International Journal of Scientific Research in Multidisciplinary Studies
Vol.9, Issue.5, pp.29-39, May 2023
E-ISSN: 2454-9312 P-ISSN: 2454-6143
Available online at: www.isroset.org

Research Paper

Assessment on Collection Management of Electronic Information Resources in Jimma University Library System

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Received: 19/Mar/2023; **Accepted**: 22/Apr/2023; **Published**: 31/May/2023

Abstract— An electronic information resource is any information source that the library provides access to users in an electronic format. These electronic information resources can be accessed via computer and other devices as much as an electronic network is available. The objective of the study was to assess techniques used by the university to manage electronic information resources in the library. To achieve the proposed objective cross sectional survey was used. To collect the data the researcher designed and distributed the questionnaire for respondents. From the 336 total population, 40 numbers of respondents were selected randomly. This study contributed to the library users, researchers, and curriculum developers finding out the problems with materials, services, and users in the Jimma University library system. The future development and success of academic libraries depend greatly on how they embrace technology in their operation mainly in the management of electronic resources. The librarians used the ABCD and Dspace software for the interlibrary management of electronic information resources in the library. The users can access the collection of electronic information resources in the library and remotely through the campus network. The SPSS software version 20.0 was used for data analysis.

Keywords —Electronic information resources, library system, collection management.

1. Introduction

Electronic resources were created as a result of the development and expansion of the e-publishing sector in the ICT sector. It serves as a catch-all phrase for all digital materials. A computer can store, organize, transmit, and display digital information in a format that does not require any intermediate conversion steps. 'Born digital' is how it is described. They refer to the electronic distribution of text through computer terminals and the use of information technology in the creation of publications. These resources are crucial for the production, transfer, and archival of information[1].

Electronic resources include a wide range of genres, formats, storage, and distribution methods. It is a blend of 'born digital' and' made digital' resources. The media used to store and send content to consumers is referred to as storage. The delivery media could be a CD-ROM, a magnetic tape, or an Internet-accessible server[1].

Information is currently the most precious resource on earth. Information is a wealth and product commodity. In the twenty-first century, in addition to meeting basic human needs, information technology has made the entire world into a global village with a global economy that is increasingly dependent on the creative management, services, and distribution of information[2].

A wide range of resources is thus available in the electronic information space, including document delivery services, websites, electronic books and serials, electronic databases provided by information aggregators, and indexing and abstracting services. Numerous of these resources might be hosted locally on a library's server or could be accessed remotely via modem or direct Internet connections that the library keeps up[3].

Electronic resources that librarians have located and remotely accessed have shown consistent, incremental expansion in their offerings. They raise special challenges including comparing numerous distribution and access media for the same content, intricate pricing schemes, access to back-files, copyright, security, bibliographic control, indexing, archiving, contractual licensing issues, high costs, and issues with indexing, security, and bibliographic control. The widespread availability of electronic resources created additional difficulties for libraries in their acquisition process, such as site licensing, copyright issues, and ways to provide access to varied electronic resources[3].

The study's major goal was to evaluate the preferred collection management of electronic information resources

operations carried out in the Jimma University Library System. To achieve the aimed objective specific objectives such as: investigating the mechanism used to manage the electronic information resource in the library, investigating the method of evaluating electronic information resources in the library, assessing factors affecting the collection management of electronic information resources in the library, evaluating the possibilities of using the library's electronic information resources, To analyze the improvements needed to improve the library's collection management of electronic information resources. Many of a library's regular operations can be automated by utilizing various programming and networking technologies that are already available[4].

The development of digital resources to improve teaching and learning has been a challenge for education at all levels, including primary, secondary, and higher education[5].
The researcher researched and evaluated how electronic information resources permit the research output. Best practices and standards are still being developed to address system compatibility, standard format, interoperability, data encoding, and information transmission schemes.
To achieve the following specific objectives the researcher prepared the following research question and Answered through investigation in the result discussion.

RQ1. What are the mechanisms used to manage the electronic information resources in the library?
RQ2. How the collections of electronic information resources in the library were evaluated?
RQ3. What are the factors that affect the collection management of electronic information resourcesin the library?
RQ4. What are the possibilities to access electronic information resources available in thelibrary?
RQ5. What improvements are required to improve the collection management of electronicinformation resources?
The paper is organized as this. Section 2 describes the related work to the study. Section 3 explains the methodology used for the investigation. Section 4 describes the data analysis and results of the research.

2. Related Work

2.1 Jimma University Library System

The investigation was carried out in the library system at Jimma University. It lies 350 kilometers from Addis Ababa in the southwest of the country. Diverse private university schools and governmental higher education institutions are actively involved in generating skilled citizens in Jimma, a city of many diverse ethnicities, who will participate in Ethiopia's growth and transformation strategy.

The University is one of Ethiopia's higher education institutions, with five colleges, two institutes, and a school of graduate studies (College of Natural Sciences, College of Social Sciences and Law, College of Public Health and Medical Sciences, College of Business and Economics, College of Agriculture and Veterinary Medicine, Jimma Institute of Technology, Institute of Educational and Professional Development, and School of Graduate Studies) working under the University's cordial supervision.

