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The role of Information Technology on Communications Satisfaction and Organizational Learning

Hamed Naderi¹, Seyed Mahmoud Hosseini Amiri^{2*}

¹ Master of Business Administration-Marketing, Sari Branch, Islamic Azad University, Sari, Iran. (Corresponding Author) hamed.naderi@gmail.com

² Assistant Professor, Department of Management, Economics and Accounting, Payam Noor University, Tehran, Iran. Hoseiniphdl@gmail.com

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ABSTRACT

The emergence of new technologies constantly brings about changes and developments in today's societies, and among these technologies, information technology is one of the most influential. In order to survive by keeping pace with the course of technological advancement, organizations must consider mastering new technologies in the business environment as an inevitable requirement and necessity. Considering the weight and importance of the topic, this study, using a systematic review, thoroughly explores the role of information and communication technology (ICT) in communication satisfaction and organizational learning. And in the end, based on our findings in this review, the conclusion has been made. The results indicate that IT has an effective role in communication satisfaction and organizational learning. Therefore, by identifying the impact of ICT on communication satisfaction and organizational learning, we provide a complete and comprehensive vision for the benefit of ICT policy makers in the field of information.

KEYWORDS: Information Technology ; Communication Satisfaction; Organizational Learning

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1. Introduction

The emergence of new technologies constantly brings about changes in today's societies, and among them, information technology is one of the most effective. Today's organization conducts business globally in an information-rich environment. The existence of networks such as the Internet provides access to information and facilitates communication. Effective communication has always been one of the important success factors of organizations. The decision-making process in the present time organizations is complex and dependent on intuition and requires strong mathematical models and information analysis methodologies (Popovič et al, 2012).

Information technology plays an important role in the fast-paced and changing environment. It is worth emphasizing that organizations that are equipped with information technology and have the ability to use it can be the leaders of other organizations in terms of knowledge acquisition, storage and transfer. Technology is very effective in the quantity and quality of organizational learning, and learning is one of the key factors in improving the organization's performance. For the first time, organizational learning emerged as a rapid response to these environmental changes (Berghman et al, 2013; Santos-Vijande et al, 2012) The goal in such an approach is to try to cultivate creative employees, with internal motivations inclined to learn and improve, as well as capable of aligning personal goals with organizational goals (Yaşlıoğlu et al, 2014) Although the effectiveness of organizational learning depends on the performance of each of the employees, sharing knowledge for learning in the work environment and the organization's support for the learning work environment (Tam and Gray, 2016).

Organizational learning is a dynamic, complex, and comprehensive process, by which the organization adapts itself to the environment (Haase et al, 2015). According to Lien et al (2007), organizational learning is associated with the capacity of an organization to continuously change and improve to solve existing problems and ultimately transform into an organization with higher levels of performance (Chahal et al, 2015). From another point of view, in large companies, organizational learning focuses on the best practice of learning in the workplace as a strategy to help manage change through knowledge and creative solutions (Tam & Gray, 2016). Organizational learning dimensions according to Neffe (2001) involve personal capability, mental models and shared vision. The use of IT in organizations promises fundamental changes in all fields. Organizational learning is one of them. Organizational learning is a dynamic process that enables the organization to quickly adapt to change. This process includes the creation of new knowledge, skills and behaviors. Organizational learning is the main way to create knowledge and improve organization's efficiency. It is clear that ICT can play a significant role in this learning. On the other hand, employee communication satisfaction refers to their satisfaction with internal communication. Internal communication is naturally a two-way communication between management and employees. Internal communication examines the effectiveness of communication systems in the organization as well as the communication between its employees. Communication satisfaction includes organizational perspective, communication with supervisors,

communication environment, personal feedback, horizontal and informal communication, media quality, and organizational integration (Mitić et al, 2017).

Simultaneously with the increasing development and expansion of information technology, the question that arises is to what extent the use of information technology is related to employee communication satisfaction and can improve employee satisfaction while facilitating matters. Today, change is the most important factor that organizations face and they must prepare themselves to deal with its consequences and impacts. People with high satisfaction and motivation improve organizational learning by using new IT tools. Therefore, given this importance, the main issue of the current research is whether information technology has a role in communication satisfaction and organizational learning.

