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E-Resources Initiatives: Challenges Based on Users Perspective

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Abstract

In recent years, academic users have become more dependent on article databases and electronic journals to obtain information pertinent to their needs. In Indian Higher education has tremendous growth in providing quality education for past two decades, Most of the universities and colleges are providing pin pointed electronic information to their users. This study presents the results of a brief survey on the use of electronic resources by the academic users of selected engineering colleges in Tamil Nadu. Results revealed that the users are giving preference to "enhance effectiveness" (4.37) and it is followed by "online performance" (4.00) and "easy to use" (3.89). "Competent and effective" (3.21) of online resources is given least preference.

Keywords: *Competent and Effective, Engineering Colleges, E-Resources,*

1. INTRODUCTION

Increasing demands for access to electronic resources, continuous migration from print to online resources, and the overall proliferation of electronic media are forces libraries globally to re-examine their traditional operations and workflows. Efficient electronic resources management remains crucial in helping libraries to fulfill their role of meeting the information needs of patrons, and to this end, many libraries have adopted various strategies.

The majority of the resources are available in digital form which is of high cost. In spite of cost factors the academic libraries are started subscribing the e-resources either through consortia or direct with publishers. The utility of these resources seems to be very less than estimated. In order to ascertain the challenges it is essential to identify the user preferences and use pattern of the e-resources. In this paper, an attempt has been made to identify the effectiveness of these e-resources in higher engineering educational institutions in and around Chennai (India).

2. REVIEW OF RELATED LITERATURE

Swain and Pandey [1] highlighted in their study the problem and constraints faced by the information professionals in accessing e-resources and delivering electronic information services.

Usage of electronic resources and services by engineering students [2], legal professionals [3], business administrative students [4] indicates positive attitudes towards e-resources and their exhaustiveness.

The users, who have the knowledge of access to internet, may feel more comfortable in using electronic information sources and gain more from using them. The knowledge they attain for their above skills depends on many factors, such as their disciplines, academic status and ranks, ages and training [5]. Factors motivating the use, level of importance they give to e-resources, the use one has found and the purposes they use, plays a leading role in the use of electronic resources [6].

3. OBJECTIVES OF THE STUDY

The following objectives have been pursued to study the use preferences and usage pattern of e-journals.

1. To identify the significance of access to e-resources;
2. To find out the level of trust on e-resources for their research work ;
3. To find out the technological attitude towards use e-resources;
4. To examine the integrity in use of e-journal services provided in their institutions;
5. To identify the mindset of the users in using e-resources;
6. To identify the nature of attitude and intention in the use of e-resources.

4. METHODOLOGY

To fulfill the stated objectives a well structured questionnaire was constructed and distributed to the ninety randomly selected students those are undergoing engineering education from selected engineering institutions, in and around Chennai, Tamil Nadu in regard to the use of e-resources. Out of 85 questionnaires thus distributed there were 76 responses (89.4%). The data were analyzed using SPSS.

5. DATA ANALYSIS

The respondents were further evaluated based on the demographic nature such as gender, user group, domain of the institution and the location of the institution and the same is shown in the Table 1.

Table 1Demographic Data

S. No.	Description	Core Engineering	Allied Engineering	Total
1	**Gender**			
	Male	17	15	32
		22.4%	19.7%	42.1%
	Female	19	25	44
		25.0%	32.9%	57.9%
2	**Nature of Membership**			
	Student	27	31	58
		35.5%	40.8%	76.3%
	Faculty	9	9	18
		11.8%	11.8%	23.7%
3	**Location of the Institution**			
	Rural	10	12	22
		13.2%	15.8%	28.9%
	Urban	26	28	54
		34.2%	36.8%	71.1%

Ten variables have been identified in the users perspectives on e-resources and the variables are evaluated based on five point scale such as Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree and Strongly Agree. Further mean and standard deviation were calculated. Rank were provided based on mean and standard deviation and the same is shown in Table 2.

It can be seen from the Table 2 that the users are giving preference to “enhance effectiveness” (4.37) and it is followed by “online performance” (4.00) and “easy to use” (3.89). “Competent and effective” (3.21) of online resources is given least preference.

The user perspectives are further evaluated based on gender and the same is shown in Table 3.

