

## “IMPACT OF E- RESOURCES ON THE TEACHING FACULTIES OF PHYSICAL SCIENCES OF NORTH MAHARASHTRA UNIVERSITY AS WELL AS MUMBAI UNIVERSITY”



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### INTRODUCTION :

The Internet under the acronym WWW is a mean and media to acquire the information of e resources that is a collection of electronic documents that are linked together like a spider web. The documents are stored on computers called servers located around the world (Lihitkar,2013).The information and communication technology has enabled scientists of any field to acquire, store and retrieve the information. Physical sciences is not exceptional one; that has also the scope to be with www to create grasp and share the information explosion worldwide in electronic format, electronic information forms an integral part of libraries assisting the users in learning, teaching and research.

Education field is undergoing massive change in knowledge society. Information Technology in knowledge society allows for newer learning scenarios where technology plays a major role in sharing and dissemination of knowledge (Abuzaid, 2010).

### 2. DEFINITIONAL ANALYSIS

#### 2.1 USE:

Use of e resources is defined as searching, browsing, examining and visiting an e resource by

### ABSTRACT

*The study attempt to deal with using of Electronic Information Resources by the teaching faculties of Physical sciences of Mumbai University and North Maharashtra University Jalgaon,*

**KEYWORDS :** *E resources, Physical Sciences, Electronic, web, Information communication, Education, University, Teach, Faculty.*

### SHORT PROFILE

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a user's.

### 2.2 E-RESOURCES

E resources are resources in which information is stored electronically and which are accessible through electronic systems and networks. E resources is a very broad term that includes a variety of different publishing models, including OPACs, CD ROM, online data-

base, e-journals, eBooks, Internet resources, print on demand(POD), e-mail publishing, wireless publishing electronic link and web publishing etc. In this context the term means “any electronic product that delivers collection of data be it in text, numerical, graphical, or time based as a commercially available resources” (Sudhrma, 2009).

### 2.3 Faculty

Term used to denote a branch of learning. It is derived from Latin word faculty, which was used in medieval time to translate Greed dun amine. Thus the faculties of mediaeval universities were art, theology, medicine and law .This use has since been further extended to include the body of members of a profession. In nutshell a certain groups of professors is called faculty.(

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Wikipedia Encyclopedia.)

### **2.3Review of Literature**

(Thanuskodi, 2012)Reveals that majority of users are aware about the availability of e resources 47.78 per cent of respondents want to access only electronic version whereas only 32.78 per cent users want to read the printed journals and 19.44 per cent respondents wants to use both electronic and printed version. Majority at responds means 76.66 per cent are use e-resources for paper presentation and Library website is used for linking e-resources.

(Mittal, Aug 2013)Reveals that majority of users use e-resources for their research purposes and educational purposes. They learn to use e-resources either by self-instructions or with guidance from colleagues and friends they did not get any training from university Library. Users access their requirement from different places like University and at home study also reveals that they did not get adequate facilities for accessing e-resources.

(Habiba, 2012)examine Dhaka University Library users and reveals that 44.0 per cent users access to electronic resources every day 27.07 accessed electronic resources 52 per cent users mostly used web search engines to find relevant electronic resources on the internet and 16.0 per cent of users use university library websites and 20.0 per cent users used subject guides on the Internet and e-resources. Regarding the use purpose 54.0 per cent respondents for learning 35. per cent used e-resources for current information 6 per cent for research purposes and 5 per cent for teaching purposes. Also he examine various issues like types at e-resources, features at e-resources, Navigation to resources form Lib- websites, Problems at using e-Resources.

(Millawinanachchi, 2012)Carried out the study of the university of Colombo to investigate the critical success factors on e-resources usage by postgraduates. Examine the uses of e-resources and multiple regression analysis was

carried out to determine the relationship to those identified factors with overall e-resources usage. Also he analyzed nine factors which affect the usage, that are Technology as the most critical factors in using e-resources, Library support, information literacy, computer, competency, usefulness and user attitudes.

