

APPENDICES

APPENDIX A

SUPERVISOR'S LETTER TO RESPONDENTS

3 January 2004

TO WHOM IT MAY CONCERN

**Questionnaire on The Extent of Digital Library Initiatives In Malaysian Libraries,
and Factors for Future Growth**

This is to certify that Pn. Norasiah Haji Harun is a candidate for the Ph.D. degree at the Faculty of Computer Science & Information Technology, University of Malaya. As part of her research, she is conducting a study on the degree of Digital Library Development in Malaysian Libraries.

The findings of the study will be of interest to libraries and information related organizations/agencies, which are in the process of planning, initiating and transforming the traditional library set up to one which are more technology based. We are certainly interested to know about Malaysian libraries moves toward adopting the digital library concept.

Your cooperation in completing Pn. Norasiah's questionnaire will be much appreciated.

Thank you.

Sincerely,

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Assoc. Prof. Dr. Diljit Singh
Deputy Dean,

in the capacity of Supervisor to Pn. Norasiah Haji Harun

APPENDIX B

COVER LETTER FOR THE QUESTIONNAIRE

Dear Sir / Madam,

Questionnaire on the Extent of Digital Library Initiatives in Malaysian Libraries, and Factors for Future Growth

I am a researcher at the Computer Science and Information Technology, University of Malaya, conducting a study on the Extent of Digital Library Initiatives in Malaysian Libraries, and Factors for Future Growth

The objectives of this research are to explore the advancement that has taken place among Malaysian libraries, especially in the process of embracing technologies, in particular the digital library development. This is an attempt to gauge the state-of-the-art of such development and to develop some understanding of the current level of digital development and what are the problems faced by the information professionals in the due process of implementation.

I shall be grateful if you may spend a few minutes of your time to fill up this questionnaire and all information collected will be treated with utmost confidentiality and used strictly for academic purposes only.

Please return the completed questionnaire using the enclosed stamped self-addressed envelope by _____ 2004.

Thank you very much for your time cooperation.
Yours sincerely,

NORASIAH HAJI HARUN
Senior Lecturer, Universiti Teknologi MARA

Ph.D. Student, University of Malaya

APPENDIX C
THE QUESTIONNAIRE

QUESTIONNAIRE

THE EXTENT OF DIGITAL LIBRARY INITIATIVES IN MALAYSIAN LIBRARIES AND FACTORS INFLUENCING THEIR GROWTH

This questionnaire is part of a study to identify how far have libraries keep abreast with information technologies in an attempt to provide the latest and most up-to-date library online operations and services, which are IT based.

In this study, the term 'digital library' meant as an extension of the traditional library that is characterized by the digital collections where access is global, instant, simultaneous and 24/7.

DLI (Digital Library Initiative) is primarily attempts made by libraries towards digital library development, where one of the main tasks could be digitization program.

The questionnaire consists of 8 sections in 12 pages

Please respond to all statements

PART A: DEMOGRAPHICS

Fill in the blanks or tick where appropriate:

1. Name of library / information center: _____
http:_____

2. Name of Head of Library: _____
Tel: _____
Fax: _____
E-mail: _____

3. Library type:

National	State	Public	Special	Academic	School

4. Current designation of Head of Library:

Director General	
Chief Information Officer [CIO]	
Chief Knowledge Officer [CKO]	
Director	
Assistant Director / Deputy Director	
Manager	

Information Manager	
Chief Librarian	
Library Head	
Librarian	
Library officer	
Assistant Library Officer	
Senior Library Assistant	
Library Assistant	
Others: Please specify	

5. Grade of Head of Library:

JUSA B	S 52/ S 53 S 54 [S1]	S 48 [S2]	S 41 [S3]	S 32 [S4]	S 27 [S5]	S 22 [S6]	S 17 [S7]

Others [Please specify]: _____

6. Highest academic qualification of Head of Library:

Doctorate	Master's Degree	Post Graduate Diploma	Bachelor's Degree	ALA	Diploma	STPM	SPM

7. Total number of years of working experience of Head of Library: _____ Years

8. Staff [number of persons] as at December 2003

	1	2-3	4-6	7-10	11 – 20	21 - 40	41- 60	61- 67	71- 80	>81
Professional staff										
Support staff										
IT personnel										

9. Is every staff being provided with an e-mail address?

YES		NO	
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10. Do you perceive your library as digital or virtual or hybrid or print based?

[Digital means 100% of collections are in digital format]

[Virtual means 100% of collections are in online format]

[Hybrid means a combination of digital, virtual and print based]

[Print-based means 100% collections are available only in print format]

Digital	Virtual	Hybrid	Print – based

11. Do you intend or plan to be 100% virtual by 2010?

YES		NO	
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12. How long [no. of year/s] has the library been established? _____ Year/s

PART B: GENERAL PROBLEMS

Based on **scale of 1 – 5**, where 1 is the least and 5 is the most, please tick where appropriate the following questions:

1. Does your library face any of these common and general problems?

Problems	1 Not a problem	2 Slightly problematic	3 Problematic	4 Very problematic	5 Extremely problematic
Lack of professional staff					
Lack of IT personnel					
Lack of support staff [e.g. library assistants]					
Lack of IT training					
Lack of leadership.					
Lack of management support					
Lack of suitable integrated library system					
Lack of local vendor support					
Lack of IT facility					
Lack of ICT infrastructure					
Lack of collaboration [among local librarians]					
Lack of demand for library services					
Lack of budget					
Lack of library space					
Lack of digital library initiatives [at all levels]					
Under utilization of digital and virtual resources.					

Renewal subscription of online databases					
Not up to date holdings					
Attitude problems					

PART C: STATISTICS ON COLLECTION [As at October 2003]

Please fill in the blanks.

Collection type	Amount [Total in volumes or units]
Monograph [includes books, thesis, annual reports, etc.]	
Journal & periodicals	
Audio cassettes tapes	
Video tapes	
Films	
Photographs	
Maps	
Posters	
Microfiche	
CD-ROM	

PART D: AUTOMATION

Please fill in the blanks or tick where appropriate:

Has your library installed an integrated library system?

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
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[If NO, please proceed to question 5]

[If YES, please continue with the next questions]

1. When your library did first installed an integrated library system?
_____ [Year]
2. What was the first system used? _____. [e.g. VTLS, ILMU]
3. What is the current system used? _____
[Ignore if similar to the above]

4. Please tick if any of these are operational [you may tick more than one]

Services	YES	NO
OPAC		
Web OPAC		
Online circulation		
Online acquisition / ordering		
Online Selective Dissemination of Information Service [SDI]		
Online registration		
Online Inter Library Loan / SPP		
Online reservation		
Online reference enquiry		
Hypermedia / multimedia		
Self checked machine		
Web site services		
Mobile Internet services		
Smart card		
Others: Please specify		

5. Does your library have or provide these IT services / facilities.

Services / facilities	YES	NO
Internet access		
Do you charge for Internet service?		
Dial up		
Lease line		
Intranet		
Extranet		
Telnet		
Wide area network [WAN]		
Local area network [LAN]		
Scanners		

6. What is the total number of PCs for the entire library? [For users and office use]

	1 - 5	6 - 10	11 - 20	21 - 50	50 - 100	>100
PCs						
PCs with Internet connections						

7. How many local and foreign databases do your library subscribes?

	NONE	1-3	4-6	7-10	11-15	16-19	20-23	24-27	28-35	>50	>100
Local databases											
Foreign databases											

8. Who provides the technical support for library automation?

An IT Unit of the parent organization	
IT Unit within the library	
Outsource	
Others: please specify	

PART E: TRAINING

You may tick more than 1 where applicable.

