CHAPTER – 4
E-JOURNAL COLLECTION MANAGEMENT

Electronic library aims to demonstrate its services to fulfilling the requirements and information needs of the users, the community and the organization. It also projected the information infrastructure, change and progress in interest of internation community and integration of library resources wide networking. It shifted its activities to transmit and storage of information and maintain high standards of selectively of information quality including web technology. There are two basic factors of technology to collection management of electronic journals. (1) Computer technology and (2) information technology. Moreover, electronic publication has been also important factors as it is an expression of authors stored in digital form.

During 21\textsuperscript{st} century librarians expended their activities because of emergence of new technologies and similarly resources including e-journals also increased qualitatively and quantitatively. The resources collected by the libraries were accessed in library campus and off campus libraries. There are seven factors of creating electronic resources:

(a) Selection of e-resources,
(b) Relevance of e-resources,
(c) Acquisition of e-journals,
(d) Cooperative efforts,
(e) Preservation of e-journals,
(f) Weeding of e-journals.
(a) **Selection:**

There is speedy change in academic curriculum and projects and the learning habits of users. Library stand by its objective of over all service mission to its community. Librarians are adopting all programmes of selecting electronic journals based on the requirement of information needs and responding to information seeking behavior.

4.1 **Type of e-journals:**

(a) E-journals application through internet and distributed via E-mail and now available on web. Such journals are accessed free of cost.

(b) Parallel e-journal are such which are published simultaneously in both print and electronic forms. Online version may include Full text journals, table of contents or selected articles from the print version. Electronic form of journals may be acquired quickly than print journal.

(c) **Database or Software type:** E-journals may be in form of database or software model. Articles are reside in the databases of publishers and subscriber is supposed to take permission to access the database and use search software. The software model is used through internet connected with computer and the related databases of journals so that user can search and download the information.

(d) **CD-ROM journals:** When journals are available on CD-ROM by the publishers on commercial basis, these are known the type of CD-ROM journals Full text journals and newspaper are also made available on CD-ROM.
4.1.1 Collection Development Policy:

E-journals have increasing importance to faculty and researchers. There is rapid growth in electronic information. The successful collection development reflect the academic priorities and support study and teaching. The University libraries are part of academic world and applied information technology systems. The libraries cooperate in the collection and selection criteria with faculty and continue their collaborative efforts in selection policy. There are necessary guidelines followed by the university libraries for selection, deselection, review and approval, acquisition, cataloguing and preservation of e-journals. The issue is also concern with licensing agreements, accessibility and ownership etc.

Every library have adopted their selection criteria. Some points are as under:

(i) The selection criteria should be consistent with other developed information environment.

(ii) Electronic material should be relevant to the needs of the users community and academic needs. Special attention should be made to e-journals that provide coverage to high priority subjects.

(iii) Such electronic journals should be considered for acquisition which suits selection policy.

(iv) Duplicacy of e-journals should be avoided.

(v) Cost of e-journals should be compromising to library budget.

(vi) The product of journals should be user friendly and provide easy access.

The prime responsibility lies with the subject experts of assigned subjects. Indexes, Directories and other bibliographical tools are used to select the journals
in coordination with librarian. The department and users are also consulted. Other departments and their experts are also consulted in case of inter discipline journals.

The selector after finalizing the list of journals contact the vendors to decide the software and hardware appropriate for accessing e-journals. Necessary license policy is also decided and agreement is made accordingly keeping in view the cost of journals. Some University library form a selection committee for the purpose in which all heads of department and specialized experts are included to discuss and finalise the list of journals to be acquired in library. This committee assess the relevance of products and review the list each year and disapprove such journals which become unsuitable or not used. Such decisions are put before the committee for discussion and experts views.

There are many tools which are consulted to select the journals, i.e.

(i) Faculty suggestions,
(ii) Publisher’s catalogue,
(iii) Publisher’s consortia,
(iv) Book Reviews,
(v) Students suggestions,
(vi) Other sources: Index, Directories.

4.1.2 Challenge for selection of E-journals:

The selection of e-journals is a challenge to the libraries. The librarian faced the following challenges and reasons:

(i) E-journals should allow remote access,
(ii) Can be used simultaneously by more than one user,
(iii) Provide timely access,
(iv) Search capability,
(v) Have unique features,
(vi) Saving physical space,
(vii) Containing multimedia information,
(viii) More valuable to the study and research,
(ix) Digitally saved,
(x) Easy preservation.

