

# The Investigation of Effect of Using Office Automation

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**Abstract:** In constantly changing conditions, we also should change, otherwise, we will pay heavy cost for no change (Doctor Nordal, the chairman of World Union of Science & Productivity: management's message). Today, office communications in economic organizations and institutions has changed fully due to the increasing development of technology changes in the world and also the rapid raise of environmental change and organization's need to respond quickly and appropriately to these developments. For this purpose, office automation system, on the one hand speeds work flow and on the other hand, provide a suitable platform to speed up the routines by collecting information of collection activities of the organization and their classification as a novel method. Surely, by facilitating the process of doing things, it is achieved one of the goals of any organizations which is indeed customers' satisfaction and increasing of efficiency of human resources. Therefore, the effect of using office automation on the productivity of human resources has also 2 indicators of efficiency and effectiveness and because efficiency is compilation of the performance of doing proper things or doing things right and effectiveness is do the right things or doing right things, that's mean, it is containing both efficiency and effectiveness (SarafiZadeh & Alipour, 2009). Efficiency means efficient use of various sources to produce goods and services which attract consumers' satisfaction, to maximize the staffs' job satisfaction and to increase staffs' acceptance of life in all its dimensions. Generally, efficiency is a concept that is used to show the proportion of input to output of a person, unit and organization or a nation. In this case, if the production and services level of an organization is more than the total rate of work force, capital, materials and things which is used, we say the intended organization has efficiency. One of the factors which can play an important role in the increasing of efficiency is technology information. The major reasons of application of the information technology in an office environment are increasing of efficiency of people who work in these offices.

**Keywords:** Organizational Activity, Efficiency, Human Resources, Automation.

## Introduction

Organizations are seeking for creating new methods to maximize the efficiency and effectiveness and they have no choice except change in their technology to compete globally. The change chariot is moving with insane speed and if organization is not in progress permanently or it can't use advanced technologies and it is not show the appropriate response against changes in environmental factors, it will be closed its life's book after a little while. Despite the increasing spread of information and communication technology and internet which has caused transformation of way of doing activities and services in light of the increasing accuracy and speed and transparency and reducing cost and time in today's world and particular despite widespread of topics related to electronic government and electronic business in Iran, ye, in Iran companies especially large organizations which have power

and possibility of more capital maneuver and as well as state organs have failed to set up effective electronic procurement systems for various reasons including lack of proper infrastructures and this in the way that the need for having such systems has been raised in the world in parallel with the growing recognition of latent abilities in the electronic government. In the massive change of world information, we should change our thoughts, issues investigation method, combine information way and way of forecasting the consequences of things. In this kind of circumstances, we should change the role of knowledge in our life and perhaps we change the chemical composition of our brain.

Office automation which is gift of IT industry to the administrative bureaucracy is a new idea which its age is not reaches to more than a decade in Iran (RahimiKia et al., 2011). Office automation is the combination of various equipment and furniture to facilitate affairs related to administrative activities which has advantages such as support the organization's goals and missions, increasing efficiency, increasing profitability, staff's optimization, speed improvements which leads to efficiency in office.

Part of the main circulating information of each organization takes place in format of organization's internal and external correspondence and automation's software are designed and produced in a way which can provide all needs of the organization and thus, they produce an integrated system of flow of information. Today, computers have surpassed of humans in many fields in terms of speed and accuracy, they can solve simple and repetitive issues quickly and with patience and to do complex calculations (Sheikh Beklo did without need for physical and continuous presence that this feature insists on shortening the distances of time and space as a superhighway). Office automation systems cause facilitating the administrative process and increasing the efficiency of human resources and management. In this study to evaluate the effects of information and communication technology on work force's efficiency growth in Iran's economy, due to the setting up the office automation officially in many organizations and authorities' frequent emphases in order to use this technology, it arises this question that is using this method could have an effect in improving the delivery of new services and staff's efficiency and also is it attained effectiveness by spending relatively high costs in order to equip the office automation in order to computerizing more office automation to better use of work force and increasing of staff's individual efficiency and use of time to more efficiency and better quality of management and also effectiveness?

