Review Article

Use of E-resources by Faculty Members and PG Students of K.S. Institute of Technology, Bangalore: A Case Study

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Abstract

The present study examines the use of e-resources at K.S. Institute of Technology. A questionnaire was prepared to elicit opinions from the users of e-resources. The responses were gathered from 98 users (80 faculty and 18 PG students from Engineering College). The results of the survey provide information about the type of e-resources used, purposes for which e-resources used, problems faced by the users while using e- resources, benefits of e-resources over conventional resources, success rate of finding required information in e-resources adequacy of information in e- resources, influence of e-resources on academic efficiency and views regarding features of e-resources on the basis of results of the survey some suggestions have been put forth for optimum utilization and exploitation of e- resources.

Keywords: E-resources; Faculty members; PG students; K.S. Institute of Technology.

Introduction

Advances in Computer Applications during the past few decades have brought radical changes in the way information is gathered, stored, organized, accessed, retrieved and consumed. The applications of computers in information processing have brought several products and services into the system. The internet and the web are constantly influencing the development of new modes of scholarly communication e-resources have emerged as a powerful media of communication. Their potential of delivering the goods is quite vast, as they overcome successfully the geographical limitations associated with the print media. Further, the distribution time between product publication and its delivery has drastically reduced. These can be used for efficient retrieval and meeting information needs. This important fact is convincing many libraries to move towards digital/ e- resources, which are found to be less expensive and more useful for easy access.

K.S. Institute of Technology Library

K.S. Institute of Technology library which made its modest beginning in 1999 with 3,000 books only has now come to acquire a rich collection of 33,000 documents up to November 2011. It subscribes to 64 Journals both national and international and also provides access to e-journals like IEEE, Wiley Blackwell, Springer, Mc-Graw Hill, J- Gate, Elsevier and ASTM Digital Library under AICTE Consortium. It covers all areas in Engineering, Science and Humanities. There is a campus- wide networking. All the faculty members and PG students can access e-resources in their respective department, Internals labs as well as in the Library.

Objectives of the Study

The study has been undertaken with the following objectives:

- To study the use of different types of e-

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resources by the faculty and PG students of K.S. Institute of Technology.

- To know the purposes for which e-resources are being used.
- To know the problems encountered by the users while accessing and using e-resources.
- To know the benefits of e-resources over the traditional ones.
- To know the influence of e-resources on the academic efficiency of the users.
- To suggest means and ways for optimum utilization and exploitation of e- resources.

Methodology

It was decided to conduct a survey of 98 users of e-resources (80 faculty and 18 PG students of Engineering & Technology). For the purpose of study, a questionnaire was designed. The respondents were given the pre-structured questionnaire irrespective of their status. All the respondents shared great enthusiasm in filling up the questionnaire. They were interviewed to fill the gaps.

Table 1: Classification of Respondents according to Status

SL	Status	No. of Respondents	%
1	Professor	3	3.75
2	Asst. Professor	20	25.00
3	Senior Lecturer	25	31.25
4	Lecturer	32	40.00
	Total:		80.00
5	PG Students	18	100.00
	Grand Total:	98	100.00

Analysis and Discussions

In order to access the frequency of using e-resources, the respondents were asked to indicate any one of six categories of time lag. It has been found from table 3 that 12.24 percent of respondents make use of e-resources 'daily'. 37.75 percent 2-3 times a week, 24.48 percent of respondents once a 'week' and only 14.28 percent 2-3 times a month. 6.12 percent once a month 5.10 percent use the e-resources occasionally.

Table 4 shows that 100 percent of the respondents are using e- journals followed by 35.71 percent online databases. None of the respondents has shown preference for using CD- Rom databases.

Table 5 shows that 14.28 percent of respondents acquiring the necessary skills for e-resources is via Self-instruction followed by guidance from colleagues and friends 30.61 percent. The percentage of PG students who have learnt the skills through guidance from colleagues far exceeds 33.33 percent than that of faculty 30.00 percent. About 55.10 percent of the respondents acquired the skills through trial and error.

