

## E- Learning

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### Abstract

*The information technology affects the people, the process and the productivity of the organization. It's a strategic business decision and not a financial decision to be taken the least cost approach. Information Technology acts as a vehicle, to handle the management education. The information technology decision is also influenced by student's factors. The choice of information technology is made on the basis of the ability of the students in the mgt. Studies to run the hardware–software system. The study culture and the student culture become the critical decision inputs for information technology decision. The information technology decision is made for the current needs as well as for futuristic needs of the organization. Information technology as a recent manpower – intensive technology promises to address the exclusive employment problem with tremendous job opportunities and current prospects. Rapid studies in the technology and fast obsolescence pose formidable challenges to technology education. Fortunately e-learning such an innovation combining various advancements in technology to built next generation learning environment. Here birds view of e-learning focuses in two ways*

- 1. Students studying.*
- 2. Teachers training.*

*In higher education, there is no provision for prerequisite training and practice of teaching. Training process was devised by keeping the following points in mind.*

- 1. Programme should be short but intensive.*
- 2. Training should be done in reclusive situation where an atmosphere of immersion in the subject matter should be created.*
- 3. Course projects should preferably contain elements of the problems encountered by the participants in their daily activities.*
- 4. Experts who are more touch with computers are consisted for training.*
- 5. The concept of professional trained by the same programme and retained to create a center for brokering of information and expertise the rest.*

**Keywords:** *Information Technology, Hardware–Software System, Students Studying, Teachers Training, Business Decision*

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### INTRODUCTION

#### **Retrospective (1965 – 1999)**

In each of periods four aspects which impinged on the development of information technology in India. These are

1. The prevailing technological and industrial situation
2. The status of computer industry

3. The initiatives which the Govt. of India took to promote information technology
4. The prevailing political climate

#### **Educational Scene (1965 – 74)**

During the period 1965-75 we also saw the beginning of formal education in computer

science. A start was made at the Indian institute of technology, Kanpur, by introducing computer science/engineering subjects in the master's program in electrical engineering. Concurrently doctoral work in the area also started with one of the first Ph.Ds. graduating in 1969<sup>[1-3]</sup>. A compulsory course in computer programming and numerical analysis was introduced for all undergraduate engineering students. Besides this short term intensive course were started in programming and application of computers in science and engineering. This was an extremely popular course and about 2000 working professionals from all over India were trained who in-turn introduced computing in their own organizations.

The two centers with large computers were at Tata Institute of Fundamental Research, Bombay, (CDC 3600) and the Indian Institute of Technology, Kanpur (IBM 7044). These two machines, being large, and with good software availability were extensively used by many organizations in India such as ONGC, Engineers India and Universities for design and development work. These machines were quite expensive (cost over Rs.75 lakhs) and not many organizations could afford them. There was thus an initiative to set up Regional Computing Centers at Universities to cast to research and development oriented work emanating from the region, Calcutta, Bangalore, Chandigarh and Pune were identified and centers were set up at Calcutta, Pune and Chandigarh.

### IMPACT OF INTERNET ON EDUCATION

Network use is also growing rapidly throughout the larger educational community, but several factors have placed practical limits on its growth. Some of the reasons that move forward use of internet education are:-

**Isolation:** Wide area computer networks can help and the isolation of students and teachers in the traditional classrooms. Of course, networks will accomplish this end only if they are in expensive enough to make available to all students and teachers.

**Equity:** Connecting all schools to the internet will provide equity of access to online information and create opportunities for all schools to publish online. This requires a reasonable priced infrastructure that all schools can afford to purchase, install and maintain.

**Reform:** Networks can be a powerful tool in support of educational reform. A network with easy access to information servers and tools for placing resources on servers will allow students and teachers to produce online materials<sup>[4,5]</sup>.

