



香港中文大學圖書館系統
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The Chinese University of Hong Kong

Cross Sector Digitization Activities in Hong Kong and US Organizations - *A Comparison of Two Research Surveys*

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Digitization Survey in Hong Kong (1)

- **The Survey**

- Survey of Digitization Activities in Libraries and Other Related Organizations in Hong Kong was conducted in March 2010
- Co-organized by University Library System of The Chinese University of Hong Kong and Hong Kong Public Libraries



Digitization Survey in Hong Kong (2)

- **Objectives**

- To gain an overview of digitization plans and activities in Hong Kong's libraries and other related organizations
- To identify the nature and extent of collaborations among different libraries and other related organizations
- To identify technical and metadata standards applied in digitization projects



Digitization Survey in Hong Kong (3)

- **The Questionnaire**

(<http://www.lib.cuhk.edu.hk/DigitisationSurvey/survey.htm?Submit=Continue>)

- 35 questions in 6 sections
 - **Section 1: Background information**
 - **Section 2: Digitization plan and activities**
 - Section 3: Practices and technical standards
 - **Section 4: Funding & collaborative digitization activities**
 - **Section 5: Future plan and challenges**
 - Section 6: Contact information



Digitization Survey in Hong Kong (4)

- **Response**

- 72 organizations out of 147 responded to the survey (49%)
- Distribution of participants:
 - Libraries : 47 (65.3%)
 - Museums : 9 (12.5%)
 - Archive Centers : 7 (9.7%)
 - Others : 9 (12.5%)



Digitization Survey in Hong Kong (5)

- **Response**

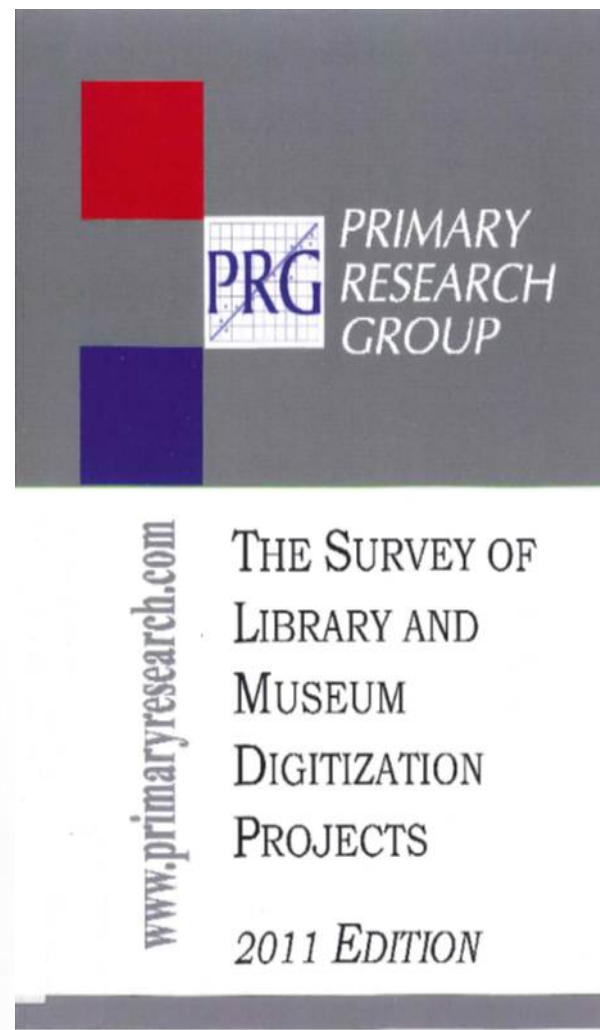
- 55% of survey participants (39 organizations) have been engaged in digitization
- Distribution:
 - Libraries : 26 (66.7%)
 - Museums : 6 (15.4%)
 - Archive Centers : 5 (12.8%)
 - Others : 2 (5.1%)



Digitization Survey in US

- Data extracted from the research report "*The Survey of Library and Museum Digitization Projects, 2011 Edition*" (PRG Survey Report) conducted by Primary Research Group

(http://www.primaryresearch.com/view_product.php?report_id=281)



PRG Survey Report (1)

- **The Survey:**

- Look closely at how academic, public and special libraries and museums are digitizing special and other collections
- Questions covered:
 - **Materials that are being digitized**
 - **Budget**
 - Staffing
 - Impact of Online Exhibits
 - **Outsourcing**
 - Scanning, Photographing and other Digitization Methods
 - Digital Management
 - Cataloging
 - **Collaborations**
 - Marketing



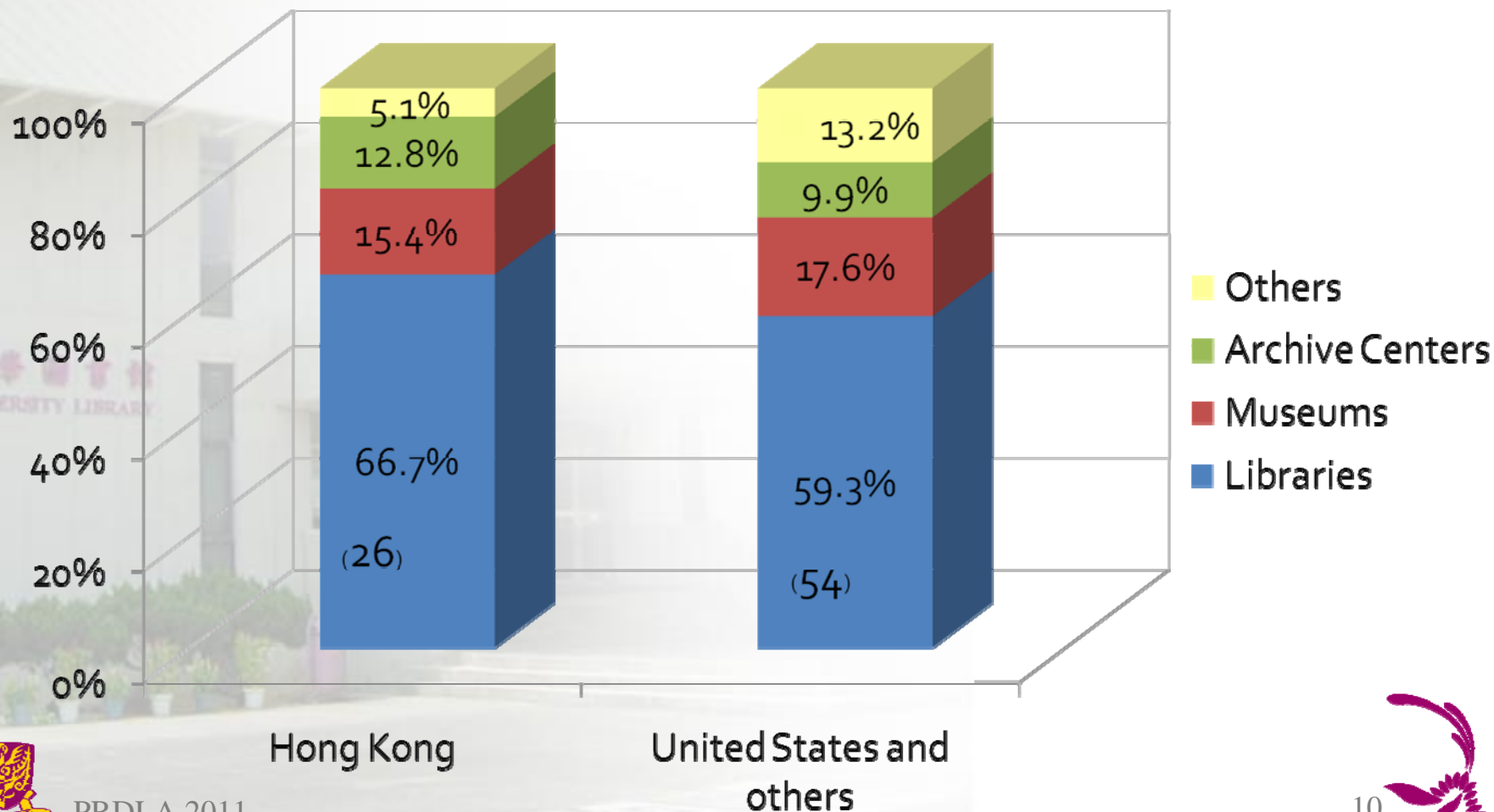
PRG Survey Report (2)

