

**Classification** **Tagging Rights** **Collabularies**

**Collaborative Cataloguing** **Tag**

**Cluster Tag Collaborative Tagging Tagosphere**

**Folksonomy** **PIM** **Web 2.0**

**Metadata** **User Tagging**  
**of Online Cultural**  
**Heritage Items** **Users**

**Taxonomy Tagging Social Book-marking**

**Social Classification Wikipedia Social indexing**

**Tag Spam Social networks Personal information**

**Management Tag Cloud collaborative**

**Book-marking Social software Social**

**tagging** **Tag Aggregation Tagger CMDP**

**Tagging Systems** **Tagonomy Tagsonomies**

# **USER TAGGING OF ONLINE CULTURAL HERITAGE ITEMS**

**A project report for the  
2008 Cultural Management Development Program**

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## EXECUTIVE SUMMARY

Users of online services now expect to be able to interact with and contribute to these services. Web 2.0 technology provides cultural institutions with the opportunity to display their digitised collections in popular online spaces and to encourage people to use the collection in new ways.

With many cultural institutions having online images of items in their collections accessible to the public, there is a growing tendency to allow web users to add tags to the image descriptors. This report on User Tagging of Online Cultural Heritage Items is the result of the project sponsored by the National Library of Australia for participants of Cultural Management Development Program. This study aims to improve the understanding of user tagging of online cultural heritage items within the cultural institutions and shows how it enhances accessibility of collections and user interactivity.

The findings are divided into three main groups based on institutions who have already implemented user tagging, institutions planning to implement user tagging in the near future and institutions not planning to implement user tagging. The most useful data collected came from institutions in the first two categories. The information gathered was analysed under the following headings: Survey Methodology; General Findings; Collection/Image Selections; Moderation and Monitoring; Use and Integration of Tags; Tagger Motivation and Behaviour; Benefits and Issues.

Although in its infancy user tagging has proven to be very effective and this technology has empowered users to join the experts and contribute to the taxonomy of cultural heritage items.

User tagging allows us, as the custodians of national collections, to: interpret collections more broadly; balance technical description with common language; engage and create communities from afar; and give the public a sense of ownership.

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# 1. BACKGROUND

The Cultural Management Development Program is a program aimed exclusively at developing middle level managers within Commonwealth cultural institutions to enable them to gain the leadership, people management, communication, project management and financial management skills necessary for them to be effective at level and to prepare for potential higher management positions.

As part of the program, participants form small project teams and complete a set project over the duration of the nine month program. The 'User Tagging of Online Cultural Heritage Items' project was sponsored by Pam Gatenby of the National Library of Australia.

Users of online services now expect to be able to interact with and contribute to those services. Web 2.0 technology provides cultural institutions with the opportunity to display their digitised collections in popular online spaces and to encourage people to use their collection via their organisation website in new ways.

Many cultural institutions both nationally and internationally are considering or have implemented some form of user tagging of online images. The value of this project is to draw from the work already underway in cultural institutions to assess the benefits of user tagging, the issues involved for cultural agencies in supporting user tagging and the viability of this approach for providing enhanced access to digitised collections.

The original project outline was as follows:

## **Project outcome**

An improved understanding of user tagging of online cultural heritage items and how it enhances user interactivity and accessibility of collections.

## **Project deliverables**

A report that includes:

- Survey results of user tagging systems currently in use
- Survey results of user tagging progress in cultural organisations
- Report on the benefits of tagging and issues for consideration
- Definition of user tagging and glossary of terms
- A presentation at the end of the project

## **Project scope**

<b>What's included</b>	<b>What's not included</b>
Survey of user tagging approaches currently in use in major cultural institutions in Australia and New Zealand	Analysis of tag content
Survey of user tagging progress in major cultural institutions in Australia and New Zealand	Software trial
Report on the benefits of tagging and issues for consideration	Policy decisions
Definition of user tagging and glossary of terms	Advice on tagging technology/software

Along with the above stated outcomes and deliverables it was also envisaged that the project would help deliver learning outcomes to the team.

## 2. LITERATURE REVIEW

### 2.1 WHAT IS USER TAGGING?

In recent years user tagging or social tagging systems have become increasingly popular. These systems allow participants to annotate a particular resource, such as a web page, a blog post, or an image with a freely chosen set of keywords or tags, without the use of formal descriptions

The concept of user tagging was introduced in websites such as Del.cio.us (<http://del.icio.us/>) and Flickr (<http://www.flickr.com>), where tags are used to enable the organisation of information within a personal space, but also shared, thus allowing the browsing and searching of tags attached to information resources by others (McGregor 2006).

### 2.2 EXAMPLES OF TAGGING WEBSITES

#### Del.cio.us

Del.cio.us is a social book-marking service which was launched in 2003, and was the first application to use social tagging (Matusiak 2006). The Del.cio.us website defines a tag as 'simply a word you can use to describe a bookmark' and indicates that this is an ideal way for participants to organise their bookmarks and to discover things on the website. Tags are presented in 'tag clouds' which indicate the popularity of use of each tag by the size of the font. The tags in the tag cloud form hyperlinks to all items in the website that have been allocated that particular tag.

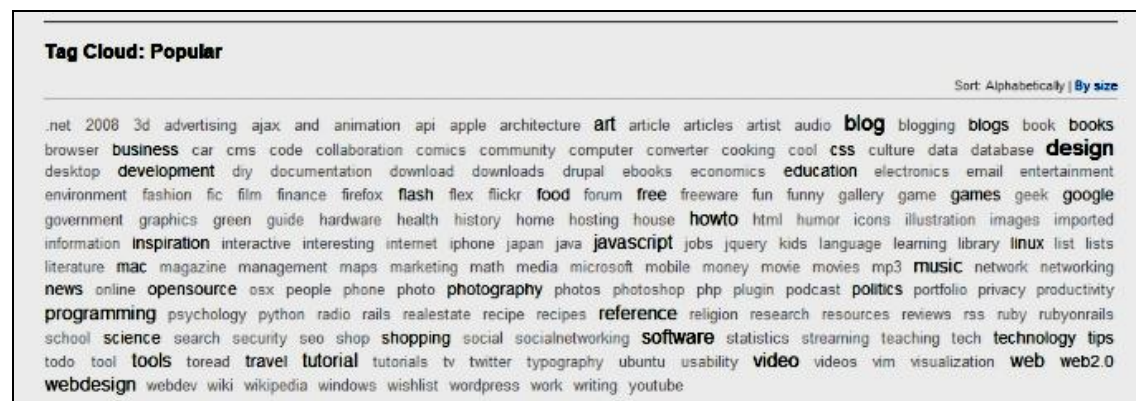


Figure1. Tag cloud from Del.cio.us website

#### Flickr

Flickr is a popular image and video hosting application which provides a simple unrestricted tagging system. Users can assign as many tags as they wish using keywords that they deem to be the most appropriate for their photos, and also have the opportunity to see how other users apply the tags in the context of other images. The following information about tags is provided on the website:

- You can give your photos and videos a "tag", which is like a keyword or category label.

- Tags help you find photos and videos which have something in common.
- You can assign up to 75 tags to each photo or video

As of November 2007, Flickr claims to host more than 2 billion images, and an extensive use of tags. The following figures were obtained from the Flickr website on the afternoon of September 12th 2008:

- 3,087 uploads in the last minute
- 6,292 things tagged with the word 'fresco'
- 3.2 million things geotagged this month

Flickr presents tags in 'tag clouds' in a same way as Del.cio.us, as shown below.

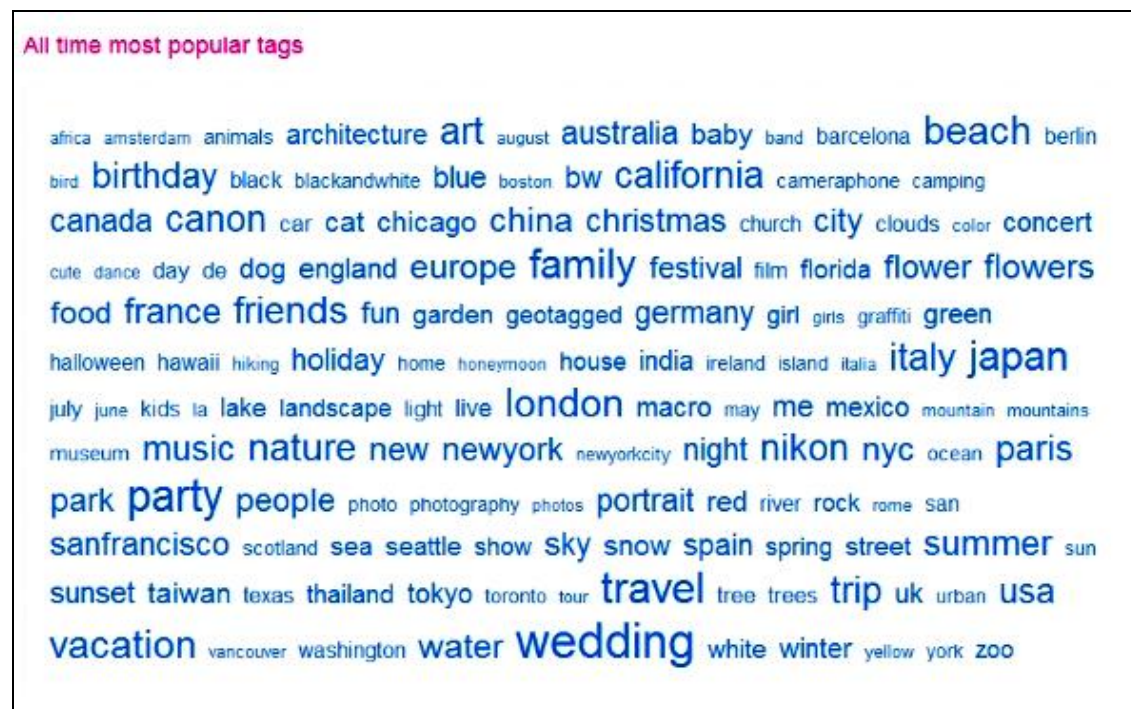


Figure 2. Section of the most popular tags from Flickr

## LibraryThing

LibraryThing is a prominent social cataloguing web application for storing and sharing personal library catalogues and book lists. The primary feature of LibraryThing is the automatic cataloguing of books by importing data from booksellers and libraries. After a user catalogues books, he or she can tag them, add/correct cover pictures, and use social features. When a book is tagged, it can be viewed when other users or books search using the same tag.

Tagging is, according to the WikiThing, '*... a simple way to categorize books according to how [a user thinks] of them....*' Thus one person will tag *The DaVinci Code* "novels" while another tags it "trashy, religion, Mary".



**The Kite Runner**  
by **Khaled Hosseini**

Members	Reviews	Popularity	Average rating	Conversations
16,237	458	45	★★★★½ (4.29)	183

+ Add to your library

Members [all members](#)

Recently added by: ppbd2008, kaurwakee, lazyleaves, pattiebee, Dilukshi, ahlf001, suesterret, Tatarana, robinsone, b00kw0rm007

Member tags [numbers](#) [all tags](#)

2005 2006 2007 21st Century **afghanistan** American Audio **Betrayal** book club borrowed **Boys** childhood coming of age  
Contemporary **contemporary fiction** culture drama family favorite favorites **fiction friendship** guilt historical fiction  
history immigration islam **kabul** Khaled Hosseini **kites** literary fiction literature **Middle East** novel own rape read **redemption**  
roman social class **Taliban** tbr to read unread **veneskab** War

Figure 3. Tags that have been added on LibraryThing for the book The Kite Runner

## 2.3 HISTORY OF TAGS IN CULTURAL INSTITUTIONS

### Rationale for the use of tagging

In the last decade cultural institutions, including museums and libraries, have undertaken large scale digitisation projects to convert their collections of items including paintings, photographs, archives etc., to digital format, enabling a wider access to these collections. Advances in digital technologies and an increase in the number of digital image collections however did not appear to have been supported by comparable advances in image retrieval (Matusiak 2006).

A considerable amount of indexing work accompanies image digitisation in the library and museum settings. Archivists and cataloguers transcribe image captions, assign subject headings, and create other descriptive metadata to provide access points for image retrieval. Descriptive metadata are created in museums and libraries by professional cataloguers following standards and controlled vocabulary tools. This approach represents traditional document-orientated indexing where items are classified by professional cataloguers with little or no input from end-users.

Unfortunately, museum collections appear to be relatively inaccessible even when 'made available' through searchable online databases. Museum documentation seldom satisfies the online access needs of the general public, both because it is written using professional terminology and because it may not address what is important to, or remembered by the museum visitor.

Matusiak (2006) gives an example of an online exhibition at The Metropolitan Museum of Art that acknowledges "Coco" Chanel only in the brief, textual introduction. All of the images of her fashion designs are attributed to "Gabrielle Chanel" often fail to match users' world-views.

It has been acknowledged by many professionals working with art museums that when cataloguers and curators describe works of art, they do not include the 'subject' of the image itself. Visitors will often remember a work based on its visual characteristics, only to find that web based searches for any of the characteristics



they recall do not produce results.

