IMPACT OF NEW TECHNOLOGY TO AN EMPLOYEE OF AN ORGANIZATION

Dr. Pugazhendhi. P, Asst Professor Of Commerce, Adhiparasakthi College Of Arts And Science, Kalavai, Vellore dist, Tamilnadu.

Abstract:

Technological advances bring huge opportunities as well as challenges for managers from all professional fields. Most organizations do not attach high or optimal priority to sophisticated technology that slows down an organization's growth. In present competitive global economic scenario, organizations who fail to advance technologically are at potential risk of lagging behind competitively as well as in terms of productivity. Change is natural and the term "Change or perish" coined by Abrahamson, (2000) has become a new corporate mantra making rounds in every business circle. The present study examines the introduction of technologies and their influence on organizations due to their extensive use. The article sheds light on implications of technology, reasons for introducing technology and impact of technology on organizations. It also particularly addresses various issues that create barriers to technological changes within organizations.

1. INTRODUCTION

The word technology has been derived from Greek words "techne" meaning art or skill and "logia". In context of day to day practice "technology" is a distinct word referring to the use and knowledge of humanity's tools and techniques. Technology is one of the central and most significant elements related to effective operations management in an organization. It can be defined as a body of knowledge used to create tools, develop skills, and extract or collect materials. It is also the application of science (the combination of the scientific method and material) to meet an objective or solve a problem (Molinero, 2012). Technology increases the prospect for conducting business in more efficient and competitive ways that are methodically different from the past. Every organization uses different form of technology for their business which has a basic and critical effect on the nature, design, structure and work of an organization. In an organization departments and division are developed around the equipments used whether it is for production, communication, information or control. The scope of technology that an organization can adopt or employ is vast, ranging from something seeming simple, such as buying a personal computer with a word processor, to investing in the latest state-of-the-art computer-aided manufacturing machinery (art on impact of technology). Along with the complexity of this technology increasing at a fast pace, the rate of change is also galloping fast. Development of modern computer systems is the most complex human activity so far under taken by organizations. Its application is also highly complex and beneficial for firms of all kinds. Though fast changes are taking place due to technology, still technologies are significant contributor to the unstable and competitive market. The disparity amongst the organization is observed due to competencies in different technologies (Dasgupta, Gupta & Sahay, 2011). The current dynamic environment demands all organizations to change— both radically and incrementally. Technological development cannot happen without innovation. It is very essential for an organization to change the way it operates and also change the products and services it provides. Growth through innovations might not necessarily take place through breakthrough Innovations. The advancement due to innovations not certainly can occur with the result of highly modern inventions.

However, to get better results it includes further new method of assimilating, existing, or advancing technologies. These new methods need integration across internal and external business fields and extend over the value chain (Wahlen, 2007). The main aim of this study is to examine some of the key literature regarding implications of technology, reasons for introducing new technology. These literature hints at the importance of various organizational factors which are responsible to promote innovations within the organizations. A brief introduction on the implications of technology, reasons for introducing new technology is provided to make the reader acquainted with the knowledge base within the area and broaden the scope of further research on the topic. Next we focus upon various technological barriers to technology changes. Further we highlight impact of technology on organizations. Finally, we summarize and discuss the issues arising from our study and, provide some general conclusions on the state of the field which is followed by indicating some gaps for potential future study at the end. For this purpose secondary source of information was gathered from the vast expanse of literature related to the topic present and the internet sites as EBSCO, WILEY, EMERALD, SAGE and others.

2.   TECHNOLOGY AND ORGANIZATION

This study does not focus back to the industrial revolution, still it ensures that the development of technology has influenced the organization. Instead 'new technology' 'usually refers to a particular set of changes that have occurred from the 1970's onwards… brought on by the development of microchips. The relationship between manpower levels and technology is less obvious in non-manufacturing industries, where the output is less substantial. The link between technology and organization was first illustrated by Joan Woodward in mid 1960s. On the basis of a research which focused on production technology she was the first to view the organizational structure from a technological point of view. During 1950s, Woodward putting in mind the technical complexity of the manufacturing process built up a measurement scale on which firms were distinguished. With the result that high technical complexity implied that most of the work was performed by machines, whereas low technical complexity specified that workers participate almost all in the course of action. The relationship between people and technology has been established and recognized long ago and the effect of technology on organizational behavior has become increasingly apparent. No organization can afford to ignore the fast developing changes in almost all the fields of management and have strong impact on institutional working, progress, productivity and profiteering. An organizational unit be it large or small, produce modestly or in a big way, irrespective of the size it has to be aware of the constant up-gradation of its production tools, methods and working, as these activities are as essential as any other component attached to high priority so far in the concern organization. Each technology is associated with a particular organization structure and has to be nurtured, nourished, and improved as a continuous process. Moreover, technology also influences the needs of the organizations, customers as customers are the one who purchase the organizations output in the form of goods or services. Customer is the main protagonist who has complete authority and choice whether or not to accept the organizations goods or services.