Table 2 User Perspectives

S. No.	Descriptions	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Mean	Std. Deviation	Rank
1	Competent & Effective	8	16	14	28	10	3.21	1.23	10
		10.5%	21.1%	18.4%	36.8%	13.2%			
2	Online Performance	-	4	24	16	32	4.00	0.98	2
		-	5.3%	31.6%	21.1%	42.1%			
3	Comfortable	-	8	8	46	14	3.87	0.84	4
		-	10.5%	10.5%	60.5%	18.4%			
4	Like using websites	8	16	14	14	24	3.39	1.40	9
		10.5%	21.1%	18.4%	18.4%	31.6%			
5	Easy to use	-	20	12	-	44	3.89	1.34	3
		-	26.3%	15.8%	-	57.9%			
6	Improve my performance	6	8	6	44	12	3.63	1.12	8
		7.9%	10.5%	7.9%	57.9%	15.8%			
7	Enhance effectiveness	-	-	16	16	44	4.37	0.81	1
		-	-	21.1%	21.1%	57.9%			
8	Easier to find information	-	-	24	46	6	3.76	0.59	6
		-	-	31.6%	60.5%	7.9%			
9	Capable & Proficient	-	20	4	32	20	3.68	1.13	7
		-	26.3%	5.3%	42.1%	26.3%			
10	Use e-jls alone in future	6	12	6	20	32	3.79	1.35	5
		7.9%	15.8%	7.9%	26.3%	42.1%			

The Table 3 shows that the respondents are giving top two preference to “enhance effectiveness” (4.41, 4.34) and “easy to use” (4.16, 3.16) and the least preference to “competent and effective” (3.13, 3.27) irrespective of their gender. The male respondents provide third rank to “online performance” (4.00) and female respondents are giving to “comfortable” (3.93).

Further the user perspectives have also been evaluated based on the category of the users and the same is shown in Table 4.

It is seen from the table 4 that the students are providing top three ranks to “enhance effectiveness” (4.31), “online performance” (4.03) and “comfortable” (3.88) and the faculty members are providing to “enhance effectiveness” (4.56), “easy to use” (4.22) and “capable and proficient” (4.17). “Competent and effective” (3.19) is given least preference by students whereas faculty members provide least rank to “like using websites” (3.06).

The user's perspectives in use of e-resources are further evaluated based on the discipline offered by the institutions and the same is presented in Table 5.

Table 3 User Perspectives Vs Gender

S. No.	Description	Male								Female							
		1	2	3	4	5	M	Std	R	1	2	3	4	5	M	Std	R
1	Competent & Effective	5	7	3	13	4	3.13	1.34	10	3	9	11	15	6	3.27	1.15	10
		15.6%	21.9%	9.4%	40.6%	12.5%				6.8%	20.5%	25.0%	34.1%	13.6%			
2	Online Performance	-	-	12	7	13	4.03	0.90	3	-	4	12	9	19	3.98	1.05	2
		-	-	37.5%	21.9%	40.6%				-	9.1%	27.3%	20.5%	43.2%			
3	Comfortable	-	3	4	22	3	3.78	0.75	4	-	5	4	24	11	3.93	0.90	3
		-	9.4%	12.5%	68.8%	9.4%				-	11.4%	9.1%	54.5%	25.0%			
4	Like Using Websites	4	5	7	4	12	3.47	1.46	9	4	11	7	10	12	3.34	1.36	9
		12.5%	15.6%	21.9%	12.5%	37.5%				9.1%	25.0%	15.9%	22.7%	27.3%			
5	Easy to Use	-	7	3	-	22	4.16	1.30	2	-	13	9	-	22	3.70	1.36	8
		-	21.9%	9.4%	-	68.8%				-	29.5%	20.5%	-	50.0%			
6	Improve My Performance	3	3	4	18	4	3.53	1.14	8	3	5	2	26	8	3.70	1.11	7
		9.4%	9.4%	12.5%	56.3%	12.5%				6.8%	11.4%	4.5%	59.1%	18.2%			
7	Enhance Effectiveness	-	-	5	9	18	4.41	0.76	1	-	-	11	7	26	4.34	0.86	1
		-	-	15.6%	28.1%	56.3%				-	-	25.0%	15.9%	59.1%			
8	Easier to Find Information	-	-	13	15	4	3.72	0.68	5	-	-	11	31	2	3.80	0.51	5
		-	-	40.6%	46.9%	12.5%				-	-	25.0%	70.5%	4.5%			
9	Capable & Proficient	-	9	1	15	7	3.63	1.13	6	-	11	3	17	13	3.73	1.15	6
		-	28.1%	3.1%	46.9%	21.9%				-	25.0%	6.8%	38.6%	29.5%			
10	Use E-journals Alone in Future	4	4	3	10	11	3.63	1.41	7	2	8	3	10	21	3.91	1.31	4
		12.5%	12.5%	9.4%	31.3%	34.4%				4.5%	18.2%	6.8%	22.7%	47.7%			

