

DIGITAL CULTURAL HERITAGE – CHALLENGING MUSEUMS, ARCHIVES AND USERS

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ABSTRACT

This article* will analyse the many challenges that creating, storing and using digital heritage has brought to the memory institutions and their professionals. We look at the interrelationship between the potential users of the museum collections, the collections themselves and information and communication technologies as intermediaries to these relations. By analysing survey data, we look at the average Internet user in order to find out who could be the current and future users of the online collections. In addition that, we analyse interviews conducted with 12 members of different Estonian memory institutions in order to understand their perspective on online cultural heritage. Third empirical pillar of the article comes from the two focus group interviews to understand what are users perceived needs for the digital cultural heritage. The data will be analysed through three key functions of the memory institutions in order to understand how digitisation helps with preservation, opening access to the collections and inviting audiences to become active participants and increasing their involvement with cultural heritage.

KEYWORDS: Internet users • digital heritage • cultural heritage online • memory institutions • heritage professionals

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INTRODUCTION

Several studies claim that today's museums think too little about who the users of their online sites are, why the users go to these sites and how museums could better adapt the sites to their needs (Farber, Radensky 2008; Roberto 2008; Salgado 2008; Samis 2008). At the same time, there is a strong consensus that online space is very important in providing the pre- and post museum visit experience (Filippini-Fantoni, Bowen 2007; Fisher, Twiss-Garrity 2007; Durbin 2008). In addition to extending the museum experience online, Estonian museums are facing the task of digitising increasing numbers of artifacts (texts, photos, films, objects, etc.) in order to place them in online digital storage spaces. According to the Estonian Digital Cultural Heritage Strategy (*Eesti...* 2003) the aim of the memory institutions is to transfer cultural heritage in a uniform way to (almost) everyone, widen and expand the user groups and introduce Estonian cultural heritage outside the state borders and language space. As we learn from the Estonian perspective, cultural heritage is defined by state apparatuses and official institutions, by administrators and cultural engineers, whose task is to reproduce national culture and promote the identification of citizens with that culture. In most of the cases this is done in line with Bendix (2000: 38) who says that heritage can be distinguished from other ways of aligning the past with the present by, "its capacity to hide the complexities of history and politics".

Museums are facing many challenges connected with digitising their materials. In many ways, these challenges correspond to those that museums have faced for centuries. The focus is on the interrelationship between the users and the museums' collections; modern technologies are only one possible intermediary for these relationships. The classical roles of the museum are collecting, preserving, research and basic interpretation. In general, museums, especially if they are publicly funded, are seen as being obliged to give things back to society in order to "justify their existence", and according to Fleming (2007), this could be seen as the social responsibility of the museum. For Fleming, this responsibility is met when staff commit themselves to identifying and meeting the needs of the public, and when they place this at the head of their priorities (*ibid.*). Digitisation and making cultural heritage materials available online as subscribed to by the Estonian Digital Cultural Heritage Strategy (*Eesti...* 2003) could be seen as one possible way of taking care of those responsibilities. In a country where public services are increasingly provided in online environments, museums face similar pressures from users and administrators.

RESEARCH DESIGN

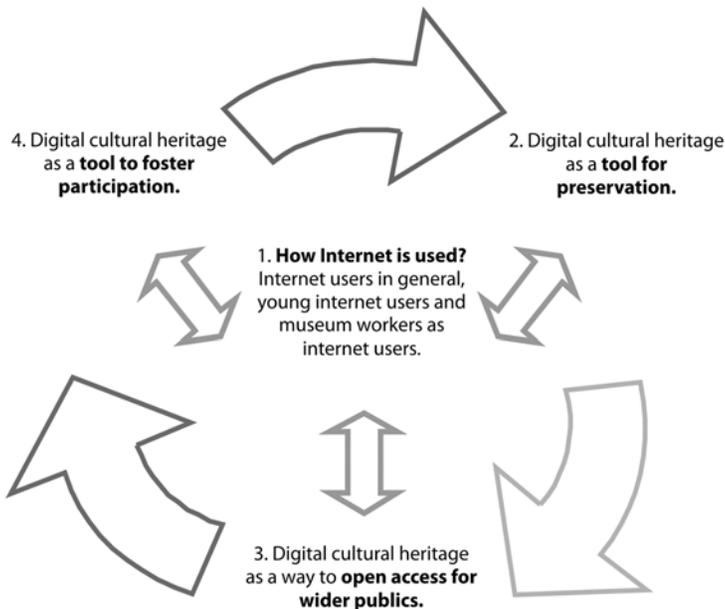
This article aims to gather several data sets in order to understand the dynamics that exist between employees of the cultural institutions as providers of digital content, and youth groups as potential target audiences. The article starts by questioning the notion that there is an average Internet user through survey data. By identifying and drawing on six Internet user types, we continue to compare the insights from statistical analysis to materials from qualitative interviews. In 2008 12 semi-structured interviews were conducted in four memory institutions in Tartu¹ (the second biggest city in Estonia) with

