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USE OF ELECTRONIC RESOURCES AMONG STUDENTS OF SELECTED ENGINEERING COLLEGES IN CHENNAI, TAMILNADU: A STUDY

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ABSTRACT

In recent years, the role of the Library and Information Science (LIS) professionals are adapting themselves to changing technologies, information environment, and readers' expectations. Library professionals are increasingly responsible not only to provide traditional library information services according to the needs of the Library users but also provide modern electronic resources and services to them. In the 21st century, everyone is going through many occupational changes to face the future challenges, LIS profession is also not an exceptional one. Information and Communication Technology has transformed the role of not only librarian but also the library collections in the changing environment. Due to the exponential growth of information, the libraries have now metamorphosed into "digital institutions". Specifically Engineering College Libraries are inevitable to implement the e-resources in its collection management. Today, libraries are having data by networked that is connected to a vast ocean of Internet-based service. Moreover, electronic resources relevant to the professions are developing at an unprecedented pace. Purchases of new books, journals, magazines, and abstracting and indexing services are only beginning to become a presence in library collections. Introducing new services in libraries actually means in the first place in implementing electronic services. At present Libraries of all sizes and types are embracing digital collections.

Keywords: Electronic Resources, E-Books, EJournals, E-database and ICT

INTRODUCTION

"Engineering is the profession in which a knowledge of the mathematical and natural sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize economically, the materials and forces of nature for the benefit of mankind".

Accreditation Board of Engineering and Technology, They are creating ideas into reality, useful products, and systems with imagination and possibilities. With regard to new technologies applied leading to new connections and outcomes while interacting with the people and environment. In the present days, the role of engineers has been broadened to manage various aspects of organizational competitiveness. With the advent of computers in the digital era, the nature of library services has changed dramatically. Computers are being used in libraries to process, store, retrieve and disseminate information. As a result, the traditional concept of a library is being redefined from a place to access books to one which houses the most advanced media including CD-ROM, Internet, and remote access to a wide range of resources. Libraries have now metamorphosed into "digital institutions". Library collection management has changed dramatically in the past decade. The widespread use of new digital technology in the publication of information through the Internet. This created a massive shift in the generation of information, its publication and dissemination of electronic information. Gradually the concept of a library has changed very fast due to theimpact of information communication technologies. Libraries not only maintained printed collection but also maintained digital collections. They have moved from the print-based environment to a digital environment. As the information environment changed rapidly there is widespread availability of electronic resources in libraries. Dissemination of information at low cost and high speed that could not obtain through paper has been achieved. In this study the researcher has selected 10 Engineering colleges in ChennaiTamilnadu to attempt to analyse the use of electronic resources in engineering college libraries, from students of Under Graduate and Post Graduate.

E-RESOURCES - DEFINITION

"An electronic resource is a publication in digital format which must be stored and read on a computer device". It works which are encoded and made accessible through a computer, online or in a physical format. This category includes an ever-growing array of electronic journals, monographs, reports, articles, databases, digital collections, still and moving images, sound, and interactive resources. E-Resources refer to that kind of documents in digital formats, which are made available to the library users through a computer-based information retrieval system. The electronic resources include CDROMs, E-books, e-journals, e-magazines, E-databases (online databases), e-theses, dissertations, and websites, E-Newspapers etc.

E-RESOURCES COLLECTION:

The library may own the item in print and/or microform. The library may have purchased electronic access to the item, in addition to the print. The library may have purchased access to an aggregated database that includes the full text of the journal that the patron wants. The different electronic formats that communicate information are OPAC, online databases, web-database, e-books, ejournals/ magazines, e-theses, e-dissertations, e-reference sources, e-learning materials, e-research reports, and e-newspapers. Thus, electronic resources have become the vital part of college library collections in the 21st century.

Electronic Book:

A book provided in a digital format for checkout or use via an Internet browser, a computer, or another electronic device like an E-Book Reader.

Electronic Journal

A journal provided in a digital format for access via an Internet browser, a computer or other electronic device.

Types of E – Resources

Some of the most frequently encountered e-resources types are:

- E – Journals (Full text and Bibliographic)
- E – Books,
- Online Databases Full text (aggregated) databases
- Indexing and abstracting databases
- Reference databases (Biographies, Dictionaries, Directories, Encyclopedias etc.)
- Numeric and Statistical databases
- E – Images, Institutional repositories
- E – Audio/Visual resource

Formats:

The formats of e-resources are document files (.doc), spread sheets (.xls), presentation slides (.ppt), portable document format (.pdf), audios (.mp3), videos (.mpeg, .mp4, etc.) and web pages (.htm, .html, .asp etc.).

E-database

Electronic databases come very handy for searching vast data within a shortest possible time. There are good number of such databases are available on the internet today, which can be accessed free of cost. An e-database is an organized collection of information, of a particular subject or multi-disciplinary subject areas. The information of an e-database can be searched and retrieved electronically. Contents include journal articles, newspaper articles, book reviews and conference proceedings, etc., Usually, e-resources have been updated on a daily, weekly, monthly, and quarterly basis. Full-text databases contain the whole content of an article such as citation information, text, illustrations, diagrams and tables. Bibliographic databases only contain citation information of an article, such as author name, journal title, publication date and page numbers.

