Knowledge and Use of Electronic Resources (ER) By the Faculty Members of KITSW (Autonomous), Warangal, Telangana State

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Abstract - *The present study mainly focused on use of electronic resources by faculty members of Kakatiya Institute of Technology and Science, (Autonomous) KITSW, Warangal. The author investigates the use of e-resources by faculties through a survey method. This survey purpose is to find out the awareness, availability and the usage of e-resources by the faculty members of KITSW. The survey conducted with the help of a questionnaire and personal interview. Majority of the faculty members are well aware about the electronic resources and most of the faculty members are using electronic resource at least once in a week, The Majority of faculty members 39.81% (43) using e- resources are teaching, The majority of faculty members are 31.48% (34) using e – resources twice a week, the majority of faculty members using e-Journals like IEEE 73.14% (79), Springer Links 71.42% (75), Elsevier-Science Direct 61.11 (66),the majority of faculty member44.44% (48) using e-resources for e-Journals, and the majority of faculty member 43.51% (47) opinion "Good" with e-resources.*

Key Words: ICT, Electronic resources, E-Journals, Online resources

Introduction:

The present century is called as Information Technology Era. The IT is playing a pivotal role in disseminating the knowledge. Libraries are providing good e-resources along with print resources. Electronic Sources have increasingly become the focus of research and development institution in the recent years. Academic libraries also could not remain behind and many academic institutions have created digital libraries for their users to access electronic journals, because accessing the web has become very convenient. Web based full text electronic journals have naturally become the most popular tools for academic library users for locating desired resources.

E-resources are those resources which include documents in electronic or e-format that can be accessed via internet in digital library environment. E-resources are that electronic product that delivers a collection of data, be it text, image collection, other multimedia products like numerical, graphical mode for commercially available for library and information centers. These may be delivered on CDROM / DVD, over the Internet and so on. Electronic resources can be classified into two types-online and offline. Online resources are e-books e-journal, multimedia facilities, email, chat etc., Offline resources are CD-ROM, Floppy disk, Magnetic tape.

Meaning of E-Resources: The information available on electronic gadgets is called "Electronic Information Resources" which are easily stored, disseminating and retrieving.

The Electronic resources available in a library play important role in facilitating access to the required information to the user are an expediency manner. Further one need not go to the library to make use of print formats as the digital resources can be made use of by any user through on-line access via networks or authentication methods at any time by comfortably now web-based electronic resources have become most popular tools in an academic research. E- Resources is one of the emerging environment in libraries and informational communication in the competitive services. E-resources usually consist of e-book, e-journals, articles, newspapers, thesis, dissertation, databases and CD-ROMs, which are likely to be the alternative to the print media. Emerald, Ebsco, Springer, Scopus are some of the examples of online databases. All updated information is published in these e-resources. The familiarity and use of electronic information resources in the libraries for rapid development is necessary and important.

A Profile of KITS: The Government of Andhra Pradesh realized in the late 1970s the popular demand for enhancement of facilities for technical education. It decided to adopt progressive policy of encouraging philanthropic organizations to establish and manage technical institutions. Consequent to such a policy decision, Kakatiya Institute of technology and Science, popularly known as KITS, was permitted at Warangal, in the academic year 1980-81. The institute, over the years has substantially grown in academic programmes, infrastructural facilities and attracted academicians of proven competence into its faculty. It gained recognition amongst academic circles as one of the premier technical Ist institution in this region. It is rated now as one of the AAA+ graded NAAC A grade engineering colleges in India and placed among the top 50 private engineering colleges in India. Recognized as an Autonomous Institute under Kakatiya University by UGC, New Delhi.