the aim of opening a discussion about digitising and communicating cultural heritage. In addition, two focus group interviews² were conducted with young people (one with secondary school pupils and another with university students and young researchers) in order to find out how they would like to use cultural heritage.

For the memory institutions the digitisation of cultural heritage materials is seen to fulfil three basic needs relating to memory institutions: it serves as an aid to preservation; as way of opening access to wider publics; and as a way of inviting audiences to become active participants in introducing, learning and being involved with cultural heritage, either through the given interpretations or by inviting the community to give their own meanings to the cultural heritage materials stored in the museums. At the same time for young audiences, cultural heritage in general is seen as necessary for understanding both the past and also collective memory, mainly in the context of research projects and school papers. The role of memory institutions is seen as the systematic safe keeping of heritage for future generations, and thus is in line with the first two aims of the memory institutions' digitisation projects, although much less in accordance with the participatory focus.

Figure 1 gives an overview of the research design. We start by analysing Internet use, as in many ways how the Internet is used reflects how the Internet is conceptualised. We then use statistical analysis of the general population as a backdrop for more focused study of heritage professional's Internet use. In this way museum workers' basic Internet use is reflected in how they provide cultural heritage for the general population, and vice versa. As young people are generally seen as the key target group for online heritage, mainly because they are future users, online tools are seen as a way to foster interest in heritage among them. Thus we look at how the practices of Internet use differ between the key groups.

Figure 1. Overview of the research design.



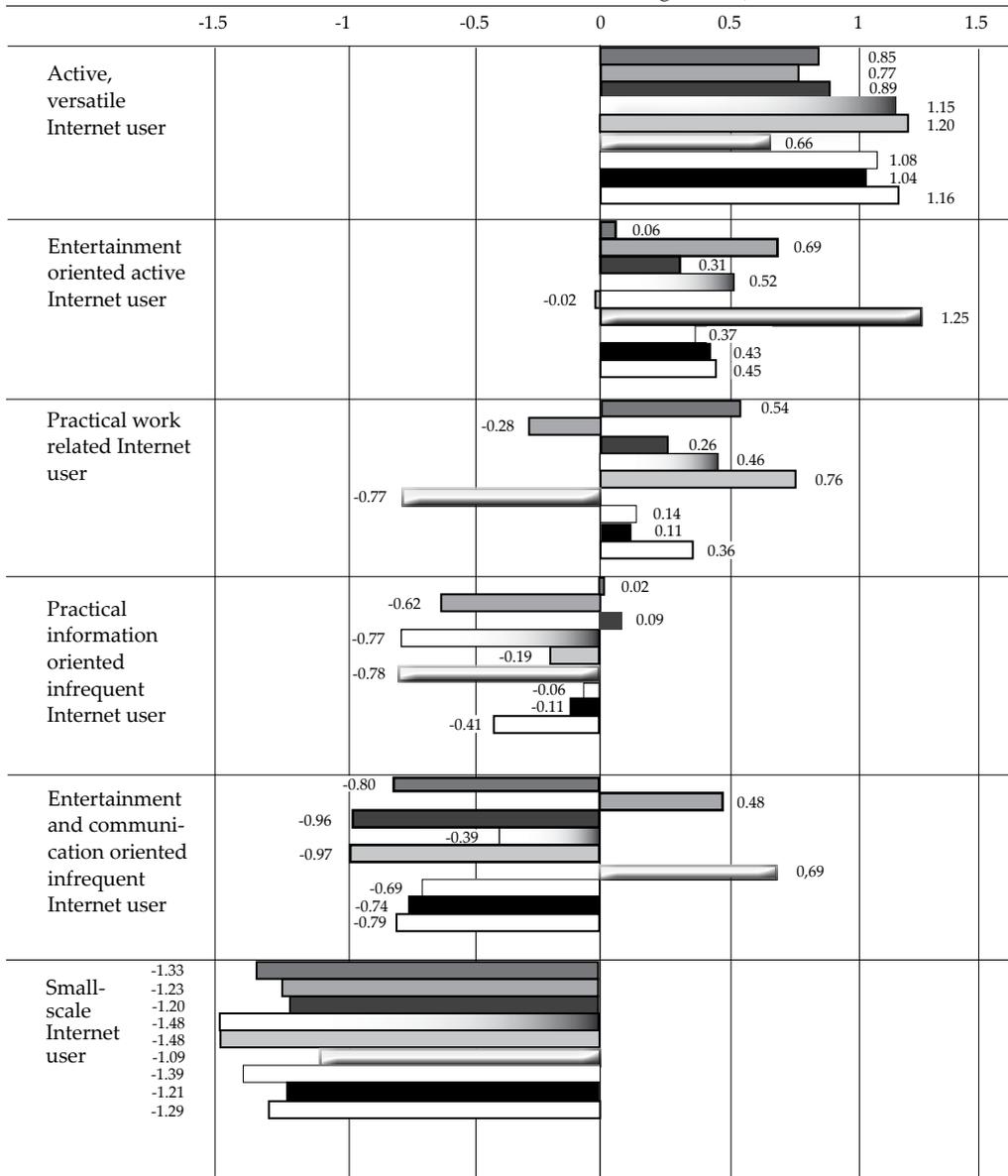
We will also look at the three key aims that memory institutions have set as targets in the digitising of their collections. Online access and digital collections are supposed to help with preservation, open access and fostering participation and so the article also analyses how well these aims are met. The article concludes with some general considerations drawn from the discussion section.

