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**IMPACT OF INFORMATION AND  
COMMUNICATION TECHNOLOGY TOWARDS  
THE ATTITUDE OF UNIVERSITY PUPILS**

Geethanjali H. M<sup>1</sup>, Shreedevi Chadachal<sup>2</sup>

<sup>1</sup>System Analyst, RKVY Project, UAS, Dharwad, h.mgeetha73@gmail.com

<sup>2</sup>Shreedevi Chadachal, UAS, Dharwad, shric5666@gmail.com

Author Correspondence: Geethanjali H.M, C-1staff quarters, krishi nagar, Dharwad, mobile: 9945228840,  
h.mgeetha73@gmail.com

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**Abstract**

Results from the study indicated that students had positive attitudes towards using the Internet as a tool for their research work and were satisfied with the availability of computers with internet among the departments within the University. The university achieved its objectives of promoting the use of the Internet for research work as well as teaching and communication. This study revealed that the success of Information Technology in molding positive attitudes among students towards using the Internet with less cost and ease of access for their work at a University. This article positively revealed the importance of ICT and economic benefits of Information Technology. It shows how much useful the e-sources and internet for the Agriculture students. The challenge is to make Information Technology facility more accessible so that the students set satisfaction with respect to availability, ease of access and cheapest source of communication in the university. also definitely Information Technology will bring the revolutionary changes in almost all activities of present day environment, education, learning system and also in life style of current generation.

**Keywords:** Information Technology, Internet, Communication, Impact, e-resources, Attitude, Revolutionary.

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**1. Introduction**

There is no doubt now that for most of us Information Technology is becoming like a second skin, an extension of our intellects and even emotions, creating almost a parallel universe of “digital selves.” Perhaps we have been using computers a long time and in a multitude of way, or perhaps not. Either way, this article hopes to deliver important practical rewards by helping us to become “computer streetwise”—that is, computer savvy, means knowing how computer is useful, how they can benefit us.

But not just about computers, it is also about the way computers communicate with one another. When computer and communications technologies are combined, the result is Information Technology or “InfoTech.” Information Technology (Information Technology) is a general term that describes any technology that helps to produce, manipulate, store, communicate, and/or disseminate information. Information Technology merges computing with high-speed communications links carrying data, sound and video.

Examples of Information Technology include personal computers but also new forms of telephones, televisions, appliances and various handheld devices.

Unquestionably we were using communications technology for years. Communications technology, also called telecommunications technology, consists of electromagnetic devices and systems for communicating over long distances. In more recent times, there has been the addition of communication among computers—which is what happens when people “go online” on the internet. In this context, online means using a computer or some other information device, connected through a network, to access information and services from another computer or information device. A network is a communications system connecting two or more computers; the internet is the largest such network. Information technology is already affecting our life in exciting ways and will do so even more in the future. So statistical analysis on use of information technology and its benefits has become hot issue now days. Internet has become the most popular way of communication.

## 2. Methodology

To facilitate quantification and analysis of data, close ended questions were used along with check lists and rating scales (3 and 5 point scale). The 25 questions in the questionnaire are spread over the following sections, which includes general information's of the respondents, use of computers, knowledge about information technology, use of internet, economic benefits of internet, time spent and impact of use of computers. The questionnaires were distributed randomly to 130 respondents in the Colleges of University of Agricultural Sciences, Dharwad to capture the response. In that 115 returned the filled schedule. Out of which 100 valid questionnaires were selected for analysis and to draw necessary inferences. The respondents were spread in 14 departments in the University, in which Male respondent were 61 and Female respondents were 39. This includes under graduate and post graduate students of the University.

## 3. Results and Discussion

The study was carried out to know the response of respondents toward information technology, necessity of computers in the University, availability of computers, networking services, economic benefits of internet and impact of information technology on their research. Figure1 shows the percent of male and female respondents among the total respondents. There were 39 per cent of female respondent and 61percent of male respondents.