### **Problem statement**

Organizations have not escape route from using the computer systems and information technology and advanced media and future is for people who consider advantages and disadvantages of these systems scrupulously with exact and correct recognition and learn from other's experience without bearing the costs of that experience again. Access to computer and information technology and advanced media is generating increasing acceleration and this acceleration has this effect that it makes more valuable per unit of time which saves from its previous unit. Thus, it creates a positive feedback ring which accelerates accelerating (SarafiZadeh, 2009).

Office automation is the best tool to reach helpful solutions in order to save and efficient use of time in organization. Mechanized solutions accelerate correspondence circulation of organization and also permit management of workflow. In this process, it is practical removing paper correspondence and efficient use of time and in fact office automation is a mechanism in the event of improving the efficiency of the organization through correspondence electronic circulation across the organization, easy search in the stored information, rapid and timely response to clients, removing paper from official correspondence cycle, apply an appropriate control on users, optimal registration and maintenance of information and improving communication within the organization (Norozian Garetakan et al., 2011). Torrential spread of computer in recent decades has created the most important change in the knowledge system from the invention of printing in the fifteenth century or from the invention of writing to the hand. Parallel to this extraordinary change it comes the spread of new media and networks which is amazing equally and its work is moving knowledge and its constitutive elements, that's mean, data and information. What are managers do at different organizational levels and move in its space always can be considered collecting and processing information (SarafiZadeh & Alipour, 2009).

Most managers and employees count decision making as a single event which is happening in a certain moment of time. But, in fact, decision making is the process mixed with the final game of power, policies, personal differences and organizational history. The leaders who have the recognition power of this subject make decisions much better than those who insist on this image which decisions are events only in the control of them. This is in the way that it is said some of decision making processes are more effective and more efficient from others. Now, computer vast possibilities and advanced communications is reduced administrative and executive problems and it has provided the possibility of thinking and decision at other space for planners and implementers. Sign in small computers opens a new window to the automation world and it has put a great opportunities to the administrative

and executive systems. These tools are able to increase speed and accuracy and promote executive power of administrative units in terms of quantitative and qualitative far too high. Performance is that the result of the activities of an employee in terms of performance of assigned duties after a certain time which can have the production side, like the number of books which a bookmaker is binding during the day or it has service aspect like the number of customers are being served by an employee during the day (Yazdani et al., 2010).

Using these tools is effective in allocation of affairs in addition to increase the speed and accuracy and it raises staffs' efficiency dramatically and puts proper facilities to the managers and operating staff to reach timely and accurate information easily when needed. And they combine and move information in any way they want and to analyze them easily and they print prepared reports or put it to planners and managers through network. Using these reports which has been prepared based on truthful and accurate information enable managers to identify many of the problems and deficiencies and to adopt an appropriate decisions with fully aware of strengths and weaknesses points and to have more control on the implementation of programs. Hence, automation debate finds more important day by day, if today, those organizations can see themselves at the highest level of readiness to deal with peripheral and interior equipment which have benefited from the high degree of automation.