(Singh, 2013)Findings show that majority of respondent 94.74 per cent access e resources from their work places through Wi-Fi/LAN .Majority of people are well aware that library is a member of IIM Consortium (77.03 per cent) and INDEST AICTE consortium(72.97 per cent), majority (74.32) users take guidance by teachers /supervisors to access e resources.94.59 per cent users use E resources for writing articles/research paper and research work ,94.59 per cent users indicates that due to wide range of e databases journals available they have been using E resources ABI/Info Business Source Complete, Emerald and Capitoline Pluse are frequently used by most of the respondents ,Science Direct, IEL online, INSIGHT, Euro monitor and CRIS INFAC are occasionally used by most of the respondents ACR Digital Library and J-Gate are never used by most of the respondents

### **2.3 Physical science Department of North Maharashtra University, Jalgaon**

The school of Physical Science was established in 1991-92. It consist of two departments namely Department of Physics and Department of Electronics. At present the school has 13 fulltime faculty members consisting of 4 Professors, 3 Associate Professor and 6 Assistant Professor. The University Grant Commission (UGC) Delhi has recognized the research excellence of the school by granting the Departmental Research Support (DRS) The Department of Physics has research collaboration with National and International Universities and institution.

## 2.4 Physical Science Department of Mumbai University, Mumbai

The University Department of Physics, established in the year 1971, offers postgraduate leading to the Master of Science (M.Sc.) degree, by research or papers, awarded by the University of Mumbai. In addition, M.Phil. and Ph.D. degree programmers are also undertaken by the Department. M.Sc. laboratories are well equipped to carry out experiment in Electronics, Solid State Electronics, Solid State Physics, Nuclear Physics, Laser and Plasma Physics, Chemical Physics and Astronomy and Space Physics. Electronics is divided into two option Electronics - Microprocessors & Microcomputers.

## 3. SCOPE AND LIMITATION OF THE STUDY

The present study is limited to teaching faculty of Physical Sciences of Mumbai University and North Maharashtra University, Jalgaon Maharashtra. The main focus of the study is to identify the needs and requirement of e resources for teaching and learning process

## 4. OBJECTIVES OF THE STUDY

The objectives of the present study are

1. To know the purpose of accessing and using e resources among faculties
2. To determine the types of electronic information resources preferred in support of work.
3. To know the search techniques to access e resources
4. To know the most preferable search engine.

## 5. METHODOLOGY

A survey method of research using questionnaire was followed for data collection. In the study 13 questionnaire in North Maharashtra University and 14 questionnaires in Mumbai University are distributed in teaching faculties of department of Physical sciences.

Teaching faculty were also personally assisted and interviewed in order to receive more clear accurate and pin pointed responses to the

listed questions. In this paper an attempt has been made to analyze and interpret the data collected on the use of e resources .Total response from the users is -25 means (88.8 per cent).

## 6. ANALYSIS AND INTERPRETATION OF DATA

### 6.1 Sexwise distribution of Respondent

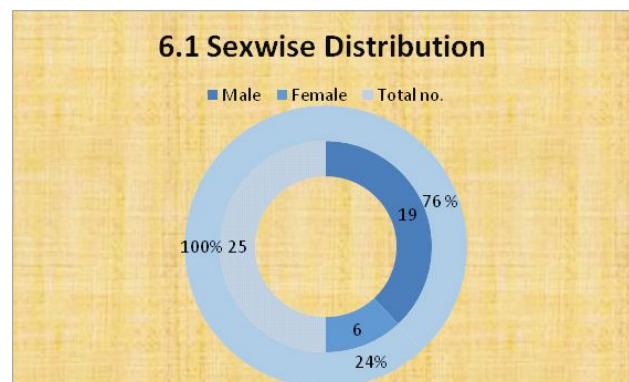


Table no 6.1 of faculties are 25 out of which 19 i.e. 76 per cent are male and remaining 6 i.e. 24 per cent are female faculties. It shows that number of male faculties is more than 3 times of female faculties.

