New technology-what is currently happening in it? essay

Business, Industries

New Technology-What is Currently Happening in IT? Introduction“ Information technology as defined by the Information Technology Association of “ America (ITAA) is “ the study, design , development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware. In short, IT deals with the use of electronic computers and computer software to convert, store, protect, process, transmit and retrieve information, securely. In this definition, the term “ information” can usually be replaced by “ data” without loss of meaning. Recently it has become popular to broaden the term to explicitly include the field of electronic communication so that people tend to use the abbreviation ICT”. (Information technology – Wikipedia, the free encyclopedia)Information and Communication TechnologyInformation technology has brought about a revolution in every field of life be it research, communication, industry or education. Information technology has brought about a revolution in every field of life be it research, communication, industry or education. To achieve strategic goals and compete in the market, information technology architecture is used – it is an integrated framework for evolving and acquiring IT. It contains both technical and logical components.

Technical components consist of IT standard and rules which are used to apply on the logical architecture. Whereas, logical components include functional and information requirements, mission, information flow and system configuration. (City of Angola – Municipal Website). Information technology has enabled us to select, question and compare. Information

technology was the dire need of the modern changing times. New information and communication technologies have enabled us to achieve better living standards. Today, almost all human activity depends upon the information and technology.

User friendly software has enabled us to use computers in a very user-friendly interface – anyone can easily operate them. Nowadays, millions of people use the internet on daily basis and this number has been growing with a phenomenal pace. Internet and fast communication have really made this world a global village, where transferring of data and information is just a few click away. “ Assessing the potential value of IT in supporting development requires addressing the three different channels through which it could work: its inherent worth in bringing new ideas to those outside the global mainstream; its part in helping to achieve specific development objectives; and its role in fostering broader economic development Information technology can help bring ideas and experience to even the most isolated, opening to them the world outside their village, town, and country—including family members and friends who have moved away.

It also allows their experience to be shared with the world at large, at the tap of a keystroke or the touch of a cell phone keypad”. (Information Technology and Development) IT can strengthen overall productivity in developing countries by increasing efficiencies and technological competitiveness and by linking domestic producers to global markets. IT can also empower individuals to participate in the political social and institutions of their society, giving voice to those who have traditionally been excluded. The

availability and use of information and communication technologies are a pre-requisite for economic and social development in our world. BackgroundThe terminology “ information technology” was first used in 1970s. However, the core concept of IT was present even at the time of World War II when militaries and the industrial sector combined together to develop advanced electrical and computer-related components. Nonetheless, the military was still the main source of R & D funding which was used after the 1940s to expand the scope of this technological innovation to replace manpower with automated machines.

Since the 1950s, computer technology has gone through four different eras. Each era depicted alterations in the size and volume of devices although the capability of the new small-sized devices was much more enhanced than the old ones. The first era witnessed the use of vacuum tubes, the second saw transistors, the third era came with integrated circuits (ICs), and the last one enhanced integrated circuit technology to combine multiple ICs on a single computer chip.

In this fifth era through which the computer technology is passing nowadays, innovations in artificial intelligence (AI) are reducing the necessity for complex programming.“ The first commercial computer was the UNIVAC I, developed by John Eckert and John W. Mauchly in 1951. It was used by the Census Bureau to predict the outcome of the 1952 presidential election.

For the next twenty-five years, mainframe computers were used in large corporations to do calculations and manipulate large amounts of information

stored in databases.” (Information technology: Definition and Much More from Answers. com) Extraordinarily designed supercomputers were employed in new technologies for various purposes including noteworthy tasks like the creation of blueprints for nuclear reactors and the prediction of global weather conditions. On the other hand, minicomputers were used in the early 1980s in small & medium enterprises and production plants.

In the year 1975, the Massachusetts Institute of Technology (MIT) invented microcomputers. The year 1976 witnessed the introduction of Tandy Corporation’s Radio Shack microcomputer whereas the Apple microcomputer came into being in the year 1977. The demand for these new microcomputers escalated significantly when IBM brought personal computers in the markets in 1981. Due to advanced improvements in computer technology, personal computers carry out more functions than the best computers of the 1960s did. More importantly, the cost of personal computers nowadays is about a thousandth of the price of those computers which were used in the 1960s.

