Review: Organizational Intelligence and Organizational Learning Capability

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Abstract: In today's competitive world, organizations are faced to rapid, stunning and surprising changes. Survival, success and thus, their competitive advantage depends on the capabilities and competencies that must develop to adapt to these changes and to apply in the best way. The importance of organizational capabilities and competencies have documented well for the effective performance of organizations in the research literature. The aim of this study was to evaluate the results of researches and models that have been performed in the field of organizational intelligence and organizational learning capability. Based on performed studies, it can be argued from the theoretical foundations that the perception of employees from organizational intelligence have a relationship with organizational learning capability.

Keywords: Organizational Learning, Organizational Intelligence, Performance.

Introduction

Organizational learning capability is one of the organizational capabilities that have been considered by Senge (1990) from the time of planning the idea of organizational learning and learning organization which has been recognized as essential tools for operation and performance of the organizations (Senge, 1990; Garvin, 2000). Organizational learning capability is a complex and multi-dimensional concept, which various studies have identified different aspects for it theoretically and on the operational and empirical basis. Jerez-Gomez (2005) had introduced organizational learning capability operationally by four aspects of managerial commitment, system perspective, openness and experimentation, knowledge transfer and integration and measured it based on an experimental and operational basis. According to this conceptualization, managerial commitment represents the development and facilitation of managerial support and leadership commitment for the process of innovation and motivation employees. Managerial commitment improves effectiveness and personalized learning and the ability of an organization to change based on environmental conditions. Similarly, systems’ approach points to the gathering members of the organization around a common identity and a common perspective, to link the activities of the staffs, to improve common actions and to develop relations based on the exchange of information and shared mental models. Openness and experimentation implies on the space of acceptance of new ideas and perspectives within and outside the organization which provides the possibility of becoming novel, new and broad and continuous improvement of individuals’ knowledge. In addition openness and experimentation support searching for new and flexible solutions for current and future issues based on the use of the different values and practices. Then, the aspect
of knowledge transfer and integration refers to disseminate and inner report of knowledge through verbal and non-verbal communication (for example formal and informal conversations, discussions and interaction between people and information systems) which helps to accuracy, reproduction and production capability and availability of information (Jerez-Gomez, 2005; Akgun et al., 2007). Organizational learning and development of organizational learning capability provides the basis for the survival and success of organizations in the future (Hult et al., 2004). The development of this capability within an organization reflects its ability to implement managerial practices, structures, and practices that facilitate and encourages the learning process (Goh, 1998). Despite there is consensus on the importance of continuous learning to improve competitiveness and thus maintain a sustainable competitive advantage, but there is still considerable debate about how managers can develop their organizational learning capability effectively. For this reason, many researchers have focused on investigation of the factors affecting it such as human resource management (Jerez-Gomez et al., 2005) and emotional capability of the organization. Many researches have been demonstrated the impact of the emotional capability of individuals on their learning and also the impact of emotional learning capabilities on the organizational learning capability (Akgun et al., 2007). In the context of organizational intelligence, it is discussed the linkage between organizational intelligence and learning process theoretically. According to these texts, an intelligent organization essentially is an organization that would be able to learn. Therefore, this study examined the results of research and models that have been performed in the field of organizational intelligence and organizational learning capability until now.

Results

Organizational intelligence from the perspective of Matsuda

T. Matsuda (1996) considered organizational intelligence as the total of mental abilities of an organization that is a combination of two factors of human intelligence and machine intelligence and has two components of organizational intelligence as a process which is meant to analyze and design and effective performance of organizational knowledge and information processes and solving organizational problems. Organizational intelligence is defined as a process by three parameters: interaction, accumulation and coordination. The process of organizational intelligence is divided into 5 parts according to Matsuda’s opinion: organizational knowledge, organizational memory, organizational learning, organizational communication and organizational intellect. These 5 sub-processes are powerful tools for analysis and progress the decision-making processes in the organization and organizational intelligence as a product provides combined policy and plans and guidelines for designing information systems for the organization. Of course, these two are not separate from each other and act as two dependent factors (Labbaf et al., 2011).

Organizational intelligence from the perspective of William Halal

From the viewpoint of William Halal (1998), organizational intelligence means the capacity of an organization to create knowledge and use it to adapt to the environment or market strategically. Organizational intelligence is like the IQ, but is formed on an organizational level which is called as the organizational intelligence quotient and is measurable like as IQ. If organizations do not have good leaders with subtle strategies and favorable environment, they may not use their intelligence as people and at a time when theories of organizational learning and intangible assets use, it may be understood hard how to implement and evaluate these methods, how they relate to the performance and how to develop them (Labbaf et al., 2011).

