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Scenario of Archives Management in Some Selected University Libraries of Bangladesh

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Scenario of Archives Management in Some Selected University Libraries of Bangladesh

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Abstract

The purposes of the paper is to analyze and assess the current state of archives and records management in some selected university libraries of Bangladesh as well as to evaluate professionalism towards the existing preservation systems.

To draw inferences and make recommendations, a survey was conducted in selected public and private university libraries of Bangladesh. The universities were selected for this study on the basis of their position within 10th in the 2020 UniRank list published in Bangladesh. The primary data were collected through questionnaire, interview and observation methods and secondary data were derived from literature search. The findings of the study show that 50% public university library use digital repository as archives whereas 90% private university libraries preserve the archives digitally as well as manually. The study also reveals that maximum (90%) private university libraries use archival repository though the number of repositories are increasing slowly. On the other hand, 50% public university libraries use the repository but the number of manual collection of these university library are much higher than others libraries. The study also clearly indicates that public libraries are ahead of private university libraries in preserving the number of manual collection.

Keywords: Archives, Preservation, Institutional Repository, University Library, Bangladesh.

Introduction

'An Institutional Repository is an organization based set of services which the organization offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members. It is most essentially as an organizational commitment to the stewardship of these digital materials, including long-

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term preservation where appropriate as well as organization and access or distribution"(Clifford Lynch, 2003).

In information technology, a repository is defined as a central place in which an aggregation of data is kept and maintained in an organized way, usually in computer storage. The term is from the Latin *repositorium*, a vessel or chamber in which things can be placed, and it can mean a place where things are collected. Depending on how the term is used, a repository may be directly accessible to users or may be a place from which specific databases, files, or documents are obtained for further relocation or distribution in a network. A repository may be just the aggregation of data itself into some accessible place of storage or it may also imply some ability to selectively extract data. [https://searchoracle.techtarget.com/definition/repository]

A study suggests that Institutional Digital Repositories (IDR) could become a compelling and useful tool for collecting, organizing and disseminating intellectual output of an institute. If properly implemented with the existing practices, IDRs has the potential to fulfil many unmet expectations (Roy et al 2012).

The major function of archives and record centre are to maintain and defend record for potential use, and access to these records is frequently preventive. Usually, libraries' major functions are mounting collection in meet the needs of user, and permit right of entry to this information for free to a defined number of users or entire public. Libraries hold the information that is contemporary and applicable to make sure that users are assessed with new and current information trends for effective decision making. Despite the differences in scope and function between archives, record centers and libraries, there is no doubt that their roles intersect or overlap (Dube, 2020). Earlier researcher tried to find out if libraries can work as an archive and record centers. The impact of digital environment is more visible in information intuitions internationally as the libraries currently are not handled as the storehouse of books but measured as a entryway of knowledge property, and the centre of creation and recreation of academic activities (Trayambakrao, 2012). Many institutional records produced by faculty members and research students of the particular institutions are in operational nature and the majority of the records includes journal articles, theses and dissertations, and clinical reports on multidisciplinary research area (Hasinul-Elahi, 2018). Some of these academic institutions give the access to their research documents and

learning materials initially to the Indian scholars in other institutions as well as to external scholars in institutions across the globe (Kumar, 2009).

Islam and Akhter (2013) studied the initiatives of IR and Open Access Initiatives going on among academic libraries in Bangladesh. The group concluded that an in-depth review is needed for each university, in order to establish what is applicable for its own setting, infrastructure, and needs. Various library networks, library consortia and library associations are also encouraging their member institutions to establish institutional repositories or open access archives. Library and information science professionals were concerned about open access issues. Library associations are holding conferences, seminars and workshops at the national level to provide a platform for discussion on the open access movement. In the near future, the group of workers expected to see a sustainable growth of open access initiatives, open access literature and digital repositories in Bangladesh.

The present study was aimed to assess the current situation of archive management in the university libraries of Bangladesh and find out

- the availability of archival records in university libraries of Bangladesh;
- the record types and facilities for ensuring sustainability of university archives;
- the present position of electronic records in the institutional repository.
- Interest of institutional authorities towards preservation of intellectual properties they possessed

Scope and research methodology

At present there are forty nine public, hundred-seven private, and three international universities in Bangladesh (UGC, 2021). UniRank is the leading international higher education directory and search engine featuring reviews and rankings of over 13,800 officially recognized universities and colleges in 200 countries. On the basis of this ranking list, a survey was conducted among ten public and nine private and one international university libraries have been selected on the basis of their position within 10th in the 2020 UniRank list published in Bangladesh for this study (Table 1).