In the present era, computers can be classified into four different categories with respect to their price, size, and functions. These four categories are: minicomputers, mainframes, microcomputers, and supercomputers. Microcomputers, also known as personal computers can be further classified into laptops, desktop PCs, network PCs, and handhelds. Discussion” The NASDAQ may rise and fall. Dot-coms will come and go. But there is no doubt that anyone in business today will be managing technology of may sorts. It doesn’t matter whether you work in fast foods, museums,

hospitals, or industry-technology is as instrumental to your workplace as the product you manufacture or the service you offer" (Zukerman, 1998). Information technology is a tool for economical, social, cultural and educational development.

In today's world, the term (IT) Information Technology has flourished to encompass many aspects of computing and technology, and the term IT is more recognizable than ever before in the world. The umbrella (IT) can be quite large, covering many fields." Today the Net is used for one-to-one communication (e-mail), one-to-many communication (online Webcasting and Web presentations), many-to-many communication (electronic conferencing), and many-to-one communication (online democratic participation, and electronic commerce)".

(Flexible Networking, Information and Communications Technology and Local Economic Development)Bypassing conventional telephone networks presents the intriguing possibility of persons in rural and remote areas having equal communications access to those in more central and favored locations. Technology can furnish the means for very low-cost information distribution, information processing and remote accessing, universally accessible and distributed, electronic publishing and globally distributed electronic commerce and sales. Information technology has given a boost to education industry as well. " The Internet has tremendous potential for students and teachers. First, it is an accessible place for information. With the availability of online resources, anyone can reach data, people, and ideas and can search any area of knowledge deeply and

thoroughly". (Archived: The Future of Networking Technologies for Learning – Overview)Information technology plays a significant role in medicine. For instance, a scanner takes a series of snapshots of the body by means of computerized axial tomography (CAT) or magnetic resonance imaging (MRI).

A computer then gathers the pictures to produce elaborated three-dimensional images of the body's organs. Moreover, the MRI produces images that depict changes in body chemistry and blood flow. By using supercomputers, meteorologists forecast future weather by using a combination of observations of weather conditions from many origins, geographic data a mathematical representation of the behavior of the atmosphere. One intriguing possibility is that in the future there may be important readjustments in how information intensive actions may be distributed. For instance, the decentralization of information-intensive public sector activities can result to an equalization of employment opportunities between urban and rural areas. Emerging business functionalities supported by IT present important opportunities and even benefits to domestic enterprises.

" Opportunities are emerging for reducing the cost of transmission, management and processing of information and of any information-intensive undertaking. There is an enhanced capacity for better quality and more cost-effective education irrespective of location. Differential access to IT is likely to become one of the major part of social and economic life in rural and metropolitan areas". (Flexible Networking, Information and Communications Technology and Local Economic

Development)Communication Information and technologies are the roots of new productivity sources, of new company forms and of the formation of a worldwide economy Econometric research shows the close statistical relationship between information technology and diffusion, competitiveness and productivity for regions and countries, industries and firms.

Summary” We live in a society exquisitely dependent on science and technology in Which hardly anyone knows anything about science and technology ” (Carl Sagan), this quote clearly signifies the importance of IT in the modern changing times. “ Every day, people use computers in new ways. Computers are increasingly affordable; they continue to be more powerful as information-processing tools as well as easier to use”. (R, Kiran, 2007)The Internet can be a “ marketing tool” for small rural companies, where domestic Entrepreneurs develop Web sites and enhanced their markets. The technology is also “ enabling” the mobilization of a much broader and more advanced range of resources to support domestic economic development initiatives than has ever before been possible.

Although this does not necessarily imply the need to produce information technology hardware locally, it does imply the ability to use advanced information and communication technologies, which in turn requires an entire reorganization of society. A famous quote says ” How could this be a problem in a country where we have Intel and Microsoft”? (Al Gore on Y2K). Hence Technology allows for work sharing, remote administration, continuous communication management, seamless presentation and marketing of centers as a single entity to the world“

Over the next 10 years, there will be dramatic changes in the use of information technology for work, play, and learning.

New technologies will be developed, software will be designed, and in schools, new technology-based curricula will be developed along with the teacher training programs needed to implement them. To curtail all the details it would be accurate to say that information technology is a door to success.” Computers are magnificent tools for the realization of our dreams”.

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