In addition to its academic activities, Jimma University is well known in the neighboring community and other areas throughout the country due to its community-based education strategy with the motto “We are in the Community”. This is to alleviate numerous community problems through expert assistance and scientific research.

As a university library, Jimma University Library System (JULS) was founded in 1999 with the mandate to further the educational, research, and public service objectives of the entire university community. To fulfill its core mission and vision, it offers information services in both traditional and electronic formats through each of its branch libraries (Main Library in 1999, Agriculture and Veterinary Medicine College Library in 1952, Health Sciences Library in 1985, Education Library in 2003, Technology Library in 2004, Social Sciences Library in 2004, Graduate Studies Library in 2004, Law Library in 2005, Business and Economics College Library in 2010 and Females Library in 2010).

The Ethiopian Ministry of Education has entrusted Jimma University with the task of academic and research operations. In addition to its traditional information services through print materials, Jimma University provides free electronic information resources to its academic staff, other non-academic staff, and students to enhance academic work and research activities through its library systems.

Collection management is a well-known issue in the world of library administration. Due to the diversity in the display of information in many formats and a wide range of electronic resources, it has grown complex.

Many studies have been undertaken throughout the world on the changing landscape of collection management as a result of the impact of information and communication technologies. They investigated the collection management process as well as its specific aspects and identified issues with broad ramifications in the new information environment. Various sources have been identified while reviewing and analyzing the status of research in collection management, which serve as invaluable and practical suggestions for collection management.

The review of literature in this field is critical for the current research study because it exposes a sequence of changes in collection management that have occurred from the formation and beginning of libraries. It identifies the numerous stages of development that have occurred since its inception. It can shed light on what additional research is required, particularly in dealing with the transition from print document collection management to electronic resource management. It reveals any gaps in library collection management that require further research.

2.2 Electronic Information Resources

Electronic information resources are a means of storing information electronically and making it accessible via electronic systems and networks. Furthermore, the term "electronic information resource" refers to a broad range of publishing reproductions such as OPACs, CD-ROMs, online databases, e-journals, e-books, internet resources, print-on-demand (POD), e-mail publishing, wireless publishing, electronic link, and web publishing, and so on[6].

The current digital environment's proliferating growth of various electronic resources opens up new horizons for a wide range of issues, including access, the availability of information in various formats, collection policy agreements, licensing agreements, copyright concerns, resource sharing, preservation, and collection evaluation. There is a ton of material on the topic of managing electronic resource collections.

To conduct the investigation, a review of research about the present state of collection management policies, issues, and practices in the field of academic libraries was conducted. Related writings on managing electronic journal collections can be downloaded from the web or accessible through networks.

These articles are grouped under collection management: concept and characteristics of e-resources on collection management, collection development policies, changing dimension of collection development to collection management, and related case studies and user studies will be conducted by researchers in the jimma university library system. They would be categorized and analyzed their findings would be interpreted.

2.3 Types Of Electronic Resources

Online databases: An online database is a collection of e-books and e-journals from multiple publishers in various subjects that are available online. Some of these resources are free to libraries in developing countries, while others require a price to be paid as a subscription. Access to these databases, on the other hand, offers researchers thousands of scientific journal articles on a single subject of specialization or research[7].

Digital information: Digital information is a method of converting printed information resources in libraries and information centers to electronic forms using digital means. It is a relatively new technology in which information materials in paper format are translated by machine into microfilm and another small form for rapid and easy access via electronic methods.

Digitization refers to the process of converting paper-based information to digital information. However, the benefits of library digitalization in providing access to primary electronic sources from any remote geographic location and multiple accesses to a single resource are considerable. However, because special and priceless collections are restricted to specific institutions, users from other institutions, research centers, etc must travel a long distance to access the material. According to researchers from other institutions who are located farther away from the library or information center where the printed information resource is found, digitized resources would enable them to access materials more easily and without difficulty. As a result, the majority of researchers believe that this is the case[1].

Electronic journals: Since the advent of the internet, researchers and public library organizations have recognized the value of information and communication technologies (ICTs) as efficient ways to share research findings, overcome obstacles by fully transferring intellectual property rights from author to publisher, and speed up the presently sluggish pace of traditional publishing[8]. As a result, the number of electronic journals, pre-print (e-print), archives, and electronic books is increasing. However, because electronic journals give more efficient access to information, they are easier to provide to library clients than traditional print content.

CD-ROM databases: CD-ROM databases are electronic information resources that are stored on a CD-ROM. In libraries, CD-ROM databases provide users with access to relevant databases without the need for internet connectivity. It is thus less expensive than online databases because information may be accessed offline without incurring telecommunication costs.

The introduction of CD-ROM has led to the use of e-journal collections in the reference library and an increase in the states of libraries [9]. Additionally, if the system is networked, this CD-ROM database is far superior to traditional (print) information sources because users at their separate workstations might access information without physically visiting the library.

