INTRODUCTION

"It is not the strongest of the species that survives, nor the most intelligent,

But the one most responsive to change."

- Charles Darwin

Traditionally, Libraries are considered as a place for storing and retrieving information from the available resources such as books, manuscripts, journals, and other sources of recorded information. The technological development is influencing to shift the libraries from traditional print resources to E-resources. Meanwhile the E-resources are not able to replace all the traditional print resources. The terms 'Digital library' and 'Virtual library' are used to refer the vast collection of information by which the people are able to access the information.

The traditional print format resources are dominated and used in all the libraries, before the development of information communication technology. But after the development of information communication technology, the electronic resources are also use in the libraries by its users with some of its specialised features. Same time the e-resources are not able to completely replace the traditional print resources. Because the print resources, provide some convenience to it's users. So, the academic libraries should able to maintain and provide both print and e-resources effectively.

Generally, the academic libraries are concentrating on two important aspects for providing services to it's users for creating the study environment. The two important aspects are 1) According to the curriculum programme the library provides resource and services to the users to create the best study environment. 2) According

to the competence skill of the student and faculty the library provides resource and services to the users to create the best study environment.

A resource is a source for supply of information. Typically resources are materials or other assets that are transformed to get benefit and in the process it may be consumed or made unavailable. Resource is a concept that has been common to all the areas, including life sciences, computer science, human resources, and other areas of human life day today activity.

The development of ICT provides an alternative or eliminates the traditional print resources in the libraries. In the present situation the print resources like books, periodicals and other resources are available in the E-resource formats. This E-resource format may provide the information to the user for twenty four hours a day.

Technology is redefining the very notion of what constitutes a book. This evolution is accompanied by rigorous debate in the library and publishing worlds. For each expert who offers a vision of the e-book, living book, or networked book, another decries the reported death of the printed world.

1. LIBRARY RESOURCES

Exhaustible items used for reference or lending such as books, periodicals, and microfilm that have a useful life greater than one year. Library resources are capitalized, depreciated and controlled by a recognized cataloging system[1].

1.1 DEFINITION

According to Merriam Webster dictionary define the word resources as follows

a) A source of supply or support **:** an available means —usually used in plural,
b) Something to which one has recourse in difficulty,

c) A possibility of,

d) Relief or recovery,

e) A means of spending one's leisure time,

f) An ability to meet and handle a situation[2].

The term 'Resource' has a few different senses[3]:

1. A source of aid or support that may be drawn upon when needed;
2. The ability to deal with unusual problems resourcefully;
3. Available source of wealth; a new or reserve supply that can be drawn upon when needed.

Resources have three main characteristics:

1. Utility
2. Limited availability,
3. Potential for depletion or consumption.

Resources have been variously categorized as biotic versus a biotic, renewable versus non-renewable, and potential versus actual, along with more elaborate classifications. Similarly library resources give benefit by providing information to the users [4].

2. HIGHER EDUCATION IN INDIA

Generally academic libraries are considered as a heart of the institution. Academic libraries are situated within the academic institutions. It serves mainly for student's research scholars, teaching and non teaching staff of the institutions. The resources of the academic library belong to the courses offer by the institutions. Generally all the academic libraries consist of text books, reference books, Journals, theses dissertations, project reports, maps, atlases, drawings, and magazines in both

print and electronic formats. Also, academic libraries are subscribing the on line journals, e books, on line databases for the benefit of students and scholars.

The main objective of the academic library is to serve the academic community particularly their exams, preparation of seminar, conference, symposium, projects and research work. So, offering orientation programmes are essential to the users and it will improve the strength of the knowledge. Academic libraries are directing the users for searching the information from print or e-resources.

Academic libraries provide the best information to it's reader. University libraries are plays an important role for the academic community. It gives pleasure to the user and it also creates a learning environment in the university. Library is an important part of any academic institutions through the information distribution.

The important feature of academic library is based on some academic activities;

- Academic library is a part and partial of the any educational system;
- Academic library has to involve the academic study activities such as workshop and conference;
- The users of academic library are students, teachers, researchers, and administration staff.
- The study programme of the institution depends on the academic library. To create the learning environment is depends on the use of library resources.
- Nowadays the academic library environment is changed with the development of online and e-resources. The online resources are help to save the time of users and also to libraries.

The academic library environment gives quality and quantity of information to the users through its collection and that is identified by an individual learner according to his/her experience, competence and personal learning goals. The traditional and e-resources of the library's learning environment belongs to the information related to the users requirement; the ways information is being collected and distributed. Academic library resources are considered as a good measure of an institution's excellence and quality. The information resources and services available in the institutional information systems must be capable of supporting research activities among the students and faculty members.

The library as any organized collection of printed books and periodicals of any other graphic and audio visual materials and the services of the staff to provide the facilitate the such materials as are required to meet the information, research educational or recreational needs of its user.

3. TYPES OF INFORMARTION RESOURCES

Generally resources are classified into three types depends on the information available from the resource.1) Primary resources, 2) Secondary resources, and 3) Tertiary resources.

3.1 PRIMARY SOURCES

Primary sources are original materials. They are from the time period involved and have not been filtered through interpretation or evaluation. Primary sources are original materials on which other research is based. They are usually the first formal appearance of results in physical, print or electronic format. They present original

thinking, report a discovery, or share new information. The definition of a primary source may vary depending upon the discipline or context.

