Reviewing the Nature of Organization in the Age of Information and Network Society: The Role of Social Communication Network in Development of Information Transfer in Organizations

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A R T I C L E I N F O	A B S T R A C T
	In the new era of communication, wherein the entire world is facing ever-growing advances in information technology (IT) and people are also dealing with new software updates day by day, it is necessary to take steps towards changing lives. Such developments are so significant and escalating that most researchers believe that working towards planning ahead for change is not a requirement but top management of organizations need to identify the nature, principles, and aspects of knowledge management to make their sub-systems much more effective. In this period, defined as the age of information society, people are living in an environment which is based upon information and communication technology (ICT) with its own specific characteristics. In such societies, traditional concepts of economy, education, business, management, trade, and war have evolved. Moreover, the importance of the nature of organization in the age of information and network society along with the role of social communication networks in development of information transfer in organizations can be fully maintained through being updated in today's societies, which can lead to reaching goals a good manager will stand facing in the future. Given the nature of this review article developed with reference to the related literature, there were attempts to reflect on new topics in the course of dynamism and readiness of today's societies and take even small steps in this direction. This study was thus reflected on the role of virtual social networks in the age of information and network society and then accounted for the role of social communication networks in development of information transfer in organizations.

1. Introduction

Globalization is regarded as an inevitable process commencing and evolving from the 19th and the 20th centuries, facing vicissitudes, but not brought to a standstill except for the First and the Second World Wars. This trend was initially successful in economic dimensions and it gradually expanded into other aspects. In the present era labeled as the world of information and communication technology (ICT), the given process is also rapidly affecting human life and growing societies as a new platform. This impact can be observed in all social aspects; among them, the significant effect of information technology (IT) on organizational affairs and information transfer.

All the mentioned developments and changes can thus provide grounds for organizations to take on new attitudes towards the concept of information and the effect of IT in optimization and practicality of information in order to create a family of interests. Nowadays, information is taken into account as a valuable resource as well as an organizational asset whose weight and credibility are higher than those of important indices such as capital or workforce. IT can correspondingly be of assistance to an organization in competitive processes. Advantages of IT use in business can be accordingly various including accelerating information distribution and service provision as well as possibility of needs analysis among employees. The prerequisite for successful exploitation of such a system in organizations is having an accurate understanding of organizations and their resources along with knowledge of IT selection and development methodologies in business.

2. Research Method

In this review article, a total number of 30 relevant studies were examined. For this purpose, three databases and two web search engines were checked using appropriate keywords. Then, the list of the articles retrieved was investigated and finally 18 studies meeting the inclusion criteria were analyzed.

3. Results

According to this review article, Danaie-Fard and Alvani (2002) in their study on critical theory of public administration and the translation of Organization Theory by Stephen Robbins, defined organization as; "a social phenomenon that has been consciously coordinated with relatively distinct boundaries and parameters, acting almost continuously to achieve a common goal or a set of goals". With reference to this definition, an organization cannot be established automatically but it is made up of individuals or groups interacting with each other, leading to a harmony among members to the extent that they make efforts and plan together to attain an ultimate goal. As with IT development, deep transformations have been also created in the objectives of administrative processes and organizational structures. Moreover, IT provides organizations with an opportunity to eliminate many parallel and duplicate works and delegate a high volume of manual activities to computer systems. Thus, they can find a good chance for overviews and planning without any restrictions.

Zanganeh (………), in an article published in a personal website entitled as "Design and development of organizations tailored to the age of information" believed that one of the advantages of organizational integration of IT function was decreased organizational levels. Accordingly, organizations and companies with low management levels are very accountable since most decisions are taken immediately and there are not even different levels of management decelerating decision-making processes. All these features result in removal of excessive sectors in conventional organizations. Therefore, such organizations will be more competitive compared with traditional and hierarchical ones with a view to their accountability and reduced operating costs. Undeniably, such benefits might impose some extra costs on organizations, e.g.:

- Organizations are obliged to invest in IT.
- Organizations must be able to manage IT sector.
- Employees need to learn about new technologies and keep their information up-to-date.
- Supervision duties of managers will increase.
- Managers should monitor teleworking.
- Organizations have to manage relationships with partners and other strategic ones.

It should be noted that IT is the result of the growing cross-section of electronic phenomenon, data processing, and telecommunication development which demands removing gaps and integrating computers and users, as well as mechanization of communication systems and increase in data transfer capacities. This has thus enabled decentralization and creation of a highway along with a rise in speed and quality of efficient decision-making and management. Within organizations, fundamental changes in all areas are also possible through IT use. Today's world is however impossible to imagine without ICT as it is not thinkable without the power industry (Hamidizadeh & Rezaei, 2009). So, this modern-era world and its strong communications need strong managers because organizations can be more successful if they have stronger information and communications, which comes true with the presence of managers making timely and fast-moving decisions via sufficient and updated information and directing their organizations towards their goals.