The researcher used two sets of structured questionnaire to collect primary data from 98 archivists / library administrators (questionnaire 1) and secondary data were derived through personal visit and onsite assessment and literature search. Another set of questionnaire (questionnaire 2) was also distributed among 147 archives/repository users of the selected

universities to know their level of satisfaction on the existing condition, significant challenges and actual conditions of archives/repository according to them.

Table 1. Selected university libraries of Bangladesh

S.N	University Library Name	Type	Est Year	Address	Repository Software
1.	American International University (AIU) Library	Private	1994	Dhaka	Customize
2.	Ahsanullah University of Science and Technology (AUST) Library	Private	1995	Dhaka	N/A
3.	Asian University for Women (AUW) Library	International	2008	Chattogram	Customize
4.	Ayesha Abed Library (BRAC University)	Private	2001	Dhaka	DSpace
5.	Bangabandhu Sheikh Mujib Medical University (BSMMU) Library	Public	1965	Dhaka	SLiMS
6.	Bangladesh University of Engineering and Technology (BUET) Library	Public	1962	Dhaka	DSpace
7.	Daffodil International University (DIU) Central Library	Private	2002	Dhaka	DSpace
8.	East West University (EWU) Library	Private	1996	Dhaka	DSpace
9.	International Islamic University Chittagong (IIUC) Library	Private	1995	Chattogram	DSpace
10.	Independent University, Bangladesh (IUB) Library	Private	1993	Dhaka	DSpace
11.	Jahangirnagar University (JU) Library	Public	1970	Dhaka	Underdeveloped
12.	Khulna University (KU) Library	Public	1991	Khulna	N/A
13.	National University (NU) Library	Public	1992	Gazipur	N/A
14.	North South University (NSU) Library	Private	1992	Dhaka	Customize
15.	Shahjalal University of Science and Technology (SUST) Library	Public	1986	Sylhet	N/A
16.	Sher-E-Bangla Agricultural University (SAU) Library	Public	2001	Dhaka	Customize
17.	United International University (UIU) Library	Private	2003	Dhaka	DSpace
18.	University of Chittagong (CU) Library	Public	1966	Chattogram	N/A

19.	University of Dhaka (DU) Central Library	Public	1921	Dhaka	DSpace
20.	University of Rajshahi (RU) Central Library	Public	1953	Rajshahi	DSpace

To give the present state of archival condition university libraries were observed physically as well as the websites of these libraries were searched. The study found that among ten public libraries, 3 university libraries use DSpace, 1 university library use SLiMS, 1 university library use customize software, customize software is under developed in 1 library and rest 4 university libraries don't use any digital or repository software for the preservation of archival materials. Among 10 private and international university libraries, 7 university libraries use DSpace software, 3 libraries use made customize software whereas the only one international university library made customize software as institutional repository.

Demographic Information of Archivists/Library Administrators

Table 2 shows the demographic information of archives/repository administrators where 68 respondents (59.2 percent) were from the public university, 37 (33.8 percent) from private, and 03 (3.1 percent) were from the international university. Among the respondents, 67 (68.4 percent) were male, 31 (31.6 percent) were from female repository administrator. The greater proportion of the respondents were Assistant Librarian 36 (36.7 percent), Library Officer 33 (33.7 percent), Deputy Librarian 19 (19.4 percent), Librarian/Additional Librarian/Library In-Charge 3 (3.1), Undergraduate student 3 (3.1 percent), Graduate student 2 (2.0 percent), Post graduate student 1 (1.0 percent) and Senior Cataloguer 1 (1.0 percent). The highest number of the respondents were from the age group of 35-39 years 31 (31.6 percent), followed by 40-44 year 26 (26.5 percent), 25-29 year 16 (16.3 percent), 30-34 year 9 (9.2 percent) and the lowest proportion were from 45-49 year 4 (4.2 percent).