A Profile of Library: The library supports the teaching learning program of the Institute. It provides reading & lending facility to the Respondents. It is located in the ground floor of Block II, with a plinth area of 1161sqm. It has a collection of 64821 books with 13455 Titles, back volumes, pamphlets, standards, CD-ROMs, Video cassettes etc. It receives 100 National and International Journals. The Digital Library has campus LAN connectivity through Computer Center and is connected to web server. 30 systems providing network facility are installed for browsing. The institute has the subscription of AICTE mandatory e journals package. The NPTEL Laboratory has procured a hard disk from IITs contains 125 web courses and 135 Video courses furnished with a DLP projector and screen with 60 seating capacity. The book banks were established with the financial assistance provided by the Social Welfare and Tribal Welfare Departments respectively. It is intended to serve the needs of the SC & ST students of the Institute. The Library works on all Academic working days And Summer Vacation as follows Week days – 8.am to 8.pm, Saturday – 8.am to 2pm, During Summer Vacation – 9.30 to 4.45pm.

Review of Literature: There are a number of studies related to the use of e-resources by the students and researchers of various institutions. There are many factors which affect the use of electronic information resources. The related studies discuss some of these issues. The present study is conducted in the light of the previous studies.

Atilgan and Bayram's (2006) reports the results of a survey on the use of e-databases at Ankara University. They surveyed faculty in 2002 to determine the level of awareness of digital library resources, particularly journal articles, along with their usage rate, and to evaluate the preferences of faculty for specific electronic databases. They distributed a

questionnaire to a sample of 3800 researchers at Ankara University, out of which 1996 (53 percent) usable questionnaires were returned to the investigators. The main findings were that the majority of respondents (86.5 percent) indicated that they knew that digital library resources exist in Ankara University. Many of the faculty members (88 percent) use electronic databases. Full professors (53.8 percent) and research assistants (55.4 percent) place second after associate (67.8 percent) and assistant (63.4 percent) professors in the use of electronic databases, although they place first in level of awareness of the digital library. The most preferred databases have been Web of Science, Science Direct, and EBSCO. **Mulla,K.R.** (2011) has studied the Use of Electronic Resources by Faculty Members in HKBK College of Engineering: A Survey in Bangalore and found that the majority of the faculty visited once a week the electronic library; 91.67% of respondents use Internet; 50.00% respondents use CDROMs; 70.00% of respondents stated access to current information is a benefit of using electronic resources ; 35% of respondents do not have enough time to access to the electronics resources and 31.67% faculty members indicate lack of training to use the electronic resources satisfactorily. **Haneefa** (2007) has studied the Information and Communication Technologies in Special Libraries in Kerala and found that though the libraries had hardware, software, and communication facilities to some extent, ICT-based resources and services were not reaching the Respondents to the expected level because of the lack of funds, lack of infrastructure, and lack of skilled professionals to establish an automation of all library management activities and application of ICT. **Rajeev Kumar and Amritpal Kaur** (2005) have carried out a study about the usage of Internet and related issues among the teachers and students of engineering colleges of Punjab, India and found that the Internet has become a vital instrument for teaching, research and learning processes of the respondents. In order to make the Internet more beneficial, the library staff should organize and classify the information on a website in such a way that the Respondents are able to find out easily the information they need for their studies and research purposes. The library services supplemented by Internet services can prove a great boon to the Respondents in getting the right information at the right time. **Tenopir** (2003) studied the 200 recent research publications that focus on the use of electronic library resources and were published between 1995 and 2003 in the report for the council on library and information resources. The study used a variety of research methods, including observations, surveys, interviews, experiments and transaction log analysis. The findings show that both faculty and students use and like electronic resources and most readily adopt them if the sources are perceived as convenient, relevant, and time saving to their natural work flow. Print medium is still used for some reading and is part of research in almost every discipline. **Nallathambi et.al.,** (2014) discussed the use of information and communication technology among the faculty members of leading engineering colleges in Namakkal District and analysed that majority of students and faculty members used electronic based information resources. **Urkalamuthu et.al.,** (2014) analysed the study on challenges of information seeking behaviour of Madurai Kamaraj University Scholars in Tamilnadu and revealed that academic development of the nation and hence due attention has to be paid for online information services and their utilisation. **Joseph Jestin K J. and Ally Sornam, S.** (2016), in their article entitled *Use of e-Resources by the Faculty Members of Engineering Colleges in Kerala: A Survey.* In their study, they opined that the faculty members are well known of the e-journal packages available in most of the colleges. Other packages of e-Resources are much less used by the teaching faculty.