### 6.2 Teaching experience

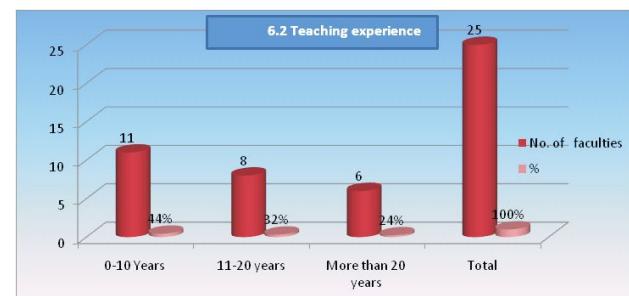


Table no 6.2 indicates that 11 faculties have less than 10 years of experience of teaching i.e. 44 per cent of faculties have less than 10 years of experience , 8 faculties i.e. 32 per cent faculties have experience between 10 to 20 years and 6 faculties i. e. 24 per cent faculties have more than 20 years of experience

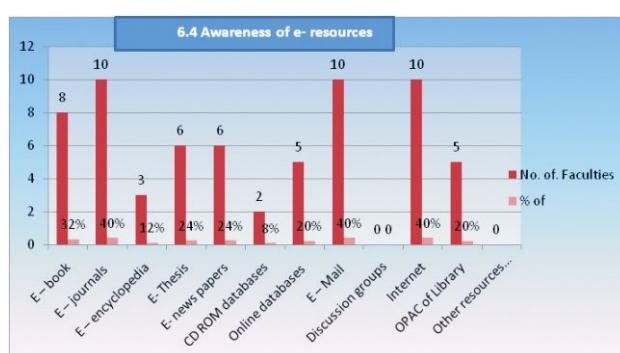
### 6.3 Level of satisfaction



Table 6.3 indicates the level of satisfaction of the respondent to using electronic information resources that 64 per cent of faculties are very highly satisfied and 28 per cent faculties are highly satisfied with the electronic information resources. It indicates that e-services provided by the universities are very excellent, only for 8 per cent faculties are somewhat satisfied for which e-resources facilities are required to be improved.

### 6.4 Awareness of e- resources

Table no 6.4 shows that maximum no. of faculties i.e. 40per cent uses e-journals, E-mails and internet. After that e-books are used by 8 faculties i.e. 32per cent. 6 faculties uses e-thesis and e-newspapers i.e. 24per cent followed by 5 faculties uses OPAC of library and online databases. Very few faculties use CD -ROM databases and E-encyclopedia.



### 6.5 Methods and Formats adopted to learn about the electronic information use

Through membership	6	24 %
Through Library web sites	18	72 %
Through Information Broachers	7	28 %
Courses from parent organization	11	44 %
Through staff and other sources	12	48 %
Trial and Error	9	36 %

Table 6.5 shows that methods and formats adopted by the faculties to use e-resources. Most of faculties i.e. 18 out of 25 (72per cent) learn how to use electronic information through library web sites. After that staff guidance and other sources are adopted by the faculties to use electronic information. 36 per cent of the faculty's i.e.9 out of 25 learns through trial and error method. 24per cent to 28per cent i.e. 6 to 7 faculties out of 25 adopts the method of electronic information through membership or through information broachers.

### 6.6 Time spent in searching, accessing e-resources

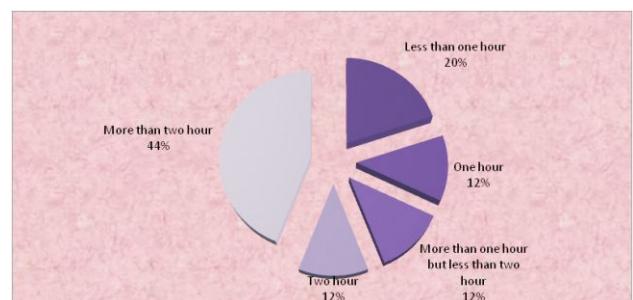


Table 6.6 is regarding the time spending to access the e resources 11faculties out of 25 i.e. 44per cent have to spend more than 2 hours daily to access the data. 5 faculties i.e. 20 per cent spend less than 1 hour in searching or accessing e resources. 9 faculties (36 per cent) spend time between 1 hour to 2 hour in searching e resources. It shows that every respondent use e resources for their information need.