1. Have any of the library staff been sent for these ICT training?

Types of training	YES	NO
Introduction to computers		
Internet and World Wide Web		
Application software [e.g. power point, excel, access, word]		
Web design and home page Development		
Online searching skills		
Online indexing & abstracting		
Programming & programming Languages		
PC maintenance		
Databases management system [DBMS]		
Information systems development		
Telecommunication & networking		
Operating systems		
Content management		
Others: Pls. specify		

2. Who provide the ICT training?

In-house trainers	External trainers	Both in house and external	Self trained

3. What is the average length of the training?

< 1 week	1 week	2 weeks	3 weeks	1 month	2 months	> 3 months

PART F: DIGITIZATION PROJECT (S)

Please tick and fill in the blanks where applicable

1. Has your library ever carried out any digitization project?

NO		Please proceed to question 9
YES		Please proceed to the next question

2. Please tick if you have **digitized** any of these:
[You may tick more than 1]

Articles [from selected journals]	
Books	
Booklets / leaflets / pamphlets	
Circulars	
Conference papers / proceedings	
Manuscripts	
Maps	
Minutes of meeting	
Newsletters / house organ	
Newspaper cuttings	
Occasional papers	
Organization's annual report	
Organization's special report	
Organization's technical report	
Photo collection	
Standards	
Patents & specifications	
Speeches [related to parent organization]	
Thesis and dissertation	
Archival materials	
Others (please specify)	

3. Who did the digitization works?

[You may tick more than 1]

Outsourcing [Local private company]	
Outsourcing [Foreign private company]	
Organization's IT Unit	
Library's own equipment	
Others: please specify	

3. What is / are the most common storage devices selected?

[You may tick more than 1]

CD	
PDF	
DVD [Digital video disc]	
Floppy disc	
Hard disc	
PC cards	
Miniature mobile storage media	
Enterprise storage system	

4. Once digitized, what proportions of the materials are made available online through the web site?

All of the materials [Public domain]	
Only some of the selected materials [Private domain]	
No, but will be in the future	

5. What is total amount of budget that have been spent / committed on digitization works, until December 2003?

RM25,000 - RM50,000	
RM50,000 - RM75,000	
RM75,000 - RM100,000	
RM100,000 - RM200,000	
RM200,000 - RM300,000	
RM300,000 - RM400,000	
½ million - 1 million	
1 million - 2 millions	
> 2 million	

6. What are the contents of web site made up of?

[You may tick more than 1]

	YES	NO
General information on the library, staff, contact numbers, opening hours, services, collections, rules and regulation.		
Hypertext links to other agencies within the same ministry / department		
Hypertext links to related websites		
Community information databases		
Interactive reference enquiries		
FAQ		
Web OPAC		
Access to E – books & e-journals		
Access to commercial online databases		
Access to local content databases [developed by the library] e.g. <i>Raja Kita / Sireh Pinang</i>		
E – mail		
E – forms [e.g. application forms of any type]		
Electronic document delivery service		
Calendar of events & exhibitions		
Book / article reviews		
New book list		
Location maps		
Suggestion page		
Feedback & comments		
Others: please specify		

7. What are the problems encountered during the digital and virtual library development?

[You may tick more than 1]

PROBLEMS	YES	NO
Lack of understanding of the actual concept of digital and virtual library phenomena		
Lack of exposure to what is digital and virtual library is all about.		
Too busy running the library that do not have the time to plan for digital and virtual library development		
Proposal has been turned down		
Management is not very keen on digitization		
The project has to be done with the existing number of staff		
Too expensive		
Lack of local contents		

Home page is not updated regularly		
Copyright Act clearance		
Lack of suitable hardware and software		
Lack of IT vendor that specializes in the digitization of library works		
Lack of collaborative works among libraries		
Lack of initiatives at national level [e.g. from PNM]		
Lack of role model [established digital or virtual library]		
Absence of a blueprint that may serve as a guidance		
Absence of NII [National Information Infrastructure] policy		
Others: please specify		

8. Is your library involved in any digitization project initiated by the National Library of Malaysia?

YES		NO	
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9. Has your library ever developed any in-house databases?
[Other than the bibliographic database].

YES		NO	
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10 What is your future planning for virtual / digital library development?
Please describe.

PART G: ANNUAL BUDGET

Please fill in the blanks:

RM (\$)			
	2001	2002	2003
Allocation for monographs			
Allocation for non-print / AVM			
Allocation for print journals			
Allocation for e-journals			
Allocation for online databases			

PART H: OPINION

Based on **Likert Scale of 1 – 5**, where 1 is the least and 5 is the most, please tick where appropriate the following questions.

- Are you positive about virtual library development?
[Positive means digital library development has bright future in Malaysia and this is the future trend]

1 Not positive	2 Slightly positive	3 Positive	4 Very positive	5 Extremely positive

- Do you think library users are ready for new information technology?
[Ready means users are willing and looking forward to be using all the new facilities without having any problems in information searching]

1 Not ready	2 lightly ready	3 Ready	4 Very ready	5 Extremely ready

- In your opinion will digital format finally dominate the entire library scene?
[It means print collections are diminishing]

1 Will not dominate	2 Will slightly dominate	3 Dominate	4 Dominate to a large extent	5 Dominate 100%

4. Has there been a change in your collection development policy since 2000?
[It means the library is buying more digital format & subscribing more to an online services]

1 No change	2 Slight change	3 Change	4 A lot of changes	5 Change 100%

5. Please indicate your opinion to the following statement / questions.

	1 Disagree	2 Slightly Agree	3 Agree	4 Agree to a large extent	5 Agree 100%
The National Library of Malaysia [PNM] should publish a blueprint that will serve as a guideline for digital library development in Malaysia					
<i>Projek PERDANA</i> of PNM does reflect some degree of digital and virtual library development in Malaysia.					
In your opinion, do you think that the hybrid type is the best for Malaysian libraries?					
Do you think that books are here to stay despite the rapid expansion of the online services?					
Do you feel that the information professionals are being threatened by the computer science professionals?					
Informational professionals must embrace technology and not leave everything to the computer science professionals					
Traditional libraries are on the brink of extinction					

END OF QUESTIONNAIRE

Kindly return the completed questionnaire using the self addressed envelope enclosed
by **30 April 2004**.

For any queries please free to contact:

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THANKING YOU IN ADVANCE FOR YOUR KIND COOPERATION.

APPENDIX D

LIBRARIES VISITED FOR INTERVIEW SESSIONS
(Alphabetical order)

APPENDIX D

1. Akademi Seni Kebangsaan, Perpustakaan
17 September 2004
2. Attorney General Library, (Jabatan Peguam Negara)
9 July 2004
3. Hospital Universiti Kebangsaan Malaysia Library
(Tan Sri Lim Goh Tong Medical Virtual Library)
26 May 2004; 6 August 2008)
4. Institut Alam Tamadun Melayu, Universiti Kebangsaan Malaysia
31 March 2004
5. Institut Latihan Kehakiman Negara (ILKAP) Library
3 December 2004
6. Institut Penilaian Negara (INSPEN) Library
3 December 2004
7. Institut Penyelidikan Teknologi Nuklear Malaysia (MINT) Library
6 February 2004
8. Institut Tadbiran Awam Negara (INTAN) Library
5 May 2004
9. Institute of Diplomacy and Foreign Relations (IDFR) Library
25 Jun 2004
10. Institute of Medical Research (IMR) Library
28 July 2004
11. INTI College Library
17 September 2004
12. Jabatan Perdana Menteri (JPM) Library
5 July 2004
13. Kelantan State Library
29 June 2004
14. Kolej Sultan Zainal Abidin (KUSZA) Library
28 June 2004

15. Kuala Lumpur Digital Library
July 2004
16. Kuala Lumpur Stock Exchange Library
3 November 2004
17. Malaysian Science and Technology Information Center Library (MASTIC)
30 April 2004
18. Melaka State Library
13 December 2004
19. Ministry of Agriculture, Library
10 December 2004
20. Ministry of Land and Cooperative Development, Library
29 October 2004
21. Museum and Antiquity Library
9 July 2004
22. National Map Library (Jabatan Pemetaan Negara)
23 January 2004
23. National Productivity Center (NPC) Library
18 August 2004
24. Negeri Sembilan State Library
13 December 2004
25. Pahang State Library
31 December 2004
26. Penang State Library
12 July 2004
27. Perpustakaan Tun Seri Lanang,
Universiti Kebangsaan Malaysia
31 March 2004
28. Photo Library, Ministry of Information
30 July 2004
29. Pusat Dokumentasi Malayu, Dewan Bahasa dan Pustaka
27 October 2004

30. Pusat Sumber Maklumat Digital, Ministry of Information
14 April 2004
31. Resource Center, Ministry of International Trade and Industry
2 January 2004
32. Terengganu State Library
28 June 2004
33. TV Library (RTM), Ministry of Information
14 April 2004
34. Universiti Islam Antarabangsa Malaysia (UIAM) Library
2 July 2004
35. Universiti Malaysia Sabah Library
12 November 2004
36. Universiti Perguruan Sultan Idris (UPSI) Library
31 May 2004

APPENDIX E
INTERVIEW QUESTIONS

INTERVIEW QUESTIONS

1. Digital library planning
2. Budget for digitization projects
3. Online services and operations
 - a. Basic library functions (Acquisition, processing, dissemination and preservation).
 - b. Library services
 - c. Subscription to online databases
 - d. Digital library projects
4. Human resource/ staffing
5. Management support
6. External support
 - a. Dependency on PNM for digital library initiatives
 - b. Parent's organizations IT Unit
 - c. MIMOS, Multimedia Development Corporation (MDC), Malaysia Communications and Multimedia Commission (MCMC), State government, ministries, foundations, associations, trustees and private sector.
7. Digital library collaborative efforts with other libraries (local and international)
8. Digital library related problems
9. Digital library training
10. ICT Facilities (Telecommunication, PCs, Internet, Intranet, extranet, Library system)
11. Personal opinion on the prospect of digital library development and usage.
12. Perceived conditions for digital library future growth

