



Research Paper

The Impact of Information Technology in Environment

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ABSTRACT

Technology is one of the fastest growing missions of the world. Various software have been developed for environment and health care which are user friendly and help in better understanding for the development of technology. A number of techniques are used under IT for development and application of computational tools to acquire, store, analyse and visualise satellite data which is used for observation and protection of environment. Due to the development of the internet and information through the satellites a wide database is generated which is the collection of various interrelated articles. Technology has played a key role in the development of human society. Modern technologies such as information technology have changed the human lifestyle. Development of sophisticated instruments like computers, satellites, telecommunication instructions etc has resulted in total revolution in almost all spheres of life.

Keywords : Technology , environment , human society , bioinformatics

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I. INTRODUCTION

Information technology has tremendous potential in the field of environmental, educational and health as in any other field like business, economics, politics or culture. Development of Internet facilities, worldwide web, Geographical information system (GIS) and information through satellites has generated a wealth of up to date information on various aspects of environment and health. A number of softwares have been developed for environment and health studies, which are user friendly. The Ministry of environment and Government of India has created information on various aspects of environment and health. A number of softwares have been developed for environment and health studies, which are user friendly. The Ministry of Environment and Forests, Government of India has created an information System called Environmental Information System (ENVIS) with its headquarters in Delhi, it functions in 25 different centres all over the country. The ENVIS centres work for generating a network of database in areas like pollution control, clean technologies, remote sensing, coastal ecology, biodiversity, western Ghats and eastern environmental management, media related to environment, renewable energy, desertification, mangroves, wildlife. Himalayan ecology, mining, etc.

Objectives of the study

- To study on information technology, environment and human life
- To analyse advanced technology in environment
- To find various technology in Environment in current scenario

Role of Information Technology in Environment

Technology has played a key role in the development of human society. Modern technologies such as information technology have changed the human lifestyle. Development of sophisticated instruments like computers, satellites, telecommunication instruments etc., have resulted in total revolution in almost all spheres of life. The important roles of information technology in environment are as follows :-

Remote Sensing and GIS (Geographic Information System) It provides data and knowledge concerning the global environment as it is used for mapping and monitoring various natural resources. Remote sensing and Geographical Information System (GIS) has proved to be very effective tool in environment

management. Now the on going changes in the environment can be assessed easily through satellites by remote sensing techniques. The occurrence of a number of natural calamities like droughts, floods, volcanic eruptions etc., can also be predicted well in advance. Such assessments help the environmentalists and planners to take ameliorative measure to minimise the effects of these extreme natural events. The Ministry of Environment and Forests, Government of India has created an information system called Environmental Information System (ENVIS) with its headquarters in Delhi.

Database :It is the collection of interrelated data on various subjects in computerized form which can be retrieved whenever required. Now the data regarding birth and death rates, immunisation and sanitation programme can be maintained more accurately than before in computers at health centres. Database is also available about the diseases like malaria, fluorosis, AIDS etc. The Ministry of Environment and Forests Government of India has taken up the task of compiling a database on various environmental issues like wildlife forests cover, wasteland etc. National Management Information System (NMIS) of the department of science and technology has compiled a database on Research and Development projects along with information about research scientists and personnel involved.

Computer Based Modelling : IT is used for computer based modelling and simulation of environmental scenarios for analysis and prediction. The National Institute of Occupational Health provides computerised information on occupational health i.e. the health aspects of people working in various hazardous and non hazardous industries, safety measures etc.

Online Information : IT enables environmental scientists and researchers around the world to communicate, collaborate and coordinate. It provides vast quantum of information on different subjects including human health and environment. One of the most important online learning centres with power environmental science which provides current and relevant information on environmental science.

Role of Information Technology in Human Health

Information technology also plays a key role in human health. It helps the doctors to monitor the health of people of that area. The information regarding outbreak of epidemic disease from remote areas can be sent more quickly of that area to the district administration to take corrective measures. Now patients can seek help of a super specialist doctor placed at far off distance. Many hospitals now, take online help of experts to provide better treatment and services to their patients. This has become possible only because of advancement of IT in the recent times,

IT can be used for audio, visual and data communications for medical consultation, diagnosis, treatment nursing and medical education. IT is used for testing of DNA, creating DNA database and genetic, information about populations. Medical records and finger prints which are used by investigating agencies to identify missing persons and criminals. It helps in spreading awareness about endemic, epidemic and communicable diseases. With the help of Remote sensing and GIS there is identification of several infested areas which are prone to some diseases like malaria etc., based upon mapping of such areas. It provides vast quantum of information on different subjects including human health and environment.

