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Management of IT Resources

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***Abstract*: This paper presents an overview on management of IT resources.**

***Keywords*: IT resources.**

1. Introduction

The Indian information technology (IT) industry has played a key role in putting India on the global map. Thanks to the success of the IT industry, India is now a power to reckon with.

India's IT growth in the world is primarily dominated by IT software and services such as Custom Application Development and Maintenance (CADM), System Integration, IT Consulting, Application Management, Software testing, and Web services.

Computers are growing in popularity very rapidly. Almost everything you can of think is being run by computers from organizing records to directing traffic. The Information Technology (IT) industry is growing at an incredible rate. The impact of computers on our everyday lives is monumental, though taken for granted. Every time we make a bank deposit, purchase items on a credit card, pay an insurance premium or rent a video movie, innumerable computer operations are involved. Making all these operations happen, behind the scenes, is the work of a vast array of professionals: computer programmers, programmer analysts, systems analysts, hardware and software engineers, database managers, etc. As our society becomes more computerized and technologically sophisticated, the need for highly skilled computer professionals increases accordingly.

Do you know that IT has been recognized as a potential enabler of business as companies have been invariably growing their business by looking at new markets and products? India has been best positioned to offer IT services and IT solutions. Most of the MNCs are outsourcing their software requirement to retain their competitive edge and our country has been recognized as an emerging superpower in IT. Finally, we should learn about IT because of the many employment opportunities in this field.

2. Objective

An important aspect of IT is that it can be applied anywhere. The impact of IT has not only changed the working at offices but also the lifestyle of people at home.

3. Changing Life Style

The computer and communication controls the routine tasks such as washing machines, microwave oven, tracking of bank balance, sale purchase of goods, online information of stock, communication through cellular phones, via Internet e-mail, etc. World Wide Web is another gift of IT to the world. One can keep track of the information about world, politics, weather, medical information, etc. It also helps the children with homo work, school projects.

4. What to Study in Knowledge Management

As we all know that Information Technology is changing old jobs and inventing new ones. Thus, to prosper this environment we need to combine traditional education with training in computers and communications, to understand the principal trends in Information Age.

5. Concepts of IT

IT is a system which enables its user to collect, process and distribute information. IT is nothing but individual components of a computer-based information.

6. Information Technology for Business

Information Technology is generally application of computer to storage, retrieval, processing and dissemination of data, particularly in the field of commerce'. Information Technology is a term generally applied to activities and technologies associated with the use of computer and communication.

7. What is Information?

In its broadest and non-technical sense, information consists of facts and ideas. Information in an organization is required for several reasons. It is used to tell people in the organization what the goals are and to instruct them in the policies and procedures required to achieve those goals.

8. Components of Information System

An information system is a component of a business system in the same way as a nervous system is a component of a human body. Its purpose is to gather information from within and outside an

organization, make it available to all other components of an

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organization and outside organization as and when they need. An information system has three major types of components:

1. Data
2. Data processing system
3. Communication channels.

Fig. 1.

9. Technological Trends

The trends in Information Technology including computer, communication and information can be summarized.

10. Career Options

The computer technology industry on the whole encompasses many fields of professional involvement and advancement. In broad terms, here are some of the career options that graduates can consider.

a) Concept of Quality i.e. Do it Right the First lime.
b) Concept of Cost i.e. How to do the same job in the shortest possible time.
c) Effective Communication in English both verbal & written.
d) Business dress (like wearing a tie) & be comfortable in that.
e) Etiquette in day-to-day behaviour as well as on the dining table.
f) Soft skills like team work, leadership etc.
g) Training to score well in aptitude tests conducted by large software companies.
h) Thorough knowledge of two most commonly required programming languages e.g.
Java Enterprise Edition and C#, so that in a test persons can score well.
i) Thorough knowledge of programming algorithm design.
j) Thorough knowledge of testing strategy, planning, test data preparation and actual testing.
k) English Spoken & Personality Development.

11. Computer Science Jobs

Generally speaking, computer scientists are involved in designing computer systems and in researching ways to enhance the practical applications of such designs. Computer scientists address highly theoretical and complex problems associated with making new technology beneficial to all segments of society; academia, the military, civilian businesses, end-user consumers, etc. Included in this group of computer^ scientists are computer engineers, database administrators, computer support analysts, and other technically specialized professionals.

12. Systems Development Jobs

People working in this field analyze the informational needs within an organization and the ways by which various computer systems should properly relate to each other to enhance the overall operation of the organization. Systems analysts ensure that the functional areas of the organization — accounting, marketing, sales, etc.— properly communicate with each other. To accomplish this task, systems analysts study and modify the capabilities of the computer hardware and software to meet the changing demands of an evolving organization.

