

# A Study of Use of Information Communication Technology (ICT) Tools at Management Colleges and College Libraries of Savitribai Phule Pune University

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**Abstract:-** ICT is fast growing into important technology and tool for the teachers and students of higher educational colleges in India. Information and communication technologies (ICT) have become commonplace entities in all aspects of life. Across the past twenty years the use of ICT has fundamentally changed the practices and procedures of nearly all forms of endeavor within business and governance. Education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners. The use of ICT in education lends itself to more student-centred learning settings. But with the world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important and this importance will continue to grow and develop in the 21st century.

The study aims to analyze the applications of ICT tools and techniques and their impact in college libraries. The growing information and communication technologies have been revolutionizing the society by making information available to the people in new way.

**Keywords:-** Information, communication, education, technology, governance, revolutionizing.

## I. INTRODUCTION

ICT originally is applied to serve as a means of improving efficiency in the educational process (Jones and Knezek, 1993). Furthermore, it has been shown that the use of ICT in education can help improve memory retention, increase motivation and generally deepens understanding (Dede, 1998). ICT can also be used to promote collaborative learning, including role playing, group problem solving activities and articulated projects (Forcheri and Molfino, 2000). Generally, ICT is promoting new approaches to working and learning, and new ways of interacting (Balacheff, 1993). Majority of faculty members are major catalyst to promote the necessary changes (Whetston, 2001) and to equip students with the skills they are expected to have upon graduation (Brandi, Gunter, 2004).

In higher education systems, there has been a significant shift in enterprise training policy in recent years (Bruce, 1995, 2002; Edward, 2004, 2007; Kemp, 1999; Martin and Rader, 2002). In the other words, ICT learning and utilization is one

of the most concerns of educational issues around the world and for a number of years there has been evidence in the training and development area (Edwards, et al, 2006). It is essential that the pedagogy of ICT becomes the main focus of staff development and this will have to build upon in a constructive manner in order to allow instructors to achieve the full benefits of using ICT in their daily tasks (McCarney, 2004). It is generally understood that university teaching and learning refers to both the contents (skills, understandings and values) and the processes of teaching in higher education.

The Information and Communication Technology (ICT) applications are rapidly changing all over the world. It is a tremendous impact on every library operations, resources, services, staff and users. Library professionals are confronting challenging dynamic technological environment demanding the extensive and effective utilization of ICT in order to survive and meet the changing complex information needs of the user community. ICT has provided libraries with new opportunities to improve the resource & services. The tools of ICT are as follows

### 1.1 Computers

The uses that computers are now commonly put to: writing letters, and reports, printing books newspapers, and magazines, drawing pictures and diagrams, doing statistics, mathematics and handling financial records, controlling traffic lights, flying airplanes, making and playing music and video, sending messages anywhere in the world.

### 1.2 Internet

The Internet is the world's largest computer network that enables computers of all kinds to share services and communicate directly with each other, as if they were part of one giant seamless global computing machine. It plays a significant role in education, health political processes, agriculture, economy, businesses and newsgroups. With Internet connectivity, one can do business all over the world without physical contact with the buyer or the need for a business intermediary

### 1.3 E-mail

Electronic mail (e-mail) is the exchange of text messages and computer files transmitted via communications networks such as the Internet. The email system as the equivalent of postal mailing services with the biggest difference being the time and cost involved. And not only written data, but all sorts of information in the form of video, audio, or photographs can be sent via e-mail. E-mail is described as an increasing popular method of communication, especially in the workplace.

#### 1.4 Mobile Phones

Mobile phones are defined as a telephone system that can move or be moved easily and quickly from place to place. Mobile phones were once the tool of rich and busy executives who could afford both the luxury. Mobile phones are now the ICT that is reshaping and revolutionizing the communications globally. Its impact on the economic activities of nations, businesses and small entrepreneurs is phenomenal. The availability of this new technology has been reshaping the material basis of the society as well as bringing about a profound restructuring of economic, political, and cultural relations among society.

#### 1.5 Fax machine

Ogbomo (2008) defines that fax caused a sharp drop in prices with a significant increase in capacities. "Long distance copying" might be an appropriate nickname for this telecommunication process. Any document, whether it is handwritten contains pictures, diagrams, graphs, charts or typed text can be transmitted at a great speed for relatively low cost. The fax system is widely available; most organizations have at least one fax machine.