THE AVERAGE INTERNET USER AND THE MUSEUM

As many authors have analysed, it is very important to understand the Internet user within the museum context, as the online representations of a museum give a very important pre- and post-museum visit experience (Filippini-Fantoni, Bowen 2007; Fisher, Twiss-Garrity 2007; Durbin 2008). In order to give an empirical description of the “average” Internet user, we use data from the University of Tartu survey *Mina. Maailm. Meedia* (Me. The World. The Media). The survey was conducted in cooperation with a survey company and composed by a research team from the University of Tartu. The representative sample consisted of 1,507 people aged between 15 and 74 and it enables us to describe inhabitants of Estonia based on their Internet use practices and to have some insight into their attitudes towards digital culture and content creation. Through cluster analysis, we have reached six basic Internet user types who are similar to those described in our previous studies (Runnel, Pruulmann-Vengerfeldt 2004; Pruulmann-Vengerfeldt 2006; Runnel, Pruulmann-Vengerfeldt, Reinsalu 2009). The types have remained fairly stable (Kalmus, Keller, Pruulmann-Vengerfeldt 2009), thus enabling us to make assumptions on future Internet use as well.

In general, the types can be divided into two broader types, each of which has three subtypes. On the one hand, more active Internet users (varied use, practical and pragmatic information-based use, entertainment and communication-oriented use) and, on the other hand, three types of more passive Internet users. These types include users oriented towards information and entertainment as well as infrequent users who come into contact with the Internet so rarely that it is impossible to distinguish clearly developed practices of use. Figure 2 provides an overview of the online activities of the user types, comparing their frequency of engagement in the most popular activities and activities related to digital culture. It also gives a comparison of Internet users according to the nine most distinguishing Internet user practices. Respondents rated on a scale of 1–7 how important this activity was for them. On average, the responses ranged from 2–4, depending on the activity. In the figure, one can see the variation from the average, marking how much this particular activity was considered more/less important than the average response.

Figure 2. Nine online activities distinguished by Internet users types (numbers indicate deviation from the mean scores of the average users).



- Using online banking
- Communicating with friends
- Seeking practical information
- Seeking work and study related information
- State provided e-services
- Seeking entertainment (games, movies, music)
- Following online journalism and news portals
- Seeking information to improve your private life
- Using online databases (libraries etc.)

