

# **IMPACT OF INFORMATION TECHNOLOGY ON MANAGEMENT EDUCATION THROUGH DISTANCE MODE**

*\* Dr. Kapil Dev sharma*

## **Introduction**

Information technology is an amalgam of some wonderful inventions of the 20<sup>th</sup> century in electronics and communication. During a very short span of time it has acquired an important place in almost all aspects of human life and particularly in the field of education. India has taken some bold steps to adapt and absorb the advances in information technology by constitution of national task force. Having missed the benefits of the industrial revolution as a result of more than two centuries of colonization, the country is overtaken by the information revolution. At the same time globalization having opened the doors wide to alien influence, the government has decided to take all steps to make India an IT super power by adoption of IT as a national program so as to enable personal and national growth. The 'IT Action Plan' intends to involve all walks of life e.g. industry and commerce, banking and insurance, finance, revenue, communication, media, human resource development, defense etc. The steps taken facilitates in providing effective education in almost all disciplines and particularly for the business schools, to use newer technologies so as to ensure better management education to all.

The increasing demand for management education, change in nature of business and industry within the newly created borderless market environment, and the revolution in information technology provide an opportunity to change the curricula and delivery system of management education so as to provide prospective managers an edge to successfully face the challenge in globally competitive setting. Therefore, management education and IT has to develop a mutually supportive relationship for achieving excellence.

We in India are using multi-technologies in imparting management education. At the one end, some premier institutions are having access to all facilities in terms of educational technology such as multimedia system, LAN, WAN, and World Wide Web on the other hand a large number of business school are still depending only on stereotyped lecture method in imparting knowledge. Therefore the existence of technology gap provides an opportunity to use IT supported education technologies for better delivery of education, easier access to a number of knowledge sources, sharing through networks and quality distance learning in management education.

## **Impact of Technology on Delivery system**

In most of the business schools knowledge and information are delivered with teaching aids like slide projector, overhead projector and LCD projector. However, in distance mode of learning various other tools like audio-visual tapes, broadcast on radio and telecast through T.V., teleconferencing through satellite, floppy diskettes and CD-ROMS, networking via ERNET and INTERNET and direct to home DTH technology are being

used or may be used in a big way to impart management education in remote areas also. With access to internet, the learners have a reach to an unrestricted pool of knowledge, through the Web T.V. while operating at their home. Hence the homes will come to harbor the 'Virtual' class room. With the help of broadcast T.V. the best available professionals, emeritus professors and functional specialists can interact directly to a large number of learners. In remote areas where networking is not available or may not prove cost effective CD-ROMS run on a multimedia PC are treated to be the best option of taking business education. Huge information, data, figures, pictorials, documents, graphics may be stored within them along with audio and video effect. Further internet communication is a very useful medium of imparting knowledge as classroom situations may be created at home with the access to E-mail and web browsing on the World Wide Web, which is now commonly available due to the launch of web television.

Computers play a useful role in creating learning material. Through multimedia symbiotic advantage may be gathered by integration of various types of information such as clip art, animation graphics, music, voice and live interaction that makes the delivery effective. Digital multimedia has made T.V. interactive. It has elevated its functionality to information delivery and education. The consumers of this information have a choice to call for information they need. A selected program can be viewed at the convenience of the viewer and not when relayed. Multimedia computer can be used for training on management education in a one-to-one situation with the student. Multimedia system is treated to be more learner friendly as compared to T.V. as it enables to control the response of instruction transfer process as per the pace of the learner's grasping capacity and preference so as to purposive and situation specific interface with the available information package. This creates an identical condition to the classroom on computer monitor without engaging a teacher and the given package can be browsed again and again by the learner to match with his or her own learning process.

In management discipline students come with mature personality. Computer based learning provides them an opportunity for self growth rather than being taught which stimulates the as they themselves make an appraisal of their achievements in the learning process. On the other hand teachers may also concentrate themselves on development and research related activities as they are relieved from routine monotonous tasks such as tasking, drill, practice and sharing of information. Hence, the new system reduces dependence on conventional and less cost effective infrastructure on elements of learning and also avoids wastage of time to assemble in a class room. It is now realized that IT tools have some relative advantages as compared to conventional mode of information sharing. This generates the need for computer which is not only useful in sharing knowledge but also imbibes skills required in a prospective manager such as conceptual, behavioral, analytical and administrative. In business schools case studies, workshop, project work, business games supplements conceptual learning. To develop the ability to apply knowledge in real life and hypothetical situations different soft wares are developed. Now-a-days most of the management literature is also published with CD ROM to provide visual effect to printed material.