2. Theoretical framework

The term information technology was used for the first time by Leavitt and Whisler in 1958 in order to express the role of computers and supporting decision-making and information processing in the organization. Information and communication technology refers to any tool based on communication lines and computers that connect the units of organizations, institutions and departments so that employees or users can use it to work with information according to information processing needs of the organization (Haase et al, 2015). According to Lien et al (2007), organizational learning has to do with the capacity of an organization to continuously change and improve to solve existing problems and ultimately transform into an organization with higher levels of performance (Chahal et al, 2015). From another point of view, in large companies, organizational learning focuses on the best practice of learning in the workplace as a strategy to help manage change through knowledge and creative solutions (Tam & Gray, 2016).

Organizational learning is a dynamic process that enables the organization to quickly adapt to change. This process involves production of new knowledge, skills and behaviors. Organizational learning is the main way to create knowledge work and improve the efficiency of the organization (Mitić et al, 2017).

2.1. The role of ICT in communication satisfaction

Prior research in this field has confirmed the tremendous impact of information and communication technology (ICT) on organizational communication. In a research conducted by some researchers, it has been found that the use of various information and communication technology tools has increased the total volume of communication. They found that an electronic messaging system increased upward communication in the organization. Another group of researchers found that the use of communication technologies strengthens the feeling of sameness in the members of the group. Because people who may lag behind strong people in face-to-face communication feel less restricted in electronic communication. Another management expert maintains that information technology enables managers to communicate with each other and be aware of each other's work results. The virtual computer system creates a new communication that these managers can use and become a group. This technology helps managers in removing

obstacles and creates a kind of group feeling, which results in an organizational identity (Ibid.: 273).

A group of researchers found in their research that information technology provides the possibility for managers to control and coordinate more complex structures by quickly processing information. In addition, information technology makes the organization and management function with coherence and quick feedback. In general, organizational communication has undergone significant changes in recent years with the growth and flourishing of information technology.

2.2. The role of ICT in organizational learning

Being a learning organization involves the organization in activities that can successfully identify learning opportunities and invest in them. Hence, paying special attention to ICT and its use in organizations for identifying learning opportunities are among the most important factors for the sustainability, growth and development of learning organizations, and the application of these technologies is a solution for developing knowledge and learning and providing better services, and refers to the effect of these technologies on organizational learning and transformation of the organization into a learning organization. In fact, in order to enjoy the advantages of the learning organization in organizations, it is necessary to focus and invest on the factors affecting organizational learning and the dimensions of the learning organization. One of these factors is the attention and importance that the organization gives to the latest and superior technologies. Therefore, the use of up-to-date and efficient ICT is one of the basic requirements of today's organizations, especially information-oriented organizations. Because ICT activities are considered as a point of strength in the organizational learning process (Morgan, Colebourne, & Thomas, 2006).

2.3. The role of communication satisfaction in organizational learning

According to Keaton (1991), communication satisfaction is one of the general dimensions of communication that is affected by various variables. Measuring employee communication satisfaction is one of the important aspects of organization communication evaluation. Researchers have provided a variety of tools to measure and assess organizational communication, among which we can refer to the communication satisfaction questionnaire of Downs and Hazen (1977), the organizational communication scale (Roberts & O'Reilly, 1979), and the communication assessment of the International Communication Organization.

Julke and Dohan (2000) concluded that high communication may potentially disrupt the focus of employees, while low communication causes employees to not be given the guidance they need to perform their duties. Therefore, managers must have the ability to establish appropriate and flexible communication with their employees. Organizational communication enables social interaction between organization members, communication processes, the use of information and knowledge distribution methods within an organization, and coordination among organizational resources (Chen & Huang, 2007). Organizational structure can be considered a dynamic factor that can be employed in various situations to acquire new and diverse knowledge as well as to accept

new organizational conditions (Lloria, 2007). These points indicate that organizational communication plays an important and effective role in the learning process, the amount of which depends on the flexibility of the organization (Martinez-Leon & Martinez-Garcia, 2011).

