

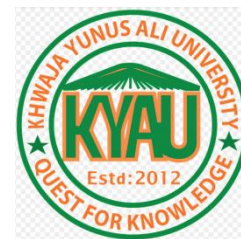
# Khwaja Yunus Ali University Journal

Publisher homepage: [www.kyau.edu.bd](http://www.kyau.edu.bd)

**OPEN ACCESS**

ISSN: 2791-3759 (Online), 2521-3121 (Print)

Journal homepage: [www.journal.kyau.edu.bd](http://www.journal.kyau.edu.bd)



## Review Article

### Convergence and Divergence Factors in Digital Preservation of Libraries, Archives, and Museums Materials in Bangladesh

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#### Abstract:

*Libraries, Archives, and Museums (LAMs) have existed in society for a long time, each with its size, shape, and description. It has been observed that over time, these separate institutions have extended or evolved from one stage to the next and participate in the digital world. Though these institutions are different in terms of origin, practice, tactic, aims and objectives, target audience, and so on, they have some similarities in different aspects. This paper also identifies the convergence factors in the digital preservation of LAMs materials in Bangladesh and discovers the divergence factor. Firstly, the paper identifies the convergence and discovers the divergence factor based on related literature available in books, journals, research papers, newspapers, news bulletins, and several websites. Then, secondly, provide recommendations according to the problem. Some substantive problems have been identified, and there is an overlap among libraries, archives, and museums regarding converging factors. There is a potential for more collaboration resulting in a deeper understanding of collection building among heritage amateurs. LAMs is now widely used, but from a Bangladeshi*

*perspective, it's not familiar to all. And research on it is minimal. This paper is based on a review of existing literature that will benefit researchers and practitioners in the fields of libraries and archives and museums. Finally, the authors have suggested some recommendations for convergence and divergence factors in digital preservation in Bangladesh.*

**Keywords:** LAMs Paradigm, Libraries, Archives, Museums, Convergence and Divergence, Digital Preservation

#### 1. Introduction:

For a long time, people have been putting things in collections. These collections may be informal, institutionalized, and maintained by libraries, archives, and museums over time. Some excellent reasons behind having libraries, archives, and museums developed on distinct routes. Still, they are indeed brought together as never before by the information age that arises around new data and communication techniques (Hedstrom & King, 2003). The most prevalent themes in the library, archive, and museum organization are Information science, collection management, conservation, and user access. However, in various domains, the remake of such popular subject areas is indistinguishable and has its

taste. These seemingly different institutions started to cover their uniqueness more clearly with the propagation and advantages of information and communication in the broader realm of digital preservation; technology plays an important role. As libraries began collecting e-books, archives began preserving old digital data, and museums began reissuing the artifacts, becoming aspects of digital preservation. It occurs in bitstream form, whether digital multimedia information, e-book, e-record, or science information (Giaretta, 2011). The collections of heterogeneous features of material properties, physical shape, and information nature connected and users; isolate libraries from museum archives and archives. The "digital" or "bitstreamconversion" becomes "homogenous" as a result of such collecting. " thus capturing the imagination of all. It is generally a charming message for us due to the convergence hype during such deliberations.

As a consequence, we are going to merge and blend stuff somewhat randomly. Instead of solving, we tend to overgeneralize and become unreasoning to diverging variables (Allen 2002 cited in Katre 2011). The abbreviation LAMs stands for these three distinct institutions that share some alike characteristics.

## 2. Objective of the study:

Based on the available literature, it is found that some studies were conducted globally (Katre, 2011; [Vårheim](#) et al., 2019), but less initiative has been taken in Bangladesh to reveal the convergence and divergence factors in the digital preservation of (LAMs) materials. Thus, it is expected to explore the convergence and divergence factors in Bangladesh's digital preservation of LAMs materials. The study's particular objectives are as follows:

- i. To identify the convergence factors in the digital preservation of LAMs materials in Bangladesh;
- ii. To discover the divergence factors in the digital preservation of LAMs materials in Bangladesh;
- iii. To effectively suggest some recommendations for the digital preservation of LAMs materials in Bangladesh.