Some primary resources are given below:

- Artifacts (e.g. coins, plant specimens, fossils, furniture, tools, clothing, all from the time under study);
- Audio recordings (e.g. radio programs)
- Diaries;
- Internet communications on email, listservs;
- Interviews (e.g., oral histories, telephone, e-mail);
- Journal articles published in peer-reviewed publications;
- Letters;
- Newspaper articles written at the time;
- Original Documents (i.e. birth certificate, will, marriage license, trial transcript);
- Patents;
- Photographs
- Proceedings of Meetings, conferences and symposia;
- Records of organizations, government agencies (e.g. annual report, treaty, constitution, government document);
- Speeches;
- Survey Research (e.g., market surveys, public opinion polls);
- Video recordings (e.g. television programs);
- Works of art, architecture, literature, and music (e.g., paintings, sculptures, musical scores, buildings, novels, poems).
- Web site.

3.2 SECONDARY SOURCES

Secondary sources are less easily defined than primary sources. Generally, they are accounts written after the fact with the benefit of hindsight. They are interpretations and evaluations of primary sources. Secondary sources are not evidence, but rather commentary on and discussion of evidence. However, what some define as a secondary source, others define as a tertiary source. Context is everything. The definition of a secondary source may vary depending upon the discipline or context.

Some Secondary resources are given below:

- Bibliographies (also considered tertiary);
- Biographical works;
- Commentaries, criticisms;
- Dictionaries, Encyclopedias (also considered tertiary);
- Histories;
- Journal articles (depending on the disciple can be primary);
- Magazine and newspaper articles (this distinction varies by discipline);
- Monographs, other than fiction and autobiography;
- Textbooks (also considered tertiary);
- Web site (also considered primary).

3.3 TERTIARY SOURCES

Tertiary sources consist of information which is a distillation and collection of primary and secondary sources.

Some Tertiary resources are given below:

- Almanacs;
- Bibliographies (also considered secondary);
- Chronologies;
- Dictionaries and Encyclopedias (also considered secondary);
- Directories;
- Fact books;
- Guidebooks;
- Indexes, abstracts, bibliographies used to locate primary and secondary sources;
- Manuals;
- Textbooks[5] (also be secondary).

4. CATEGORIES OF LIBRARY RESOURCES

Library resources are generally categorized in to two types based on its features and mode of usage.

They are

1) Traditional resource

2) Electronic resources

4. 1 TRADITIONAL RESOURCES

Generally resources are included a person, asset, material, or capital which is support to fulfill the task or any assignment.Similarly library resources consist of manpower of library and reading material like printed and electronic resources which are meet the user's requirement. But the manpower of library is only providing service to the users. So, generally library resources are consider as the reading materials such as print and e resources.

In ancient period variety of materials are preserved in libraries and used as a library reference. Generally the word "traditional" denotes that trust of our old customs or beliefs. Similarly, our ancestors are used as Birch Park, clay tablet, Codex, manuscript, ostracism, papyrus, scroll, vellum, wax tablet for made the library resources. After some technological development the paper was invented and it is used as a library resource. So, in our generation print resource are considered as traditional library resource. But more technological development may lead the libraries to use e resources. So, library users are unable to avoiding both print and e resources in library.

4.1.1 HISTORY OF TRADITIONAL LIBRARY RESOURCES

History of library resources includes the history of libraries. More than 6000 years back people were make records or written their ideas by pictorial scripts. They kept their records in bone, leather, clay, silk, paper, tapes and so on.

There are different types of resources used for written work and preserved in the libraries from ancient to present time. From time to time some technological improvements have been making changes in the library resources. At every stage these kinds of resources are preserved and maintained by the library-in-charges and served to library users. Now, we are using print and e resources based on our

requirement and availability. So we know what are the technological developments came across to reach this stage in library resources. Historical development of the library resources is just an evolution of library resources. History of library resources contains lot of the draw backs for collecting the information about resources. Some of the ancient library resources are given below;

4.1.1.1 INSCRIBED IN CLAY: FROM 3100 BC

The clay was tablets were made 2000 years before the birth of Christ. The writing system was developed in Mesopotamia. During 3100 BC people were used clay for writing and reading[6]. The clay was available easily on those days.

There are two ingredients define the first script. Characters are formed from the wedge-shaped marks by which a corner of the reed is made while pressing into the damp clay - a style of writing known as cuneiform.

Clay tablets are kept in sunlight up to its dried and hardness. Because, the humidity may be affects the clay tablets.

4.1.1.2 THE EGYPTIAN PAPYRUS: 3000 BC

During 3000 BC Egyptians were used as a writing material was called as papyrus. Papyrus was produced from an aquatic plant. It consists of smooth surface without roughness or any cracks.

The preparation of papyrus involves two processes. The processes begin with wetting and the second process is papyrus put in pressure. The green plant was cut and laid side by side to form a rectangle, and others are then laid across at right angles. After complete the cutting two layers are bonded with adhesives then it kept

under sunlight for the purpose of wetting. After wetting it gives pressure then up to twenty sheets are pasted together and it was called as papyrus scroll.

4.1.1.3 BAMBOO BOOKS: FROM 1500 BC

During the 1500BC the writing material was used as bamboo in china. It is convenient for writing and preserving. The Chinese scripts at this early period were written in vertical columns, so a thin stripe of bamboo is convenient for a single column. To produce a lengthy document, threads are used for making continuity in the bamboo stripes.