Table 2. Demographic Information of Archivists/Librarian/Repository Administrator (n=98)					
Variable	*Class*	*Frequency*	*Percent*	*Valid%*	*Cumulative%*
Category of University	International	3	3.1	3.1	3.1
	Private	37	37.8	37.8	40.8
	Public	58	59.2	59.2	100.0

Gender	Female	31	31.6	31.6	31.6
	Male	67	68.4	68.4	100.0
Designation	Deputy Librarian	19	19.4	19.4	19.4
	Librarian/Additional Librarian/Library In-Charge	3	3.1	3.1	22.4
	Library Officer	33	33.7	33.7	56.1
	Postgraduate student	1	1.0	1.0	57.1
	Senior Cataloger	1	1.0	1.0	58.2
	Assistant Librarian	36	36.7	36.7	94.9
	Undergraduate student	3	3.1	3.1	98.0
	Undergraduate Student	2	2.0	2.0	100.0
Age group	25-29 years	16	16.3	16.3	16.3
	30-34 years	9	9.2	9.2	25.5
	35-39 years	31	31.6	31.6	57.1
	40-44 years	26	26.5	26.5	83.7
	45-49 years	4	4.1	4.1	87.8
	50 and above years	12	12.2	12.2	100.0

Table 3 demonstrated the educational qualification and work experience of the archivists or library administrators.

Table 3. Educational qualification and work experience (n=98)					
Variable	*Class*	*Frequency*	*Percent*	*Valid%*	*Cumulative%*
Highest Education	Diploma	10	10.2	10.2	10.2
	Honors	10	10.2	10.2	20.4
	Masters	72	73.5	73.5	93.9
	M.Phil	4	4.1	4.1	98.0
	PhD	2	2.0	2.0	100.0
Work Experience	10-14 years	27	27.6	27.6	27.6
	15 and Above	34	34.7	34.7	62.2
	5-9 years	20	20.4	20.4	82.7
	Below 5 years	17	17.3	17.3	100.0

Archives Management in University Libraries of Bangladesh

Institutional repositories are widely developed and maintained in different areas of research around the world. In developing countries like Bangladesh, it has been seen as an unprecedented opportunity to provide equality of access to essential research information

and to raising awareness of national research (Islam and Akter, 2013). A total 17 public and private university libraries are using Institutional Repository software in Bangladesh at this moment (Islam, 2019). Present scenario of IR in public and private university libraries of Bangladesh is showed below.

Public University Library

Public university libraries are playing important role in preserving and distributing the archival resources for their faculty, researchers and students. Table 4 shows that 9 Public university libraries are using the IR software for digital preservation of the archival resources, repository software used and the URL link of the repository.

Table 4. Selected public university Archival Repository and URL

SL	University Name	Used IRS	URL
1.	Bangabandhu Sheikh Mujib Medical University (BSMMU) Library	SLiMS	(LAN)
2.	Bangladesh University of Engineering and Technology (BUET) Library	DSpace	http://lib.buet.ac.bd:8080/xmlui/
3.	Jahangirnagar University (JU) Library	Under developing	https://www.library.juniv.edu/resources/#
4.	Khulna University (KU) Library	N/A	N/A
5.	National University (NU) Library	N/A	N/A
6.	Shahjalal University of Science and Technology (SUST) Library	N/A	N/A
7.	Sher-E-Bangla Agricultural University (SAU) Library	Customize	http://www.saulibrary.edu.bd/daatj/public/index.php
8.	University of Chittagong (CU) Library	N/A	N/A
9.	University of Dhaka (DU) Central Library	DSpace	http://repository.library.du.ac.bd/xmlui
10.	University of Rajshahi (RU) Central Library	DSpace	http://repository.ubn.ru.nl/

Table 5 shows the number of repository collection in public university libraries of Bangladesh.