- 91 libraries and museums in the US, the UK, Europe, Canada and Australia participated:
 - US: 73 (80.2%)
 - UK: 7 (7.7%)
 - Canada: 5 (5.5%)
 - Europe: 3 (3.3%)
 - Middle East: 1 (1.1%)
 - Australia: 2 (2.2%)
- The majority of participants were from the US; the report largely reflects the digitization activities in the US



Cross Sector Comparison (1)

- Organizations that have digitization collections in Hong Kong and US (i.e. 39 vs 91)



Cross Sector Comparison (2)

- Areas for comparison:
 - Materials digitized
 - Digitization Budget
 - Collaboration and outsourcing



Main Findings and Comparison

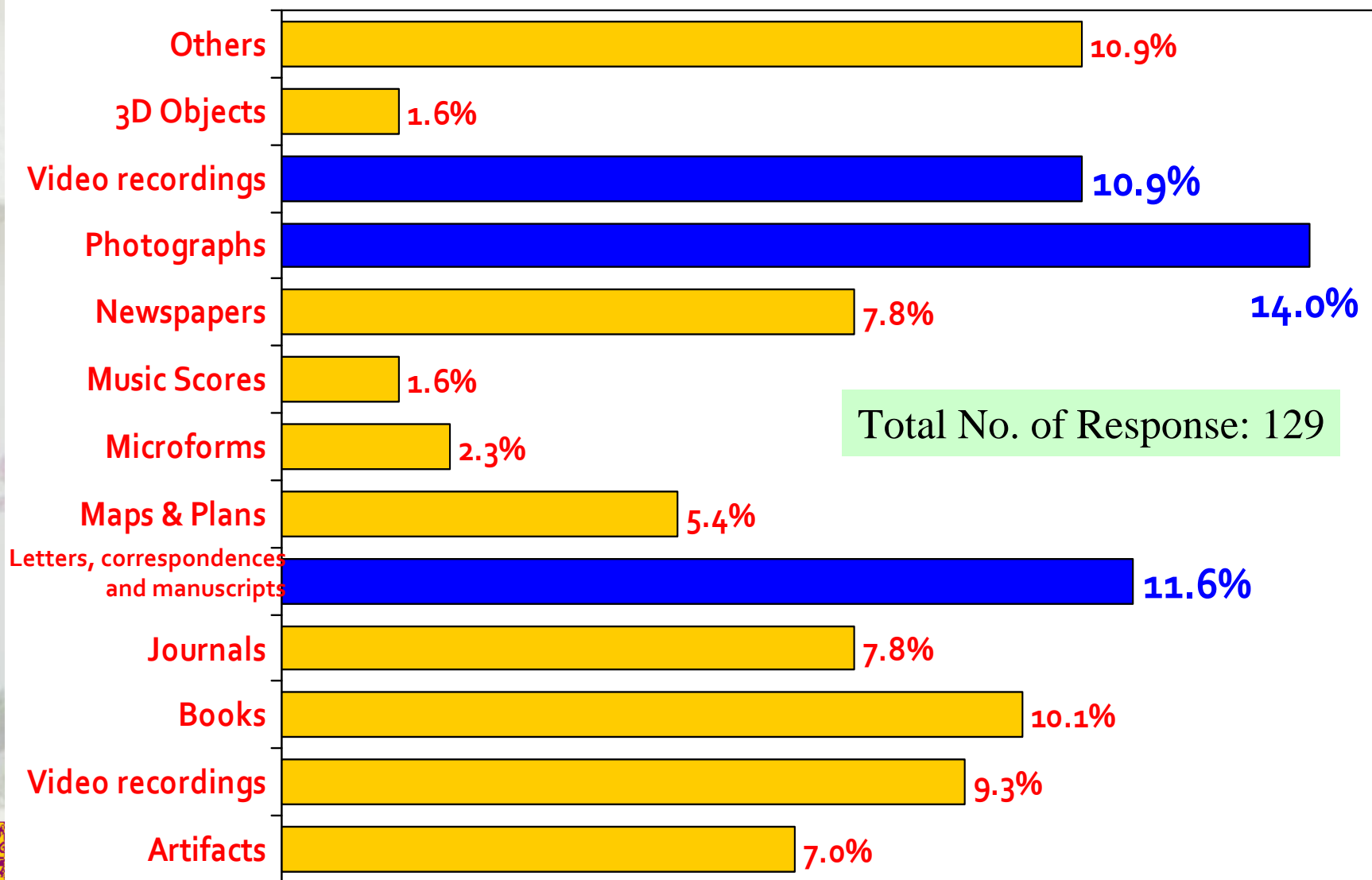


Materials Digitized (1)

- **Hong Kong**
 - Questions asked:
 1. What types of material have you digitized? [May select more than one option]
 2. Why did you decide to digitize material? [May select more than one option]
 3. What were/are the selection criteria for digitization? [May select more than one option]

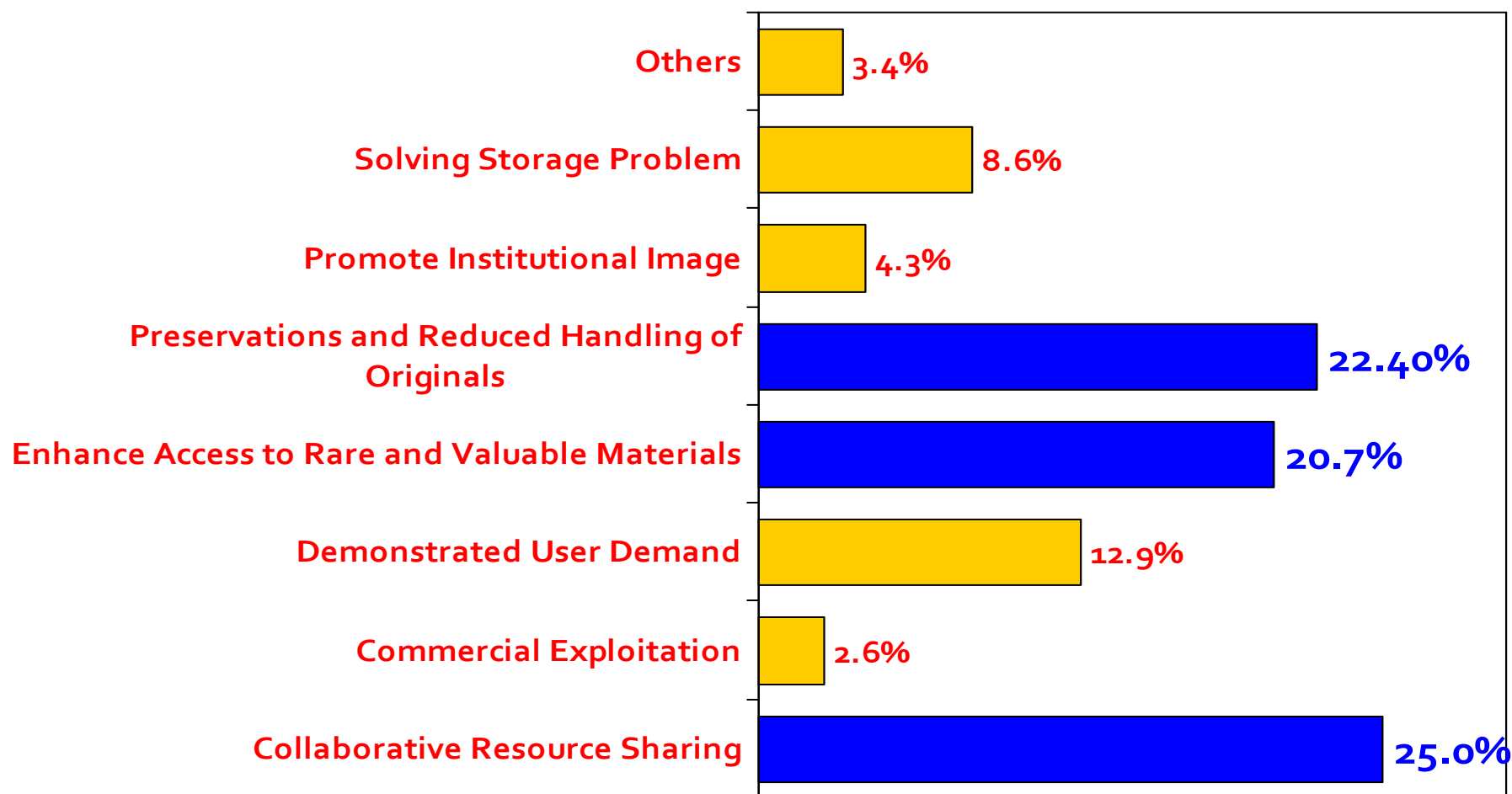


Materials Digitized (2)