There are some factors which are considered necessary while making selection of e-journals in University libraries:

(i) Cost of journal or cost of consortia,
(ii) Whether special equipment is needed to handle,
(iii) How far compatibility exits,
(iv) Copyright issues,
(v) Browsing easily or difficulty,
(vi) How far incorporate with print journals,
(vii) License agreements required,
(viii) Technical support needed,
(ix) Whether portable,
(x) Easy access or to locate.

4.1.3 Preliminary planning:

To build a collection of e-journals few steps are to be taken. It needs to go for few issue for planning and mapping out the technology, personals and financial resources. The following factors should be keep in mind while making the preliminary planning. Whether:-

(i) Suitable consortium.
(ii) Internet connectivity.
(iii) Adequate software and hardware.
(iv) Technical personal and knowledge of collecting, evaluating and selecting e-journals.
(v) Training is required:
   (a) Knowledge of e-journal collection development tools and strategies.
   (b) Understanding of selection, evaluation.
   (c) Basic technological skills.
   (d) Knowledge of more than one subject.
(vi) Fulfill the purpose of the library.
(vii) Subject area covered.
(viii) Type of journals to be selected.
(ix) Support study and teaching.

There should be longterm planning for e-journals and they should be a preferred project. If any longterm planning is made about the cost and benefits of e-journal, though initial cost is much whether longterm cost saving is possible for the library. Planning should enhance the access of e-journals through the following stages:

(i) A link of webpage to full text databases and homepage licensed e-journal publishers.
(ii) Alphabetical list should be updated manually that integrate the individual e-journals.
(iii) The database should be more updated with titles of e-journals with search interface for users.
(iv) Weblists of e-journals grouped in subject catalogues along with alphabetical listing.
4.1.4 Cost and Value:

Cost is an important aspect of consideration while collection developing programmes are taken in hand. Cost and the journals are related factors. It is very difficult to estimate the value of a journal. The pricing model of e-journals is difficult and complex. There is title or each reviewed title or each article viewed printed and downloaded. It also depend on the users also as how more users needs it an access a publishers collection of journals. The price may also be died up to the cost of print version of the journals or to the print holdings of all libraries in a consortium. Some print subscription are also factored in the cost of the e-journal package, if the license prevents you from cancelling some subscription which you want to maintain.

4.1.5 Publishers reputation:

Libraries considers the image or reputation of the publishers while developing its collection or to add any journal in the package. There are always many publishers emerged every year with their packages. Libraries keep their policy flexible to all support new entry of journals if it is useful to users. The journal when published takes time to be known by the libraries. It also takes time to be included in indexing and abstracting databases. As soon as its linking initiatives grow, the subscription is activated that are linked with some databases.

4.1.6 Accessibility:

The traditional collection policy is not applicable to modern collection policies particularly electronic journals. The most important is a mode of access of e-journals. The library can develop the following factors:
(i) Authenticity (ID)

(ii) Area limitations
   (a) Library campus
   (b) Whole campus
   (c) Unrestricted area

(iii) Type of users
   (a) Authorized/registered users.
   (b) Uncertain users (walk in users)
   (c) Requirements of the users
   (d) Use level (Separate of Simultaneously)
   (e) Usage statistics
   (f) Interrelationship with other resources.
   (g) OPAC or other cataloguing record.

   When there are different choices, the policy also change and take decisions accordingly.

4.1.7 Contents:

The selection of contents has not been an important issue in traditional journals and e-journals based on traditional journals in each library has its standard and quality for the contents of e-journals. For example IITs and Engineering colleges have different standard and quality of contents. Engineering colleges and ITI have different standard and quality of contents. Similarly, the demand of the users of different level of institutes will be different based on their standard and quality. Standards and quality of contents also change with the change in researches and courses etc.
It is also not possible for all e-journals to have the same quality because of many factors, i.e. Authorship quality, publishers standards, and review quality etc. and subscription of e-journals also vary with the quality and standards. The quality and standard of free journals is also somehow different with subscribed e-journals.

