

digital Cultural Content Forum

Evaluation of Digital Cultural Content

Initial survey results and research agenda

July 2003

Alice Grant Consulting
www.alicegrant.com

Initial survey results and research agenda

Executive summary

In 2002 the Cultural Content Forum agreed to undertake research to identify and analyse material relating to the evaluation of digital cultural resources. The project was planned in two stages, the aims of which were:

- To research and publish a catalogue of evaluation undertaken relating to digital cultural information resources.
- To undertake and publish an analysis of available evaluation material. The aims of this analysis would be to:
 - identify common indicators and trends relating to the development and use of cultural information resources;
 - identify common issues relating to the provision of digital cultural resources;
 - identify gaps in available research and propose an evaluation research agenda for the future.

In January 2003 a call was issued across the international library, digital library, museum and archive domains using professional email lists. Significant interest in the project was stimulated with many of the contributors of the 86 documents received during the initial stage, requesting access to the results.

A dataset documenting the material received, was prepared using the Dublin Core Metadata Element Set as a basis for the record structure. Headings were adapted for use to reflect the particular nature of the research, in particular to enable the recording of aspects of the evaluation methodologies used by different projects.

A positive finding was the number of evaluation reports which reflected the extensive use of first-hand encounters with users in gathering feedback. Less positive was the relatively low number of returns which documented the results of the later stages of the evaluation process. Organisations appear reluctant to divulge information which may be commercially or otherwise sensitive.

A number of issues were identified and recommendations made for future work which might be considered by the Forum. Potential contributors should be reassured of this project's aim to draw common messages about evaluation techniques and results, and not to divulge information confidential to specific projects. Furthermore, given the extent of interest in the research work, the resulting dataset (with links to documents where available) should be published online in order to encourage the developers and managers of digital resources to learn from the experiences of other projects. There is a clear need for the community to agree and provide guidance on, good practice in undertaking evaluation work. Finally, the quality of the documents received suggests that there are common lessons to be gleaned from the further analysis of the available material, which has been commissioned by the Forum to be undertaken in July 2003.

Project Background

The Cultural Content Forum is a recently-formed international grouping which exists to harness expertise and forge consensus amongst agencies worldwide engaged in setting policy for the digitisation and online delivery of our global cultural heritage.

Towards the end of 2002 the Cultural Content Forum agreed to undertake a research project, the purpose of which was to collocate information about evaluation work and thereby aiming to inform the wider cultural community about existing user research and evaluation. It was planned that subsequent analysis of available research should inform the development of evaluation and user research strategies in the future. In January 2003 the Forum therefore invited all cultural organisations to contribute the results of user studies undertaken in relation to their digital resources.

Partly in response to the phased funding, it was proposed that the review should be undertaken in two stages as follows:

Stage 1

To research and publish a catalogue of evaluation undertaken relating to digital cultural information resources.

Stage 2

To undertake and publish an analysis of available evaluation material. The aims of this analysis would be to:

- identify common indicators and trends relating to the development and use of cultural information resources;
- identify common issues relating to the provision of digital cultural resources;
- identify gaps in available research and propose an evaluation research agenda for the future.

In December 2002 funding was identified to undertake Stage 1 of the proposed project, consequently in January 2003 a call for evaluation material was issued to cultural organisations worldwide. This report describes the process of gathering and recording the evaluation material received as a result of that call. It also sets out some initial findings which were presented to the Cultural Content Forum at its meeting in Pistoia, Italy, in March 2003, together with a description of issues identified for further investigation. Finally, the report outlines the planned analysis of the evaluation material, to be undertaken during July 2003.

Scope of review

The call for evaluation material was issued to all the major professional email lists, both national and international, and covering the museums, archive, library and digital library domains. In addition, where specific organisations were known to be particularly active in this area, approaches were made in person to appropriate individuals.

The scope of the contributions which were invited included any published or unpublished material relating to the evaluation of digital cultural resources. The call requested evaluation material relating to digital resources delivered via:

- in-gallery or other on-site applications within libraries, archives and museums;
- CD-ROM-based or other desktop or mobile applications;
- the World Wide Web or other remote or internet-based applications.

Material could include existing qualitative and quantitative evaluation and user information, for example:

- evaluation of specific applications and services;
- user surveys;
- non-user surveys and market research;
- website usage statistics (where these could be attributed to a specific cultural resource as opposed to a general website with some cultural content).

It was envisaged that much of the material which to be reviewed would fall within the category of 'grey literature'; that is, material which had not been formally published, and/or material developed for specific applications within an organisation as part of a development project. Contributions of this type of material were therefore particularly encouraged.

Aims of Stage 1

Since funding was initially available for Stage 1 only, the original aims of the proposed Stage 1 of the review were refined in order to extract maximum value from what was essentially a small-scale project. The specific aims of Stage 1 were to:

- issue the call requesting evaluation material;
- create a descriptive catalogue of the material able to be used by researchers and content creators;
- provide an overview of the material available.