An example of this problem has been described by Susan Chun et al, a consultant at The Metropolitan Museum of Art in New York, who received a request regarding one of the paintings in the Museum's collection (Chun et al 2006):

[http://www.nfaais.org/Chun\\_BibControl.ppt](http://www.nfaais.org/Chun_BibControl.ppt)

*"I have been looking on and off for years for this painting. The painting is of a very well-dressed renaissance man standing in a room (a library). In front of him on the table is a large hour glass. The painting has very rich colours. I have talked to a lot of people who have said that they have seen the painting but can't remember its name or the name of the artist. Could you please use your resources to find this painting?"*

The consultant was familiar with this painting:



Portrait of a Man, ca. 1520-25  
Moretto da Brescia (Alessandro Bonvicino) (Italian, Brescian, ca. 1498-1554)  
Oil on canvas; 34 1/4 x 32 in. (87 x 81.3 cm)  
Rogers Fund, 1928 (28.79)

ARTIST

- Venice and Northern Italy, 1400-1600 A.D.
- Sixteenth Century Painting in Lombardy

MATERIAL AND TECHNIQUE

- Moretto da Brescia (Alessandro Bonvicino) (Italian, ca. 1498-1554)
- Titian (Tiziano Vecellio) (Italian, Venetian, ca. 1488-1576)

SUBJECT MATTER/THEME

- Painting, Oil on Canvas
- Painting, Oil on Canvas, Europe
- Painting, Oil on Canvas, Europe, Italian, Peninsula
- Portrait, Painting
- Painting, Painting, Europe
- Painting, Oil on Canvas, Europe, Italian, Peninsula
- Canvas
- Oil Paint

**Figure 4. Digital image and accompanying description from MMOA website**

It is clear that the description of the painting provided by professional museum may not assist the client to find this painting by searching the website.

Social tagging appeared to create new opportunities for sharing and classifying digital images using user-generated keywords. The use of collaborative tools to

create distributed knowledge and the building of virtual communities were acknowledged as two important objectives that are becoming increasingly important to museums as they seek to engage the community (Hammond, Hannay et al. 2005).

### **The 'steve' Project**

The steve project, billed as the first experiment in social tagging of museum collections, was founded in 2005 to address concerns by art museums about access to their ever-growing online collections. The problem, in part, stemmed from a semantic gap that separated museums' formal description of works, usually created by art historians or other specialists and the vernacular language used by the general public for searching. The project team believed that by employing the then emerging technology of social tagging and resulting folksonomies, this gap could be bridged.

The project was a combination of research, software development and a commitment to broadening awareness of the potential of social tagging to enable access to the museum collections (Bearman and Trant 2005).

The museum community discussed the potential for user-generated tagging in image indexing in the "Cataloguing by Crowd" professional forum. The forum was held at the 2005 Museum and the Web conference and drew over one hundred colleagues, who debated the potential for 'social tagging'.

In July 2005 the functional requirements for a tool, 'steve', that is a social tagging system with a great deal of variability in its interface were discussed. This flexibility was seen to be essential in testing a suite of features related to user involvement, term utility, and museum community acceptance.

Chun et al (2006) described the requirements of the tool "We wanted a tool that would motivate users to tag, guide them through the process, and reward them when they were done. We wanted "stickiness" enticing users to spend time in the system and to return for more sessions. We also realized the need for a lot more information about what would make users tag (and tag well) if we were going to create tools that supported and enhanced this motivation".

Following the conference the Metropolitan Museum of Art and the Cleveland Museum of art conducted a series of exploratory tests. The Guggenheim Museum began a preliminary exploration through a prototype application where users were encouraged to annotate a collection of images (<http://steve.museum/index.php?>)

Many researchers such as Susan Chun et al, of The Metropolitan Museum of Art (2006) are optimistic that the Steve project will solve problems, such as of additional access points, multilingual information and things that are not often included in art catalogue records such as colour.

In the years since the inception of the Steve project there has been much experimental work carried out by the participants to test the validity of the use of social tagging on museum collections.

### **Validity of tags - Proof of Concept Studies**

To develop an understanding of the role social tagging might play in the art museum, The Metropolitan Museum of Art conducted a series of 'proof of concept'

tests, to determine if untrained cataloguers could provide useful description and access points through tagging-like activities.

Analyses were made of the terms gathered in the test to assess the potential for terminology collected through social tagging to enhance access to art museum collections. The initial aim was to establish if the terms contributed something new and beneficial to the existing documentation, so the terms collected were compared with basic museum documentation.

Initial tests with a small group of volunteers in an informal experiment were conducted by the Metropolitan Museum late in 2005. The volunteers were asked to supply keywords for 30 images from the museum's collections. The terms supplied by volunteers were compared to curatorial cataloguing from the Museum's management system, and the 'unique' terms - new keywords not previously available through mining museum data were 'validated' for relevance to the work of art by a group of Museum staff members. For the 30 images tested, approximately 80% of terms submitted by the community cataloguers were unique, providing new additions to the museums documentation (Chun et al, 2006).

Trant (2006) documented further testing and concluded that the studies at The Metropolitan Museum of Art have supported the ongoing development of social tagging in art museums. The studies showed that non specialists can supply a useful number of access points augmenting the professional descriptions of art museum collections

In a more recent study, Datema (2007) reported that The Metropolitan Museum of Art found that 92% of tags added new information that was not present in traditional sources.

## **Tags and Folksonomies**

Folksonomy has become a popular term to describe the bottom-up classification systems that emerge from social tagging. Guy and Tonkin (2006) describe a folksonomy as a type of distributed classification system, which is usually created by a group of individuals, typically the resource users.

Wikipedia defines a folksonomy as 'the practice and method of collaboratively creating and managing tags to annotate and categorize content. In contrast to traditional subject indexing, metadata is generated not only by experts but also by creators and consumers of the content. Usually, freely chosen keywords are used instead of a controlled vocabulary'.

## **2.4 PROBLEMS WITH TAGS AND FOLKSONOMIES**

### **Lack of structure**

Since the early implementation of social tagging and the resulting folksonomies, there has been much discussion about the problems and issues inherent in such systems.

Hammond et al (2005) explain that traditional means of organizing information elements have generally relied on well-defined and pre-declared schemas ranging from simple controlled vocabularies to taxonomies to thesauri to full-blown ontologies. This orderly approach to cataloguing allows for both the validation and quality control of known terms to be registered within an information system. By

contrast, 'tags' are free-form labels assigned by the user and not drawn from any controlled vocabulary. This is very much a 'bottom-up' (or personal) approach compared with the traditional 'top-down' (or organizational) structured means of classification.

Spiteri (2006) is concerned about the flat structure, so related terms that describe an item vary along a continuum of specificity ranging from very general to very specific. There have been some attempts to introduce structure within tags, but to date there is no consensus on this issue.

### **Quality of tags**

There are many critics of current tagging systems, including Spiteri (2006). Probably the major flaw of current folksonomy systems is that the tagging terms used in the systems are imprecise. It is argued that it is the users of the system who add the tags, which means that the tags are often ambiguous, overly personalised and inexact. Many folksonomy sites only allow single-word metadata, resulting in many useless compound terms; the majority of tags are generally believed to be "single-use"; that is, to appear only once in the database of tags. Spiteri (2006) is concerned that that system administrators do not impose judgement about the tags chosen by users and so there is no control over things such as:

- synonyms (different word, same meaning)
- homonym (same word, different meaning)
- plural and singular forms
- conjugated and compound words
- specialised tags
- 'nonsense' tags designed as unique markers

The result is an uncontrolled and chaotic set of tagging terms that do not support searching as effectively as more controlled vocabularies do.

Other problem issues such as misspelt tags, personal tags that are without meaning to the wider community and singular tags that only appear once in the database have been identified by Guy and Tonkin (2006). They suggest that efforts should be made to improve tag literacy by educating users to add better quality tags, and systems be improved to allow better tags.

Macgregor and McCulloch (2006) are also concerned with the uncontrolled nature of tagging systems and suggest that this could increase the probability of noise in a user's environment result set.

However, some users do not consider this a problem; they may argue that tags are there primarily to help the particular end-user who is submitting them. It has been argued that in folksonomies there are no such things as synonyms, because users employ tags for specific reasons. Therefore every different user-selected word actually has a unique meaning (e.g., cinema and movies).

### **Improving tags**

At the moment there are no standard guidelines on good selection processes for users when adding tags. Information specialists have wrestled with the issues involved many times and various remedies have been suggested. For example Macgregor and McCulloch (2006) that tag literacy could be improved by two

processes:

- the community needs to be ready to set rules and agree upon a standard for tags
- users need to be made aware of and agree to these rules

Ways in which tags may be improved are presented frequently on blogs and folksonomy discussion sites. In his article on tag literacy, Ulises Ali Mejias suggests a number of tag selection "best practices" (Guy and Tonkin 2006). These include:

- using plurals rather than singulars
- using lower case
- grouping words using an underscore
- following tag conventions started by others and
- adding synonyms

## 2.5 BENEFITS OF TAGS

User tagging and resulting folksonomies have been recognised as having the potential to add value to the websites of museums, libraries and other institutions. Several benefits have been identified:

- **Increased number of access points**  
As discussed above many studies including the 'proof of concept' studies described by Trant (2006), have shown that tagging increases the number of access points to art museum collections.
- **Create a sense of community**  
Many researchers believe that tagging can serve to create a sense of community amongst the online users. Trant (2006) suggests that folksonomies provide a shared goal to encourage user engagement with museum collections, and a shared mission to create connections between museums and art. This is because social tagging offers a less formal, more participatory and highly distributed way to reflect the perspectives and interests of the community. Bearman and Trant (2005) predict that if input is obtained from a community of cyber-cataloguing volunteers, trusted contribution roles could be developed, forming ongoing relationships with the museum which may be more satisfying than an occasional one.
- **Personal connections**  
It has been suggested by Golder and Huberman (2005) that in the museum context, tagging offers a way for users to connect directly with pieces of art. Tagging lets users record these for future use making re-discovery easier. Users remember the personal connection, rather than trying to re-imagine how the object might be discovered through a traditional search.
- **Add knowledge about collections**  
Users can contribute to the depth of image description and enhance the intellectual knowledge of the image by assigning tags, commenting on images and annotating them. Expertise in local history and language can be particularly valuable in cultural heritage collections where users can help to identify images and enhance description with their unique knowledge and perspectives (Matusiak 2006).

- **Provide information for future development of collections**  
Matusiak (2006) suggested that tags may be a source of evaluation data indicating the relevance of collections to user's needs and provide direction for future development of digital image collections.

## 2.6 TAGGERS AND TAGGING BEHAVIOUR

### Who are the taggers?

A December 2006 survey by the Pew Internet & American Life Project 9 found that 28% of internet users have tagged or categorized content online such as photos, news stories or blog posts. On a typical day online, 7% of internet users say they tag or categorize online content ([http://www.pewinternet.org/pdfs/PIP\\_Tagging.pdf](http://www.pewinternet.org/pdfs/PIP_Tagging.pdf)).

In a discussion of the results of this survey Weinberger (2007) suggests that taggers look like classic early adopters of technology. They are more likely to be under age 40, have higher levels of education and income and are considerably more likely to have broadband connections at home, rather than dial-up connections. It was also found that men and women are equally likely to be taggers, and "online minorities are a bit more likely than whites to be taggers". Weinberger suggests that the act of tagging is likely to be embraced by a more mainstream population in the future because many organizations are making it easier and easier to tag internet content. For instance, Gmail users can label their email content and Amazon users can apply the labels of their choosing to books and other published material.

### Why do users tag?

There has been much discussion on the reasons users may add tags to the websites of organisations such as museums and libraries. On social websites such as Flickr users generally engage in tagging for their own benefit, as they tag their own digital image collections which they want to manage and share with friends, family and a wider audience, in a social networking environment.

There are some examples of altruistic contributions e.g. Wikipedia being a primary example. It is difficult to predict whether users will be willing to invest their time and effort into describing images at museums and libraries.

Ahn & Dabbish, (2004) ask "how do we motivate them?" and "is there a way to make tagging fun?" Bearman and Trant (2005) suggest that we need to understand how to encourage users to provide tags. They offer some incentives or rewards to encourage users:

- taggers could view their history of adding tags
- game like environments
- competitions with prizes
- rewards external to the system - e.g. discounts at museum shop

### Tagging interface

The tagging interface presented to the potential tagger has a significant effect on the probability that the user will successfully add tags Chun et al (2006). Research showed that each of the different ways that the tagging application was to be

deployed had an effect on the user experience. The need to understand what factors are significant to user's successful engagement with tagging museum objects must be determined. For example, how are users assisted through the tagging process? Chun et al also asks if we wish to encourage more than the free-form assignment of keywords, do we need to guide the process, and how will the results change if we lead with facets as a way to guide tagging.