Need of the Study

Today, information technology has developed rapidly and has a huge impact on access to information and on information seeking behavior. Faculty members of Engineering Colleges

libraries at Warangal District in Telanganana State are expected to optimally utilize the library as one of their major sources of information. It is assumed that engineering faculty members could be experiencing technical problems in the accessing information resources. Library information resources are very costly in terms of their acquisition and preservation. The librarians need to manage these resources and make them accessible.

Objectives of the Study

1. To know the purpose of accessing and using e resources among the faculty members of KITS, Warangal, Telangana State.
2. To know the awareness of the respondents on e-resources of KITS, Warangal.
3. To identify the problems faced by the faculty member in accessing e-journals; and
4. To provide suggestions based on the present study for improving developing the e-resources.

Methodology: For the present study, the questionnaire method was used. The needed data collected through structured questionnaires. A total of 150 were distributed randomly among the faculty members of which 108 duly filled-in questionnaires were received back with a response rate of 77.14%

Limitation of the Study: This study is limited to KITS, Warangal, Telangana State has been selected.

Data Analysis and Interpretation: The data collected from the respondents and analyzed with the help of tables and discussed in the below tables.

Table 1: Gender wise distribution of Respondents

Sl. No.	Gender	Respondents	Percentage
1	Male	75	69.44
2	Female	33	30.56
Total:		**108**	**100**

It is clear from the table no.1 shows that a majority of the faculty 69.44% (75) is male and 30.56% (33) of the faculty are female. A majority of faculty member are 69.44% (75) percent of the respondents is males

Table 2: Qualification of the Respondents

Sl. No.	Qualification of the Respondents	No. of the Respondents	Percentage
1	Ph.D.	23	21.29
2	M.Tech.	76	70.37
3	M.Sc.	9	08.33
Total		**108**	100

It is evident from table 2, regarding the education qualification majority of the respondents 70.37% (76) are Post Graduate, 21.29% (23) of the faculty are PhDs Degree and, 08.33% (9) of the faculty are M.Sc. Majority of the faculty member education qualification 70.37% (76) are Post Graduate.

Table 3: Designation of the Respondents

Sl. No.	Designation	Respondents	percentage
1	Professor	18	16.66
2	Associate Prof	27	25.00
3	Asst. Professor	63	58.34
Total:		**108**	100.00

In this table 3 observed 16.66% (18) of the faculty members are Professor, while 25.00% (27) faculty member are Associate Prof, and remaining 58.34% (63) are Assistant Professor. Majority of faculty member 58.34% (63) are Asst.Professor.

Table 4: Frequency of visit to the Library

Sl. No.	Frequency of visit the library	No. of Respondents	percentage
1	Regularly	11	10.18
2	Twice a week	33	30.55
3	Once in a month	47	43.51
4	Occasionally	17	15.74
Total		**108**	100

The above table 4,show that 10.18% (11) of the faculty members visited the Library regularly, 30.55% (33) of the faculties visited the Library twice a week, 43.51% (47) of the faculty members visited the Library once in a month, remaining 15.74% (17) of the faculties visited the Library occasionally. Majority of the faculty members 43.51% (47) visited to Library once in a month.

Table 5: Purpose of using Library

Sl. No.	Purpose of using Library	Respondents	percentage
1	To borrow/Refer Book	24	22.22
2	To prepare class notes	16	14.81
3	Reference Section	11	10.18
4	For research work	21	19.44
5	To use e-journals	28	25.95
6	For update knowledge	8	07.40
Total		**108**	**100**

It is observed from table 5, shows that 22.22% (24) faculty members are using the Library for "to borrow book/refer books", 14.81% (16) faculty members are using the Library for "to prepare class notes", 10.18% (11) faculty members are using the Library for "reference section", 19.44% (21) faculty members are using the Library for "research work", 25.95% (28) faculty members are using the Library for e- journals, remaining 07.40% (8) faculty members are using Library for "update knowledge". Majority of faculty members are using the Library for e-journals

Table 6: Use of Electronic Resources

Sl. No	Use of E-Resources	Respondents	Percentage
1	Yes	108	100
2	No	0	0
Total:		**108**	100

