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USE AND IMPACT OF E-SHODHSINDHU DIGITAL LIBRARY CONSORTIUM ON RESEARCH OUTCOME: A CASE STUDY OF THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA

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ABSTRACT

Attempt to indentify the user's pattern to access online journals that which are available through UGC-Infonet (renamed as e-ShodhSindhu) e- journal consortium in particular. A well structured questionnaire survey was conducted among faculty members and research scholars of various science departments of The Maharaja Sayajirao University of Baroda. The Study revels that The Maharaja Sayajirao University of Baroda (MSU) was 1129661. It is also found that in the block of five years, i.e., 2011-2015, the contributions from The Maharaja Sayajirao University of Baroda (MSU) were 1716.

KEY WORD: *UGC Infonet, Digital Library Consortium,* ***(renamed as e-ShodhSindhu)***

INTRODUCTION:-

In the present senior. The Electronic Material consider the storage , dissemination and transmission of information. The important characteristics of Inomatation scene today is that huge amount of published material like text , images and numerical data are now created and disseminated through the electronic form.

The brighter side of e-resources is that it saves times, space and similar that time number of users can access the information by the students, research scholar and faculty members with the help of electronic devices.

So, in the light of discussed it becomes important to study on the different aspects of e-resources and the issues relating the impact on Research outcome to the use of e-resources of e-ShodhSindhu by the users, more particularly by the faculty members and research of The M.S.University of Baroda.

UGC-INFONET (RENAMED AS e-SHODHSINDHU):

The project entitled UGC Infonet Digital Library Consortium launched by the MHRD now renamed as e-ShodhSindhu covered the mainly three consortia like UGC-INFONET, Digital Library Consortium, N-List and INDEST-AICTE Consortium. The e-ShodhSindhu will provide the current as well as archival access of 4 Database, more than 3335000 e-books, more than 10000 e-journals and 20 types of e-resources to supply more than 3000 colleges and 108 Technical Institutes and 217 universities as on 2018.

OBJECTIVES OF THE STUDY

The objectives of the present study on 'use and Impact of UGC Infonet Digital Library Consortium on research outcome: A Case Study of The Maharaja Sayajirao University of Baroda' is

1. To study Users information-seeking behavior patterns of usage, content viewed, navigational preferences and routes used to access of e-journal content.
2. To find out how online searching and use of e-journals relates to

researchers general behavior in seeking and using information and to scholarly and research workflows vary by subjects and designation.

3. To Study further the relationships between levels of spending money on e-journals, levels of use, and Patten of research outcomes.
4. To investigate any trends in users referencing behavior, Navigating and searching of e-journals.

METHODOLOGY

The study employed the survey method using a structured questionnaire that brings outs demographic information about the respondents, their access and use patterns of e-recourses and research outcomes. The survey population taken as per users'. There were 04 professors; 02 Associate Professors; 20 Assistant Professors and 23 Research Scholars filled questionnaire were received. Secondary source of information sources were used to collect a Research Output data of university as a result of using of E-Resources from Annual Report of University, Internal Quality Assurance Cell (IQAC) Report of University.

REVIEW OF LITERATURE

Sinha, M. K., Singha, G., & Sinha, B. (2011) analyzed the traditional functions of libraries had undergone various changes in the present century, and E-resources have great importance in libraries and amongst the library users. This study has been undertaken with an attempt to evaluate the usage pattern of E-resources made available in the Assam University Library under the UGC-INFONET amongst the research scholars and teachers of North Eastern Region of India with special reference to Assam University. The self-designed questionnaire comprising of 150 questions has been distributed amongst faculty members, research scholars, UG/PG Students and officers/staff the randomly selected samples.

Raghuram, K., & Vatnal, R. (2011) explained that the academic and research community in the country largely depends on the access to information resources through UGC-INFONET Digital Library Consortium. This study presents the evaluation of UGCINFONET consortium usefulness, finding and suggestions by the users of Social Science faculty, Goa University, Goa.

In the survey under the title of Use of UGC-Infonet Consortia by the Research Scholars at the University of Delhi, Ahmad, N., Basha, I., & Fatima, N. (2012) sought to examine aware about the UGC-INFONET consortia. They also investigate the user's usefulness and satisfaction with the services given through UGC-Infonet E-journal consortium in the University of Delhi.