#### 1.6 Scanner

An Image Scanner is an input device that translates paper documents into an electronic format that can be stored in a computer. The input documents may be typed text, pictures, graphics or even handwritten material. This input device has been found to be very useful in preserving paper documents in electronic form. An Image Scanner has a set of light emitting diodes encased in a small case that can be held in hand conveniently.

#### 1.7 Printer

The monitors enable us to see or view the output the printers enable into make a hard copy of it. The processed data in the form of tables, spreadsheets diagrams, pie chart, schedules, reports, image & graphics etc. may be printed on a piece of paper using the printer. There are various type of printers like

- a. Dot Matrix Printer
- b. Daisy wheel Printer
- c. Laser Printer
- d. Ink Jet Printer

#### 1.8 Bar code Reader

Bar code reader is a device used for reading barcoded data. It may be a hand-held scanner, or embedded in a stationary scanner. It scans a bar-code image & converts it into an alphanumeric value that is then fed to a computer connected to the Bar-code reader.

#### 1.9 Digital Boards

Digital boards are the tools used by the faculty of management colleges to teach the subject pictorially and also present PPT of the subject.

### II. OBJECTIVES OF THE STUDY

- a. To study the choice of ICT tools used in college students and libraries of management colleges.
- b. To find and examine the patterns of use of ICT by the respondents in their professional activities;
- c. To analyze respondents' perception of the appropriateness of different ICT tools;
- d. To investigate respondents' evaluation of a spectrum of currently-available tools;
- e. To offer suggestions for the effective management of emerging tools

### III. HYPOTHESIS

- a. Students and professionals use different ICT tools in their scholarly communication.
- b. There is a difference among the respondents in the selection of tools

### IV. REVIEW OF LITERATURE

The recent century has been characterized with some new and outstanding technologies impacting human life the most important of them is Information Technology. Researchers conducted in both developed and developing countries prove that the educational authorities in these countries among their other activities have given the priority of "ICT Literacy" through developing various educational programs (Tapscott, 1998; Currier, 2001). In the other words, ICT learning and utilization is one of the most concerns of educational authorities around the world and for a number of years there has been evidence that a training and development area, which may be labeled information literacy is being formed (Edwards, et al., 2006). A variety of authors have surveyed the literature of educational technology in information skills teaching (e.g. Cox, 1997; Rader, 2000; Contain and Kaplowitz, 2000; Joint et al., 2001). Broadly speaking, the literature reveals the importance of using ICT in teaching and learning purposes (Ayers, et al., 2002).

The roles and responsibilities of college and university faculty members are closely tied to the central functions of higher education. Broadly defined, faculty fulfill three primary functions at University: teaching, research and service (Fairweather, 1996). The teaching role of faculty members

reflects their centrality in addressing the primary educational mission among colleges and universities. Faculty members are expected to provide instruction and student advising as assigned by the departmental chairman. In brief the main aspects of teaching responsibilities of faculty members are classroom teaching, academic advisement, course development, academic program review and course duplication review, all of them can be categorized as curriculum development process. If ICT tools are to improve institutional effectiveness and efficiency, it is obvious that their application in support of teaching and learning should be seriously considered. However, investments in this area should always be carefully balanced against other ways in which teaching and learning may be improved and strengthened.

V. METHODOLOGY

Detailed questionnaire having information on the use of ICT tools and its impact in the colleges and college libraries were prepared. The questionnaire are distributed to the users for knowing the use and impact of ICT in 10 Management colleges of Savitribai Phule Pune University selected from all three university centre like Nasik Ahmednagar and Pune. Total of 200 students were selected for the study.

Table1 -Use of ICT Tools

S.No	ICT Tool	No of Respondents	Percentage (%)
1	Computer	198	99
2	E-Mail	194	97
3	Internet	190	95
4	Mobile Phones	196	98
5	Printers	196	98
6	Scanners	106	53
7	Fax	25	5

The above table shows that nearly all the students use internet services(99%) and mobile phones(98%) and E-Mail services(97%) The use of mobile phones is highly significant because it is fast and easy to communicate without much

infrastructure. Internet services also are widely used by the respondents to access more and more information and improve their knowledge.