## 2.7 HOW TAGS ARE USED

There has been much debate about the potential use of user provided tags on the websites of cultural institutions. Matusiak (2006) suggests that there are several options for incorporating tags into digital collections:

- users can add their tags to the metadata in the records
- users can provide feedback on the terms assigned by indexers
- user-supplied tags can be used to develop 'a controlled vocabulary that truly speaks the users 'language'

Spiteri (2006) reported little examination of folksonomies in the library environment. The seemingly uncontrolled nature of the folksonomies may appear daunting to a field that emphasises control and authority in the indexing of objects. It is suggested that the combination of folksonomies and controlled vocabularies will be a valuable tool in the continuing development of client based customisable features in library catalogues.

In the museum context, Chan (2006) suggests that user tagging and folksonomies can be used to improve navigation and discoverability, but will work most effectively when matched with detailed collection records and balanced with the structural benefits of formal taxonomies,

The consensus of opinion seems to lean towards the possibility of balancing controlled vocabularies such as Library of Congress Subject Headings (LCSH) with user-driven vocabularies, as long as folksonomies are shown to provide terms that cannot be easily matched in LCSH or similar schemes.

## 2.8 USE OF TAGS IN AUSTRALIAN AND NEW ZEALAND CULTURAL INSTITUTIONS

At present there are a number of cultural institutions in Australia and New Zealand that are currently providing user tagging systems on their websites.

### **Powerhouse Museum**

In mid-2006 the Powerhouse Museum launched a new online catalogue OPAC2.0, which aimed not only to provide a better more usable museum catalogue, but also to explore ways to leverage user interest and community knowledge. In the case of OPAC2.0, the use of user keywords to tag collection items was conceived as a means to achieve better discovery of collection items. OPAC2.0 offers only a basic instruction to users wishing to add keywords to objects:  
"Tagging helps others locate this material more easily. Please check your spelling. Use comma to separate multiple tags".



Tags are immediately visible after being added, and any user can remove tags, including those submitted by other users. Tags appear on the site as hyperlinks and can be clicked to trigger a search for that user keyword.

Chan (2007) reported that in total, 3,928 tags were submitted to the website between June 14 and December 31, 2006. Of these, 537 were deleted, edited for spelling, or removed by other users or the system administrator. In the time period under study, 2,246 objects were tagged with 3,391 tags.

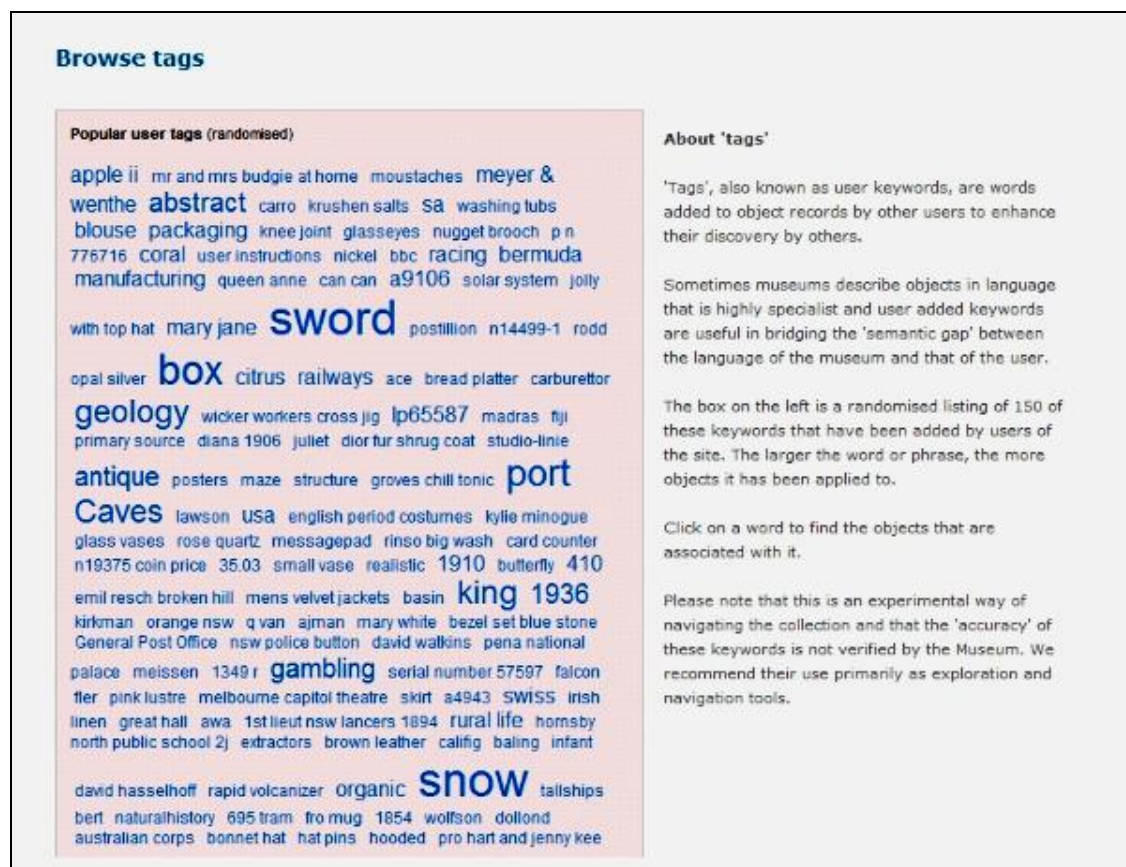


Figure 5. Popular tags from Powerhouse Museum, showing information provided about tags

In April 2008, The Powerhouse Museum was the first museum in the world to release publicly-held historical photographs for access on Flickr, one of the largest online photo communities in the world.

<http://www.powerhousemuseum.com/commons/>

Known as The Commons on Flickr, the online initiative was launched by Flickr to share the collections of cultural institutions worldwide and to make historical photos more widely accessible to a global community. This exciting initiative encourages the public to add tags and comments to the images that in turn allow us to feed this data back to our collection records.

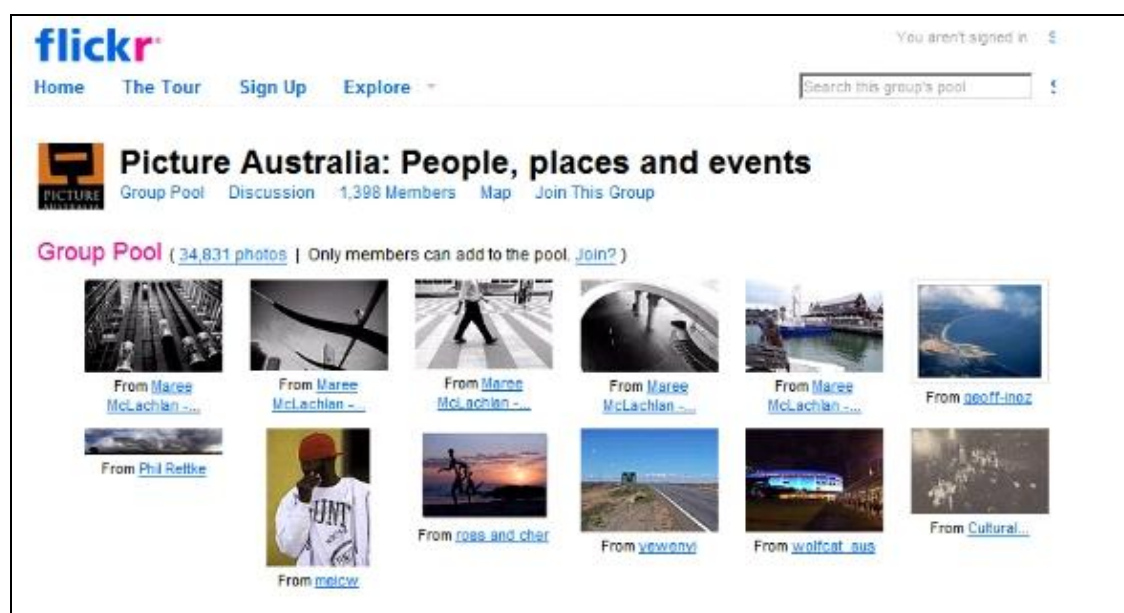
One month later on 6 May 2008 Chan reported that the experiment with Commons on Flickr continued with the addition of about 50 images each week.

It was interesting to note the many tags had been added and they were of a quality that had not been experienced in other tagging projects. Chan is firmly of the belief

that the quality is a result of the Flickr environment (let's call it 'culture') and its user-base.

## Picture Australia

Picture Australia is a federated service, managed by the National Library of Australia that allows users to search across a number of online pictorial collections at the same time. It began as a pilot in 1998 and currently provides access to over one million images harvested from close to 50 cultural institutions. The service initially provided access to primarily historical material, but since 2006 has collaborated with Flickr in order to include more contemporary images. Users of Flickr are encouraged to first upload their images with associated tags (metadata) to Flickr, and then add them to Picture Australia 'groups'. The Library harvests the metadata and thumbnails and adds them to Picture Australia.



**Figure 6. Images in Picture Australia 'group' on Flickr website**

Flickr was chosen as a suitable partner because it already has a large following of Australians, and because it encourages the use of metadata to aid discovery. Guidelines on tagging are provided on the Picture Australia Flickr site and Picture Australia administrators monitor the images, and email contributors with advice as required. Gatenby (2007) has concerns about the quality of the metadata, as sometimes images are not given a sufficiently descriptive title, but is confident that the quality will improve.

## Australian Newspapers Digitisation Project

The National Library of Australia, in collaboration the Australian State and Territory libraries, has commenced a program to digitise out of copyright newspapers. The Library is creating a free online service that will enable full-text searching of newspaper articles. This will include newspapers published in every state and territory from the 1800s to the mid-1950s, when copyright applies. On 25 July 2008 the Australian Newspapers Beta service was launched to the public. The Beta service now contains 150,000 newspaper pages from 1803 onwards. Additional pages are being added each week. This trial service has incorporated the use of tagging, with the following information provided on the

website:

The Beta service is being heavily used as indicated by some general statistics from the first month:

- over 300,000 lines of text corrected (600-800 per day)
- 7984 registered users
- 5168 tags added to articles (approx 40-130 per day)
- 162 notes added to articles (approx 2-5 per day)
- up to 70,000 keyword searches per day (+ unknown amount of browse by date/title/issue)

The tags on the Beta service have been presented as a tag cloud. This cloud is already very large and includes a large number of single tags, many of which have been obviously added for personal use. However, there are also many very useful tags. For example, the tag 'stolen generation' provides access to articles that were published many years before the term 'stolen generation' was in use. These articles are now more easily located by other researchers.

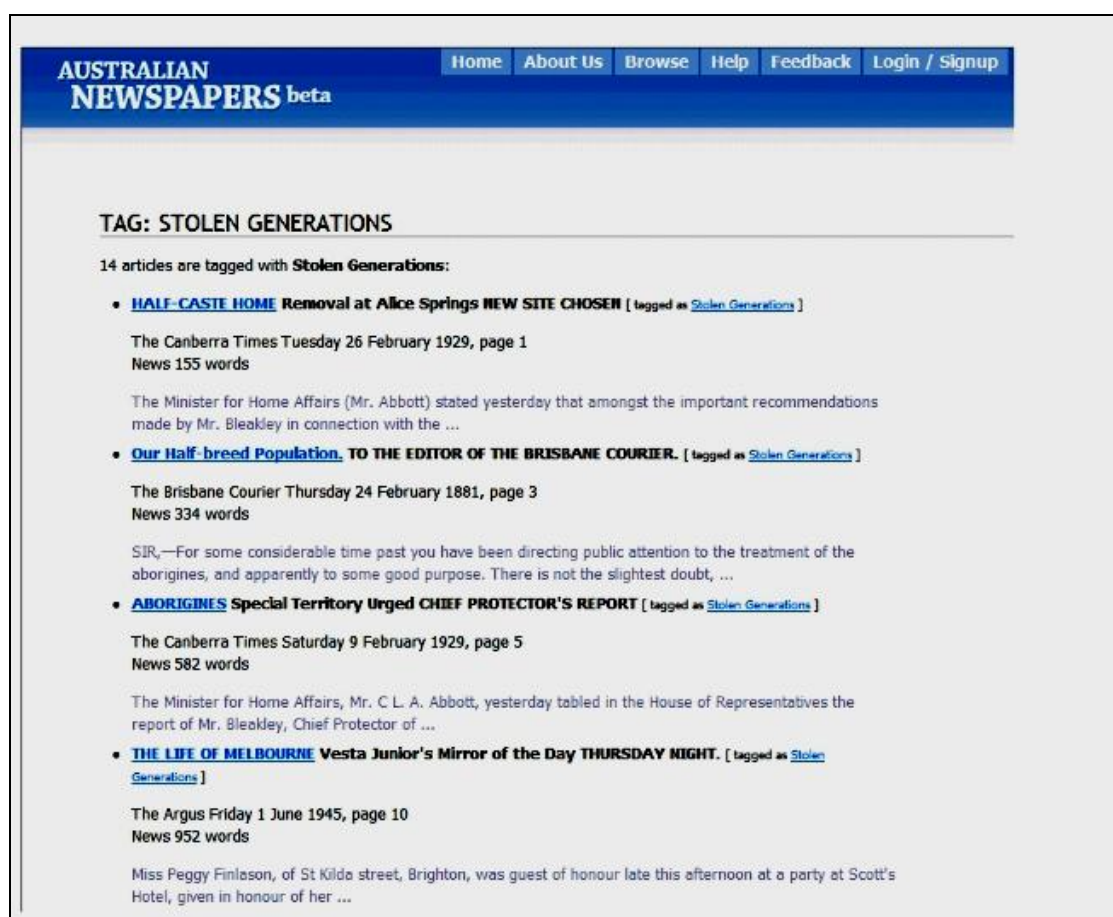


Figure 7. Articles tagged as 'Stolen Generation'.