## 3. Literature Review:

Reviewing the literature gives the researcher a summary of the available literature on the research issue, which is crucial for accurately identifying the research gap. To identify the research gap, the researcher reviewed some substantial research

literature, including EAD (Encoded Archival Description Standard) was created and examined in 1995 to help museums, libraries, and archives list and describe their collections in a machine-readable format that is easy to search, maintain, and interchange (Rinehart, 2003). From the perspective of technical studies, cooperation between archives of libraries and museums has since been a common subject for panel discussions and conferences (Zorich et al., 2008). In 2013, the author conducted a study on LAM . The study discovered that the selection of digital material requires little change compared to non-digital material selection, with technical criteria related to the organization's capacity to know the importance of preserving the material. In selection organizations, there is a definite hypothesis that this leads only to continuous collection, which should be challenged. The study identified selection drivers, including external funders, and obstacles that include a lack of practitioners' confidence and understanding of how to select and handle digital content (Ravenwood, 2013). Digital preservationists face the challenge of integrating the values guiding their job into projects from the beginning. To do so, libraries must temper with clear foresight the thrill of new initiatives to ensure their long-term accessibility and utility. While book manufacturing and conservation can and has been separated into distinct organizational entities, with digital initiatives, there should be no such division. Before an organization considers conservation, books can sit on racks for centuries. At the same time, all aspects of a digital project, including software, hardware, and online protocols, could have changed. To become part of the global network of LAMs, efficient digital conservation will require changes in library organizational structures to decrease communication obstacles (Moulaison & Corrado, 2014). They researched the collaboration among LAMs. The results in this study discuss the essence of LAM collaboration in the sense of a shared and transformative development that addresses everyday needs. The challenge for today's campus-based LAMs is to move further along the collaborative spectrum—beyond cooperation and coordination—toward real collaboration and integration of shared services and functions as appropriate (Waibel, Zorich, and Erway 2009). Digital preservation is focused on the digitized entity's entire

and thorough life span. Many Europeans and some North Americans may use "digital curation" interchangeably, considering digital preservation to be the few activities and processes required to ensure long-term access. The writers examine all elements of curating and preserving digital content for long-term access, using the term "digital preservation" in its broadest meaning (Corrado & Sandy, 2017). This study introduces digital curation as a prospectively converging area in both professional conduct and vocational education and a model for finding everyday demands and institutional differences. The author disclosed their Knowledge and Competencies Matrix of Digital Curation to find and organize the content that should be covered in a digital curriculum. Interpreted, the importance of digital curation operations in supporting the responsibilities of all three types of organizations is growing, opening up attractive new opportunities for professional education collaboration (Tibbo & Lee, 2010). The author studied museums, archives, libraries, and professional workouts and found that, given essential modifications in how data is accessed online, museums, libraries, and archives have rethought their facilities and revised their user models. With the acceptance of the Web as the primary means of publishing and communication, there are several prevalent problems facing libraries, archives, and museums (Trant, 2009). The researcher examined the historical convergence between these organizations, focusing on repositories of cultural artifacts in museums and libraries. Using historical records, two current examples of long-standing epistemic ties between libraries and museums are analyzed, pointing to the re-convergence of a customarily shared history (Given & Tavish, 2010). Partners inquire about the library, archive, and museum cooperation (2010). They tried to define the intersecting elements of LAMs together. This working group looks at how social media users' metadata can be utilized to communicate LAMs (Smith-Yoshimura, 2011). The author of this article stressed the importance of addressing the converging and diverging factors of LAMs in the Indian context, where he highlights the divergence and convergence factors while also providing an overview of these institutions. (Katre 2011). In Bangladesh, only a few research studies have been conducted that are linked to our topic.