2.4 Collection Development and Collection Management.

2.4.1 Collection Development

Collection development is defined in Harrod's Librarian's Glossary (1984) as "the process of planning a stock acquisition program not simply to cater for immediate needs but to build a coherent and reliable collection over several years, to meet the service's objectives".

The goal of collection development is to identify users' information needs, select and acquire useful documents, apply a systematic and judicious approach to track collecting spending, review the collection regularly, and weed out undesired materials from the collections. Its goal was to create a balanced collection that met the university library's aims.

2.4.2 Collection Management

According to[10] Collection management is the methodical, efficient, and cost-effective management of library resources. Because it is analytic and programmatic, it is methodical. It is concerned with the functional programs that adhere to the institutional and library aims and objectives. Selection, order, procurement, budgeting, financial distribution, technological processing, storage access, and maintenance are all aspects of

collection management. It also entails the management of human resources to carry out these operations.

2.4.3 Collection Development Policy

The libraries' mission is to support teaching, learning, and research at the university by offering a useful combination of non-print and electronic resources and integrating their use. However, there are issues with access, interface, technical support, and licensing that are not present with the procurement of conventional library materials. To address these difficulties, the Libraries must create a unique electronic resources collection development policy. This policy's objectives are to provide uniformity and priorities in the management of this significant component of the libraries' collection and to provide guidelines for selecting acceptable electronic resources[11].

3. Methods And Material Used

3.1 Overview

The goal of this part was to present the researcher's methodology and processes for carrying out the investigation. The methods, procedures, and other instruments utilized to gather, analyze, and interpret data were attempted to be described step by step. It also demonstrates the efforts taken to ensure the validity and reliability of the instruments utilized.

3.2 Research Design

The study employed a cross-sectional survey. The research design's goal was to determine the prevalence of the outcome of interest in the population or subgroups within the population at a given time point. Cross-sectional studies are occasionally conducted to evaluate relationships between factors and the desired outcome. They are limited, however, in that they are performed at a single moment in time and provide no indication of the sequence of events, such as whether exposure happened before, after, or during the commencement of the consequence. And this study design would have a lot of advantages for this study, such as being relatively inexpensive and taking up little time to conduct; being able to estimate the prevalence of an outcome of interest because the sample was usually drawn from the entire population; assessing many outcomes and factors; and there was no loss to follow-up[12][13].

3.3 Study Population

The Staff members of the Jimma University Library System made up the study population. Employees of the Jimma University Library System served as the study's respondents. There were 336 participants in the study as a whole. 40 individuals were randomly selected from the entire population. As they would be able to provide in-depth information as well as richer and more thorough information about the e-resources used at their university, the researcher anticipated that such respondents would be well-suited for the study. As a result, the researcher's goal was to use sample-gathering techniques to investigate pertinent data from that community.

3.4 Sampling Technique And Sample Size

The researcher employed a straightforward random sample strategy for this study. A sufficient sample size enables the acquisition of high precision, accuracy, and confidence at the lowest possible cost. To calculate the sample size for this study, the researcher employed a single population proportion. The following formula was used to estimate the overall sample size depending on the degree of accuracy necessary in the estimate, specifying the acceptability margin of error and the confidence level.

Sample Size Determination Formula:

$$N = \frac{z^2 * p * q * N}{E * (N-1) + Z * p * q}$$

Where:-

- **N**= total population
- **n** = required sample size
- **z =** confidence level at 95% (standard value of 1.96)
- **E =** margin of error at 5% (standard value of 0.05)
- **p** =population proportion at which the sample size is maximum (at p=0.5 and q=0.5,p*q=0.25)
- **q**=1-p

N= 336 (The number of staff workers in the library system)

$$n = \frac{1.96^2 * 0.5 * 0.5 * 336}{0.05^2 * (336-1) + 1.96^2 * 0.5 * 0.5}$$

$$n = \frac{3.8416 * 0.25 * 336}{0.0025 * (335) + 3.8416 * 0.25}$$

$$n = \frac{322.6944}{0.8375 + 0.9604}$$

$$n = 179$$

The researcher divided the chosen sample size into the population to examine the finite population correction (FPC). Unless the needed sample size may be accepted as it is, FPC would be used to adjust the final sample size if the result was larger than 5% (i.e., n/N>5%N)[13].

FPC formula:

$$nf = \frac{n}{1+e}$$

Where **c**=n/N and, nf = final sample size

$$c = \frac{n}{N} = \frac{179}{336} = 0.533$$

Because c was more than 5%, the researcher employs finite population correction (FPC) to determine the appropriate sample size.

nf =179/ (1+0.533) = 116

As a result, the researcher determined that the sample size of staff workers was 116. However, due to business and time constraints, the researcher limited the number of responders to 40.

Sample size determination is the act of deciding how many observations or replicates to include in a statistical sample. The sample size was an important aspect of any empirical study whose purpose was to conclude a population from a sample. In practice, the sample size employed in a study was determined by the cost of data collection and the necessity for statistical power. In more intricate investigations, numerous distinct sample sizes would be used.

3.5 Data Collection Instruments

For data collection, the researchers can use questionnaires, interviews, observations, and document analysis, but for this study, a questionnaire was employed to collect data.