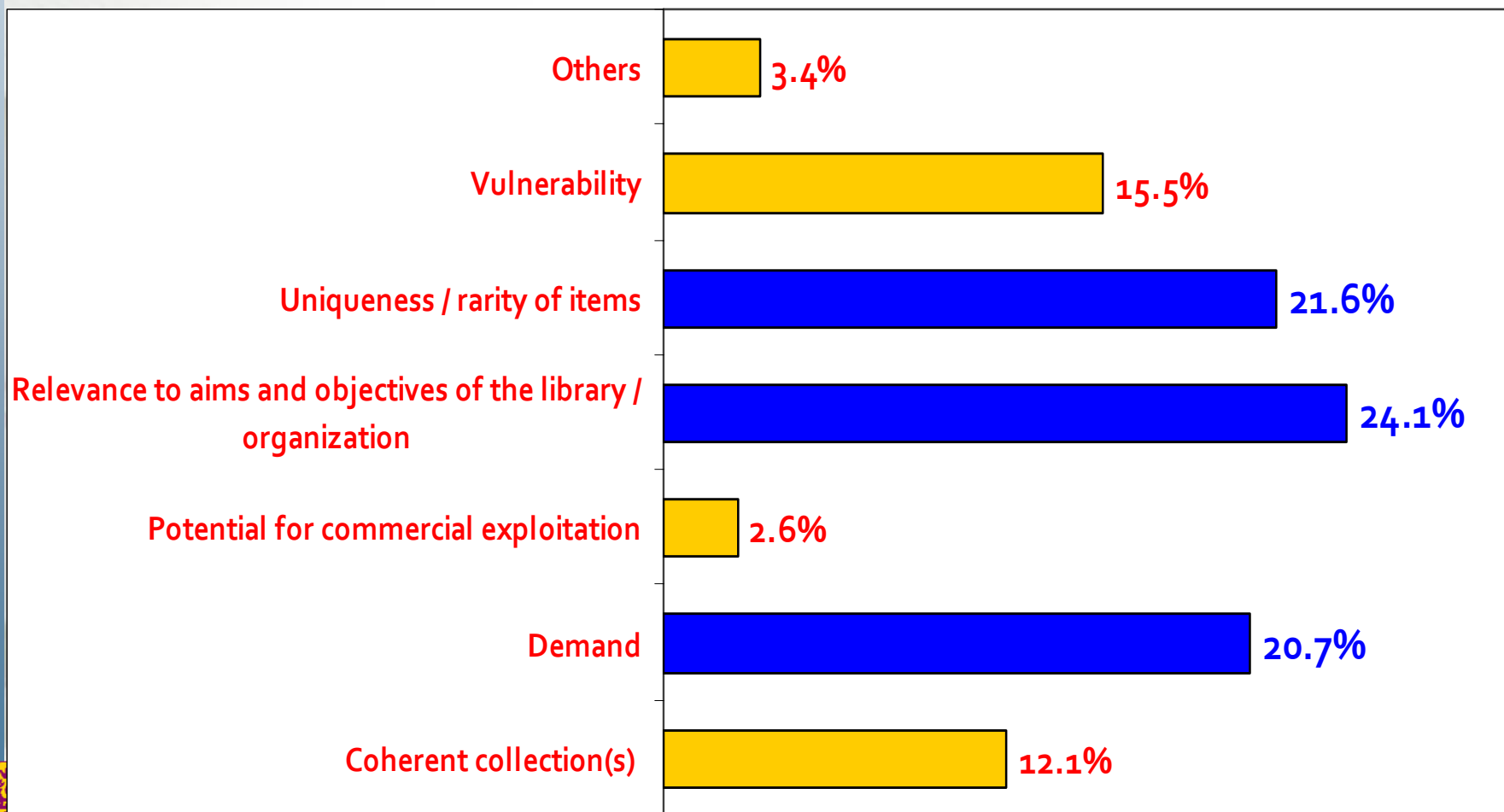
Materials Digitized (3)

- Reasons for digitization (total no. of response = 116)



Materials Digitized (4)

- Criteria Selected for Digitization (total no. of response: 116)



Materials Digitized (5)

- **United States**
 - Questions asked:
 1. Rank the following types of digitization efforts for the degree to which they form a part of your digitization efforts
 - a. Digitization of Photographs
 - b. Digitization of Microfilms or Fiche
 - c. Digitization of Text
 - d. Digitization of Music or Other Voice Recordings
 - e. Digitization of Film or Video
 - f. Preservation of Enhancement of Existing Digital Formats

Materials Digitized (6)

• Results

	Have had no experience with this	Have had some modest experience but peripheral to our efforts	This is an important factor or medium for us	This is the most critical factor or medium for us
Photographs	12.86%	17.14%	44.29%	25.71%
Microfilms or Fiche	70.77%	18.46%	10.77%	0.00%
Text	9.86%	18.31%	40.85%	30.99%
Music or Other Voice Recordings	42.65%	27.94%	23.53%	5.88%
Film or Video	39.13%	36.23%	18.84%	5.80%
Preservation or Enhancement of Existing Digital Formats	25.00%	33.82%	32.35%	8.82%

Comparison of Materials Digitized (1)

- In Hong Kong,
 - Photographs are the most digitized materials (14%) among other materials, followed by letters, correspondences, and manuscripts (11.6%) and video recordings (10.9%)
 - Collaborative resource sharing (25%) and preservation (22.4%) are the main reasons for digitization
 - Most selected materials for digitization if they are relevant to the mission of the organization (24.1%); and are rare materials (21.6%)



Comparison of Materials Digitized (2)

- In US,
 - 71.84% and 70% selected to digitize text and photographs respectively, as they form part of their critical medium; the same trend applies in Hong Kong
 - University libraries and museums largely follow the same trend
 - More museums (52.63%) than university libraries (23.36%) ranked photographs as the most critical medium
 - More museums (17.65%) than university libraries (4.65%) ranked preservation of existing digital formats as the most critical medium

Digitization Budget (1)