Source: Mina. Maailm. Meedia. (Me. The World. The Media.) 2008

Active, versatile Internet users (14 per cent of all Internet users) are more active with regard to all manner of Internet use compared to the other groups. For them, the Internet is an environment where they satisfy their need for information, entertainment, belonging and participation (Figure 2). This type includes a greater proportion of women, people aged 20–39, and people with a higher education. Together with the next Internet user type, they are actively contributing online content. Uploading photos is the most common activity where content is provided in the online environment and social networking sites come second in online content creation practices.

Entertainment oriented active Internet users (20 per cent) concentrate mainly on searching for entertainment, watching/listening to TV and radio shows through the Internet, and also on the consumption of culture. This type of user is generally active, however, and tends to search for information and use the Internet to gain access to practical services if necessary. This user type includes people who consider it important to participate in blogs and forums. The largest number of Internet users of this type belongs among the 15–29 age group, with the Russian-speaking population being represented slightly more among the entertainment-oriented active users. This group is most active when it comes to different forms of content creation. They upload photos and videos, and participate in forums and social networking sites.

Practical work related Internet users (22 per cent) focus primarily on information and practical activities, in addition to being significantly more active than average in using e-services. Their online communication is mainly work related and considerably less personal than that of the average Internet user. They also search for significantly less entertainment than the average Internet user. This group is dominated by women, people aged 30–49, people with a higher education and members of the Estonian-speaking population. In addition, people belonging to this group are more likely to have an average or high income.

The largest group among the passive Internet users is the *practical information oriented infrequent Internet users* (20 per cent). Their Internet use is characterised by a somewhat higher than average use of information and slightly higher than average use of online banking solutions. At the same time, the variety of their online activities is somewhat larger than that of the next user type. This group more commonly includes older people, women and people with a secondary education.

The online activities of *entertainment and communication oriented infrequent Internet users* (15 per cent) are characterised by searching for entertainment as well as communication with friends and acquaintances, while their Internet use remains passive with regard to other purposes. This group includes more men, members of younger age groups and therefore also people with a basic education and those belonging to the lowest income group.

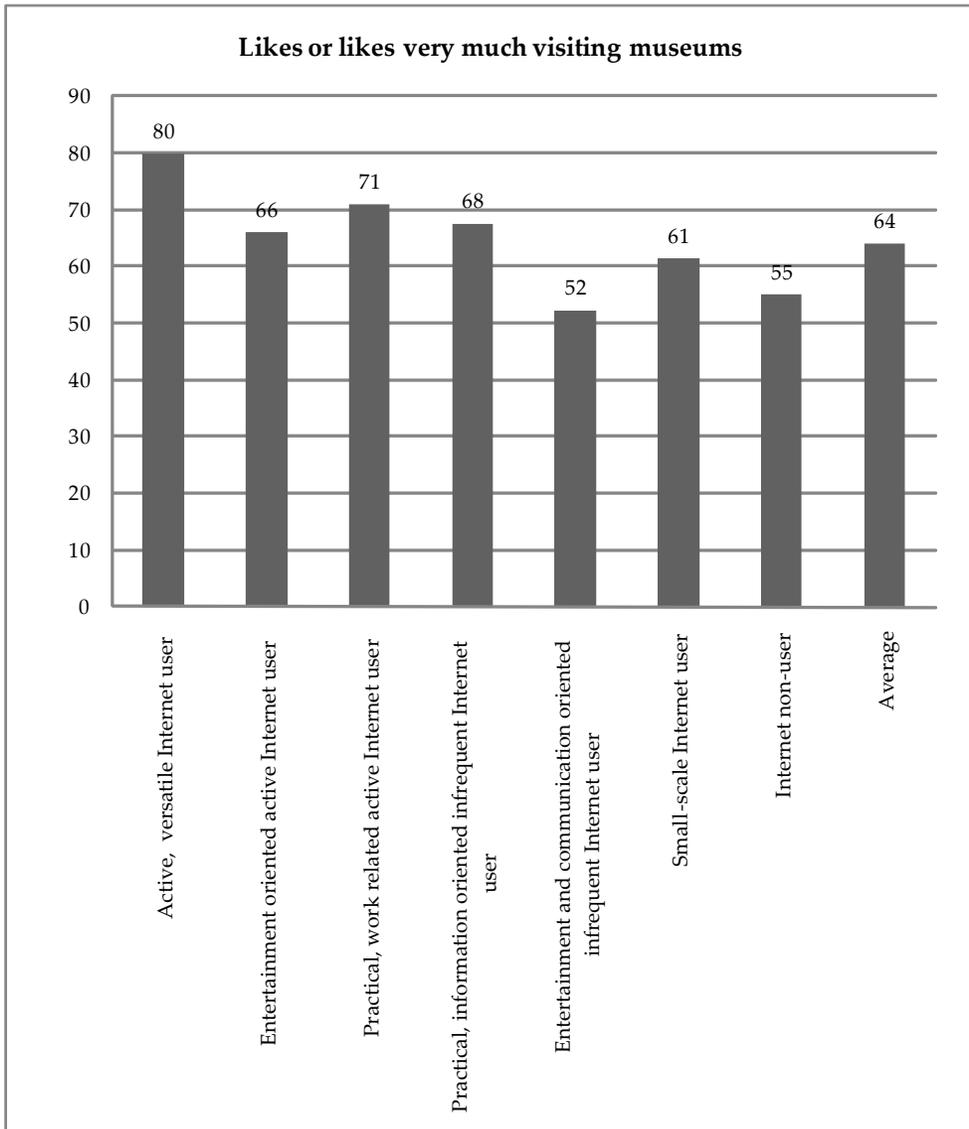
Small-scale Internet users (10 per cent) are not characterised by any specific practice of Internet use and their online behaviour is generally in the developmental stage. Infrequent users comprise a larger than average share of older people and people with a secondary education, as well as members of the Russian-speaking population. They also are the least active when it comes to contributing online content.