## **Electronic Library and Networking**

The impact of IT on University libraries and more so on the business school libraries is bound to be drastic, if not detrimental. The print material is forced to beat a retreat. The libraries of future will be called electronic libraries. Instead of books, these will have optical disks which could be used at home or anywhere through a small portable electronic reader. Computer applications to library and information field increase the efficiency of the day to day library work. An electronic computer network connecting millions of computers all over the world is the Internet. It provides the path for the continuous flow of data among computers using protocol software. It is the information superhighway. Its basic applications like ftp, email and remote log-in allow flow of information. Its various tools like Gopher, WWW and Archie allow for fast access to reliable data. Its various services like Usenet service, Telnet service etc. further enhance its capabilities. Internet is the fastest medium of access to information of all types at the click of a mouse. It is an essential element in libraries today, which is providing new dimensions to the way libraries acquire process, store and disseminate information.

Today most of the business school libraries have access to online information service and have acquired CD ROMs and have mounted them on networks with wider access. The goal of better management education, however, can be served by taking a more focused approach of building internet that connects the management institutions similar to Indian Institutes of Management and can be utilized by member institutions only. The Intranets may be implemented to connect business schools in each state or those on common platforms. The tools necessary to share resources will include use of internet connectivity through DOT, VSNL, or other ISPs, web browsers and security firewall as the heart of Intranet. It will require software packages for discussion forums, network electronic bulletin boards and list servers for low volume discussion groups as well as for member institutions with the limited connectivity and bandwidth. Many applications can be administered on the business educational Intranet such as sharing of library resources, projects and research work, faculty interaction and collaboration, student placement information and video conferencing.

To conclude with, through libraries today we have moved from documentation to information and in the next decade will move from information to knowledge.

## **Impact of IT on Distance Education**

We are passing through the age of information technology. The new technology likewise other areas have helped in improving distance education for management program. With advanced communication technology, teaching learning process has become faster, non-conventional and interesting. Distance education is the fore-runner in exploiting the potential of information technology so as to reach the learners, teach them, while assuring also its future, especially in the third world countries like India.

Distance education acts as a social catalyst in developing countries and supports the objectivist model of knowledge transmission. Peters has observed three important features of distance education: first, the use of technical media; second, the mass education of students at a distance; and third, the industrialization of teaching process. It is felt that distance education must adapt new technology tailored to individual learner within the Indian environment. However, the technology should be cost-effective, interactive and innovative. During last 20 years the Open University system has shown substantial growth and development, both quantitative and qualitative. At present there are ten open universities in the country including the Indira Gandhi National Open University (IGNOU). Most of them are offering management education. IGNOU is the fastest growing education system in the world, with over six hundred thousand students, more than fifty programs comprising over six hundred courses. It is the largest university in the country and the second largest in the world. The cataclysmic changes taking place in the telecom and IT sector are being increasingly absorbed by the university and now it plans to install VSAT based terminal across the country. In an attempt to implement an interactive ETV for distance learning program for management, the IGNOU has conducted teleconferences for

1. Distant students
2. Counselors handling counseling sessions at study centers
3. Regional Directors and supporting staff of the university.

The interactive network system has three basic components viz. :

1. The teaching end,
2. The receiving end, and
3. The space craft

In addition to IGNOU some other experiments have taken place in India on educational teleconferencing such as ISRO-UGC National Talk – Back Experiment, 1991, Indo-US sun commission project; classroom 2000+, 1993; CEC-ISRO-UGC-IGNOU teleconference, 1994; NOS-DECU-ISRO talk back experiment, 1996. These experiments were conducted to appreciate both way interactions in distance learning.

Within this back drop, the impact of information technology is appreciable to identify the effect on distance education for management discipline, which is as follows:

- The teacher and learner of management education are not required to assemble in class rooms. There are no regular classes and peer group interactions.
- It has no time and space limitation. Learners are not requires to complete all the courses in a given time frame. The pace of learning may be decided by the student at his own. Likewise no campus infrastructure is needed.
- Digital or electronic library may reach to the learner without physical boundaries. Integrated library with online multimedia support can solve the problems of students.