APPENDIX F
INTERVIEW ANSWERS' SHEET

INTERVIEW ANSWERS' SHEET

Name: _____

Organization: _____

Date: _____ e-mail: _____

Time: _____ Tel: _____ Fax: _____

Question No.	Interview questions	Respondent answers'
1	Digital library planning	
2	Budget for digitization projects	
3	<p>Online services and operations</p> <p>a) Basic library functions (Acquisition, processing, dissemination and preservation).</p> <p>b) Library services</p> <p>c) Subscription to online databases</p> <p>d) Digital library projects</p>	

4	Human resource/ staffing	
5	Management support	
6	<p>External support</p> <p>a) Dependency on PNM for digital library initiatives</p> <p>b) Parent's organizations IT Unit</p> <p>c) MIMOS, MDC, MCMC, State government, ministries, foundations, associations, trustees and private sector.</p>	

7	Digital library collaborative efforts with other libraries (local and international)	
8	Digital library related problems	
9	ICT/Digital library training	
10	Facilities (Telecommunication, PCs, Internet, Intranet, extranet)	

11	Personal opinion on the prospect of digital library development and usage.	
12	Perceived conditions for digital library future growth	

APPENDIX G
INTERVIEW RESPONSES

INTERVIEW RESPONSES

NO	THEMES	RESPONSES
1	DL planning	<p>National level: PNM: <i>PERDANA</i> Service Division (est. April 2007) : all knew about <i>PERDANA</i> as nat. DLIs : need to be restructured : lack of staff (2 IPs and 2 support staff) : formerly under Malaysiana Div. : change of PNM's leadership affect nat. DL planning. : main DLIs – PNM's website and MyLib : main concerned - to spearhead national DLIs through content development, digital services and Project Management Office, to accelerate necessary ground works, DL promotional activities, public / national awareness VS: R38 <i>"With this new independent division, the development of PERDANA should be more focused especially in terms of project implementation plan"</i>. : 600,000 pages digital information through information surrogates (September 2008) / local items and out of copyright. : had digitized Malay manuscripts (outsourced to the private sector). : born digital (35 projects) but some were not yet accessible online. : had commissioned a private vendor to develop a search engine (part of KIK project); to be launched in December 2008. : <i>PERDANA</i>'s problems. VS: R38 <i>"The lack of coordination on the part of the National Library and the absence of a dedicated team make planning very difficult"</i>. : lack of info on <i>PERDANA</i> (Dissatisfaction). : not many libraries involved. VS: R4 <i>"That we are in the dark, not getting the true picture of its planning, implementation and progress. Not much has been written about it either and the only way to know PERDANA would be to surf PNM's or MyLib's websites"</i>. VS: R28 <i>"A newsletter on Malaysian digital library initiatives be published to keep everybody informed on the latest digital library developments that are happening within Malaysian libraries"</i> : implementation strategy of <i>PERDANA</i> (2006 – 2010) continuation of the past projects. : now working with MCMC U-Library (Ubiquitous library) project, to be launched in 2008 / Dec.; PNM networked with all PLs. : R1: MDC early player but now with MCMC. : future planning, VS: R38 <i>"That it will be better if the PERDANA Service Division be placed under the jurisdiction of MCMC, so that it will be directly be part of the ICT component of the National Broadband Plan of the MCMC, to help with the problems of ICT infrastructure"</i>. Institutional level: : For DL planning, respondents felt IPs must head libraries. VS: R37 <i>"Does not matter what type of library – public, branch or village libraries, council or even statutory bodies, must be headed by a professional librarian"</i>, VS: R22 <i>"It's high time that libraries be headed by professional librarian and not just a library assistant or a senior library assistant"</i>. : good management support. High expectations & up to librarians to initiate new dev (DLIs). : plans for DLIs - DL proposal, asked more IPs, special budget for DLIs, more PCs, expanding IT Corner, buying/ upgrading library system, buying a scanner (digitize newspapers collections), materials selection (to be digitized), digitizing organizations publications (institutional memories), expanding websites' contents & linkages,</p>

	<p>expanding digital ref. service, working on user education and online promotional activities.</p> <p>: main components of DL planning - subscription to e-journals/commercial online databases/information surrogates and the development of web sites/homepages. What really matters were online services, remote access & digitizing organizations' internal publications.</p> <p>VS: R12 <i>"The planning is done by the head quarter's main library and its main concern is to provide services only"</i> (college lib).</p> <p>: Observation – very basic DL planning / lack of solid substance (both quan. & quali. methods); independently done.</p> <p>: DL planning problems – lack of staff, had to do everything (planning and implementation) but did get help from parents' organization's IT unit; nowhere to get advice, no technical expertise, not part of PERDANA, lack of understanding and knowledge on DL.</p> <p>VS: R7 <i>"I have to do everything from acquisition to service. In between I also have to plan digitization works"</i>.</p> <p>VS: R3 <i>"They sent directives to set up digital library immediately within a very short period, say three months, which is quite impossible to execute"</i>.</p> <p>VS: R24 <i>"I just do not know where to begin"</i>.</p> <p>VS: R22 <i>"I wish there is a central body overseeing this matter that I can turn to for help"</i>.</p> <p>VS: R10 <i>"It has been the same people, in the library doing everything from A-Z"</i>.</p> <p>VS: R15 <i>"If we are part of the national digital library program, things would have been easier"</i>.</p> <p>VS: R 13 <i>"I have to do not only library works but also be involved in some of the ministry's activities"</i>.</p> <p>VS: R4 <i>"That digital library planning should be part of the KM (Knowledge Management)"</i>.</p> <p>: they were still learning DL/many had been self taught, got help from the parents organizations' IT Unit, surfing and learning from foreign DLIs websites.</p> <p>VS: R16 <i>"One thing that I must do every day will be to surf foreign libraries' web sites to get some ideas"</i>.</p> <p>: minimal external support</p> <p>: support/assistance from PNM:</p> <p>VS: R25 <i>"That PNM too have its own digital library problems"</i></p> <p>VS: R16 <i>"I do not know exactly what the status of PERDANA is now"</i></p> <p>VS: R26 <i>"Do you think PNM can help?"</i></p> <p>VS: R37 <i>"Do they have the expertise and technical know-how?"</i></p> <p>VS: R13 <i>"Can they spare their staff to help us?"</i></p> <p>VS: R17 <i>"My library is not part of PNM's digital program"</i></p> <p>VS: R4 <i>"I am not so sure whether they have the so called digital advisory service"</i>.</p> <p>: therefore in need of strong guidance/ leadership in DL dev.</p> <p>: Future plans seemed to co-relate with DL problems, so an independent DL body/a leading agency could play the leadership role.</p> <p>VS: R35 <i>"As long as libraries plan individually, the development of digital library will be slow and resource sharing will also be affected"</i>.</p> <p>: DL planning should have DL project management team, to ensure smooth implementation.</p> <p>: DL planning be part of strategic planning (19 respondents did so).</p> <p>VS: R4 <i>"Don't be surprise some libraries do not have strategic plan"</i>.</p> <p>VS: R30 <i>"Most important is to include digital library in the strategic planning to ensure a continuous long term planning, and with a continuous midterm reviews, so that any loopholes can be rectified. A five year strategic plan would be most appropriate"</i></p> <p>: could be done through the establishment of an independent DL body/leading agency consisting of all library types, archives and museums (form a national DLIs team); to</p>
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		<p>streamline national planning (be part of the technical & DL project) & exposed to info. surrogation/born digital materials. : under the independent body, expertise could be shared, and break up into different DLIs teams (technical & DL project teams).</p>
2	Barriers to DL development	<p>: DLIs new area/not well exposed yet</p> <p>Level of progress VS: R1 <i>“The first is the different level of digital library progress that Malaysian libraries are in, where some are still without library system; secondly they do not know where to begin and thirdly no expertise”</i>. : u/standing of concept & knowledge on DL. VS: R1 <i>“That it will be difficult to streamline a national library project where the level of progress, understanding of the concept and knowledge on digital library is still minimal among the librarians”</i>. : DLIs needed higher managerial skills (adverse effect). : technical jargons (self taught)</p> <p>Expertise : technology dependent (severely lacking) VS: R1 <i>“To be trained and exposed first”</i>. VS R1 <i>“As it is now, libraries have to some extent depend on IT people, from the Computer Unit to get technical support”</i>. : government should strengthen PNM’s role by increasing training for expertise.</p> <p>Budget : total dependent on govt. funding : government should strengthen PNM’s role by allocating bigger DL fund. VS: R 5 <i>“If the government wants to make PNM as the stronghold for DLIs, then pour in sufficient money, enough for all, for many local and international projects”</i>. : explore new avenue for funding : strong working paper/proposal/ late approval : good management support but not in monetary terms : insufficient funding (no significant increase/rather constant) VS: R3 <i>“At times the biggest stumbling block is to get back up in terms of financial support”</i>. VS: R4 <i>“A librarian will have really to prove that we too do contribute to the well being of an organization”</i>. VS: R 34 <i>“I think the main problem when embarking on digital library, still, money is the problem”</i>. VS: R22 <i>“Budget has always been tight”</i>. VS: R4 <i>“Librarians must be able to see where is the opportunity, how to put up the request and grab any opportunities that comes”</i>. VS: R33 <i>“Must really work hard to get extra budget”</i>. VS: R3 <i>“At times we get full amount but it all depends. There has been a case where only half is approved from the total amount requested”</i>. VS: R10 <i>“There has been some small increase but not particularly big and outstanding”</i>. VS: R26 <i>“That the biggest stumbling block is to get management support or management backing in terms of money to start a project”</i>. VS: R29 <i>“We need more money to do digitization works”</i> VS: R16 <i>“Even a simple scanner to digitize newspapers costs more than RM200, 000 and if there is more money, then we can plan on a bigger scale”</i>. VS: R13 <i>“What can be done with RM100, 000? Can’t even buy a decent scanner”</i>. : DL special projects (budget need to be asked). : DL project staggered for a number of years. : severe lacking of private funding (3 exceptions) VS: R28 <i>“Steps must be sought to encourage more private sectors to get involved in the sponsoring or funding of digital library projects such as through tax exemption”</i>.</p>