## NZMuseum

On 17 September 2008 the NZMuseum launched its new website. This site 'showcases the museums and collections of New Zealand and is an online collection management system for museums' (NZMuseum, 2008). The site uses a Vernon

Systems Ltd. online collection management system, 'ehive', which enables user tagging. Only 1000 cultural heritage items were on the website at launch.

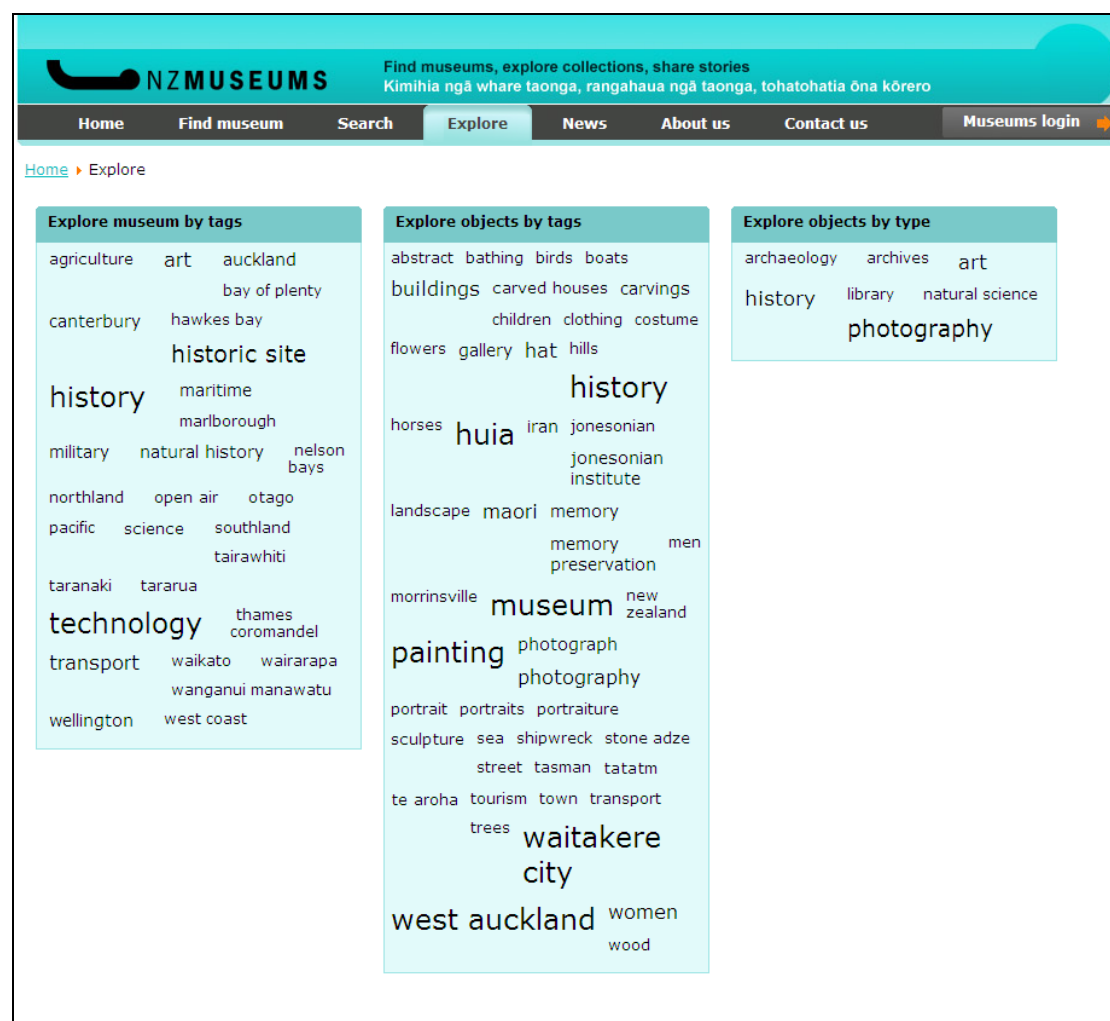
The screenshot shows the NZMUSEUMS website interface. At the top, there's a navigation bar with links: Home, Find museum, Search, Explore, News, About us, Contact us, and Museums login. Below this, a search results page is displayed for the query 'scott'. The results show 'Record 7 of 19'. The main content area features a large image of a taxidermied penguin. To the right of the image, there's a metadata section with the following details:

- From:** [South Otago Museum](#)
- Name/Title:** Taxidermied penguin
- Subject and Association:** Penguin found drowned in the Clutha River during the 1878 flood.
- Credit Line:** Donated by Nancy Scott
- Object Type:** Bird
- Object Number:** 2108.89

Below the image, there's a 'Click on image to enlarge' link. To the right of the metadata, there's a 'Tags' section with a list of existing tags: 'Clutha River [x]', 'flood [x]', and 'Penguin [x]'. There's an 'Add tag' button and a text box for entering new tags. Below the tags section, there's a 'Detailed information' section with a paragraph about the penguin's history: 'Hoiho (Yellow Eyed Penguin) found twenty kilometers up the Clutha River during the 200,000 cusec flood of 1878 that destroyed the Balclutha bridge and Port Molyneux at the mouth of the Clutha River.' There's also an '+ Add Comment' link. At the bottom, there's a 'Disclaimer/Re-use of images' section.

Figure 8. Tagging on the NZMuseum website

[http://www.nzmuseums.co.nz/index.php?option=com\\_nstp&task=showDetail&objectContext=&recordIdSet=1153,46,1629,2284,2294,521,52,418,554,695,5,392](http://www.nzmuseums.co.nz/index.php?option=com_nstp&task=showDetail&objectContext=&recordIdSet=1153,46,1629,2284,2294,521,52,418,554,695,5,392)



**Figure 9 Tag cloud on the NZMuseum website**

Tag clouds are used in three different ways to search the website. Tags are divided into museums listed on the website, tags on heritage items and heritage item by type.



## 3. SURVEY FINDINGS

### 3.1 SURVEY METHODOLOGY

In order to get a clear picture of user tagging sentiment, and implementation of or intention to implement tagging in cultural institutions, we designed a survey (hosted by Survey Monkey) to distribute to relevant institutions. See appendix I.

Institutions were selected on the basis of being a National, State or Territory cultural institution and having an online collection available to the public. We contacted 27 institutions to explain the survey, identify the correct representative and to confirm their willingness to participate. The survey ran from 1 - 22 August 2008.

The survey contained five sections:

1. General Information
2. Tagging In Your Institution
3. Tagging In Use
4. Tagging Intentions
5. Benefits and Issues

Respondents were required to fill in sections 1, 2 and 5, and sections 3 and 4 as relevant.

In total we received 24 responses to the survey from 21 institutions including:

- ACT Heritage Library
- Archives New Zealand
- Art Gallery of NSW
- Australian Heritage Photo Library
- Australian National Maritime Museum
- Australian War Memorial
- National Archives of Australia
- National Film and Sound Archive
- National Gallery of Australia
- National Gallery of Victoria
- National Library of Australia
- National Portrait Gallery
- Northern Territory Library incl PictureNT
- Old Parliament House
- PictureAustralia
- Powerhouse Museum
- State Library of New South Wales incl Mitchell Library
- State Library of Queensland
- State Library of South Australia
- State Library of Victoria
- State Records New South Wales

A presentation of survey findings is below and full survey information can be found at Appendix II

## 3.2 GENERAL FINDINGS

There were 24 responses to the survey, from 21 institutions.

- All institutions surveyed have or intend to have images online in the near future
- All institutions surveyed have or intend to have images on the institution website
- Fourteen institutions have images displayed on other websites including:
  - [www.pictureaustralia.gov.au](http://www.pictureaustralia.gov.au)
  - [www.flickr.com](http://www.flickr.com)
  - [www.images.act.gov.au](http://www.images.act.gov.au)
  - [www.wikipedia.org](http://www.wikipedia.org)
  - [www.vicnet.net.au](http://www.vicnet.net.au)
  - [www.samemory.sa.gov.au](http://www.samemory.sa.gov.au)
  - [www.youtube.com.au](http://www.youtube.com.au)
  - [www.myspace.com](http://www.myspace.com)
  - [www.facebook.com](http://www.facebook.com)
  - [www.territorystories.nt.gov.au](http://www.territorystories.nt.gov.au)
- Institutions had between 0 and 20 million images online with the majority in the tens of thousands.
- Four institutions are tagging, nine institutions are intending to tag and eight institutions have no current intentions to implement tagging.

## 3.3 COLLECTION/IMAGE SELECTION

### Tagging in use

- All institutions undertaking tagging are doing so on the institution website.
- Two institutions undertaking tagging have applied tagging to their whole collection and two have applied tagging to selected items only.
- Some rationale/methodologies used by institutions undertaking tagging in selecting material for tagging include:
  - all well-described material is open to tagging
  - items with poor descriptions are open to tagging to assist internet research and searchability
  - selected items are open to tagging part of a new service with a 'free hand'

### Tagging intentions

- Two institutions intending to tag are planning to do so on the institution website.
- Two institutions intending to tag are planning to do so on a social network (eg Flickr).



- Five institutions intending to tag are planning to do so on both their institution website and on a social network.
- Four respondents also said they planned to use other alternatives, for example continuing discussions on tagging within their institution and utilising other pictorial collection websites.
- Four institutions intending to undertake tagging plan to apply tagging to their whole collection, four plan to apply tagging to selected items only, and one is uncertain.

## 3.4 MODERATION AND MONITORING

### Tagging in use

- All institutions undertaking tagging allow tagging by anyone who views the images.
- Two institutions undertaking tagging allow free expression tagging, one uses guided tagging and one encourages single word tags.
- Three institutions undertaking tagging moderate the tags by use of 'bad words' filters or timed release of tagging to allow for checking by staff. One did not currently moderate tags but were working on a policy.

### Tagging intentions

- Four institutions intending to undertake tagging plan to allow tagging by anyone who views the images, three are not yet sure as to who will be able to tag and two plan to only allow tagging by registered users.
- Three institutions intending to undertake tagging plan to allow free expression tagging, one institution plans to use guided tagging, one institution plans to limit tagging to phrases and four institutions are unsure as to what type of tagging they will implement.
- Six institutions intending to undertake tagging plan to moderate tags, one institution plans to not moderate tags and two institutions are unsure as to whether tags will be moderated in any way.

## 3.5 USE AND INTEGRATION OF TAGS

### Tagging in use

- All institutions undertaking tagging have the tags presented in clouds or clusters, three have tags searchable in parallel with current catalogue/system and one has the tags integrated into current catalogue/system.
- One institution undertaking tagging is monitoring the tags added and has added some to their official taxonomies. One institution is anticipating further use of tags and two institutions are not using tags for any other purpose in their institution.

## Tagging intentions

- Three of the institutions planning to undertake tagging plan to have tags integrated into their current system, three plan to have tags searchable in parallel with current catalogue/system, four plan to have tags presented in clouds or clusters and three of institutions are unsure as to how best to utilise tags for searching.
- One of the institutions planning to undertake tagging plan to use tags to gain a better understanding of their users and eight institutions are yet to determine other uses for tags in their institution.

## 3.6 Tagger Motivation and Behaviour

### Tagging in use

- Two institutions undertaking tagging have 'user tag' boxes on collection pages. One institutions has a link to tag images in their help text and one has tagging promoted on the website to let users know they are able to tag certain images.
- All institutions undertaking tagging provide brief instructions/guidelines to assist users to tag.
- The uptake of tagging in institutions undertaking tagging included: more than expected; high demand at first which slowed considerably; thousands of tags; and unsure at this point.
- Reasons institutions believe users add tags to their collection include:
  - recall/findability
  - to compliment documentation
  - to update terminology of historical records
  - to highlight particular artworks of interest
- All institutions currently undertaking tagging do not use a reward system. Some are considering possibilities.

### Tagging intentions

- Three institutions planning to undertake tagging intend to have 'user tag boxes' available on each collection page, four are unsure at this point as to how users will know they are able to tag and two of institutions did not respond to this question.
- All institutions planning to undertake tagging intend to have instructions available to users. Institutions commented that the tagging process should be intuitive so as not to rely on instructions.
- Some comments made by institutions on what motivates user tagging include:
  - to find items again
  - to share knowledge/experience of an item with others
  - for the public good
  - to naturalise language
  - engagement
  - a genuine belief that they have information that adds to the public record

- to make a difference to something worthwhile
- Five institutions planning to undertake tagging plan not to use a reward system, one does intend to use a reward system and three are undecided on whether to implement a reward system.