This study mainly focuses on the trends of ARM education in Bangladesh. The article analyzed the role of ARM professionals. The findings show that professionals' motivation for pursuing ARM is jeopardized since there is no scope to help them due to a lack of awareness and policymakers' attention to ARM growth. The value of ARM is emphasized, which may persuade politicians to include ARM courses in regular education (BEGUM, B., Mostofa, M., & Mezbah-UI-Islam, M., 2014). To identify opportunities and challenges, the researcher researched to conceptualize record and archive management education, training, and opportunities in Bangladesh. The findings show that RAM training options have aided the development of professionals in Bangladesh (Maidul, 2021).

In the international arena, considerable research has been conducted. However, no significant research works from the Bangladeshi perspective are closely related to this topic. Those interested in promoting technology-based preservation and conservation will, in our view, drive more deliberations on this subject. Their purpose is to say that it would be fascinating to learn about librarians', archivists', museologists', and the great majority of potential customers' perspectives on how they want to advance this choice. Such attempts raised theoretical problems and generated some experimental outcomes regarding interoperability at the metadata level (for integrated access to data). The convergence was only tested once embedded access to LAMs was complete.

#### **4. Methodology:**

This study relies on secondary data sources from related literature, journals, research papers, newspapers, news bulletins, and several websites. The information is gathered from current literature and the Bangladesh National Library, National Archives, and National Museum websites. The rest of the portion is from the author's point of view, identifying the divergence and convergence factors. Delineate and provide recommendations for the digital preservation of LAMs materials in Bangladesh.

#### **5. Results:**

##### **5.1 LAMs Paradigm and Disentangle:**

Libraries, Archives, and Museums (LAMs) are treated as separate institutions (Borgman et al., 1996, cited in

Rasmussen and Holland, 2021). "Digital libraries are a set of electronic resources and associated technical capabilities for creating, searching, and using information." There is no distinction among digital LAMs. When it comes to archives, the digitalization of records means that they (like library documents) can now be searched individually using full-text retrieval techniques. Archives focus on collecting historical manuscripts, pictures, text, or other written items that might have future value. The museum focuses on collecting physical materials related to culture and history and provides physical access to the item. The disparities among LAMs should be subordinated to the emerging need to strengthen the knowledge-based nation's economic and intellectual infrastructure through a new outlook on collecting and collections. Few people believe the LAMs are critical infrastructure for the knowledge-based economy because they have functioned so well in modern society that they have been practically invisible. Furthermore, new information and communications technology may eventually obviate the requirement for such entities.

### 5.2 Digital Convergence Factor:

We often get confused with the term "convergence." Convergence indicates merging or aggregating institutions. In that sense, LAM convergence combines library, archive, and museum in terms of similarities in functions or operations. Sometimes, thinking about "digital," "electronic," or "traditional" confuses me. For convergence, we need to better understand the distinguishing elements of the fundamental operations of the institutions.

The LAMs paradigm highlights similarities in digitally expanded procedures and functionality. We see some expansion like the library to a digital library, archives to the digital archive, a museum to virtual museum record-keeping to E- record management, archaeology to digital archaeology, curation to digital curation, restoration to digital restoration, collection management to digital collection management, preservation to digital preservation, repository to trusted digital repository but we find convergence in some cases digital curation, digital content management, digital preservation and which could be suggested.

Digital content exists in libraries, archives, and museums, and these institutions are moving toward merging into the larger area of digital preservation. We believe convergence should be explored in educational and professional practice, the development and management of collection, preservation, administration, and sustenance (Katre, 2011).

### 5.3 Digital Divergence Factors :

Archival exercise defines a *collection* as an unintentional by-product of an individual's or organization's actions. Museum objects are described as having a "thinness of the thing," which refers to their physical characteristics, including their material, dimensions, and object or genre classification (Rinehart, 2003). Libraries today, in contrast, are more dynamic and transaction-oriented, collecting published content. Archival records are more likely to have been created spontaneously and inadvertently as a result of routine legal, commercial, administrative, or social operations than as conscious endeavors to provide education, teaching, and research tools. According to the documentation tradition, museum objects are considered documents that are exceptions; things are usually one-of-a-kind, and the concept of authenticity plays a role.