During the period of 5th century the shang dynasty people were used wax, leaves, wood for purpose of writing and reading. During the 400BC the bamboo was used for made a book like reading material.

4.1.1.4 PALM LEAF MANUSCRIPTS

The manuscripts made out of dried palm leaves. They served as the paper of the ancient world in different parts of Asia as far back as the fifteenth century BCE and possibly much earlier[7]. South Asia and south East Asian people were used to record actual and mythical narratives.

At the beginning stage the communication was done orally, but after find the alphabets and its benefits were motivated the people eventually began to write it down in dried and smoke treated. After written completes, all document had only some limited time to be copied onto new sets of palm leave manuscripts. The reason for spreading Indian culture to South East Asian countries was the palm leaf manuscripts.

During the early 19th century the invention of printing technology affects the manuscripts process like copying.

4.1.1.5 PERGAMUM AND PARCHMENT

In turkey during 197 to 159 BC Pergamum was used as a reading and writing resource. This is best alternative for papyrus, but it was expensive. This is one type of leather. The Pergamum and parchment are using the period of 2nd BC.

Since about 2500 BC the leather has been used as writing and reading resources, but only one side can be written on. If the ordinary leather was treated both sides it become smooth and able to write both sides.

It is not until much later, in the second century AD, that parchment becomes a serious rival to papyrus. But from the 4th until the 15th centuries it is the standard writing surface of medieval European scribes.

4.1.1.6 BIRCH BARK DOCUMENT

In India during 4th century CE, the people were used this birch bark for wrote the Sanskrit text. In Russia early of 1400 CE the people were used this birch bark for written purpose. Birch park document of Gandhaharan Buddhist texts have been found in jars. It expresses the culture of the people to the next generation.

In India for writing long scriptures and texts in Sanskrit and other scripts has been used the Birch park document of Himalayan Birch that was named as Betula utilis. Early Sanskrit writers such as kalidasa during the period of 4th century CE, Sushrutha during the period of 3rd century CE, and the period of 6th century CE Varahamitra has been used bark document for their work.

4.1.1.7 CODEX

In latin the caudex means “trunk of a tree” or “block of wood”. It was a book format resource which was bound and used. The popularity of codex was associated Christianity. The Bible was written in codex document in early periods. The codex was considered as a familiar book form resources in the ancient world and also replaced the scrolls. It is one of writing resources which was developed by the Romans.

It has been termed the most important advance in the history of the book prior to the invention of printing. The roman poet Martial during the period of the 1st-century AD, who was received appreciation for conveniently used. During the 6^{th} century the codex had completely replaced the scrolls.

4.1.1.8 OSTRACON

The word ostrakon was derived from Greek, which means a shell pr shard. The plural form of ostracon is ostrca. Usually ostraca was produced from the broken earth ware vessels. It is a piece of pottery.

The scripts are like scratched-in words or other forms of writing which may give clues as to the time in use of ostraca. The ostraca was used as a voting ballot. The shard of pottery was used as a voting ballot in Athens.

4.1.1.9 PARCHMENT & LEATHER

The history of parchment and leather was based on the pergamena. The leather is supported to carry our ancient civilization into our next generation. In the quality aspect Pergamena was better than parchment and leather.

In Lerida of Spain during the period of 8000 BC the cave paintings of pergamena was rendered. During the period of 700 AD, the oldest existing version of the biblical Gospels, were written and illuminated on parchment. During the period of 2600–2000 BC, leather scrolls and parchment are used by Ancient Egyptians to record writings.

4.1.1.10 WOOD PULP

The rags are one of the main ingredients for paper manufacturing process. The paper has white smooth and flexible pages, it provides convenient to its readers. During the period of 19th century the demand of paper was increased. The main ingredients of paper rags also meet the requirement of paper production. So, paper manufacturers are try to alternate for rags that was esparto grass.

Paper from wood pulp soon turns yellow and brittle. Many books of the late 19th century are now in an unreadable condition, falling to bits, and books of our own time will follow even more rapidly down the same path. Electronic publishing has arrived none too soon[8].

4.1.1.11 PAPER

Paper was invented during the period of AD 105 by the Chinese emperor Cai Lun. To make a sheet of paper these substances are repeatedly soaked, pounded, washed, boiled, strained and bleached. The mush is left to drain in a mesh frame and

then dried. The result is thinner and more flexible than papyrus or parchment, and much more adaptable to methods of large-scale production.

Paper is the best resource for printing and maintaining in the form of books, periodicals in library. During the period of 800BC the paper preparation method is shifted to bhagdad, during 900 and it was moved to Egypt and Europe by 1400.In present situation papers are considered as a traditional resource because it is using in book form from the past several decades.

4.1.2. EVALUATION OF TRADITIONAL RESOURCES

The evaluation of print resources is following some important aspects. There are

- The publication of traditional print sources involves the some process that includes editing and article review. To maintain the standard and quality of print resources have required some processes i.e. verification of fact, reviews, and editorial work.
- Print sources clearly stated that author's details like his experience, working institution and interesting area, publication details and so on.
- All the traditional print publications, clearly pointed out the sources to be consulted for complete the work.
- While bias certainly exists in traditional publications, printing is more expensive and difficult to accomplish. Most major publishers are out to make a profit and will either not cater to special interest groups or will clearly indicate when they are catering to special interest groups.
- The Qualification of an author is necessary for accept by the publisher for the publication.

