

# Use of ICT Resources and Services by the Faculty Members of Engineering Colleges in Chittoor District, Andhra Pradesh: A Study

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**Abstract** - The present study made an attempt to know the use of ICT resources and services by the faculty members of engineering colleges in Chittoor District, Andhra Pradesh. The researcher selected 982 samples in various colleges. Standard questionnaires are used to collect the primary data. The main objectives of this study is to know their attitude about ICT, the type of search engines used, the motivating factors to use ICT resources and services and frequency usage of internet. Result found that most of the respondent have highly use the ICT resources and services.

**Keywords:** Information, Search engines, Technology, ICT

## I. INTRODUCTION

Today we are living in an age of digital world. Computer and other electronic resources has become an indispensable tool in our society. ICT play a significant role in the modern libraries (Maheswaran, 2016a). Educational institutions play a role to inputting knowledge to all age group. The main function of a library is to provide information to the users. With the help of electronic resources the faculties, students and the researchers can access to the huge volume of information with speed and accuracy by using ICT (Maheswaran, 2016b). The new information technology has created a new infrastructure for engineering college libraries and change the way they function and provide services. Most of the engineering college libraries in India fully equipped with modern facilities collections related to ICT (Maheswaran, 2016c).

The ICT provides a cheap and efficient means of communication. It is a boon to all where they can access to information available throughout the universe with the help of online search with the advent of digital revolution, communication became easier and faster and decisions are made instantaneously (W J Jeyaraj, 2012). The present study is to highlight the use of ICT and its resources available in the engineering college libraries and usage of electronic resources by the faculty members of engineering colleges in Chittoor District, Andhra Pradesh has been undertaken (Wilfred Jeyatheese Jeyaraj, 2017).

## II. USES OF ICT IN EDUCATION

ICT is being utilized in every part of life. Due to the increasing importance of the computer, students-the future citizens cannot afford to keep themselves aloof from this potential medium [6]. In education, use of ICT has become

imperative to improve the efficiency and effectiveness at all levels and in both formal and non-formal settings. Education even at school stage has to provide computer instruction. Profound technical knowledge and positive attitude towards this technology are the essential prerequisites for the successful citizens of the coming decades.

## III. REVIEW OF LITERATURE

Seena and Sudhier (2014)<sup>7</sup> investigated the awareness, skill and attitude towards Information and Communication Technologies (ICT) among library professionals in Kerala University Library, Thiruvananthapuram. Puttaswamy and Krishnamurthy (2014)<sup>8</sup> analyzed the advancement of Information and Communication Technology (ICT) in recent era that has made the information services available to the users on their desktop as well as on their laptop and hand held e-book reader. (2015)<sup>9</sup> expressed that all the nations of the world are embracing technological innovations and integrating them into their educational systems for advancement and development. Shivaputrappa, and Ramesh, (2013)<sup>10</sup> observed a significant difference between different designations towards competence on operation of computers, creation of files and folders, library automation software modules, various operating systems, internet-related skills, web design/web editors, search engines and digitization of IR.

## IV. METHODOLOGY

The researcher has employed a well structured questionnaire for collecting the data from the faculty members of self financing engineering colleges affiliated to JNTU-Anantapur in Chittoor District, Andhra Pradesh. The questionnaire has been prepared in such a way that the respondents could easily understand the question items. A total number of 1200 questionnaires were distributed among the faculty members. The investigator could collect questionnaires from only 982 out of 1200 engineering faculty members among whom the questionnaires were distributed. This constitutes 83% of the total respondents

## V. OBJECTIVES

The following objectives are formulated to identify the problems.

- To identify the frequency of the use of e-resources and services available in the library covered under the survey.
- To study the reason for using the e-resources use of the faculty members.
- To identify the preference of search engines to gathering information.
- To examine the motivating factors to use ICT.
- To find out the frequency of usage of internet.

## VI. RESULT AND DISCUSSION

TABLE I CLASSIFICATION OF THE FREQUENCY USE OF ICT RESOURCES AND SERVICES BY THE RESPONDENTS

S. No.	Designation	Daily	%	Thrice in a week	%	Twice in a week	%	Once in a week	%	Once in two weeks	%	Total	%
1	Assistant Professor	602	61.30	171	17.41	5	0.51	0	0	0	0	778	79.23
2	Associate Professor	90	9.16	26	2.65	9	0.92	0	0	0	0	125	12.73
3	Professor	30	3.05	49	4.99	0	0.00	0	0	0	0	79	8.04
	Total	722	73.52	246	25.05	14	1.43	0	0	0		982	100.00

The table I shows that 73.52% of the respondents are using the ICT resources and services every day. 25.05% of the respondents are use the ICT resources and services thrice in a week; 1.43% of the respondents are use the ICT resources

and services twice in a week, and almost all of them use the ICT resources and services either daily or thrice nor twice in a week. It concludes that all the respondents are using the ICT resources and services.