	<p>: private sponsorship for DL not a norm (unlike US/UK). Must find mechanisms to encourage this.</p> <p>VS: R4 <i>“So we have to look up elsewhere for fresh financial assistance or a new funding from other sources and this is a real challenge”</i>.</p> <p>: expansive subscription of e-journals (under utilized/no monitoring system)</p> <p>VS: R9 <i>“But normally vendor gives only four concurrent user license. If you want more there will be extra charge”</i>.</p> <p>: academic libraries (better position to support research)</p> <p>VS: R20 <i>“Unlike academic libraries where the budgets reached the million brackets, many of the special libraries do not have this kind of privileges”</i>.</p> <p>: some states were better than the others (Trengganu & Pahang)</p> <p>VS: R33 <i>“I am fully aware of its emergence and am preparing towards that development when financial standing improves”</i>.</p> <p>VS: R26 <i>“I still hope that the plan to build a new library building which has been postponed three times will soon materialized”</i>.</p> <p>: special libraries did get RM 1.7m & RM 15,000</p> <p>: libraries low priorities</p> <p>VS R37 <i>“Why libraries in Malaysia have always been given the lowest priorities, libraries not important”?</i></p> <p>VS: R9 <i>“Whenever there is a budget cut, library will be the first to feel the cut”</i>.</p> <p>VS: R36 <i>“As such an increase in budget under the periodic Malaysia Plan can be requested before a good national proposal or memorandum on digital library development”</i>.</p> <p>VS: R35 <i>“Government should consider increasing budget for libraries as we now entering the cyber era”</i></p> <p>VS: R38 <i>“Soliciting funds for national digital library initiatives is one of the problems faced”</i>.</p> <p>VS: R4 <i>“The provision of budget should be given priority and made available to the tune of enabling libraries to install library systems, to carry out digitization works and to enable the subscription and renewal of online databases”</i>.</p> <p>VS: R4 <i>“We must think how to generate income for digital library works”</i>.</p> <p>VS: R31 <i>“We seem to have overlooked on the matter and is also partly due to unfamiliarity with digitization works”</i>.</p> <p>VS: R38 <i>“The whole idea is to increase public awareness in order to gain national support”</i>.</p> <p>VS: R38 <i>“That there should be budget increase, to support more digital library initiatives and at the same time this would increase citizens’ awareness”</i>.</p> <p>: PNM working with several other strategic partners (MDC, MIMOS, state libraries, HP Malaysia, schools, special libraries, MCMC).</p> <p>VS: R38 <i>“From 2007 onwards we have been working collaboratively with MCMC (Malaysian Communications and Multimedia Commission) for the U-Library project, another new adventure of the national digital library project”</i>.</p> <p>: PNM been transferred from one ministry to another (not a good indication).</p> <p>: proposed: govt. to increase budget; change of attitude/libraries deserved more grant; make DLIs national agenda; library community made a huge impact, then private donors might want to come in. (28/74%)</p> <p>Human resource/staffing</p> <p>: no real increase in library staffing.</p> <p>: In some libraries (only 1 librarian doing everything).</p> <p>: that’s why the need for a centralized body for advisory service.</p> <p>VS: R29 <i>“We have to do almost everything, planning till the end”</i>.</p> <p>: help from PNM?.</p> <p>VS: R3, R 10 and R 37 <i>“They have their own kinds of problems with Perdana/MyLib, how would they cater to our individual needs or problems”</i></p> <p>: PNM’s PERDANA Service Division was also understaffed.</p> <p>: have to do internal structural re-organization / staff mobilization / re-organization of</p>
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		<p>functions / technical assistance from the IT Unit of the parent’s organizations to cater for the new DL services.</p> <p>: many intended to ask for staff increase to help in digitization works.</p> <p>VS: R3 “<i>I just do not know how to do it within three months, with no budget, staff and equipment. I think I will have to set up a special committee and get other units to be involved</i>”.</p> <p>: Public/state libraries too were having staff problems (contract basis). Staff morale was low and made planning difficult.</p> <p>VS: R19 “<i>Some of these staff have worked for more than five years, but still under contract. It’s hard to ask them to work extra</i>”.</p> <p>Training</p> <p>: human resource problems one of the problems faced (74%) in Quan.</p> <p>: therefore the number of professional librarians should be increased and ICT training enhanced.</p> <p>VS: R37 “<i>We need young blood IT savvy librarians to move things faster</i>”.</p> <p>Over dependence on PNM</p> <p>: R1 felt that there would be a heavy dependent on PNM for support and guidance in the initial stage (especially Common User Scheme) were not yet exposed to the DL world.</p> <p>: central/leading agency to help solve the problem of over dependence on PNM</p> <p>: 26 respondents (68%) thought that there had been some form of dependency on PNM for DLIs (libraries with small or no budget for digitization program).</p> <p>: minimal digital collaborative efforts of Malaysian libraries has resulted in over dependence on PNM & had limited the scope of DLIs.</p> <p>The absence of a central/leading agency</p> <p>: DL a new area.</p> <p>: strongly felt government should form a leading agency/ special commission/ independent body on DL dev. to spearhead Malaysian DLIs.</p> <p>: to streamline national digital library planning and projects.</p> <p>: staff and technical expertise be solved through collaborative works administered by one central or leading agency.</p> <p>VS: R37 “<i>A more dedicated central agency that solely focus on digital library projects is what we need</i>”.</p> <p>VS: R37 “<i>At least there will more professional librarians involved, more ideas, more expertise, and more digital library plans/initiatives/projects and may be easier to get money from the government if we work collectively</i>”.</p> <p>VS: R 36 “<i>Then division of work will become clearer. One team will tackle technical aspect; another team does the digital library planning or thinks of what projects to do</i>”.</p> <p>: role of the leading agency/independent body - to ask for additional grants, explore & plan more national DLIs with all types of libraries, archives (national & institutional) , museums (military, science and corporate museums) and publishers working together as a national DL team (break up into smaller teams, handling different aspects of DLIs).</p> <p>: therefore pool of expertise working collaboratively on DL policy and blueprint, IPR, digital infrastructure and ICT training.</p> <p>: With extra funding (through the leading agency), new NII, DL training and other human resource aspect could be improved, to establish DL research center, have more DL projects, expand information surrogating/born digital materials, and share the subscription of leased databases (consortia).</p> <p>: the leading agency’s capabilities to offer advisory, supervisory/legal functions.</p> <p>: The establishment of an independent body/a leading agency was perceived as one of the conditions for DL future growth, proposed by 32 respondents/ 84%.</p>
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3	Lack of understanding on DL concept	<ul style="list-style-type: none"> : DL awareness was good/all knew of its coming/transformation : full understanding of DL concept still at basic level (DL jargons). : not familiar/not sure with info. surrogate, Greenstone s/w, DLIs, handle system, accessibility against ownership /termination of user license and the concept of library as the custodian of recorded knowledge. : in DL environment, access was the fundamental/underlying factor. : physical growth/ownership vs. subscription vs. collection development or global access vs. ownership : had not given much thought about the impact of the above. : need a precisely spelt objective and policy of digital resources. VS: R32 <i>“Is to give online services and the subscription to e-journals has proven as the easiest way to do it”</i>. : must not resort to only online database subscriptions but more on local content development to ensure ownership. : libraries as growing organizations. : the proposed independent body/DL commission should incorporate more local contents from museums & archives for national DLIs. : the emergence of new lib concept (digital based). VS: R31 <i>“We must follow the trend”</i>. (interpreted as DL concept) : not observing fully resource sharing concept. : public domain not yet extensive (e.g. <i>Portal ILMU</i>) : DL concept (resource sharing & public domain type should be given priority). : self taught, surfing and networking. : voiced out the need for exposure/DL training. VS: R1 <i>“That’s why it is very important for the National Library of Malaysia to strengthen and consolidate understanding of the concept of digital library among all libraries prior to project implementation”</i>. VS: R1 <i>“A strong solid foundation on the subject matter is of extreme important so that they know what to expect from the National Library and vice versa”</i>. : exposure & some level of know how was extremely important to ensure the success of DL projects. : skeptical about DL project with shortage of staff and absence of IPs. VS: R28 <i>“We must keep up to date with digital library knowledge”</i>.
4	National support system	<p>National awareness (public or mass awareness)</p> <ul style="list-style-type: none"> : national DLIs needed support from all sectors (public and private) : need for national platforms/support systems to expedite DL planning. VS: R38 <i>“It has to be made as a big national agenda, with support from many sectors and of course public awareness must be created”</i>. : PNM’s big responsibility to meet library community’s expectations. : DL subject/topic not yet reached/achieved a center stage : Malaysian DLIs very localized. VS: R38 <i>“That everybody in the community must be mobilized to trigger more digital library news or events thus creating more public and national awareness”</i>. : PNM doing their best & felt the hybrid type would emerge. : knew of PNM’s DLIs/projects were on a selective basis. : hoping for PNM to play a bigger role in initiating DLIs : PNM should make known its DLIs to the library community whatever their plans were, even though some were not part of the <i>PERDANA</i> Project VS: R4 <i>“To be in the know on anything that is related to the national digital library initiatives”</i>. <p>Independent body/leading agency/well represented national committee</p> <ul style="list-style-type: none"> : 89% / 32 respondents were for it. : to coordinate, bring together info related organizations (Libraries, archives, museums and publishers) under one roof/administration, for a coherent, focused, defined, well charted & guided national DL planning.