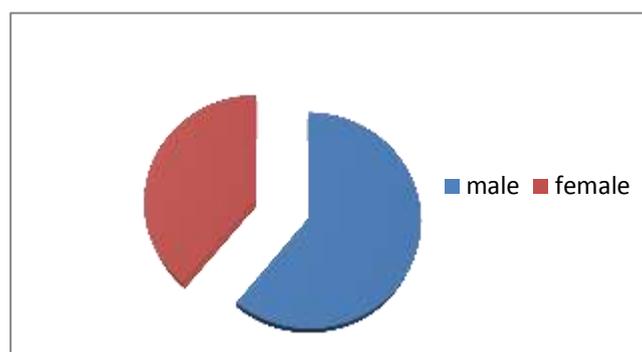


Fig 1: Category wise composition of respondents.

### 3.1. Knowledge about Information Technology

Table 1 reveals the knowledge of the respondent with respect Information Technology. The knowledge of the students in the university campus, with respect to the various aspects of Information Technology was accessed for the entire student community as well as for male and female students separately.

The frequencies with regards to each of the aspects were converted into percentage and are presented in the table. (Table 1).

**Table 1: Knowledge of the respondents with respect to Information Technology**

Sl. No	Concept	Frequency	Percent	Male	Percent	Female	Percent
1	Hardware	81	81.00	51	83.61	30	76.92
2	System software	86	86.00	53	86.89	33	84.62
3	Application software	86	86.00	53	86.89	33	84.62
4	Statistical packages	86	86.00	53	86.89	33	84.62
5	Email/internet	92	92.00	56	91.80	36	92.31
6	Digital library	84	84.00	52	85.25	32	82.05
7	Website	86	86.00	53	86.89	33	84.62
8	Networking	87	87.00	53	86.89	34	87.18
9	Video games	87	87.00	53	86.89	34	87.18
10	Playing audio / video shooting	87	88.00	54	88.52	34	87.18
11	Video conferencing	85	85.00	52	85.25	33	84.62

It shows that more than 85percent of the respondents were having knowledge about the information technology. Only 10percent to 15percent were not having knowledge about the Information Technology as in Table 1. It was clear that 92percent of respondents were having knowledge on internet. About 87percent know about the networking, playing audio, video games. Nearly 86percent know about the system software, website, application software, and statistical software, around 85percent know about the video conferencing and about 81percent know about the hardware i.e. about the mouse, printer, key board, central processing unit, mother board etc.

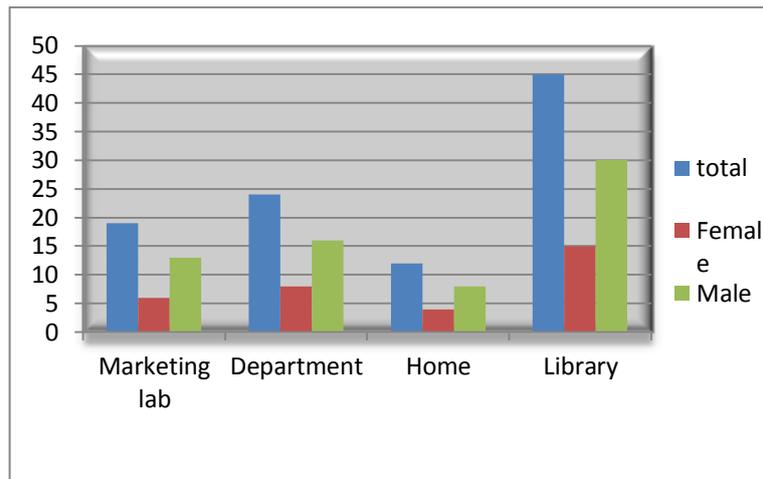
Further the knowledge with respect to Information Technology was analyzed gender wise. Information Technology could be seen from the table that male and female students have knowledge about Information Technology in more or less same proportions in almost all the aspects. Therefore it could be concluded that the knowledge about Information Technology is not gender specific in the University campus.

### 3.2. Accessibility of Computers

The sources, where the students can access the computers in the university campus were analyzed and the same are presented in table 2.

**Table 2: Ease access of computers**

Place (In University)	Total	Female	Male
Marketing lab	19	7(17.95)	12(19.61)
Department	24	10(25.64)	14(22.95)
Home	12	4(10.26)	8(13.11)
Library	45	18(46.15)	27(44.26)

**Fig2: Ease access of computers**

Maximum of the students could have accessibility to the computers in the university library (45%) followed by the computers available in their own departments. A sizable proportion (19%) of the student also accessibility to the computers in the marketing department laboratory. A few students also access the computers in their homes or hostel rooms (125). Students accessing the computers at their willing places are more among male students (13%) as compared to their female counterparts (10%).