- Publication information such as date of publication, publisher, author, and editor are always clearly listed in print publications.

4.1.3. FEATURES OF TRADITIONAL LIBRARY

All traditional libraries have some features. There are

- Generally libraries are the place to preserve and distribute the physical forms of resources, such as books and magazines, journals, periodicals.
- To maintain these resources with cataloguing and classification.
- Physical Searching method is using to retrieve the resources.
- Information is stored in physical format. The users may be borrowed the resources and make use of it.
- A traditional library consist details of available stock in books and subscription of periodicals.

4.1.4. ROUTINES REQUIRED FOR MAINTAIN PRINT RESOURCES IN LIBRARY

The aim and objective of academic library is to serve the academic community. For providing best service is only based on the maintenance of resources. So there are some regular woks are necessary for maintain the traditional print library resources effectively. To maintain the traditional print resources is not easy task. That is purely based on the maintaining and updating of records.

- Should be maintaining records for order and receiving of news paper and periodicals. This is supporting to identify the not supply issues from the ordered periodicals.

- For concern about the journals to maintain the back issues is essential. The back issues are using by researchers for their research.
- Displaying of current issues of journals is important. This also creates the familiarity with the users about new journals.
- Also display the new arrivals of books in library is important one. This also creates the familiarity with the users about the book and its subject.
- Regular updating and shelving is required for book stock. This process may support to identify the misplacing of Books. According to Dr S.R.Ranganathan misplacing of books is just equal to missing of books.
- Should concentrate the updating of circulation register.
- Should maintain a publisher's catalogue for both books and periodicals. This is to find the future needs of library.
- Maintain the records for ordering books and periodicals. It is helping to renew the periodicals and find the additional requirement.
- Maintain the user statistics is essential for find the requirement of users.

4.1.5. ACCESSING METHOD OF PRINT RESOURCES:

Accessing method of print resources is divided in to two types.

1) Open Access method: In this open access method the users are directly visited inside the library stock area or journal section or other sections and verify their requirement. If any resource is suitable for the users requirement the user can borrow that particular resource from library.
2) Closed Access method: In this closed access method users are required help or support from the library staff. The users are not permit inside the library.

Users are informing to library staff for their requirement and library staff may provide the resources to users.

4.1.6. ADVANTAGES OF TRADITIONAL RESOURCES

There is lot of advantages while using traditional library resources. Because it's some features like the format, size, quality, easy to handling and etc.

- Traditional print resources are able to take by the users because of its portability. Compactness, light in weight and comfortable to read.
- Traditional print resources are able to read. Even if computers are failure.
- Users can turn the pages comfortably the traditional print resources. Because of the familiarity.
- One of the traditional formats of print resources is very convenient for the users. Bob Balay, in an article praising print reference sources that he facetiously titled "Notes from the Jurassic," claimed that, with print reference sources, "you always know where you are and have a sense of the entirety of the source" [9].
- Before publish all the print format resources are followed by processes like editing, and peer reviewing. The print resources are usually more authoritative than their E-resources. Healey points out that "the expense of publishing, combined with an extensive reviewing system and the relatively 'fixed' nature of printed materials, all help the librarians to find quality materials, and avoid shoddy, biased, or misleading works" [10]
- There is no need of any technology for read the print resources.
- User can spend long time for using print resource.

- A traditional format of print resources is very convenient for the reading. Traditional format Printed resources are printed and bound in the different size for make use conveniently.
- A traditional format of print resources is more portable, easier to read, and better to handle.
- There is no specific places are required for store a printed format resources.
- Printed resources are more environmental than e resources. The printed resources are not creating any pollution in the environment.
- Traditional Printed resources remain readable for many years.
- The user can feel physically, cover, paper and binding from the original work while using the traditional Printed resources.
- The user unable to use the print resources only the reason may be damaging. The damage may happen after many decades of print.
- Users can be able to buy used copies at significant discounts, as they can now easily do with printed resources.

4.1.7. DISADVANTAGES OF TRADITIONAL RESOURCES

- The maximum number of printed reference books is available at high price. Even there are number of free search engines and search directories and web sites available online for user's reference purpose.
- Only one user can use a printed resource at one time. The user may lose the opportunity if the resources is misplaced or lost in library.
- As reporter May Wong states, "Once-a-year updates for printed editions means that "Some information can be stale even before the books get out of the box" [11].

- If users want a traditional print resource he/she should visit the library during the working hours only.

4.2. ELECTRONIC RESOURCES

In present situation the global communication and information transfer is easiest one. WWW and Internet are the most two important tool which is supporting for communication and Information transfer. The data are available in all the fields are huge amount for all users of internet.

Now a days the information transfer is simple and which is possible by the rapid growth of information and communication technology. In that way the people can access information in the areas for their requirement. The Internet and www can be taken great place to supporting to the scholars in all the areas.

E-resources are influencing the university library collection. Because the salient features of e resources such as multiple searching, providing global communications, cheapest access cost, storage and database maintenance etc. Sometimes the electronic form is the only alternative to print resource.

Electronic resources are providing plenty of information to the present day Users. Electronic information resources can provide a lot of benefits than traditional print resources.

For the past few decades the growth of IT is enormous rate. This development may support to create document in electronic format and distribute via internet or intranet or other form of e resources like CD ROM and USB-drive and etc. So, the current situation of libraries is also changing its environment to e resources for provide information to its users.