2.4. The role of communication satisfaction in the effect of ICT on organizational learning

According to Hatch (1978), the issue of communication satisfaction can be studied at three levels: interpersonal, group, and organizational, based on which he presented a tool to measure interpersonal relationships called the Interpersonal Communication Test, which was used in various organizations (Wills et al, 1984). The researches of Downs and Hazen (1977) and Downs (1990) led them to the conclusion that the category Communication Satisfaction has various dimensions. They found that communication satisfaction is an individual's satisfaction with various aspects of communication in the organization

From the perspective of these researchers, the issue of communication satisfaction is multidimensional and consists of eight aspects: communication with superiors, communication with subordinates, communication space, organizational integrity, organizational outlook, feedback, horizontal communication, and communication channel quality.

Organizational communication plays a fundamental role in organization enrichment to identify the required technologies, acquire new technologies and integrate them into the organization. As a result, organizational communication is a very important variable in the process of technology implementation and organizational learning (Patterson, 2014). Thus, it is obvious that the ability to learn is not a quest that is created by itself in the organization. It requires, on the one hand, the identification of factors that facilitate and accelerate learning, and on the other hand, the placement and utilization of the mentioned factors and their effective management.

3. Conclusion

Scientific management requires the use of appropriate data technology tools in order to improve the decision-making process and improve the employee performance. In this regard, business intelligence has come to the help of managers by providing them with the solutions, tools and advanced technologies in order to enable them to develop a suitable strategy, gain a competitive advantage and make smart decisions. From the psychological point of view, business intelligence will be effective and efficient if it benefits from capable human resources. Due to the need of organizations to adapt to the changing environment, the concept of organizational learning has become increasingly popular. Just as learning is essential for the growth of individuals, it is also important for organizations. Since organizational knowledge is viewed as a strategic asset in the organization, organizational learning has been discussed as one of the vital resources to gain competitive advantage in strategic management. On the other hand, organizational conditions can also provide contexts in which new and better services can be provided with the help of organizational learning and knowledge innovation, of which the organizational structure is one of the most important. In an environment which is mainly characterized by the ever-increasing development of knowledge and technology, business domains have lost their traditional form and

are taking new forms. These conditions have turned the business environment into a competitive and challenging environment, demanding new models. In new business models, the greatest competitive advantage is the ability to learn. Based on this, organizations that learn earlier, faster and better than their competitors are more successful.

In fact, in the current scenario of globalization, organizations must be competitive and dynamic not only in their image and values, but also in behavioral, structural, and technological changes. These conditions require new attitudes and innovative strategies, and emphasize the need for the organization to renew its methods in order to perform better (Haase et al, 2015).

Communication satisfaction is defined as individual satisfaction with the flow of information and variables pertaining to relationships in the organization. Pincus (1986) believes that communication satisfaction is a combination of individual satisfaction with the flow of information and individual relationship variables. According to Keaton (1991), communication satisfaction is one of the general dimensions of communication that is affected by various variables. Thayer (1968) defines communication satisfaction as employee satisfaction that lies in establishing successful communication with others. Crino and White (1981) also define communication satisfaction as employees' satisfaction with the many aspects of communication that occur in the organization. The issue of communication satisfaction has been widely addressed in the research on the organizational environment during the last 30 years. Extensive research in the late 1970s and early 1980s highlighted the importance of communication satisfaction (Refaisbone et al, 1977). Julke and Dohan(2000) concluded that excessive communication could potentially disrupt employee focus, while the lack of communication means that the required guidance on task performance is not given to the employees. Therefore, managers must have the ability to establish appropriate and flexible communication with their employees. Ballard and Seibold (2006) stated that employees who are faced with a high volume of communication perform their tasks slowly and cannot complete their tasks completely, so they quickly move on to their next task. Among other communication problems, we can mention the problems of managers in communicating with their employees.

In order to survive in an environment characterized by rapid technological advancement, organizations must consider mastering new technologies as an inevitable business requirement and necessity. Considering the importance of the topic, this research has comprehensively delineated and introduced the role of information and communication technology on communication satisfaction and organizational learning. By identifying the impact of information and communication technology (ICT) on communication satisfaction and organizational learning, we have provided a complete and comprehensive view for the use of ICT policy makers.

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ETHICAL CONSIDERATION

Authenticity of the texts, honesty and fidelity has been observed.

CONFLICT OF INTEREST

Author/s confirmed no conflict of interest.