4.1.8 Comprehensiveness:

There is a relationship between the information need and the users accessibility. There are three factors which increase the quality of comprehensiveness, i.e. (1) Long ability (2) Accessibility and (3) Currency, particularly of full text. There are journals which have their current issues on the web and libraries include such journals in their mailing list because of their currency and availability. There are few other journals which are put on web sometimes, when they are published. Some journals have incomplete contents and are not preferred more by libraries. Sometimes few journals are put on trial for months or years. Libraries may or may not make such journals available to their users.

4.1.9 License:

Library make an agreement of license with publishers under the conditions of subscribing e-journals individually or in consortium. If a library subscribed a consortium, it may effect the selection of e-journals.

4.1.10 Users choice:

There are sometimes specific need of a specific journals available in electronic format. The information may be first identified and then identify the
publisher and the options of access then it will identify the needs of user and the suitability of e-journal. Moreover, the cost is also considered.

Identification of journal may be traced in Ultrich International Periodical Directory or search engines like Yahoo and Google etc.

4.2 Online access to print subscriptions:

There are many publishers offer both print and online access to their journals. Price may differ. Sometimes online access is free to print subscribers or otherwise access fee “for both versions”. On the other hand electronic subscription. Publisher, sometime design online subscription and also safeguard print subscription. There are also agents to arrange the activation of online access to journals subscribed. A code is also given by publishers from the level of print issue. If free online access to print subscription is given option and activated. Agents also provide a list of e-journals along with their subscription. In the absence of serial vendors, the site of electronic collection online site may be consulted. It has a collection of 2400 journals. Publishers also link their OCLC to web pages of publishers.

E-journals have grown beyond expectations and it has been impossible to access them. It has raised some management problems in libraries in in-housing operations, as under:

(i) Problem of FWP e-journals whether catalogued.
(ii) Catalogue journals that are accessed through aggregation only.
(iii) What will be the method of catalogued of e-journals.
(iv) Designing a web Graphical user Interface that promote easier access to e-journal collection.
(v) Can a link to free on e-journals should be created.
The E-journal collection is now growing in University libraries from potential capacity, for easy access and retrieval the creation of separate database became essential. The database includes:

(i) Title information: Full or short title.
(ii) ISSN for editors of print and electronic journals
(iii) Publishers.
(iv) Journal provider, e.g. INFLIBNET, JSTOR.
(v) URL link: Fulltext or provider.
(vi) Information about holdings.
   (a) Beginning and End Volume number
   (b) Beginning or end issue.
   (c) Beginning or end year.
(vii) Subject heading.
(viii) Search engine used.

Thus, it may be said that databases is an accurate source for full text periodicals, content coverage and license agreement. The database act as gap and work a centre media among source of information. It facilities tracking usage by title, aggregator or publishers. It can measures user’s feedback and improvement in use.

4.3 Cataloguing e-journals collection:

Catalogue is a bibliographical record and useful for electronic journals. The better way is OPAC (Online Public Access Catalogue) which is widely used. But majority of OPAC are not web based and no software was not available for direct access to online sources. There are few libraries prepared lists of e-journals and provided hot link on their webpage and allow direct access so that user can locate and access electronic e-journals on webpage.
It is the first step to consider the cataloguing work is to see the sources available in library for the purpose. Budgetary provision hardly allow the cataloguing department to take up the cataloguing work separately. E-journals have separate entity in every library and treated as specific resource as it differ with print journals and needs to discuss on following issues:

(i) E-journals are issue based and added over a certain period.
(ii) There may be changes in volume and issue number.
(iii) The website may possible change the name and location or address.

Generally the libraries prepare catalogue of print version of journals, but add some more information about publisher, vendor etc about e-journals. This is known as single record option. It has some difference:

(i) Similar contents,
(ii) Title may differ but it did less problem,
(iii) Preservation differ,
(iv) Title of print and e-journals may change.

Separate record may also prepared and maintained. Separate bibliographic record may be maintained for both print and electronic journals. Each record describe its format and contain the details in the following instance:

(i) Resource exist in e-journals.
(ii) Contents differs.
(iii) There is change in format.
(iv) Contents may be equivalent to more than one print source in a database or website.
(v) The original text cannot be definitely identified. The separate record system is costly.
4.3.1 Myth about e-journals:

Hazel and Woodward discussed the following myths which are universally acceptable:

(i) E-journals provide better access to their articles.
(ii) Academic community generally read the journals at their convenient location.
(iii) Users prefer electronic journals.
(iv) E-journal provide quick and sharp access.
(v) Users are generally aware about the publishers of the journals they usually consult.
(vi) Users prefer page integrity.
(vii) E-journals are not limited to one library.
(viii) These are economical.
(ix) Storage and dissemination is cheaper or free.
(x) E-journals need no paper and hence save paper.
(xi) More archival issues are not demand except few of last few years.
(xii) They are generally more current.
(xiii) They provide graphical material of print versions.
(xiv) They are always accessible without any consideration of time and location.
(xv) They are time saving for library staff.