It is evident from table 6, shows that 100% (100) faculty members are using and accessing of e-resources. All the faculty members using and accessing of e-resources

Table 7: Place of access e- resources

Sl. No.	Location of using Internet	Respondents	percentage
1	Library	19	17.59
2	Department	58	53.70
3	At Home	18	16.66
4	Mobiles	9	08.33
5	Cyber Café	4	03.70
	Total:	**108**	100

It is evident from table 7, 17.59% (19) of faculty members access e-resources in Library, 53.70% (58) of faculties access e - resources in Departments, 16.66% (18) of faculty members access a resources at Home, 08.33% (9) of faculty members access e – resources on Mobile phones and remaining 03.70% (4) of faculties access e-resources at Cyber Café. The majority of Faculty members 53.70% (58) access e – resources at Departments

Table 8: Purpose of using e-resources

Sl. No.	Using Resources	Respondents	percentage
1	To teaching	43	39.81
2	Research	31	28.70
3	Prepare Articles	14	12.96
4	Update Knowledge	11	10.18
5	E-mail/Social sites/ etc	9	08.33
	Total:	**108**	100

It is observed from table 8 shows that 39.81% (43) of faculty members using e- resource is teaching, 28.70% (31) of faculty member using e- resources is research purpose, 12.96% (14) of faculties are using e – resources for preparing articles, 10.18% (11) of faculties are using e – resources for update knowledge, remaining 08.33% (9) of faculty members using e – resources is E-Mail/Social sites etc. The Majority of faculty members 39.81% (43) using e-resources are teaching.

Table 9: Frequency of using e- resources

Sl. No.	Frequency of using of e-resources	Respondents	percentage
1	Daily	13	12.03
2	Twice in week	34	31.48
3	Weekly	23	21.29
4	Fortnightly	18	16.66
5	Once in a month	12	11.11
6	Occasionally	8	07.61
	Total	**108**	100

The above table 9, it is indicate that 12.03% (13) of the faculty using e – resources daily, 31.48% (34) of the faculties are using e - resources twice a week, 21.29% (23) of the faculty using e – resources weekly, 16.66% (18) of the faculties are using e – resources fortnightly, 11.11% (12) of faculty members using e – resources once in a month, remaining 07.61% (8) of the faculties are using e – resources occasionally. The majority of faculty members are 31.48% (34) using e – resources twice a week.

Table 10: Use of online Journals

Sl. No.	Use of E-Journals	Respondents	percentage
1	ACCESS ENGINEERING	11	10.18
2	ASCE	16	14.81
3	ASME	19	17.59
4	ASTM	09	08.33
5	ELSEVIER-Science Direct	66	61.11
6	IEEE	79	73.14
7	J-GATE (E&T)	23	21.29
8	J-GATE (S&MS)	19	17.59
9	SPRINGERLINKS	75	71.42
10	EBSCO	10	09.25

(Note: Respondents were allowed multiple answers)

The above table 10, it is inferred that 10.18% (11) of the faculty using Access Eng E-Journals, 14.81% (16) of the faculty using ASCE E-Journals, 17.59% (19) of the faculty using ASME E-Journals, 08.33% (09) of the faculty using ASTM E-Journals, 61.11% (66) of the faculty using Elsevier-Science Direct E – Journals, 73.14% (79) of the faculty using IEEE E-Journals, 21.29% (23) of the faculty using J-Gate (E&T) E- Journals, 17.59% (19) of the faculty using J-Gate (S&MS) E Journals, 71.42% (75) of the faculty using Springer Links E-Journals ,remaining 09.25 (10) of the faculty using EBSCO E-Journals. The Majority of faculty members using E-Journals like IEEE 73.14% (79), Springer Links 71.42% (75), Elsevier-Science Direct 61.11 (66)

Table 11: Electronic Information resources used

Sl. No.	E-Resources used	Respondents	percentage
1	E-Books	18	16.66
2	E-Journals	48	44.44
3	Audio-video materials	29	26.85
4	Electronic Dissertations	8	07.40
5	E-Data base and others	5	04.62
Total:		**108**	100