### Advantage of Using Internet In The Field Of Education

There are positive and negative features of using internet in management education. Teachers also have benefits and shortcomings. Some advantages of using Internet in management education given below:

1. Students using the Internet and the World Wide Web (WWW) will develop the technical skills required to use the Internet for communication and information gathering.
2. Students using the Internet and World Wide Web (WWW) will acquire geographical awareness based on understanding the global nature of Internet connection and communications.
3. Students using the Internet and World Wide Web (WWW) will improve their ability to learn and understand new and changing information technologies.
4. Students using the Internet and World Wide Web (WWW) will learn to evaluate the validity of information acquired through Internet Resources.

5. Students using the Internet and World Wide Web (WWW) will learn to integrate the data acquired through the Internet meaningful whole.
6. Students using the Internet and World Wide Web (WWW) will understand and know how to use at least one Web Browser.
7. Students using the Internet and World Wide Web (WWW) will develop the skills required to rate information for relevance in meeting a specified need.
8. Students using the Internet and World Wide Web (WWW) will understand differences and similarities among search engines and how to use a variety of search engines.
9. Students using the Internet and World Wide Web (WWW) will develop strategies for finding and evaluating new Internet growth and use.
10. In the information age, student will access to Internet can explore extensive libraries and international resources on different subjects.
11. Through Internet students can share their work with learners of all ages.
12. Teachers who teach the severely handicapped may find themselves faced with students who have limited use of their arms and hands. With today's technology most of these students have other means of using a keyboard. Their horizons are opened and they are able to read and write through Internet. Even the blind students are able to use the Internet through speech recognition programs and specially equipped computers.
13. By teleconferencing, in classes students can actually see and speak to each other in real time as they learn their lessons. The use of newsgroups and email can be incorporated into education.
14. The students can learn at their own place. Services like email and mailing lists can support communication between teacher and student. By using a combination of both email and web, teachers and students can collaborate on research and projects even with those who don't live in the same city or country<sup>[6]</sup>.
15. Automation recognition of speech in conferences and lesson plans with their translation into PC screen messages are a very good help for the deaf.
16. The places where facilities for higher education are not available, people can use Internet facility for their higher education. Some universities have started some higher level courses through Internet. So, if people have access they can do their higher studies by accessing Internet. Many universities have launched many courses through Internet for example Indira Gandhi National Open University (IGNOU).

#### **Disadvantages of Using Internet in The Field Of Management Education**

1. Searching through the Net sometimes can lead children to the place that are not supposed to go such as: sex page, crime magazines, drug advises etc. this is a major problem for teachers to keep children away from such pages.
2. With so many resources available to students in electronic form, they can quickly copy it. So, it is difficult to access student.
3. It is not possible to keep students on task.
4. If students do not know how to use email and browser, they cannot join email groups, send mails and utilize online tutorials etc.
5. Computers can get viruses through Internet or email.
6. Software often gets bugs and sometimes computer crash. In this situation students will leave with nothing to do.

7. Some students spend too much time in playing games, which can be very violent.
8. Anyone can put information or images on the Internet, so, it can easily be used by criminals to communicate with each other or to send pornography. There are no laws to stop this yet, and it is extremely difficult to Police the internet.
9. A machine cannot give the necessary and meaningful personal attention to students.
10. Students will waste time if there is no teacher to check on them.
11. One student will be able to take the test of another student since no human will be checking.
12. Computers can be dangerous to the eyesight of students because of the need to read from the screen.

## **NEXT GENERATION LEARNING ENVIRONMENT**

### **Interactive Learning Method**

The internet services which can be used of interactive learning network are:

1. Web Sites
2. Telephony Conversation
3. E Mail Services

### **Web Sites**

In technical education system, this powerful feature of Internet can be used to compile all the instructional materials developed in any discipline in the form of web pages stored in a WEB site, These pages containing multimedia elements such as text, video, sound and graphics makes it a powerful media of instructions, which can be accessed by any learner who has the access to the WEB site, sitting at remote locations in India<sup>[7-9]</sup>.

A simulated laboratory environment can also be provided on the network to the learners where they develop a range of skill to perform electronic circuit development, space mission, control panel operations etc. The use of this Internet

WEB site can save lot of money, time and manpower on teaching process and documentation of technical education system. It will also help to share the expertise and intelligence an available uniformly, throughout the country.