4.2.1. DEFINITION

There are some definitions are available in internet for E-Resources

According to all words dictionary.com defines the term E-resource, “Information (usually a file) which can be stored in the form of Electrical Signals usually, but not necessarily, on a Computer”.

According to Library Jargon of London south bank university describes the term E-resource, “A collection of on-line publications giving author, title, date, place of publication, publisher, details of edition, pagination, series and some idea of the contents. You will search this kind of database to find articles in journals. You can see a selection for your particular course on your subject portal”.

According to glossary of British Library Development Studies define the term E-resource, “Resources which are available in electronic form, over the Internet, or on CD Rom”.

According to glossary of library terms from Arts University College define the term e –resource, “The section of the Library’s web pages that provides access to our electronic resources, including databases, e-journals, e-books and e-newspapers”.

4.2.2 EVALUATING ELECRTRONIC RESOURCES

4.2.2.1 PROCESS FOR PUBLICATION

All are able to publish their work through internet in the form of e-resource. The requirement of e publication is only a computer with internet connectivity. Some of the internet resources are not having editors or reviewers. But the online journals have editors and reviewers and so on.

4.2.2.2 QUALITIES AND QUALIFICATION OF AUTHOR

Some of the internet resources are unable to determine the Authorship and affiliations. But the online journals and e books are having the authors and affiliations.

4.2.2.3 DETAILS OF REFERENCE SOURCES

Some of the internet resources are not having exact information regarding the references used by the author.

4.2.2.4 RELEVANCE

The online texts are not guiding the users properly. Sometimes unwanted items are downloading while searching the internet.

4.2.2.5 AUTHOR DETAILS

Some of the websites have explained its purpose and name of the author but not mention about the authors standard and qualities qualification.

4.2.2.6 PUBLICATION INFORMATION

There is no assurance for availability of date of publication and how long the information is available.

4.2.3 ELECTRONIC LIBRARY

An electronic library is allows users, to read or refer any published items from their residence or office or college via internet. Users are no need to visit the library directly for their reference.

4.2.3.1 1DEFINITIONS: E-LIBRARY

There are some definitions or explanations for e-library defined by some eminent personalities and publications of standard institutions for e-library. According to the features and functionality, the E-library defined as follows.

A-Z of Library Jargon of oxford Brookes University define the term E-library as, “Section of the Library Web pages which provides access to databases, electronic journals, electronic books and electronic newspapers”.

National Diet library, Japan is defined the "electronic library concept" as "a library which provides primary and secondary information electronically through communications networks and the basis for this purpose." Putting emphasis on the library as a mode of service, electronic library service, including in-library services, is broadly defined as "service which enables library users to directly access electronic data via telecommunications networks."

Now the academic libraries are shifting to the traditional print resources into e resource and maintain as Institutional repository. Those resources are theses and dissertations and other innovative academic work done by faculty or students. The resources of institutional repository are distributing via internet or intranet to its user community. The benefits of e- library for the following:

When using electronic information sources lot of benefits are obtain by the users that they are

1) E-libraries are the best tool for providing online resources for research which will make easy to its users.

2) Retrospective search is easy and most convenient than print resource.

3) Literacy is increases when searching made by the educators.

4) Searching of index is also easy.

5) It supports for searching with the combination of keyword.

6) While searching made by patrons for their project to retrieve a manageable amount of content, quickly and easily.

7) Provision for simultaneous access of multiple file.

8) E-libraries facilitate to its patrons for research solution.

9) Provision for printout and saved the down load items for future references.

10) The distance learners are also searching their requirement from e library.

11) E-Library provides the benefit to integrated search to dictionary, encyclopedia, almanacs, and etc through the reference desk.

12) The simplest functionality like Point-and-click promotes the users interest.

4.2.4 TYPES OF E-RESOURCES

The E resources are divided into two types depends on its features. They are

1) Online e-resources, which may include the online resources, are providing information to its users via internet and www. Online resources are considered virtual one. Users are able to use the information in intangible manner. Some examples of on-line resources are given below

- E-journal (Full Text & Bibliographic Databases)
- E- books
- On-line Databases
- Web sites

2) Another type e resources may include the off line resources that are keep inside the library in the form of electronic materials. Users can be able to touch physically and use it. Some examples of resources are given below

- CD ROM
- Diskettes
- Other portable computer databases

Above mentioned e resources are explained in the following sections.

4.2.5 E- JOURNALS

According to wikipedia.org define the term E-Journals as, "(E-journal) Electronic journals, also known as e-journals, e-journals, and electronic serials, are scholarly journals or intellectual magazines that can be accessed via electronic transmission. In practice, this means that they are usually published on the Web".

According to glossary of African digital library define the term E-Journals, "An article or complete journal available fully electronically via a web-site on the Internet. It could be available free or as part of a paid for service. This trend is older and more established than the trend of providing e-book content via the Internet".

According to OCLC define the term E-Journals, "Journals, magazines, e-zines, webzines, newsletters and types of serial publications that are available electronically".

According to glossary of Bolton define the term E-Journals, "Electronic versions of printed journals that can be viewed online via any PC connected to the Internet".

According to glossary of define the term E-Journals, "Online, full-text journals to which the library subscribes. They can be found by searching the Journal's List, or by clicking on Find Journals, Magazines, Newspapers: at WPI (journal's list) in the Quick Start area of the library home page".

Libraries are subscribing Electronic journals for users. E-journals consist of two important categories depends on what information it consists. This two categories consists some information which are very useful to users.

