describing various needs of stakeholders. Sometimes these representatives described the project complexity and objectives through training sessions and seminars with various units and individuals. The attempts cleared importance of identifying specific channels of each organization and project as well as mechanisms for obtaining knowledge and distributing it among seekers.

5- CONCLUSION

Each of the mentioned tools helps to transfer and generalize knowledge in organization. As each project has its own requirements, the exchanged knowledge should be integrated and localized by considering project conditions. In fact, it led to create new knowledge in some cases that facilitates crisis management finally. To make optimize decision during a crisis, organization must provide the required knowledge for each unit at right time appropriately, in addition to identify different requirements. As described, it can be carried out through job rotation, training, academic counseling, information boards, informal meetings, email, recruiting new forces and employer representatives. Value added of successful using such methods play a significant role in timely decision-making in difficult and stressful times in organization. It may be difficult to access necessary information and knowledge and transfer it to people at different levels, and it is sometimes impossible.

During a crisis, organization is faced with a unique and stressful decision-making environment, as a result, necessity of coherent and timely action will be unavoidable. Examining results showed that it should be obtained people's trust to support and share knowledge in optimal management crisis. Meanwhile, taking measures to reduce stress, explore other channels of knowledge transfer and necessity of using them in the company's processes are matters that should be considered. Necessary predictions to reduce the company effectiveness during crisis and using knowledge transfer channels such as job rotation were cases that their absent was cleared in current activities of organizations. Obviously, recognizing knowledge transfer channels can play an important role for every organization to obtain and share knowledge and success of organization to control and manage crisis in special conditions. It should be considered how to deal with people in obtaining and sharing knowledge, the selected mechanisms for knowledge transfer and approaches to

reduce tension during knowledge transfer. The project team should consider identifying non-stated needs of employers, clients and stakeholders. In one hand, after transferring knowledge to them, there will be brought up new issues due to lack of necessary experience and knowledge that organization may has no answer for them. Obviously, emerging tension and conflict is inevitable in such conditions, and how to deal with people in obtaining and sharing knowledge, how to obtain and share knowledge and crisis control will be very important. According results of estimating importance of the extracted criteria in the research, it can be said that training has had the most effect; then academic consultation and job rotation are placed in next positions. After that, three channels of creating and transferring knowledge had same importance, i.e. recruiting new forces, information boards and employer representatives. Finally, channels of email and informal meetings had the least effects. Regardless of the prioritization, each of these channels played a significant role in crisis management and control conditions. Figure 1 shows a model to create and transfer knowledge in crisis management.
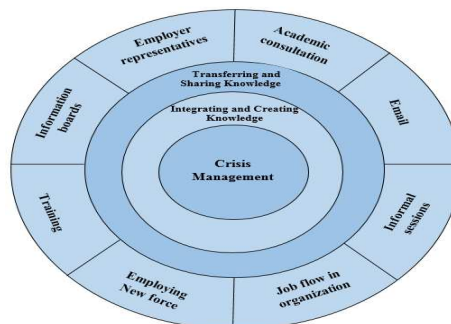

FIG. 1: A MODEL TO CREATE AND TRANSFER KNOWLEDGE IN CRISIS MANAGEMENT

Knowledge transfer is one of issues that must be appeared in place, time and individual, group, or organizational levels. Sometimes, knowledge is not available as documented only (Tacit knowledge). It may be transferred in various forms formally or informally. Sometimes, knowledge transfer channels are blocked as a barrier and will be placed between owners and seekers of knowledge.

6- RECOMMENDATIONS

According the research findings, there are other cases that can help to crisis management in organization such as predicting crisis conditions for every organization in terms of available conditions, using encouragement policies to obtain and share knowledge, creating appropriate information infrastructures and managerial recommendations:

- The following managerial recommendations can be placed on agenda of managers for optimal management of organizational crisis:
- Compiling the learned lessons from previous projects to be used in future projects and knowledge transfer from one project to another project by creating a project bank;
- Extracting and using knowledge transfer channels based on organization's experiences for optimize management of organizational crises;
- Obtaining necessary knowledge for various units during crisis and transferring critical knowledge to its seekers.