### **Telephony Conversation**

Telephones offer two-way interactive communication across a distance. By means of Internet telephony conversation network, audio, video and data information can be sent and received by learners. Telephony conversation can serve number of functions in education and training.

1. It allows immediate and interactive form of contact with remote learners.
2. Enable a learner at a distance in getting a problem solved or query to get quick feedback.
3. Can be used for instructional teleconferencing network with the experts at a remote place for educational guidance and comments.
4. To provide quick feedback on learners' assignments submitted to tutors.

### **E Mail Services**

To exchange information both senders and receivers must be logged on to the computer systems at the same time or else it will get stored in the central system till the user system is logged on.

This E-mail service will help,

1. To assist in the administration of local educational authorities.
2. Learners and experts to exchange professional information.
3. To distribute textual training materials as a component in distance learning mode.

## **INTERACTIVE LEARNING NETWORK BY VIDEO CONFERENCING**

Conferencing play an important role in education where a group of people exchange information, review performance, check the progress of a

project, make a presentation or discuss a strategy etc. In an educational setup a face to face conference held for guiding learners, can also be held for guiding learners at remote places through video conferencing.

Video conferencing can allow people at different locations within Tamil Nadu and other states to confer at a short notice and more often. This communication revolution characterized by the use of computers, telecommunications, and satellite communications and coupled by the capabilities of information technology provides an interactive environment for learning. This video technology can be an effective mode for providing education and training not only to students of formal and informal education but also employees of government and corporate organization. Interactive learning network by video conferencing provides an environment for face to face conferencing<sup>[8]</sup>.

A desk top video conferencing system enables individuals spread over at different locations to communicate with each other using audio, video and data transmission. Such type of PC consists of fixed camera and complete set of tools to carry out face to face meetings between two remote persons. The key advantages are

1. The application sharing utilities of the system enable the persons in the conference to interact and share the documents used for one user.
2. Helps the learner without moving from the desktop to meet people, solve educational problems and make decisions.
3. Integration with input devices to quickly import and image or document into the white board, using devices such as scanner or other video capture card

4. Create a built in phone book with photographs for quick reference and perform one button auto dialing
5. Perform easy file transfer , access to remote network and Email

Sharp vision PC-3000 allows 2 to 24 people to simultaneously participate in a view conference from their individual desktop PCs. These PCs have a fixed camera mounted which can be replaced by a video camera, if required. It provides facilities for connecting hardware such as electronic white boards, input devices like scanner, light pen etc., and supported by powerful software for conducting conferences. Linkage to the client is possible by using ordinary telephone line, Very Small Aperture Terminal (VSAT) or leased line option. Video motion quality available is of 15 frames per second and even better quality by faster processor.

## E-LEARNING

E learning is a significant improvement over earlier initiatives towards automated learning , incorporating the benefit of personalization of learning from books with book marks & annotations, interactive environment of trainer based learning, practical insights from on –the-job learning and global information access through internet as a computing and collaboration platform leading to revolution in learning environments<sup>[10]</sup>.

*Learning “Any time anywhere”*

*Internet as an information Repository*

*Internet, as a collaboration platform*

*Real learning Environment*

Intranet as a tool to impart management education like

1. Decision making tool
2. Complete communication tool
3. User education
4. Collaborative efforts
5. Sharing expertise
6. Immediate availability of information updates



7. Partnering tool
8. Customer tool
9. ISO tool
10. Target marketing tool
11. Human resource tool

## CONCLUSION

Technology is affecting management education in revolutionary ways and the momentum towards these changes is irreversible. The use of information technology in management education has potential to raise student's achievement. Universities and Technology Institutes need to become leaders in applying this latest technology to management education for learning.

New technologies with new applications can significantly reduce the cost of networking and significantly improve the networking capabilities available to students and teachers. E-Learning does not seek to replace the trainer with the computer. Rather, it strengthens the trainer with the need-based information access to hasten his own and his trainee's skill. Learning, wherein he could leverage on his training skills in a more effective way and his experience as application of knowledge, breaking free from the perpetual threat of obsolescence and mad rush behind emerging technologies.

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