Table 5. IR and Manual Collections in Public University

SL	Name of the university library	IR collection	Manual collection
1.	BSMMU Library	14000	31405
2.	BUET Library	5314	1,42,913
3.	Jahangirnagar University (JU) Library	N/A	124000

4.	Khulna University (KU) Library	N/A	47666
5.	National University (NU) Library	N/A	50000
6.	SUST Library	N/A	78000
7.	Sher-E-Bangla Agricultural University (SAU) Library	4653	42840
8.	CU Library	N/A	3,50,000
9.	DU Central Library	1370	600,000
10.	RU Central Library	8	3,40,000
	Total	25345	1,103,784

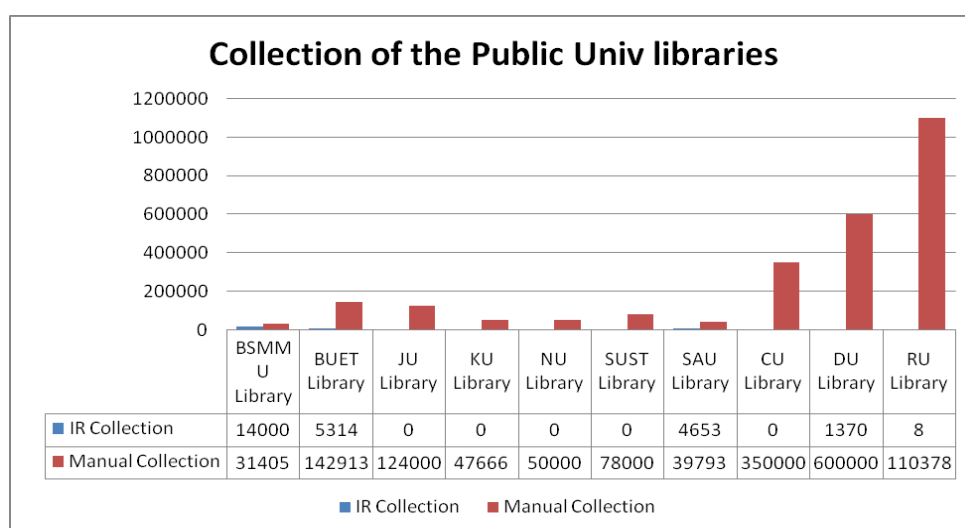(Data collected on 18/08/2021)

Figure 1

It is mentioned that the use of Digital Library Software (DLS) as Institutional Repository (IR) in university libraries all over the world as well as in Bangladesh are increasing day by day. But at this moment this is the present collection of IR items in university libraries of Bangladesh.

Private University Library

There are one hundred seven private universities and 3 international universities are functioning in Bangladesh. Among them 6 private and 1 International University were selected for the study on the basis of uniRank 2020 (Table 6).

Table 6. Private University Library Repository and URL

S.N	University Name	Repository	URL
1.	Kazi Fazlur Rahman Library (AUST)	N/A	-

2.	American International University (AIU)	N/A	-
3.	Asian University for Women (AUW)	AUWSpace	http://www.auw.edu.bd/library/Repository.php
4.	BRAC University	DSpace	http://dspace.bracu.ac.bd/oai/request
5.	Daffodil International University (DIU)	DSpace	http://dspace.daffodilvarsity.edu.bd:8080/
6.	East West University (EWU)	DSpace	http://dspace.diu.ac.bd/oai/request
7.	International Islamic University Chittagong (IIUC)	DSpace	https://dspace.iiuc.ac.bd/xmlui/
8.	Independent University, Bangladesh (IUB)	DSpace	http://dir.iub.edu.bd/
9.	NSU Library	Customized	-
10.	UIU Library	DSpace	http://dspace.uiu.ac.bd/

Table 7 shows the number of IR and Manual collection in private university libraries of Bangladesh.

Table 7. IR and Manual Collections in Private University Libraries			
SL	Name of the university library	IR collection	Manual collection
1.	AUST (Kazi Fazlur Rahman Library)	N/A	27326
2.	AIU Library	N/A	43318
3.	Asian University for Women (AUW) Library	N/A	27000
4.	BRAC University (Ayesha Abed Library)	12357	37519
5.	Daffodil International University (DIU) Library	5623	24000
6.	East West University (EWU) Library	2540	33012
7.	International Islamic University Chittagong (IIUC) Central Library	1996	87250
8.	Independent University, Bangladesh (IUB) Library	385	32000
9.	North South University (NSU) Library	500	49500
10	United International University (UIU)	2095	98658
	Total	25496	459583

(Data collected on 18/08/2021)

Data Analysis and Discussion

This section presents the findings as per the research questions. The questions were based under themes of the archives management in university libraries of Bangladesh such a archives in library, public access in archives, availability of archivists, archives building, financial capacity, record storage, record types, physical condition of records, preservation tools, container availability, retention policy, access permission & restriction, preservation methods, lab and air condition facility, humidity facility, vacuum cleaners facility, security tools, digital/automation software, equipment facility, interest in automation, websites of library or archives, collaboration with universities, status of skill personnel, institutional support, guidelines, agreement on policy, agreement on reformatting procedures, status of physical facility, periodic care and maintenance activity, users' feeling towards archival facility, agreement on making online resources, effort towards automation of archival resources, users satisfaction level, opinion on strength of collection etc.