### 3.7 BENEFITS

The overall comments suggested that institutions believe taggers benefit from tagging in a range of ways including: easy recall of items/search performance; a sense of engagement with the institution and ownership of the collection; 'a warm heart from contributing to the public good'; and long term improvement in access to a wider range of information and content.

The overall comments suggested that institutions believe non-tagging users benefit from tagging in a range of ways including:

- improved searchability by using colloquial terms
- a more web centric way of searching collections via related search options
- help non-tagging users see the value in collections if they can see evidence that others have found something useful or interesting
- a broader insight into the subject matter
- ability to search most popular keywords
- new ways of thinking about a topic or object.

The overall comments suggested that institutions believe that tagging institutions benefit from tagging in a range of ways including:

- community engagement
- enhanced search capability
- learning about how users wish to describe items
- advise on future directions and how to maximize public engagement
- making collections meaningful; improve user experience
- provide unexpected correlations
- develop a stronger relationship with users
- can expose flaws in current search systems
- increased traffic to site if tags 'googlable'
- greater knowledge base
- improvement of poor descriptions
- use of natural language.

### 3.8 ISSUES

The overall comments suggested that institutions had some issues with implementing or planning to implement tagging including:

- finding appropriate tools and platforms
- creation of policy and procedures
- resources
- maintaining the integrity of the item
- resistance from curators, librarians, archivists and traditionalists
- lack of understanding and acceptance of the benefits of Web 2.0
- moderation including inappropriate terms, irrelevant comments and spelling mistakes
- concern that users would perceive that tags may have come from the institution

## 4. DISCUSSION

The following discussion distils the team's research, survey findings from August 2008 and ideas with regard to user tagging of online heritage items. It should be noted that tagging in cultural institutions is changing rapidly and that a number of institutions who reported no intentions to tag have subsequently made images available on social networking sites.

Cultural institutions are identifying the need to digitise collections to enhance access. Tagging is a mechanism which enhances user interaction with online collections. It should not be the driver to digitising a collection, rather tagging should be used to enhance digitised collections. In the last decade user tagging has become increasingly popular and was initially used on social networking websites. More recently cultural institutions have introduced user tagging in order to improve access to their online collections.

The survey results coupled with the research conducted indicate that both entire collections and selected collections have been digitised and used for tagging purposes. Selections have often been made for one of two distinct reasons: well described and accessed items to generate user interest and engagement; and items with poor descriptions to gain more descriptive information. All institutions surveyed who are currently tagging allow any user who can view an image to tag it.

The cultural institutions that support user tagging systems, such as the Powerhouse Museum, do not provide guidelines on the content of tags. In general the websites indicate that tags are keywords that can be used to describe resources and provide no further instructions on acceptable tags. Overall, social networking pages give few rules on how to tag and tend to rely on intuitive systems. Despite the lack of formal instruction the tagging system on these sites, especially Flickr, is seen to be of a high standard. If tagging is to be undertaken on institutional websites, we see the need for clear guidelines and an intuitive and prominent system.

Research has shown that tags provided by the general public can enhance discoverability, by adding valuable description to cultural institutions collections. However, many professionals are concerned about the quality of the tags and the lack of structure in the resulting folksonomies. Institutions who have implemented user tagging, such as the Powerhouse Museum, generally use simple inappropriate language filters and/or automated moderation systems. The National Portrait Gallery (live to staff from October 2008) will moderate by staff inspection of tags.

There has been much discussion about what motivates users to add tags to the websites of cultural institutions. Evidence has shown that taggers will add tags for their own reasons and motivation methods such as reward systems appear to be unnecessary and have not been trialled in cultural institutions in Australia and New Zealand. Users report a sense of community involvement when tagging which seems to increase when items are tagged on social network sites such as Flickr. Research suggests that taggers are empowered by the ability to share their knowledge and interests, and connect with like-minded people online.

For the average user, searching online catalogues of cultural heritage items can be time consuming, and the path to locate an item can be difficult to replicate. So it is not surprising that the intention of many tags appears to be to improve discoverability of the item, for the tagger and/or their family and friends. The tag cloud of the Australian Newspaper Digitisation Beta trial is very large with numerous single tags which have obviously been added as personal bookmarks. As there is no subject analysis for the newspaper articles on this service, it appears that tags are

seen by the users as a way of rediscovering relevant articles. Tagging numbers appear higher on items that related directly to people, e.g. newspaper article about family members, or photographs of places, rather than on images of art work.

The use of tag clouds is popular with the institutions surveyed and in our research. These visual navigation tools reduce the need for key strokes and/or detailed searches.

There has been much debate about the potential use and integration of user generated tags of cultural heritage items. The consensus of opinion supports the view that tags can be used most effectively when used in tandem with controlled vocabularies. Some institutions, including the Powerhouse Museum have manually added user tags to their official taxonomies. The National Portrait Gallery is also planning to add moderated user tags into their current catalogue records.

Through user tagging, additional information on our collections can be gathered by drawing upon the knowledge, memory and natural language of the general public. This is demonstrated by the Metropolitan Museum of Art, (Datema, 2007) where 92% of tags added new information that was not present in the collection databases.

Information collected can assist institutions to understand how users wish to search items, and therefore how they would like to see items described. It also allows institutions to establish how to maximise public engagement, making the collection meaningful and improving user experiences.

Opening up online collections to user tagging allows an institution to connect with a demographic that is savvy with Web 2.0 technologies and to minority groups, which enables further information to be gathered to identify the needs of this new audience.

There are a number of factors that prevent cultural Institutions from implementing tagging. A significant barrier for cultural institutions is the limited availability of resources. Use of social network systems, such as Picture Australia, Flickr, Commons on Flickr, ehive and Facebook are an excellent alternative as they negate the need to develop costly specialist tagging infrastructure.

It is clear that some cultural institutions are concerned that tags may appear to be generated by the institutions themselves, and see the need to clearly identify tags as being separate from traditional catalogue records. Resistance from traditionalists is frequently identified as a stumbling block to introducing tagging, though if tagging is introduced with clearly defined policy, these concerns can be alleviated.

For the institutions we surveyed who have implemented tagging, success has been demonstrated by both the rate of uptake by taggers and the positive impact of tagging on the institutions. The National Library of Australia/PictureAustralia reports that their involvement with Flickr has overwhelmingly fulfilled its objective as a successful marketing tool with a 43% increase in page views. The Powerhouse Museum reported that approximately 4000 tags were applied to images on their website from June – December 2006. When images from the Powerhouse Museum were displayed on Flickr in 2008, Chan reported that 'tons of tags were added'. In July 2008, the Australian Newspapers Beta Trial experienced very enthusiastic tagging with over 5000 tags applied to articles in the first month of the service.

It is interesting to note that institutions who have not implemented user tagging generally perceive many potential problems that institutions who have implemented user tagging do not report.

## 5. CONCLUSION

Tagging within cultural institutions is still in its infancy, having commenced in 2006 with the 'steve' project in American art museums. Our research shows that a growing number of cultural institutions in Australia and New Zealand are embracing user tagging as it evolves. And users are enthusiastically tagging to enhance access to online resources and for personal bookmarks.

Institutions should not underestimate the benefits of tagging with regard to community engagement. By not adopting user tagging, cultural institutions may miss the opportunity to connect with the online community and make their collections more accessible as Web 2.0 technology becomes prevalent in the online environment.

If tagging is to be undertaken on institutional websites, we see the need for an intuitive and prominent system with clear guidelines and basic moderation.

Over the course of this project we found that the use of social networks, such as Picture Australia, Flickr, Commons on Flickr, ehive and Facebook negate the need to develop costly specialist tagging infrastructure. These sites attract a wider audience than is currently attracted to cultural institution websites which increases the accessibility of collections and entices new users to the institution websites. We conclude that using social networking for tagging appears to be the preferred option.

User tagging allows us as the custodians of national collections to: interpret collections more broadly; balance technical description with common language; engage and create communities from afar; and give the public a sense of ownership of our collections.

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## 7. GLOSSARY OF TERMS

**Classification:** Arrangement of information into fields of knowledge or specific subjects.

**Collabularies:** A collective vocabulary (Hayman, S., 2007)

**Collaborative bookmarking:** See social book marking.

**Collaborative cataloguing** (social reference managing): Sharing and managing catalogue information/metadata

**Collaborative tagging:** See folksonomy

**Folksonomy** (also: collaborative tagging, social classification, social indexing, social tagging, Tagsonomies): A collection of tags created by an individual for personal use, and done in a social environment. Coined by Thomas Vander Wal in 2004 to signify what he called a "*user-generated classification, emerging through bottom-up consensus*". It is a fusion of the words folk and taxonomy. (Hayman, Sarah., 2007)

**Metadata:** Data about data.

**PIM (Personal information Management):** The personal acquisition, organisation, maintenance, retrieval and use of web bases information.

**Resources:** Items tagged by users.

**Shared tagging:** See Social Tagging.

**Social bookmarking:** The collection, sharing and tagging of web-delivered content, with other users. Boyd, D et al (2008) describes it as '*Users allowed to collect and store resources and retrieve then using tags applies*'.

**Social Classification:** See folksonomy.

**Social indexing:** See social tagging.

**Social networks:** Social structure made of nodes (which are generally individuals or organizations) that are tied by one or more specific types of interdependency (Wikipedia 2008).

**Social software:** Software that enables people to cooperatively share information, communicate and collaborate.

**Social tagging:** (also Folksonomy) Practice of publicly labelling or categorising resouces in a shared environment (Trant, Jennifer 2006).

**Tag aggregation:** A collection of organised tags.

**Tag:** Key words, metadata or category names added by users. '*The big difference between tags and keyword annotations is that users can contribute tags, whereas keyword annotations are usually added by authors or librarians*' (Haymann, Paul 2008).

**Tag Cloud** (also Tag Cluster): A visual representation of tags within a given database, where the more frequently used tags are emphasised by size or colour.

**Tag Cluster:** see Tag Cloud.

**Tag Spam:** Junk or unwanted tags.

**Tagger (Indexer):** User that tag resources.

**Tagging:** The act of applying a tag.

**Tagging rights:** Restrictions based on resources, tags and users.

**Tagging Systems:** All tagging occurs within a system, the system defines the rules of tagging.

**Tagosphere:** Environment in-which tagging takes place

**Tagsonomies:** See Folksonomies.

**Taxonomy:** Classification systems.

**User tagging:** Labelling or tagging of web items done by the user (Hayman, Sarah, 2007).

**Users:** People who use web-delivered content.

**Web 2.0:** The interconnectivity and interactivity of web-delivered content.

# USER TAGGING OF ONLINE CULTURAL HERITAGE ITEMS SURVEY

## 1. GENERAL INFORMATION

We are part of the Cultural Management Development Program for 2008. The overall objective of CMDP is to develop middle level managers within Canberra based Commonwealth cultural institutions so that they gain the leadership, people management, communication, project management and financial management skills necessary for them to be effective at level and ready for potential higher management roles.

As part of this program we have been assigned a project to investigate the progress of, and interest in, user tagging of online cultural heritage items. Our Project Sponsor is Pam Gatenby of the National Library of Australia.

Your institution has been selected as a vital contributor to our survey.

All questions marked with an \* (asterisk) are mandatory. You will be able to go back to previous pages in the survey and update existing responses until the survey is finished or until you have exited. After you have exited the survey, you will not be able to re-enter the survey to amend responses.

This survey is open until 5:00pm Friday 22 August 2008. Please contact [usertaggingsurvey@gmail.com](mailto:usertaggingsurvey@gmail.com) if you have any queries.

Thank you for your participation.

Sarah Clayton (Australian War Memorial)  
Sue Morris (National Library of Australia)  
Arun Venkatesha (Royal Australian Mint)  
Helena Whitton (National Archives of Australia)

\* 1. Your name:

\* 2. Name of institution:

\* 3. What is your position/role within the institution?

\* 4. Do you consent to any information disclosed in this survey being published in a report?

☐ Yes

☐ No

\* 5. Does your institution have or intend to have digitised images of collection material available to the public on a website?

☐ Yes

☐ No

If Yes, how many?

6. Which website?

☐ Institution website

Other (please specify)

# USER TAGGING OF ONLINE CULTURAL HERITAGE ITEMS SURVEY

## 2. TAGGING IN YOUR INSTITUTION

Please tell us the progress that has been made (if any) on user tagging in your institution. This will help to tailor the survey to your institution's current tagging situation.

1. Has user tagging been implemented by your institution?

☐ Yes (you will be taken to Section 3)

☐ No

2. If not, are there plans to implement user tagging?

☐ Yes (you will be taken to Section 4)

☐ No

3. If your institution has not or is not planning to implement user tagging, why not?

4. If your institution has not or is not planning to implement user tagging of online images, please go to Section 5.

☐ Section 5 (select to be taken to Section 5)

# USER TAGGING OF ONLINE CULTURAL HERITAGE ITEMS SURVEY

## 3. TAGGING IN USE

Please tell us about your experience with user tagging of online cultural heritage items. If you are still considering some of the issues below rather than having implemented solutions please include your intentions in this Section as well.