On the other hand, libraries must also be classified according to their goals: libraries and books are primarily used for research, whereas archives and records are used for administrative purposes. The discrepancy between the tasks specified by the National Archives and Records Administration (NARA) and the Congress Library (LoC) is notable. The main aim of NARA is to obtain, maintain, and make the most precious federal government documents accessible for a study where. LoC collects study materials in various media and on a wide range of themes from around the world and is one of the largest providers of bibliographic data and products (Katre, 2011).

The National Archives and Records Administration (NARA) began working with electronic records in 1965. In 1969, the National Archives received the first electronic record transfer. In the forty years since 1969, there have been three major phases in which NARA has dealt with electronic records (Thibodeau, 2009). Considering the unique distinctions among

these institutions, we would like to observe the following divergent factors as a pattern for a course syllabus: data sharing and distribution culture; copyright legality of materials; acquisition policy; content creation method or approaches; data type and file formats; classification; metadata languages; digital preservation solutions; privacy and confidentiality; standards and procedures; revenue-sharing arrangements; survival models; government policies at the institutional level; administrative systems and processes; and user expectations. So far, a unified metadata schema is the sole convergent component for embedded access to the explorations. Aside from the technical aspects, mutually beneficial income sharing, information sharing models, motivational incentives must be developed, and LAM convergence. In addition, the figure below shows the converging and diverging variables in the digital preservation sector of the LAMs paradigm (Katre, 2011).

#### **5.4. Museology, Archival, Library, and Information Science in Bangladesh:**

##### **5.4.1 Museology Scenario:**

It is proven that taking youngsters to museums and displaying artifacts, cultural and educational substances, or works of art will give them a fourth dimension to what they have learned in typical classrooms. Suppose young people attend an exhibition featuring armor and weapons from the time of Bangladeshi liberation fighters. In that case, they will undoubtedly be interested in the subject and want to learn more about its history. According to multiple studies, people who have firsthand experience with such content are more likely to recall it later in life. A substantial percentage of Bangladeshi children and young people reside in remote rural or urban locations and are unable to visit museums in the capital or large cities. Even rural primary and secondary school authorities find it challenging to organize guided tours of museums, notably the National Museum in Dhaka. Schools in Bangladesh should encourage pupils to visit museums as part of their curriculum, just as in many other countries where schools arrange guided excursions to historical places and museums. The government should provide resources to schools and museums to encourage children to visit museums regularly and learn about their country's history, society, communities, and cultures. Otherwise, the

government should consider creating a virtual museum based on current museum materials so that children can visit the online portals of various museums and take a virtual tour of the web-based museums through computers, tablets, or smartphones. Such a virtual museum is gaining popularity in various parts of the world (Rashid & Rahaman, 2013). The scenario of the Bangladesh National Museum: The Museum's goals are to enhance the Museum's collections by acquiring antiquities, artwork, ethnological specimens, artifacts related to Bangladesh's struggle for independence, flora and fauna samples, traditional crafts and artifacts, products of intellectual endeavor, audio-visual documentaries, and other items related to the country's cultural and natural heritage, but most importantly, items from various nations that collectively represent a spectrum of cultures. to maintain all items according to accepted conservation standards. For the sake of current and future generations, provide a secure and suitable habitat for the collections and efficient environmental control. Ensure all items the Museum receives on loan or borrowed from the Museum are preserved according to requirements. To provide study support for scholarly exploration and research to catalog, record, and publish the museum's artifacts and to advance human knowledge. Encourage engaging educational initiatives. Support fieldwork and exploration—the upkeep of databases, archives, libraries, and other research resources. The Bangladesh National Museum forges a link between the dynamic present and the rapidly disappearing past. The ability to explain a country's natural and cultural legacy in a way that sheds light on the current situation is one of the museums most critical and challenging jobs today. With this in mind, the Bangladesh National Museum aims to broaden the definition of culture in the broadest anthropological sense by connecting modern life to the ongoing creative pursuits of man and the material world, both natural and artificial, to aid visitors in discovering a purpose that is shared by all.