Public Access in Archives

The researchers wanted to know the restriction of public access to archives in the participants' archival institutions. The statistics shows that 69.4 percent archives has public access which is restricted and 30.6 percent archives has no access restriction (table 8).

Table 8. Access restriction to library and archival institution.

	Frequency	Percent	Valid Percent	Cumulative Percent
No	30	30.6	30.6	30.6
Yes	68	69.4	69.4	100.0
Total	98	100.0	100.0	

Separate building or room for archives

The respondents were asked about having separate archival building or separate room for archives. The table 9 shows that 59.2 percent library administrators told that they have either separate building or separate room for archives. On the other hand 40.8 percent told that they haven't detached building or room.

Table 9. Separate building or room as Archives.

	Frequency	Percent	Valid Percent	Cumulative Percent
No	40	40.8	40.8	40.8
Yes	58	59.2	59.2	100.0
Total	98	100.0	100.0	

Financial help for maintaining archives

In response to a question regarding the financial source for maintain the archives most of the library administrators and archivists (92.9 percent) stated that they get fund from the university whereas only 7.1 percent told that no funds allocated for their archives (table 10).

Table 10. Financial help to maintain the Archives.

	Frequency	Percent	Valid Percent	Cumulative Percent
No funds allocated for the Archives	7	7.1	7.1	7.1
University fund	91	92.9	92.9	100.0
Total	98	100.0	100.0	

Storage of records

The storage of archival materials is an important and challenging issue in an archival institution. The table 11 below showed that most of archival institutions use the filing cabinet and cupboards. Some use current file, database, acid free file folders or boxes.

Table 11. The placement of records

	Frequency	Percent	Valid Percent	Cumulative Percent
Acid free boxes	1	1.0	1.0	1.0
Acid free file folders	3	3.1	3.1	4.1
Cupboards	8	8.2	8.2	12.2
Cupboards, Acid free file folders	1	1.0	1.0	13.3
Cupboards, Current files	1	1.0	1.0	14.3
Cupboards, Filing Cabinets	10	10.2	10.2	24.5
Cupboards, Filing Cabinets, Acid free file folders	1	1.0	1.0	25.5
Cupboards, Filing Cabinets, Current files	7	7.1	7.1	32.7

	Frequency	Percent	Valid Percent	Cumulative Percent
Cupboards, Filing Cabinets, Current files, Acid free file folders	1	1.0	1.0	33.7
Current files	5	5.1	5.1	38.8
Database	4	4.1	4.1	42.9
Filing Cabinets	55	56.1	56.1	99.0
Filing Cabinets, Acid free file folders, Acid free boxes	1	1.0	1.0	100.0
Total	98	100.0	100.0	

Types of records

There are different types of archival resources available in an archival institution. The table exposes that there are various kind of records like journal, periodicals, manuals, monographs, hand book, palm leaves, parchment, property deeds, thesis, marriage registers etc are preserved in university archives of Bangladesh (table 12)

Table 12. Types of records available in the university archives.

	Frequency	Percent	Valid Percent	Cumulative Percent
Hand Books	4	4.1	4.1	4.1
Hand Books, Journal/Periodicals	13	13.3	13.3	17.3
Hand Books, Journal/Periodicals, Manuals	14	14.3	14.3	31.6
Hand Books, Journal/Periodicals, Manuals, Marriage Registers	1	1.0	1.0	32.7
Hand Books, Journal/Periodicals, Manuals, Monographs	31	31.6	31.6	64.3
Hand Books, Journal/Periodicals, Manuals, Monographs, Palm Leaves	2	2.0	2.0	66.3
Hand Books, Journal/Periodicals, Manuals, Monographs, Palm Leaves, Parchments	7	7.1	7.1	73.5