Table 11 shows that, 16.66% (18) faculty members are using e-resources for E-book, 44.44% (48) faculty members are using e-resources for E-Journals, 26.85% (29) faculty members are using e-resources for Audio-video materials, 07.40% (8) faculty members are using e-resources Electronic dissertations and remaining 04.62% (5) faculty members are using e-resources for E-data base and others. The Majority of faculty member44.44% (48) using e-resources for E-Journals

Table 12: Preferred format of e –resources

Sl. No.	Use of Format E-Resources used	Respondents	percentage
1	PDF	52	48.14
2	HTML	44	40.74
4	PPT	12	11.11
	Total:	**108**	100

It is evident from table12 shows that, 48.14% (52) faculty members are using e-resources format PDF, 40.74% (44) faculty members are using e – resources format HTML and remaining 11.11% (12) faculty members are using format PPT, other. The Majority of faculty member 48.14% (52) are using e-resources format PDF.

Table 13: Impact of reading article from e-Journals

Sl. No.	Impact	Respondents	percentage
1	Innovative/Inspires New Ideas	19	17.59
2	Quick completion of research work	21	19.44
3	Save time on other sources	56	51.85
4	Update latest information	12	11.11
	Total:	**108**	100

Table 13 show that analysis of the impact of reading e – journals , of all the impacts "save time on other sources" come on top with 51.89% (56), second impact "quick completion of research work"19.44% (21), third position impact "Innovative/Inspires new ideas" 17.59% (19), fourth position impact "update latest information" 11.11 (12) . The majority faculty impact of reading e-journals "save time on other sources" come on top with 51.89% (56).

Table 14: Recommend e-journals to student

Sl. No.	Recommend	Respondents	Percentage
1	Yes	108	100
2	No	0	0
	Total:	**108**	**100**

Table 14 shows that, every faculty member like to recommend e-journals to their students for effective study. In this table total in favour of recommending e-journals 100% (108) for students

Table 15: Problem in accessing e-journals by the faculty

Sl. No.	Problem faced by Faculty members	Respondents	percentage
1	Access Difficulties (Slow access& speed)	31	28.70
2	Lack of IT Knowledge/Training	22	20.37
3	Difficulties in finding relevant information	19	17.59
4	Lack of time	17	15.74
5	Lack of capable tools/ Terminals	19	17.60
	Total:	**108**	**100**

It is evident from table 15 shows that, 28.70% (31) faculty member having face problem "access difficulties like slow access speed", 20.37% (22) faculty member having face problem "lack of IT knowledge/Training", 17.59% (19) faculty member having face problem

"difficulties in finding relevant information", 17.59% (19) faculty member having face problem "Lack of capable tools/terminals", remaining 15.74% (17) faculty members having face problem "lack of time". The majority of faculty member 28.70% (31) having face problem "access difficulties like slow access speed"

Table 16: Opinion about Library e-resources

Sl. No.	Respondents opinion	Respondents	percentage
1	Excellent	17	15.74
2	Good	47	43.51
3	Satisfactory	30	27.77
4	Need to improvement	14	12.98
Total:		**108**	**100**

The above table 16 shows that,15.74% (17) of faculty member opinion "excellent" with e-resources, 43.51% (47) of faculty member opinion "good" with e – resources, 27.77% (30) of faculty member opinion "satisfactory", remaining 12.98% (14) of faculty member opinion "need to improvement". The Majority of faculty member 43.51% (47) opinion "good" with e-resources.

Major Findings:

1. A majority of faculty member are 69.44% percent of the respondents is males
2. Majority of the faculty members education Qualification 70.37(76) are Post Graduate.
3. Majority of the faculty members 58.34 %(63)are Asst.Professor.
4. Majority of the faculty members 43.51% (47) visited to Library once in a month.
5. Majority of faculty members are using the Library for e-journals
6. All the faculty members using and accessing of e-resources
7. The majority of Faculty members 53.70% (58) access e – resources at Departments
8. The Majority of faculty members 39.81% (43) using e- resources are teaching.
9. The majority of faculty members are 31.48% (34) using e – resources twice a week.
10. The Majority of faculty members using E-Journals like IEEE 73.14% (79), Springer Links 71.42% (75), Elsevier-Science Direct 61.11 (66)
11. The Majority of faculty member44.44% (48) using e-resources for E-Journals
12. The Majority of faculty member 48.14% (52) are using e-resources format PDF.
13. The majority faculty impact of reading e-journals "save time on other sources" come on top with 51.89% (56).
14. In this table total in favor of recommending e-journals 100% (108) for students
15. The majority of faculty member 28.70% (31) having face problem "access difficulties like slow access speed"
16. The Majority of faculty member 43.51% (47) opinion "good" with e-resources