TABLE II DISTRIBUTION OF THE REASON FOR USING ICT RESOURCES AND SERVICES BY THE RESPONDENTS

S. No	Reason for using ICT resources	Professor	Percentage	Assist Professor	Percentage	Associate Professor	Percentage	Total	Percentage
1	Teaching purpose	10	1.02	25	2.55	74	7.54	109	11.10
2	Research purpose	15	1.53	13	1.32	148	15.07	176	17.92
3	Entertainment	2	0.20	4	0.41	23	2.34	29	2.95
4	Seminar preparation	5	0.51	14	1.43	77	7.84	96	9.78
5	Preparing for the examination	6	0.61	8	0.81	40	4.07	54	5.50
6	Official correspondence	3	0.31	5	0.51	61	6.21	69	7.03
7	For improving area of specialisation	6	0.61	11	1.12	44	4.48	61	6.21
8	E-books	5	0.51	13	1.32	81	8.25	99	10.08
9	E-Journal	12	1.22	12	1.22	83	8.45	107	10.90
10	For communication (e-mail)	6	0.61	11	1.12	81	8.25	98	9.98
11	Career Information	9	0.92	9	0.92	66	6.72	84	8.55
	Total	79	8.04	125	12.73	778	79.23	982	100.00

From the above table-II shows, that the e-resources are highly used for research purposes. In specific the e-books and e-journals are also used by the respondent. It could be seen that 11.10 percentage of respondent's next priority of using e-resources and service are for the preparation of teaching purpose. 9.98 percent of the respondent opts for their communication with other fellow of their field. In addition to that, 9.78 percent of the respondents are interested in seminar preparations. For career information 8.55 percent of the respondents are using the Ict resources and services. It could be noted that 7.03 percent of respondents are preferable for using e-resource and services for official communication, 6.21 percent of them are

preferable for improving area of specialization. 5.50 of them are preferably use for getting examination purpose. Among the total respondent 2.95 percent of them use the e-resource and services for entertainment purpose.

Based on the above table that among the various search engines, maximum number of 714(72.7%) assistant professors used Rediff followed by Google. Whereas associate professors 412(41.9%) are used yahoo. Professors 47 (4.9%) also used yahoo. So it is concluded that Google and Rediff are more use when compare with other search engines for teaching and research.

TABLE III PREFERENCE OF USING SEARCH ENGINES FOR TEACHING / RESEARCH PURPOSE THE RESPONDENTS

Search Engines	Asst. Professor n=778	Associate. Professor n=125	Professor n=79	Total N=982
Google.com	670 (68.2)	294 (29.9)	18 (1.8)	982 (100.0)
Yahoo.com	523 (53.3)	412 (41.9)	47 (4.9)	982 (100.0)
Rediff.com	714 (72.7)	127 (12.9)	141 (14.4)	982 (100.0)
Altavista.com	658 (67.0)	269 (27.4)	55 (5.6)	982 (100.0)

TABLE IV MOTIVATING FACTORS TO USE ICT BY THE RESPONDENTS

Factors	Asst. Professor n=778	Associate. Professor n=125	Professor n=79	Total N=982
Attractiveness of the technology	175 (78.47)	23 (10.31)	25 (11.21)	223 (100.0)
Successful use of technology	135 (73.77)	30 (16.39)	18 (9.83)	183 (100.0)
Easy to modification	257 (85.38)	25 (8.30)	19 (6.31)	301 (100.0)
Easy to access	45 (58.44)	24 (31.16)	8 (10.38)	77 (100.0)
Less Time consuming	35 (62.5)	15 (26.78)	6 (10.71)	56 (100.0)
Inspiration from colleagues to use	131 (92.25)	8 (5.63)	3 (2.11)	142 (100.0)

(Note: Numbers in parentheses indicate percentages)

It is observed from the above table shows that the predominant factor of motivating factors is easy to modification while using the ICT resources and service by the respondent. It could be seen that the next reason for the use of Ict resource and services are Attractiveness of

technology. So it is concluded that there is a significant difference in motivating factors to use ICT based on designation. Easy to modification is the main motivating factor to use ICT.

TABLE V FREQUENCY OF USE OF INTERNET THE RESPONDENTS

Frequency	Asst. Professor n=778	Associate. Professor n=125	Professor n=79	Total N=982
Never	55 (53.39)	35 (33.98)	13 (12.62)	103 (100.0)
Monthly	175 (80.64)	26 (11.98)	16 (7.37)	217 (100.0)
Weekly	210 (84.1)	12 (4.8)	28 (11.2)	250 (100.0)
Daily	338 (82.03)	52 (12.62)	22 (5.33)	412 (100.0)

(Note: Numbers in parentheses indicate percentages)

It is evident from the table that most of the respondents 84.1% of Assistant professor, 4.8% of associate professor and 11.2% of Professor are using internet weekly. 82.03% respondents of who mentioned daily are assistant professor, 12.62% of associate professor and 5.33% of Professor. It is clear from the table that large number of Assistant Professors use internet facility either daily or weekly followed by Associate professor 12.62% and Professor 5.33% daily. The category wise data reveal that more number of Assistant Professors are using of internet weekly when compared to Associate Professor and Professor. It can

be concluded that most of the respondents use internet either daily or weekly for flow of information, which means that Internet has a predominant role in their academic activity.

## VI. FINDINGS

Findings are arrived based on the above analysis. They are:

1. Majority of the respondents of their frequency of use of ICT resources and services are Daily.

2. Result shows that the most of the respondents are use of ICT resources and services for research and teaching purpose.
3. Analysis proves that respondents differ in using search engine. Rediff, Yahoo and google are the preference of the respondent.
4. Analysis shows that there is a significant difference in motivating factors to use ICT.
5. The study exhibits that most of the respondents use internet either daily or weekly for their information, which means that Internet has a predominant role in academic activity.

## VII. CONCLUSION

The present study made an attempt to know the use of ICT resources and services by the faculty members of engineering colleges in Chittoor District Andhra Pradesh. Questionnaires are used to collect the primary data. Result shows that the most of them respondents are use of ICT resources and services for research and teaching purpose. Mostly all the respondent are using the e-resources and services either daily or weekly basis. Result found that the respondent have high level of attitude towards the use of ICT and its e-resources and services.

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