Table 6 indicates that 36.73 percent of the respondents use e-resources for research / project work, 34.69 percent for publishing articles/ books, 9.18 percent for teaching purposes, 8.16 percent for finding relevant information in the area of specialization, 6.12 percent for getting current information and 5.10 percent keeping up-to- date in their subject field.

Table 7 reveals that 71.42 percent of the respondents find the information in e-

Table 2: Department-wise- Break- up of Respondents

Category	Department - Wise					
	Mechanical Engg.	Electronics & Communication Engg.	Computer Science Engg.	Telecommunication Engg.	Basic Science	Total
Faculty	22	23	15	9	11	80
P.G. Students	18	-	-	-	-	18
Total	40	23	15	9	11	98

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Table 3: Frequency of Use of E-Resources

Frequency	No. of Responses					
	Faculty	%	PG Students	%	Total	%
Daily	8	10.00	4	22.22	12	12.24
2-3 Times a week	25	31.25	12	66.66	37	37.75
Once a week	22	27.50	2	11.11	24	24.48
2-3 Times a month	14	17.5	-	-	14	14.28
Once a month	6	7.50	-	-	6	6.12
Occasionally	5	6.25	-	-	5	5.10
Total	80	100.00	18	100.00	98	100.00

Table 4: Types of E- Resources Used

Frequency	No. of Responses					
	Faculty	%	PG Students	%	Total	%
E- Journals	80	100.00	18	100.00	98	100.00
On-line data bases	24	30.00	11	61.11	35	35.71
CD- Rom Databases	-	-	-	-	-	-

Table 5: Methods of Learning E-Resources Skills

Methods of learning e- resources skills	No. of Responses					
	Faculty	%	PG students	%	Total	%
Trial and error	46	57.5	8	44.44	54	55.10
Guidance from friends/ Colleagues	24	30.0	6	33.33	30	30.61
Guidance from the Library Staff	-	-	-	-	-	-
Guidance from the Computer Staff	-	-	-	-	-	-
Training offered by the Institution	-	-	-	-	-	-
Self- instruction	10	12.5	4	22.22	14	14.28
External Courses	-	-	-	-	-	-

Table 6: Purpose of Using E-Resources

Purpose	No. of Responses					
	Faculty	%	P.G. Students	%	Total	%
For Research / Project Work	34	42.50	2	11.11	36	36.73
For Teaching Purposes	9	11.25	-	-	9	9.18
For Publishing articles/ books	25	31.25	9	50.00	34	34.69
For keeping up to date in your subject area	4	5.00	1	5.55	5	5.10
For finding relevant information in the area of specialization	5	6.25	3	16.66	8	8.16
For getting current information	3	3.75	3	16.66	6	6.12

Table 7: Adequacy of Information in E- Resources

Opinion	No. of Responses					
	Faculty	%	P.G. Students	%	Total	%
Always	58	72.50	12	66.66	70	71.42
Sometimes	22	27.50	6	33.33	28	28.57
Never	-	-	-	-	-	-
Total	80	100.00	18	100.00	98	100.00

Table 8: Problems Faced While Using E-Resources

Problems	No. of Responses					
	Faculty	%	PG Students	%	Total	%
Slow access speed	32	40.00	9	50.00	41	41.83
Difficulty in finding relevant information	14	17.50	3	16.66	17	17.34
It takes too long time to view / download pages	21	26.25	2	11.11	23	23.46
Too much information is retrieved	6	7.50	1	5.55	7	7.14
Difficulty in using e-resources due to lack of IT Knowledge	1	1.25	2	11.11	3	3.06
Limited access to computers	3	3.75	1	5.55	4	4.08

