ROLE OF STATE IN THE DIGITALIZATION OF ECONOMY- A FUTURISTIC ANALYSIS

Commerce

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ABSTRACT

Technology is expanding its wings to different socio-economic, education, political spheres so far its application is concerned. Many developing economies like India are marching ahead for digitalizing its most of the activities. Trade, business, commerce, academic, health care, hospitality, tourism, developmental, archive, research, transportation, legal, service and allied sectors have been technologically developed. Paperless documentation, classroom without teachers, web based online learning, learning factories predominantly IT enabled, e-logistics have become the trends. The evolutionary changes in the adaptability of technology coupled with revolutionary developments in the field of Information Technology have influenced the Indian economy to large extent. In this context, the State has to take a vital role in promoting and protecting the interests of the social members who are apprehended to become victims of technological developments. Enhancement of quality of life provided to the social members along with equilibrium in growth among different social hierarchies should be taken care of by the State. The important aspects of an economy like employment generation, minimizing the gap in the social hierarchies, unorganized labour, and wealth distribution and over & above harmonizing the peace and prosperity of the society in all sectors should be equally considered by the State. A model has been considered for pursuing research to explore more vistas in the light of technological developments and role of State. The model is useful for academic field as well as for incorporating its implications for practitioners.

I. INTRODUCTION

Scientific developments, innovations in the field of technology and communication and over & above functioning of organizations beyond the geographic boundaries of nations have really provided benefits to different stakeholders. The hubbub of changing world of business and the hurly-burly functional activities of organizations have been influenced by technology. The traditional long-process oriented activities have been drastically changed due to progress in technology. One of the leading economies of the world, India has been shining in different spheres which are mostly attributed to successful policy formulation and its implementation in the field of technology and communication. The impact of digitalization in different spheres of economy has been discussed in this article. The future problems going to be faced by the State with specific reference to technical advancements have been discussed citing a model which could provide a base for future research.

II. Review of Literature

Technology is changing so fast that if any company is not implementing modern and upgraded technology for its operations, it would be difficult for its survival. The professionals for technological innovations are in great demand. The nature and operational area of workplace activities have been changing. 'Anywhere-Anytime' has become the operational base for most of the personal and professional activities. Companies come forward to collaborate for technological innovations. 'Technology' can be considered as a determining factor so far as the future of an organization is concerned.

Organizations invest in research and development. Different projects are being undertaken for innovation of new technology. All technical innovations should be used for betterment of mankind. Involvement in research projects which are for any destructive purpose should not be continued. Implementation of any innovative machinery which is creating labour problems in terms of mass unemployment should be cautiously done. In other words, balance should be maintained between 'technology' and 'human resource'. It is also fact that it is the employer's choice to use the best innovative and sophisticated technology which is helpful for enhancing its business. Labour intensive economies should consider 'human' factor in business as one of the primary concerns (Panda, 2018). Labour shortage economies have a problem to complete the work on time. And use of sophisticated technology becomes essential for them. Work, human resource and workplace activities should be synchronized properly. It should be done in such a way that cost effectiveness in business as well as employment generation in society should be ensured. More effective way of communication is predicted due to inventions and use of machinery for communication beyond workplace (Netfortris, 2017).

All ages prefer technology based communication and this trend shall be continued.

Organizations of all sectors shall strive for upgrading their technology for effective communication. Technology shall be considered as a key factor for organizational success (Mitel, 2016). Application of technology shall enrich quality of personal and professional life. Nature of business and communication could change drastically in future. Organizations shall strive to develop their technology. Single portal and broadband communication shall be more useful (Netfortis). More application of software shall facilitate communication process better. Workplace activities shall be more facilitated by technology to complete work in less time and less human effort to attain more organizational outcome (Mitel). The desktop devices and the physical manifestation of the office work would change. There would be more collaboration for enabling virtual work activities by use of technology (Ben Fineman, 2017). There would be more use of telephone for controlling office environment and artificial intelligence (J. Henriet, 2016). There would be changes in workplace communication. The nature of work activities would change due to automation, digitalization and technological innovations. The development of automation promising enhanced productivity also brings apprehensions for future scope of employment, wages and broad social impact. The conventional ideas of workplace communication have been changing. More scientific innovations especially in Information Technology (IT) shall impact more on workplace communication.