The above analysis reveals that there is more flux in the university library for usage of computers. Hence the facilities in the department and marketing laboratory can be strengthened to ease out more rush in the library for usage of computers in the library.

### 3.3. Availability of Computers

The computer was a rich source of communication. The students and staff were using it for their research work, communication and personal usage like entertainment etc. The university provided large number of computers to each and every department.

**Table 3: Response of the respondent on availability of computer in the University Campus.**

Opinion	Responses	Percent (percent)
Very much dissatisfied	8	8
Dissatisfied	22	22
Neutral	19	19
Satisfied	38	38
Very much satisfied	13	13

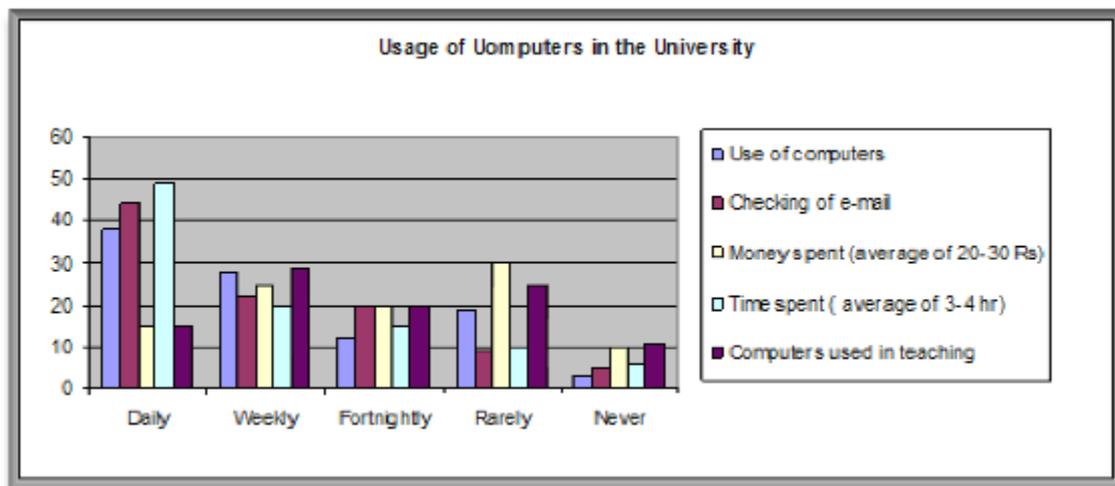
Table 3 shows the opinion of the respondents towards the availability of computers in the university campus. More than half of the students were either satisfied or very much satisfied about the availability of computers in the university (51%). Still sizable proportions (22%) of the students were dissatisfied and around (18%) were highly dissatisfied about the availability of the computers in the university campus. About 19 percent of the students remained neutral about the availability of the computers in the university campus. This calls for the improvement to be made on the campus so that everyone should avail the e-sources for their various research works, which is very much necessary under present situations.

### 3.4. Frequency of usage of computers

The students using computers for different purposes. The resultant out come and frequency of usage are presented in the table 4 and fig 3.

**Table 4: Reveals the Frequency of usage of computers (percent)**

Purpose	Daily	Weekly	Fortnightly	Rarely	Never
Use of computers	40(40.00)	28(28.00)	09(9.00)	20(20.00)	3(3.00)
Checking of e-mail	44(44.00)	19(19.00)	15(15.00)	9(9.00)	13(13.00)
Money spent(average of 20-30Rs)	15(15.00)	25(25.00)	20(20.00)	30(30.00)	10(10.00)
Time spent (average of 3-4 hr.)	49(49.00)	20(20.00)	15(15.00)	10(10.00)	6(6.00)
Computers used in teaching	15(15.00)	29(29.00)	20(20.00)	25(25.00)	11(11.00)



**Fig 3: Frequency of usage of computers.**

Table reveals that nearly about 40 percent of the students use computers on daily basis and about 28 percent use them on weekly basis. Some 20 percent of the students rarely use the computers and paltry proportion of 3 percent of the student has never used the computers.