	<p>: independent body/leading agency at the forefront between library community & government, to provide leadership, guidance & advisory service on how to go about setting up DL.</p> <p>: working through a specific organization chart that would reflect the work flow of truly national DLIs collectively (division of works).</p> <p>: the outcome: the production of knowledge portals, representing digital contents of participating organizations (to streamlined DL planning to achieve one national goal).</p> <p>: to solve problems of leadership, collaboration & over dependence on PNM.</p> <p>VS: R35 <i>“If only there is a national referral center on digital library, or a central body, or a commission, say at a university or in a particular ministry or department, than we know where to turn to”</i>.</p> <p>VS: R28 <i>“May be there is a need to form a digital library body or a new commission that can look into this matter as a whole and really work towards digital library, no any other library services, except digital library”</i>.</p> <p>VS: R28 <i>“The division of responsibilities between the technical and digital project team”</i>.</p> <p>VS: R11 <i>“That the proposed national commission would supposedly be an independent body performing advisory, intermediary and development functions”</i>.</p> <p>VS: R27 <i>“The main committee members would comprise representatives from the National Library, the National Archive and the National Museum, MIMOS, MDC (Multimedia Development Corporation), MCMC (Malaysian Communications and Multimedia Commission) and a representative from the Treasury”</i>.</p> <p>VS: R19 <i>“A digital library commission would be more focused, team members can be delegated to do digital library projects and other teams to concentrate on say more technical nature of work”</i>.</p> <p>VS: R36 <i>“We really need a body to help us in the planning, implementation, technical knowhow, metadata, in fact anything that relate to it (digital library). At least we know where to turn to for help if we are stuck”</i>.</p> <p>VS: R37 <i>“At least the problem of technical expertise can be solved”</i>.</p> <p>VS: R28 <i>“More digital library initiatives can be planned between participating members and the subscriptions of leased databases can be shared through consortia”</i>.</p> <p>VS: R 28 <i>“Make it a big national agenda and enforce the establishment of a central agency that focus solely on national digital library initiatives”</i>.</p> <p>VS: R27 <i>“When there is a main body, digital policy matters can be tackled collectively in a stronger manner and a committee on blueprint can be set up”</i>.</p> <p>VS: R33 <i>“That PNM has started some initiatives, but not very effective because of its other pressing national library and information functions”</i>.</p> <p>DL research center (DLRC)</p> <p>: DLRC had significant roles in western DLIs</p> <p>: Malaysian libraries should establish strategic alliances with local universities (supportive roles) to start DLRC</p> <p>VS: R35 <i>“Digital library research can be done by universities”</i>.</p> <p>VS: R5 <i>“I think our universities should be pro-active. Like overseas. They are doing a lot of digital library research”</i>.</p> <p>VS: R5 <i>“PNM should initiate and team up with local universities especially those offering higher degrees in LIS (Library and Information Science) to do digital library research”</i>.</p> <p>VS: R18 <i>“MIMOS is noted for its early involvement in digital library planning and should spearhead the idea with a few of the local universities that are offering the study in Library Science”</i>.</p> <p>VS: R35 <i>“Strategic partnership with the local universities by any organizations or between the universities may pave the way for advance digital library research”</i>.</p> <p>VS: R28 <i>“Or the government may give grant and commissioned a university for example, to undertake digital library research and the Ministry of Science may also</i></p>
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	<p><i>initiate the project through for example MIMOS and may call experts from various organizations”.</i></p> <ul style="list-style-type: none"> : nineteen respondents (50%) were expressing hopes that any university offering a course in LIS should take up the matter. : DLRC has the potential to develop more DLIs (pool of DL expertise together). : DLRC was perceived as one of the conditions for DL future growth (19 respondents/50%). <p>Publishers & e-publishing</p> <ul style="list-style-type: none"> : e-book and e-journals on the rise : respondents thought support from publishers was also important to help push national DL growth. : e-publishing has an indirect impact to substantiate info surrogates. : DBP (the biggest publisher) might collaborate with any other publishers (university presses, commercial publishers and government ministries & departments) to further substantiate DL development from e-publishing perspective. : production of born digital titles/documents/reports, instead of hard copy. No more printed annual reports from govt dept. <p>VS: R 32 <i>“That government departments and ministries should be involved in producing born digital materials, and forget about printed government reports”.</i></p> <ul style="list-style-type: none"> : therefore libraries no longer need to subscribe and ownership would be secured. : publishers should be part of the national DLIs program & also be part of the proposed independent body/national commission on national DL development. : might required a separate policy (business would not be affected) & publishers would not regard DL as a threat (profit making). <p>VS: R5 <i>“That even our publishers must be pro-active in producing more e-materials. Big publishers like DBP must be able to do something”.</i></p> <p>VS: R28 <i>“University presses too can have a digital project. They can start by digitizing the academic books. At least start first. Than the others like government printing or commercial publishers will follow suit”.</i></p> <p>VS: R30 <i>“Publishers have to reciprocate as Malaysian libraries are undergoing a paradigm shift in providing digital materials and services, they must start somewhere, and at least start the ball rolling, then interests in e-books will increase slowly”.</i></p> <p>VS: R12 <i>“e-books are making fast appearance and is gaining momentum. By the time the present IT savvy generation reaches maturity, e-book will be the main medium of learning and teaching”.</i></p> <ul style="list-style-type: none"> : publishers and e-publishing was one of the perceived conditions for DL future growth, proposed by 17 respondents (45%). <p>External support</p> <ul style="list-style-type: none"> : DLIs external supports: PNM/parents’ organizations IT Unit/MIMOS, MDC, MCMC, state governments, universities, ministries, foundations, associations and the private sector. : 26 (68%) respondents agreed on the dependency on PNM for DLIs esp. small libraries/no budget for digitization program. : over dependence on PNM was also one of the barriers to DL dev. : still hoping and expecting more extensive/wider scale projects on a continuous basis from PNM. <p>-MDC at one time worked closely with PNM during the initial stage of the PERDANA Project (R1). But no more/now with MCMC (R38).</p> <p>: Smart school/ Schools’ Resource Centers (PSS)</p> <ul style="list-style-type: none"> : IT savvy community needed/good supportive element for national DL growth/ from early age, could be done through Schools’ Resource Centers : introducing/enforcing/exposing the use of DL facilities from primary schools (PSS) to create awareness & to adopt e-learning easily in tertiary level. -e.g. Portal Pendidikan Utusan & ICDL (member checking process: UUM did contribute some local contents to this website).
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		<p>VS: R31 <i>“The education system can start introducing digital library from early age so that learning will be fun”</i>.</p> <p>VS: R15 <i>“Schools through the Smart School Project are the best avenue to introduce pupils to the Internet world”</i>.</p> <p>VS: R5 <i>“School Resource Centers can play a significant role in becoming the test bed for online learning and teaching and in determining that the digital library concepts are well accepted when the primary and secondary students head on to the tertiary level”</i>.</p> <p>VS: R25 <i>“There are so many web sites that are educational based, therefore it is never too early to introduce web based learning from standard one”</i>.</p> <p>: however the Smart School Project’s main component was more on teaching modules for schools’ laboratories.</p> <p>VS: R37 <i>“The Smart School Project should be re-aligned to include the School Resource Centers as the center of IT activities”</i>.</p> <p>VS: R28 <i>“The digital teaching module should supplement the e- School Resource Centers to make learning more enjoyable, besides exposing digital library environment at the very early age”</i>.</p> <p>VS: R35 <i>“The Ministry of Education may include computer literacy courses at primary level so that school computer laboratories will be used to the fullest and the Educational Technology Division can help design the module”</i>.</p> <p>: the Smart School Project (one of the flagships of MSC), through e-schools resource centers, has great potential to support long term DL planning.</p> <p>: perceived as condition for DL growth by 20 respondents (53%).</p>
5	Human resource and DL/ICT training	<p>: considered as extremely/critically important, the success of DLIs would depend on.</p> <p>: DL is technology dependent; therefore librarians need to be trained/re-trained & learn/re-learned.</p> <p>: libraries/librarians were no longer intermediaries in DL environment.</p> <p>: respondents seemed to fully agree on acquiring the necessary IT/DL skills (to remain competitive)</p> <p>: technological knowhow would determine the future of the profession.</p> <p>: librarians must involved/dominate the DL scenario through creation/dissemination of digital information through cyber space.</p> <p>: highly stressed/highlighted/discussed at length/ important factor to be reckoned with.</p> <p>: library heads should be IPs (degree in LIS).</p> <p>: need to consolidate the human resource aspect of librarianship.</p> <p>: reinforcement of DL & ICT training (to include more technical stuff)</p> <p>: determining factors for national DLIs success.</p> <p>: improvement of human resource management for libraries for all categories (professional/support staff/IT personnel/technical staff).</p> <p>VS: R28 <i>“Semi professional remains as supportive staff and libraries headed by non-professionals should be something of the past if digital library planning were to go further”</i>.</p> <p>VS: R38 <i>“That human resource management, digital library process management and realignment were indeed important”</i>.</p> <p>VS: R1 <i>“The widest possible exposures, training and the availability of technical assistance. And it will be good if the National Library of Malaysia can develop the expertise among them first, before extending it to others”</i>.</p> <p>VS: R38 <i>“There is a serious lacking in digital library expertise and long term training or courses on digital library are almost nil”</i>. (further reiterated that DL training, support from policy makers and standards governance were of equal important).</p> <p>: many had been self-learned, self-taught, self-exposed/taking own initiatives/learn and explore the Internet/surfing foreign DLIs.</p> <p>: tough situation when knowledge on DL was not equivalent to what you were</p>