They are

1) Full-text Journal Article: Full- text Journal articles are containing the relevant information such as citation, text, illustrations, diagrams and tables.

2) Bibliographic Databases: Bibliographic databases contain the information such as author's name, journal title, publication date and page numbers. That is citation information of an article.

To better use of e-journal databases are need some proper organization and updating. The users are able to search only on title of the journal, unable to search the title or author of individual articles in print catalogue. But the e journal databases facilitate the user for searching the exact details like journal title, article title, author, abstract, year, etc. These are all the reason the electronic database is most convenient to its users and also support to the researchers for refer the current information as well as old information for their research. Generally, Libraries meet the problems like space for print journal, back issues, increasing price and damaging or missing issues and so on. These kinds of problems are avoiding in e-journals.

Computer with internet connectivity is enough for access Electronic journals. Simultaneously one or more than one user can access the e journals.

Some publishers are providing the e journals with offer prices through the consortia. In India there are two major consortia which are run by AICTE and UGC respectively INDEST and INFLIBNET. These two consortia distribute the e-journals with offer price from leading e-journal publishers.

E-journals are facilitating to maintain the back issues and provide the benefits to librarian and users.

- It facilitate simultaneous access by more than one user
- It facilitate remote access
- Working in 365 Days per year
- It facilitate different searching strategies
- It facilitate additional links if required

- It saves storage space
- It facilitate multimedia information

The above merits of e-resources may lead to the libraries obtain licenses for receiving e journals from various publishers and deliver to its users. Otherwise subscribe through the vendor or through consortia for information delivery.

4.2.6 E- BOOK

In Indian universities, higher educational institutions like IIT, IIM and IIS are maintain the Library within the Campus for students, scholars and faculties. The recent information and communication technologies are directly influenced the print resources of library, also it converts into e resources like ejournals, e books and so on.

Wikipedia defined the e-book as, “An e-book (short for electronic book and also known as a digital book, ebook, and eBook) is “a portable electronic device used to download and read books or magazines that are in digital form.” Sometimes the equivalent of a conventional printed book, e-books can also be born digital”.

According to Glossary of African digital library defined the term e-book, “(E-Books) A Book available fully electronically via a web-site on the Internet. E-Book readers have been developed for devices such as Palm Tops and PC's, including the notebook PC”.

According to publishing glossary defined the term e-book, “This is a book in digital format that can be downloaded to your computer to be read or printed out, or to a portable eBook reader which you can carry around with you and read when convenient. eBooks come in different formats, depending on which device they will be read”.

The term e book describes by glossary of velocity micro, “E-books (aka eBooks, e-books, etc.) are type of electronic book that can be downloaded from a server in many different file formats: E-Pub, PDF, TXT, HTML just to name a few. They are meant to be read on the go and used as a lighter alternative to carrying actual books with you on travel, work, and leisure”.

Generally all the libraries are providing quality of information and services to the patrons for their utmost level of satisfaction. For achieve this target libraries collect preserve and disseminate the information resources such as print and non print materials.

Few centuries back, the libraries kept resources in the form of print materials. But nowadays the requirement of information is high and systematically. This may influence the need, improvement and growth the of e books.

4.2.6.1 FEATURES OF E-BOOKS

There are some valuable feature to give preference for e-books such as updated citation, references, connectivity to other sites, easiest searching, and so on. The features of e books are as follows

- Able to circulate like printed books.
- Provision for distance learning.
- Able to transferred and carry easily.
- Ability to change font size also motivates the users.

4.2.7 ON-LINE DATABASES

On-line Database is a collection of information categorized by specific fields. Databases are usually searchable by keywords in topics. An online-

database is an organized collection of information, of a particular subject or multi-disciplinary subject areas.

- Wikipedia Define the term “An online database is a database accessible from a network, including from the Internet”.
- Glossary of Tees University for library and information services define the term online database, “(Online Databases) An electronic collection of information, often containing journal articles, or references to journal articles, accessed via the Internet”.
- UNM Glossary of Library, Computer, and Internet Terms define the word online database, “A computerized file, and within a Library setting it often contains periodical indexes”.
- Glossary of South African medical research council defines the word online database “A collection of information arranged into individual records to be searched by computer, which is available through the Internet or an organization's Intranet”.

The systematic organisation of information is considered as database. Oganisation of database through internet or WWW is considered as online database. The online-database includes journal articles, newspaper articles, book reviews and conference proceedings, and bibliographical information etc.

4.2.8 ADVANTAGES OF ELECTRONIC RESOURCES

Speed: As Lanier and Wilkins state, “providing access to information via the Internet is often quicker than using print sources”[12]. Librarians are not able to know all the subject areas. They are able to directing the users only up to their level of subject knowledge in traditional print resources. But in online resources they can get

all the information whether they know or don't know. Librarians just type the keywords in search box from the patron's requirement and they receive the results within few seconds.

Enhanced result: Online searches provide results which are better than the print resources. E-resources include audio and visual materials, color images, maps and atlases, drawings and other enhancements which are not available in print sources.

Access information apart from library's collection: The Internet resources are help to avoid carrying the print resources. Zumalt and Pasicznyuk claim[13], for example, that "a library with a limited reference collection should consider funding Internet access to quickly buttress their ability to any field a wide range of questions. This strategy is preferable to slowing adding print… products to the library collection".

Multiple accesses: More than one user can access the same resources at one time.