Medical Transcription

Medical Transcription also known as MT is an allied health profession which in the process of transcription or converting voice recorded reports as dictated by physicians or other healthcare professionals into text format. It is the act of taking written or dictated medical information and producing a permanent uniform and legible record of that information in keyboarded form (via a word process, personal computer or increasingly less frequently, a typewriter). To transcribe is literally to change into writing more traditionally speaking, transcribing is changing oral dictation (words spoken) or dictated for the purpose of writing them down into written form. In the medical information a medical transcriptionist transcribes can vary from office notes regarding a patient's visit to the physician to a specific hospital report such as a pathology or radiology report to a manuscript for publication regarding medical or scientific topics. The information in all cases is considered confidential and should always be treated with sensitivity privacy and respect.

BIOINFORMATICS

Bioinformatics is the application of statistics and computer science to the field of molecular biology. The primary goal of bioinformatics is to increase the understanding of biological process. What sets it apart from other approaches, however is its focus on developing and applying computationally intensive techniques e.g. pattern recognition data mining machine learning algorithms and visualization to achieve this goal. Major research efforts in the field include sequence alignment gene finding, genome assembly, drug design, drug discovery protein.

II. REVIEW OF LITERATURE

Cetinndamar D (2001) examined the role of regulations in the diffusion of environmental technologies. Over time, many regulations have been made for the conservation of the environment while using the technology but still, this is a prominent issue which is needed to be solved. For this purpose, the Turkish fertilizer industry was selected to carry out whether firms adopt regulations to fulfill environmental needs or not. The study concluded that firms invest in the environment just for the sake of rules to be fulfilled which are imposed by government authorities. None of the firms has any pollution prevention system. It is of great need from the side of both the government and the public to take the initiative to protect the environment so that industry efficiency is increased and its cost is not bearded by the environment.

Daniels P (2005) analyzed the role of technology revolutions and social development and the shift to a green paradigm to sustain ecology. For this purpose, the data has been collected from lower-income countries to foster technology and focus on how to save material, energy, and other resources. Also, this study focuses on how to develop a link between technology and human development. The study concluded that the green techno-economic paradigm can lead to development in the economy without causing any harm to the environment.

Zulkifli et al (2009) analyzed the social and environmental accounting in Malaysia. The study was conducted to determine the depth of social and environmental accounting and corporate social disclosure knowledge and awareness among Malaysian accounting practitioners and to investigate the views of Malaysian accounting professionals regarding the importance of social and environmental accounting issues to the accounting industry. The data was collected using a mixed approach using 245 survey questionnaires, 123 survey respondents, and 7 in-depth interviews. The study concluded that they have low knowledge and awareness although they have doubts about quantification and valuation concerns, they can see that reform, which would need to be supported by legislation, may enhance company performance in terms of social justice and environmental quality.

Chang (2013) examined environmental management accounting in the Taiwanese higher education sector. The study focuses on the issue that organizations fail to manage the procedure of recording environmental costs from an accounting perspective. For this purpose, Taiwanese universities were selected and practices of managing the cost associated with electricity, water, and paper were analyzed. The data was collected using face to face interview method. The results showed that it looked that none of the three universities were using environmental management accounting to handle their significant environmental costs. There was still a need for improvement in environmental performance, especially from an accounting point of view.

Ribeiro (2016) analyzed the determinants of environmental accounting and reporting practices in Portuguese local entities. For this purpose, the data was collected through a postal survey of 69 Portuguese entities. During analyses of the study three variables entity size, accounting framework, and level of environmental management practices development are taken into account as important drivers of the development of environmental management practices by local entities. The findings show there has been little development of environmental accounting practices in Portuguese municipal bodies. The degree of development of environmental management and accounting regulation are additional aspects that contribute to the explanation of the level of development of environmental accounting practices in Portuguese local entities.

III. DISCUSSIONS

Above mentioned views discuss the impact of technology and its effect on the environment. Mostly they all discuss the policies of government and awareness programs. But there is a need on behalf of individuals to pay attention to the environment and protect it. Firms should also set up a separate department to keep an eye if it serves back to the environment or not.

IV. RECOMMENDATIONS:

Now far everyone talks about the side effects of technology, but every coin has two effects. If there are bad effects there will be some good sides also. If used with proper care technology can result in a bloom in disguise. It can be done by having a separate cell in every organization and also by taking part in government awareness programs. Campaigns should be run. Substitutes for fossil fuels should be developed and used.

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