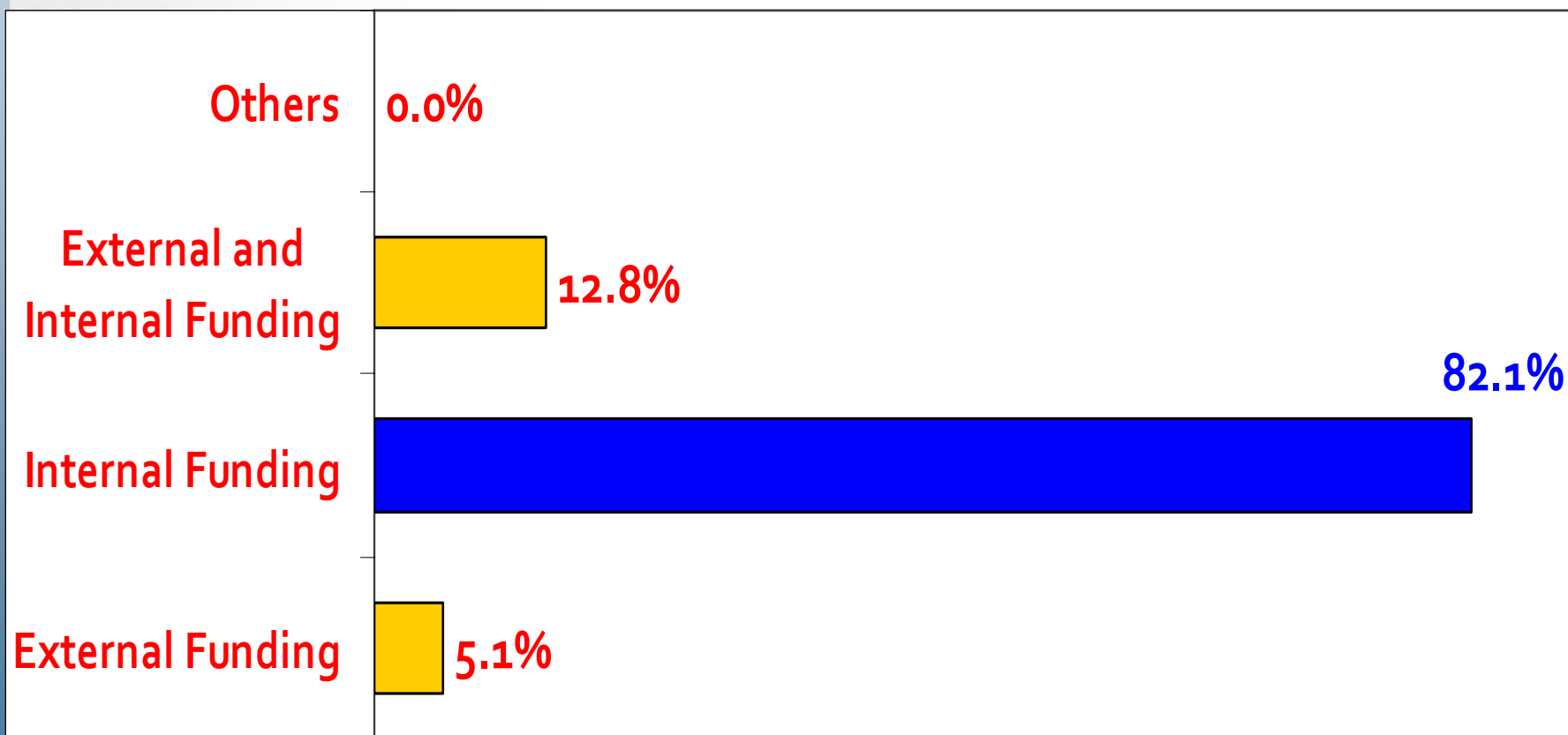
- **Hong Kong**

- Questions asked

1. What is the main source for funding digitization activities?
2. Which external organizations fund your digitization activities? [May select more than one option]
3. What is the funding model for externally funded digitization activities?
4. Is there any material in your collections that you consider should be digitized in the future?
5. Please rank the top three challenges in conducting your digitization activities?

Digitization Budget (2)

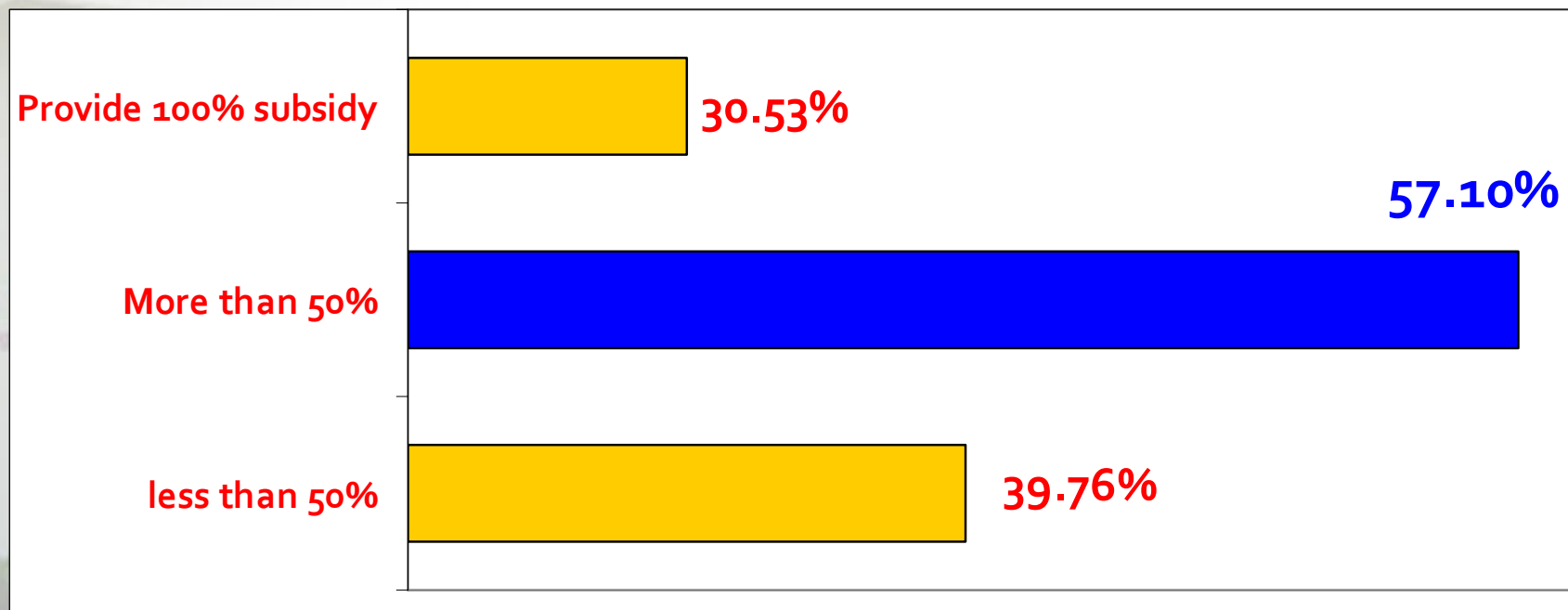
- Sources of funding



Digitization Budget (3)

- Funding model for externally funded digitization activities

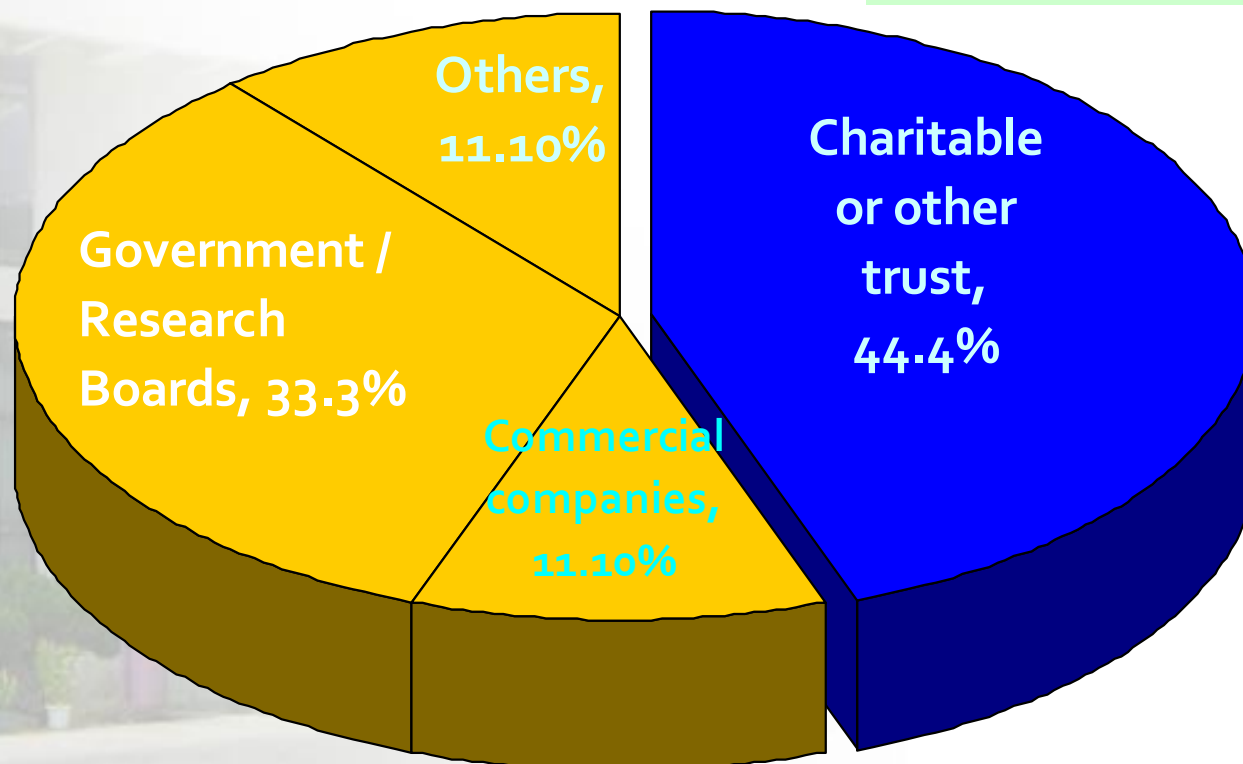
Total no. of response = 7



Digitization Budget (4)