The researcher used questionnaires to collect the data from the library workers. The library staff members were given forty (40) surveys. Respondents were given the option of ticking the most appropriate response to an item, and the questionnaire items included all of the required issues to provide all of the responses to the research questions.

The structured questionnaire was administered personally to limit the chance of failure to respond questionnaire and to guarantee that respondents provided relevant and accurate information.

3.5.1 Questionnaire Design

The questionnaire was designed and utilized to gather data for the study while keeping in mind the aims and scope of the study, as well as the huge shift in the selection, management, dissemination, and use of electronic resources by library professionals and users. The questionnaire was designed in such a way that accurate, valid, and trustworthy findings were acquired. The purpose of the questions was to determine the level of usage of the electronic resource collections, how users sought information, their preferences and expectations for the library collections, and their level of satisfaction.

The questionnaires were carefully designed to be as comprehensive as possible while maintaining their simplicity and neutrality. To boost response rates, the questionnaire's length was cut. The questionnaire was pretested and polished before being distributed. For the study, a staff survey for the university library was created. The following sections provided a detailed explanation of the questionnaire's contents.

3.6 Data Analysis

Data analysis was done after its collection. The responses were classified based on the information provided by respondents. The data were analyzed using the Statistical Package for Social Sciences (SPSS version 20.0). Frequency distribution tables, percentages, pie charts, and bar charts were used to show and explain the data. The SPSS version 20.0 has extraordinary powers and flexibility, allowing it to analyze massive amounts of data in seconds and generate an infinite number of simple and complicated statistical results.

3.7 Data Sources

In this study, data from both primary and secondary sources were used.

3.7.1 Primary Sources of Information

Primary data are the initial information gathered for a particular study objective or data obtained from a questionnaire, an interview, or observations. Because it was necessary to get information directly from the chosen respondents among the university library staff members, a primary source of data was picked. Information from respondents was gathered using a structured questionnaire.

3.7.2 Secondary Sources of Information

Secondary data are data that was previously obtained for a separate study and is now being used for a new study or purpose. The researcher used Internet publications, journals, documented reports, and Internet material.

4. Results And Discussion

4.1 Overview

This chapter includes the analyses and data gathered from a random sample of respondents. In total, forty (40) questionnaires were issued to both male and female library staff members at Jimma University, and forty (40) questionnaires were retrieved. The analysis was conducted using items from the questionnaire and was organized following the research questions and objectives stated in chapter one. The results are presented in the form of frequency distribution tables, pie charts, and graphs to provide better explanations and to make the analysis easier. These data presentation modes were created using the Statistical Package for Social Science (SPSS) version 20.0 using survey data.

4.2 Demographic Information

This is the first part of the analysis that deals with the respondents' (library staff members) basic data. It was critical to ascertain the respondents' age, gender, educational background, and year of work experience. Because individual responses or perspectives on some topics may differ, these specific traits would influence their participation in the survey. The data involves respondents' gender, age, level of education, and number of years worked with the University which is presented as follows:

Table 1: Age Distribution of Respondents

Age range	Frequency	Percent
20-30	29	72.5
30-40	9	22.5
above 50	2	5.0
Total	40	100.0

As the above table 1 indicates that 29(72.5 %) of the respondents were aged between 20-30, 9(22.5 %) of the respondents said that the age was between30-40, and 2(2 %) of the respondents were aged greater than 50 age. This implies that most of the respondents were between20-30, which accounts for about 29 respondents from the total of 40(100 %). Based on this clue researcher concluded that most respondents lie in the ages 20-30 years, who are very energetic and can help the institution to achieve its target or objectives.

Table 2: Gender distribution of respondents

Gender	Frequency	Percent
Male	19	47.5
female	21	52.5
Total	40	100.0

duties are highly resided in the hands of female employees. Based on this table the researcher concluded that male workers are not equally participated in the management of library collection. This unequal participation of male and female workers in the management of the collection of library material indicates male workers have no more interest than female workers.

Table 3: Respondents' education status

Education level	Frequency	Percent
Certificate	1	2.5
Diploma	7	17.5
Degree	28	70.0
Master	4	10.0
Total	40	100.0

are degree holders at their education level. Based on this information researcher concluded that the library has the well-educated manpower to achieve the objective and goal of the library which paves the way to provide effective and up to dated information/ service for their users.

Table 4: Respondents' work experiences

Year of work	Frequency	Percent
1-3 year	8	20.0
3-5 year	17	42.5
5 andabove	15	37.5
Total	40	100.0

The above table 4 indicates that 8 (20.0 %) of the respondents said their work experience was 1-3 Years, 17(42.5 %) of the respondents said their work experience was 3-5 Years, and 15 (37.5 %) respondents said their work experience was above 5 years from the total population of 40(100.0%) respondents. This table implies that most of the respondents were 3-5 Years' experience as main library staff members. Based on this output the researcher concluded that the library has experienced manpower to launch good administration in the management of library resources and services for its researchers/users.

