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DEVELOPING A NATIONAL DIGITAL CULTURAL HERITAGE REPOSITORY CENTRE FOR MALAYSIA : ISSUES AND CHALLENGES

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Abstract

The demand for digitized cultural content is ever increasing worldwide and the same phenomenon is facing Malaysia. Several digitization initiatives have been established in Malaysia. As the main objective of digitizing cultural heritage materials is to enhance the accessibility and to improve preservation, this paper will discuss on the potential of establishing a National Digital Cultural Heritage Repository Centre for Malaysia. The proposed National Digital Cultural Heritage Repository Centre is an effort towards promoting collaboration among the different cultural heritage institutions in Malaysia including museums, archives, art galleries, and libraries. This paper reports on the findings of a survey that investigated the state of digitization projects in Malaysian cultural heritage institutions. In addition, this paper will discuss some of the issues and challenges that must be addressed by the Malaysian information professionals in order to materialize the idea of the National Digital Cultural Heritage Repository Centre. The establishment of such a repository in Malaysia will enhance global community's understanding and appreciation of the Malaysian culture and heritage, and thus providing an important reference point for the world to access to information on Malaysian cultural heritage information.

Cultural Heritage Information

Cultural heritage information allows human to learn and develop. In 1994, the U.S. National Archive and Records Administration (NARA) Conference on Authenticity in Relation to the World Heritage Convention defines cultural heritage information as the written, oral and figurative sources, which make it possible to know the nature, specifications, meaning and history of the cultural heritage. It includes published and unpublished texts, images of many types, work of art, artefacts, collectables, historical treasures, or similar items, which are held for their cultural, environmental or historical significance. Cultural institutions such as libraries, museums, archives, galleries and historical institutions hold these types of information. Dempsey (2000) explains that cultural heritage information contains the memory of people, communities, institutions

and individuals, the scientific and cultural heritage, and the products throughout the time of our imagination, craft and learning.

Throughout history, there have been continuous attempts made to record culture to mark the importance of preserving the knowledge of civilization. The degree and nature of these activities vary, ranging from simple cave paintings to more sophisticated systems of classification. One thing that has remained a constant is the fundamental fact that the universe of knowledge is forever expanding, and must be preserved.

There is a growing recognition that cultural heritage and its conservation is a shared responsibility of all levels of government, proponents, and members of a community. Heritage is more than a record of the past - it is becoming an integral part of the urban identity now, and for the future. Unfortunately, the world rich cultural heritage is under tremendous pressure from the forces of rapid economic development, globalization, and political unrest. The world is facing an unprecedented loss of valuable cultural heritage information due to several factors such as natural causes - cyclones, monsoons, moulds, insects and rodents and acidified paper, on which recorded knowledge ultimately crumbles to dusts. Abid (2001) states that documentary heritage in libraries and archives constitutes a major part of the memory of the peoples of the world and reflects of peoples, languages and cultures, but this memory is fragile. He further opines that there is no escape from the destructive forces of nature, but a sad reflection that the most grievous losses have generally been the result of human action, whether through neglect or wilful destruction.

Recognising the importance of cultural heritage information, UNESCO has taken the responsibility as the sole UN agency with the mandate for promoting the stewardship of the world's cultural resources at all levels. The responsibility for safeguarding the world's cultural properties begins at the highest legal and international governmental levels and descends through practical and technical levels down to grass-roots advocacy and hands-on fieldwork. UNESCO's activities in the safeguarding of cultural properties revolve around three axes: prevention, management and intervention. UNESCO oversees a number of international conventions and treaties that assist countries in safeguarding their cultural heritage. Cultural heritage preservation is essential if we are to retain the wealth of our cultural diversity and ensure that the world is enriched rather than impoverished by globalisation. So it is crucial for every nation to support activities dedicated towards preservation, access and appreciation of their cultural heritage information.