1-Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree, 5-Strongly Agree

Table 4 User Category

S. No.	Descriptions	Students								Faculties							
		1	2	3	4	5	M	STD	R	1	2	3	4	5	M	STD	R
1	Competent & Effective	7	11	10	24	6	3.19	1.22	10	1	5	4	4	4	3.28	1.27	9
		12.1%	19.0%	17.2%	41.4%	10.3%				5.6%	27.8%	22.2%	22.2%	22.2%			
2	Online Performance	-	3	18	11	26	4.03	0.99	2	-	1	6	5	6	3.89	0.96	4
		-	5.2%	31.0%	19.0%	44.8%				-	5.6%	33.3%	27.8%	33.3%			
3	Comfortable	-	6	5	37	10	3.88	0.82	3	-	2	3	9	4	3.83	0.92	5
		-	10.3%	8.6%	63.8%	17.2%				-	11.1%	16.7%	50.0%	22.2%			
4	Like using websites	5	14	7	11	21	3.50	1.42	9	3	2	7	3	3	3.06	1.30	10
		8.6%	24.1%	12.1%	19.0%	36.2%				16.7%	11.1%	38.9%	16.7%	16.7%			
5	Easy to use	-	17	9	-	32	3.81	1.37	6	-	3	3	-	12	4.17	1.25	3
		-	29.3%	15.5%	-	55.2%				-	16.7%	16.7%	-	66.7%			
6	Improve my performance	2	6	6	36	8	3.72	0.95	7	4	2	-	8	4	3.33	1.53	8
		3.4%	10.3%	10.3%	62.1%	13.8%				22.2%	11.1%	-	44.4%	22.2%			
7	Enhance effectiveness	-	-	14	12	32	4.31	0.84	1	-	-	2	4	12	4.56	0.70	1
		-	-	24.1%	20.7%	55.2%				-	-	11.1%	22.2%	66.7%			
8	Easier to find information	-	-	17	35	6	3.81	0.61	5	-	-	7	11	-	3.61	0.50	7
		-	-	29.3%	60.3%	10.3%				-	-	38.9%	61.1%	.-			
9	Capable & Proficient	-	19	4	21	14	3.52	1.19	8	-	1	-	11	6	4.22	0.73	2
		.-	32.8%	6.9%	36.2%	24.1%				-	5.6%	-	61.1%	33.3%			
10	Use e-jls alone in future	6	8	2	16	26	3.83	1.40	4	-	4	4	4	6	3.67	1.19	6
		10.3%	13.8%	3.4%	27.6%	44.8%				-	22.2%	22.2%	22.2%	33.3%			

1-Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree, 5-Strongly Agree

Table 5 Discipline Group

S. No.	Descriptions	Core Engineering								Other Engineering							
		1	2	3	4	5	M	STD	R	1	2	3	4	5	M	STD	R
1	Competent & Effective	3	6	7	13	7	3.42	1.23	9	5	10	7	15	3	3.03	1.21	10
		8.3%	16.7%	19.4%	36.1%	19.4%				12.5%	25.0%	17.5%	37.5%	7.5%			
2	Online Performance	-	1	10	10	15	4.08	0.91	3	-	3	14	6	17	3.93	1.05	3
		-	2.8%	27.8%	27.8%	41.7%				-	7.5%	35.0%	15.0%	42.5%			
3	Comfortable	-	3	4	22	7	3.92	0.81	4	-	5	4	24	7	3.83	0.87	4
		-	8.3%	11.1%	61.1%	19.4%				-	12.5%	10.0%	60.0%	17.5%			
4	Like Using Websites	3	4	9	8	12	3.61	1.29	7	5	12	5	6	12	3.20	1.47	9
		8.3%	11.1%	25.0%	22.2%	33.3%				12.5%	30.0%	12.5%	15.0%	30.0%			
5	Easy to Use	-	6	4	-	26	4.28	1.21	2	-	14	8	-	18	3.55	1.38	8
		-	16.7%	11.1%	-	72.2%				-	35.0%	20.0%	-	45.0%			
6	Improve my performance	5	3	5	18	5	3.42	1.25	10	1	5	1	26	7	3.83	0.96	5
		13.9%	8.3%	13.9%	50.0%	13.9%				2.5%	12.5%	2.5%	65.0%	17.5%			
7	Enhance Effectiveness	-	-	4	6	26	4.61	0.69	1	-	-	12	10	18	4.15	0.86	1
		-	-	11.1%	16.7%	72.2%				-	-	30.0%	25.0%	45.0%			
8	Easier to Find Information	-	-	10	21	5	3.86	0.64	5	-	-	14	25	1	3.68	0.53	7
		-	-	27.8%	58.3%	13.9%				-	-	35.0%	62.5%	2.5%			
9	Capable & Proficient	-	9	2	18	7	3.64	1.07	6	-	11	2	14	13	3.73	1.20	6
		-	25.0%	5.6%	50.0%	19.4%				-	27.5%	5.0%	35.0%	32.5%			
10	Use e-journals Alone in Future	5	4	5	9	13	3.58	1.44	8	1	8	1	11	19	3.98	1.25	2
		13.9%	11.1%	13.9%	25.0%	36.1%				2.5%	20.0%	2.5%	27.5%	47.5%			