REFERENCES

[1] Afrazeh, A. Amirkabir Industrial University and Dana Knowledge Management Research Group. Knowledge Management (Concepts, Models, Measurement, Installing). Tehran, the author, 3rd edition, 2010.

[2] Hensgen, T., Desouza, K. C., & Kraff, G. D. (2003). Games, signal detection, and processing in the context of crisis management. Journal of Contingencies and Crisis Management, 11(2), 67–77.

[3] Mitroff, I. I. (2001). Crisis leadership. Executive Excellence, 18(8), 19–20.

[4] Gundel, S. (2005). Towards a new typology of crises. Journal of Contingencies and Crisis Management, 13(3), 106–115.

[5] Wei-Tsong Wang, Yu-Cheng Lu. (2010). Knowledge transfer in response to organizational crises: An exploratory study, Expert Systems with Applications.

[6] Pearson, C. M., & Clair, J. A. (1998). Reframing crisis management. Academy of Management Review, 23(1), 59–76.

[7] Davenport, T. H., & Prusak, L. (1998). Working knowledge: How organizations manage what they know. Boston, MA: Harvard Business School Press.

[8] Yim, N. H., Kim, S. H., Kim, H. W., & Kwahk, K. Y. (2004). Knowledge based decision making on higher level strategic concerns: System dynamics approach. Expert Systems with Applications, 27(1), 143–158.

[9] Holsapple, C. W., & Joshi, K. D. (2002). Knowledge management: A threefold framework. The Information Society, 18(1), 47–64.

[10] Shin, M., Holden, T., & Schmidt, R. A. (2001). From knowledge theory to management practice: Towards an integrated approach. Information Processing and Management, 37(2), 335–355.

[11] Changchien, S. W., & Lin, M. C. (2005). Design and implementation of a case-based reasoning system for marketing plans. Expert Systems with Applications, 28(1), 43–53.

[12] Argote, L., McVily, B., & Reagans, R. (2003). Managing knowledge in organizations: An integrative framework and review of emerging themes. Management Science, 49(4), 571–582.

[13] Anderson, J. R. (1983). The architecture of cognition. Cambridge, MA: Harvard University Press.

[14] Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. Organization Science, 5(1), 14–37.

[15] Lee, Y. W., & Strong, D. M. (2003). Knowing – why about data processes and data quality. Journal of Management Information Systems, 20(3), 13–39.

[16] Changchit, C., Holsapple, C. W., & Viator, R. E. (2001). Transferring auditors' internal control evaluation knowledge to management. Expert Systems with Applications, 20(3), 275–291.

[17] Davenport, T. H., De Long, D. W., & Beers, M. C. (1998). Successful knowledge management projects. MIT Sloan Management Review, 39(2), 43–57.

[18] Lin, C. H., Tan, B., & Chang, S. F. (2008). An exploratory model of knowledge flow barriers within healthcare organizations. Information and Management, 45(5), 331–339.

[19] Nonaka, I. and Takeuchi, H. (1997), The Knowledge Creating Company, Oxford University Press, New York, NY.

[20] Marr, B., Gupta, O., Pike, S. and Roos, G. (2003), "Management decision: intellectual capital and knowledge management effectiveness", Management Decision, Vol. 42 No. 8, pp. 771-81.

[21] Mitroff, I. I. (1988). Crisis management: Cutting through the confusion. MIT Sloan Management Review, 29(2), 120–150.

[22] Shrivastava, P., & Mitroff, I. I. (1987). Strategic management of corporate crisis. Columbia Journal of World Business, 22(1), 5–11.

[23] K.E.Weick, K.M. Sutcliffe, Managing the Unexpected: Assuring High Performance in an Age of Complexity, Jossey-Bass/ Pfeiffer, San Francisco, CA, 2001 xvi, 200.

[24] K.E. Weick, The collapse of sensemaking in organizations: the Mann Gulch disaster, Adm. Sci. Q. 38 (4) (1993) 628–652.

[25] Kuang-Hsun Shih, Chia-Jung Chang, Binshan Lin, 2010, Assessing knowledge creation and intellectual capital in banking.

[26] Sommer; Christine M. Pearson 2007, Antecedents of creative decision making in organizational crisis: A team-based simulation.