Digitization of Cultural Heritage Information

Technological advancements have significantly changed the way information is generated, collected, organized, presented, disseminated, shared and used. Individuals and organisations at local, regional, national and international levels are actively creating

vast quantities of digital information, adding to the global information explosion. Digitization has proven to be possible for nearly every format and medium presently held by cultural institutions, from maps to manuscripts, and images to sound recordings. Smith (1999) reveals that the use of hardware and software for capturing an item and converting it into bits and bytes, supported by effective practices for describing and retrieving digital objects, is giving form to the talk of the library without walls. The main reason to digitize is to enhance access and improve preservation. By digitizing their collections, cultural heritage institutions can make information accessible globally. It also allows users to search collections rapidly and comprehensively from anywhere at any time. Berger (1999) confirms that digitization can also be considered as preservation option while providing unparalleled access available to all. However, Jones (2001) stresses that this does not mean that digital copies should be seen as a replacement for the original piece.

All efforts that have been made to enhance accessibility and preserve cultural heritage information should be acknowledged. By digitizing cultural heritage information, we can not only ensure it is well preserved for the future generation, but also be considered as an effort to increase the level of appreciation to the cultural heritage information by the society especially to the young generation. This can be done through providing easy access and discovery of information. Allen and Bishoff (2002) regard the benefits of digitization of cultural heritage information as non-tangible, nonetheless the information is crucial to link each individual or community with its history. The main purpose of cultural heritage digitization projects is to ensure the preservation of cultural heritage information through appropriate means and to ensure the accessibility of the cultural content to as many people possible using the most appropriate technology. This is in accordance with Jones' (2001) view, who divides the benefits of digitization into two, i.e. access and preservation.

Digital Cultural Heritage Repository Centre

The ultimate aim for digital cultural heritage information initiative is to enhance accessibility and to improve preservation. However, digitizing of cultural heritage information is not a simple initiative. It requires a lot of expertise, such as IT expertise, resource description expertise, project management expertise, etc. It is a costly exercise requiring high investments, not only a one time cost but an ongoing cost for the maintenance of the resources. The 'Lund Principles' (2001) lists fragmentation of approach, technological obsolescence, intellectual property rights, lack of common form of access and institutional investment and commitment as the key challenges in digitization initiatives. The Library of Congress lists building of resources, interoperability, intellectual property, providing effective access and sustaining resources as the broad categories of challenges in digitization initiatives. The National Digital Forum in New Zealand (2002) represented by a wide range of cultural institutions, also outlines a number of issues such as legal, funding, technical issues such as developing common standard and interoperability, identifying and assessing demand, and strategic policies development such as for selection of materials, preservation, curatorial ethics,

etc. The forum feels that a national collaborative approach will help avoid duplication of effort, provide access to expertise, facilitate problem solving and provide a strong national platform to negotiate funding.

Cultural institutions provide and use many network services to disclose and deliver their content. Dempsey (2000) mentions that they are individually valuable, but do not seamlessly work together or rely on each other for services and they do not communicate easily or share content. He further suggests that user who has to discover what is available have to cope with many different interfaces, negotiate different authentication systems, work out terms and conditions, manage different results and move data between services which are very labor-intensive.

Collaboration between cultural heritage institutions has been found to be capable of expanding the impact that each type of institutions brings to society. With a powerful collective mission, collaboration among cultural institutions can yield greater results. Allen and Bishoff (2002) report that in the United Kingdom, the collaboration among libraries and other cultural has resulted into increased access to collections, economies of scale, resource sharing, training and allowing staff to learn new approach as the major five tangible benefit of collaboration.

Coordination efforts toward cooperative management of the nation's digital heritage initiatives would positively avoid any possibility of duplication and permits more effective and efficient resource discovery and apparently it would promote the nation's cultural heritage information to the world. Besides avoiding duplication of effort, there are other numerous benefits that could be gained by the cultural institutions with the establishment of a central National Digital Cultural Heritage Repository (NDCHR). With the establishment of such repository, the cultural institutions would be able to resolve challenges in a more comprehensive manner and also share costs, share access systems, share programs, share support infrastructure and share training access (Allen & Bishoff, 2002). It would absolutely be beneficial to the small institutions. Obviously, the establishment of NDCHR is crucial because it will serve as a reference point for the world to access information and knowledge about the country, and undeniably, the establishment should be regarded as the main concern of cultural institutions.