The above literature shows precisely that so many studies had been conducted in various consortiums during last few years to know the awareness and use of E-journals among different categories of users. However, no study had been traced by the researcher in which comparison between the usage and its impact on research outcome.

FREQUENCY OF E-RESOURCE USAGE BY GENDER

The sample selected for the study consists of both male and female respondents. The gender wise distribution of The Maharaja Sayajirao University of Baroda users is shown in above table. It may be seen from the table that majority of the respondents numbering 28(57.1%) are female and the remaining 21 (42.9%) are male.

Gender		
Gender	Total (N=49)	Percentage
Male	21	42.9
Female	28	57.1

Table No 1 E-Resource usage by Gender

SOURCE OF INFORMATION ABOUT E-RESOURCES

The table no 2 contained the frequency distribution of the source of information across the Designation category of respondent. Compression of information about source of E-Resource across Designation shown that out of total respondent (N=18) has highest value of 36.73 percent from Librarian followed by from Teacher/Guide and lowest value of 8.16 percent from others sources.

source of information	Designation					
	Professor (N=4)	Associate Professor (N=2)	Assistant Professor (N=20)	Research Scholars (N=23)	Total (N=49)	Percentage
From Librarians	3	1	6	8	18	36.73
From INFLIBNET	1	0	2	2	5	10.20
From Teacher/ Guide	0	0	5	6	11	22.45
From Orientation / workshop /seminar	0	0	2	4	6	12.24
From Colleague's Reference	0	1	2	2	5	10.20
Others	0	0	3	1	4	8.16

Table No 2 Source of information about E-Resources

PLACE MOST FREQUENTLY ACCESS THE E-RESOURCES

The table no 3 contained the frequency distribution of place most frequently access the E-Resources across the Designation category of respondent. Compression for place most frequently access the E-Resources across Designation shown that out of total respondent (N=39) has the highest value of 79.59 percent access the E-resources from department followed by home and the lowest value of zero percent from cyber café.

Place most frequently access the E-Resources	Designation					
	Professor (N=4)	Associate Professor (N=2)	Assistant Professor (N=20)	Research Scholars (N=23)	Total (N=49)	Percentage
College Library	0	0	2	2	4	8.16
Department	4	2	14	19	39	79.59
Cyber café	0	0	0	0	0	0.00
Home	0	0	4	1	5	10.20
Hostel	0	0	0	1	1	2.04

Table No 3 Place most frequently access the E-Resources

DEVICE USED TO ACCESS THE E-RESOURCES

The table no 4 contained the frequency distribution of device used to access the E-Resources across the Designation category of respondent. Compression for device use to access the E-Resources across Designation shown that out of total respondent (N=21) has highest value of 42.86 percent from personal computer (PC) followed by laptop and lowest value of 4.08 percent from Tablet

Device used to access the E-Resources	Designation					
	Professor (N=4)	Associate Professor (N=2)	Assistant Professor (N=20)	Research Scholars (N=23)	Total (N=49)	Percentage
Personal Computer (PC)	3	0	10	8	21	42.86
Laptop	1	2	4	13	20	40.82
Tablet	0	0	2	0	2	4.08
Smart Phone	0	0	4	2	6	12.24

Table No 4 Device used to access the E-Resources

SEARCH STRATEGY USE TO RETRIEVE INFORMATION FROM THE E-RESOURCES

The research scholar was use rank method to know the usage pattern about Search Strategy to retrieve information from the E-resources by the respondent in the form of 1(One) as most preferred to 4 (Four) as less preferred.

Out of total respondents (N=49), the average score of Strategy use to retrieve information from the E-resources most preferred by title is 2.16 and least preferred by Author is 2.84

Search Strategy use to retrieve information from the E-resources					
Designation		By Title	By Author	By Subject	By Keywords
Professor	Mean	2.25	2.75	2.00	3.00
	Std. Deviation	.957	.957	1.414	1.414
Associate Professor	Mean	2.50	3.00	2.00	2.50
	Std. Deviation	2.121	0.000	0.000	2.121
Assistant Professor	Mean	2.15	2.75	2.80	2.30
	Std. Deviation	1.182	1.020	.951	1.261
Research Scholars	Mean	2.13	2.91	2.74	2.22
	Std. Deviation	1.100	.668	1.137	1.347
Total	Mean	2.16	2.84	2.67	2.33
	Std. Deviation	1.124	.825	1.068	1.313

Table No 5 Search Strategy use to retrieve information from the E-resources

MOST USE COMPONENT OF ELECTRONIC JOURNALS

The research scholar was use rank method to know about a most useful component of the Electronic Journal by the respondent in the form of 1(One) as most preferred to 4 (Four) as less preferred.