Conclusion: E-resources have introduced the new environment for both Respondents and libraries. The new environment brings about challenge and opportunities. Respondents become more and more relying on the use of e-resources for information discovery. The way that they seek, search, select and use information has changed drastically. The library itself has to understand the user's demands and needs, and try to respond to meet those demands and needs.

The successful operation of any library depends to a large extent on the choice of library collections. The choice of collection should meet the need and requirements of the end Respondents. Consequently, librarians must be aware of how the faculty members seek information. It is also observed that Respondents are not satisfied in display board service; inter library loan service and reference services. The professionals are great help for faculty members in searching their relevant information. Maximum number of faculties used electronic journals for course work and research.

Suggestions: Based on the findings of the study, the following suggestions are made to improve the use of e-resources and services to faculty members at Library, KITSW in Telangana State.

The following suggestions were made for development of EIRs and Digital Library.
1. There is urgent need to acquire more electronic information resources as demand received from respondents.
2. There is a need to improve the speed of internet connectivity.
3. Increase of bandwidth to ensure faster access to e-resources; this will save the time of the faculty and also solve the problem of slow access.
4. Conducting of orientation or awareness & information literacy programme for the faculty to educate them about what kind of e-resource are available in the Library and how to make use of maximum e-resources for academic and research work.
5. Conduct of user surveys regularly to determine the needs of e-resources and to identify changes in the use of e-journals.
6. The libraries should be taken immediate steps to improve infrastructure facilities.

References

1. Arora, Jagdish and Trivedi, Kruti. (2010). INDEST-AICTE Consortium: Present Services and Future Endeavours, *DESIDOC Journal of Library & Information Technology*, 30(2), 79-91.

2. Dogan Atilgan and Ozlem (Gokkurt) Bayram. (2006). An Evaluation of Faculty Use of the Digital Library at Ankara University, Turkey. *Journal of Academic Librarianship*, 32: 86–93.

3. Indrasena Reddy, Komalla. (2016). Users Based Studies of NBA Accredited Engineering College Libraries of Warangal District in Telangana, India: A Study *IOSR Journal Of Humanities and Social Science*, 2(2), 56-62

4. Jamali, Hamid R. & David Nicholas & Ian Rowlands. (2009). Scholarly e-books: The views of 16,000 academics. Results from the JISC National E-book Observatory. *ASLIB Proceedings*, 6(1), 33-47

5. Josepah Jestin, K.J., & Ally Sornam, S. (2016). Use of e-Resources by the Faculty Members of Engineering Colleges in Kerala: A Survey. *International Journal of Digital Library Services, 6*(3), 31-38.

6. Mulla, K.R. (2011). Use of Electronic Resources by Faculty Members in HKBK College of Engineering: A Survey. *Library Philosophy and Practice,* May 2011.

7. Mohamed Haneefa. (2007). Application of Information and Communication Technologies in Special Libraries in Kerala (India*). Library Review*, 56(7), 603-620.

8. Rajeev Kumar & Amritpal Kaur. (2006). Internet Use by Teachers and Students in Engineering Colleges of Punjab, Haryana and Himachal Pradesh States of India: An Analysis. *Electronic Journal of Academic and Special Librarianship*, 7(1), 42-55.

9. Tenopir, Carol. (2003). Use and Respondents of electronic library resources: an overview and analysis of recent research studies. *Council on Library and Information Resources,* 8(3), 1-66.

10. Venkatesha and Ramasesh, C.P. (2016). Use of Electronic Information Sources by the Visually Challenged Students in the State of Karnataka. *Pearl: A Journal of Library and Information Science,* 10(4), 316-323.