It is very important to have a joint strategy for giving people access to their national cultural heritage information, which is to be found in the different types of cultural institutions. Alkhoven (1999) points out that digitization must definitely add extra value and this extra value can definitely be found in improved accessibility of dispersed information, which will only be attained when the database contains large collections which are stored in a standardised way. In order to achieve this, a central repository is needed. In many countries, there is a growing interest in cooperation among archives, libraries and museums. Hedegaard (2004) argues that, for the sake of the interested user, it is important to make it easier to obtain information from different institutions and to make a cross strategy that allow people to access to their cultural heritage information. The goal of a digital cultural heritage repository centre is to provide the public with the opportunity to search material in archives, libraries and museums simultaneously and this main goal will definitely improve access to those materials.

There is a growing list of success stories where groups of cultural institutions worked together in digitization projects so that the result is richer and better organized with increased access to all data than a set of independent efforts would have been. Examples of success collaboration initiatives in digitization of cultural and heritage resources are:

1. ***The Digital Library Federation (DLF)*** (<http://www.diglib.org/dlhomepage.htm>). This program was initiated in 1996 under the auspices of the Commission on Preservation and Access. DLF focuses primarily on establishing standards and best practices and on research and development in leading edge areas of digitization. Although the DLF does not directly produce digital content, it has produced a body of work that reflects the DLF-funded research conducted by the membership organization. Two members of DLF, University of Michigan and Cornell University have collaborated to produce a very large and ongoing project called the *Making of America* (<http://moa.umdl.umich.edu>). The project focuses on materials published from 1850 to 1877. The project has demonstrated a successful model for presenting text documents in digital format that are not directly searchable by the user.
2. ***Digital Scriptorium*** (<http://sunsite.berkeley.edu/Scriptorium>) which is also an initiative under DLF is a project that specializes on medieval manuscripts. This project is funded the by the Mellon foundation and was undertaken by Duke University's Perkins Library, Columbia University's Rare Books and Manuscript Library, the University of California at Berkeley's Bancroft Library.
3. ***The American Memory Project*** (<http://memory.loc.gov/>). In 1997, the Library of Congress and Ameritech established a partnership that brought special collections into a centralized digital centre. More than 7 million digital objects from the unique collections of the Library and its partners are available to the world. This digital collection is the single largest digital collection of primary resources. Most of the partners of this project are libraries but some museum resources were also included.
4. ***California Digital Library (CDL)*** (<http://www.cdlib.org/>). It has more than 40 members including the libraries from the University of California System, California State University System libraries, and the California State Library, as well as museums and public libraries. In 1998, the CDL began its first thematic project, the development of the Japanese American Relocation Digital Archives (JARDA). According to Ober (2001) the database presents digital images representing 10,000 images and 20,000 oral histories, diaries, letters, drawings and photos about 11 camps.
5. ***The North Suburban Library System (Wheeling, Illinois)*** (<http://www.nslsilus.org/>) is the coordinator for the *Digital Past Project* (<http://www.digitalpast.org>). In this project the member libraries, frequently working with local historical societies, digitized collections that convey the history of their community.
6. ***Colorado Digitization Project (CDP)*** (<http://coloradodigital.coalliance.org>) was conceived by a group of Colorado librarians participating in an annual Colorado resource sharing planning retreat. The CDP demonstrates a collaborative model that provides digitization infrastructure to the state, enabling both small and large cultural heritage institutions to engage in digitization. Some of the digitization initiatives are :

- a. *Connecticut History Online* (<http://www.lib.uconn.edu/cho/>). A collaborative initiative of the Connecticut Historical Society, Mystic Seaport Museum and the Thomas J. Dodd Research Center at the University of Connecticut. They have established a comprehensive Web-based virtual collection of images documenting the Connecticut community
 - b. *Images of the Indian People of the Northern Great Plains Project* (<http://www.lib.montana.edu~elainep/implsabst.html>), is a project involving the Museums of the Rockies and the Montana State University Libraries creating a database on culture of the Plains Indians
7. In Denmark, the *NOKS* project (<http://www.noks.dk>) is one of the databases with materials about cultural history of the North of Jutland. The database involves nine institutions and the records from each institution have been put together in one database. The database consists of 115,000 records; among them 8,000 photos, including different types of material, printed material, book, leaflets, newspaper clippings, archives and museums items, etc. This database can be considered as one of the national repository for Denmark.