Table 9: Benefits of E-Resources over Conventional Documents

Benefits	No. of Responses					
	Faculty	%	PG Students	%	Total	%
Time Saving	49	61.25	7	38.88	56	57.14
Easy to use	14	17.50	5	27.77	19	19.38
More informative	7	8.75	3	16.66	10	10.20
More useful	6	7.50	2	11.11	8	8.16
More Preferred	4	5.00	1	5.55	5	5.10

Table 10: Success Rate

Success Rate	No. of Responses					
	Faculty	%	PG Students	%	Total	%
100%	-	-	-	-	-	-
75-99%	32	40.00	8	44.44	40	40.81
50-74%	28	35.00	6	33.33	34	34.69
25-49%	12	15.00	3	16.66	15	15.30
Less than 25%	8	10.00	1	5.55	9	9.18
Total	80	100.00	18	100.00	98	100.00

Table 11: Influence of E-Resources On Academic Efficiency

Influence	No. of Responses					
	Faculty	%	PG Students	%	Total	%
Expedited the research process	24	30.00	2	11.11	26	26.53
Improved professional competence	22	27.50	8	44.44	30	30.61
Access to current up-to-date information	12	15.00	3	16.66	15	15.30
Access to a wider range of information	9	11.25	2	11.11	11	11.22
Easier access to information	7	8.75	2	11.11	9	9.18
Faster access to information	6	7.50	1	5.55	7	7.14

Table 12: E- Resources Be Good Substitute for Conventional Resources

Response	Faculty	%	PG Students	%	Total	%
Yes	80	100.00	18	100.00	98	100.00
No	-	-	-	-	-	-
Total	80	100.00	18	100.00	98	100.00

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Table 13: Faculty Opinions Regarding the Features of E-Resources

Features	Poor	%	Fair	%	Good	%	Very Good	%	Excellent	%
Accessibility	-	-	10	12.50	47	58.75	23	28.75	-	-
Accuracy	-	-	13	16.25	37	46.25	22	27.50	8	10.00
Availability	-	-	9	11.25	20	25.00	51	63.75	-	-
Consistency	-	-	10	12.50	60	75.00	10	12.50	-	-
Easy to Use	-	-	5	6.25	45	56.25	12	15.00	18	22.50
Flexibility	-	-	-	-	58	72.50	22	27.50	-	-
Permanence	-	-	11	13.75	22	27.50	47	58.75	-	-
Timeliness	-	-	-	-	36	45.00	44	55	-	-
Uniqueness	-	-	-	-	49	61.25	31	38.75	-	-

Table 14: PG Students Opinions Regarding the Features of E-Resources

Features	Poor	%	Fair	%	Good	%	Very Good	%	Excellent	%
Accessibility	4	22.22	3	16.66	9	50.00	2	11.11	-	-
Accuracy	-	-	3	16.66	8	44.44	6	33.33	1	5.55
Availability	1	5.55	4	22.22	7.12	66.66	6	33.33	-	-
Consistency	3	16.66	6	33.33	9	50.00	-	-	-	-
Easy to Use	-	-	-	-	12	66.66	6	33.33	-	-
Flexibility	2	11.11	4	22.22	6	33.33	3	16.66	3	16.11
Permanence	-	-	6	33.33	9	50.00	2	11.11	1	55.55
Timeliness	3	16.66	4	22.22	6	33.33	3	16.66	2	11.11
Uniqueness	2	11.11	3	16.66	9	50.00	3	16.66	2	11.11
Usefulness	-	-	4	22.22	10	55.55	3	16.66	1	5.55

resources 'always' adequate, while 28.57 percent find the information adequate only 'sometimes'. The percentage of respondents who find the information in e-resources 'always' adequate is greater among the faculty (72.50) then that of the PG students 66.66 percent.

Table 8 shows the problems faced by respondents in using e-resources. The most common problems faced by the users is that of slow access speed (41.83 percent). About 23.46 percent of the respondents are of the opinion that it takes too long time to view/download pages. '7.14 percent' report that too much information is retrieved which makes it difficult to select the 'relevant one'. 3.06 percent of respondents express that they cannot make use of e-resources effectively due to lack of proper IT Knowledge and 4.08 percent state limited access to computers as barrier to use e- resources.

