

## INFORMATION TECHNOLOGY

Information Technology (IT) can be termed as a backbone to all the industries because of wide-scale use of computers, internet and telecommunications systems. Information Technology helps in managing, manipulating, storing, regaining, sharing/communicating and transmitting small as well as large amount of information/data conveniently and effectively.

Work that was done manually in the past now can be done easily and efficiently with the help of computers. There's no need to store paper files as all the important documents can be stored on computer and can be accessed without much hassle. Better and faster communication online has led to globalization and have immensely helped industries and businesses around the world.

However, things were not like this in 60s and 70s and IT sector was mostly limited areas such as banking sector, large business houses, computer scientists and mathematical engineers. The emergence of personal computers changed this scenario and suddenly IT was being used in almost every sector. Big/small businesses, industries, education sector, government sector, defense, marketing, fashion, security, journalism etc. These days there's hardly any arena that's not being positively affected by information technology.

Besides making work easier world over, IT sector has also created lots of job opportunities for people, providing youngster with field to explore.

### **Few Examples of How IT Has Changed Industries Around:**

**Media:** Media field has been totally upgraded and transformed by the IT. Now, media can cover news better and can distribute it for mass consumption on a larger scale. Apart from TV and radio, online websites have been launched to keep people updated. Now we are having 24\*7 news.

**Banking:** Few years ago, in banks working with hands and saving data on paper was a norm. But with the arrival of computer, everything has changed. Now entries are directly and efficiently recorded in PC files, money can be transferred online, account balance can be checked, people have been provided with the service online banking service to carry out various transactions.

**Business:** Businesses across the world, due to IT, are not bound to a geographical area anymore. With the help of online communication they can reach the world. It's because of IT that there are so many people today who can work for employers that are located in some different geographical area.

**Education:** In the past, education was mainly done with the help of books. However, these days, internet plays a vital role in teaching students valuable information regarding any subject they want to learn about. There's absolutely no shortage of information online and can be accessed easily.

**Medical:** IT has brought revolutionary changes in medicine sector as well. With the help of new techniques, technologies and equipments developed by IT for this specific field, physicians can provide more accurate treatment to patients. Something that wasn't possible ten to twenty years ago.

**Transport:** Transport sector is also not untouched. New inventions and innovations have upgraded the transport industry to a great extent. Roadways, railways, airways, waterways all are revolutionized. Availability of seats, timings are all at a stone throw just because of internet.

**It won't be wrong to say that we are in truly living in a globalized village, where everyone is connected with everyone. IT has major hand in turning things around for every industry.**

**Career Prospects in IT Sector:** IT sector is growing industry all over the world and has lots of career opportunities to offer to people with right skills, education and talent. Below are mentioned some job options one can pick from:

**Security Expert:** Due to threat from numerous malicious malwares and virus on the internet, companies and business owning a website always hire a security expert. Security experts are responsible for testing, finding and repairing loopholes in system, software programs and hardware devices. Anyone aiming for this position would have to have good overall knowledge of working of hardware, software programs along with programming skills.

**Web Designer:** As a web designer, you will mainly be responsible for creating, designing and maintenance of a web page. Following skills are required to be a web designer: good knowledge of working of internet, HTML, web servers, CSS, design, project management, Flash, PHP, RSS, SSI, XHTML etc., depending on the requirement of client/company.

**Technical Support:** Technology today is part and parcel of everyone's life. However, majority of end-users (sometimes company employees as well) don't know how to resolve a hardware or software problem. So companies hires technical support people to help customers. To apply for this position, you should have good knowledge computers, hardware and software programs.

**Database Administrator:** A database administrator's main responsibility consists of work such as supervising, managing and testing company's database management system. They are also responsible for backing up and storing all the data regularly and ensuring its safety.

**3D Animation/Graphic Design:** If creating new things is what you love doing, then you can consider this job as it involves development of games, software programs, animation, web pages, movies etc. You should also know this that you might have to work on some already existing work of someone else in graphics, animation or movies. Apart from having creative skills, you would have to pursue a formal degree in 3D Animation/Graphic Design.

### **Advantages of Information Technology**

Information technology refers to the study and development of a support-management based, computerized information system. The development is mainly observed in the form of dedicated software applications and a number of hardware programs. The advantages of IT include work place cost-effectiveness and essential globalization.

Information Technology or IT mainly deals with computer applications. The common work environment today is totally dependent on computers. This has led to the need to develop and consistently upgrade dedicated computer software like project management software, for a number of related requirements. These include storage and protection of content, processing and transmitting of dedicated information and the secured retrieval of information, when and as required. IT promotes computing technology, covering everything from installing applications to developing databases.

### **Why is Information Technology Important**

All our work related applications are now completely automated, thanks to the IT sector. IT professionals are people involved in essential management of sensitive data, exclusive computer networking and systems-engineering. The advancement of the IT sector has resulted in automated:

- Administration of entire systems.

- Production and manipulation of sensitive information.
- Cultural development and communication.
- Streamlining of business processes and timely upgrades.

### **Advantages of IT**

#### **• Globalization**

True globalization has come about only via this automated system. The creation of one interdependent system helps us to share information and end linguistic barriers across the continents. The collapse of geographic boundaries has made the world a 'global village'. The technology has not only made communication cheaper, but also possible much quicker and round the clock. The wonders of text messages, email and auto-response, backed by computer security applications, have opened up scope for direct communication.

#### **• Cost-effective**

Computerized, internet business processes have made many businesses turn to the Internet for increased productivity, greater profitability, clutter free working conditions and global clientèle. It is mainly due to the IT industry that business have been able to make their processes more streamlined, thereby becoming more cost-effective and consequently more profitable. People are able to operate their businesses 24x7, even from remote locations only due to the advent of information technology.

#### **• Communication**

Quick and effective communication is vital to any business anywhere in the world. Information technology gives an entrepreneur or business the tools, like email, video conferencing, SMS, etc., essential to communicate efficiently and effectively. to the business world, and information technology gives your company the resources it needs to communicate quickly and effectively. Not only do people connect faster with the help of information technology, but they are also able to identify like-minded individuals and extend help, while strengthening ties.

#### **• Storing and Protecting Information**

IT provides a low-cost business options to store and maintain information that may be important from a business or service point of view. Virtual vaults and other such security systems not only store vital data but also allow control over the access to such information. IT security systems will also protect virtual data from being hacked or wiped out in case of any technical failure.

#### **• Creation of New Jobs**

One of the biggest advantage of IT has been the creation of a whole new field of opportunity for skilled personnel leading to new and interesting jobs. Hardware and software developers, computer programmers, web designers, system analyst, the list of new jobs created could go on. IT has also been attributed to be the major cause of surge in the economies of certain Third World nations too.

Things that were once done manually or by hand have now become easier and faster due to the advent of a computing technology. Our world today has changed a great deal with the aid of IT which has penetrated almost every aspect of our daily lives and society, from leisure to business. IT has become a part of our day-to-day lives through the evident use of PC's, Internet, cell phones, faxes, the list would seem endless. Let us hope that newer development in the field of IT can provide benefits to our future generations, just as it has greatly benefited ours.