The Study

In Malaysia, several institutions that have embarked on the digitization of cultural heritage information such as Pustaka Negeri Sarawak, Institut Alam dan Tamadun Melayu (ATMA), Universiti Kebangsaan Malaysia (UKM), National Library of Malaysia, National Archive, National Art Gallery, State Public Libraries, etc. However, most of the digitization initiatives by the cultural institutions in Malaysia are being carried out in isolation. The development and progress of the initiatives is not widely known, and it is segregated in terms of approaches and perceptions. Putri Saniah (2001) mentions about duplication of efforts by various institutions in their digitization initiatives due to working individually. She also points out that the country is lack of agreement to coordinate and bring together local digital information resources in one repository.

The Prime Minister of Malaysia , YAB Datuk Seri Abdullah Ahmad Badawi (2000) in one of his speeches stresses that in order to enhance the knowledge and information contained in our local collections, libraries need to embark on joint initiatives with universities and public and private archives to develop repository for our local resources. This would enhance global community's understanding about Malaysia's culture and become a reference point for the world to access information and knowledge about the country.

Dato' Habibah Zon (2001) also recommends that in order to keep the nation's memory of the past alive, a coordinated effort is clearly needed. She proposes that in order to address the challenges in collaborating cultural heritage institutions, there must be an understanding of shared responsibility among various institutions in the public sector.

It is obvious that the main aim for any digitization initiative of cultural heritage information should be to enhance accessibility and to improve preservation. The importance of accessibility and preservation of the national cultural heritage should be the focus of every cultural institution and it should not be an individual institution's role or effort. The exercise should be viewed as a national agenda towards the dissemination, preservation and promotion of the nation's cultural heritage information to the world as well as to the future generation. These objectives could only be successfully achieved through collaboration and co-operative effort from all cultural heritage institutions in Malaysia through the establishment of a central repository. Thus, it is high time that the establishment of a national digital heritage repository be the aspiration of all cultural institutions in Malaysia and be treated as an essential national agenda for the nation in achieving the Vision 2020. However, such central repository for digital cultural heritage information is not yet available in Malaysia. Embarking on such collaborative project will involve a lot of planning, re-planning and challenges. It would definitely require adequate and sufficient resources, such as funding, staffing, timing, infrastructure, etc.

Acknowledging the lack of a central repository for Malaysia, a need is felt to understand the current status of digitization projects in Malaysian cultural heritage institutions. The main objective of this study is to investigate the potential of establishing a repository centre for Malaysian cultural heritage institutions. A survey was conducted during the months of June and July 2005. A total of thirty (30) cultural heritage institutions were identified based on the directory provided by the Ministry of Culture, Arts and Tourism, Malaysia. These are public cultural institutions which comprised of libraries, archives, museums and art galleries. A questionnaire with three main sections with sixty seven questions was designed to explore the current status of the digital cultural heritage information initiatives in Malaysia. Questionnaires delivered to the institutions were accompanied with an introduction letter and a self-addressed envelope. The respondents were given a one month period to respond to the questionnaire. All data received were properly coded and analysed.

Findings and Discussion

State of digitization projects

Based on the returned questionnaires, it was discovered that 20 (66.7%) of the cultural institutions in the study have digitized their cultural heritage information. About 85% of the digitization initiatives are still on going. The study found that the digitization initiatives in cultural institutions in Malaysia had started as early as 1999. It was also found that 50% of the digitization initiatives were conducted internally, and the other half engaged external consultants to manage the digitization projects. Most of the institutions, i.e. 70% of them, maximised their own internal financial facilities to fund their project. Table 1 below outlines the digitization projects embarked since 1999. The complete list of the projects, i.e. projects' names, and types of collections digitized can be found in Appendix 1.

Table 1: Digitization projects (1999-2005)

Commencement Date of the Project	No of Institutions
2005	3
2004	4
2003	2
2002	5
2001	2
2000	2
1999	2

The findings reveal that digitization initiatives in Malaysian cultural heritage institutions have started since late 90's. The list of projects also shows that the types of institutions range from libraries, museums, and art galleries. As can be seen, state public libraries have also initiated digitization projects of cultural heritage materials.