In this way it was hoped to ensure an end result of Stage 1 which would be of value in itself, but which would also lead into a subsequent analysis phase if required to do so.

Survey and respondents

The call for evaluation material was issued in January 2003 and is provided in Appendix 1 of this report. Respondents were allowed five weeks to respond. It was recognised that many organisations might be wary of disclosing proprietary and/or sensitive material to a wider audience. Therefore, bearing in mind these likely concerns the project sought to reassure potential contributors that the confidentiality of evaluation material would be upheld if so requested. It was emphasised that the aim of the project was to draw common lessons from work undertaken across the community, not to highlight or expose specific projects. However it was also made clear that unless confidentiality was requested, all material received will be acknowledged in any resulting publication. As planned, following the posting of the call to the major professional email lists, additional follow-up requests were made to personal contacts.

All respondents received an acknowledgement and it quickly became apparent that there was widespread interest in the project. Most contributors were keen to see the end product published and distributed, not simply in order to acknowledge their contribution but in order to further their own work in this area. Indeed since the survey (and prior to the publication of the eventual dataset on the Cultural Content Forum website) a number of follow-up requests to see the results have been made to the researcher.

Although an initial deadline of February 7th was set, contributions continued to arrive (and in fact continue to arrive at the time of writing this report). Contributions continued to be logged and described up to the Pistoia meeting in March 2003.

It was proposed that contributions be catalogued using a format based on the Dublin Core Metadata Element Set¹, and using an appropriate vocabulary to enable the recording and retrieval of different types of evaluation material. This approach proved to be a practical and successful solution and enabled the identification and recording of key characteristics. The format used is provided in Appendix 2 of this report.

Overview of results

At the time of the report submitted to the CCF meeting in February 2003, thirty individual respondents had contributed material. However eighty six separate evaluation documents had been catalogued and these represented the results of work undertaken by over one hundred separate organisations. The reason for the substantial discrepancy between the number of contributors, the number of items and the original sources of evaluation work were twofold. First, a number of documents were submitted by publishers of professional websites and journals and by publishers of conference proceedings. Second, some submissions provided references to the work of large, often collaborative projects and funding programmes, such as the New Opportunities Fund's NOF-Digitise² programme in the United Kingdom³.

¹ <http://www.dublincore.org/documents/dces>

² www.nof-digitise.org and/or www.enrichuk.net

³ Individual evaluation documents from the NOF-Digitise Programme will be included in the Stage 2 analysis.

The majority of documents submitted were in English and originated from Australia, Canada, the United Kingdom and the United States of America. The call was translated into Spanish and posted on a number of additional European email lists. Consequently a small number of non-English-language contributions were received from Spain, Portugal and Germany. A number of responses related to projects which had been undertaken in non-Anglophone countries but where the results had been published in English.

The contributions received encompassed a wide range of publication types. The included:

- evaluation commissioned in relation to specific digital resources;
- print-based journal articles;
- in-house publications and reports;
- online publications;
- conference papers.

These categories were not exclusive however; for example, a conference paper might be reporting on evaluation undertaken for a specific digital resource.

Describing evaluation material

As noted above, the Dublin Core headings were adapted for use in describing the evaluation material received. The decision for this was based on:

- an initial review of material to identify commonalities of form and stated content between the different contributions;
- experience drawn from the earlier analysis of built-heritage and environment resource evaluation in the UK⁴.

Appendix 2 describes the way in which the Dublin Core headings were used to describe documents; also provided are examples of the controlled vocabulary used for sorting and retrieval.

The time available did not permit the evaluation material to be read fully in order to prepare the catalogue. Descriptions of the documents were derived from the titles of documents, from abstracts where available and from a review of introductory paragraphs and executive summaries where necessary. The catalogue was completed using Microsoft Excel; it was felt that this provided the best opportunity for manipulation and subsequent publication and/or export of the data while keeping the database configuration effort to a minimum.

⁴ The *Users and Uses of HEIRs* research was undertaken by the Cultural Heritage Consortium on behalf of HEIRNET (the Heritage and Environment Information Resources Network), in 2002. The resulting report and recommendations can be found at www.britarch.ac.uk/HEIRNET/publications.html.

Of the headings adapted from the Dublin Core Element Set, those of particular interest in relation to the initial description and analysis provided in this report, were the following:

Heading	Usage
<i>Subject</i>	Used to describe the category of evaluation which was undertaken – e.g. market research, formative evaluation, summative evaluation.
<i>Description</i>	Used to provide a brief summary of the research undertaken and the scope of the resource.
<i>Type</i>	Methodologies used and documented in the research – e.g. interviews, focus groups, analysis, questionnaires.
<i>Identifier</i>	Reference to online publication where available.
<i>Audience</i>	Specific audiences targeted by the digital resource being evaluated, and therefore the subjects of the evaluation. Examples include: general, research, higher education etc.
<i>Coverage</i>	The geographic and professional community to which the research is applicable – e.g. libraries, museums, archives, as well as country of relevance.

