

Information and Technology: Emphasizing their Role, Issues in Knowledge Society & Economy - A Contemporary Overview

Prantosh Kumar Paul¹, Mrinal K. Ghose² and Subhasis Maiti³

¹Indian Journal of Information Science & Application, GR Publication, New Delhi - 110 002, India

²Techno Global Engineering College, Balurghat, West Bengal - 733 103, India

³Research & Development (R&D), Sikkim Manipal University, SMIT Campus, Majitar-737 136, Sikkim, India

E-mail: editor.ijisa@gmail.com, maiti.subhasis@rediffmail.com, headcse.smit@gmail.com, mkghose2000@yahoo.com

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Abstract – Information as well as technology both are powerful term in today's world. The word information is used to define various meaning such as knowledge, message, understanding, data fact and so on. Technology and its rapid development suddenly change our society in to a global village. Today we can see a wonderful relationship between the information and technology. This relationship creates a facet and component – knowledge economy. Knowledge economy is actually nothing but the economy of knowledge emphasizing the production as well as management of knowledge centered frame of economic constraints or simply to the knowledge lead economy or knowledge based economy. In this paper we describe about knowledge and its economical aspects, role of information and technology towards a develop society and economy. We describe what are the technologies help or liable for knowledge based strong economy.

Keywords : Economical Development, Society, Information, Technology, Digital Divide, Knowledge Economy, Computing, Information Professionals

I. INTRODUCTION

There are several meaning and concepts are associated with knowledge as a product, it is a tool, it is a weapon and synonymous with social and economical development. Information plays an important role for all round development. Information is an aggregate of statement or facet or figures which are conceptually interrelated, as said Hoffman. Technology is another limitless term which is directly as well indirectly associated with us. There are tremendous changes we can see in the field of science & technology from decades or simply in the last century, no doubt. Technology gives us so many tools and weapons, smart phones, Ipad, computer, laptop, light system, mobile phones, networks, internet, e-mail, ATM and so on. The synergistic relationship is occurred from the dawn of human kind, with the invention of simple tools and continuous in to modern technologies such as the printing press and computer [wikipedia].

II. OBJECTIVES OF THE STUDY

The main objective of his study is to know about paradigm shifting from Agricultural Society to knowledge and techno based society and its contemporary issues and challenged. Some of the objective are :

1. To know basic about information and its role.
2. To know the strategy and social and technological changes, due to innovative techno management solution and information to the door step solution.
3. To know the economical development and its relationship with knowledge and technology.
4. To know how the technologies are changing our life and other facet like emotion, feelings and so on.
5. To know or learn about the relationship in between technology- information with special reference to knowledge economy.

III. INFORMATION AND ITS FACET

The term information first came to existence in USA, as an alternative of documentation. Information is actually nothing but the collection or we can say accumulation of statements, fact and figures idea what ever it may be and that are organized process in a systematic manner. This systematic manner can be done through or by the way of reasoning, logic, ideas etc. Information is actually has several facet like-

- information is a flow of message.
- information is a transitory by nature.
- information inherits meaning.
- information is a particular.
- information is fragmented.
- information is dynamics.
- information is timely.
- information is purpose oriented.

- information is quantitative.
- information can be recorded.
- information needs person's affiliation.
- information is descriptive.
- information can be abstracted.
- information can be surrogated and so on.

IV. INFORMATION AND DEVELOPMENT

The scientific as well as the technological development depends on information. We can see Information and its uses in several cases. The countries which are less populated may get benefit from information through awareness programme for their up gradation in a balance population. On the other hand countries which highly populated may get the benefit of information through awareness programme to come as a standard country as far as population is concerned. The developments are:

- With the help of research development of anything is possible. The input as well as output of the research in information. So practically increasing information lead development in many perspectives. The scientific and technological growth is also depends on information.

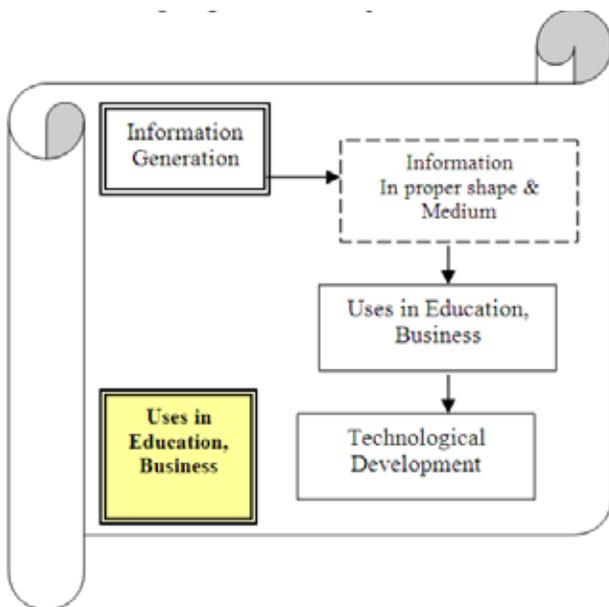


Fig. 1 Information Technology & Development

- Information in other words increases the standard of living through out the world. Today we are using TV, Mobile, Robot, computer and other electronic devices and

technologies the main thing behind these are algorithm and information processing. For these kind of product our life and living standard is increasing.