Hand Books, Journal/Periodicals, Manuals, Monographs, Property Deeds	3	3.1	3.1	76.5
Hand Books, Journal/Periodicals, Manuals, Palm Leaves	1	1.0	1.0	77.6
Hand Books, Journal/Periodicals, Monographs	4	4.1	4.1	81.6
Hand Books, Journal/Periodicals, Parchments	1	1.0	1.0	82.7
Hand Books, Journal/Periodicals, Theses	1	1.0	1.0	83.7
Hand Books, Monographs, Palm Leaves	1	1.0	1.0	84.7
Journal/Periodicals	10	10.2	10.2	94.9
Journal/Periodicals, Manuals, Marriage Registers	1	1.0	1.0	95.9
Journal/Periodicals, Manuals, Monographs	1	1.0	1.0	96.9
Journal/Periodicals, Manuals, Travelogue	1	1.0	1.0	98.0
Palm Leaves	1	1.0	1.0	99.0
Parchments	1	1.0	1.0	100.0
Total	98	100.0	100.0	

 Physical Condition of Records

Physical Records are records that one can touch. They take up physical space, such as records or paper or media like CDs. Records management involves managing records throughout their lifecycle (Record Point, 2021). Physical records management is managing assets that user can touch throughout the lifecycle that should be kept in right process. The table shows the physical condition of records where 71.4 percent told that their records are in good condition, 10.2 percent told that mutilated, 12.2 percent told brittle and 6.1 percent stated warm infested (table 13).

Table 13. The physical condition of the records.

	Frequency	Percent	Valid Percent	Cumulative Percent
Brittle	12	12.2	12.2	12.2
Good	70	71.4	71.4	83.7
mutilated	10	10.2	10.2	93.9
Warm infested	6	6.1	6.1	100.0
Total	98	100.0	100.0	

Tools for preserving archival records

The function of doing indexing and cataloging are important assignment in libraries and archival institutions (Radzuan et al., 2018). The libraries and archives administrators were asked 'do they use catalogue, index and data for the available records'. The table 14 shows that most of the participants use catalogue and index for the existing archival resources whereas only 12.2 percent don't use.

Table 14. Use of catalogue and indexes for the available archival records.

	Frequency	Percent	Valid Percent	Cumulative Percent
Don't know	1	1.0	1.0	1.0
No	12	12.2	12.2	13.3
Yes	85	86.7	86.7	100.0
Total	98	100.0	100.0	

Access permission of particular group

The archives administrators were asked regarding the access permission to the archival resources. 44.9 respondents stated that it is open for research scholars, 20.4 told that it is open for faculty and research students, 10.2 percent stated that it is available for general public, 10.2 stated it's open for officials, 6.1 stated that it is open for research scholars and general public, 4.1 stated that it is open for historians, 2.0 stated that it is open for faculty and researchers and 2.0 stated that it is open for historians, research scholars and general public (table 15).

Table 15. Status of access permission of particular group in archives.

	Frequency	Percent	Valid Percent	Cumulative Percent
Faculty and research students	20	20.4	20.4	20.4
Faculty and researchers	2	2.0	2.0	22.4
General public	10	10.2	10.2	32.7
Historians	4	4.1	4.1	36.7

	Frequency	Percent	Valid Percent	Cumulative Percent
Historians, Research scholars	1	1.0	1.0	37.8
Historians, Research scholars, General public	1	1.0	1.0	38.8
Personnel only	10	10.2	10.2	49.0
Research scholars	44	44.9	44.9	93.9
Research scholars, General public	6	6.1	6.1	100.0
Total	98	100.0	100.0	

Methods of treatment in preservation

The table 16 below shows that 57.1 percent follow computer scanning, 26.5 use computer scanning and fumigation both, 14.3 follow fumigation, 1.0 percent chiffon and fumigation both, 1.0 percent computer scanning, microfiche and microfilming.

Table 16. Methods of Treatment followed for Preservation

	Frequency	Percent	Valid Percent	Cumulative Percent
Chiffon, Fumigation	1	1.0	1.0	1.0
Computer scanning	56	57.1	57.1	58.2
Computer scanning, Fumigation	26	26.5	26.5	84.7
Computer scanning, Microfiche, Microfilming	1	1.0	1.0	85.7
Fumigation	14	14.3	14.3	100.0
Total	98	100.0	100.0	

Air-condition facility

The table 17 reflects the responses of 73.5 percent who told that their library and archives are air-conditioned whereas the department is not air-conditioned of 26.5 percent respondents.