It is recognised that the usage of some of the headings was not quite as set out within the Dublin Core guidelines. For example, the use of *Audience* relates to the target audience of the resource being evaluated rather than the report itself. It was felt that given the specialist nature of the catalogue this approach was more appropriate. All the reports themselves are targeted at a professional audience. It is the digital resources being evaluated which are of interest to the users of the catalogue and so it seemed sensible to provide that audience with the information they would find most useful.

Multiple values were entered for all elements where appropriate, particularly where more than one methodology had been deployed, or where the evaluation fell into two or more categories of evaluation research.

Subject

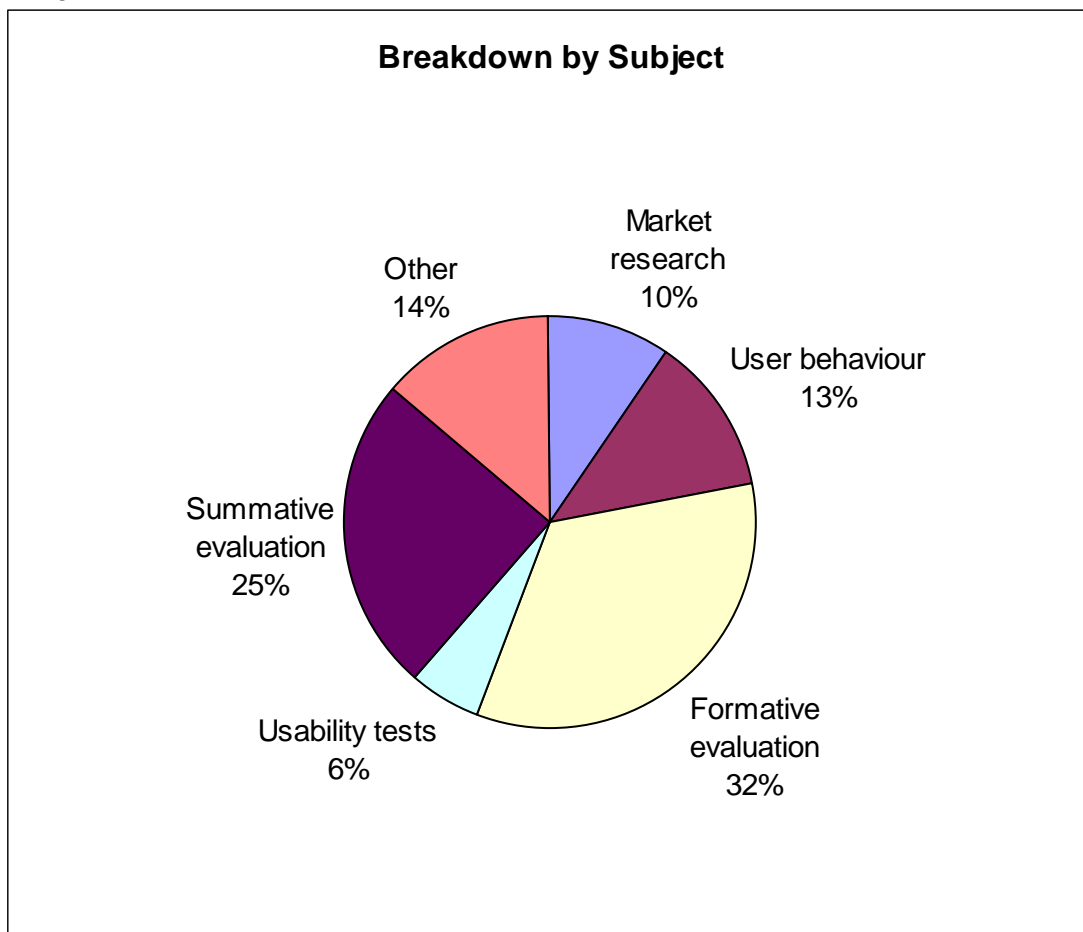
By using subject to describe the category of evaluation undertaken, users of the catalogue were being provided with an indication of how relevant the evaluation was likely to be to their project or research interests. The category of evaluation being undertaken provides a context for whichever methodology is used within the evaluation process. For example, a researcher interested in the results of summative evaluation of the delivery of services by digital libraries might be equally interested in summative evaluations undertaken in other domains. However the techniques used in market research, user behaviour studies or formative evaluation are likely to be very different even within the same subject area. To a certain extent each category represents a distinct stage in what might be viewed as a 'life cycle' of evaluation for a specific project. For example, a project might be initiated with market research, followed by formative evaluation, usability studies and completed with summative evaluation and impact evaluation.