1-Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree, 5-Strongly Agree

Table 6 Location of Institution

S. No.	Descriptions	Urban								Rural							
		1	2	3	4	5	M	STD	R	1	2	3	4	5	M	STD	R
1	Competent & Effective	2	4	4	9	3	3.32	1.21	10	6	12	10	19	7	3.17	1.24	10
		9.1%	18.2%	18.2%	40.9%	13.6%				11.1%	22.2%	18.5%	35.2%	13.0%			
2	Online Performance	-	1	6	5	10	4.09	0.97	2	-	3	18	11	22	3.96	0.99	2
		-	4.5%	27.3%	22.7%	45.5%				-	5.6%	33.3%	20.4%	40.7%			
3	Comfortable	-	2	2	14	4	3.91	0.81	3	-	6	6	32	10	3.85	0.86	4
		-	9.1%	9.1%	63.6%	18.2%				-	11.1%	11.1%	59.3%	18.5%			
4	Like Using Websites	2	5	4	4	7	3.41	1.40	9	6	11	10	10	17	3.39	1.41	9
		9.1%	22.7%	18.2%	18.2%	31.8%				11.1%	20.4%	18.5%	18.5%	31.5%			
5	Easy to Use	-	6	3	-	13	3.91	1.38	4	-	14	9	-	31	3.89	1.34	3
		-	27.3%	13.6%	-	59.1%				-	25.9%	16.7%	-	57.4%			
6	Improve My Performance	2	2	2	13	3	3.59	1.14	7	4	6	4	31	9	3.65	1.12	8
		9.1%	9.1%	9.1%	59.1%	13.6%				7.4%	11.1%	7.4%	57.4%	16.7%			
7	Enhance Effectiveness	-	-	5	4	13	4.36	0.85	1	-	-	11	12	31	4.37	0.81	1
		-	-	22.7%	18.2%	59.1%				-	-	20.4%	22.2%	57.4%			
8	Easier to Find Information	-	-	6	14	2	3.82	0.59	5	-	-	18	32	4	3.74	0.59	6
		-	-	27.3%	63.6%	9.1%				-	-	33.3%	59.3%	7.4%			
9	Capable & Proficient	-	7	1	9	5	3.55	1.18	8	-	13	3	23	15	3.74	1.12	7
		-	31.8%	4.5%	40.9%	22.7%				-	24.1%	5.6%	42.6%	27.8%			
10	Use E-journals Alone in Future	2	3	2	5	10	3.82	1.40	6	4	9	4	15	22	3.78	1.34	5
		9.1%	13.6%	9.1%	22.7%	45.5%				7.4%	16.7%	7.4%	27.8%	40.7%			

1-Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree, 5-Strongly Agree

Table 5 shows that the respondents belonging to institutions offering core engineering subjects are providing “enhance effectiveness” (4.61), “easy to use” (4.28) and “improves the performance” (3.42) as top three reasons for using e-resources and the respondents belong to the institutions offering other engineering subjects are preferring “enhance effectiveness” (4.15), “use e-journals alone in future” (3.98) as top three reasons. “Improve my performance” (3.42) is the least preference given by respondents of core engineering institutions whereas “competent & effective” (3.03) is given by the respondents of other engineering institutions.

The user's perspectives in use of e-resources are further evaluated based on the location of institution and the same is presented in Table 6.

The respondents of urban located institutions prefer “enhance effectiveness” (4.36), “online performance” (4.09) and “comfortable” (3.91) as top three reasons for using e-resources whereas the respondents of rural institutions prefer “enhance effectiveness” (4.37), “online performance” (3.96) and “easy to use” (3.89). “Competent and effective” (3.32, 3.17) is the least preference given by all respondents irrespective of the locations of the institution.

6. CONCLUSION

Even though the e-resources becomes mandatory of the day, it seems it has high utility as per the user's perspective is concerned. This study indicates the effectiveness of the e-resources becomes a prime motivation among the users of engineering institutions irrespective of either core or allied engineering; urban or rural and male or female. Amount spent on e-resources seems to be cost effective.

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