- External organizations that fund digitization activities

Total no. of Response = 9



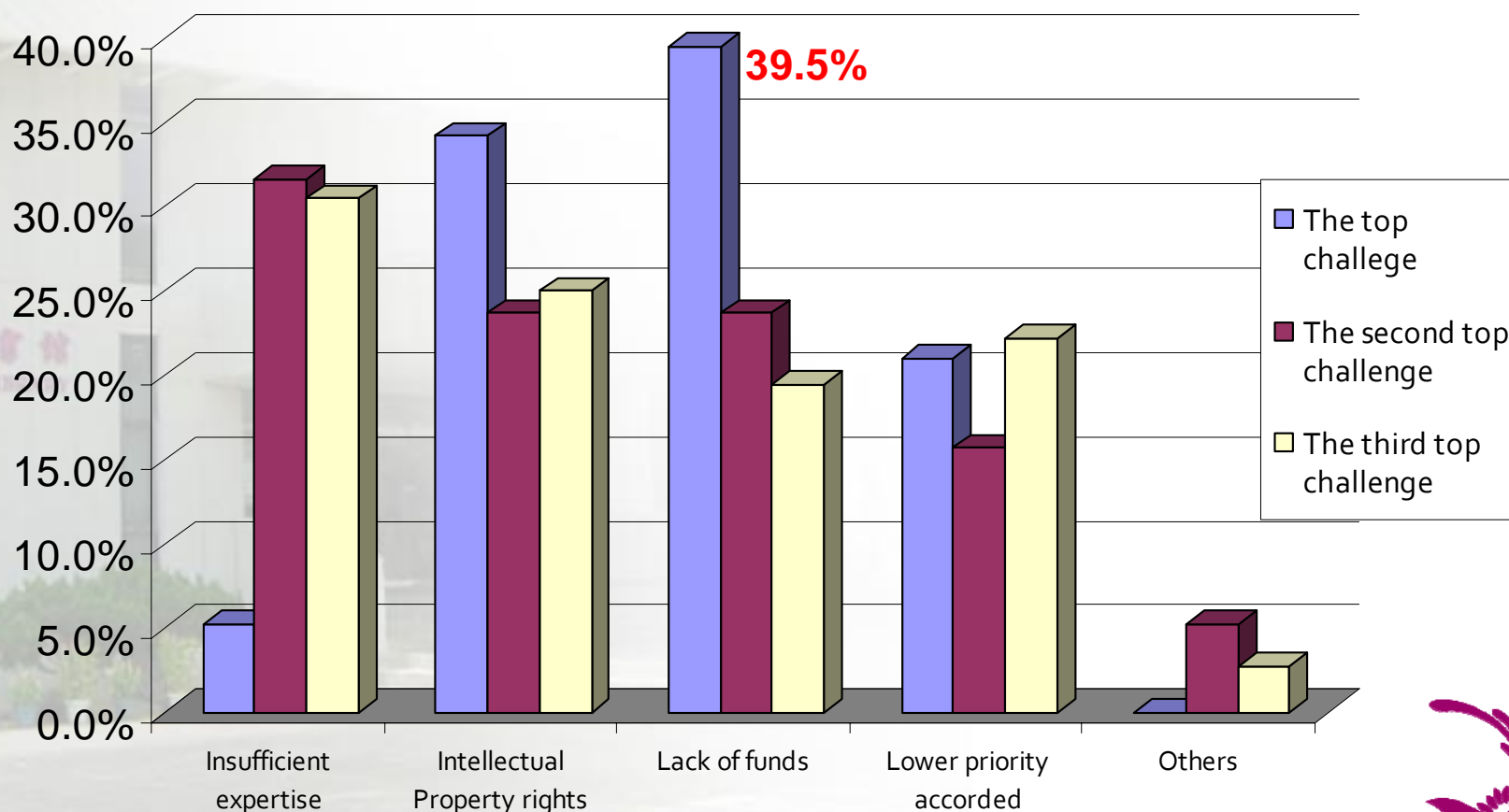
Digitization Budget (5)

- Materials in the collections that may be considered to be digitized in future

Yes	51.40%
No	48.60%

Digitization Budget (6)

- The top three challenges in conducting digitization activities



Digitization Budget (7)

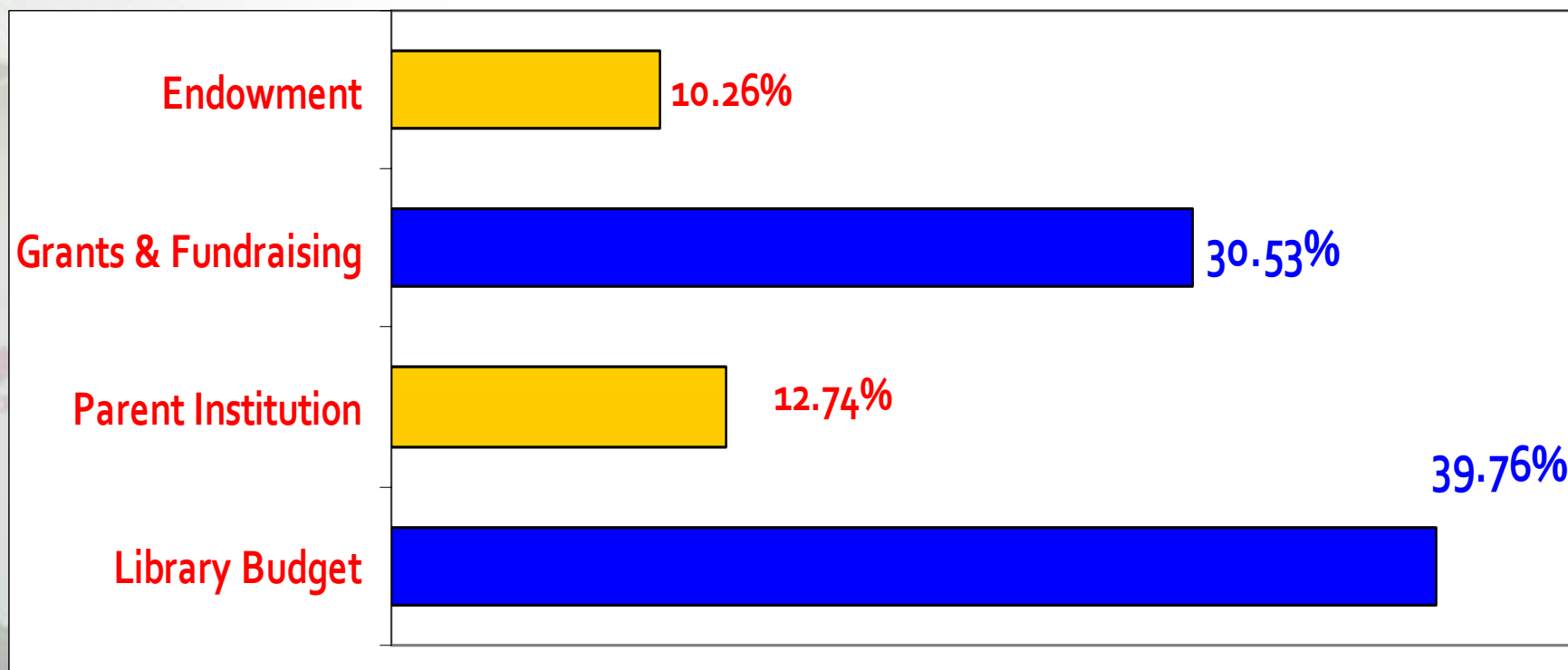
- **United States**

- **Questions asked**

1. What percentage of the budget for digitization comes from the following sources
 - a. The library budget
 - b. A supplementary grant from the parent institution
 - c. Grants & fundraising
 - d. Endowment is the main source for funding digitization activities?
2. How would you describe the outlook for raising money for digitization projects from sources of the main library, museum or other main institutional budget?
3. Which phrase best describes the probable course over the next two years of your institutional spending for digitization?