Over thirty percent of the documents received contained formative evaluation results whereas those containing summative evaluation represented only twenty five percent of the total. However if the total number of documents relating to the development of digital resources (i.e. market research, user behaviour and formative evaluation) is compared to the total relating to post-development research (usability testing, summative research) the difference is more marked, with almost two thirds of the

sample containing evaluation relating to the development of resources and fewer than one third of the documents relating to post-development evaluation. The smaller proportion of usability studies and summative research appears to suggest organisations' reluctance to share research findings at the later stages of the evaluation life cycle. It could be assumed that this reflects organisations' disinclination to share potentially sensitive information, either for political or professional reasons; equally it may be that the later stages of evaluation are not carried out, although anecdotal evidence does not necessarily support this, especially in the Higher Education sector. Some contributors were equally concerned about research undertaken in the context of the earlier stages of evaluation in that they were keen to protect what was regarded as a clear commercial advantage afforded them by the methodologies deployed in market research and formative evaluation, and the results they obtained as a result.

Remaining documents related to the analysis of specific types of information service, research into evaluation methodologies and analysis of website statistics; individually none of these categories represented a significant proportion of the total.

Figure 1



Description

The Description heading was used to provide a brief abstract or narrative description of the project, including where appropriate and/or available:

- the scope of consultation which had been undertaken
- the purpose of the project
- the relevance of the methodologies deployed

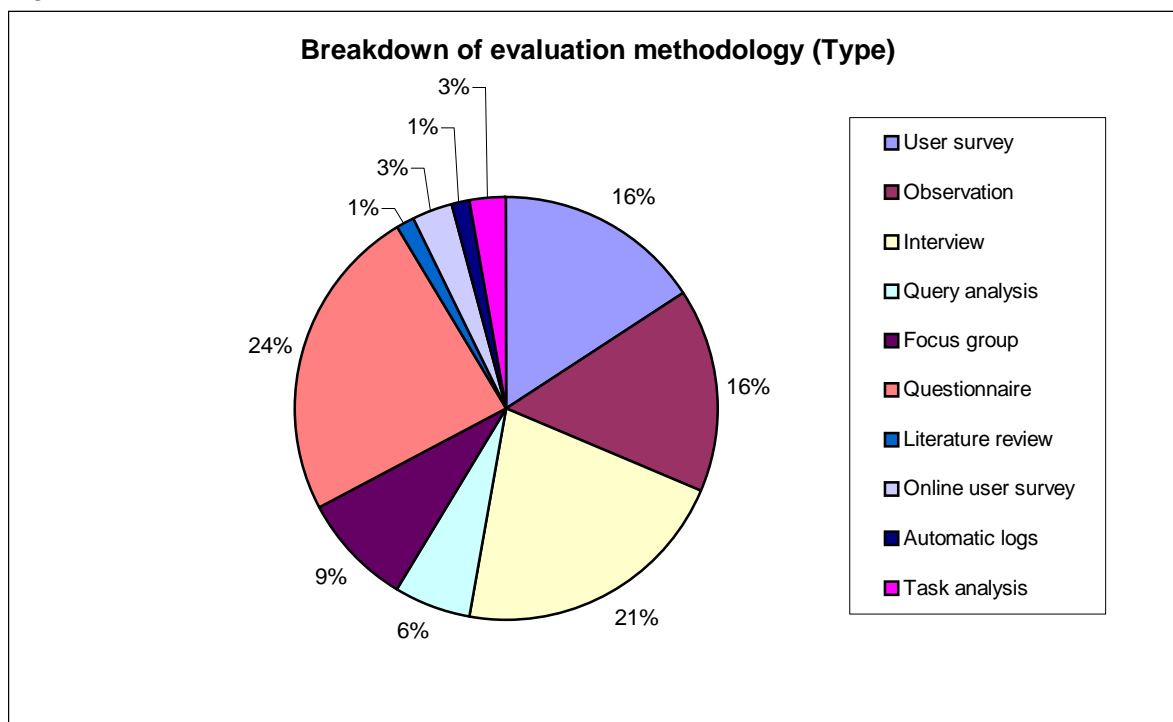
Although many resources were very rich and extensive, there were others which were not as extensive, or which were providing a synthesis of results. However no attempt was made to distinguish levels of detail, size or quality of resource. This was for a number of reasons, including the lack of time to review each resource properly, as well as the fact that some contributors had intentionally provided a synopsis of results for reasons of confidentiality and it would have been inappropriate to impose a value judgement as a result.

Type

The Type heading was used to record the evaluation methodologies and tools used, and was documented where this could easily be established from abstracts or summaries, or from scanning the introductory paragraphs. As such, this is an indicative representation of the methodologies used in the evaluation received. Although it is not a rigorous analysis however, it provides an indication of the proportions of different methodologies used in the evaluations.