1. Where do users tag your institution's images?

- ☐ Institution's website
- ☐ Social network (eg Flickr)
- ☐ Other

Comments...

2. How are images selected for tagging (eg whole collections, selected items)?

3. What is your rationale and methodology in making your selection?

4. How do users know they are able to tag images?

5. Do you provide instructions/guidelines to assist users to tag?

☐ Yes

☐ No

Comments...



# USER TAGGING OF ONLINE CULTURAL HERITAGE ITEMS SURVEY

## 6. Who can add tags?

- ☐ Anyone who views the images
- ☐ Registered users only
- ☐ Specific groups (eg special interest, targeted groups)
- ☐ Other

Comments...

## 7. To what extent has tagging been adopted by users (eg number of tags, number of items tagged)?

## 8. Why do you think users add tags to your collection?

## 9. Do you use a reward system (eg game environment or credits for tagging)?

☐ Yes

☐ No

Comments...

## 10. What type of tags do you accept?

- ☐ Free expression
- ☐ Guided tagging
- ☐ Single word
- ☐ Phrases
- ☐ Other

Comments...

# USER TAGGING OF ONLINE CULTURAL HERITAGE ITEMS SURVEY

11. Are user tags moderated or monitored in any way?

☐ Yes

☐ No

Comments...

12. How are the tags being used for searching/access?

- ☐ Integrated into current catalogue/system
- ☐ Searchable in parallel with current catalogue/system
- ☐ Presented in clouds or clusters
- ☐ Not used to search
- ☐ Other

Comments...

13. Are tags used for any other purpose by your institution?

# USER TAGGING OF ONLINE CULTURAL HERITAGE ITEMS SURVEY

## 4. FUTURE TAGGING

Please tell us about the approaches you plan to use if your institution implements user tagging of online cultural heritage items.

1. Where will users tag your institution's images?

- ☐ Institution's website
- ☐ Social network (eg Flickr)
- ☐ Other

Comments...

2. How will images be selected for tagging (eg whole collections, selected items)?

3. What is your rationale and methodology in making your selection?

4. How will users know they are able to tag images?

5. Will you provide instructions/guidelines to assist users to tag?

☐ Yes

☐ No

Comments...

# USER TAGGING OF ONLINE CULTURAL HERITAGE ITEMS SURVEY

6. Who will be able to add tags?

- ☐ Anyone who views the images
- ☐ Registered users only
- ☐ Specific groups (eg special interest, targeted groups)
- ☐ Other

Comments...

7. Why do you think users would add tags to your collection?

8. Will you use a reward system (eg game environment or credits for tagging)?

☐ Yes

☐ No

Comments...

9. What type of tags will you accept?

- ☐ Free expression
- ☐ Guided tagging
- ☐ Single word
- ☐ Phrases
- ☐ Other

Comments...

10. Will user tags be moderated or monitored in any way?

☐ Yes

☐ No

Comments...

# USER TAGGING OF ONLINE CULTURAL HERITAGE ITEMS SURVEY

11. How will the tags be used for searching/access?

- ☐ Integrated into current catalogue/system
- ☐ Searchable in parallel with current catalogue/system
- ☐ Presented in clouds or clusters
- ☐ Not used to search
- ☐ Other

Comments...

12. Will tags be used for any other purpose by your institution?

Please click 'Next' to go to Section 5 - TAGGING BENEFITS AND ISSUES.

# USER TAGGING OF ONLINE CULTURAL HERITAGE ITEMS SURVEY

## 5. TAGGING BENEFITS AND ISSUES

Please share your thoughts on the benefits and issues involved with user tagging of online cultural heritage items.

1. How do you believe taggers benefit from tagging?

2. How do you believe other non-tagging users benefit from tagging?

3. How do you believe institutions benefit from user tagging?

4. What issues have you faced in planning or implementing tagging in your institution?

Appendix II, Part 1: User Tagging Implemented

Section 1: General Information

Name:		Sebastian Chan	Gillian Raymond	Rose Holley	Jeremy Cauchi	Fiona Hooton
Name of institution:		Powerhouse Museum	National Portrait Gallery	National Library of Australia	Archives New Zealand	National Library of Australia/Picture Australia
What is your position/role within the institution?		Manager, Web Services	Online Manager	Manager - Australian Newspapers Digitisation Program	Senior Advisor	
Do you consent to any information disclosed in this survey being published in a report?	Yes or no	Yes	Yes	Yes	Yes	
Does your institution have or intend to have digitised images of collection material available to the public on a website?	Yes or No	Yes	Yes	Yes	Yes	Yes
	If Yes, how many?	Roughly 80,000 images	we currently have about 40% digitised and are working towards the rest of the collection	Not sure		1.5 million
Which website?		Institution website	Institution website	Institution website	Institution website	
Other (please specify)		and in the Commons on Flickr (http://www.flickr.com/photos/powerhouse_museum/)		www.nla.gov.au http://ndpbeta.nla.gov.au		Picture Australia: Ourtown' www.flickr.com/groups/pa_ourtown Picture Australia: People, Places and Events' www.flickr.com/groups/PictureAustralia_people

Section 2: Tagging in Your Institution

Has user tagging been implemented by your institution?	Yes (you will be taken to Section 3) or No	Yes	Yes	Yes	Yes	
--	--	-----	-----	-----	-----	--

Section 3: Tagging in Use

Where do users tag your institution's images?	Institution's website	Institution's website	Institution's website	Institution's website		
	Social network (eg Flickr)	Social network (eg Flickr)			Flickr	
	Other					
	Comments...	Tagging can happen in our collection database for "any" item in that database - both collection objects, and images, as well as 'themes' (which are groupings of objects by person, subject etc)	User tagging has been built into the new National Portrait Gallery website due to go live in October.	Users are not tagging images. They are tagging newspaper articles. We've had long discussion about if they should tag the entire issue, page, article, line or word. At present we've implemented it at article level and the tag is not physically visually associated on the article (since it blocked the text). It appears to the side.	Use tagging is only possible at this point for the War Art Online sub-site of the main Archives New Zealand website.	
How are images selected for tagging (eg whole collections, selected items)?	Open-Ended Response	See above. Anything in our publically available online collection can be tagged.	We are opening up the whole collection for tagging.	Any article in the Newspapers Beta can be tagged by a user. At article level -see above.	All of the images on the War Art Online can have tags applied to them.	Each Insitutions selects there own
What is your rationale and methodology in making your selection?	Open-Ended Response	If they meet the basic standard for documentation then they are made available.	We are hoping to build a portrait based thesaurus of folksonomies about our collection to enable internal research and increased searchability.	We thought it was a good idea for users to be able to do this. Since it is a new service and we have been given free hand to implement anything we thought was a good idea for BEta we have done it. There is no policy yet on the Library for tags and it will be discussed at higher level once we have more feedback from this.	The War Art collection was selected as a small discrete group of records for which the current descriptive information did not provide as much detail as is deisrable.	



How do users know they are able to tag images?	Open-Ended Response	With a simple USER TAGS box in the top right of the UI. Because we already have comparatively well documented object records, tagging has never been a 'major' driver, more an experiment. There are plenty of articles on my blog that describe the effectiveness or otherwise - <a href="http://www.powerhousemuseum.com/dmsblog/">www.powerhousemuseum.com/dmsblog/</a> - which you are welcome to cite.	There will be a tagging box on each collection page for users to access with clear instructions on the process.	There is a button 'tag this image'. Its in the help. Lib staff populated the service with some eye catching tags before we released the system so it would stand out to users. Recently added tags are on the home page.	The website promotes the use of tags and invites people to add tags to particular jobs.	
Do you provide instructions/guidelines to assist users to tag?	Yes or No	Yes	Yes	Yes	Yes	
	Comments...	But only minimal - we haven't incorporated tagging into a game or made it a primary feature.		Brief instruction		
Who can add tags?	Anyone who views the images	Anyone who views the images	Anyone who views the images	Anyone who views the images	Anyone who views the images	
	Registered users only					
	Specific groups (eg special interest, targeted groups)		Specific groups (eg special interest, targeted groups)			
	Other					
	Comments...	Open, anonymous tagging in our collection database. Registered Flickr users in Flickr.		Users can either login so they can see and edit all of their own tags, or if not logging in add anonymous tags. In this case they have to do a captcha first so we are sure they are human (and not automated program).		
To what extent has tagging been adopted by users (eg number of tags, number of items tagged)?	Open-Ended Response	PHM collection - 9393, 5574 objects tagged at least once Flickr - 2836	The collection has been tagged internally (by staff members) at this stage. I will be able to provide further statistics on the success of the program once the site goes live in October.	don't have stats yet, but more than we expected have been tagging from day of release (28 July 2008).	There was a very good uptake when the site went live. The rate at which tags have been added has slowed over time.	
Why do you think users add tags to your collection?	Open-Ended Response	On our own site for a variety of reasons - usually to compliment documentation or for recall. With the level of documentation on our collection quite high there is little incentive or need to tag some objects.	See above	So they can find stuff easily after they've read it. They are using keywords not mentioned in articles e.g. 'cigarette advertising' for display ads that have no text so can't be found by these terms. 'Racism' 'stolen generations', 'animal accidents' have been popular for historic newspaper articles that don't have these terms or the term didn't exist at that time.	To complement the standard descriptive information and to highlight particular artworks that they are interested in.	
Do you use a reward system (eg game environment or credits for tagging)?	Yes or No	No	No	No	No	
	Comments...		But these are possibilities that we are considering at this stage.	If we implement this it would be to correct the OCR (which is much more important to us) than tagging.		
What type of tags do you accept?	Free expression	Free expression		Free expression		
	Guided tagging		Guided tagging			
	Single word	Single word	Single word	Single word	Single word	
	Phrases	Phrases	Phrases	Phrases		
	Other					
	Comments...			anything they put in. They can't see a list of tags or search tags only at present.		
Are user tags moderated or monitored in any way?	Yes or No	Yes	Yes	No	Yes	
	Comments...	Minimal moderation and an automated 'badwords' filter	There is an automatic moderation system in place and timed release of tags (probably 24hrs) which allows for internal monitoring by NPG staff.	We'll address it when someone starts to put in naughty words. This is one of the important things to develop for a policy and to test.		
How are the tags being used for searching/access?	Integrated into current catalogue/system	Integrated into current catalogue/system				
	Searchable in parallel with current catalogue/system	Searchable in parallel with current catalogue/system	Searchable in parallel with current catalogue/system		Searchable in parallel with current catalogue/system	

	Presented in clouds or clusters	Presented in clouds or clusters	Presented in clouds or clusters	Presented in clouds or clusters	Presented in clouds or clusters	
	Not used to search					
	Other			Other		
	Comments...			user can browse cloud. It was also our intent to have a search tags only box and a search newspapers box with optional and tags. This hasn't yet been implemented.		
Are tags used for any other purpose by your institution?	Open-Ended Response	We do look at the tags added and have from time to time added them to our official taxonomies.	We anticipate that the tagging will be used in the development of education and public programs.	No. Note: users are confused between adding comments and adding tags for newspaper articles. WE also have a comments feature at article level.	no	

Section 4: Future Tagging

Where will users tag your insitution's images?			Institution's website	Other		
	Comments...		see answers on previous page	Not sure		
How will images be selected for tagging (eg whole collections, selected items)?	Open-Ended Response			Not sure		
What is your rationale and methodology in making your selection?	Open-Ended Response			Not sure		
How will users know they are able to tag images?	Open-Ended Response			Not sure		
Will you provide instructions/guidelines	Yes or No			Yes		
	Comments...					
Who will be able to add tags?	Anyone who views the images					
	Registered users only					
	Specific groups (eg special interest, targeted groups)					
	Other					
	Comments...			Not sure		
Why do you think users would add tags to your collection?	Open-Ended Response			To help them find them again later. To make their own group of things (tag with their name)		
Will you use a reward system (eg game	Yes or No					
	Comments...			Not sure		
What type of tags will you accept?	Free expression					
	Guided tagging					
	Single word					
	Phrases					
	Other					
	Comments...			Not sure		
Will user tags be moderated or	Yes or No					
	Comments...			Not sure		
How will the tags be used for searching/access?	Integrated into current catalogue/system					
	Searchable in parallel with current catalogue/system					
	Presented in clouds or clusters					
	Not used to search					
	Other					
	Comments...			Not sure		

Will tags be used for any other purpose by your institution?	Open-Ended Response			Not sure		
<b>Section 5: Tagging Benefits and Issues</b>						
How do you believe taggers benefit from tagging?	Open-Ended Response	Recall and search performance	I believe that taggers benefit from the ability to describe our collection in their own words. They benefit from the feeling that their observations and opinions are taken seriously by the NPG and that they are contributing to developing national cultural heritage.	Like to feel they can interact with data. Helps them to find 'their' things later. Makes them think the site is 'cool' and refer it to friends.	Users can choose which images receive the benefit of additional highlighting and additional search paths.	Gain hyper distribution of their images to national and international researchers and curators Discover the wealth of historical images in public collections in Picture Australia while searching and finding their own images Learn about copyright through the application of Creative Common licenses Monitor the progress of the project through monthly news items. Some Flickr photographers have had their works acquired into cultural institutions permanent collections and others have sold reproductions of their works through Picture Australia's request a copy service.
How do you believe other non-tagging users benefit from tagging?	Open-Ended Response	Search performance	I believe the advantages that tagging offers to exploring cultural collections are many and varied. These include the ability to search on colloquial terms, words that may not fit a gallery paradigm 'curator speak' and the ability to use a more webcentric way of searching collections via related search options.	You can see the things other people looked. Its a different way of browsing by using a cloud and quite quick. You can see the most popular keywords You can find stuff you might not have been able to in a search.	Tags can assist in locating relevant images	At Picture Australia, we've approached the challenges of the digital age with a big vision – believing it should be possible to search a comprehensive pictorial record of Australian history and endeavour from one place. More than that, though, the vision is to invite all Australians to place their own image collections there too, so we all play a part in telling the full story.
How do you believe institutions benefit from user tagging?	Open-Ended Response	Learning about how people might also wish to describe objects etc (see blog posts and articles)	Insitutions benefit from hearing our audiences voices describing our collection. Tagging can advise an institution on future directions and how to maximise public engagement with their collections.	It adds value to the data. It demonstrates the users are interacting with your service and how. It shows flaws in your search system (why and what are people tagging?) so you might be able to fix them. It generates new metadata. It creates relationships between objects adn taggers which might be able to be used in someway later.	Tags complement and enhance the standard description and allow some description at a level not possible within the standard descriptive framework.	The NLA's Flickr Project has overwhelmingly fulfilled its two key objectives. It has been the most successful online marketing tool that Picture Australia has yet utilised with a 43% increase in page views. Web-based communities are challenging the restrictions of corporate content owners and providing a grassroots mechanism to enable collaboration and artistic growth in independent production, distribution of, and debate around cultural product. Web 2.0 tools offer cultural institutions the ability to actively engage with their user groups and thereby better service their organisational goals.