4.3 Electronic Resource Subscriptions

The following Figure 1 indicates 14(35.0%) respondents said that library staff uses independent subscriptions, 7(17.5%) respondents said that library staff uses consortia for subscription, and 19(47.5%) respondents of the total population of 40(100.0%) said that library staff uses both independent and consortia subscription for electronic information resource in the library. This implies that the university library staff uses consortia and independent subscriptions for electronic information material in their library. Based on this information, the researcher concluded that the library system use both independent and consortia methods for the subscription of the e-resources.

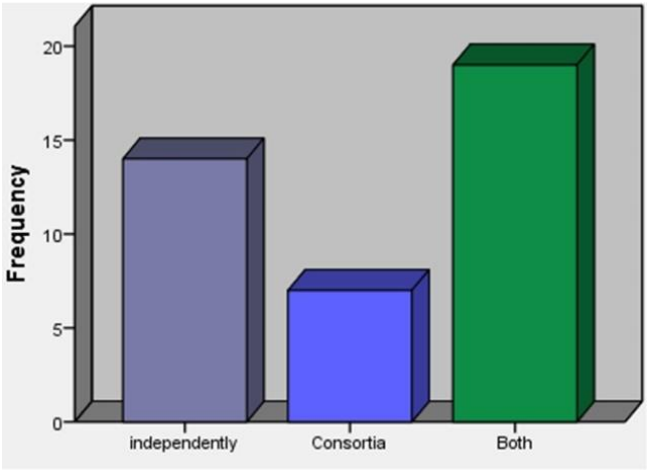

Figure 1: Electronic resource subscriptions

4.4 Whether Culture Library Uses Independent Subscriptions

The following Figure 2 indicates 12(30.0%) respondents said that library staff uses direct-from-publisher subscriptions of independent subscriptions, 5(12.5%) respondents said that library staff uses vendor impendent subscriptions, and 8(20%) respondents said that library staff uses aggregator independent subscription. But 15(37.5%) of respondents refused the independent type of subscription of electronic information resources of the library. This implies that the library system did not use the independent type of subscription for their electronic information resources within the library.

E-subscriptions enable annual access to each issue of Monthly Review via the website--that is, on the first of the month, without delay--and are a cost-effective way to support the work. E-subscribers have access to the Monthly Review Archives website, which contains individually indexed PDF files of every article published in the Monthly Review magazine, journal, newspaper, and research resource for the

library's collection growth. Keep up to speed with the world's greatest collection of optical and photonics research publications. The SPIE (Society of Photographic Instrumentation Engineers) Digital Library contains the most recent knowledge on light-based technologies for engineers and scientists. Individual subscriptions (with limited downloads) and institutional subscriptions (with limited downloads) are both available.

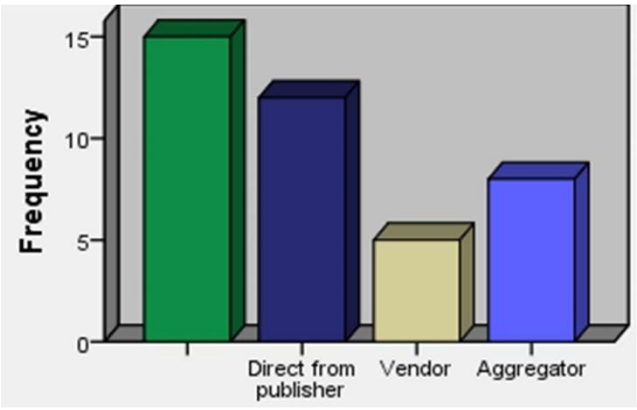

Figure 2: Electronic Resources independent subscriptions

The SPIE digital library is the largest research database on optics and photonics research currently available. It contains more than 430,000 papers covering biomedicine, communications, sensors, defense, security, manufacturing, electronics, energy, and imaging. For one year, personal use subscriptions to the digital library are offered. Individual Digital Library subscribers may only download materials for their personal use.

By signing up for the SPIE digital library's subscription agreement, the library system makes available a variety of electronic information resources for the library collection. Depending on the library's preferences, the subscription may be made monthly, weekly, or annually.

4.5 Access Type Licensor Provide In Subscription

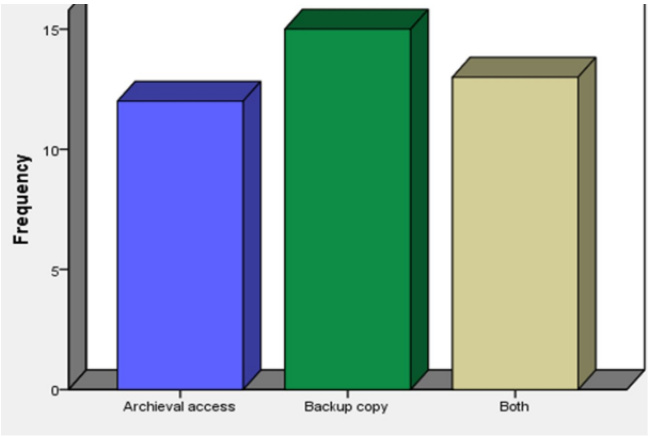

Figure 3: Access type licensor provide in the subscription

As indicated above in Figure 3, 12(30.0%) respondents said that licensors provide archival access, 15(37.5%) respondents indicated that licensors provide backup copy, and 13(32.5) respondents said that licensors provide both archival and backup copy access of total population 40(100.0%). This implies that the licensor provides backup copy access during the library material subscription. From this researcher concluded that the licensors provide backup copy access during the subscription of the electronic information resources for the library collection development.