	<p>expected to do.</p> <p>: didn't realize the free <i>Greenstone</i> DL software & <i>DSpace</i> (open source repository) used in western DLIs. Might have heard/read but unsure of its usage and application.</p> <p>VS: R4 <i>"Equip our self with the knowledge, go talk to people, visit digital libraries" & "Learn the trade and equip our self with the necessary skills"</i>.</p> <p>VS: R18 <i>"Ask if you don't understand as it is risky if there is money but there is no technical support"</i>.</p> <p>VS: R24 <i>"Move forward, should never remain static and stagnant"</i>.</p> <p>VS: R35 <i>"Training, courses and exposures should be the pre-requisite to enable librarians to internalize the concepts, elements and dimensions of digital library development"</i>.</p> <p>VS: R27 <i>"To be IT savvy"</i> & <i>"Don't let IT people take over everything"</i>.</p> <p>VS: R37 <i>"Don't just depend on the computer science people"</i>.</p> <p>VS: R20 <i>"How can we start something that we are not sure of?"</i></p> <p>VS: R38 <i>"So training is in fact important and how to start a digital project without technical know how?"</i></p> <p>VS: R4 <i>"Always ready to train and re-train, learn and to re-learn"</i>.</p> <p>VS: R4 <i>"Visits to digital library establishments, local and abroad must be intensified to explore, experience and learn new skills"</i>.</p> <p>VS: R19 <i>"That librarians must have a new mind set, with positive attitude, be proactive and embrace digital technology"</i>.</p> <p>VS: R4 <i>"Read extensively, get exposure especially at international level, observe what others are doing and dare to take the first bold initiative"</i>.</p> <p>VS: R15 <i>"Digital library and ICT training, and digital library exposure that are so scarce must be immediately addressed, especially training on content management and content development, database management system, information system development and telecommunication and networking"</i> (extremely important to help reduced the dependency on the parent organizations' IT Unit).</p> <p>VS: R36 <i>"Training is also important to widen librarians' knowledge and levels of understanding, to keep abreast of the latest trend of digital library development and to equip our self with the latest technological advancement"</i> (with knowledge, would be able to venture and initiate more DLIs and not only doing information surrogates and e-subscriptions), & helped released from over dependent on external bodies such as PNM/computer experts,</p> <p>VS: R13 <i>"Training is all what we need"</i>.</p> <p>VS: R27 <i>"If we have the money but no technical knowhow, still no point"</i>.</p> <p>VS: R36 <i>"There is an urgent need for IT savvy librarians"</i>. (stressing again on the importance of ICT/DL training).</p> <p>VS: R 27 <i>"To be IT savvy"</i>.</p> <p>: majority of respondents seemed to be in learning process/with minimum DL course (unless training from vendor).</p> <p>: they did communicate within peer group, but everybody was at the same level of dev. so nothing much to learn.</p> <p>: resulted in heavy dependence on parents' organizations IT Unit/ computer science experts.</p> <p>: DL training be immediately addressed to lessen the over dependence on computer experts & IT Unit of the parents organizations.</p> <p>: felt the urgent need for a body such as PNM/a special commission/an independent body to design a DL training module.</p> <p>VS: R 28 <i>"If only there is a national commission that acts as a national referral center, planning, training and initiating a digital library project will be much easier"</i>.</p> <p>: DL training was scarce/limited/occasionally organized by PNM</p> <p>: on the lookout for relevant courses (esp. on web site creation and design, to improve their websites)/mostly short local courses.</p> <p>: willing to learn even the technical stuff (guidance to start DL: answering the</p>
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		<p>questions of what, where, who, how) and assistance (technical and non-technical) as long as if that would substantiate their understanding/skills on DL.</p> <ul style="list-style-type: none"> : hoping more exposures, courses, on DL/digitization works by the relevant authorities. : the existence of independent body would make things easier (planning for DL training) : human resource/DL training perceived to be one of the conditions for future growth, proposed by 25 respondents/66%.
6	Collaboration	<ul style="list-style-type: none"> : DLIs mostly independently done (except under PNM & PERPUN) : <i>PERDANA/MyLib</i> (under PNM) & <i>MyUniNet Portal</i> (under PERPUN). : no pulling factor from a central agency/or an independent body for collaborative DLIs, except under those above. : they would plan/initiate/start & solve any problems in the course of implementations much on their own. : resulted in small localized projects & international DLIs was none. : need to change mind set. : librarians (forefront of DL dev./trying their best to increase online services / universal access/resource sharing but difficult unless everybody open up/working on the same mechanism/platform to turn national DL project a success (collaborate). : they knew PNM too was facing problems with <i>PERDANA</i>, therefore the need to collaborate was more/greatly felt. : why independently? 1) attitude 2) subject knowledge VS: R30 <i>“The involvement and collaboration of all types of information centers are very important”.</i> VS: R4 <i>“Malaysian librarians must really open up and we cannot be thinking anymore that your library is your library and my library is my library”.</i> VS: R28 <i>“We need to adopt a paradigm shift. A stronger and more effective digital library consortium might bring the library heads to more national collaborative efforts, possibly through the formation of a central agency. A stronger and bigger consortium is badly needed in times of budget cut”.</i> VS: R31 <i>“Digital library environment necessitates that we must be willing to share the resources more openly”.</i> VS: R4 <i>“We must unite to get more budget and sponsors”.</i> VS: R30 <i>“Never forget the publishers; they too have a role to play to help push digital library development”.</i> : on the Q about collaboration between ANM/PNM/MNM? VS: R4 <i>“I am puzzle as to why the three (national library, archive and museum) cannot just have one big project together”.</i> VS: R10 <i>“Why can’t they worked as a national digital library team?”</i> VS: R22 <i>“They possess some of our best and unique cultural heritage and this is what the world wants to see virtually”, and “A truly national digital library project will be possible if the three can work together”.</i> VS: R34 <i>“A one stop centre of knowledge portal on various subjects or disciplines can be produced if libraries or archives or museums can combine resources, not only for information surrogates but also born digital materials”.</i> : the proposed knowledge portal (multidisciplinary) would be possible through combined efforts/resources/technical expertise/DL software & hardware (wider scope). : to fasten digitization works/the dev. of digital objects & truly national in character. : this could be done through the independent body/national commission on DL. : lack of collaborative efforts has resulted in over dependence on PNM -voiced out by 26 respondents (68%) and limited the scope of DLIs. : development of local digital contents/born digital materials were also minimal. VS: R22 <i>“That more local content should be digitized as we are rich in our cultural heritage but not being done. The Arkib, PNM and Museum should work this out, as</i>