4.3.2 Collection Management and Library Professionals:

Library personnel have to understand some important issues and shoulder the responsibility of the quality collection. They face many problems like rising cost and labour, complex distribution system, license agreement problem, handling
procedures, administrative problems etc. But they are also aware about their capabilities and expertisation.

Most of the University library is not in sufficient number and fully skilled in modern technologies which have decreased the service tempo and users are not well satisfied even if the resources are available.

4.3.3 Type of consortia:

There are two types of consortia:

(1) **Single title consortia:** It consists single subscription for print journal and access for e-journals from any location. It is developed by a single institution or organization for having or not having many units or branches. For example, Indian Institute of Astrophysics, Bangalore and its branches in different cities.

(2) **Group of titles consortia:** It consist of group of titles of one publisher or many publishers. For example, JGATE (Information Pvt. Ltd.); EBSCO database (Ebsco Information Service Group); OCLC (USA); UGC-Infonet; CSIR e-journal consortium.

4.4 OPAC:

It is an effective source of access of e-resource collection. It is an infrastructure for a digital resource consists of web-OPAC for library catalogue, specialized collection websites for specialized local collection, portal or subject gateways for web resources and a search and browse interface for local collection. OPAC is much useful to the users as (i) gives easy access to wide range of information about the holdings of a library (ii) It reduce manual labour (iii) It brings all copies of one title at one place (iv) provides many ways of searching (v) performance single integrated system (vi) proved as a security to library collection.
Web OPAC is a new development of OPAC. It is originated west. It serves as gateways to the sources available in the library and other participating libraries without any limit of local collection. Web OPAC has many specific features: (i) It offers of access of the collection of the library and other libraries also (ii) It provide details of documents stored in computers of the whole world (iii) easy to access data available in the form of bibliographical record (iv) It has capability to search other libraries OPAC (v) It link all resources and easy access to them (vi) It works a search engine (vii) It is a gateway of information (viii) It require a “Log in”, user name or password (ix) store bibliographies, full text databases.

Electronic journals are in electronic form or print journals are converted into electronic form. These may be digital form. Their use has increased in every sphere of life and available on internet and accessed online. They are stored in CD-ROM databases. Digital format has many advantages over prints like convenient and more functional. Preserving digital material and continuous access is an journals are being created or converted in digital format. Their primary objective is accessing information.

Digital or electronic journals differ with print version (1) They are in digital form (2) They are accessed while paper based is read not accessed (3) These have machine dependency and require software and hardware (4) It needs proper maintenance (5) However, digital information is fragile and disappear anytime without precautionary measures and differ with traditional technologies. It is more easily corrupted and altered without recognition. Store media has short span of life Information require access techniques. Sometimes information cannot be used without softwares.
In view of the above the librarian identify the best practices of satisfy the requirements:

(i) Space selection environmentally,
(ii) Improved access technology,
(iii) Easy to use,
(iv) Easy to upgrade,
(v) Greater searching capability,
(vi) User interface.

Storage:

There are two types of repositories’ where e-journals are stored and put on access by the users.

4.5 CD-ROM:

CD-ROM became popular with indexing and abstracting services. It is natural that most users wanted more access and variations in computer platforms. The data scanned and converted into images and put them in optical discs CD-ROMs.

E-journals and library consortia:

E-journal is a media of communication of knowledge since last two decades. The first scholarly journal was published in 1665 followed by the philosophical transactions of royal society. It was very costly with problem of peer review process and publication delays. The development of computer and internet and communication networks and WWW has facilitated electronic forms. It was
an revolution in e-publishing. Print publication still dominate though there have been many databases as major players in the field of e-publishing.