3.   IMPACT OF INTRODUCING NEW TECHNOLOGY

Many positive and useful changes have taken place these days in the workplace in terms of competency and effectiveness with the invention of new technologies. In spite of that the introduction of new technology creates many challenges to organizations. One of them is to achieve user acceptance and approval of new technology and at the same time retaining an acceptable level of productivity and

performance. There are a number of factors that that have an effect on an individual's attitude toward new technology such as age, gender, and peers' attitudes and perceptions. Time and again, short-term economic benefits are achieved with the help of designed technologies and there is insufficiency willingly available technical skills that may be applied to meet the criterion of union aspirations in a more reliable and dependable way. According to Dawson, these are some of the reasons why organizations decide to introduce new technology: To reduce costs; to increase productivity; to increase quality; to reduce dependence on skilled labor; because it always seems a good idea to be up to date; because competitor organizations are also introducing new technology; because new technology is interesting; in order to change the relations between various groups in the organization (Dawson, 2007, p.8). The new technology however has always faced various challenges that have dampened its effectiveness. All suggestions are linked with some pressure groups and without any job security the people cannot be helpful for giving suggestions for improvement. Moreover the power of the trade unions varies and depends on a number of factors. There may be the interests of the employees related with the introduction of the advanced level technology and so on. There are organizations that have formed teams like quality circles, self-managed work teams, task forces to boost organizational effectiveness along with new technology. The new technology helps to reduce costs, improve quality and productivity, and encourage the use of innovative and creative methods for solving problems. But, it was also observed that many team members resisted technological changes and adoption of new practices. This attitude of the workers was apparent because all team members did not have the skills, ability or knowledge necessary to use the new technology which may help the teams to perform effectively. Recruitment of personnel is one of the most vital elements. Recruitment process has taken a new turn in this era of information technology. With the advent of Resumix6 system from Hotjobs.com Ltd., automation has replaced the entire process of recruitment. This system has also cut the cost per hire by more than 50 percent.Today, technology has indented wage payment system of organization also. Offices are now sending employees'salary cheques, directly to banks thus eliminating a lot of accounts work and long queues of employees waiting to receive their wages every month. Thus, new technologies are a form of communication that has made the scope for betterment. Also it is a more efficient way for transacting business because it greatly improves work flow, and a new set o organizational behavior. The personnel profession develops on the basis of a set of system and procedures. These bring consistency, order and conformity to an organization.

4. ORGANIZATIONAL OPERATIONS

In their life span organizations experiences change at least once. With the result everything involving organization is influenced such as: tough competition and prospect of management and other components upgraded technologies, coming up opportunities etc. The reason is either some significant thing concerned to organization has occurred or under the impact of change. Some vital areas of change have been discussed. Every organization has a goal and the organization structure is among the forces that work towards achievement of that goal. The structure is helpful to achieve efficiency and provides guidance to all the members. The organization structure is one of the forces that exerts for the achievement of the organizations goal. The structure of the organization is simple originally but it gets complicated when the technology develops. An organized and planned structure come to light at this juncture that is supported by technical experts and social specialists. Without structure a business cannot grow and survive as it facilitates management to implement rules and regulations. The behavior of technical experts is unique whereas the working style of social specialists and anthropologists is found to be very sophisticated. Technology simultaneously improves quality and service, overall efficiency and reduces costs at every

level of the conversion process. It occurs at every stage from input to conversion to output (Jake09, 2011). At every level the organization structure is influenced by technology. Technological skills, systems and procedures handle environmental factors effectively at the input stage (Jones, 2010). Technology affects decision making, middle managers, information processing and communication etc coordination apart from complexity and formalization. The performance relationship is maintained at different institutional positions and activities based on organizational hierarchy. Also, technology influences design of the organization such as techno-structural activities concerned with design of the organization, and the inter-relationships of design and technology with people on job. To confirm the effect of internet in organizations design there are many examples available. Further, e-businesses focus on design as they adapt to the dynamic internet environment. Besides characteristics of the innovation or the new technology itself, other factors have been proposed, namely, organizational and environmental attributes such as the size of the organization, its willingness to absorb risks, the degree of competition in the industry, the activeness of change agencies, type and extent of authoritative intervention, etc.

CONCLUSION

   It is also in the interest of an organization to keep and follow an open communication policy about the forthcoming technological changes in the system. All likely to be affected or otherwise concerned must be kept informed and should be kept in picture right from the initial stage. Employees should have access to all information about the changes an organization intends to bring and the skills that will be required for that. This will forewarn the workers and they will know where they are likely to stand in the new set up. This though delicate, will give them ample time and opportunity to plan their future and how they should change themselves in order to remain relevant to the organization. Those who can get themselves updated with the addition of some more skills should be encouraged to do so. Since it is a humanitarian aspect, people have a right to know in what manner they are likely to be affected and how they have to meet the new challenges. Management approach has to be to absorb the surpluses as far as possible by absorbing the skilled, natural wastage or voluntary redundancies.

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