## 6.7 purpose of using e resources

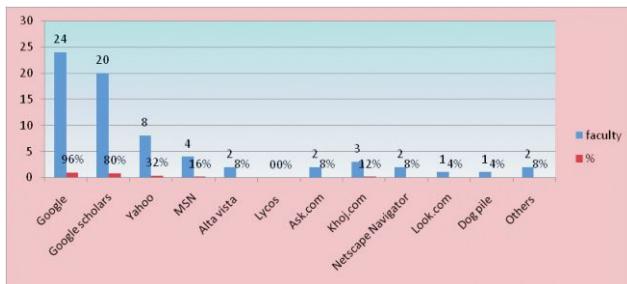


Table 6.7 shows that all the 100 per cent faculties uses e resources to update knowledge and for study purpose. 84 per cent faculty's uses e- resources for teaching purposes, 80 per cent faculties use e- resources for research and development activities also 76 per cent faculties' uses e-resources for writing research paper.

## 6.8 Common search and retrieval field

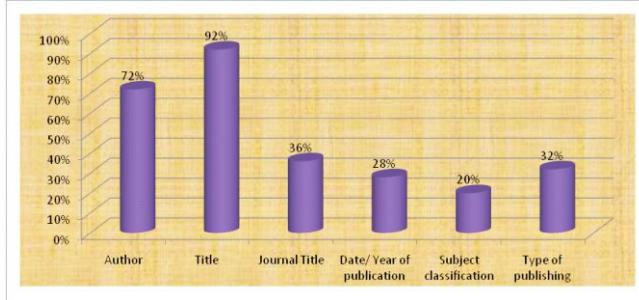


Chart no. 6.8 shows that 92 per cent of faculty members search their required information through title, 72 per cent of faculties retrieve information by searching through author, 36 per cent of respondents access information through specific journal title while 32 per cent search information through type of publication, 28 per cent of faculties search specific information by year wise or date wise and 20 per cent of the faculties search by subject classification.

## 6.9 Search technique frequently used

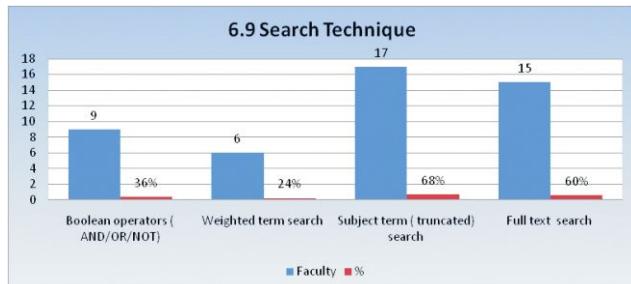


Table 6.9 shows that 17 faculties use direct subject term of their required information i.e. 68 per cent, and 15 faculties uses full text search technique for their information search i.e. 60 per cent. Boolean operators are used by 36 per cent. Users.

## 6.10 Search engine frequently used for literature search

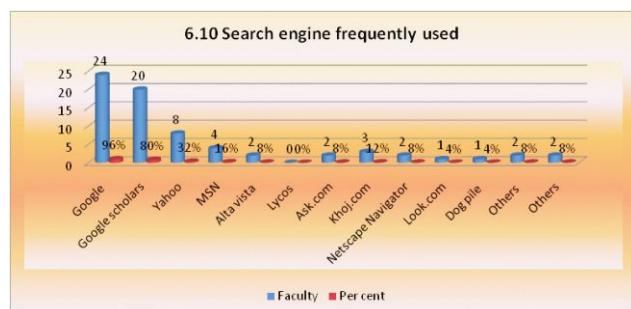


Table 6.10 indicate that for literature queries Google and Google scholars search engine are used 96 per cent and 80 per cent respectively. Yahoo search engine and MSN search engine are used by 32 per cent and 16 per cent faculties respectively. Other search engine like Alta vista, Ask.com, Khoj.com etc are used by 10 per cent of users.