Application of technology has brought many changes in organizational communication. The profile of employees has changed in comparison to the employees in earlier decades. Employees have become more career oriented. Due to the changes in operation of organizations especially from technology front, the existing employees and also the job aspirants have been upgrading their technological skill. They are getting more information in less time which is due to internet. Accessibility to World Wide Web (WWW) helps in getting much information in less time. Employees are doing multi-tasking jobs. They prefer flexible work atmosphere. In other words, employees work with flexible timings, less supervision and less controlled by superior authority. Organizations are also changing their technology as per the needs and demands of employees who are considered as internal customers.

III. Current Scenario

Invention of machineries has enabled the communication faster, easier and interesting. Innovations of fourth industrial revolution further added values to communication. Many fascinating features of technology have created more flavours to organizational business. The

current trend of workplace activities being dominated by automatic operation, three dimensional printing etc. make the communication process easier than earlier decades. Still, communication fails due to partial or complete failure in understanding the intension and intensity of message. Smooth pace of work, effective operation of activities, efficient storage of data and automatic reminder of activities are done by technology. It also helps in preventing cumbersome paper works. Environment friendly and paperless office can be maintained. It not only helps in managing workplace activities but also promotes sustainable development. Time, space, money and use of other resources can be minimized by using sophisticated technology. In order to manage organizational activities, technological innovation is essential. Different softwares, Information Technology (IT) related applications and operational machineries are upgraded for better use. Time to time small and heavy machines are being invented with advanced features and broad applications. Opening, closing and overall management of machineries at workplace are highly protected. Different financial transactions are done online. All are possible due to technological innovations. Personal computers, laptops, smart phones are provided to employees by organizations. The overall management of technology is done by a specific department. Organizations have a well-designed 'Information Technology' department being led by a profession from Information Technology field. Collaboration of different workplace activities are done by technology. Even the workplace activities can be done from home. Communication in all forms is facilitated by technology. Any voice message can be sent by recording voice using the smartphones, laptops or any other voice recording devices. The necessary messages can be texted and sent to the respective receivers. The receivers are manager/s, supervisors, workers or any other stakeholders of an organization. Teleconferencing is very useful to reach the respective clients. People of remote villages, officers, personnel in developmental projects etc. can be connected and communicated by teleconferencing. The clients can be involved in interaction process. Different animated or real images are being sent to the requisite customers. Information pertaining to business is communicated by technology. Innovative designs, graphics, audio-visual features improve the quality of information being sent to the customers. The trends in business have changed. The technical features followed by developments in information communication mechanism have created business competition. The traditional business process and outlooks have changed to modern business which is mostly attributed to technology. Organizations as well as customers prefer online business. The online business enables to connect customers of different continents. Innovations in technology have added advantage to organizational business. Financial viability of use of technology in communication has to be assessed by organization. Collaborative tools like broad view network office suite, Cisco Webex, click meeting, fuze meeting, go to meeting, join.me, office 365 skype for business, zoom, united meeting, zoho meeting etc. are used by organizations (A. Rivera, 2018).

Figure 1: Role of Technology in Economic Development
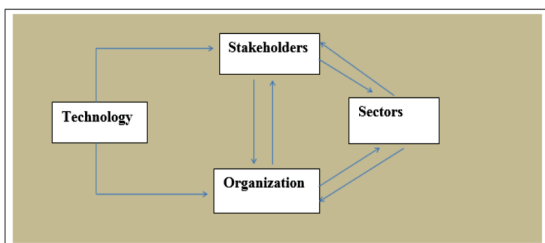
**Source:** Communication for Workplace Management by Dr. S. Panda.