Goals of digitization

Respondents were asked about the goals of digitizing their cultural heritage resources. Eighteen (90%) of the respondents cited preserving cultural heritage information and to support education and research activities as the ultimate goals for digitization. The other highly cited goals were to improve access (85%), and information sharing (70%).

Table 2: Goals of digitization

Goals of Digitization project	No. of Institutions	%
To preserve materials	18	90%
To support education and research activities	18	90%
To improve access	17	85%
To share the information	14	70%
To reduce damage to original materials	10	50%
To save space	6	30%

The above findings suggest that the different institutions almost unanimously agreed on the goals of digitizing cultural heritage materials. Having an agreed upon projects' goals would be a good starting point for the institutions to work together in so many aspects of digitization projects.

Types of materials digitized

In terms of the types of cultural heritage information being digitized, 85% (17) of the institutions indicated that they digitized photograph collections. The next two popular resources being digitized were sound recordings and films. Based on the Table 3 below, it can be said that other types of materials are also being digitized such as 3-D objects, videos, manuscripts, text, maps, fabrics and textiles, etc.

Table 3: Types of Materials Digitized

Types of Material Digitized	No.	%
Photographs	17	85%
Sound	13	65%
Film	12	60%
3-Dimensional Objects	7	35%
Video	6	30%
Manuscripts	4	20%
Text	4	20%
Maps	3	15%
Fabrics and Textile	3	15%
Artefacts	3	15%
Magazines	3	15%
Newspaper cutting	2	10%
Lithographs	1	5%

Although it is observed that photograph is the most popular type of materials being digitized, the study also found that various other formats are being supported by the different projects. The variety of formats could only suggest that cultural heritage materials are recorded in so many forms. Digitizing them would allow access in a single format accessible to all. It would definitely contribute in the preservation, access, and appreciation of the local culture as the public is having access to the different manifestations of Malaysian culture and heritage.

In them of synergizing their efforts, different types of materials suggest different policies and technologies to be employed. As such, issues like metadata structure, formats of digital surrogates, and quality of images need to be addressed together by the different institutions. Getting to a consensus on the policies and guidelines for digitizing cultural heritage materials is a challenging but essential task for establishing a repository centre.

Problems Experienced During Digitization

The study was also interested in identifying the problems experienced by the different institutions when undertaking the digitization projects. Table 4 reports that twelve (60%) institutions admitted lack in standard and technical limitations as their main implementation setbacks. Half of the respondents disclosed facing lack in knowledge and skills to carry out their responsibility. More than 5 institutions admitted experiencing difficulties due to insufficient funding, limited knowledge, limited technology, intellectual property, and content management. Majority (90%) of the institutions confirmed receiving sufficient support and commitment from the top management.

Table 4: Problems in Digitization Projects

Types of Problems	No.	%
Standard and technical issue	12	60%
Limited knowledge / skill base	10	50%
Insufficient funding	9	45%
Limited technology base	8	40%
Intellectual Property issue	8	40%
Content management issue	7	35%
Limited infrastructure	4	20%
Insufficient commitment from top management	2	10%
Others	1	5%

Commitment and support from the top management is a very essential ingredient in managing successful digitization projects. As the study suggests, cultural heritage institutions in Malaysia did not face major problem pertaining to this. However, the other problems mentioned need to be properly addressed as these concerns are not only important for the success of an individual project, but the impact would be more strongly felt when the different institutions have to work together, contributing their digital collections in a single repository.

Policies

In terms of the policy governing the digitization initiatives, more than half (55%) of the respondents revealed that they have their own policies to administer their digitization projects. Interestingly, the remaining 45% respondents who admitted not having any policy indicated that they plan and intent to develop the policies in the most immediate future. Table 5 below presents the types of policies that are currently available in the institutions.