In this respect, Zand-Rahimi (2005) confirmed that IT use in decision-making by managers was still far from optimal level and other methods were being typically employed to obtain information they needed. Kargar (2013) also stated that, despite complexities and rapid changes in the world of ICT, it could be used to collect and process information for desirable decisions made by managers. Regardless of being a tool kit, ICT resembled a thought and even advice to perform activities in an optimal and effective manner. The today's world is the world of technology and dropping behind technology will simply lead to dependence and backwardness in organizations.

According to Toffler's Third Wave Theory, Jain (2014) in a study entitled as "Technological revolution and disclosure of multidimensional development process relying on ICT in the new era", found that global community had attempted to learn, expand, and transfer experiences and information and also to group communications via integrating, defining, and explaining components and domains, so that they could play a role in macroeconomic, social, political, and cultural areas directly linked to the process of globalization and contribute to developments (Heddeghem, Lambert, & Lannoo, 2014). Even today, ICT strategic planning has been developed for connection between development components in the process of globalization and the era of communication (Akhavan, 2012).

Organizations nowadays are also experiencing a strong IT-based shift (Zanganeh, ………). The need to adopt a management philosophy that puts emphasis on subordinates' responsibility is thus the major problem facing the management of teleworking. It is likely that organizations and companies eliminate locations and physical offices for employees who spend so much time on commuting to and from work. Of course, the experience of working from home has demonstrated that some managers do not feel good about their subordinates they rarely see. Teleworking also requires trust between managers and subordinates, and subordinates' responsibility in this regard is of utmost importance. Some subordinates negatively react to losing their offices and using part of ones' homes as a substitute. They feel that organizations and companies are imposing extra costs on them. A virtual office undoubtedly calls for new managerial techniques as well as fixing relationship between managers and people who report them.

In the current age and with respect to human-made developments, making it possible to enter into the virtual world, it is necessary to make fundamental changes at the same time with advances in science and technology. Now, with the development of computer knowledge and networking, circulations of information and communications have become much more accurate and quicker and human life has become generally revolutionized. In this respect, many jobs have been phased out and ones that have never existed ever before have emerged. The value of creativity and innovation also points out the importance of this issue because organizations can adapt themselves to global changing conditions through correct entry into the network world, creation of right values, and reliance on creativity and innovation in this field and also continue to create organizational values to move in the direction of thought, knowledge, and innovation, which in turn leads to organizational improvements in revenues, costs, and processes. Use of thoughts and ideas in this regard also paves the grounds for further creativity and innovation to produce values and it will be a foundation for competitiveness in thoughts because small

and medium-sized enterprises (SMEs) can have a faster and timely shifts and utilize appropriate strategies originated from new thinking to benefit from network platforms and to act better for society in terms of competition with rivals, customer satisfaction, cooperation with premiere global suppliers, and value creation for stakeholders and community.

Most organizations are looking for ways to survive in today's competitive environment and to inform their employees in this regard. Organizations try to strengthen sharing innovative practices and raise motivation among employees to allow them demonstrate voluntary behaviors for the benefit of their organizations.

The ability to sustain an organization in today's changing and competitive environment requires IT use. The role of IT in new organizations is so strong that most organization theorists recommend managers and decision-makers to adopt strategies related to technologies in future directions. Among the important sectors in organizations affected by this technology are human resources. Naturally, management of employees integrated with IT environment will be overshadowed by it (ISNA, News Code 92111611373).

Virtual social networks assume two basic roles in political changes in today's societies. On the one hand, they publish mass culture, and on the other hand, they are the main source for the elite in society targeting innovation. In other words, such networks like to connect a big environment or the entire society to a small one. Each main factor affecting regeneracy and creativity is thus considered as an incentive and propellant for political developments. The issue of globalization and media are also intermingled, so the impression of experiencing globalization without media especially virtual social networks is without a solution.

Social media, particularly virtual social networks in the present era, are playing major roles in social changes which are also the sources of many contemporary evolutions as well as guides and controllers for processes and developments in the world. In this line, information science refers to knowledge of adjustment (collecting, storing, and processing) and accessibility (recovery and transfer) of information. Moreover, information knowledge is established as a scientific field reflecting on quality and use of information, forces dominating information processes, as well as tools for preparation of information for optimal access and use. So, information knowledge deals with generating, collecting, organizing, storing, retrieving, interpreting, transferring, converting, and using information (Vickery & Vickery, 2002).

A social network aims to provide the possibility of a relationship between individual capitals and to create social ones in order to help in the growth and promotion of levels of science. The main goal of each social network is to produce social capital and to facilitate relationship between specialists, artists, and owners of various professions. Converting individual capitals to social ones is also among important issues highlighted in all scientific fields. In this way, individual knowledge is converted into collective one; indeed, collective knowledge is utilized to solve problems in the world of science.

A virtual organization is network-based. In order for an organization to de-structure itself and to become virtual, organizational change and restructuring of organizational processes and functions are thus required, which will be very difficult with regard to inherent resistance of individuals to change. Using a more complete definition, it can be reiterated that a virtual organization is a certain type of network organization using the latest ICTs such as the Internet and the Intranet to establish interactions and to cooperate with individuals and organizations out of organizational environment, time, and boundaries.

