

## Use of ICT among the Faculty Members of Engineering Institution in Puducherry

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### Abstract

*This paper aims at evaluating of use of ICT among the faculty members of engineering institution (puducherry).the relevant data were analyzed and assessed by employing interview schedule method from total number of 364 respondent. This study analyzed the use of ICT tools, and electronic engineering service by the respondent. It is also analyzed in this study that the performance of the various service s offered by the institution library. This study is useful for the development of engineering institution of karaikal (puducherry).*

**Keywords:** *Engineering Institution, ICT, Electronic engineering Health Service, Performance of Library Service, Karaikal(Puducherry).*

### Introduction

The twentieth century was shaped by sweeping changes in communication technologies. The emergence and use of information technology is the century's most significant development affecting scholarly communication. The application of computers to information processing has brought several products and services to the scenes. Consequently, the academic community has undergone tremendous changes during these years, assuming new dimensions influenced by technology-driven applications. Libraries have witnessed a great metamorphosis in recent years both in their collection development and in their service structures. Thus Libraries are using technology to improve the management of scholarly information to strengthen and speed access to scholarly information not held locally. Over the last several years a significant transformation has been noticed in collection development policies and practices. Print medium is increasingly giving way to the electronic form of materials (Sharma, 2009).

Ani (2008) states that "the transition from print to electronic medium apart from resulting in a growth of electronic information, has provided users with new tools and applications for information seeking and retrieval. Electronic resources are invaluable research tools that complement the print-based resources in a traditional library setting.

### Review of Related Literature

Studies have also been carried out on the use of electronic resources by teachers, students and research scholars of universities and research organizations. Seventy-eight percent (78%) of the respondents feel that the use of the UGC – Info net E-journals has created high dependency value on their research work and they needed current article alert services and electronic document supply services (Madhusudhan, 2008).

In the context of developing countries, Okello-Obura and Magara (2008) investigated electronic information access and utilization at the East African School of Library and Information Science, Maker

ere University, Uganda. Out of the 250 targeted students, 190 responded, giving a response rate of 76%. The study revealed that users derive a lot of benefits from electronic resources by gaining access to a wider range of information and improved academic performance as a result of access to quality information.

In the Ghanaian context, Dadzie (2007) writes that electronic resources are invaluable research tools that complement the print – based resources in a traditional library setting. Their advantages, according to her include: access to information that might be restricted to the user due to geographical location or finances, access to more current information, and provision of extensive links to additional resources related contents.

Chisenga (2004) carried out a survey of the use of ICTs in ten African Public Library Services. The survey found that, although most libraries had internet connectivity, very few were offering web-based information services to their users. The study however, identifies four barriers to the effective provision of electronic resources in those libraries, namely: lack of strategic planning; lack of adequate or reliable funding; lack of use of Internet to provide information services to users and a lack of consistent training for users in new ICT services.

### **Objectives of the study**

The general objective of the research is to promote electronic resources in health care. The specific objectives that the study seeks to achieve are listed below.

- To find out the level of awareness of electronic resources among the users.
- To find out the time and frequency of use of electronic resources among the users
- To find out the kind of electronic resources preferred databases and use of ICT Engineering.
- To find out the respondents' extent of electronic engineering services.

### **Hypothesis:**

The Research Objectives are supported by the Following Research Hypothesis.

- There no significant relationship between level of awareness and use of electronic resources.
- There is a significant relationship between time and frequency and use of electronic resources.
- There no significant relationship between preferred databases and use of ICT Engineering.
- There no significant relationship between extent of electronic engineering services.

### **Methodology**

A questionnaire survey was conducted to collect the information regarding the use of ICT Engineering, frequency of use of electronic resources, purpose of using electronic resources, frequency of locating desired information, problems faced by users while databases and use of ICT Engineering. A total of 30 questions and 100 choices were designed around seven subjects listed above. Each questions included multiple choices. The people investigated simply ticked inside the brackets. Four hundred and twenty (420) questionnaires were distributed to collect the primary data. Three hundred and sixty-four (364) were found useable representing 86.7% of the valid sample size. Questionnaires were distributed randomly to the users at the electronic resources health care karaikal Institution , at the Main Libraries

and departmental offices, in case of Lecturers. Data collected were analyzed and presented in tabular form.

### Data Analysis and discussion

**Table-1 Sex wise distribution of Respondents**

Sl. No	Category	Number of Respondents	Percentage
1	Male	230	63.18
2	Female	134	36.82
	<b>Total</b>	<b>364</b>	<b>100.00</b>

The above Table-1 gives sex or gender wise distribution of the sample. 230 (63.18 %) are male and 134 (36.82 %) are females. It is concluded the more number of respondents are belongs to male respondents.

