

Essay on Information Technology (Avenues and Opportunities)

"Recent advancements in Information Technology has transformed every facet of human life and revolutionized the world as never before witnessed in known human history."

The world of computers, telecommunication, televisions, the internet, and all other audio and visual media is facing rapid and radical changes presently. This has generated infinite and unimaginable new opportunities in education, communication, commerce, manufacturing, agriculture, health care, leisure and entertainment, and more particularly the service sector. 'Information Technology' comprises computers, telecommunications, television, audio-visual media, development of software, etc. The computer is the major segment of Information Technology that has permeated and grasped every sphere of existence of human society and become indispensable. The present-day elegance, accuracy, sophistication, efficiency could have been made possible only with the invention of computers. Computer software is gradually becoming a decisive force in making important decisions. It has become the basis of modern scientific and technological inventions and researches. The use of software has penetrated every walk of life, be it transportation, medicare, telecommunication, defense, industrial processing, entertainment, office utilities, space research, environmental predictions, and so on, with an endless list.

Information Technology could be classified into two major components i.e. (1) Hardware, (2) Software. Hardware means the physical parts, which can be touched and are used to run the software. Software is the program, or say heart and soul of the hardware.

For the last two decades, there have been tremendous ups and downs in the IT industry. IT has played an important role in making the Indian economy run at a much faster pace. During 2001-2002, when there was world wide economic slump, yet the IT sector managed to show impressive growth. Though during this period, the IT education segment showed a down turn. This trend had a fallout on the Indian IT educational training business. Though business volumes declined a lot, yet an awakening had been created among the youth that IT is a must go ahead in life. With IT becoming acceptable to all, it became apparent that people needed to know computers to excel in life.

Recent studies conducted by leading IT associations and business intelligence Concern have shown that our country will require millions of IT professionals up to 2005. A study conducted by NASSCOM also reveals that the demand for IT professionals during 2005 be much more than the expected availability. The emerging IT enabled service (ITES) segment, has shown tremendous avenues of jobs for IT professionals. A study conducted by NASSCOM (2002-2003) shows that the ITES sector will create job opportunities for over 1.1 million people by 2008. It is worth while to note that during the last 20 years, the IT industry's present trend reflects a more than 20 times increase in the ITES-BP segment. In spite of USA's restrictions on outsourcing from Indian market, it is felt that with globalization, the opening of economic fronts and markets becoming more competitive, it will be non-profitable for the USA companies and business tycoons, if they restrict the outsourcing opportunities available from India. As such more and more job opportunities will be further generated in the IT and ITES segment positively.

After the Sept. 11th incident, the IT industry went through some difficulties, though Indian IT field didn't feel the adverse effect as much as other developed countries, some Indian youth went jobless albeit temporarily. The basic lesson that our country learnt in the

post-Sept. 11 eras, is that “our software industry has to be made more robust and less fragile, if we like to make it the most significant contributor to our economy”. Tremendous market potential that is available in our country in the area of the-education, telemedicine, entertainment, e-governance etc., needs to be given business, if the IT made to touch every one of the billion Indian people, the IT market would become phenomenally large and it would become absolutely robust.

Presently our IT industry has provided a job to approximately 5 lac people and earning only \$ 10 billion, which is less than one percent of the world market. At the same time a typical international software company with only 50000 employees, earns \$ 20 million through its worldwide operations. Based on the current trend if we have to reach \$ 80 billion, we will have to multiply our workforce eight times. Today our IT industry is proud that 260 out of the fortune 500 companies are its clients, but with Indian software professionals earning for foreign companies, if they are given proper opportunities in our country itself, then the things might change that out of 500 fortune companies, more than 50% may be Indian MNCs.

Information Technology can contribute tremendously to economic development, particularly the rural areas. It can become a prudent tool in integrating the nation, the remote localities that have so far been feeling a sense of neglect will be feeling part of development. Cell phone is becoming more and more approachable for a common man, with computer education made compulsory from primary and middle level, we can hope and aspire that within next few years, India will become more integrated and more economically robust.