Consortia is a collection package of e-journals of one or many publishers. It is a database and access to e-journals. It has many benefits:

(i) Encourage access to e-journals,
(ii) Proper utilization of funds,
(iii) Ensures continuity in subscription,
(iv) Best source of resource sharing,
(v) More useful to big libraries,
(vi) Cost sharing support.
(vii) Increase use base access from PC of users.

A library consortia may be formed at local, regional, state, national and international level and inter-institutional level. Consortia are an cooperative arrangement among institutions or associations to the maximum use of e-resources. It provides current as well as archival access to core and peer reviewed journals. Consortia is necessary because of:

(i) To meet the challenge of growth of knowledge and subjects.
(ii) Meeting the shrinking of budget.
(iii) Changing need of new technology.
(iv) Consistency in access.
(v) It is cost effective.
(vi) Autonomy and reliance on information.
(vii) Improving user’s satisfaction.
(viii) Direct access from desktop.
(ix) Time saving.
Consortia is a demand of the modern libraries and require following aspects:

(i) Computerisation of a library pre-requisite,
(ii) Availability of infrastructure of networking,
(iii) Internet connection,
(iv) License agreement with libraries,
(v) Organisational structure,
(vi) Participating libraries should be competitive,
(vii) Security arrangements,
(viii) Mutual understanding among participating libraries,
(ix) Skilled library staff.

4.5.1 Acquisition issue:

Acquisition includes three functions: Ordering, receiving and Accessing of journals. Order means the selection of journals, ordering and receiving process free journals are also included in library catalogues or web lists. Orders are generally handled by subscription agents for individual or package of journals. They are playing a important role in providing or supply or made available the journals. Though few libraries directly deal with the publishers and negotiate with them the price and license issues. They also directly clarify technical specification of online journals. The main problem which the library deal directly is the missing issues in case of print journals.

However, vendor and agents give their service in regarding following issues:

(i) Subscription contract at one point.
(ii) Single bill and renewal list.
(iii) Availability of on-line access with print subscription.
(iv) License issues.

(v) Free access to an aggregate database of journals of many publishers.

(vi) Problem of access barriers and penalty.

Order can be placed by phone, fax, E-mail, By post. Prescribed form and websites can also be used as source for placing order. Vendor responses with a registration or enrolment or membership number used for mailing purpose. After placing order by the library and submitting the subscription, the vendor of publisher confirm the access availability, which is checked periodically.

**4.5.2 Renewal process:**

Every year library makes a survey of users and the quality of e-journals, on the basis of which the contract is renewed. There may be many changes in content, which depend on the type of contract of individual title or package. It opens the some issues: (1) If sources are added by the vendor or removed some titles to which previously has accessed (2) In case of full text database, if any duplication occurred (3) How many unique titles are there in databases or package subscribed.

A usage statistics is also prepared to know the use status of journals. There may be variations in use of journals and titles more used seldom or never used. The important issues are:

(i) No. of session or log on.

(ii) No. of queries or search

(iii) Peak time of use during the day.

(iv) No. of users turned to use and whether users are to be awarded more.

(v) Price of individual title or database and whether it is low comparing the offer of other vendors.
(vi) Whether aggregator database title or database and whether it is low comparing the offer of other vendors.

(vii) Whether aggregator database has longterm access or need changes.

Duplication of journals in a large package has to be viewed whether to avoid it or cancel the print version. A policy need to be framed for the purpose regarding (i) regular articles are contained in journal (ii) Print version contains supplementary materials (iii) quality is chequed (iv) Whether unstable channels provided for access online journals (v) collection sharing agreements (vi) special software for online journals (vii) Equivalence status of print journal and electronic journals (viii) Print journals are heavily used.

4.6 Digital preservation:

Preservation is a technique which prevents the original digital documents and makes it in improve ways to use it again. Its service involved many methods to maintain the digital objects and apply preservation services with different methods, skills and providing unique and dynamic new use of information. Its main object is long term maintenance of a byte stream to reproduce a suitable facsimile of original documents. It maintains continue accessibility of contents of documents by the time to come and changing technologies.

Digital depositories are based on two major components: (1) The repositories with policies, standards (2) The repositories with a trusted system. Digital depositories cover:

(1) CD-ROM
(2) Print publication disc.
(3) Online/Networked publications
(4) Special collection
In house projects with images and structured products.

Websites

Audio

Geographical information system.