Digitization Budget (8)

- Sources of funding:



(note: not equal to 100% as they are asked in different questions and only the mean of the budget is included)



Digitization Budget (9)

- The outlook of raising money for digitization projects from sources outside of organization

	Not Favorable	Not Too Bad	Pretty Good	Excellent
US	35.71%	35.71%	24.29%	4.29%
University Library (US and non-US)	26.19%	52.38%	16.67%	4.76%
Museum (US and non-US)	31.58%	31.58%	36.84%	0.00%
Special Library (US and non-US)	61.11%	22.22%	11.11%	5.56%

Digitization Budget (10)

- Probable course of spending over the next two years

	It will probably decrease substantially	It will probably decrease somewhat	It will probably remain the same	It will probably increase somewhat	It will probably increase substantially
US	4.17%	11.11%	27.28%	37.50%	19.44%
University Library (US and non-US)	6.82%	6.82%	31.82%	40.91%	13.64%
Museum (US and non-US)	5.26%	5.26%	31.58%	31.58%	26.32%
Special Library (US and non-US)	0.00%	11.11%	50.00%	16.67%	22.22%



Comparison of Digitization Budgets (1)

- In Hong Kong,
 - Over 80% of the digitization projects are funded internally
 - Of the remaining 20% of digitization projects that are funded by external sources, over 80% have more than 50% subsidies and most come from charitable organizations
 - While the majority of the organizations in the survey felt the need to continue to digitize their collections, they found that the lack of fund was the greatest challenge



Comparison of Digitization Budgets (2)

- In US,
 - Digitization budgets come largely through non-budgetary allocations. The internal budget accounted for only 39.7% of the overall digitization budget
 - Prospects for digitization funding in the United States were considered pretty good or excellent by about 28.6% of the survey participants.
 - Museums (36.84%) are much more optimistic than university libraries (21.43%) and special libraries (1.67%) in the outlook for fund raising.
 - About 56.94% of US organizations would probably increase their spending for digitization; again more museums (57.9%) than university libraries (54.55%) and special libraries (38.89%) will increase their spending



Collaboration and Outsourcing (1)

- **Hong Kong**
 - **Questions asked:**
 1. Do you cooperate with other organizations to develop digitization projects?
 2. Which types of organization do / would you work with on digitization activities? [May select more than one option]
 3. What were the reasons for working with partners? [May select more than one option]
 4. Do you outsource digitization work such as scanning, creating metadata, etc?



Collaboration and Outsourcing (2)

- Cooperation with other organizations to develop digitization projects

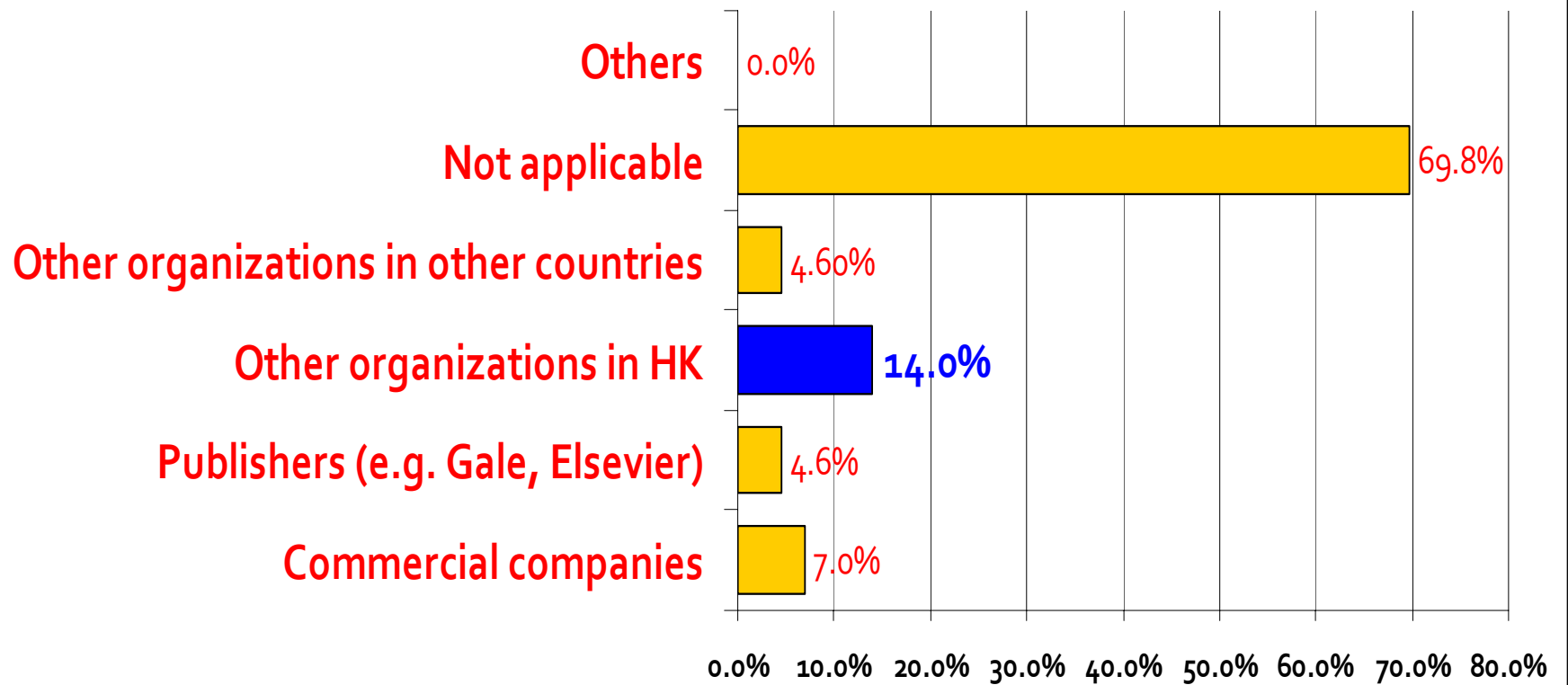
Yes	20.50%
No	79.50%

- Outsourcing of digitization work like scanning and metadata

Yes	43.60%
No	56.40%

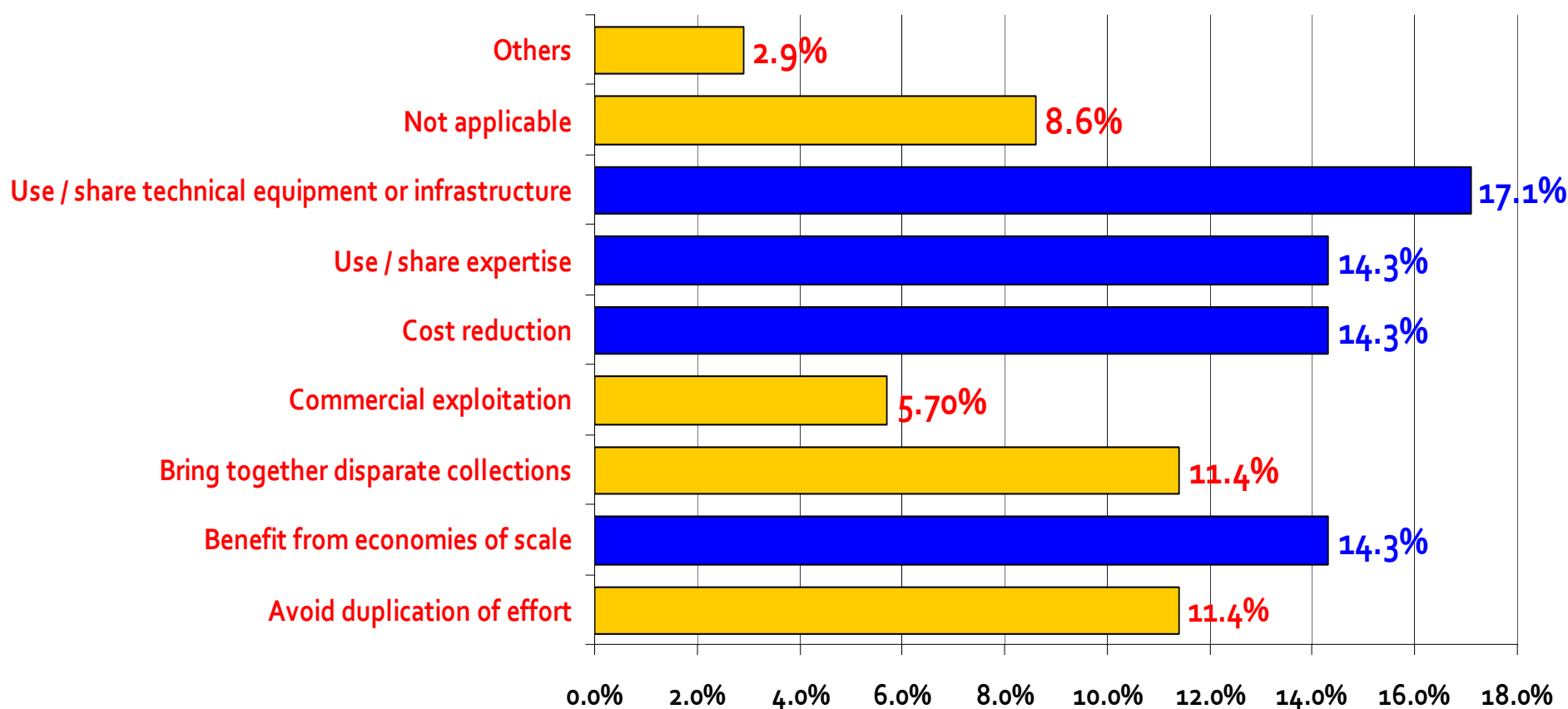
Collaboration and Outsourcing (3)