Out of total respondents (N=49), the average score of a most useful component of the Electronic Journal was most preferred by Full text i.e 1.71 and least preferred by Table of content i.e 3.24

Designation		Table of Contents	Journal Abstract	Article Reference	Full Text
Professor	Mean	3.25	2.00	3.25	1.50
	Std. Deviation	1.500	0.000	.500	1.000
Associate Professor	Mean	3.00	2.00	3.50	1.50
	Std. Deviation	1.414	1.414	.707	.707
Assistant Professor	Mean	2.85	2.55	2.70	1.90
	Std. Deviation	1.182	.826	1.031	1.210
Research Scholars	Mean	3.61	2.00	2.78	1.61

	Std. Deviation	.783	.798	.902	.839
Total	Mean	3.24	2.22	2.82	1.71
	Std. Deviation	1.071	.823	.928	1.000

Table No 6 Most use component of electronic journals

PURPOSE OF RETRIEVING INFORMATION FROM THE E-RESOURCES

The research scholar was use rank method to know about the purpose of retrieving information from the e-resources by the respondent in the form of 1(One) as most preferred to 5 (Four) as less preferred.

Out of total respondents (N=49), the average mean score of the purpose of retrieving information from the e-resources was most preferred for research needs i.e 1.33 and least preferred for Professional achievement i.e 4.27

Designation		For Education	For Research needs	For Professional achievement	For Writing research articles	For Current information
Professor	Mean	3.25	1.00	4.50	2.50	3.75
	Std. Deviation	.957	0.000	1.000	1.000	.957
Associate Professor	Mean	2.50	1.50	5.00	3.00	3.00
	Std. Deviation	2.121	.707	0.000	0.000	1.414
Assistant Professor	Mean	2.70	1.65	4.10	2.75	3.80
	Std. Deviation	1.455	.933	1.021	1.070	1.152
Research Scholars	Mean	3.17	1.09	4.30	2.91	3.52
	Std. Deviation	1.154	.288	.765	.996	1.238
Total	Mean	2.96	1.33	4.27	2.82	3.63
	Std. Deviation	1.290	.689	.884	.993	1.167

Table No 7 Purpose of retrieving information from the E-Resources

FREQUENCY OF IMPORTANT FEATURES OF E-JOURNALS BY DESIGNATION

The below table contains percentage frequency distribution regarding frequency of problems while using E-Journals across Designation category of respondent and test of association using chi-square statistics. The response (N=49) was recorded in four scales i. e always, often, sometimes and never.

The below table contained the frequency distribution of poor internet connectivity problem and the Designation category of respondent. The highest value of 51.0 percent respondents sometimes face problem regarding poor internet and the lowest value of 14.3 percent from always.

To determine the impact of the problem facing by respondents regarding insufficient hardware infrastructure the perception of the respondents' categorized based on their different designation. The highest value of 55.1 percent respondents never face problem regarding insufficient hardware infrastructure and the lowest value of 4.1 percent from always

To ascertain the impact of the problem facing by respondents in accessing full text the perception of the respondents' categorized based on their different designation. The highest value of 46.9 percent respondents sometimes face problem in accessing full text and lowest value of 8.2 percent from always.

To find out the impact of the problem facing by respondents regarding core journals are few in number the perception of the respondents' categorized based on their different designation. The highest value of 49.0 percent respondents sometimes face problem regarding core journals are few in number and lowest value of 6.1 percent from always.

To determine the impact of the problem facing by respondents in searching the perception of the respondents' categorized based on their different designation. The highest value of 44.9 percent respondents sometimes face problem in searching and lowest value of 2.0 percent from always.

To ascertain the impact of the problem facing by respondents regarding reading from the computer the perception of the respondents' categorized based on their different designation. The highest value of 67.3 percent respondents never face problem regarding reading from computer and lowest value of 2.0 percent from often.