Table 5: Digitization Policy

Type of Policy	No.	%
Selection Policy	13	65%
Content Management Policy	11	55%
Intellectual Property Policy	11	55%
Collaboration Policy	9	45%
Preservation Policy	5	25%

Experience gathered from established digitization projects suggests that having strategic policies on certain aspects as outlined in the Table 5 above could help in ensuring the smooth running of any digitization project. In the Malaysian context, it can be suggested that there are already in place, in more than half of the institutions, policies regarding the selection, content management, intellectual property of digital cultural heritage materials. Bringing the different institutions together would require them to agree on a set of policies. As such, the existing policies need to be reviewed together and revised in manner that would best fit every institution.

Selection Criteria

Respondents were asked pertaining to the criteria for selecting cultural heritage materials to be digitized. Majority of the respondents confirmed that cultural value, intrinsic historical value, and academic/research value as the key criteria (Table 6). More than half of the respondents supported that wider accessibility, promotion, reducing damage, space saving, and funding as factors considered. Fifteen (75%) institutions admitted that they did not consider ‘demand’ as one of criteria for selection.

Table 6: Selection Criteria

Selection Criteria	No.	%
Cultural value	19	95%
Intrinsic historical	18	90%
Academic / research value	18	90%
Wider accessibility	15	75%
Promotion	13	65%
Reduce damage	11	55%
Space saving	10	50%
Funding availability	10	50%

Revenue generation	8	40%
Demand	5	25%

The three most cited criteria by majority of the institutions confirmed that the materials to be digitized reflects their commitment in exercising their roles as important agencies in the society that promote the preservation and access to Malaysian culture and heritage. Deciding on what materials to be part of a repository must be carefully done to ensure that the collections support the goals of the projects. Interestingly, cultural heritage institutions in Malaysia seem to agree both on the common goals and the selection of materials to be digitized.

Collaboration Effort

The study found that more than half (55%) of the institutions do not have any form of collaboration with other institutions at the moment. This also suggests that the remaining institutions admitted having been working with other institutions in their digitization initiatives. Respondents were asked regarding their perceptions about the benefits of collaboration. Table 7 below indicates that more than 50% of these institutions agreed that collaboration among cultural heritage institutions could enhance resource discovery, preservation, accessibility, and sharing of cultural heritage information.

Table 7: Perceived Benefits of Collaboration

Benefits of Collaboration	No.	%
Enhance resource discovery of the nation's cultural heritage information	14	70%
Improves preservation of the nation's cultural heritage information	14	70%
Improves accessibility of the nation's cultural heritage information	13	65%
Shared resources	12	60%
Improves promotion of the nation's cultural heritage information	11	55%
Shared expertise	8	40%
Avoid duplication of effort	8	40%
Development of the technical and/ or standard for resource description	8	40%

In general, it can be said that cultural heritage institutions in Malaysia do realize the importance of working together in support of some important national agendas.

Conclusion

Digitization of cultural heritage materials is not new in Malaysia. As the study suggests, different types of cultural heritage institutions have embarked on several digitization projects. Various types of cultural heritage materials have been digitized and made publicly accessible. The impact of providing such service to the public could be enhanced through a combined effort that synergizes the effort of individual cultural heritage institutions. A central repository of Malaysian digital cultural heritage materials would improve the accessibility, resource discovery, preservation and promotion of the nation's cultural heritage information by providing a single gateway to Malaysian culture and heritage information. As demonstrated by many digitization projects such as Colorado Digitization Project, American Memory, California Digital Libraries, Australian Digital Libraries and others, collaboration among cultural institutions can contribute in resolving challenges and maximising the benefits of digitization.

The findings of this initial study suggest that cultural heritage institutions in Malaysia share some common views pertaining to the various aspects of digitization initiatives. These common goals, interest, and concerns are pertinent in materializing the idea of establishing a national digital cultural heritage repository centre for Malaysia.