Table 17. Status of Air-condition facility in the library and Archives.

	Frequency	Percent	Valid Percent	Cumulative Percent
No	26	26.5	26.5	26.5
Yes	72	73.5	73.5	100.0
Total	98	100.0	100.0	

Temperature and humidity controlling facility

The respondents were asked about the technology to control the temperature and humidity of the archives premise. The largest part (72.5 percent) of the respondents claimed that they have the facility. On the other hand 24.5 percent respondents claimed that they have no such kind of facility. 3.0 percent respondents refrained from reply the question (table 18).

Table 18. Status of temperature and humidity equipment to maintain archive

	Frequency	Percent	Valid Percent	Cumulative Percent
	3	3.0	3.0	3.0
No	24	24.5	24.5	25.5
Yes	71	72.5	72.5	100.0
Total	98	100.0	100.0	

Vacuum cleaners facility

Vacuum cleaner is the most effective method of removing dust without direct or indirect dust reorganization (Wilson and VanSnick, 2017). The table 19 shows that the highest proportion (68.4 percent) has vacuum cleaner; whereas 29.6 percent administrators has no vacuum cleaner facility. 2.0 percent remain abstain to respond regarding the issue.

Table 19. vacuum cleaner facility in the archives

	Frequency	Percent	Valid Percent	Cumulative Percent
	2	2.0	2.0	2.0
No	29	29.6	29.6	31.6
Yes	67	68.4	68.4	100.0
Total	98	100.0	100.0	

Use of tools for ensuring security

Various tools and technologies like alarms, fire extinguishers etc used to ensure security of library and archival institutions. Table 20 illustrated that 38.8 percent use only alarms, 20.4 percent use extinguishers and 40.8 percent use alarms and extinguishers both in their library and archival institutions.

Table 20. Status of security measure inaugurated in archives

	Frequency	Percent	Valid Percent	Cumulative Percent
Alarms	38	38.8	38.8	38.8
Both	40	40.8	40.8	79.6
Extinguishers	20	20.4	20.4	100.0

Total	98	100.0	100.0	

Interest to computerizing the archival collection/IR

Preservation of records electrically has brought many challenges to the university library (Oweru and Mnjama, 2016) . All are not interested to computerize the records willingly. Some professionals feel hesitation to deal with modern technology. The big proportion (86.7 percent) of the participants interested to computerize the archival collection whereas only 13 percent are either not interested or under hesitation (table 21).

Table 21. Interest of personnel on computerizing the archival collection

	Frequency	Percent	Valid Percent	Cumulative Percent
No	2	2.0	2.0	2.0
Yes	85	86.7	86.7	88.8
Under hesitation	11	11.2	11.2	100.0
Total	98	100.0	100.0	

Conclusion

As contribution towards the digital nation-building process, many library professionals in Bangladesh are working to bring their libraries up to global standards. This study was conducted among 98 Academic Librarians/Repository Administrators and 147 academic scholars, archives and repository users of 10 public and 10 private university libraries of Bangladesh selected on the basis of their position within 10th in the 2020 UniRank list. It is found that 50% public university use digital repository as archives whereas 90% private university libraries preserve the archives digitally as well as manually. The number of manual collection in selected public library is 1,103,784 including 25345 institutional repository collections whereas the manual collections in selected private university libraries are 462064 and repository collection are the number of 23685 that demonstrates that public libraries are ahead of private university libraries in preserving the manual collection. On the other hand private university libraries are ahead of public university libraries in preserving the online institutional repository collection. As contribution towards the digital nation-building process, many library professionals in Bangladesh are working to bring their libraries up to global standards. Like Indian National Mission for Manuscripts, Government of Bangladesh should also initiate steps for establishing a central body to guide towards establishing some repositories in the university libraries across the country which has huge collection of manuscripts written in various languages and scripts, available on different kinds of materials like birch bark, palm leaf, wood, stone, etc. Particularly in the present

COVID 19 pandemic situation the importance of IR in academic institutions has been increased many fold to provide information support to student community for continuation of their educational activity by staying safe at home (Srivastava & Babel 2021).

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