To find out the impact of the problem facing by respondents regarding lack of trained staff to help the perception of the respondents' categorized based on their different designation. The highest value of 46.9 percent respondents never face problem regarding lack of trained staff for help and the lowest value of 10.2 percent from always.

To determine the impact of the problem facing by respondents regarding power failure the perception of the respondents' categorized based on their different designation. The highest value of 51 percent respondents sometimes face problem regarding power failure and lowest value of zero percent equally from always and often.

Important Features of E-Journals		Designation					
		Professor (N=4)	Associate Professor (N=2)	Assistant Professor (N=20)	Research Scholars (N=23)	Total (N=49)	Percentage
Poor Internet connectivity	Always	0	0	2	5	7	14.3
	Often	3	0	0	6	9	18.4
	Sometime	1	2	12	10	25	51.0
	Never	0	0	6	2	8	16.3
Insufficient hardware Infrastructure	Always	0	0	2	0	2	4.1
	Often	1	0	1	2	4	8.2
	Sometime	2	1	4	9	16	32.7
	Never	1	1	13	12	27	55.1
Difficulty in accessing full text	Always	0	0	2	2	4	8.2
	Often	3	1	3	9	16	32.7
	Sometime	1	1	10	11	23	46.9
	Never	0	0	5	1	6	12.2
Core journals are few in number	Always	1	0	0	2	3	6.1
	Often	2	0	2	6	10	20.4
	Sometime	1	2	14	7	24	49.0
	Never	0	0	4	8	12	24.5
Searching is difficulty	Always	0	0	0	1	1	2.0
	Often	0	1	1	3	5	10.2
	Sometime	2	0	11	9	22	44.9
	Never	2	1	8	10	21	42.9
Difficulty to read from a computer	Always	2	1	0	1	4	8.2
	Often	0	0	0	1	1	2.0
	Sometime	1	0	2	8	11	22.4
	Never	1	1	18	13	33	67.3

Lack of trained staff for help	Always	1	0	0	4	5	10.2
	Often	0	0	3	5	8	16.3
	Sometime	1	1	6	5	13	26.5
	Never	2	1	11	9	23	46.9
Power Failure	Always	0	0	0	0	0	0.0
	Often	0	0	0	0	0	0.0
	Sometime	4	0	8	13	25	51.0
	Never	0	2	12	10	24	49.0
	Total	4	2	20	23	49	100.0

Table no 8 Frequency of important features of E-Journals by Designation

IMPACT OF ACCESS TO E-RESOURCES ON RESEARCH OUTPUT

Sr. No.	Year	E- Recourses Usage (Download pages)	Paper Publish (Research Output) data indexed and reflected in SCOPUS database
1.	2011	206064	365
2.	2012	246547	361
3.	2013	217624	354
4.	2014	231646	321
5.	2015	231646	315
Total		1129661	1716

Table no 9 Impact of access to E-resources on Research Output

The INFLIBNET Center has monitor and provide usage of e-resources to the member university. The INFLBNET center has also provide the counter of the usage statistics to the each and every colleges and universities. So, they can brief statistics about the access of e-resources during the specific period..

An assessment has been made from the data indexed and reflected in SCOPUS database and is presented in the above table in blocks of five years starting from 2011 to 2015 of the M S university. The data shown are the overall contribution of the research articles/papers from all the disciplines by the faculty members and researchers of the university on a five-year block. It is found that in the block of five years, i.e., 2011-2015, the E-resources Usage (Download Paper) from The Maharaja Sayajirao University of Baroda (MSU) was 1129661. It is also found that in the block of five years, i.e., 2011-2015, the contributions from The Maharaja Sayajirao University of Baroda (MSU) were 1716 which slightly going downward.

CONCLUSION

From above summary report it is concluded that the highest percentages of respondents are Research Scholars of this survey. They are aware and using the resources. Maximum 28 (57.1 percent) of the respondents are Female. Majority 36.73 percent of the respondents became aware the source of information from Librarian followed by Teacher/ Guide. Majority of respondents 39 (79.59 percent) access E-resources from the department and 21 (42.86 percent) respondents use a personal computer (PC) as a device for access E-resources. The study also reveals that the majority respondents use to retrieve information from the E- resources by title followed by keyword. Majority respondents use most useful component of Electronic Journal is Full Text and the purpose of retrieving information for research need. The Study reveals that to enhance the use of e-resource, more hands on practice workshop should be organize.

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