Figure 3 relates these Internet user types to their attitudes towards going to a museum. In general, it illustrates the idea that the more active people are in their attitudes towards life, the more frequent Internet users they are as well. Although one might as-

sume that if a person holds traditional values and a conservative attitude, they would rather go to a museum and not use the Internet that much, the research illustrates that this assumption doesn't hold true. The more active Internet users are, the higher is the chance that they will also be more likely to go to the museums.

Figure 3. Percentage of Internet users and non-users who like, or like very much, visiting museums.

Source: *Mina. Maailm. Meedia. (Me. The World. The Media) 2008.*



INTERNET EXPERIENCE AND THE PRACTICES OF MEMORY
INSTITUTION EMPLOYEES IN CONTRAST WITH THE PRACTICES OF
YOUNG PEOPLE

When compared with young people, museum and archive workers tend to belong to the practical work oriented groups. Some of them can be classified as active Internet users, while others are more infrequent. Overall, their use is very much oriented towards getting things needed for work done and much less towards entertainment related or leisure use.

For employees of memory institutions, their everyday work and most of their day is spent at a computer and on the Internet. A museum employee's day often starts with reviewing and answering e-mails, and a large part of their professional communication takes place via e-mail and internal websites, which have made the sharing of information easier. E-mails have made communication and exchange of information more active and operative in Estonia and abroad. At the same time it is stressed that direct communication is still important in the functioning of an organisation and plays a significant role in developing further web-based communication outside the institution.

By and large, I get all the information I need for work [from the Internet], although we do have department meetings, but I also get the information I should know [from the Internet]. [...] On the internal web I can express my opinion and communicate with colleagues, that probably joins it all up and enables me to promptly use information and everyone to look at one and the same thing, increases and enhances the quality of work. But I still think that we also need these joint meetings. (ENM)³

First of all, the Internet is used for finding work-related information. The homepages of the Ministry of Culture, Tartu City and museums are used most often to find necessary information, contacts and documents. Database search systems are important in everyday work; depending on the nature of the work, the databases of the Institute of the Estonian Language, the Estonian Literary Museum and the National Archives of Estonia are used, as well as the library catalogue ESTER, the Amazon bookstore and various dictionaries. People mainly stay in the Estonian-based Internet space, venturing into foreign language web-space seldom and then rather out of interest than everyday need. Finding and reading important speciality articles in Internet databases has become important for people who are proficient in the English language.