13. EDP Auditor Jobs

This is a challenging career option for professionals who have keen interests and skills in computers as well as in accounting and finance. The fundamental goal of EDP (Electronic Data Processing) auditing is to ensure the accuracy, efficiency, and integrity of a company's computer system, which is at the heart of all its business operations. EDP auditors are concerned, in part, with the accuracy of computer input and output as this accuracy relates to the possibility of financial impropriety, security leaks, or fraud. Along with knowledge of computer systems, programming languages, and various applications, EDP auditors need a good understanding of business and financial management. In fact, many EDP auditors hold MBA degrees and or CA certification.

14. Consulting Jobs

'Graduates who aspire to become computer consultants can follow a number of career paths. Some computer consultants are motivated by strong entrepreneurial instincts. With several years of industry experience, they choose the route of freelance consulting, often as stepping-stones for starting their own companies to carve their niches in the computer market. Talented young professionals may also consider a career withal combined-practice companies, such as the prestigious consulting firms, or with major hardware /software suppliers, or with international consulting firms that offer computer consulting as part of turnkey business services. Other rewarding computer careers include sales/marketing support, technical writing and instruction, quality assurance, network engineering, management information systems, and so forth.

15. Computers in Non-IT Professions

Even if you are not interested in becoming a computer professional, it is a must that you have basic knowledge of computers and the commonly used applications. It is imperative that you become a computer savvy professional—a person who can use computers with ease to perform routine tasks like composing a letter or memo, send and receive e-mail, surf the Internet, make computer presentations, etc. Because in today's information age—where computers hold the center stage—computer proficiency is a must for your survival and success.

16. Academic Preparation

The road to a well-paying, challenging computer career begins with adequate academic preparation. A four-year degree in computer science, electrical engineering, or information systems is most appropriate. Students who have opted for

branches like Mechanical, Civil, etc. also can become computer professionals if they have the right aptitude and skill set. Now almost all branches offer electives in computer related fields. Even if one does not want to become a computer professional, knowledge of computers and familiarity with the popular software packages is a must in today's world. If you are aspiring to become a specialist in areas like CAD/CAM, Workflow automation, then you need to know the software packages in those areas.

Some of the courses that will help in building a good foundation for the IT profession include computer fundamentals, fundamentals of information technology, programming, computer languages, qualitative and quantitative analysis, operating systems, statistical methods, data and file organization, hardware/software interface, application systems, project management, and so on. In addition to taking the required computer courses, students study other subjects to become well rounded in the business world. Examples of such subjects are economics, business law, marketing, etc.

Learning other languages offer students a competitive edge in job hunting and professional advancement. Being conversant in French, Spanish, German, or Japanese (as examples) can pay off by opening doors for job-related travel and project work that involves interfacing with people from different culture and language.

Gaining practical work experience through internships and industry training is critically important. The size of the company isn't as important as the variety of duties and responsibilities that go along with the learning experience. Interning with several companies provide students with valuable perspectives on the type of company they will fit in with most comfortably following graduation. So students should make it a point to do industrial training while they are doing their course.

To become well diversified in the computer field, it is important to develop good interpersonal skills. To students contemplating a computer consulting career, the advice is not to wait until your final year to use the resources of career services. Start targeting the companies you'd like to work for and develop the academic profile they expect of new employees. Also, the students should get a good blend of business skills! It is important to gain diversified work experience-and to specialize in some industry. Whether it's telecommunications, health care, manufacturing or banking, knowing; some industry inside out is important for computer consultants. Some of the skills f required for IT professionals (in addition to solid technical knowledge) are summarized below:

- Should be able to cope with constant change
- Should be able to analyze information, make appropriate decisions and solve problems
- Capability to organize and think logically
- Should be able to reason abstractly, observe keenly and concentrate intensely
- Should be, a team player
- Must possess proficiency for accurate details
- Should be able to write and speak proficiently
- Must possess computational ability
- Should understand computer language, equipment and application programs. Some of the possible career options for IT professionals are
- Computer Systems Manager
- Computer Programmer
- Document Specialist
- System Software Developer
- Computer Engineer
- Consultant
- Artificial Intelligence Specialist
- Technical Writer
- CAD/CAM Designer
- Quality Control Engineer
- Ergonomics Program Designer
- EDP Auditor
- Training Instructor
- Database Administrator
- ERP Consultant
- Statistician
- Specification Writer
- Customer Engineer
- Special Effects (FX) Specialist
- Systems Analyst
- MIS Manager
- Cryptographer
- Telecommunications Specialist
- Programmer/Analyst
- Project Manager
- Computer Operator
- Information Systems Auditor
- Systems Engineer
- Teacher

17. Conclusion

A successful career in the computer field depends on many factors including hard work, dedication, and industry trends that put certain jobs and skills in more demand than others. One thing is certain. Computer technology is forever changing how we all live, work, relax, and communicate. Whoever helps orchestrate such changes will be at the forefront of shaping the society's expectations as we move into the 21st century.

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