**Table-2 Department of Engineering of the Respondents**

Sl. No	Department	Number of Respondents	Percentage
1	CIVIL	120	32.97
2	MECH	80	21.97
3	ECE	54	14.83
4	CSE	110	30.22
	<b>Total</b>	<b>364</b>	<b>100.00</b>

Among the Respondents 120 (32.97%) are CIVIL, 110 (30.22%) them are obstetrics and CSE, 80 (21.97%) of them are MECH only 54 (14.83%) of them one ECE.

It could be seen clearly from the above discussion majority of them are belong to CIVIL.

**Table 3: Faculty members of Engineering awareness of electronic information resources**

S/N	EIRs Awareness	Mean	Standard Deviation
1	E-journals	4.71	0.63
2	E-books	4.63	0.66
3	E-databases	4.55	0.63
4	E-magazines	4.52	0.68
5	E-serials	4.50	0.71
6	E-dissertations and theses	4.43	0.69
7	WWW	4.65	0.58
8	E-mails	4.60	0.75
9	CD-ROMs	4.53	0.75

10	Online Public Access Catalogues	4.48	0.76
11	Reference Databases	4.37	0.80
12	E-Images	4.38	0.77
13	E-audio visual resources	4.32	0.80
	Aggregate Mean	4.51	0.71

### Criterion Mean

From the Table 5 shows the average calculated mean of 4.51 and standard deviation of 0.71, it shows that the faculty members Engineering are highly aware of electronic information resources such as e-journals (4.71, 0.63), e-books (4.62, 0.66), e-mails (4.60, 0.75) and e-databases (4.55, 0.66). This is because both the aggregate/item calculated statistical mean are greater than the criterion mean of 3.00. This implies that the faculty member's engineering institution in Karikal is highly aware of electronic information resources.

**Table 4: Usage of ICT by Faculty members in Engineering**

S/N	Usage of ICT	Mean	Standard Deviation
1	E-journals	4.73	0.52
2	E-books	4.53	0.82
3	E-databases	4.73	0.57
4	E-magazines	4.70	0.56
5	E-serials	4.63	0.55
6	E-dissertations and theses	4.56	0.59
7	WWW	4.51	0.78
8	E-mails	4.57	0.65
9	CD-ROMs	4.61	0.69
10	Online Public Access Catalogues	4.40	0.84
11	Internet resources	4.55	0.71
12	E-Images	4.38	0.77
13	E-audio visual resources	4.32	0.80
	<b>Aggregate Mean</b>	<b>4.60</b>	<b>0.66</b>

### Criterion Mean 3.00

From the above Table 4 with an average calculated mean of 4.60 and standard deviation of 0.66, it shows that faculty members of usage of information and communication technology in Engineering.

This is because both the aggregate/item calculated statistical mean are greater than the criterion mean of 3.00. They use e-journal (mean = 4.76), e-database (mean =4.73) and e-magazines (mean = 4.70) and other electronic resources to a very large extent. This implies that faculty members of usage of information and communication technology in engineering institution in Karikal (Pondicherry) to a very large extent in their academic work.

**Table 5: Skill fullness of database in faculty members of ICT Engineering**

S/N	Database	Mean	Standard Deviation
1	IEEE	4.67	0.55
2	SPEINGER LINK	4.59	0.59
3	NTIS	4.39	0.73
4	WEB OF SCIENCE	4.40	0.80
5	SCIENCE DIRECT	4.39	0.86
6	INSPEC	4.41	0.81
7	KNOVEL	4.42	0.75
	<b>Aggregate Mean</b>	<b>4.47</b>	<b>0.73</b>

**Criterion Mean 3.00**

From Table 7 with an average calculated mean of 4.47and standard deviation of 0.73, it shows that the faculty members of engineering are highly skilled in the use of information and communication technology. This is because both the aggregate/item calculated statistical mean are greater than the criterion mean of 3.00. They are highly skilled in IEEE (mean =4.67), SPEINGER LINK (mean = 4.59), KNOVEL (Mean = 4.42). This implies faculty members of engineering are highly skilled in the use of information and communication technology.

**Conclusion**

Now a day's internet has emerged as most powerful medium for storage and retrieval of information. In order to retrieve relevant information, users have to make use of different electronic and web resources. The study showed that the use of ICT engineering have created a great impact upon users of engineering Institution karaikal in their research and development works. The rapid developments in information communication technology have facilitated the convergence of new electronic devices and formats. Information has been embedded in a variety of ways and forms in various kinds of electronic resources. So far the systematic research has not been done in this area particularly in the use of on-line electronic resources among the users of engineering Institution karaikal. It is clear from the study that the younger generation has accepted the electronic resources, but the volume of frequent usage of e-resources among the users have been found to be optimum level. Many of the respondents are unaware and have not used

On-line thesis/dissertations, abstracts/indexes, OPAC, On-line databases, which are very relevant for their study and research.

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