As for as checking email are concerned about 44 percent of student used computer on daily basis, 19 percent on weekly basis and 15 percent on fortnightly basis. Still 13 percent of the students were not using the computers for checking emails. That means there is still scope to make students computer literate with regards to use of computers and checking e-mails.

Table also reveals that nearly about 15 percent of the students spend 20 to 30 rupees daily for usage of computers while around 25 percent of the students spend same on weekly basis, while another 20 percent of the student spends the money on fortnightly basis. It is seen that on an average 49 percent of the student spend 3-4 hour daily on computers followed by 20 percent on weekly and 15 percent of fortnightly basis. Still around 6 percent of the students never devote time for use of computers.

The table also reveals that around 29 percent of the students on weekly basis, 20 percent fortnightly basis and 15 percent daily basis use the computers for presentation and seminars. Still a yawning gap of 36 percent of the students either rarely or never uses the computers for presentation and seminars. Thus there is still scope for making the students to use computers for effective presentation and seminars.

### 3.5. Use of Internet

Opinion of the students about the importance of internet service was surveyed and is presented in table 5.

**Table 5: Opinion about the importance of internet service**

Opinion	Responses	Percentage
Very important	65	65
Fairley important	24	24
Moderately important	8	8
Somewhat important	3	3
Not at all	0	0

The students use internet for their research work. As many as 65 percent of the student opined that internet service are very important followed by 24 percent and 8 percent of the respondents opined that internet services are fairly and moderately important respectively. In all 97 percent of the students feel that internet services are important for their learning activity. Hence there is more stress on the face that internet services should be made available to all the students in the campus to acquire more knowledge on various aspects of their study.

The respondents were interviewed to elicit the information with regards to the purpose of using e-resources were analyzed and are expressed in percentages in table 6.

**Table 6: Purpose of using e-resources**

Purpose	Responses	Percent
Communication	65	70.65
Browsing	73	79.35
Research	73	79.35
Chatting	14	15.22
e-shopping	2	2.17
e-trade	3	3.26
Others	3	3.26

It is known from table that 92 percent of the student in the campus is having the knowledge of internet. Out of their usage 70.65 percent respondent use e-resources for communication purpose while 79.35 percent of the respondent uses it for browsing and research. Some 15 percent use it for chatting purpose while the students using e-resources for shopping and e-trade and other purpose were very negligible.

The above analysis clearly shows the need of e-resources for the students particularly in research and communication. This hints out that more infrastructure in e-resources are to be created on the campus for the usage of students.

### 3.6. Economic benefits of Internet

Table 7 and figure depicts the economic benefits of internet to the students in the university campus.

Benefits	Agree	Neutral	Disagree
Easy access of communication	87(87.00)	7(7.00)	6(6.00)
Cheapest source of communication	80(80.00)	12(12.00)	8(8.00)
Global village	78(78.00)	14(14.00)	8(8.00)

Figures in parenthesis indicates percentage

From table 7 it was clear that internet was the very important sources for the communication as depicted that around 87 percent of the respondent agree that internet was the source of easy communication. Similarly 80 percent of them agree that these are the cheapest source of communication. Around 78 percent of the respondent believes that internet makes the world smaller and says that it definitely creates the world as one big advanced village.