In 1974, the Bangladesh National Museum built its conservation laboratory. This department's primary goal is to perform scientific preservation and restoration on samples that are occasionally submitted from the curatorial divisions of the National Museum of Bangladesh. All the officers of this department

have received advanced foreign training in conservation science. The Department of Conservation Chemicals, in addition to the specimens of the National Museum of Bangladesh, has a branch that assists in the preservation of specimens from museums and other related institutions and museums. The department provides necessary advice on controlling humidity, temperature, harmful light rays, insects, and airborne gases for proper management of the specimens. The Department of Conservation Chemicals organizes training, workshops, seminars, and lectures for museum staff on conservation and restoration. In addition, the department, at the request of other museums and related institutions, conducts activities related to the preservation and restoration of cultural heritage and the exchange of preservation knowledge and experience. The Department of Conservation Chemistry of the National Museum of Bangladesh has been a long-standing member since 1994 of the International Institute for Conservation of Historic and Artistic Works.

#### 5.4.2 Archival Scenario:

In Bangladesh, archive and record management (ARM) is nonexistent in higher educational institutions, and many professionals must know its meaning. The European Union countries, Canada, the United States, India, Malaysia, Singapore, China, and Australia support and encourage ARM instruction in their educational institutions. Regrettably, only some Bangladeshis are aware of the concept of ARM. In recent decades In Bangladesh, the field of library and information science has been a strong supporter of archival education. Two decades ago, the majority of programs in archival education were focused on history. This emerged in part due to the functional parallels between these two fields. Although many university history departments provide archival theory and practice courses, there are several advantages to the library and information science field that can teach you about archival theory and practice. Each of these domains might serve as a repository for study

archives, which would help to reduce the disparity between theory and practice. Students can choose from a variety of potential career paths in each field. In the past, universities and other institutions in Bangladesh did not offer archives and records administration courses at the diploma, graduate, or postgraduate levels. However, at present, the Department of Information Science and Library Management of numerous universities in Bangladesh offers a 3-credit required course at the diploma, graduate, and postgraduate levels.

The scenario of Bangladesh National Archives:

Collection: Bangladesh National Archives has gathered a huge number of documents from various organizations/sources in the last few decades. The following is a description of some of the important ones:

- Proceedings and records of the Parliament of Bangladesh
- Documents of the Cabinet Division
- Documents of Dhaka Divisional Commissioner
- Documents of Chittagong Divisional Commissioner
- District Records
- Collectorate records
- Government of Bengal Proceedings / Files of East Bengal and East Pakistan
- Dhaka City Corporation Records
- District Council Records
- Narayanganj Peersabha Records
- Sylhet Proceedings / File
- Old Map (1840-198)
- Official Publications (1800-1982)
- Gazette
- Estate Records
- East Pakistan and Bangladesh Records
- Newspapers

(Bangladesh National Archives 2022)

Training programs on Records and Archives Management in Bangladesh

S.L No.	Name of the Program	Organizer	Held
1.	Exhibition of archival and library materials for celebrating the 100 years of the Father of the nation	Department of Archives and Libraries, Ministry of Cultural Affairs	27 February 2020
2.	Empowering the library and information professionals for achieving the SDGs	Department of Information Science and Library Management, University of Dhaka	10 February 2020
3.	Advanced archival records management and modern library management	Department of Archives and Libraries, Ministry of Cultural Affairs	19 January 2020
4.	Archival Innovation for citizen services	Department of Archives and Libraries, Ministry of Cultural Affairs	2 November 2019
5.	Designing the archive in the 21 <sup>st</sup> century	Department of Archives and Libraries, Ministry of Cultural Affairs	17 June 2019
6.	Exhibition of archival and library materials	The Directorate of Archives and Libraries, Ministry of Cultural Affairs	6 June 2019
7.	Reengineering of library and information systems: issues and challenges	Department of Information Science and Library Management, University of Dhaka	4 January 2018
8.	Digital curation in archives: stages, solutions, skills	Department of Information Science and Library Management, University of Dhaka	6 December 2017
9.	Archives and RTI training at Naradi	Bangladesh Archives and Records Management Society (BARMS)	20 July 2014
10.	Preservation of Institutional and digital records	Prothom Alo (a renowned national daily) and Friends of Archives Bangladesh (FAB)	29 January 2014
11.	Training on Records Management, Conservation, and Preservation	Bangladesh Archives and Records Management Society (BARMS)	January 2014
12.	Workshop on records and archives management in Bangladesh	Bangladesh National Museum and BARMS	October 2013
13.	Training program on archival records management, conservation, and Preservation	National Archives of Bangladesh and Bangladesh Archives Records Management Society (BARMS)	24-26 January 2013
14.	One-day workshops on archives and records management	National Archives of Bangladesh	2012
15.	Archival development training	Bangladesh Archives Records Management Society (BARMS) and The Directorate of Archives and Libraries	February 2010