4.6 Features Provided by the Licensor for Electronic Material

As described in Table 5 below 8(20.0%) respondents said the licensor provides an electronic link feature, 18(45.0%) respondents said the licensor provides access to database feature,3(7.5%) respondents said that the licensor provides archival/backup copy feature, and 9(22.5%) respondents said that licensor provides electronic link and access to database feature of total population 40(100.0%.). This implies that the licensor provides a database access feature in their license (agreement) for electronic information resources for the library. Based on this information researcher concluded that the licensors provide access to the database feature for the library and followed by providing the electronic link for the library to connect the library to their database server. As a result, users can access those databases and access through the link provided by the licensor.

Table 5: Features provided by the licensor

Features provided by the licensor	Frequency	Percent
providing electronic links	8	20.0
Access to database	18	45.0
Archival/backup copy	3	7.5
providing an electronic link and access to the database	9	22.5
All	2	5.0
Total	40	100.0

4.7 Major Obstacles in Dealing with the Licensor

As the following Table 6 indicates 10(25.0%) respondents replayed the major obstacle during dealing with licensor was the disparity in the bargaining power, 19(47.5) respondents said, the major hindrance during dealing with licensor for electronic information resources was inflexibility on the part of the vendor,8(20.0%) respondents said, the major problem during dealing with licensor was fitting license agreements to the need of library, 1(1.5%) respondent replied, the most obstacle during dealing with the licensor was a delay of supply and 2(2.5%) respondents of the total population 40(100.0%) said that the major problems were not known what to look for during dealing with the licensor for material in the collection. This implies that the major obstacle in the library during dealing with the licensor was inflexibility on the part of the vendor. From this, the researcher concluded that the major problems that occur when dealing with the licensor to have electronic information resources for the library collection were inflexibility on the part of the vendor.

Table 6: Major Obstacles in Dealing with the Licensor

Major hindrances with the licensor	Frequency	Percent
The disparity in the bargaining power	10	25.0
inflexibility on the part of the vendor	19	47.5
fitting license agreements to the needs of the library	8	20.0
not knowing what to look for	2	5.0
delay of supply	1	2.5
Total	40	100.0

4.8 Measures Applied in Library to Control Copyright in Digital Environment

The following Figure 4 revealed that 33(82.5%) respondents replied that, the library system uses special security measures to control the copyright of electronic material, 3(7.5%) respondents said that Jimma University library system uses an Ant plagiarism software to control the copyright of materials, 2(5.0%) respondents said that library system uses both a special security measure and anti-plagiarism software to control the copyright of electronic material, and 2(5.0%) respondents said that Jimma university library system did not use any mechanism to control the copyright of material within the library of the total population 40(100.0%). This implies the Jimma University library system uses special security measure software to protect the copyright of electronic information resources which is responded by 33(82.5%) respondents of the total population 40(100.0%). Based on this information, the researcher concluded that the library system uses special security measure software to protect the copyright of electronic information resources in the digital environment.

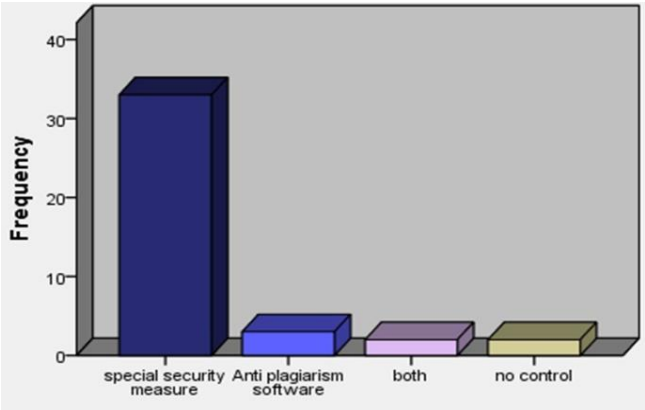

Figure 4: Measures applied in the library to control the copyright in the digital environment

4.9 Limitation Imposed by Library for Copying Portion of Licensed Materials

The following Table 7 indicates 27(67.5%) respondents said the library system stop access for a specific period for the material that was licensed during the access time in the library, 2(5%) respondents said that the library cancel the membership of the users who try to copy some portion of licensed material during the access time in the library, 6(15.0%) respondents were said the library file a case to prevent the copy of licensed material for the effective library management and 5(12.5%) respondents were said that the library system has no any methods toprevent the users from copying the portion of licensed material. This implies that the library system stops access for a specific period to prevent the users from copying some portion of licensed materials without the permission of the library, which is responded to by 27(67.0%) respondents of a total population of 40(100.0%). From this researcher concluded that the library systems control the security of licensed material by copying some portion of it by stopping access to licensed materials for a specific period.