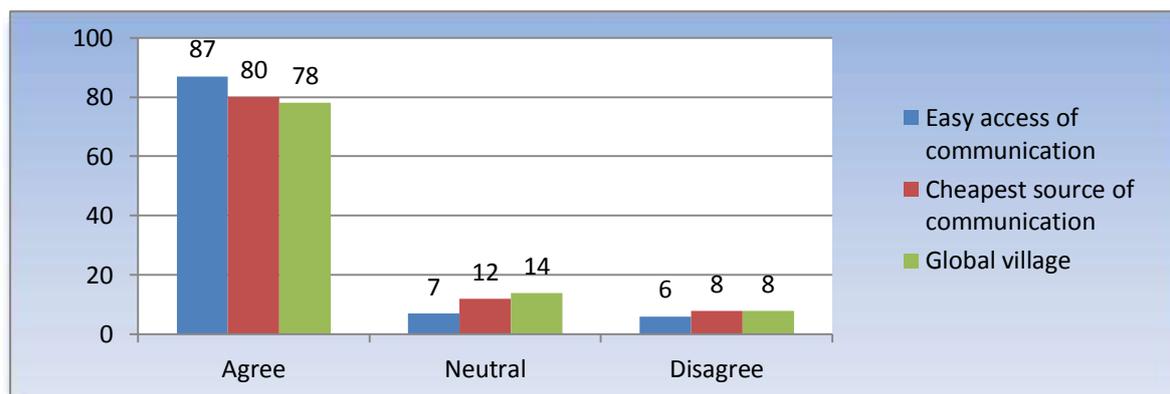


Fig 4: Benefits of internet

## 4. Conclusion

From this paper we can conclude that respondent had the positive attitude towards in Information Technology. Generally they had basic skills in using computers, internet and perception of learning media in the University encouraged them to use Information Technology as a learning tool. Facilities should be improved other than library so that respondents can easily access the computer in other places like department and marketing department computer laboratory also. All respondent use the internet for their research work and communication more in library only because of some common problems in other places like disruptive power supply, low bandwidth of internet and may be some problems with computers. Students are happy with the available benefits in the University because of its ease of access and cheapest source of communication.

The challenge is to make Information Technology facility more accessible so that the students set satisfaction with respect to availability, ease of access and cheapest source of communication in the university. Information Technology has exponentially changed the way of communication, knowledge, and interaction of

the people and also definitely it will bring the revolutionary changes in almost all activities of present day environment, education, learning system and also in life style.

## REFERENCES

1. Bates, A. W., 2005, Technology e-learning and distance education. *2nd ed. Routing* 13 (2). 121-125.
2. Hong, K.-S., Ridzuan, A. A., & Kuek, M.-K., 2003, Students attitudes towards the use of the Internet for learning: A study at a university in Malaysia. *Educational Technology & Society*, 6(2), 45-49, (ISSN 1436-4522).
3. International Journal of Library and Information Science Vol. 2(3), pp. 45-53, April 2010, Available online <http://www.academicjournals.org/ijlis> ISSN 2141 – 2537 © 2010 Academic Journals.
4. Maharana, Bulu, Biswal, Swarupanjali and Sahu, N. K., Use of Information and Communication Technology by Medical Students.
5. Madhusudhan M., 2007, Internet use by Research scholars in University of Delhi, India. *Library Hi Tech News*, 8: 36-42.
6. Mitra, A., & Steffensmeier, T., 2000, Changes in student attitudes and student computer use in a computer-enriched environment, *Journal of Research on Technology in Education*, 32 (3), 417-433.
7. Nurjana, M. I., Lim, T. A., Yeong, S. W., Foong, A. L., & Ware, J., 2002, Utilization of Information Technology in Medical Education, A questionnaire survey of students in a Malaysian institution. *Medical Journal of Malaysia* 57 (Suppl E): 58-66. 199-209.
8. Scagnoli, N. I., 2001, Students Orientation for online programs. *Journal of Research on Technology in Education*, 34 (1), 19-28.
9. Srikantaiah TK, Xiaoying D, 1998, The Internet and its impact on developing countries: *Examples of China and India.AsianLib*.7(9).

## A Brief Author Biography

**Geethanjali H. M.** – Myself Geethanjali H. M., working as a System Analyst under project ‘RKVY’, running by the Department of Agribusiness Management, Agriculture College Dharwad. I secured my Post Graduation in Information Technology discipline MTECH(IT). I am also handling computer courses for the under graduate students in Marketing, Agriculture, Food Technology as well as Home Science Departments in the University of Agriculture Sciences, Dharwad. I also worked as a guest lecturer in Physics and BCA departments in the Karnataka College Dharwad. I am also interested in the digital image processing research techniques and also published article on “face detection for skin tone images using wavelet template matching method”. The same technique I want to use in soil detection also, which will help in the Agriculture University, Dharwad.

**Shreedevi B Chadachal** – Myself Shreedevi B Chadachal currently pursuing Ph.D. in Department of Agribusiness Management, Agriculture College Dharwad. I have done my B.Sc. (Agri) from Agriculture College Bijapur (2010) and ABM (Agri Business Management from Agriculture College Dharwad (2012). I worked as junior research fellow for 3 years in the project entitled “National Agricultural Innovative Programme”. And currently doing my research work on “Dynamics of cotton marketing and Export- An agribusiness Approach”.