Table1: Status of Training programs on Records and Archives Management in Bangladesh cited in (Maidul 2021)

#### 5.4.3 Library and Information Science Scenario:

In 1959, Dhaka University established the "Library Science" department, which offered a diploma program (islam.du.ac.bd, 2016). In 1962, a one-year Master's degree in Library Science was established, and in 1974–75, a two-year Master of Philosophy (MPhil) program was approved. In 1978–1979, the PhD program was approved. In 1987, the department changed its name to the Department of Library and

Information Science and launched a B.A. with Honors course. Currently, this department offers honours, master's, MPhil, and Ph.D. degrees (islam.du.ac.bd, 2016).

The Rajshahi University, LIS Department, was established with a one-year PGD program in 1991–92. (University of Rajshahi, 1992). In 1992–93, the department introduced a three-year Bachelor of Social Science (BSS) honors program by becoming a full-fledged department. (University of Rajshahi, 1993). A

one-year Master of Social Science (MSS) program was launched for its library science graduates exclusively in the academic year 1995-96. (University of Rajshahi, 1996). Finally, beginning in 1997-98, the bachelor's degree was changed into a four-year program (University of Rajshahi, 1999).

Now, four (4) universities and four (4) private universities provide honours, master, and diploma degrees in library education in Bangladesh, and 27 separate institutions provide a postgraduate Graduate Diploma in Library and Information Science (Begum & Elahi, 2019).

In Bangladesh, the training opportunities for LIS students and professionals could be better. The University of Dhaka's Department of LIS hosted a CDS/ISIS training program, but the program was canceled due to a lack of physical facilities and faculty initiative. A few notable libraries in Bangladesh offer LIS professionals and students training. However, the majority offer CDS or ISIS education. The Independent University of Bangladesh (IUB) library, the Community Development Library (CDL), the Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP) library, and the International Centre for Diarrheal Disease Research (ICDDR, B) library all provide CDS/ISIS training courses (Islam & Chowdhury, 2006). The scenario of the Bangladesh National Library The National Library collection is a national cultural resource. The main feature of the Bangladesh National Library Collection is that it develops various branches of knowledge science such as language, literature, culture, history, heritage art, archaeology, archives, religion, philosophy, science, and technology, medicine, engineering, agriculture, economics, library and information technology development, administration, environmental science, women's affairs politics, international relations, human resource development, etc. The National Library of our country also collects foreign publications on various subjects, especially South Asia and Collection Studies. In addition to these collections, the National Library collects all publications and donations published within the country under the Copyright Act. The total number of collections of all types in the National Library is more than 5 (five) lakhs. The number of processed usable books is 2 (two) lakhs.