### **The importance and necessity of research**

International developments and the speed of these changes make states to draw strategic perspective of their move in order to gain competitive advantage in the international field. Drawing perspective is in fact distant future of a country and it represents values, ideals and thoughts of country's policymakers. Strategic and national decisions based on creating e-government Iran's prospect of 1400 and consequently strategic decisions in line with perspective and explaining purposes and general and executive policies in the fourth program of developing and explaining challenges and strategies to achieve goals, requirements of the global village in the communications, standardization of operations and customer's satisfaction and as well as Iran's interest to arrive at the colony of countries member of World Trade Organization and Iran's acceptance as observer after ten times denied, a significant presence of Iran in international organizations and communities and the emphasis of the fourth paragraph of multi-sectorial document on the development of public awareness and research and technology development put preliminaries in front of organizational system which turning to office automation is one of them (Khaki, 1997). Using office automation system, in addition to cause the increasing of product or output and saving time or work force, it causes other cases such as better control at work because of less division of labor, information conversion takes place from one form to another, staffs organizing is done better, less need for formalities control to monitor workflow between offices, because of the increasing of staffs' effectiveness in doing a series specific tasks their job satisfaction is increased, customer's more satisfaction because of providing better information and timely service (RahimiKia et al., 2011). Whereas, reviews is shown there is a positive two-way relation between investment and information technology or automation office systems and institutions' efficient and manpower's productivity. Information technology leads to enhancing the ability of organizations and as a result, the increasing of products variety and quality improvement and customer's satisfaction (Turban, 2004).

In the field of evaluation of using office automation systems on economic variables firms and governmental and private organizations have been done very few studies. This is in the way that, in different countries of world including Iran, many studies have been done in the field of the effects of information technology (IT) and information communication technology (ICT) on economic variables like efficiency, economic growth and so on in different levels of activity especially at the macro level (Norozian Garetakan et al., 2011). Business's competitive environment and its changes in the 1960s and economic globalization and economic systems conversion and industrial societies to the service economy based on knowledge and information is doubled attention to the information systems. Therefore, from 60s decade ad, use of office automation systems which are special type of the information systems finds more importance day by day (Yazdani et al., 2010). Office automation is combination of various equipment to facilitate issues related to office activities has advantages such as support the goals and missions of the organization, increasing of efficiency, increasing of productivity, staffs' optimization, speed improvement which lead to output in office. The main part of the information in circulation of any organization is done in the format of organization's internal and external correspondence and automation' software are designed and produces in a way to provide all needs of the organization and thus, to produce an integrated system of information flow. Today, computers have surpassed from humans in many fields in terms of speed and accuracy, they can solve simple and repetitive issues quickly and with patience and do complex calculations. Office automation is included all formal and informal electronic systems which is related to establishment information relation between individuals inside and outside the organization and vice versa. The main word which distinguishes office automation from data processing, management information system and decision support system is

communication. Office automation is both orally and writing in order to facilitate communication types (Sheikh Beklo, 2011). Efficiency word was used for first time by Francois Kene mathematician and economist advocate of Physiocracy school (nature rule). Kene knows the authority of any government subject to increasing efficiency in agriculture section with designing the economic table authority. In 1883, another French in the name of Liter defined efficiency as production knowledge and technique. In 1950, organization for Europe Economic Cooperation defined efficiency in a formal manner such efficiency is the resulting of fraction which is obtained divide the product amount or value on amount or value of one of the production factors. International organization of work has defined efficiency such, efficiency is the rate of output to one of the production factors (land, capital work force and management) (RahimiKia et al., 2011). Use of information communication technology in America during the period of 1973-95 resulted in 1.4% of efficiency growth of work force. In England, capital deepening related to information communication technology and efficiency growth of all production factors of this type of technologies during the final years of 1990s resulted in efficiency growth of work force in this country. Information communication technology is increased work efficiency in the countries of Central and Eastern Europe strongly and it had the greatest impact on the convergence of countries in 1990s (Norozian Garetakan, 2011). Given that office automation is the best tool to achieve effective solutions to save time and efficient use of facilities within the organization. In this way that, mechanized solutions accelerate organization correspond circulation and it makes it possible management in works circulation. In this process, it becomes practical paper correspondence, saving and efficient use of time and increasing of efficiency, therefore, the effect of use of office automation on human resources' efficiency has also 2 indicators of performance and efficiency and because efficiency is combination of (doing works right or doing works right) and effectiveness is combination of (doing right works or doing right works).