It is particularly significant that a large number of evaluation studies were based on direct contact with users. Projects using interviews, focus groups, direct observation, task analysis and other first-hand methods represented well over half of those projects where methodologies were able to be identified. This suggests that the quality of results achieved by projects is likely to be relatively reliable within individual projects. The single largest method of obtaining user feedback was the use of questionnaires which although not requiring first-hand interaction with users, nevertheless can represent a sound qualitative approach to obtaining user information and overall, indicates the extent to which researchers have been unable or reluctant to rely on automated user feedback techniques in order to obtain qualitative information about users and their uses of resources.

Figure 2



Identifier

The Identifier heading was used to provide a URL of the original evaluation document, where available. Approximately half of documents are available online, although many are only provided in summary form. However half of the remaining material is available in digital form (e.g. MS Word or PDF formats) and has simply not been made publicly available. Since many providers did not express concern about the release of their evaluation material, this suggests that there is considerable potential to share evaluation results across the professional community. Interest in seeing the results of this project suggests that there is a demand for this, and that therefore there exists the potential for a successful awareness-raising exercise, encouraging and enabling organisations to share evaluation.

However, it is estimated that approximately one quarter of the material received was regarded (even in summary form) as confidential, either providing a competitive advantage to the creator, or regarded as too sensitive for publication.

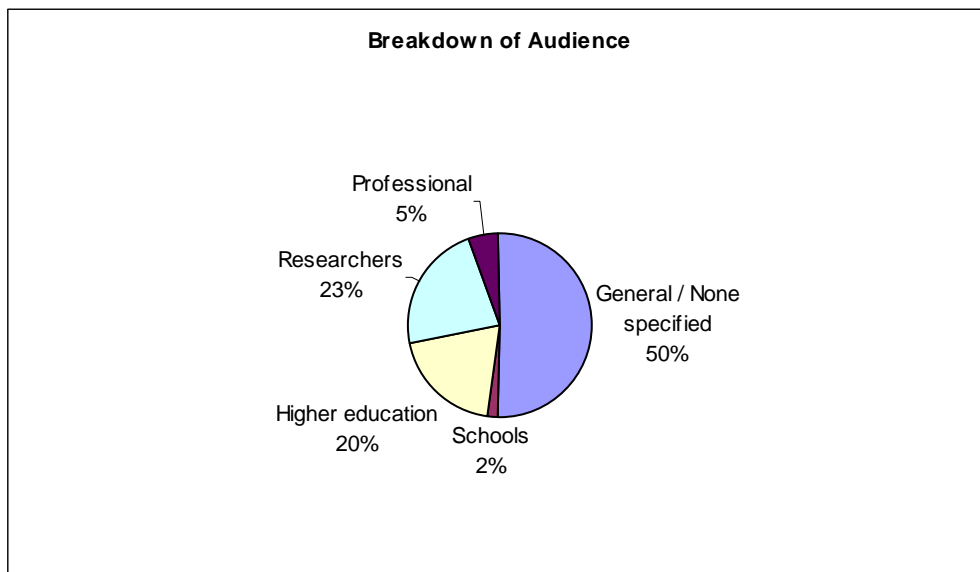
Audience

This heading was used not to document the audience of the evaluation document itself, but instead to record the intended audience of the digital resource being evaluated. It was felt that this provided a more appropriate use of the heading since all the evaluation documents were aimed at professional users and/or resource developers and managers.

In half the documents received, there was either no stated target or priority audience or if there was, it was not possible to determine this from the initial review. Some resources stated that they were targeted at a 'General' audience.

As can be seen in Figure 3, most resources for which evaluation material was received, were targeted at higher education or research users.

Figure 3



Coverage

This heading was used to indicate the professional, subject and geographic domain from which the evaluated digital resource originated.

Geographic domain

The geographic domain was recorded when the digital resource or the evaluation results were clearly relevant to a specific geographic area. For the purposes of this analysis online resources were regarded as being of global relevance, however if the subject matter pertained to a specific locality, or if the sample user group had a significant national or local bias, a geographic domain was recorded. Simply because a resource was created in the USA for instance, did not result in a document's allocation to that geographic domain. Items recorded as 'international' were regarded as having a specific international dimension.