Organizational intelligence from the perspective of McMaster

McMaster’s point of view of an organizational intelligence introduced it as a capability of an organization as a whole in the increment of information, innovation of public knowledge and effective action based on knowledge creation. He examined ants’ nest in terms of intelligence and stated that the ants’ nest are extremely flexible and adjustable. Sensibilities and perceptions of the intelligence make sensitivity and receive feedback. It continues to find food and keep the nest and survival of the species. Some bodies make systematic and thorough houses incredibly. Where are the knowledge, intelligence and capacity of doing so? There is not in the queens, not in rules nor in resource centers and warehouses. So, it is expected to find ants that are really smart and intelligence and built the nest with intelligence and knowledge of communication. Organizational intelligence is a source of the future that
it is needed to achieve it the different thinking, different management and different organizing (Elahian and Zavari, 2009). Learning theories are discussed below.

**1. Behavioral theory**

Watson was a founder of this academy in 1913. Based on the ideology of empiricism, this academy believes that experience is the only source of knowledge and learning and learning takes place through gaining experience. For behavioral psychologists, the important topic of psychology is the apparent behavior and they explain gaining the behavior often by conditioning processes. These psychologists emphasize on the importance of practice, reinforce and vicinity to the learning (Seyed-kalan et al., 2012).

**2. Cognitive theory**

At about the same time that the behaviorists have proposed their theory, a small group of psychologists emphasized to the importance of understanding or insight and individual recognition and in general internal factors in learning. Gestalt, Piaget and Lewin’s theories were such cognitive theories of learning. In recent years, a group of psychologists founded other academy as cognitive-behavioral academy with a focus on both internal and external factors. From other theories that were formed after these academies, it can be noted to the physiological neural theory of learning and information processing theory. In general, learning theory consists of a set of principles and rules in the learning process. Learning theories deal with the study of the process of learning and try to examine how to learn and the factors affecting it. To achieve this goal, each of the experts has examined the issue from various angles which causes to create different theories of the learning (Seyed-kalan et al., 2012). Todays, two popular theories have been offered to explain the learning process. These are the operant conditioning and social learning theory:

**3. Operant conditioning theory**

Operant conditioning argues in such a way that behavior is a function of its consequences. People learn to learn something they want by adopting a behavior or to stay away from what they don’t want. Operant behavior means the learned voluntary behavior that is against the reactively behavior or not learned behavior. The tendency to repeat such behavior is under affecting by reinforcing or non-reinforcing resulting from the consequences of that behavior, thus it strengthens reinforcing behavior and increase the likelihood of its repetition. Based on the early works have done in this field, researches of psychologist at Harvard University, B.F. Skinner, has expanded our knowledge about the operant conditioning. Even his critics, who are representing a large group, also believe in this regard. It seems that the behavior is determined by external factors (i.e. learning) rather than internal factors that are reflections or non-learned. Skinner showed that the desired result of a behavior would cause it repeat. In addition, it is less likely to be repeated the behavior which is not rewarded or punished.

**4. Social learning theory**

People learn by seeing what happens to others and also by hearing the experiences of others like what they have experienced. Hence, they learn things from their patterns (parents, teachers, friends, television, cinema artists, etc.). Social learning theory is the idea that we can learn both through observation and through direct experience. Social learning theory is an extension of operant conditioning (it means the theory that states the behavior is a function of the results), but accepts also the learning through observation and the importance of perception role in learning. People react toward understanding and definition of the consequences of what they have rather than to the objective consequences (Seyed-kalan et al., 2012).

**Factors affecting organizational learning**

1. **Transformational leadership:** transformational and effective leadership forms behavior of learning, provides systems to facilitate learning and improve learning capabilities in staffs, ensures dissemination of knowledge and learning and involves some people in leadership. It means the leader must create systems and processes that support learning activities and people put them into their daily activities. This means that the ultimate responsibility for success and learning in organizations is undertaken by the organization's leaders.

2. **Knowledge management:** Many researchers in the field of organizational learning know it as the process involves the steps of acquisition of knowledge through external sources or internal growth, distribution and sharing
of knowledge among members of the organization, interpretation of knowledge to share knowledge between members of the organization, appliance of acquired knowledge in practice and the organizational memory that meant to store the knowledge for the future use.

3. **Teamwork**: each member of the team has various skills, expertise and talents that through dialogue between members, an opportunity is provided for staffs to benefit from the expertise of others and learn them and working together cause to solve the problems, thus team talks are initiating team learning. The learning and skills of a team is more than the sum of individual learning and abilities of team’s members. Team learning is mentioned as a key to access organizational learning.

4. **A shared vision**: a shared vision is consisting of creation a sense of commitment in members of the organization and teams by the organizational favorable outlook in the minds of employees. The importance of learning more to achieve projected goals will become obvious to everyone by creating a shared vision and it will have an extreme impact on learning capabilities of the organization.

5. **Personal capability**: This feature lets people in the organization to improve and clear their personal prospects. People with high personal capability have the capacity and ability to see the gap between the current reality and their personal prospects and also these people have a commitment to develop and improve their own thought, capabilities and skills. One of the factors affecting organizational learning is existence of such people at all levels and in different parts of the organization, because achieving the organizational learning is not possible without the realization of individual learning.