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APPENDIX 1

NO	INSTITUTION	NAME OF THE DIGITISATION PROJECT
1.	Dewan Bahasa dan Pustaka	No Specific name, listed are the projects that have been completed : 1. Magazine: a. Dewan Bahasa (1957-1997) b. Dewan Budaya (1979 – 1999) c. Dewan Sastera (1969-1999) d. Pelita Bahasa (1989-1999) e. Dewan Masyarakat (1963-1999) f. Dewan Kosmik (1993-1997) g. Malay Literature (1988-1998) h. Perisa (1993-1997) i. Dewan Pelajar (1967-1999) j. Dewan Ekonomi (1994 – 2004) 2. Gambar Foto Tokoh Bahasa dan Sastera ~ 500 images 3. Newspaper cutting: a. Keratan Akhbar Dokumentasi Bahasa, Sastera dan Budaya (1970-1990) ~ 25,000 images b. Keratan Akhbar Dokumentasi Penulis ~ 20,000 images
2.	Muzium Sejarah Nasional	“Mymuzium” (Photograph and Artefacts)
3.	Jabatan Muzium dan Antikuiti	“JMAIS” (Jabatn Muzium dan ANtikuiti Integrated System) ~ 30,000 artefacts
4.	Lembaga Muzium & Balai Seni Lukis P. Pinang	No specific name: 1. Photograph 2. Maps 3. Fabrics and textiles 4. Text (2 titles) 5. Video (10 titles) } 200 images
5.	Perbadanan Perpustakaan Awam Negeri Perak	“Menara Jam Negeri Perak D. R.” ★Undocumented information regarding Negeri Perak
6.	Jabatan Muzium Sabah	No specific name: 1. Photographs (3,000 images) 2. 3 D objects (1,000 images) 3. Video (250 titles) 4. Text (20 titles)
7.	Balai Seni Lukis Negara	DILIS (Digital Image Library System) 1. Photographs 2. Drawing 3. 3 D Objects (1,500 items) 4. Video } 3,000 images

8.	Muzium of Malay Ethnographic	“E-Maklumat Kesenian Melayu” 1. Photographs 2. Manuscript 3. 3 D Objects 4. Fabrics and Textiles 5. Drawing 6. Text 7. Sound 8. Video
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9.	Perbadanan Kemajuan Kraftangan Malaysia	<p>“E-Industri”</p> <ol style="list-style-type: none"> 1. Photographs 2. 3 D Objects 3. Drawing 4. Text 5. Video 6. Film
10.	Perbadanan Perpustakaan Awam Kedah	<p>“MyKedah.com”</p> <ol style="list-style-type: none"> 1. Photographs 2. Maps 3. Text 4. Sound 5. Video
11.	Perpustakaan Negara Malaysia	<p>“PERDANA”</p> <ol style="list-style-type: none"> 1. Photographs 2. Manuscripts 3. 3 D Objects 4. Text 5. Sound 6. Video 7. Film 8. Selected Magazine, Newspaper Articles
12.	Lembaga Muzium Selangor	<p>“Sirih Pinang Exhibition”</p> <ol style="list-style-type: none"> 1. Photographs 2. Text 3. Sound 4. Video
13.	Perbadanan Perpustakaan Awam Kelantan	<ol style="list-style-type: none"> 1. ‘SCAD’ (Sistem Carian Akhbar Digital) 2. “Portal Di Raja Kelantan”
14.	Sabah State Library	<p>No specific name:</p> <ol style="list-style-type: none"> 1. Antiquarian
15.	Perbadanan Perpustakaan Awam Perlis	<ol style="list-style-type: none"> 1. “Portal Raja Perlis” 2. “Portal Virtual Perlis”
16.	Lembaga Muzium Negeri Pahang	<p>“Sistem Galeri Foto” ~ 3,000 images</p>
17.	Muzium Di Raja Negeri Kedah	<p>No specific name:</p> <ol style="list-style-type: none"> 1. Photographs
18.	Pustaka Negeri Sarawak	<p>“Sarawakiana Series”</p> <ol style="list-style-type: none"> 1. Photographs 2. Manuscripts 3. Maps 4. 3 D Objects 5. Lithographs 6. Drawing 7. Text 8. Sound 9. Video 10. Film

19.	Perbadanan Perpustakaan Awam Terengganu	<p>“Raja Kita”</p> <ol style="list-style-type: none"> 1. Photographs 2. Text 3. Video 4. Film
20.	Perbadanan Perpustakaan Awam Selangor	<ol style="list-style-type: none"> 1. “Selangor Digital Collection” 2. “Koleksi Arkib PPAS” 3. “Koleksi Foto PPAS” <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">  } 4,721 images </div>