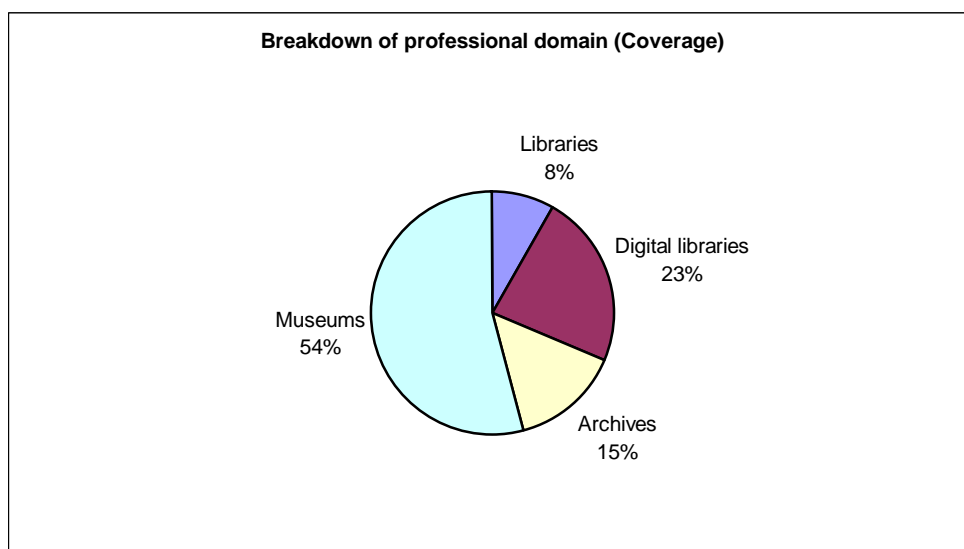
Professional domain

The cultural sector comprises a wide range of professional domains, however in the case of this survey over half the material received originated from within the museum sector. Some evaluation related to in-gallery applications, others from web-based services. There was a clear emphasis within this sector on the importance of engaging with, and obtaining feedback from, specific audiences.

The distinction between 'libraries' and 'digital libraries' was made normally on the basis of a statement of origin within the material itself. There was a tendency towards the use of this distinction in material originating from the US. Generally, digital libraries appeared to provide access to a greater diversity of material in terms of presentation and format, than did the material originating from within the libraries domain.

Subject domain

Examples of subject areas included art, digital images, archaeology and computer science. Subjects were not recorded unless there was a specific emphasis on subject area which was immediately evident from the initial review.



Medium of delivery

Where the evaluation of information services related to a particular medium of delivery, this too was recorded under Coverage, since it appeared to affect the scope of relevance of the evaluation. User behaviour does differ according to the way in which they experience and information resource; for example in-gallery applications aim to engage real-life visitors in the context of an exhibition and are usually much more confined in the scope and form of content offered than a website, for example.

Non-respondents

There were three categories of organisation from whom it was difficult or impossible to obtain material. These were:

- single institutions with a significant investment in, or perceived to have a leading role in, the field of digital resource evaluation;
- membership, semi-commercial and commercial organisations for whom an investment in evaluation represented a commercial advantage;
- single organisations reluctant to divulge application-specific evaluation, or who had recently undertaken evaluations of new or relatively new online information services.

In some instances repeated advances were made to named individuals who were either reluctant to share evaluation material, or significantly, were uncertain about their organisation's policy on providing access to material which might either be sensitive or require significant effort to collocate for the purposes of this survey.

Issues arising within Stage 1

Of the issues which it was possible to identify within the project, there are three areas which any future similar project should consider addressing. They are as follows:

Encouraging sharing of evaluation material

Despite the efforts made to reassure potential contributors within the current project, many organisations still had reservations. These may be overcome in the future by being able to demonstrate that the use of evaluation material to identify common issues across services, need not jeopardise commercial or political priorities and that it is not necessary to divulge details of specific evaluations.

Quality assessment of evaluation material

As previously noted, many of the evaluation documents received were of a high standard in that they were the result of applying robust methodologies and often relied on first-hand encounters with users. A minority of contributions however, were less rigorous and demonstrated the lack of awareness of established good practice in the field. The rate of low returns from some professional domains also indicates that evaluation is not held to be a priority activity in some areas, despite the fact that the provision of online and digital services is a core activity.

Coverage of potential evaluation material

The information recorded in *Coverage* and the number of non-respondents in key areas, demonstrates the uneven pattern of response from across the sector as a whole. In particular, the project has not been able to access what is assumed to be high-quality evaluation from some (but by no means all) key organisations. Efforts to redress this balance will continue in the proposed Stage 2 of the project; it is hoped also that obvious absences in the planned online dataset will encourage other organisations to contribute material in order to reinforce their professional standing within the cultural sector.

Recommended actions

The following recommendations should be considered by the Cultural Content Forum in order to extract the maximum value from the work already undertaken.

Providing access

There has already been demand from contributors wishing to have access to the catalogue of material which has been created. It is recommended that the catalogue be made available online as a means of providing access to existing evaluation, and that contributors who have not yet made their evaluation available online should be encouraged to do so, with links being made available from the *Identifier* heading within the dataset.