What issues have you faced in planning or implementing tagging in your institution?	Open-Ended Response	<p>Scepticism of 'direct value' and 'quality' is the main barrier. Read my post on the first three months of the Commons on Flickr for more detail - <a href="http://www.powerhousemuseum.com/dmsblog/index.php/2008/07/21/common-s-on-flickr-a-report-some-concepts-and-an-faq-the-first-3-months-from-the-powerhouse-museum/">http://www.powerhousemuseum.com/dmsblog/index.php/2008/07/21/common-s-on-flickr-a-report-some-concepts-and-an-faq-the-first-3-months-from-the-powerhouse-museum/</a></p>	<p>Issues that have had to be resolved include staff time to dedicate to moderation and the development of clear descriptions of use and to convey the attractiveness of contributing to the tagging project.</p>	<p>The fear that taggers will tag with rude words.(Moderation - not yet resolved) Implementing adding comments and tags and also OCR correction at the same time caused a bit of confusion. Not thinking enough (or implementing yet) how and if people want to search tags. Okay until the tag cloud gets really big though. People making spelling mistakes in tags or duplicating similar tags (due to no authority control over tags - librarians don't like that). Wanting to make a policy first (we didn't we just did it) intending to resolve and discuss issues as they arise. Fear from librarians that tags are irrelevant and not helpful. In the case of historic newspapers a clear and positive need and use for tags has arisen in just 2 weeks. They are definitely helpful to taggers and non taggers</p>	<p>The need to moderate tags for appropriateness. How to maximise the benefits of taggings functionality and how to enable tags to fit with other search tools.</p>	<p>Preservation: While much of this usergenerated content may not be suitable for long-term preservation, assets that support research, lifelong learning, and education should not be lost.</p> <p>Intellectual Property: It is critical to define as specifically as possible what rights the instituion has regarding the digital assets in its collections. Preferably, the institution would be allowed to act on behalf of rights holders to execute changes to the content forclearly defined preservation activities, such as reformatting for continued access when necessary hardware and software become obsolete, and changes to the representation information to reflect changes in the institutions' user groups.</p> <p>Metadata: There is currently no research on the quality of metadata for a cultural heritage collection created from content and metadata contributed by community-based groups. Several O.S agencies have applied for grants in to conduct research of this kind. The problems associated with unmediated metadata creation arising from tagging have been stated as: four central problems of polysemy, synonymy, plurals, and multipleconnectedwords.</p> <p>Some solution might be for cultural institutions to collaborate with the public to:</p> <ul style="list-style-type: none"><li>• Develop research user groups who can assist with the implementing of new</li></ul>
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Appendix II, Part 2: Future Plans to Implement User Tagging

Section: General Information

Name:		Catherine Styles	Richard Neville	Anna Raunik	Brendan Fitzgerald	Mark Mohell	Patricia Moore
Name of institution:		National Archives of Australia	State Library	State Library of Queensland	State Library of Victoria	Australian Heritage Photo Library	State Library of South Australia
What is your position/role within the institution?		Manager Web Content	Mitchell Librarian	Executive Manager, Resource Discovery	manager vicnet	Assistant Director/Imaging Services Section	SA Memory coordinator
Do you consent to any information disclosed in this survey being published in a report?	Yes or no	Yes	Yes	Yes	Yes	Yes	Yes
Does your institution have or intend to have digitised images of collection material available to the public on a website?	Yes or No	Yes	Yes	Yes	Yes	Yes	Yes
	If Yes, how many?	20 million	360,000	44,000+		35000	estimate: pictorial: 101,000; websites: 7,000
Which website?		Institution website	Institution website	Institution website	Institution website	Institution website	Institution website
Other (please specify)		Flickr		Flickr, PictureAustralia, Wikipedia, JOL Blog	vicnet portal	Department of the Environment, Water, Heritage and the Arts	SA Memory

Section 2: Tagging in Your Institution

Has user tagging been implemented by your institution?	Yes (you will be taken to Section 3) or No	No	No	No	No	No	No
If not, are there plans to implement user tagging?	Yes (you will be taken to Section 4) or No	Yes	Yes	Yes	Yes	Yes	Yes
If your institution has not or is not planning to implement user tagging, why not?	Open-Ended Response						

Section 3: Tagging in Use

These respondands were directed to Section 4

Section 4: Future Tagging

Where will users tag your insitution's images?		Social network (eg Flickr)	Institution's website, Social network (eg Flickr)	Institution's website, Social network (eg Flickr)	Institution's website, Social network (eg Flickr)	Other	Social network (eg Flickr), Other
	Comments...	We are already using Flickr for select sets: Gallipoli album, Pic of the Week. We will probably extend this to other sets. We will discuss the possibility of enabling user-generated tagging in our online collection database, RecordSearch, at a web strategy meeting.	We will be experimenting with Flickr first, and are then planning to look at tagging in the Library Management system Millennium, and finally, when we can build the process, in our Manuscript, Oral History and Pictures catalogue. I don't think we really understand the process yet. Different people see it with different agendas. Some see tagging as part of a social networking game, others as a kind of low key scholarly apparartus. It is probably all these things. I wonder how it will mature, and if it will eventually fold into standard practice instead of a stand-alone web 2 initiative. I think we see what happens. I don't think it is THE answer to a whole range of client issues, which is how it often tends to be described, but it is an answer, and one that needs to be explored.	Wil be available in Pimo once installed in late October. Digital images will be available in early 2009. Collection site in Flickr under development		At this stage we are still trying to work out how we can use this and how we can implement this. Not timetable has been setup yet.	SA Memory websites; South Australiana database [pictorial collection]. Want to explore how best to proceed, still very much in pre-developmental stage while ICT infrastructure and other issues being resolved. Currently using a mediated tag/comment approach ie What can you tell us? in SA Memory and selected images on South Australiana database.

How will images be selected for tagging (eg whole collections, selected items)?	Open-Ended Response	In Flickr, all images are taggable. In RecordSearch, how tagging would work is yet to be determined. Presumably, the items would have to be digitised. Possibly whole items (files, which can be hundreds of pages) could be tagged. It might also be possible to tag at the level of the folio or single image.	We would anticipate whole collections, of not only digital images, but catalogue records as well.	Primo - all collections Flickr - by themes		If this was implemented we will look at the collections which are available to the public	all still to be determined
What is your rationale and methodology in making your selection?	Open-Ended Response	n/a		Picture trailers already exist on our website based on popularity and user requests. These will be transferred to Flickr		The images which are available to the public have no restriction.	all still to be determined
How will users know they are able to tag images?	Open-Ended Response		Not yet understood.	options available on each record		Not sure how this will work	all still to be determined
Will you provide instructions/guidelines to assist users to tag?	Yes or No	Yes	Yes	Yes	Yes	Yes	Yes
	Comments...	they may be minimal "the interface should be intuitive					
Who will be able to add tags?	Anyone who views the images				Anyone who views the images	Anyone who views the images	
	Registered users only			Registered users only	Registered users only		
	Specific groups (eg special interest, targeted groups)				Specific groups (eg special interest, targeted groups)		
	Other		Other				
	Comments...	yet to be determined	Haven't worked through policy implications yet. I think I would like to see registered users only, but am happy to be persuaded otherwise.	Flickr - as per Flickr rules Primo - currently registered users. Registration is online and automatic with no approval required.	depending on the specific site		to be determined
Why do you think users would add tags to your collection?	Open-Ended Response	to be able to find items again; to share their knowledge/experience of an item with others; for the public good	Part of it seems to be "gaming", but I could also see a real use for it in personalising search strategies across complex databases. Literature on it seems to be very positive in an anecdotal sense, but not sure if there is much hard evidence of benefits yet. It certainly does naturalise language, which in library environments is pretty formal and disconnected, and that can only be a good thing.	Based on popular social networking sites, our experience with Flickr corporate images collection and the current feedback received via email on existign digital images.	engagement and a genuine belief they have information that adds to the public record	It will promote user re-visiting, customerisation, sharing, etc	have received enthusiastic comments via What can you tell us?, and interests/information about items online
Will you use a reward system (eg game	Yes or No		No	Yes		No	
	Comments...	yet to be determined		Under consideration	dont know yet		have not yet considered
What type of tags will you accept?	Free expression			Free expression	Free expression		
	Guided tagging						
	Single word			Single word			
	Phrases			Phrases			
	Other					Other	
	Comments...	yet to be determined	Yet to be resolved: I think we would go for free expression. To try and guide or restrict tags potentially brings us back to the very problems of thesauri which tagging is meant to avoid.		preferable but may depend on site	Not to sure	to be determined
Will user tags be	Yes or No	Yes	Yes	Yes		Yes	

moderated or monitored in any way?	Comments...	probably		Tags wil go live in real time. Monitored by staff on a daily basis.	undecided volume may be an issue		to be determined
How will the tags be used for searching/access?	Integrated into current catalogue/system		Integrated into current catalogue/system	Integrated into current catalogue/system			
	Searchable in parallel with current catalogue/system			Searchable in parallel with current catalogue/system			
	Presented in clouds or clusters		Presented in clouds or clusters	Presented in clouds or clusters			
	Not used to search						
	Other					Other	
	Comments...	yet to be determined	This has caused some informal debate amongst the Manuscripts, oral history and pictures people. I believe that the tags should be integrated, otherwise the exercise is pointless. Creating too many independent search options is pointless as most evidence suggests that clients want a single search box. I like the idea of clusters / clouds but this would involve some redesign of the screen real estate.			not sure	to be determined
Will tags be used for any other purpose by your institution?	Open-Ended Response	yet to be determined		Considering exporting of tags to make available through various related web pages. Interested in being able to export tags to PictureAustralia and vice versa		not sure	to be determined

## Section 5: Tagging Benefits and Issues

How do you believe taggers benefit from tagging?	Open-Ended Response	it can be a way of bookmarking items for ease of re-finding them; a warm heart from contributing to public good (ie improving findability of the collection); kudos if their tags are useful to others (if they are identifiable, rather than anonymous); better online experience " more engagement with and learning from the collection items (because there is space for the user to add meaning)	I am not sure that anyone is really clear on this yet. There is a lot of hype, but time will tell how it beds down into a normalised practice. Some taggers seem to enjoy the capacity it provides to engage with the collections, and reflect their own interests in them. Others will like the ability to mark material in a way that is meaningful to them, and will help them retrieve material later. I do believe there is a lot of fashionable interest in things like tagging at the moment, as an easier to implement web 2 facility. It will be interesting to see where it is at in 5 years time.	Able to share their knowledge and experience. Ability to become co-contributors. Ability to locate content easliy again.	contribute information	promotes sharing of information	user engagement with collections and institution; sharing of knowledge and enthusiasms
How do you believe other non-tagging users benefit from tagging?	Open-Ended Response	improved findability of the collection	If tags are widely exposed then - i.e. not limited to separate searches etc - that should help retrieval across the board. It possibly also helps people see the value in collections if they can see evidence that others have found something useful or interesting.	Increased access to content through enhanced metadata.		It can give a broader insight to the subject matter	enriched description of collection items via tagging would encourage non-tagging users to use the collections and contribute their own information