METHODOLOGY

At present in thiruvallvar districts 30 Engineering Colleges are functioning. But the researcher has selected only 18 Engineering Colleges for his study. He has distributed questionnaires among these selected college's library users of UG and PG students on randomly. The filled up questionnaires have been collected from the respondents for the data analysis and interpretation. Out of 900 questionnaires, 736 (81.77%) questionnaires were recollected and incomplete 8 questionnaires were rejected. For the purpose of convenient research, 728 (80.88%) questionnaires have been selected for analysis. The filled up questionnaires have been arranged for analysis and it was made on the basis of gender and category wise. Simple percentage analysis was made for analysis.

STATEMENT OF THE PROBLEM

All Engineering College Libraries have made significant investments in e-resources and accompanying computer-based technology to ensure access to e-resources. The budget allocated for e-resources in Engineering Colleges is nearly 50% of the total library budget. The budget increased for the past few years, as there was a new subscription for expensive databases, IEEE Explorer and ASME, ASCE, ACM Digital Library and others. Although engineering college Libraries pay for subscriptions or access to e-resources, this cost is hidden from users. Engineering College Libraries spend this money on subscribing and purchasing different types of e-resources that can be measured on-campus.

STATISTICAL TOOLS:

After the completion of the data collection, the filled in questionnaires were edited properly to make them for coding. After coding, the data were fed into computer and database was

created. From the database, the required tables were prepared for further analysis using SPSS 22.0. The analysis part employed suitable statistical techniques to the data collected and tabulated. Keeping in mind, the nature of the present study, the following statistical tools such as Simple Percentage Score, Chi-square test, ANOVA test.

RESULT ANALYASIS- GENDER WISE DISTRIBUTION OF RESPONDENTS : TABLE 1

Gender	**Number of Respondents**	**Percentage**
Male	341	46.8
Female	387	53.2
Total	728	100%

The Table 1 shows that 341 (46.8%) respondents are male and 387 (53.2%) are female.

TABLE2: CATEGORY WISE DISTRIBUTION OF RESPONDENTS

Category	**Number of Respondents**	**Percentage**
Under Graduate	**536**	**73.6**
Post Graduate	**192**	**26.4**
Total	728	100%

Table 2 describes that from the total respondents, 536 (73.6%) of the respondents are doing undergraduate, 192 (26.4%) of the respondents are postgraduates.

TABLE 3. BRANCH WISE DISTRIBUTION OF RESPONDENTS

Branch wise	Frequency	Percent	Cumulative Percent
CIVIL	98	13.5	13.5
MECH	122	16.8	30.2
EEE	142	19.5	49.7

ECE	170	23.4	73.1
CSE	166	22.8	95.9
IT	19	2.6	98.5
OTHERS	11	1.5	100.0
Total	728	100.0	

It is evident from the table 3 department wise analysis of the e-resource users as, 98(13.5%) of the respondents belongs to the Civil engineering department,122(16.8%) of the respondents belongs to Mechanical engineering department, 142 (19.5%) of the respondents belongs to the EEE department, 170 (23.4%) of the respondents belongs to the ECE department,166 (22.8%) of the respondents belong to the CSE department,19 (2.6%) of the respondents belong to the IT department,11(1.5%) of the respondents belongs to Other departments.

CONCLUSION

Now, E-resources have become the popular one, which is on the one hand development and impact of the technologies on libraries whereas on the other hand, pose new challenges for library professionals to manage the electronic information resources properly. The rapid growth of e-resources and the complexity in managing these resources has posed new challenges for the library professionals. Now we are living in the digital environment and obviously, it is with changing nature of all the three elements of library i.e. collection, users, and staff in every library. To grow forward to the time of this electronics age, at first effect on entire user community who are giving the more preference than a traditional print collection to e-resources. E-resources are the most innovative of different ideas, ways of thinking may prove valuable to access the journals and e-resources are important to information revolution and innovative knowledge society. In future, sustainable growth of e-Journals will be shown growing and developing in India. Users are familiar with AICTE

INDEST, IEEE Explorer, DELNET, and NPTEL. Access to a wide range of information is the main factor which influences the use of ICT based resources and services among the users. Hence, Building consortiums and Institutional subscriptions for e-resources have to be increased by the libraries.

The libraries should concentrate on sending e-mail alerts not only to save the time of the users but also to motivate them to browse or read more articles. In the present digital era, the responsibility of the librarians does not stop by just subscribing to e-resources but they should also identify the problems in information retrieval. There are many websites, which are not indexed; hence they are not accessible in online journals. To retrieve exhaustive relevant information on any particular topic it is necessary to have a good understanding of the topic and choose the right search term and solve the problem in information retrieval.

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