## 6.11 Advantages of Accessing E resources

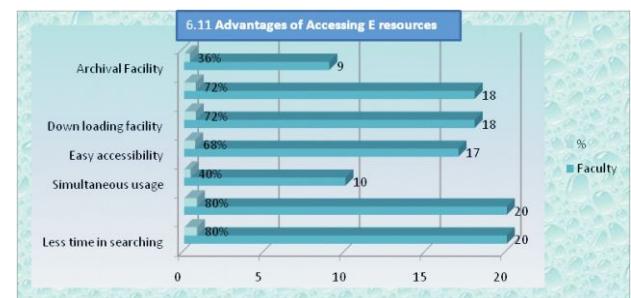


Table 6.11 indicates that 80 per cent of faculties agree that advantages of e resources are to save time, i.e. Less time required for searching and journals are made available much before print copy. 72 per cent faculties use the downloading facilities and also take the advantage to contact the author through e-mail, easy access and simultaneous usages of information is also main advantage of e-resources. Only 36 per cent faculties know about archival facility available on the internet.

## 6.12 Problems encountered while using E-Resources

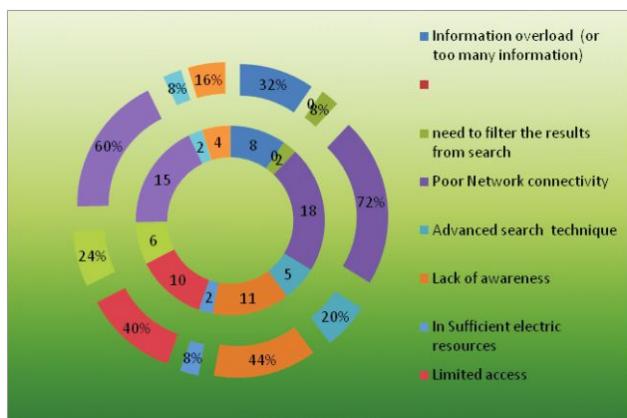


Table 6.12 indicates that various problems are faced by faculties while using e-resources, 72 per cent of the faculties faces the problem of poor network connectivity and 60 per cent faculties have problem of slow downloading, 44 per cent of faculties have a lack of awareness whereas 40 per cent faculties faces the problem of limited access.

## MAJOR FINDINGS:-

Study shows that majority (76%) of the respondents of the present study were male faculty members and only 6 faculty members i.e. 38.22% were female. It indicate that three forth percent are male faculties are working in both physical science department of Mumbai and North Maharashtra University.

The majority (44%) of the respondents having less than 10 years' experience while 32%

having 11 to 20 years' experience and 24% faculty member are having more than 20 year teaching experience

As we consider about satisfaction level of using e resources 64% of the teaching faculties are very highly satisfied to access the e resources, whereas 28% teaching faculties are satisfied to accessing e resources and only 8% are somewhat satisfied. It shows that e resources are fulfilling the requirement of the faculty members.

Majority of teaching faculty's i.e. 40% uses e-journals, E-mails and internet for accessing their e information, followed by E books are use by 32% teaching faculties after that 24% respondent use e newspapers and e theses, Library OPAC is use by 20% respondent.

Study indicates that 72% of respondent learn to use e resources through library web site, 48% faculty members are learn to use through staff members and other sources while 40% are learn through courses organize by their parent organization

Study reveal that 100% faculty members are use e resources for updated their knowledge and their study purpose. While 84% are use for teaching purpose and for research purposes 80% faculty members are dependent on e resources 76% are uses for writing papers.

Majority i.e. 92% of faculty searches their required information by title of the require topic and 72% are search through author wise.

Most of the faculty members i.e. 68% uses direct subject term for searching required information ,full text is also used by 60% of users..

Google and Google scholar search engine are widely used.

Time saving is the main advantage of e-resources, easy download facility and use of e-resources by many users simultaneously are also advantages of e-recourses.

Poor network connectivity and slow downloading are the major challenges faced by

the faculty members while using e-resources.

#### **CONCLUSION:-**

The study clearly indicate that e-resources are playing important part in Teaching , learning and research productivity. Teaching faculty are highly dependent on the e resources especially e journals, e mails, followed by e books. Library website performing major role to learn how to use e resources. Google and Google Scholar search engine are most preferable websites.

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