The Forum should also consider making available a self-entry form to enable contributors to record their evaluation projects online and to promote this as a means of helping the cultural sector improve the quality of evaluation and ultimately, to improve the quality of digital resources available to users. In order to further facilitate the recording of, and access to, evaluation sources, the Forum should consider publishing an XML schema for the description of evaluation resources, together with a declaration of a Namespace and associated guidance for the use of such a Schema

Analysis of material

The Forum should consider undertaking analysis of material already received, particularly where that analysis might have a broad application across the sector. The priority should be to identify common issues and findings which can be applied across the sector and throughout the evaluation process. It is likely that the most widely applicable findings will either be the results of market research and formative evaluation (i.e. those evaluation stages earlier in the life-cycle of the evaluation process) or methodological commonalities at all stages of the process.

Identifying remaining material

A substantial amount material has yet to be collocated. The most easily accessible evaluation results are likely to be those already in the public domain in sources such as journals and conference presentations. These could be included in the catalogue on an ongoing basis; now that the format of the catalogue is more stable it is work which could be undertaken by students and researchers either on work placements, temporary contracts or as part of their own research.

Evaluating the evaluation

Once the evaluation resources are online, feedback from users should be invited, specifically relating to:

- the scope of the evaluation material;
- strengths and weaknesses of the current sample;
- suggestions of alternative sources of material;
- comments on the format and content of the catalogue.

These comments could be gathered easily using an online feedback form.

Providing guidelines and tools for good practice

Despite the significant number of evaluation projects which have involved the use of well constructed and rigorous methodologies, a number of evaluation projects are clearly less robust; other digitisation projects do not have any evaluation at all.

The benefits of introducing tools and guidelines in order to promote good practice in the evaluation of digital resource projects would be threefold as follows:

- digitisation projects would be encouraged do include evaluation where many do not
- those who do undertake evaluation would not have to reinvent the wheel and would be supported in implementing evaluation procedures which would result in more reliable results
- the use of guidelines would make it more feasible to extract common messages across projects; the relevance of evaluation results would pass beyond individual projects, thereby informing the cultural community as a whole.

The tools and guidelines might include online sourcebooks for evaluation methodologies and guidance on incorporating evaluation results into the development process. Where possible, tapping into the experience of professional and commercial communities beyond the cultural sector would also be a useful source of information and experience.

Proposed analysis in Stage 2

In April 2003 the Cultural Content Forum agreed to commission further analysis of the documents received during Stage 1 of the *Evaluation of digital cultural content* project. This report is the first deliverable of Stage 2; subsequent deliverables will include the analysis of the available material to provide initial answers to two areas of particular interest to the Forum as follows:

Identifying user profiles

This analysis will build on the additional analysis above to identify and define a range of user profiles for use in undertaking evaluation work and for establishing methodologies for the comparison of evaluation results across projects and domains.

This is exploratory work which will:

- set out the issues involved
- assess the potential for addressing and resolving these issues with the data to hand
- map out appropriate consultation, analysis and research work which would be required to reach a wider consensus.

The identification and definition of metrics and measurements used in evaluation projects

The aim of this deliverable is identify and define metrics and measurements used in evaluation projects, and assess their potential for implementation across different evaluation projects.

This is also exploratory work which will:

- set out the issues involved
- assess the potential for addressing and resolving these issues with the data to hand
- map out appropriate consultation, analysis and research work which would be required to reach a wider consensus.

This work will be completed by the end of July 2003.

Appendix 1

Call for submission of evaluation material

Apologies for any cross-postings

Cultural Content Forum - Evaluation of digital cultural resources

REQUEST FOR EVALUATION MATERIAL

The Cultural Content Forum (www.culturalcontentform.org) is undertaking a research project to synthesise results from existing surveys of user expectations and experiences with the digitised cultural heritage. Cultural organisations worldwide are requested to submit existing published or unpublished material relating to the evaluation of digital cultural resources for review and analysis.

The Cultural Content Forum is a recently-formed international grouping which exists to harness expertise and forge consensus amongst agencies worldwide engaged in setting policy for the digitisation and online delivery of our global cultural heritage.

The review of evaluation material will be undertaken in two stages through to the middle of March 2003, as follows:

Stage 1:

Research and publish a catalogue of evaluation undertaken relating to digital cultural information resources

Stage 2:

Undertake and publish an analysis of available evaluation material. The aims of this analysis will be to:

- identify common indicators and trends relating to the development and use of cultural information resources;
- identify common issues relating to the provision of digital cultural resources;
- identify gaps in available research and propose an evaluation research agenda for the future.

In collocating information about evaluation work the CCF aims to inform the wider cultural community about existing user research and evaluation. It is intended that the analysis of available research will inform the development of evaluation and user research strategies in the future. It is envisaged that much of the material to be reviewed will fall within the category of 'grey literature'; that is, material which has not been formally published, and/or material developed for specific applications within an organisation as part of a development project. Contributions of this type of material is particularly encouraged.