Currency: Internet has been providing the up-to-date information than print resources with cheap cost.

4.2.9 DISADVANTAGES OF ELECTRONIC RESOURCES

Unable to maintain standard: As Janes mentioned that, unlike in the world of printed material, "checks on style, grammar, authority, and quality have not been widely implemented in the networked world, In general it is caveat lector -- let the reader beware"[14].

Unable to search older information: All the older information is not available in online. Because the internet is the communication medium is developed recently. So, all the older information is unable to post online. Reporter Joel Achenbach points out, for example, that the majority of the Library of Congress's 28 million books do not have the content available in online; he states that "a tremendous amount of human wisdom is invisible for the researchers who has just started using the Internet".

Unwanted items with required information: while searching the information from online, the searcher may receive lot of unwanted items with relevant information. This may consume lot of time for find the relevant information. Morville points out, however, that "these relevance ranking algorithms are far from perfect"[15]; searchers may receive hints that are completely irrelevant to their search, or they may need to scroll through several pages of irrelevant material in order to find the web sites that deal with the topic of their search.

Unstable information: All the internet information is unable to give guarantee. As Healey states, "A library may come to depend on access to a certain resource or database on the web, but will have no control over whether that item continues to be offered. As such, using the web as a resource can be a risky proposition".

High cost for online databases: There are lot of free online databases are available. But that is not enough for the researchers. So, they definitely subscribe some journals or databases for their research with high level of price.

Searching techniques required for Users: Researchers usually require more instruction in order to use the online resources successfully. Kluegel states that the role of reference librarians now is "to serve as coach and tutor for the end-user

conducting the search". Reference librarians must therefore familiarize themselves with numerous online resources in order to teach patrons how to use the online resources effectively. Beyond just familiarity with the operation of a computer and with how to navigate the World Wide Web, use of online resources may pose specialized knowledge requirements, including:

- Knowledge of specific search commands. Effective online searches often require the searcher to be familiar with search commands that may be specific to the online source being searched. For example, Dialog, a fee-based online resource, has an extensive list of search commands that aren't used by any other online resource.
- Knowledge of specific search syntax. Online searches often require the searcher to know specific search syntax (e.g., use of Boolean terms such as "and" and "or" and "not").

5. ELECTRONIC RESOURCES Vs TRADITIONAL RESOURCES

One of the important criterions of any research is to evaluate information sources. In this aspect both print and e resources are made evaluation with the factors such as updating, references, citations, convenience of reading and etc. The most revolutions of information communication technology has forced to libraries for using e resources. There is lots of difference between print and traditional resources at the time of usage.

Some sources such as journal or newspaper articles can be found in both print and digital format. However, much of what is found in the Internet does not have a print equivalent, and hence, has low or no quality standards for publication.

5.1. USERS CONSIDERATION

So many considerable factors are available while using both Electronic and traditional resources. They are given below

Table 1.1

USER CONSIDERATIONS		
S.No	**Electronic Resources**	**Traditional Resources**
1.	Number of search options are available	Direct searching is not possible of all text.
2.	On line or virtual reference	Reference is possible only on shelf search
3.	Available in all 365 days per year.	Available only at library opening hour.
4.	Multi user environment	Only one user access
5.	User can access their requirement by anywhere else.	User access directly from library only.
6.	Indexing and abstracting service through Direct link with full text record	Not linked full text.
7.	Reproduction is printing method. Easy searching.	Reproduction is photocopying method, searching the required photocopy area is time consuming.
8.	Edit any part of the text is easy.	There is no provision for editing.
9.	Particular article maybe download via internet is easy.	Particular article maybe access from the hard copy.
10.	Some times e-journals are not containing information like reviews, editorial, advertisements.	Print journals consists information such as reviews, editorials, letters, advertisements.

USER CONSIDERATIONS		
S.No	**Electronic Resources**	**Traditional Resources**
11.	Searching of articles is screen and virtual one.	Searching is only physical.
12.	In Circulation, document delivery, Interlibrary loan is not required	In circulation, document delivery or intercampus loan required.
13.	Visual retrieval is time saving –unable to physical retrieval. It depends on the availability of network.	Physical retrieval. It consumes some time for searching
14.	Immediate delivery with cheap cost.	Delivery is delay because of travel the material from one place to another place.
15.	Some equipment are essential for use the e resources.	Equipments are no need to use the print resources.

6. INDIAN SCENARIO FOR E-RESOURCES

Libraries function as an essential integral component in higher education system. Academic libraries in India are facing lot of problems due to static budget and exponential price hike of library collections. The library environment is currently undergoing a rapid and dynamic revolution leading to new generation of libraries with the emphasis on e-resources. A lot of efforts have been taken in the past few years to overcome this problem of financial crunch by resource sharing through consortia for university libraries. UGC-INFONET and INDEST- AICTE consortium are the two major initiatives for university library users. These revolutionary steps are providing scholarly resources including peer reviewed journals, databases, abstracts proceedings etc. These efforts are boon to the university library users which will definitely boost the level of higher education in our country.

Library Consortium is a group of two or more libraries which have agreed to co-operate with one another in order to fulfill certain similar needs, usually resource sharing. It usually, refers to co-operation, co-ordination and collaboration between, and amongst the libraries for the purpose of sharing information. Consortia are basically, evolving a form of cooperation among the libraries which come together to share the resources electronically. It has gained momentum even in developing countries like India.