Table 7: Limitation imposed by the library for copying the portion of licensed materials

Alternatives	Frequency	Percent
stop access for a specificperiod	27	67.5
cancel membership	2	5.0
file a case	6	15.0
Nothing	5	12.5
Total	40	100.0

4.10 Cataloguing Standards of Electronic Materials.

Figure 5 below demonstrates 6(15%) respondents said the library system uses AACR2 standards for cataloging the electronic information resources, 5(12.5%) respondents responded that the library system uses MARC standards to catalog the electronic information resources, 22(55.0%) respondents were said that the library use metadata (Dublin core) standard to catalog the electronic information resources, and 7(17.5%) respondents were said that the library system uses all three cataloging standards(i.e. AACR2, MARC and metadata) for cataloging electronic information resources in the digital environment of the library system of the total population 40(100.0%). This implies that the library system uses metadata (Dublin core) standard for the cataloging of the electronic information resources which responded by 22(55.0%) respondents of a total population of 40(100.0%).

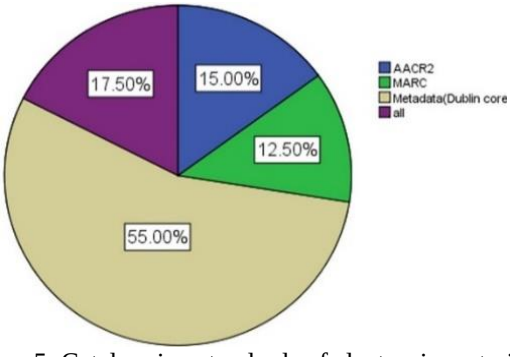

Figure 5: Cataloguing standards of electronic materials.

4.11 An Integrated OPAC For E-Resources

The following Table 8 shows that 28(70.0%) respondents said that the library system use an integrated OPAC for the management of e-resources, 11(27.5) respondents said that the library system did not use an integrated OPAC for the management of e-resources and 1(2.5%) respondent of the total population 40(100.0%) was not aware of the integrated OPAC for the e- resources. These results concluded that the library system uses an integrated OPAC for the materialof e-resources management. The library system uses this OPAC user interface which was the interface that the librarians developed for the end users to access the materials that they included for the library collection with the help of ABCD software to have the digital library for the modernized or effective management of library services to provide the information of materialsin the form of electronic form than providing in the form of hard copy which can consume the assets of the library. Through this OPAC user interface, library users can search the materials which exist in the library by using the subject, title, and author of the publication.

Table 8: An integrated OPAC for e-resources

Alternatives	Frequency	Percent
No response	1	2.5
Yes	28	70.0
No	11	27.5
Total	40	100.0

4.12 Methods to organize the E-resources

The following Table 9 indicates 7(17.5%) respondents said that library systems use the classification method to organize the e-resources, 1(2.5%) respondents said that library system use DOI (digital object identifier) to organize the e-resources, 12(30%) respondents said that the library system uses the alphabetical arrangement to organize the e-resources, and 3(7.5%) respondents replied the librarysystem use classified, DOI and alphabetical to manage the e-resources.but17(42.5%) respondents of total population 40(100.0%) said the library system did not organize the e-resources. The result indicates that the library system did not organize the e-resources. By the above information, researchers concluded that the library system did not use any organization method to organize its e-resources for management purposes.

Table 9: Methods to organize the e-resources

Choices	**Frequency**	**Percent**
No, organize	17	42.5
Classified	7	17.5
DOI(digital object identifier)	1	2.5
Alphabetical	12	30.0
All	3	7.5
Total	40	100.0

4.13 Whether The Library has Weeding Policy

The following Figure 6 shows 30(75%) respondents rebelled that the library has the weeding policy, contrary to 10(25%) respondents of the total population 40(100.0%) said the library did not have the weeding policy. This Figure indicates that the library has its weeding policy. Based on the generated information the researcher concluded that the library system has its weeding policy for the effective management of electronic information resources for the good output of research.

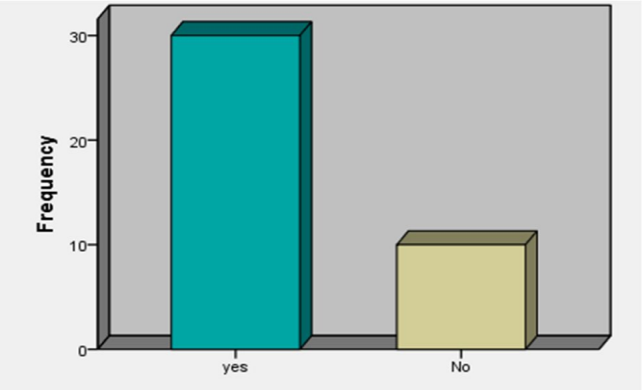

Figure 6: Weeding policy of electronic resources

4.14 Years the E-resources remain in the collection before weeding

The following Figure 7 illustrates 5(12.5%) respondents said materials remains in the collection for 2 years, 2(5%) respondents replied materials remain in the collection for 3 years, 1(2.5%) respondent said material remain in the collection for 4 years, and 16(40%) respondents said the material remain in collection for 5 years before weeded from the collection. But, 16(40%) respondents from the total population 40(100%) said that the library system did not have a well-defined period in which the electronic materials remain in circulation before it was weeded from the library collection.