How do you believe institutions benefit from user tagging?	Open-Ended Response	User tagging is a channel for users to participate in making collections meaningful. So institutions that open such a channel are potentially more used and more valued. They also benefit by distributing the burden of description among users " so that the collection becomes more findable (and thereby usable).	I feel that this is unquantified as yet, without a good deal more experience in the processes. Tagging can help drive clients to our sites, or improve their experiences and access, it can can make them feel engaged and involved, it can help client mash up diverse collections if tags sit in aggregated data sets, but it is only part of the equation. Maintaining tags and managing users can be a time consuming task too, and institutions will have to decide at what level they want to commit to the process. I think I see this as being about being part of emerging processes, which will in the end either thrive or evolve to something else, and it seems a bit limiting to throw all ones energies into it without continuing support for foundation operational activities such as cataloguing. Ultimately I suspect that tasks like cataloguing will evolve into something that harnesses aspects of tagging / user contributions, over a base of traditional cataloguing skills. Tagging is emblematic of evolving possibilities, but it is not in itself always going to the revolution often promised.	Enhanced resource discovery to content. Providing a similar service to social networking services. Being able to develop a stronger relationship with users. Acknowledges that we are not the only experts in a topic or field.	better quality information	with the sharing of information	enriched description of collection items; users are encouraged to use the collections and contribute their own information - potential broadening of support base for institution
What issues have you faced in planning or implementing tagging in your institution?	Open-Ended Response	Archivists tend to be wary of allowing users to contribute data " concerns include the integrity of archival data, security of systems, prospect of having to moderate a lot of inappropriate or irrelevant contributions, and the fact that any such developments are seen to detract from our core business.		Not yet implemented but issues are around the ability of software to streamline the process, the willingness of some staff to accept user contributions. Strategy underway to ensure buy-in from users. Impact of moderation and the length of time that tags remain on records. Does the tag become part of a collection item? Will topical tags related to a particular time or event (i.e. curriculum support) remain over time?			planning has not yet reached this stage

Jonathan Cooper	Emma Jones	Andrew Powerie	Lisa Darby	Trish Mullis
Art Gallery of NSW	Australian War Memorial	National Gallery of Australia	Northern Territory Library incl PictureNT	Northern Territory Library incl PictureNT
Manager of Information	Manager, Collection Information and Access	Web Manager	Cataloguing and metadata librarian	IT Project Officer
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes
18,000+	5000+	≈ 27,000	» 35,000	35000
Institution website	Institution website	Institution website	Institution website	Institution website
			PictureNT	<a href="http://www.territorystories.nt.gov.au">http://www.territorystories.nt.gov.au</a>
No	No	No	No	No
Yes	Yes	Yes	Yes	Yes
			Digital repository still in development.	We are still in the research and planning phase.
Institution's website		Institution's website, Social network (eg Flickr), Other	Institution's website	Institution's website
Copyright restrictions would prevent us from having many works on other websites				

selected items		WHOLE COLLECTIONS, SELECTED	Plan is to have whole collection available for tagging.	We want to implement tagging over the whole PictureNT collection.
(What selection? Sorry, don't understand the question)		TO GAIN FOLKSONOMIC REPRESENTATION OF IMAGES IN THE COLLECTION IN ORDER TO IMPROVE ACCESS TO ITEMS. TO DIMINISH THE EXPERTISE REQUIRED TO ACCESS THE COLLECTION ITEMS.	No selection as it will be the whole collection.	We want to provide users with the ability to tag over all images within our repository.
Probably on the introductory page and with a link next to each object record		CLEARLY ASSOCIATE FREE TEXT FIELDS. ASSOCIATE AUTO GENERATED TAGS TO PROMPT USERS	There will be a blurb of some sort on the website or perhaps an icon or hotlink. This is all still in the planning stages and many of these aspects have yet to be discussed.	Via means of a link or icon on the record screen. We are currently looking at the STEVE project and the tagging software that project offers.
Yes		Yes	Yes	Yes
			Even though users never read instructions there has to be some form of written guidelines to ensure consistency and to back up decisions made by the library as to the inclusion/deletion of tags.	We will provide instructions, however we hope to make the process easy and intuitive so the users do not need to access the help function.
Anyone who views the images		Anyone who views the images		
			Registered users only	Registered users only
		Specific groups (eg special interest, targeted groups)	Specific groups (eg special interest, targeted groups)	
This is my preference, but I may be overruled. ;-)				We want registered users to tag so we can maintain a system audit trail.
Probably for the same motivation behind people participating in other collaborative efforts: to make a difference to something worthwhile		for organization and to make images more easily discoverable. curiosity to see what others may have tagged with like terms	We intend initially to target specific groups such as researchers and historians, they would have a vested interest in value adding to the collection by making images more searchable.	To add subjects written in general language rather than just using thesauri terms.
No		No	No	No
This could skew the results				
Free expression				
		Guided tagging		
			Single word	Single word
		Phrases	Phrases	Phrases
Haven't thought this far				we have imagined that tagging would be comprised of single word or short phrases (two or three words)
Yes		No	Yes	Yes

			There will be a workflow in place whereby tags are submitted to the cataloguing team prior to going live. Possibly also a policy similar to the steve.museum policy of only indexing a tag once a certain number of the same tag have been submitted. In the case of steve.museum it is 50 but our user base is much smaller than theirs so we would go for a small number than that, again, this is a decision yet to be made.	New tags will need to be approved by a cataloguer before being made live in the database.
			Integrated into current catalogue/system	Integrated into current catalogue/system
Searchable in parallel with current catalogue/system		Searchable in parallel with current catalogue/system		
Presented in clouds or clusters		Presented in clouds or clusters		
				As we are still in the initial research and planning stage it is not definate that the searching will be integrated into the current system, but it is how we envision it working.
Possibly			No discussion has been entered into as yet.	We haven't discussed the possibility of further using tags.
A sense of 'ownership' and participation.		Improved discoverability basically. Most collections are catalogued for their management not for access. i believe there is a need for a shift towards "access cataloging" to assist the easy access to collection.	Better searchability. It will also provide an 'investment into the database' for the taggers, making them more likely to use it.	By enabling easier search and retrieval of images.
Users would be able to find works by themes, which is currently not possible (or easy at least). See next answer.		Same as above	Better searchability.	By enabling easier search and retrieval of images.

It would enable us to add some 'keywords' functionality to our database relatively painlessly. It would probably also increase traffic to online collection, assuming the tags were open to search engines such as Google.		increased exposure of their collections better understanding of how people use/see their collections from a non expert perspective.	Greater knowledge base. For example, many of the images in our database have been donated over the past 20 years and consist of images spanning the last 60 years or more which have people, places and things in them that are not identified. We have a very small cataloguing team so the knowledge base is necessarily small. By opening up tagging to the wider public we hope to find people that will be able to identify those people, places and things in the images that are currently unidentified.	By allowing our users to assist themselves in providing an easier method of search and retrieval of images by using natural language terms/phrases.
(not applicable)		Curatorial resistance, time,	They're all still ahead of us as we have barely started the planning process let alone the implementation.	Lack of staffing resources, lack of time.

Appendix 11, Part 3: No Plans to Implement User Tagging

Section 1: General Information

Name:		Susanne Moir	Antoinette Buchanan	Maksim Lin	Kate Curr	Clair Hurlford	Rhonda Campbell	Richella King	Emma Gwynn	Liz Holcombe	
Name of institution:		State Library of New South Wales incl Mitchell Library	ACT Heritage Library	National Archives of Australia	State Library of New South Wales incl Mitchell Library	National Film and Sound Archive	State Records New South Wales	Australian National Maritime Museum	Old Parliament House	Australian War Memorial	
What is your position/role within the institution?		Coordinator Bibliographic Access	Senior Librarian	Senior Developer	Manger, Digital and Library Systems	Website Coordinator	Project Officer, Copying and Digitisation	Manager, web developments	Database Officer, Heritage Section	Web Manager	
Do you consent to any information disclosed in this survey being published in a report?		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Does your institution have or intend to have digitised images of collection material available to the public on a website?		Yes or No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		If Yes, how many?	We produce more than 20,000 digital images each year, vast majority for public viewing	approx 8000	1000 to 10000	65,000	13,940	6000	None as yet, ultimately intending to have all available	unsure	about 800,000 photographs, and a lot more than 2,000,000 images of documents
Which website?		Institution website		Institution website		Institution website		Institution website		Institution website	
Other (please specify)		Picture Australia; also plan to test contribution of images to Flickr		http://www.images.act.gov.au		www.sl.nsw.gov.au		Flickr		Flickr, Youtube, Myspace and Facebook	
										AWM blog http://blog.awm.gov.au/	

Section 2: Tagging in Your Institution

Has user tagging been implemented by your institution?	Yes (you will be taken to Section 3) or No	No	No	No	No	No	No	No	No	No
If not, are there plans to implement user tagging?	Yes (you will be taken to Section 4) or No	No	No	No	No	No	No	No	No	No
If your institution has not or is not planning to implement user tagging, why not?	Open-Ended Response	We are interested in the concept but have not set up the functionality as yet	there are no formal plans at this stage due to limited resources	Concern with moderating user content and relationship with curatorial content.	The discussions around tagging are still very new in the SLNSW and no definitive action has been taken in this area. The concept, however has not been rejected as a possible direction in the future.	Largely because of resources.	At present we don't have that functionality on our website. We have a Flickr account which showcases some of our images and users can tag those images.	We have yet to decide which user interactions will be most beneficial to enable, tagging is just one of these.	unsure	For the website, we are still very much in the pre-planning stage with tagging. It is something that we are interested in, but at present, we don't have the means of getting it to work on our website. We are exploring a number of approaches (including user tagging) to enable site visitors can interact with the site/collection images.
If your institution has not or is not planning to implement user tagging of online images, please go to Section 5.		These respondents were directed to Section 5								

Section 3: Tagging in Use

These respondents were directed to Section 4

Section 4: Future Tagging

These respondents were directed to Section 5

Section 5: Tagging Benefits and Issues

How do you believe taggers benefit from tagging?	Open-Ended Response	taggers are likely to get a sense of engagement - can build a community of interest by drawing on peoples passions and interests		they feel they are making a useful contribution	The ability to identify resources with terms meaningful to the user is very attractive	In the long term they will get better access to a far wider range of information and content.	They can find images again quickly as they have tagged with their own tag.	they'll be more easily able to find what they're looking for.	Taggers would have a sense of ownership of our cultural heritage Taggers might find a website more stimulating and interesting if there is an option to interact with the content	I have added tags to the Powerhouse's collection. I think the main benefit was that I felt I had a better chance of finding the objects I tagged again, as I was using terms that made sense to me. A lesser benefit was that by tagging something that no one else had, and that was described in very formal museum style, I felt that it might make it easier for someone else to find it - but only if they thought like me!
How do you believe other non-tagging users benefit from tagging?	Open-Ended Response	tags have the potential to help others find what they need - tagging may help users to select a resource based on the experience of others		better meta data, possibly more relevent or up to date meta data	Greater access points for resource discovery, especially vernacular terms	Greater accessibility to information about the collection. Quality of the data improves and the depth of cataloguing grows richer.	It allows for broader search terms to be used outside of the controlled vocabulary of a pictorial thesaurus.	Museum staff will be able to tag, file, write about and refer to objects using language more in tune with our users.	Non-taggers search results would be expanded based on the wider set of key terms	It can make it easier to find things, but only if the tagger used words that the non-tagger did and spelt them correctly. It can provide new ways of thinking about a topic or object, which can make the process of searching more fruitful (not to mention turning up some unexpected results - I think this is a benefit, but I can see that not everyone would agree.
How do you believe institutions benefit from user tagging?	Open-Ended Response	community engagement with the collection and enhanced search capability - although Powerhouse Museum has found tagging is a slow process - in 23 months only 6000 records were tagged!!		unexpected correlations or new metadata	From discovering information about the collection that may never have been known before, by adding a richness to the collections that is not always possible with controlled vocabulary indexing	As above.	It increases interactivity with our users. It also shows us how people find images and what search terms they are using.	They gain an understanding of their users.	Institutions would have a greater input to their web content, and the meaning of heritage items to a wider group of people	A different and potentially very valuable way of seeing their collection, and a way to see what it is that captures the imagination or passion of visitors. I have noticed this about the photos of the AWM that people have added to our Flickr group: they are visual tags to how people see the museum and what they find interesting.
What issues have you faced in planning or implementing tagging in your institution?	Open-Ended Response	Need appropriate tools and platform to support tagging. Policy and practices need to be developed - how to maintain the integrity of the record while adding to it: how long should tags be kept, should they be reviewed, edited. Moreover there may be some within the institution who could see tagging as challenging the authority / value of the specialist		concerns of resources for moderation, how it will be viewed by the public as coming from the institution.	Change management, getting librarians to loosen their grip on the records, technology	Lack of understanding of the benefits of Web 2.0.	We are currently experimenting with how users tag images in our Flickr account. While we see the benefits of this our website currently does not have the user tagging ability.	I haven't had time nor to I have resources at the moment to plan or implement a coherent tagging strategy.		We are not close to getting to the nifty gritty of tagging yet, but a significant issue is the technical aspects of getting it to work on our site. We expect to get a resolution to this in time, but right now it is not clear what shape or form that will take, or how it will work.