6. **Culture of learning**: the meant of culture of learning is to establish conditions for learning and support of learning in an organization such as investment in learning by organizations, holding training courses for staffs, library preparation and enrichment in the organization, allocation of material (cash) and immaterial rewards (promotions) to learn and so on. Preparing such a situation will increase commitment to learning in the organization.

7. **Information technology**: information systems can affect organizational learning using information technologies. These systems have a direct impact on organizational learning through the influence on contextual factors such as structure and environment. It also affects the staffs’ information and cause to increase their knowledge.

8. **The organizational specification**: in this section, most of our focus is on the two factors of life of the organization and the organizational hierarchy. Research has shown that by increasing the organization’s life due to the increment of communications with more people such as customers and suppliers, as well as institutions and organizations, it will gain more experience that affects learning of the organizations. As well as if the organizational hierarchy is greater, the learning would be more difficult and realized later in the organization. Because the organizational hierarchy causes to strengthen the culture of authority in the organization, in this culture, learning rate will be reduced because the partnership between people is low.

9. **The mental models**: it concludes of perceptions and imageries from the world and the environment that affects behavior. Senge believed that if the mental models of people manage correctly, it will facilitate learning new skills and then innovation in the organization and otherwise incorrect mental models will prevent learning.

10. **Systems thinking**: Systems thinking means to apply systematic methods to investigate organizational issues, to analyze affairs and inner and outer organizational activities and the effect of all factors on each other. Senge believed that an organization moves forward learning when that managers and at lower-level, all employees began to build the mind using the systematic techniques and use systems thinking in their daily decisions.

11. **The open mind**: the purpose of the open mind is the ability to investigate and analyze the processes in the organization. Organizations with an open mind examine methods employed, did not hesitate to accept new ideas for improvement and try to forget their past behavior even by learning new ways. All the efforts of such organizations are to refresh the organizational knowledge. Hope to realize the organizational learning increases by strengthening this culture in the organization.

12. **Agility**: an organization would be agile that not only respond to environmental threats but also affecting its environment as well. Such organizations consider productive learning, means learning that not only detects and corrects errors, but also will change the strategies, values and organizational assumptions. Agile organizations will be able to change and enter learning into their organizational space easily.

13. **The market or environment structure**: whatever the environment that an organization acts in would be much more dynamic, the organization efforts more for learning to respond more quickly toward changes in the environment and maintenance of its competitive advantage. By learning more, organizations are better able to understand their environment and will use the best strategies to counter the threats and exploit opportunities. Of course the type of learning is different in various environments. In relatively stable environments, adaptive learning is sufficient while in dynamic environments, the generating learning will be more effective (Alavi, 2008).
Discussion and Conclusion

The aim of this study was to review and conclude the researches that have been performed in the field of organizational intelligence and organizational learning capability. Based on studies have been performed, it can be argued from the theoretical foundations that the perception of employees from organizational intelligence has a relationship with organizational learning capability and supports theoretical arguments based on organizational intelligence with the organizational learning capability. For example, it is consistent with the findings of Khorshid and Pashazaddeh (2012) that concluded organizational intelligence has a positive direct and significant impact on the organizational learning capability.

Yolles (2005) stated that the idea of organizational intelligence consists of paradigms of organizational learning and knowledge management (quoted by Stanhouse, 2009). Simic (2005) stated that organizational intelligence is based on four key elements of organizational learning as organizational memory, organizational knowledge, organizational communication and organizational results (quoted by Rafiq, 2011). In addition, many authors are agreed in the theoretical definition of organizational intelligence that the organizational intelligence holds the capacity for processing information, learning and problem solving, the ability to adapt and re-shape the environment, and the ability to understand the feelings, thoughts and behaviors, and act in a proper way based on understanding and perception (Sternberg and Kaufman, 1998).

They highlighted processing of the organizational intelligence information by evaluation literatures related to individual intelligence, that has been conceptualized as the ability to process information and by sharing the same functional features at the level of organization (Chu, 1998) and conceptualized the organizational intelligence as the capability of information processing (such as the ability to learn, change and interpretation, publication, storage and use of information) that are applicable in seeking the understanding, prediction of how to percept, interpret, store, publish and use of information by organizations (Akgun et al., 2007). For example, McMaster (1996) stated that organizational intelligence indicates the capability of an organization to collect information, innovation and production of knowledge and action based on the knowledge generated in an effective and efficient. Wilensky (1967) observed the organizational intelligence in terms of collection, processing, interpretation and transmission of information needed in decision-making processes. In addition, Golin (1996) knew the organizational intelligence representing the capacity of the organization to process, interpret, decode and targeted use of information and goal-oriented activities in order to improve adaptive capacity with environment (quoted by Jaberi et al., 2014). Thus, according to the cognitive view, each organization that can use the capability of data processing in more effective way would have higher intelligence, and each organization that cannot use this feature in an effective manner will act with a little intelligence (Akgun et al., 2007).

References


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