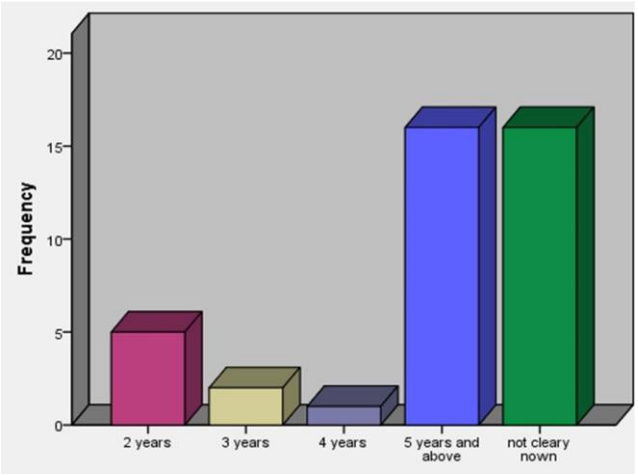

Figure 7: Years the e-resources remain in the collection before weeding

This result implies the library system did not have well-defined lifetime electronic materials remaining in the

collection before weeding. Based on this information, the researcher concluded that the library system did not clearly define the year that one particular electronic information resources live in the collection before it would be weeded from the library collection. From this, the researcher concluded that some library system was familiar with the weeding policy of the electronic materials which was performed by every 5 years. But some of the library staff members were not aware the life cycle of electronic information resources was weeded from the library collection.

4.15 Access Method of E-Resources

The following Table 10 implies 12(30) respondents' answers showed that the library allows the users toaccess e-resources in the library, 14(35%) respondents said users can access the e-resources remotely through the campus network, 12(30%) respondents said users access the e-resources through the internet, and 2(5%) respondents of the total population 40(100%) said users can access e-resources through campus network and in the library. This implies that the users can access e- recourses remotely through the campus network. So based on this clue, the researcher concluded thatthe users can access the library resources remotely through the campus network.

Table 10: Access method of e-resources

Alternatives	Frequency	Percent
Access to the library	12	30.0
Remote access through the campus network	14	35.0
Internet	12	30.0
Access to the library and remote access to the campus network	2	5.0
Total	40	100.0

5. Conclusion

The study was aimed at assessing the collection management of electronic information resources in the Jimma University library system and classification in the case of the Jimma University staff library. The qualitative-quantitative and descriptive methods of research were used to conduct the study. The researcher gathered information by distributing questionnaires, then analyzing data from the Jimma University staff library.

The effective management of electronic information resources plays a great role to provide effective services to library users. The need for digital information materials has increased from time to time instead of using the hard copy of library materials. To satisfy the users' interest the library systems were trying to shift the traditional physical library to the digital library to avoid the large expenses of the hard copy of materials in the library which needsa high budget and high physical storage space in the library.

Based on the finding of the study, the researcher concluded that the library system develops the collection management of electronic information resources by licensing the agreement within the consortia. Through the subscription of the electronic information resources, the vendors provide the features like links to electronic and access to the database for a specified period through independent types of subscription. The data security policy was protected by special security measures.

The result obtained indicates the library system did not have a determined evaluation period of the time for the evaluation of the electronic information resources in the library. In the management of the electronic information resources the major factor affecting the management of the electronic information resources was the inflexibility on the partof the vendor at the time license agreement. The library systems allow the users to access the electronic information resources through Ip address-based technology to access the resources from a distance remotely and in the library. The library users were authenticated and authorized through the Ip address of the digital library. These enable the users to log in to the systems by username and password to access the electronic information resources of the library.

Data Availability

The Data used to support the finding of this study will be provided if it is inquired through the author's address.

Conflicts of Interest

The authors of the paper declare that there is no conflict of interest.

Funding Source

The research is supported by Jimma University. This research received no grant from any funding agency in the public, Commercial, or non-profit organization other than Jimma University for adviser assignation.

Author Contributions

The researcher conducted every work indicated in this research work including problem formulation, proposal writing, questionnaire design, data collection, and data analysis and finally the researcher was able to come up with a good finding which the library used to manage electronic information resources in the library.

Acknowledgment

I would like to take this occasion to offer my sincere gratitude to my Excellence adviser Amanuel Ayde for his insightful criticism and consistent monitoring of my study during the year, from its inception to completion. I also want to express my gratitude to the staff members of Jimma University's main library for volunteering their time to respond to the queries. Finally, I want to express my sincere gratitude to my friends for helping me with all of my duties. I also want to express my gratitude to everyone who supports me as I work on my research paper every day. Finally, I'd want to thank the Department of Information Science and the College of Natural Sciences for helping to make my education successful.

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