Some of the successful library consortia setup so far in India is;

1) UGC-INFONET E-journal consortium.
2) Indian National Digital Library in Engineering, Sciences and Technology (INDEST) consortium.
3) Inter University Centers (IUC_DAEF Consortia)
4) Health Sciences Library and Information Network (HELINET)
5) Forum for Resource Sharing in Astronomy and Astrophysics (FORSA)
6) Council for Scientific and Industrial Research (CSIR e- journals consortium)

Apart from the mentioned consortia, there have been efforts to setup similar kind of consortia by ICAT, ICMR, ICSSR and other government agencies to provide and access to e-resources. Among the above all consortia, UGC- INFONET and INDEST- AICTE consortium are proving to be a boon for the academic users. These two major initiatives have come to the rescue of academic libraries so that they can cater to the needs of academic depending upon them. These revolutionary steps are providing scholarly resources including peer reviewed journals, databases. Abstracts, proceedings etc. these efforts will boost the higher education system in India.

7. STATEMENT OF THE PROBLEM

Now days, the libraries and the internet provide both the scholars and the students easy and quick access to electronic information resources located all over the globe. If the academic libraries wish to retain their pivotal role in their university setting they must gain knowledge of information seeking by their academic communities to provide quality services and access to relevant information, training and resources. Developing modules of how students and academicians search for information is one of the ways to understand this.

The main objective of this study is to analyze the dependency of library e-resource users, the perceived impact of the e-resources on the academic efficiency and problems faced by them while using the e – resources. The users are exposed to an array of e-resources through internet and other devices for research. They should be able to differentiate between useful and useless information and should be able to access the needed information effectively and efficiently.

For quite a long time librarians have been studying the needs of the users to improve the service of libraries to be responsive to the needs of their users. Information seeking is a process of looking for, collection of documents / books / articles and identify those that deal with the subject of the user, the one searching for more information. There are systems designed to facilitate literature searching but the primary objective is the study of the users of libraries, the seekers of information and how they go about it, their behaviour while engaged in that search. With the knowledge gained from the information seeking behaviour of any specific group of users, libraries with the aid of computers promote new modes of search with potential to enhance the process of search.

This modern information society, the user community has been demanding, pinpointed, exhaustive and expeditious information. To cater to the information needs of the library users libraries require accessibility to the variety of information sources, particularly the digital information in addition to the print documents. There is a need to study the usage of e-resources by the university students and the teaching faculties in various universities of Tamilnadu.

The present study is at the 'micro level' and the seekers of information are the graduates, post-graduate students, research scholars and teachers of the selected Tamilnadu Universities. They generally search for information/literature to follow up their classroom lectures, to prepare for discussions and seminars on specific issues and of course, to write up assignments and project reports. They might also look for information in general and subjects of special interest to them. They might also be preparing for competitive examinations in search of a fruitful career.

8. BRIEF RESUME OF THE SUCCEEDING CHAPTERS

The *first chapter* deals with the Introduction of the study with elaborate description. The title of research work is well defined the library, library users and library resources are taken into study by categorizing traditional and e resources formats. The study is based on academic library of higher education including four selected universities of Tamil nadu.

The *seconded chapter* 'review of literature' deals with the previous study which is related to this research .More than ninety references were taken for the research.

The *third chapter* 'methodology' deals with Objectives, Hypothesis, Method used for the study ,Scope, Limitations, Population for the study, Sample for the study,

Tools used ,Description of the tool, Statistical techniques used are included in this chapter.

The *fourth chapter* deals with the analysis and interpretation and gives the detail analysis of the data collected and applying the statistical analysis made.

The *fifth chapter* deals with the findings of this analysis, further suggestions and conclusion.

REPERENCE

1) www.ofm.wa.gov/policy/glossary.asp
2) www.Ehow.com
3) wikipaedia on answers .com
4) http://www.investerwords.com/4217/resource.html#xzz261g51feh
5) www.educationonline.com
6) http://www.historyworld.net/wrldhis/PlainTextHistories.asp?historyid=aa92#ixzz02Ufiz5no
7) http://en.wikipedia.org/wiki/palam_laef_manuscript#cite_note-8
8) www.wikianswers.com
9) Balay, Bob. "Notes from the Jurassic." Against the Grain 9 (1997): 24-26
10) Healey, Paul D. "Untangling the Web: The World Wide Web as a Reference Tool." RQ 34 (1995): 441-444
11) Wong May. "Encyclopedias: On the Way Out; Already Like Artifacts of a Vanished Age." News and Observer [Raleigh] 10 Mar. 2004.
12) Lanier, Don, and Walter Wilkins. "Ready Reference Via the Internet." RQ 33 (1994): 359-367.
13) Zumalt, Joseph R., and Robert W. Pasicznyuk. "The Internet and Reference Services: A Real-World Test of Internet Utility." Reference and User Services Quarterly 38 (1998): 165-172.
14) Janes, Joseph. "Fundamentals of Searching Digital Resources." The Internet Searcher's Handbook: Locating Information, People, and Software. Peter Morville, Louis Rosenfeld, and Joseph Janes. New York: Neal-Schuman Publishers, Inc., 1996. 1-10.

15) Morville, Peter. “Using the Internet for Research.” The Internet Searcher’s Handbook: Locating Information, People, and Software. Peter Morville, Louis Rosenfeld, and Joseph Janes. New York: Neal-Schuman Publishers, Inc., 1996. 27-49p.