- Institutions selected for cooperation to develop digitization projects (total no. of response = 43)



Collaboration and Outsourcing (4)

- Reasons for working with partners (total no. of response = 35)



Collaboration and Outsourcing (5)

- **United States**

- **Questions asked:**

1. Has your division teamed up with any other departments of faculty of the college or museum to work jointly on digitization projects?
2. Has your organization outsourced digitization, in whole or in part, to a third party, another college or museum, private consultant or company?
3. Which companies or other organizations have you found to be effective outsourcing partners for any kind of digitization work and that you would recommend to others
4. Which phrase best describes your attitude towards the outsourcing of digitization work?



Collaboration and Outsourcing (6)

- Collaborate with other departments / faculties / museums to work jointly on digitization projects

	YES	No
US	52.77%	47.22%
University Library (US and non-US)	65.12%	34.88%
Museum (US and non-US)	47.37%	52.63%
Special Library (US and non-US)	33.33%	66.67%

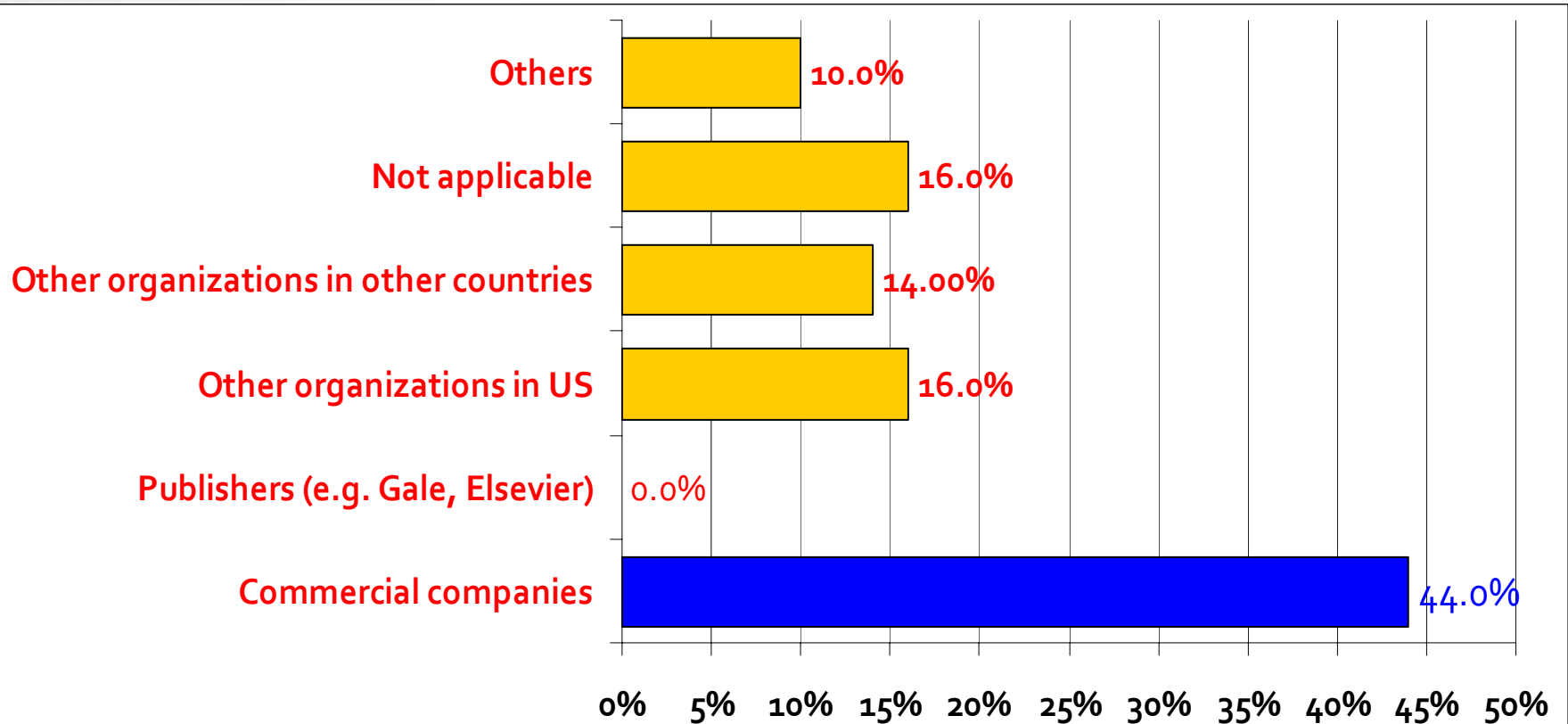
Collaboration and Outsourcing (7)

- Outsourcing of digitization work to others

	YES	No
US	52.17%	47.83%
University Library (US and non-US)	59.52%	40.48%
Museum (US and non-US)	31.58%	68.42%
Special Library (US and non-US)	52.94%	47.06%

Collaboration and Outsourcing (8)

- Effective outsourcing partners



Collaboration and Outsourcing (9)

- Attitude towards outsourcing of digitization work

	We really haven't done this and don't want to	We outsource only special needs that can't be handled in-house	We've done a lot of outsourcing but want to do more in-house	We haven't done too much outsourcing but feel that this is really the way to go	We've done a lot of outsourcing and plan to do more in future
US	27.7%	43.94%	13.64%	9.09%	6.06%
University Library (US and non-US)	23.26%	51.16%	9.3%	9.3%	6.98%
Museum (US and non-US)	52.94%	35.29%	5.88%	0.0%	5.88%
Special Library (US and non-US)	31.25%	43.75%	18.75%	0.00%	6.25%

Comparison of Collaboration and Outsourcing (1)

• In Hong Kong,

- Only 20.5% of the survey participants have collaborated with other organizations, and less than half (43.6%) have outsourced digitization work to others, which include scanning, metadata, indexing, computer programming, conversion of audio-visual materials storage format
- About 15% of them chose to collaborate with organizations in Hong Kong, this was followed by commercial organizations. But the majority (69.8%) will not collaborate with these organizations
- The main reasons for collaboration is to share technical equipment, use expertise and gain economic advantages like cost reduction and economies of scale.