	<p><i>they possess some of our best historical and cultural heritage”.</i></p> <p>VS: R5 <i>“Archive and Museum, plus the National Library must come to a round table conference and work things out how to collaborate in national digitization projects. Digitization will enable Batu Bersurat or Hikayat Hang Tuah (listed in the UNESCO’s Memory of the World Register), Mahsuri, pictures of Mulu Park or Portuguese Village in Malacca be scanned and the images put online”.</i></p> <p>: respondents were hoping (really wanted to see it happen) the 3 national information agencies be able to collaborate/work on something big virtually esp. on Malaysian heritage.</p> <p>: unspoken wishes to see Arkib/PNM/Museum to work together as the national DL team, spearheading more DLIs at national scale (together with the proposed leading agency/independent body/DL national commission).</p> <p>VS: R 35 <i>“When everybody is under one umbrella, than planning will be much easier. A lot more digital library initiatives can be planned, and since there will be more people involved, we can break up into teams”.</i></p> <p>: the existence of more personnel in the proposed leading agency, then break them up into different teams.</p> <p>: one team would do technical works & the other team could be assigned to do DL project team (division of work – therefore more focus).</p> <p>VS: R4 <i>“The concept of my collection / your collection or my library / your library in a digital world is no longer applicable”.</i></p> <p>VS: R35 <i>“That’s why there must be an independent body to act as the head or to lead and bringing all those related – libraries, archives and museum to be under one umbrella or under one administration to streamline national digital library planning. Then it will solve many problems”.</i></p> <p>VS: R37 <i>“When everybody collaborate, there will be more ideas and more digital library initiatives”.</i></p> <p>: R 38 agreed that collaboration was in fact a major problem, the channel to collaborate in developing truly shared DLIs was not yet opened & strongly felt that digital local content dev. would easily achievable through national collaboration.</p> <p>VS: R38 <i>“Because Malaysian libraries have not really ‘open up’ for resource sharing in the true sense of the word”.</i></p> <p>VS: R4 <i>“Each library wanted to claim that this digital library initiative belongs to my library or sometimes their digital contents are not accessible through the public domain”.</i></p> <p>VS: R4 <i>“That the fundamental success of any digital library initiative would be collaboration and cooperation”.</i></p> <p>: many of the respondents agreed that PNM had laid the foundation for DL cooperation but on selective basis.</p> <p>: almost all respondents agreed, cooperation & collaboration (all levels between information related agencies) were of great important for DL success.</p> <p>: ANM/PNM/MNM & an independent body/national commission/leading agency to work/collaborate in much bigger national DLIs (developing national digital heritage/repository and multidisciplinary knowledge portals or one stop center for Malaysian e - national heritage or Malaysian heritage portal).</p> <p>: librarians to adopt a new function (the creator of digital local content of unique & historical importance.</p> <p>: opportunities for librarians (good for the profession) to contribute to the dissemination of national heritage information to the world at large.</p> <p>: collaboration among libraries and the national information agencies (ANM & MNM & PNM) had been proposed as one of the perceived conditions for DL future growth by 22 respondents/58%.</p>
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7	Digital library policy, legal framework and blueprint	<p>: DL dev. a new phenomenon.</p> <p>: certain supportive platforms/mechanism need to exist</p> <p>: national DL policy and services should first be in place; also legal aspects and blueprint.</p> <p>: to serve as guidelines and reference/to enable a more coherent, collaborative/unified approach & help accelerate the national DL planning/implementation at a much wider scale.</p> <p>: no written policy on digitization/selection policy of items to be digitized</p> <p>: guided by the simple approach to digitize, preserve and to provide online service (priority)</p> <p>VS: R6 <i>“Digital policy is crucial”</i></p> <p>VS: R35 <i>“These national policies are of extreme important to lay the foundation and directions as to where we are heading”.</i></p> <p>VS: R13 <i>“How to start digitizing if we are not clear on so many things?”</i></p> <p>VS: R5 <i>“Just like blueprint, digital policy will ensure that there will be some form of guidance”.</i></p> <p>: suggested DL policies on acquisition / circulation / reference/Internet access/dev. of local contents/document delivery service/SDI/selection of materials for digitization (information surrogates)/born digital materials & domain types.</p> <p>: PNM’s <i>Dasar Pendigitilan</i> (Digitization Policy, 1994) and respondents agreed the National Policy on Library and Information Services need to be revised, to include/spell more factors on DL developmental aspects (policy on DL information & services).</p> <p>: the proposed leading agency / independent body / national commission on DLIs could take up the matter (as it directly involved national policies) together with PNM.</p> <p>VS: R38 <i>“The formulation of digital library policy and the adoption of digital library standards by Malaysian libraries, and to include establishing a legal framework for digital library development”.</i></p> <p>: these were important as they were doing a lot of information surrogates as part of DLIs (other than subscription to commercial online databases & dev. of web sites/home pages).</p> <p>: most organizations digitized own internal publications (aggressively) to avoid legal implication/not to infringe copyright act.</p> <p>: this was one factor hindering aggressive information surrogates.</p> <p>: laws pertaining to DL & information services need to be addressed accordingly.</p> <p>VS: R3 <i>“Certain requirement should be waived especially if the information digitized is meant strictly for educational purposes”.</i></p> <p>VS: R6 <i>“Libraries dare not venture into other publications due to copyright problems”</i></p> <p>VS: R24 <i>“Library loan system has been functionally accepted in the printed era but global access through digital library concept necessitates the system to be re-looked, re-defined and re-assessed to cater for wider online user based”</i></p> <p>VS: R30 <i>“There must be some acceptable mechanism to overcome copyright act problem, where it will be a win-win situation for all parties – users, libraries and writers”.</i></p> <p>: suggested libraries to acquire born digital materials (to avoid legal problems) i.e. the mandatory acquisition/depository system of born digital materials.</p> <p>VS: R5 <i>“Malaysian libraries may adopt a more aggressive direct acquisition i.e. calling and encouraging the public to donate or surrender digital information that they have produced for safe keeping”.</i></p> <p>VS: R3 <i>“The legal deposit act can be amended to include born digital materials”.</i></p> <p>VS: R4 <i>“If it has been spelt out in the collection development policy, then it would be easier to implement”.</i></p> <p>: standard national blueprint on DLIs was also suggested (national reference document); needed urgently to spell out anything on DLIs (specific and comprehensive).</p>
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8	ICT facilities and National Information Infrastructure (NII)	<p>: Internet access had not yet achieved 100% subscription despite the government’s nationwide campaign of <i>One House One PC</i> (esp. in the rural areas).</p> <p>: high dependency on PLs & Internet cafes for Internet access.</p> <p>: some respondents were lamenting on slow Internet access.</p> <p>: the Ministry of Energy, Resources and Telecommunication <i>do</i> have a policy on Telecommunication but not precisely spelt for DL needs.</p> <p>: the need to expand Internet facilities nationwide (reduced rate for lib use).</p> <p>: broadband facilities be introduced/upgraded.</p> <p>VS: R27 <i>“Internet connection costs for all library types must be differentiated from commercial use, to enable libraries to increase their online services without having to spend more on Internet subscription cost”.</i></p> <p>VS: R11 <i>“After all libraries are servicing the public. It’s part of social obligation. So we should be given special Internet fees to cater for public needs”.</i></p> <p>VS: R38 <i>“That digital technology implementation must be given priorities, including the availability of broadband and other ICT infrastructure”.</i></p> <p>: the proposed national commission/independent body could work this out i.e. NII tailored for web based DL services (under the technical team).</p> <p>: at institutional level, the establishment IT Unit/Cyber Unit/Internet Corner/Virtual Library/ DL Unit was the norm/rampant(separating between digital & print services).</p> <p>: the IT Unit was central to DL dev./ with an average of 30 PCs for users’ use/access to websites, Internet connection, online services with LAN & WAN.</p> <p>: headed by either IT personnel (programmer/system analyst) or a librarian trained in IT.</p> <p>: the use of internet facilities was regulated based on time (an average of 1 hour unless free of bookings).</p> <p>: SLs were more generous, providing unlimited Internet access (for staff only).</p> <p>: one academic library started a 24 hour Internet service next to the library building, it</p>