Bearing in mind the potentially sensitive nature of some evaluation projects the confidentiality of evaluation material will be upheld if required; the aim of the project is to draw common lessons from work undertaken across the community, not to highlight or expose specific projects. Unless confidentiality is requested, all material received will be acknowledged in any resulting publication.

The scope of the review will encompass evaluation material relating to digital resources delivered via:

- in-gallery or other on-site applications within libraries, archives and museums;
- CD-ROM-based or other desktop or mobile applications;
- the World Wide Web or other remote or internet-based applications.

The review will encompass existing qualitative and quantitative evaluation and user information, including (but not limited to):

- evaluation of specific applications and services;
- user surveys;
- non-user surveys and market research;
- website usage statistics (where these can be attributed to a cultural resource).

The review is being undertaken on behalf of the CCF by Alice Grant Consulting. Evaluation material in digital form or queries about the review should be submitted to agrant@alicegrant.com or in the case of paper-based evaluation material, mailed to:

Alice Grant Consulting

Fengate Farm

Fengate Road

West Pinchbeck

Spalding

Lincolnshire

PE11 3NE

United Kingdom

Material is requested by FRIDAY FEBRUARY 7th 2003

Acknowledgement of receipt of material will be sent to all contributors, however paper-based documents or digital media will not be returned except by prior arrangement.

The Cultural Content Forum is facilitated by:

CIMI Consortium for the Computer Interchange of Museum Information (www.cimi.org);

Resource: The Council for Museums, Archives and Libraries (www.resource.gov.uk)

UKOLN's Interoperability Focus (www.ukoln.ac.uk/interop-focus/)

Appendix 2

Use of Dublin Core Metadata Element Set for the description of evaluation material

Element name	DCMES Definition	Use of DC Elements by CCF Evaluation Review	Details of vocabulary used where appropriate.
Title	A name given to the resource.	The title of the evaluation report	Not applicable
Creator	An entity primarily responsible for making the content of the resource.	The author of the evaluation report. Where the individual is a staff member of an organisation both the individual and the organisation are documented	Not applicable
Subject	A topic of the content of the resource.	The category of evaluation which is described in the report.	"evaluation methodology" "formative evaluation" "impact evaluation" "market analysis" "market research" "organisation survey" "query analysis" "summative research" "usability testing" "user behaviour" "website usage statistics"
Description	An account of the content of the resource.	A narrative summary of the research based on an abstract, executive summary or introductory paragraphs.	Not applicable
Publisher	An entity responsible for making the resource available	The organisation(s) who commissioned the report, or (in the case of journals and conference papers) published the report.	Not applicable
Contributor	An entity responsible for making contributions to the content of the resource.	Additional authors involved in the creation of the report or in the execution of the evaluation.	Not applicable
Date	A date of an event in the lifecycle of the resource.	The date when the evaluation or research was undertaken	Not applicable

Type	The nature or genre of the content of the resource.	The evaluation methodology used. Where more than one methodology was used, all are documented.	“analysis” “automatic logs” “evaluation theory” “interview” “focus group” “literature review” “observation” “online user survey” “query analysis” “questionnaire” “task analysis” “usability tests” “user survey” “user trials” “workshop”
Format	The physical or digital manifestation of the resource.	The physical or digital format of the document as provided to the CCF.	“HTML” “Excel” “PDF” “Word” “printed” “digital files” “ASCII text” “RTF”
Identifier	An unambiguous reference to the resource within a given context.	The online location of the document in the form of a URL where available.	Not applicable
Source	A Reference to a resource from which the present resource is derived.	The person or organisation who submitted the document to the CCF review.	Not applicable
Language	A language of the intellectual content of the resource.	The language of the intellectual content of the resource.	“English” “German” “Spanish” “Portuguese”
Relation	A reference to a related resource.	Details of the publication, series or event of which the document forms a part (“Part of” heading	Not applicable

		used in dataset)	
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<p>Coverage</p>	<p>The extent or scope of the content of the resource.</p>	<p>The professional, geographic or subject domain from which the document originates, and the means of delivery of the information service. Multiple values recorded if necessary.</p>	<p><i>Geographic coverage</i> "Australia" "Canada" "France" "international" "UK" "USA"</p> <p><i>Professional domain</i> "archives" "built heritage" "digital libraries" "libraries" "museums" "picture libraries"</p> <p><i>Subject domain</i> "art" "arts" "archaeology" "computer science" "digital images" "teaching"</p> <p><i>Medium of delivery</i> "audio guide" "electronic textbooks" "in-gallery application" "portable devices" "virtual reality" "websites"</p>
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Rights	Information about rights held in and over the resource.	The copyright holder of the document where known.	Not applicable
Audience	The target audience of the resource	The target audience of the digital resource which was evaluated.	“general” “schools” “higher education” “researchers” “museum staff” “professional”