Comparison of Collaboration and Outsourcing (2)

- In United States,
 - More (52.78%) organizations than Hong Kong have teamed up with other departments of their institutions to work jointly on digitization project. University libraries are more inclined than museums and special libraries to do so; more than 2/3 of university libraries have collaborators
 - Similarly, more (52.17%) organizations than Hong Kong have outsourced their digitization projects. Museums (31.58%) are least likely to do so than university libraries (59.52%) and special libraries (52.94%)



Comparison of Collaboration and Outsourcing (3)

- Unlike Hong Kong, US organizations sampled like to outsource their work to commercial organizations.
- Organizations in both continents like to work with their local partners.
- In future, 30% of the US organizations do not want to outsource. Museums are particularly not interested to do so.
- About 44% of organizations sampled would only outsource for special needs. Libraries and museums largely follow this trend. This is the same for Hong Kong; they work with others just because they want to share others' equipment and expertise.
- Special libraries are particularly interested to do the work more in-house. Just about 6% of the museums and special libraries see greater outsourcing as their future. This is very different from the view of university libraries (16.28%) and the US organizations (15.15%)



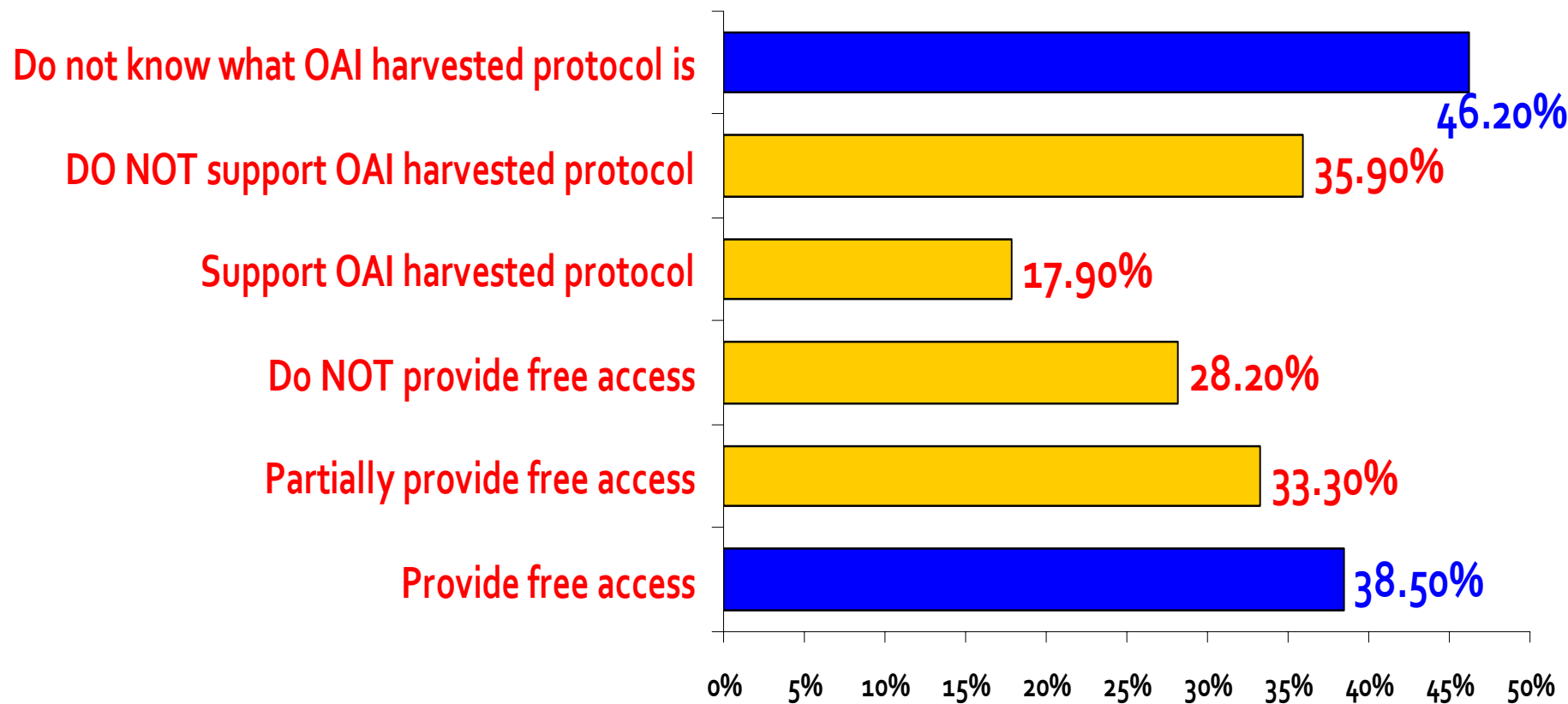
Accessibility of Digital Collections (1)

- **Hong Kong**
 - **Questions asked**
 1. Do you provide free access for the digitized materials?
 2. Is your project/collection website OAI (Open Archive Initiative) compliance?



Accessibility of Digital Collections (2)

- Result



Observations (1)

- Digitization activities in Hong Kong's libraries and other related organizations are not very common:
 - 46% of the organizations surveyed have never been engaged in any digitization activities, the reasons are:
 - Lower priority (30.9%)
 - Lack of funds (17.6%)
 - Concern for intellectual property rights (17.6%)
 - Should we promote digitization activities?
 - What is the future of the digital library?

Observations (2)

- How to tackle the challenge of lack of funding?
- Experience in CUHK Libraries:
 - The funding for digitization was reduced from over HK\$4 million in FY2007/08 to about 0.6 million in FY 2010/11
 - Some sources of funding such as university research grants and private funds are not stable enough to support ongoing digitization initiatives



Observations (3)

- To collaborate with diverse parties is crucial
 - technology is not enough; we need cooperation with users; we need international cooperation with cultural institutions and partnership with others (publishers, et al.).
- more projects which previously relied on large regional or global entities can now be accomplished through local collaboration
- Hong Kong's organizations are lagging behind the US counterparts in collaboration with other parties
- More philanthropic fund-raising activities should be promoted

Observations (4)

- Preservation is still the main reasons for engaging in digitization activities in both continents
 - It is one of the reasons why texts, letters, manuscripts, and photographs which are often rare and precious are firstly identified for digitization.
 - Image database is particularly essential to museums
 - But both surveys did not cover much on the digitization technologies specifically for these material types

Observations (5)

- Though free access to digital collections are provided by about 40%, still 30% did not provide such access to users and that about 47% do not know the concept of OAI protocol that supports open access and discovery
- This may hinder knowledge discovery and the development of Institutional Repositories (IRs) to promote scholarly communications

The Way Forward (1)

- Digitization of unique library collections is one of the top ten trends in academic libraries
(<http://crln.acrl.org/content/71/6/286.full>)
- After the survey in Hong Kong, a catalogue of digitization initiatives in Hong Kong 《香港地區數碼典藏目錄》 was compiled in May 2010 as a reference for resources for developing digitization. A total of 112 entries were listed.
- [Hong Kong Digitization Project Initiatives \(HKdpi\)](#) was established as early as 2005 as a platform for searching the digitization project initiatives of various Hong Kong libraries. They have a total of 127 entries.
- Still lacking a comprehensive, consistent and accessible record of digitization activities in Hong Kong.



The Way Forward (2)

- Hong Kong Library Association can take up the role of conducting annual survey on digitization activities and build up a more comprehensive catalogue that indexes all digitization activities in Hong Kong.
- Being annual, these surveys will allow for more vigorous and scientific comparison to map the trend of digitization in Hong Kong.



The Way Forward (3)

- Much room for collaboration across and within various institutions like libraries, museums, archives and publishers
 - More diverse content
 - Resource sharing both financially and technologically
 - Enhances user experience
 - Foster competition amongst projects leading to new approaches, new way of crossing over the existing hurdles like copyrights and intellectual property rights issues.



The Way Forward (4)

- Open access is the future
- *"Libraries will continue to lead efforts to develop scholarly communication and intellectual property services."* - <http://crln.acrl.org/content/71/6/286.full>
- A clear trend has emerged to educate faculty and students about authors' rights and open access publishing options and to recruit content for institutional repositories (IRs).
- Besides preservation of unique library collections, providing access is equally important given the ubiquitous availability of born-digital information nowadays



References

- Chan, I. , Lau, S.F. (2010). Digitised collection on Hong Kong: a survey of digitisation activities in libraries and other related organizations in Hong Kong. Available at: http://www.lib.cuhk.edu.hk/DigitisationSurvey/results/dig_survey.pdf
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Thank You 謝謝!

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