- Various packages such as 'INFORLINE' for general information, 'ADVICELINE' for advice to students, 'CHOICELINE' for choice of subjects, 'LIBLINE' for library holdings and 'EXAMLINe' for date-sheet of term-end examinations and related information may be developed for achieving excellence in management education through distance mode. These packages can be made available to the management student at university home pages on the web-site, video cassettes and CD ROMs.
- There is a growing trend that management institutions are launching distance education program. They may use internet by opening their web-sites to reach to the students who are having access to internet.
- Telephone counseling may be organized by arranging a counseling counter with STD facility for answering student queries. Students may be given this facility free of charge by dialing a certain code during pre-decided counseling hours. If connected through computer they may ask immediate clarifications through the network.
- Initially for the assignments and later for the term end examinations, traditional examination system may be replaced through online computer assessment system.

### **IT Education for Prospective Managers**

With the advent of the new millennium, Internet based computer hardware and software will usher in. Most of the business schools in India are now plentifully supplied with PCs and related technologies. However, most of the machines are under utilized.

After earning degree in management, majority of the students aspires for employment in industry, commerce and service sector. Employers in these areas with that their prospective managers should not only qualified in different functional areas of management but also possess necessary knowledge regarding popular application software packages, application programming and also understanding about how the PCs may be used optimally at their placement situations.

It is suggested that initially an exposure of basic concepts of hardware and software, word processing, spreadsheets, Database, Network and Internet is adequate. Simultaneously, students should be encouraged to solve real life problems with the help of spread sheet and data base packages. For those who wish to make advance use of computers, knowledge of data and file structure, UNIX operating system and programming methodology using computer languages C, C++, or Visual C++ and application of programming viz. in numerical analysis and computational techniques may be given. The purpose is to enable the prospective managers to develop their knowledge of computer potentiality and skill building for better placement.

In employment market demand exists and likely to grow for those who are IT literate. Knowledge of web technology (particularly Java application E-Commerce) and programming in COBOL will be other desirable and attractive qualifications.

- There exists a common feeling among different stakeholders that IT literacy of management students may provide four benefits:
- The technologies that are learnt can be applied directly to useful ends.
- The skills which are sharpened may increase analytical abilities, insight, creativity and problem solving capacity of the students.
- Managers who are computer literate will feel at ease in the new millennium of innovation, vision and cybernetics.
- Lucrative placement opportunities for the IT educated managers.

### **Conclusion**

In developing societies like India the problem is not poverty, low production, low level of per capita income or GNP. The real problem is that we are not adequately and professionally managed. Most of our industrial and service sector units are either under-managed or unmanaged. Therefore, what we need is managerialisation of all the institutions in our 'eco-socio' system. This requires a large number of professionally qualified managers. In India there is a need of management education for all. The growing demand of managers in various segments of economy may not be met with campus centric management education. Through open and distance mode of learning equipped with advent of modern information technology we may develop a cadre of qualified managers to solve most of grave problems of the country.

With the liberalization, privatization and globalization (LPG) of economy, we are in the transformation process from being a technically backward country towards being at par with rest of the world in the 21<sup>st</sup> century. This transition phase has thrown up many challenges and opportunities which need to be exploited and managed to restructure the education system in general and management education in specific for a bright future. The strengths of IT advancements can be harnessed for re-framing the management education during this process.

### **References**

1. Aiyer, S.S. Management of Education: Efficiency of computer based training, proceedings of seminar on International Training and Development Conference, New Delhi, 1987.
2. IT Action Plan, July 4, 1998, by National Task Force on IT and Software Development, Government of India.

3. Khurana, R. Emerging Trends in Educational and Training Methodologies, including Satellite Based Techniques, Interactive Techniques, Technical Support for Learning, Seminar-cum-workshop on Systems Approach to Training and Modern Instructional Techniques, Military College of Telecommunications Engineering, Mhow (M.P.), September 23, 1997.
4. Leider, Dorothy E. The use of IT to Enhance Management School Education: A Theoretical View. MIS Quarterly, September, 1995.
5. Prashant, Praveen, Technology and Management Education Delivery, best student paper competition of Association of Indian Management Schools, 1997.
6. Rawlings, B. New Technology- New Problems: The knowledge Gap between Management and Computing, The new Management Challenges, 1988.
7. Scheme for Computer Application Papers at Postgraduate level in certain disciplines – UGC assistance therefore, Guidelines for courses in Emerging Areas...UGC, New Delhi, 1993.