- As far as Government is concerned, information plays a vital role. Each and every government through out the world needs information and knowledge. Government is the highest generator and producer of information. Government basically collect, select data, information and other content and prepare then by processing, Government offices, officials and the manager and administrator needs information, data for the several reason.
- Education is a process of acquiring information and knowledge by study and learning. Information is actually needed in various educational activities. Information in the context of education needed is for several reason like- about courses, course content, for subject formation, development of a subject, corporate learning, e learning and so on.
- The input as well as output of mass media is information as like research, news paper and electronic media gives us different types of information, but before giving information to us, they collect the information and process & organized properly.
- Information is also needed for business and industrial houses for several reason like-
 - Planning and Execution.
 - Market and Marketing.
 - Decision Making.
 - Designing.
 - Financial Output.
 - Manufacturing Technology.
 - Policy Making.
 - Identification of the product and so on.

V. TECHNOLOGY & CONTEMPORARY SCENARIO

Technology today treated as one of the important subject or area of knowledge. However the technology term today integrated our life in many ways. Many tools and technologies are changes our life. Today we are spending lot of time for several reasons such as television viewing, reading, surfing web, social networking, internet, chat, e-mail, mobile phone

and so on, all these are nothing but the influence and impact of technology and its ultimate product or result. Now let we discuss some of the technology in which we are deeply engaged and associated.

- Computer is the important devices no doubt. It is useful in offices, houses, industries, government activities and so on. Virtually we are so much associated with computer due to its several reason like- speed, correctness, reliability, advancement of work, accuracy and so on.
- Television, especially satellite is one of the important tools or component which is change our life tremendously.
- E-commerce, e-business is the important term now days, people buying and selling not only product like- TV, Fan, AC, Book but also service like- consultancy, e-learning, information service and so on.

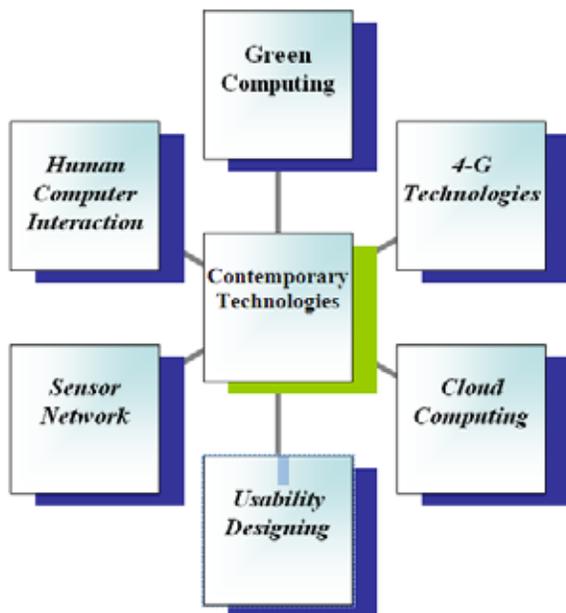


Fig. 2 Contemporary Technologies

- ‘Internet and e mail’ is another name for our changing life style. Internet is useful for communicating thousands of computers. We are able to know the on going happening and past incident and information through out the world within a few moment with the help of e-mail and chatting.
- Mobile phone and cellular phones are another tools that creates a virtual world, directly and indirectly. The users of mobile phones are increasing day-by-day.

- The computerization and internet creates problems in Human Resources aspect.
- The information overload and wider information availability is an emerging issue.
- Social networking a tool or mechanism which is bring close relationship. People now able to connect each other or even with group in stand by mode. So no doubt this is important fact for societal development and inter-connectivities.
- I-Pad and other music devices is wonderful gift for the society. Due to entertainment and recreation it is vary tough to identify some one who is not interested in music. So by conventional music player, mobile, home theater or though I-Pad, what ever it may be people are connected.
- The air conditioning system, refrigerator, Air collars are the gift of modern technology.
- If we consider transportation system then we can find several thing like- Aero plane, Buses, Railway system, helicopter and so on. All these are gift of technology.
- The space, other planet discovery is also truly depends on several technologies of space science like-GIS, Remote Sensing.
- The infrastructure system is important component of modern activities where also we can see use of technology and tools.
- The using of calculator and related peripheral change the dimension of logic in our practical life and in school (s) or college(s).

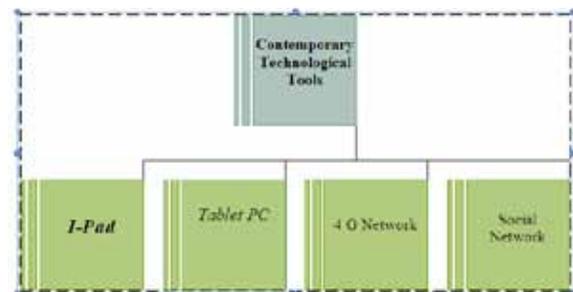


Fig. 3 Emerging Technological Product

VI. TECHNOLOGY AND TOOLS: SOME ISSUES

Though technology has several advantages and possibilities, however it has some disadvantages or challenging issue are:

- People are now having very minimum social connections.
- People are now habituated with just seat and wait type nature.
- Technology many-a-times create issues like eye problem for limitless computer operating, using un-adjustable AC, using head phones and so on.
- Internet and its bad side is also a major issue for the growing children.
- The wrong information means the accuracy of information is important issue.
- Many a times people losses or decrease their brain capacity like- formulation of mathematical logic, simple calculation due to random uses of calculator or similar devices.
- Social Networking is also has some problem like, they are much habituated with computer. So their inter connectness among the society is decreasing.
- Many a times through online communities people are habituated with relationship rather than traditional relationship.

VII. CONCLUSION

Information and Technology both have direct and indirect relation in many ways The design & development of technology and technological product is only possible through the information and right information processing, management, organization and dissemination. But the matter is that Right information transfer cycle today directly depends on several technological facets like Information centre, Systems, Documentation Centre, Digital Repositories, Organizational Information Networks and these are fully depends on several computing and technological weapons. So for better Information Activities proper uses technologies are needed. We need proper technological usage and avoid the bad side of this.

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