### **Office automation system**

Office automation is that: connect computers' information in an organization by help of network or using a common software program which information transfer, statistics, letters and correspondence and also instructions is done as fully integrated and easy and thus, it is created a new formula to classify, exchange, regulation and correction of information within the organization and accelerate the performance issue without need for administrative cumbersome and customer methods And by saving time consumable raw material.

When a new technology enters to an organization put negative and positive effects not only on efficiency, but also on company's staff which it should be increased these positive effects over time and to minimize negative effects. Small companies can enter to compete with large companies by help of office automation.

### **The overall effect of office automation on general of the organization**

It creates a visible change in organization's processes and communication with the arrival of new system of office automation to organization. Removing paper from archive and office affairs, removal of space limitation to archive files and its tools like ledger and folder, reducing of environmental risks and problems and firing, and increasing of safety factor in maintenance of information and support from office issues are the effects of using automation.

### **The positive effect of office automation on general of the organization**

By arrival of office automation system, bureaucracy replace by office automation. The advantage of this issue is that organization's various units and staff no longer needs to follow managers and experts' interests, why so, activities are defined as processes by office automation which leads task-oriented to process-oriented and these processes are flexible and able to learn. As a result of process-centric responsibilities, duties are done on time and with high speed. Paper files and traditional archives replace by a bank of data system and the information of system are saved in these information banks. Therefore, data are ordered and access to them becomes easier. As well as, the security of maintaining and storing information is gone up and dependence on staff is decreased to fetch and information transfer.

Certainly, with arrival of a new system, it should be taught necessary training of work to staff. When staff is learned that how to work with system, on the one hand, because access to data is simpler than before, staff's work motivation is gone up and works are done with more speed and accuracy. Learning and ability to work with a new system for each staff will follow social credit and special advantage in his work future. Besides easy access to data and dependence of staff and units to each other, geographical dependence also is decreased and this issue is due to

web-based system. This is in this case that by reducing paper consumption and a short path in the transmission of information, the costs also will reduce.

### **The negative effect of office automation on general of the organization**

Any new system on arrival at organization faces with resistances from staff. Staff has this image that may be their work become complex by replacing new system instead of traditional system and may be they can't deal with new system and this factor causes that to lose their work. While, if organization's manager and decision maker believe that with the establishment of this system, efficiency in organization will increase and it will save time, it can transfer this belief to staff and it gives trainings related to staff of each unit at each level of the organization by grouping staff and of course, levels of training is dependent on grouping of organization's staff.

Therefore, the most important negative effect which office automation system has with it is a resistance which staff will have in learning and work process with new system.

After these resistances break, organization's order and efficiency slope will find ascending growth.

A false belief which is available in analyzing establishment effects of office automation system is that the arrival of this system in each organization is caused reducing the number of staff in organization. If with establishment of office automation system efficiency is gone up in organization and organization grows economically, thus, this issue is caused organization's extension and naturally, organization will expand its branches in different places. Therefore, he will need to hire new individuals in organization.

### **Conclusion**

It was concluded that information communication technology capital and also human capital has an impact on efficiency of work force in Iran's economy (Norozian Garetakan et al., 2011). Most successful companies are found the importance of investment in office affairs in the late of 1980s. The results of establishment of office automation indicate the increasing of organizations' efficiency and the positive effects in affairs including better use of work force with reducing of number of staff, the increasing of personnel's individual output, better use of time, better quality of management with better decision and so on which create third base of information's economy and management (Yazdani et al., 2010). In most organizations, in order to create speed and accuracy in electronic circulation correspondence including paper document, computer files in different forms and gradual decrease of the volume of paper correspondence and platform of doing electronic correspondence and reducing of communication and transportation cost and protection of documents and classified information, they use communication or office automation system through the establishment of access system in order to reduce vulnerability and prevention from unauthorized disclosure and ensuring from information archive having protection category.

### **Conflict of Interest**

The authors declare no conflict of interest.

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