- The number of headlines in the bound Bengali daily newspaper is 103
- There are 31 headlines in the bound English daily newspaper
- Bounded Bangla Magazine has 150 headlines
- Bounded English Magazine has 8 headlines
- District Gazetteer (British period) has 309 titles
- The number of maps is 1687
- Up to 59 microfilm rolls (1875-1926)
- Up to 1500 macrophiles (1985-1992)
- Collection 63570 under copyright law from 1968-2012
- Collection 3745 under copyright law in 2013 (Bangladesh National Library 2022)

## 6. Results:

Our professionals need to be made aware of this fact, which is why they have a negative perception that tends to generate negative results. It has been noted that digital LAMs are on their way to converging into the broader field of digital preservation generating negative results. It has been noted that digital LAMs are on their way to converging into the broader field of digital preservation. The Ministry of Cultural Affairs, Dhaka University, Bangladesh National Museums, and Bangladesh Archives and Record Management Society organized several programs for their professionals. In Bangladesh, no specific organizations work on it as a common platform. The two public universities did not integrate standard course curricula on "digital conservation and preservation" into their curricula. This research depicts that convergence may be considered as the three institutions have enough digital materials to be preserved. LAM professionals are afraid or unwilling to participate in this venture because each institution has a unique identity and their participation can decrease it. Digital preservation requires technological infrastructure, but this scenario may not be satisfactory. It is challenging to cover all LAM institutions at once for convergence because of their size, collection, physical location, ICT infrastructure, and digital curation and innovation capabilities.

## 7. Recommendations for the digital preservation of LAMs materials in Bangladesh:



Based on observations, it is advised that several steps be made to bring these institutions closer together. The following recommendations might be helpful in digital preservation:

- Ministry of Cultural Affairs, Dhaka University, Bangladesh National Museums, and Bangladesh Archives and Record Management Society should take steps to organize more programs for their professionals and act as leaders in converging LAMs;
- The two public universities should take steps to introduce some standard courses for these institutions;
- Library and Information Science institutions of Bangladesh should emphasize incorporating archives and museum-related courses in their curricula;
- Some software packages may be used for organizing library, archives, and museum materials organization;
- Government should take steps to organize a large number of LAMs workshops, seminars, and symposiums to draw the interest of the institutions to the right on the collaboration spectrum;
- With convergence as a long-term goal, the Ministry of Cultural Affairs must promote and aggressively modernize museums, archives, and libraries. The upkeep and maintenance of the digital life cycle require an adequate ecosystem;
- Government should take steps to organize a large number of LAMs workshops;
- It is indeed vital to establish a professional network or forum where professional LAMs may get together;
- Formation of more digital institutions;
- We need to weaken the discrepancy from the national level by sitting with them about the perception why negative perception and capturing observations of what they require to participate;
- The key to establishing a proper participatory LAM in digital preservation is to establish a national policy for this paradigm under which such an environment can be set that will help work collaboratively in digital preservation;

- So, the first thing is to select some institutions which are in good knock in digital preservation. Then come by turns, every institution can be included.

### **8. Conclusion:**

Bangladesh is trailing behind in digitization and the construction of digital information preservation compared to other countries. Technology-based libraries, archives, and virtual museums are still in their infancy in the country. As a result, they are transitioning to LAM convergence is only possible with digitization in these sectors of our economy. This need should be recognized by information professionals and their superiors, who should take the required steps to provide refresher training. These disparate institutions must get their feet wet. Some digital libraries, virtual museums, and digital archives must be established as soon as possible; we should cover the recommended thing for creating a converging environment. In Bangladesh, it is vital to harmonize things, rebuild infrastructure, and reduce gaps in their practice.

### **9. Conflict of Interest:**

The authors declared that there is no conflict of interest.

### **10. Funding:**

The authors received no financial support for the research.

### **11. Authors' Contributions:**

Razzak A came up with the concept and created the framework for the study. Under Razzak A's direction, Rozifa A. and Sonia A. participated in the study and contributed along the way. Relevant information was acquired by Razzak A, Rozifa A, and Sonia A. The initial draft of the work was written by Razzak A. The manuscript was reviewed by Rozifa A, Sonia A, and Razzak A, who edited and critically reviewed it. The authors granted their final approval after making significant revisions to the manuscript.

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**Citation:** Razzak, A., Afroz, S., & Akhtar, R. (2022). Convergence and Divergence Factors in Digital Preservation of Libraries, Archives, and Museums Materials in Bangladesh. *Khwaja Yunus Ali Uni. J.* 5(2), 117-127