Different higher education organizations like business schools, universities, technical institutions have started imparting online courses. Students of different demographic profile prefer to enroll in such online courses. The working executives take advantage of online programmes as they can do their assignments, projects, documentations, examinations online. It is convenient for them to complete the programme based requirements like assignments etc. from their home. Different developed and developing economies encourage students to enroll for online programmes. The students participate in online classes. The virtual classroom, simulation exercises, interaction in academic forums etc. have been popular not only in creating interest among the students but also in improving their decision making process. It is also helpful in successful academic and enterprising collaborations. The field of information technology has

been continuously developing. Government and private organizations have been investing on Research & Development (R & D) projects for developing new Information Technology products. No doubt technology provides solutions to business in multiple ways; still its improper use creates big organizational problems. It is wise to take enough security measures. Change in passwords, login adaptable features, identification of unauthorized web browsers, internet & intranet interventions, gate ways and in allied areas, ample care should be taken. Effective and efficient controlling mechanism should be there for managing technology factor in an organization.

IV. Model
Technology has expanded its impact in different spheres of modern life. The work life and social life have been greatly influenced by developments of modern tools and techniques. The quality of life has been continuously improving due to digitalization of various business and organizational activities. However, there are some apprehensions about the future social problems in the economy due to technology. Unemployment, vital role of informal sector, work life imbalance, work stress, unequal growth among social groups etc. have been emphasized in the model given by S. Panda, 2018 (Refer Figure 2). This model should be tested further by interdisciplinary research to explore more vistas in the area of digitalization of economy especially in developing States like India.

Figure 2: Implications of Technology on Economy
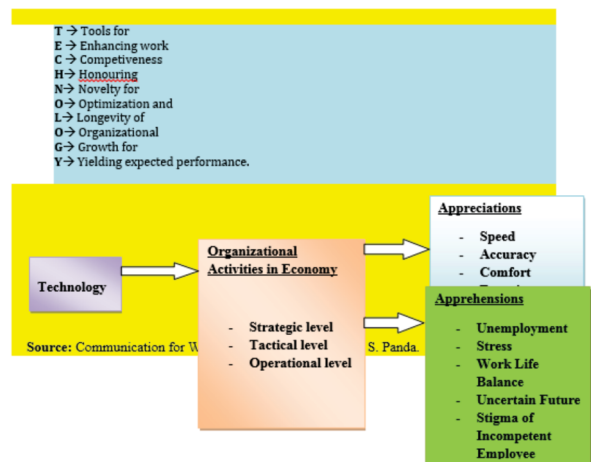
The countries like USA, Canada, some in European Continent, India, Singapore, Malaysia, South Korea, Japan, South American Countries like Brazil, Chile & Mexico, Australia & Mauritius have their own comprehensive Information & Communication Technology (ICT) policies and plans. Some of their countries reap tremendous payoff in terms of generating high quality employment and wealth creation (Ognusola, 2005). Technological innovations influencing people to live longer, work much fewer hours and to live healthier lives had also been reflected (K. Rogoff, 2012). Technological innovations would easily lead to the loss of five to ten million jobs each year had also been focused. Changes in workplace scenario due to technology have been focused. Machinery did not free human from labour rather caused unemployment. It is debated regarding role of technology in changing employment scenario. Technological development frees humans from work or produces more exploitation and unemployment debate still continues (Campa, 2014).

V. CONCLUSION
Digitalization of organizational activities in an economy has provided quality of life to the social members. But there are some issues which should be addressed for bringing equality of growth in society. Ethical aspect of technology should also be emphasized in using technology. The process, efforts, hardships gone through in inventing technology should be given due recognition. Utilization of resources especially 'technology' is benefit for organizations. But there should not be any unethical use of technology (Panda, 2018). Even involving in any 'grapevine communication' regarding usage of technology should be avoided. Communicating any wrong information creates legal and professional problems for the growth of organizational business. Nanotechnology and robotics are going to play great role in organizational business in future. The State should take a holistic approach for developing society which can help in the development of

all categories of people in the society. Proper planning and execution of such planning should be there to create employment. In case of increased unemployment scenario, there should be provision for unemployment allowance. Different employment opportunities for unskilled, semi-skilled, skilled and highly skilled human resource should be created. Efforts should be taken to develop technical competencies of unskilled and semi-skilled employees of different sectors. Projects through international collaboration should be taken to create more employment opportunities.

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