Table 9 indicates that more than 57.00 percent of the respondents feel that in comparison to conventional documents, e-resources are time saving and more informative. More than 19.00 percent of respondents also admit that these are more useful, easy to use and more preferred.

Table 10 indicates the success rate of finding the required information in the e- resources. About 40.81 percent of the respondents succeed in the range of 75.99 percent; '34.69 percent' in the range of 50-74 percent; 15.30 percent in the range of 25.49 percent and 9.18 percent in the range of less than 25 percent.

Table 11 shows the influence of e-resources in the academic efficiency of the faculty and the PG students. The information available in e-resources has proved to be a great asset to many of the respondents. 30.61 percent have been improved professional competence; 26.53 percent has resulted in expediting the research process and 15.30 percent access for current and up-to-date information.

Table 12 reveals that 100 percent of the respondents feel that e-resources can be good substitute for conventional resources if the

access speed is fast for the use of e- resources.

Table 13 depicts the opinions of faculty regarding the features of e-resources for their academic work. 63.5 percent respondents expressed their views that availability of e-resources is very good; 58.75 percent respondents expressed performance is very good; 15.00 percent expressed easy to use and only 6.25 percent of respondents expressed easy to use as fair.

Table 13 depicts the opinions of faculty regarding the features of e-resources for their academic work. 63.5 percent respondents expressed their views that availability of e-resources is very good; 58.75 percent respondents expressed performance is very good; 15.00 percent expressed easy to use and only 6.25 percent of respondents expressed easy to use as fair.

Table 14 indicates almost similar opinion of PG students to that of faculty regarding the features of e-resources as sources for the research work.

Findings of the Study

➢ A majority of the respondents 37.75 percent use e-resources 2-3 times a week.

➢ 100 percent of respondents use e- journals and only 35.71 percent use on-line databases.

➢ The most popular method of acquiring the necessary skills to use e-resources is "Trail and error method" 55.10 percent.

➢ 36.73 percent of the respondents use e-resources for research/ project work followed by 34.69 percent for publishing articles/books.

➢ A majority of the respondents 71.42 percent find the information in e-resources 'always' adequate.

➢ The most common problem faced by the respondents is that of slow access speed 41.83 percent.

➢ 40.81 percent of the respondents have reported that they succeeded in getting

required information in the e-resources in the range of 75-99 percent.

➢ More than 57 percent of the respondents feel that in comparison of conventional resources, e-resources are time saving and easy to use.

➢ 100 percent of the respondents admit that e-resources can be good substitute for conventional resources if the access speed is fast.

➢ The information available in e-resources has proved to be a great asset for many of the respondents. They have been able to keep themselves abreast of the latest information and improve their academic and professional competence.

Suggestions

Based on the findings of the study, the following suggestions are put forward to improve the use of e-resources among the faculty and PG students.

➢ The problem of slow access speed can be overcome by increasing the bandwidth.

➢ Access to more e- journals should be provided.

➢ Training programmes regarding how to use e-resources effectively should be organized at regular intervals.

➢ Awareness among the faculty and the PG students should be created to use e-resources to obtain current information.

➢ An online catalogue of e-resources containing subject, alphabetical, title indices should be made available in the library portal to offer meta-search.

➢ E-resources should be made easy to use and easy to learn to users. The library web page should provide online guide to e-resources and various search options beyond key words to e- resources. This will help the users to find the desired content and will also maximize the use of e-resources and satisfaction of users.

Conclusion

To conclude, we can say that e-resources whose history spans only a few years have emerged as one of the most important media of communication. These have radically changed the way the information is gathered, organized, accessed and consumed. They have exerted a great influence on the academic and professional competence of the academic community. These can prove a great asset to support teaching and research programmes of the institute if faster and easier access to all the required e-resources is provided to users.

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