Modeling virtual systems originates from use of information systems. Sociability of this approach can thus give a unique nature to such systems; therefore, a virtual organization along with conceptualized modeling of an environment can even help in developing organizational monopoly (Kord Naeij, Taheri, & Niakan, 2002).

It should be noted that IT becomes of utmost importance as it moves from Model 1 to Model 6 and organizations become much more reliant on information.

The characteristics of each evolutionary model are as follows:

- Model 1: This type of organization has a traditional organizational pyramid under the tight control of top management.

- Model 2: In this type of organization, top management creates a team of managers consisting of heads of units to make policies and decisions about issues and problems that cannot be solved through typical channels.

- Model 3: Such an organization has concluded that top management is not able to deal with all issues and problems, so project groups including first-line managers are created. In any case, organizational structure and hierarchies are still are very strong.

- Model 4: In this model, an organization shapes itself in the form of a matrix which allows operating groups combine their duties and skills.

- Model 5: In this type of organization, activities are fulfilled by project groups. In this case, there are task units but they only play a supportive role.

- Model 6: Such an organization is comprised of a working network. The organization also consists of a small core performing their duties through establishing relationships with others in the form of secondary contracts.

In the era of information, IT is utilized to improve and make controls tighten. It also makes it possible to have indirect control over employee performance and to establish mutual control between units and managers. Information systems also notify managers about activities and decisions, which are not possible in the traditional form.

Management control includes selecting and appointing people to perform tasks, rewarding appropriate measures, and determining whether good results have been obtained or not (Merchant, 1985).

- People control: Managers select people with right skills, values, and characteristics, train them to improve their skills and to strengthen their values, and appoint people in positions enhancing their knowledge.

- Action control: Managers identify decisions and behaviors that individuals and organizational units must adopt to achieve the desired results. Job descriptions, policies, procedures, and codes of conduct are also formal mechanisms used to control operations and actions.

- Results control: Managers compare the performance of the organization and individuals with what is expected or planned and make appropriate adjustments. Some managers also put maximum emphasis on philosophy of management by exceptions (i.e. whenever results are not in line with expectations, individuals and businesses will be examined to determine the cause of the problem). Managers also choose appropriate time periods for performance control. While seasonal overviews are widely exercised, managers in some organizations call attention to monthly, weekly, and even daily

action control. Defining the appropriate time interval for measuring performance is accordingly a function of (1) length of time expected for a trend to appear and (2) at what stage it is possible to act effectively and constructively.

IT can have a tremendous impact on all aspects of organizations, so managers are required to pay attention to issues related to IT to manage organizations in an effective and efficient manner; otherwise, they are doomed to failure. Regarding the effect of IT on society, it must be acknowledged that IT can bring numerous opportunities and threats. Furthermore, community members as an element of societies and organizations are strongly influenced by IT (Hassanpour Ghorooghchi, 2007).

Managers are additionally free to exercise tight or loose controls. Accordingly, tight controls indicate detailed and clear pictures of actions and acceptable results and loose ones provide freedom of action within the framework of general guidelines. However, individuals are expected to be cautious in defining practical solutions and in assessing whether they achieve the desired results or not. Obviously, managers make use of various control measures, in practice, with points along the tight-loose control continuum.

The aim of control is establishment of a set of the conditions improving the likelihood of achieving the desired results despite changes in technologies, markets, competitions, as well as other manifestations of turbulent organizational environment. If technologies associated with production and processes, employees, supply of raw materials, customer needs, capital markets, and competitors' movements remain stable, control can be simply defined as actions that management takes to accomplish its goals. Instead, in today's uncertain and vague world, management control is based on flexible processes and possible goals (Rasouli-Nejad, 2011).

Many organizations, particularly those in developing countries, are totally aware of the importance of IT in development of industries and economies, but they do not take any advantages not because they cannot afford it rather due to a series of obstacles including corporate culture as well as age and gender of employees. According to Hindi, virtual organizations demand much trust and honesty, so technology does not merely suffice. The ability of an organizational structure for dealing with a new technology can be indeed dependent on its employee expertise on technical, conceptual, human, and entrepreneurial skills to figure out a phenomenon. In a virtual organization, recruitment techniques, patterns of employee interactions, length of employment, rate of interest to people, performance evaluation, job design, work commitment, and human resources communication are different from other organizations. To improve future organizations, it is hoped that steps forward are taken by paying more attention to human resources as the main users of technology.

4. Conclusion

Unlike some ideas regarding the low speed of communications, what is going on today is that the world is progressing ahead with a mystical speed and it is becoming broader and more complex. In Ukrine, many managers and employees have not been able to keep up with the pace of the world because trust in global communications is not yet cultured and fear of the unknown is evident among them, but there is a need to become much more familiar with the culture of using ICT and step in a world that has been able to influence all aspects of human needs and to adapt jobs and productions with such changes and evolutions through developing modern methods of instruction.

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