		<p>was fully utilized.</p> <p>VS: R4 <i>“Library online services continue even after library closes”</i>. : seventeen libraries had started using the self checkout machine : 1 library had started digital thumb print for membership registration. : scanners were mostly available for users as well as for digitization works. : due to lack of ICT facilities, twenty respondents preferred outsourcing when comes to digitization works.</p> <p>VS: R 23 <i>“Better outsource, it’s much easier”</i>. : respondents had expressed the need for ICT, NII and DL related policies to be upgraded & enhanced. : NII was important for DL development (for networking and WWW based library services). : government should look into the provision/expansion of broadband facilities to enable wider DLIs at national level.</p> <p>VS: R19 <i>“Digital technology, basic and adequate ICT infrastructure and Internet facilities including broadband must be in place to cater for the digital needs of library operations and services”</i>.</p> <p>VS: R 21 <i>“Rightfully, all libraries at this juncture of cyber era, should at least have already installed an integrated library systems and possess a substantial amount of PCs to cater for an increase of online and digital services”</i>.</p> <p>VS: R28 <i>“Local and wide area networks, Internet and Intranet access too should be made readily available, expanded and sufficient to cater for digital needs”</i>. : NII/broadband ICT facilities were important component of DL Is. : perceived as one conditions for future growth & proposed by 28 interviewees/74%.</p>
9	<p>Increased usage of online services and sources</p>	<p>: online services had been the main focus/significant. : main target to increase online services, through interactive web sites/home pages (content laden)/digital reference service/reduce manual counter services/subscriptions of e-journals. : printed brochures/reminders were declining (library newsletters, new book arrivals, booking facilities & library announcements had been digitized/put online). : online counter services (circulation, registration, reservation, interlibrary loan) & high usage of e-mail facilities for libraries’ correspondence. : fulfilling user information needs through print and digital collections. : to meet the demand of library patrons (IT savvy) and high expectations for advanced online services. : online sources e.g. e-journals had been on the rise, & respondents agreed that Malaysian libraries resort to e-journal subscription to increase online services & users could access the digital online information at all times (libraries still concurrently acquired both print & digital collections, but this phenomenon was slowly changing). VS: R12 <i>“An increasing number of users prefer online to print materials, especially e-journals”</i>. VS: R 28 <i>“The use of e-journals is so popular”</i> VS: R 4 <i>“We are subscribing to more e-journals as the fastest way to provide online services”</i>. VS: R32 <i>“There are many commercial databases, just select those that are related, pay and service”</i>. VS: R36 <i>“Subscription to e-journals save space and reduce the headache of missing issues”</i>. : wished could subscribe to as many journal titles, but many agreed that this was the easiest/fastest way to provide online service. -it was noted that a database was subscribed by more than one library (individual subscription was not economical). : alternative: collective subscription through a consortium for effective implementation. : the proposed independent body/DL national commission could work this out</p>

	<p>through the technical team or digital library project team.</p> <p>: besides saving cost, would consolidate resource sharing & maximum use of subscribed online databases.</p> <p>: e.g. UKM Medical Virtual Library had created a monitoring system on the usage of subscribed online databases (if underused - terminate).</p> <p>: with respect to collection development/ownership against subscriptions, many of the respondents were unsure/had not given much thought about the aftermath impact of change of acquisition pattern.</p> <p>VS: R37 <i>“What really matters is to give online services. Other questions will be dealt with later as we go along”</i>.</p> <p>: online library operations (acquisition) had not changed much as it involved book suppliers and distributors.</p> <p>: certain govt. procurement/procedures made online payment difficult.</p> <p>VS: R11 <i>“It is high time that the Ministry of Finance create new financial procedures to cater for the rising of e-payment”</i>.</p> <p>: home pages/web sites were greatly exploited to reach out to library patrons (new way of info dissemination).</p> <p>: many were also talking about developing knowledge portals as a better way to disseminate information.</p> <p>VS: R 28 <i>“Our user based has been much expanded and widened”</i>.</p> <p>VS: R31 <i>“The trend today is to provide access from a single source and developing knowledge portal is one of the ways of doing it”</i>. (developed Portal Ilmu & wished that more multidisciplinary knowledge portals (historical & heritage) be created.</p> <p>: digital reference service/online enquiries/hypertext linkages/listing of online reference tools/websites had been expanded (some libraries were doing it on trial basis).</p> <p>: reference librarian had been most affected (job specification).</p> <p>VS: R35 <i>“Reference librarians now spend more time in surfing the Internet, searching for relevant websites to fulfill users’ enquiries”</i>.</p> <p>VS: R11 <i>“Reference librarian’s new functions may include surfing the Internet and establishing hypertext linkages to related web sites”</i>.</p> <p>VS: R24 <i>“Acquisition librarian can now do away with B.I.P. (Book In Print). What important now is to get in touch with electronic suppliers, use the database in the trial period and if proven useful, subscribe”</i>.</p> <p>: another approach to online services- information surrogate (internal publications like annual reports, circulars/technical/project/occasional papers, press cuttings, specific subject or special collections, thesis/dissertations).</p> <p>: e.g. JPA Library had digitized masters & doctoral thesis of its scholars; <i>Perdana</i> Leadership Foundation Library had digitized more than 1 million pages (as of October 2008) newspaper cuttings/articles on Malaysia’s past and present PMs; ATMA’s UKM - much of its contents on the Malay world were actually born digital; National Map Department had digitized map collection published prior to the 1950’s; TV Library was developing online booking system for its VHS tape/film collections; Museum and Antiquity Library was in the mid of planning to digitize its old books collection;</p> <p>AG Library in the mid of planning to develop online legal info system.</p> <p>: academic libraries main preferences- digitizing thesis/dissertation, past years’ exam questions & digital reference. UiTM’s library introduced VRF/2005 to help facilitate research among academicians.</p> <p>: main objectives of Malaysian DLIs: 1) to provide & increase online services in tandem with the world DL trend. 2) to establish institutional memory (digitizing internal organizations’ publications for preservation purposes and to help save space).</p> <p>: increased in online services/sources/operations but they confessed that the use of print materials was still high.</p> <p>: all the respondents interviewed were very enthusiastic/optimistic about DL services and agreed in principle they would have to change accordingly in order to stay viable</p>
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		<p>(almost all of them agreed that TL concept was fast changing to accommodate more online services) & were in total support of DL development but were hoping that the print collection would not be sidelined.</p> <p>VS: R9 <i>"It is the trend. Users are expecting more sophisticated library services, so we have to provide them"</i>.</p> <p>VS: R4 <i>"The provision of digital resources is becoming more important than ever and patron's expectation for online services at times can be very demanding"</i>.</p> <p>: respondents were definite that DL is the library of the future and that the TL would stay indefinitely. Support/supplement/enhance the DL collections (none felt DL as a threat).</p> <p>VS: R28 <i>"They still borrow books"</i>.</p> <p>VS: R35 <i>"Circulation remains high, even though the use of e-journals is on the increase"</i>.</p>
10	Leadership	<p>: planning for DLIs had been the prerogatives of PNM.</p> <p>: but several respondents' opinions - leadership was not available.</p> <p>: PNM too having lack of expertise? Even PERDANA Div. had only 2 IPs and 2 supporting staff.</p> <p>: PNM had initiated and started DLIs but could not cope with their existing amount of national library functions, & inadequate professional staff/DL expertise.</p> <p>VS: R1 <i>"It will be good if the National Library of Malaysia can develop the expertise among them first, before extending it to others"</i>.</p> <p>VS: R13 <i>"More focused on library works and functions"</i></p> <p>VS: R37 <i>"Remain focused on library agenda besides working in a framework to lead and coordinate"</i>.</p> <p>VS: R27 <i>"PNM should be doing the consolidating work, collocating a report what other libraries are doing or planning (on digital library initiative)"</i>.</p> <p>VS: R4 <i>"PNM needs complete face uplift to attract more users and to introduce more digital based changes on the premise"</i>.</p> <p>VS: R38 <i>"No one is championing Malaysian digital library development especially in terms of leadership"</i>.</p> <p>VS: R38 <i>"Leadership is also a problem at state level whereby there is no centralized digital library initiative among the states". "That legally there is no legislative power to control all types of libraries in Malaysia"</i>.</p> <p>: PNM did support in terms of development grant for DLIs but coordination at state level was severely lacking (segmented library management system that makes collaboration difficult).</p> <p>: R38 informed that Public Library Corporation of Perlis was on the way to be federalized in September 2008.</p> <p>: major / national DL problem - lack of DL expertise at all levels.</p> <p>: the respondents (all IPs) agreed they had a role to play to further support DL development.</p> <p>VS: R30 <i>"All have a role to play –libraries, museums, archives, government printing including university presses and commercial publishers"</i>.</p> <p>: acquired the necessary technological knowhow/DL training</p> <p>: government should be exertive/make DL national agenda/include DL in national master economic or social plans/increase budget.</p> <p>: message: anything that could contribute to the development of DLIs must be mobilized in order to succeed.</p> <p>: a leading agency/independent body/national commission that would manage a coherent national DL planning was proposed to help solved problems of leadership/collaboration/expertise.</p> <p>: a body that would able to provide central leadership / funding / guidance/supervisory/advisory/intermediary & development functions and acts as a national referral center.</p>

		<p>: 32 respondents (84%) voiced of the urgent need of the above to look solely into the matter of developing more DLIs, collaboratively, most probably establishing multidisciplinary knowledge portals.</p> <p>: suggestion from PNM's senior librarian - <i>PERDANA</i> Service Division put under MCMC (directly be part of the component of the National Broadband Plan of the MCMC).</p> <p>: Malaysian libraries were in need of a strong guidance and leadership to take them further into greater height in planning & developing more DLIs.</p>
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