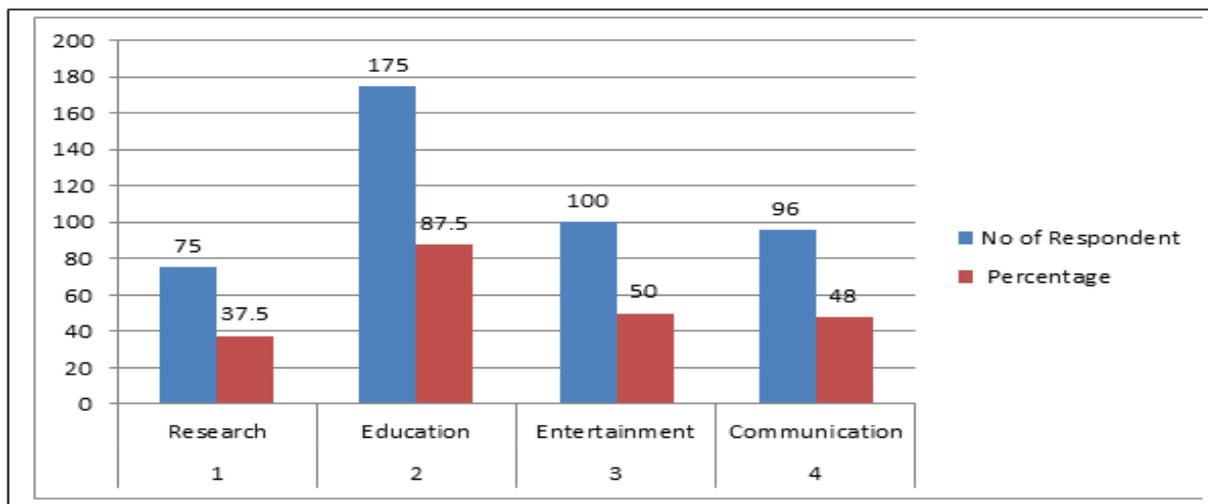
Table 2 Barriers in use of ICT by students and faculties

S.No	Barriers	No of respondents	Percentage
1	Wi-Fi Connections	125	62.5
2	Digital Boards	50	25
3	Obsolete equipments	100	50
4	Interconnectivity problem	75	37.5
5	Basic knowledge application	60	30

The above table shows the various problems faced by the faculties and students in utilizing the ICT effectively in their colleges. It is found that nearly 63% of the respondents say that there is no Wi-Fi connection provided by the college authorities. Secondly 50% of the respondents saying that the equipments installed in the colleges are of inferior quality which are big barrier in effective use of ICT. Another 37.5% of the respondents complain that there exists interconnectivity problem when using internet services. 25% of the faculties say that there is no digital board provided by the college authority for effective use of ICT in teaching the students effectively. 30% of respondents complain of no basic knowledge of technology applications to use the equipments effectively for developing knowledge.

Table3. Purpose of use of ICT tools by respondents.

S.No	Purpose of use of ICT tools	No of respondents	Percentage
1	Research	75	37.5
2	Education	175	87.5
3	Entertainment	100	50
4	Communication	96	48



The above table and graph show the various purposes of use of ICT tools by the respondents. Most of the respondents use ICT tools for gaining knowledge. Here 87.5% of the respondents use ICT tools FOR educational purpose. 50% of the respondents' use ICT tools for entertainment purpose whereas 48% of the respondents use for the purpose of communication and 37.5% of the respondents use ICT tools for the purpose of research works.

#### *Response on Influence of ICT on academic efficiency*

A] Use of conventional documents has decreased	---	95%
B] Dependency on ICT tools has increased	---	98%
C] Expedited the research process	---	85%
D] Improved professional competency	---	75%

#### *Satisfaction with ICT tools*

A] Completely satisfied	65%
B] Partially satisfied	80%
C] Least satisfied	45%
D] No comments	10%

### VI. CONCLUSIONS

Now ICT tools can offer real opportunities to improve the quality of community life. It is also important to deepen our level of reflection on community dynamics and on the constraints encountered when introducing and using ICTs for development. A healthy information society is concerned with getting reliable and timely information to its members. Making people aware of the benefits derivable from the use of ICTs will help to make the society a healthy one. The universities and management colleges should improve the ICT facilities in their institutes to facilitate the students and faculties improve their educational communication standards.

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