Digital material is short lived in the present digital environment. Disc and tape detriote in a very short period in comparison with paper media. CD-ROM last for hundred years. If they are neglected they cannot survive for a longtime. There are many methods to preserve digital collection of a library, and may be put in two categories:

1. **Preventive measures taken actively:** (i) storage and its handling (ii) maintain standard for creating and managing them (iii) Preservation metadata.

2. **Planning and strategy:** (i) storage and backup (ii) Migrating process of maintenance (iii) Emulation material used for preservation.

Digital repository is simply a place of storage, access and preserving the digital material. The digital object may be different in nature and use by specific hardware and software. All types of digital material or object can be stored in repositories, with the description, which may be articles of a journal, photographic image, numerical data, video and e-books, e-journals and e-newspapers.

Academic libraries, particularly the University libraries have adopted preservation methods and established depositories for providing feedback, policy, planning and technologies and share the information with user. Documents which are rating any may be lost soon if not treated any prevention measures. The libraries manage them with their shrinking budget and environment precautions. This has put a challenge before the libraries to
join hands with other libraries and make a vast planning, integrate the policies, procedure and technologies and decide to play a new role in preservation field.

4.7 Digital delivery of thesis and dissertations:

Information management is a life blood of an organization and it is necessary to manage bibliographical control on information resources for its effective utilization catalogue has been a worldwide utility. OCL in 2009 has introduced the delivery of world catalogue as communication device such as PDA and smart phones and local users are benefitted. These developments also require bibliographical control to the maximum exploitation of resources. But, Indian libraries are lacking behind in the delivery of documents in full text and bibliographical information of resources. Thesis and dissertations have more importance in academic activities and provide effective information in researches. The use of information technology has enabled to deliver all resources to distance places.

The digitalization and website use of thesis needs a proper framework of policy to achieve the target of Universal bibliographical control and effective delivery of information to serve the end users. AICTE and MCI formulated few guidelines for the digitalization of thesis and use of websites:

(i) Establishment of National Repository of Research information, Govt. of India. It will acquire bibliographic and full text information of all thesis and dissertation kept in Universities and colleges in India.

(ii) Issuing a Repository Document number for online filling of thesis.
(iii) A Uniform Research Regulations for e-submission and deposit of thesis and permitting access and use of information content of document through network or web by the academic community.

(iv) Bibliographical control of thesis in international language i.e. English. It will be obligatory on the part of the students and scientists of Universities and Research Institutions to provide information for such national repository.

(v) National Repository of Research Information should provide web OPAC of thesis and allow free access to OPAC and abstract to provide access facilities and download the full text.

(vi) There is a challenge of obsolete software and hardware for life long permanent preservations.

4.8 Trends in Digital Universities Libraries:

University libraries are going through a tremendous change and libraries find them instable in this changing trend. The digital publishing have forced to the structural change in scholarly communication. Important publishers and the Universities are publishing scholarly products of academic communities and then supply or provide it to its users. Publishers are retaining copyright of the scholarly information's. At the same time the cost of e-journals and e-resources hasescalators which haveeffected the library budget. During past few years, the price has been increased or exceeded and effected by inflation. The budget spent on electronic journals has been approx. 20% of the total budget, which is fine times as much as in 1990-91.

The library budget of Universities have been sinking day by day and the scholars are pressing hard for more and more scholarly journals as part of their research and communication process.
4.9 Digital environment:

The University environment of University libraries is changing fast. Universities are playing an important role in the national development. There has been a transformation in electronic infrastructure and internet connectivity and the increased attention of electronic learning to enhance the standard of higher education. Efforts are being more for more access the e-journals. University libraries are turning to be an Digital library holding digital resources and providing services electronically or access by remote. Digital libraries cannot be built overnight. There are many stages to be taken to make the digital library, i.e. (i) Digital infrastructure (ii) Digital resources (iii) Digital technology (iv) Digital services. Other stages are e-catalogue, networking, CD-ROM, digitalization of material and establishing institutional repositories.

4.9.1 E-local content:

University libraries always collect material published locally as well as published worldwide i.e. Thesis, dissertations, Research Reports, Conference and Seminar papers, Journal articles written by the faculty members, scientists etc. Librarian produced electronic databases either index or full text of such material and made available to users. During last five years many University of Scholarly output of the institution. E-journals are acquired direct from the publishers or by subscribing consortium.