The Internet allows people to be up to date with the activities of memory institutions around the world. Employees often visit the homepages of professional unions (e.g. ICOM) or museums and archives in Finland, Sweden, Denmark and America, being most interested in novel solutions and gaining inspiration for professional activities. The interviewees hold in high regard databases of professional importance, which enable the necessary information to be found without entering the research hall or library. As a significant factor in using the databases, the interviewees mentioned user friendliness, which for them means the simplicity of navigation in the search system and the speed of finding the required information. If the search system of a database is too complicated or the sought information is not found, the database is not used again.

Outside working hours, the interviewees primarily use the Internet to find infor-

mation. The Internet provides help finding cultural events and weather forecasts and assists in making travel plans; people also use it to read the news, use banking services and the electronic school portal for checking children's progress in school. A common opinion is that making big purchases has become easier via the Internet. Internet portals are the main source of assistance in buying a car or property and making price comparisons.

Besides the use of e-services, finding hobby related information is important for museum employees. People follow thematic blogs and homepages where they read the news and look for answers to specific questions. The Internet is not considered an important place for personal communication or entertainment. Work related communication has moved to the Internet and therefore people tend to prefer direct communication outside working hours.

For very many people, everyday life has moved to the Internet. For me, it has not moved to the Internet – some parts have, and I cannot say when it should happen that my everyday life will move to the Internet. (ENM)

As the employees of memory institutions generally fall into the categories of practical information oriented Internet users, both more active and infrequent, we asked them who they considered to be "ordinary Internet users". The answer was a vague description of "ordinary" in which the users referred to younger people who use the Internet more actively and largely for entertainment. The interviewees thought that young people use the Internet for communication, sharing information and photos with friends, writing blogs and homepages, writing comments and watching films. The "ordinary" users' skills in finding necessary information on the Internet are better and they can also manage more complicated databases or search systems.

In our focus group interviews, the respondents could belong to the versatile active Internet users, entertainment oriented Internet users or in some cases, for more mature students, to the category of work oriented Internet users. Most focus group members are in the active Internet user category. On one hand, the Internet is used for practical needs such as research or information searches, and on the other hand entertainment files such as films and music are downloaded, and the Internet is used as a social networking environment.

Orkut, YouTube and MSN – it's like a trio. And if I need to do a search, I use Google, not Yahoo, because I like Google more. And because I have the neti.ee portal as my browser start page, I often find myself on that site. (1M)

Every day... Google and MSN, life is unthinkable without them. And of course, like anyone. [...] Information search, entertainment, looking for applications to download from time to time... (2F)

And I use the Internet, too, like anyone else: to read e-mail and to look for all sorts of things and for watching all kinds of movies [...]. Oh, yeah, I keep a blog, too. For the reason that I want to see what it is, what it's all about. (2F)

Active users greeted technological innovations with great interest and tried them out to see if they were compatible with their user preferences. Databases or web portals from which it was complicated to find interesting material were usually discarded after

an initial, disappointing, experience. Thus the process of finding information must be compatible with the user's existing browsing logic and user experience. Another aspect that is considered unsuitable with regard to use of a portal is if it is too time consuming to distinguish relevant information from irrelevant information, or if the pages are overloaded with banners and animated adverts.

It may also be that some sites are really visually "busy" and you practically can't understand where the things are listed. If there are many, many ads, or if [...] the information could be summarised much more concisely but it is all spread out. (1M)

In comparing the qualitative data to the quantitative, we can say that almost 40 per cent of the general population of Internet users fall into the category of work related users. When considering that, for them the Internet is used for qualities that are mainly relevant for their work, we can see a gap forming. Browsing museum websites or searching databases for heritage information is work for very few people, thus making the key target groups for museum websites those who belong among the versatile active Internet users and entertainment related users. Most of the museum and archive's websites and heritage databases are designed by people whose primary use is work related, while at the same time the primary target group uses Internet for leisure and fun. This generates a situation in which there is a potential gap between the understanding and conceptualisation of the Internet, and this might in turn lead to a usability gap. The three key uses that heritage institutions outline, and for which the websites and online databases are designed, will be investigated in the next sections of this article.

PRESERVATION AND PUBLICATION OF COLLECTIONS ONLINE

We presume that museums and their collections exist for their users and visitors. Museums have defined the needs of the public in the traditional context, and within known environments such as exhibitions, etc. However, in addition museums should think in the same way about visitors to their online environments. Many studies have indicated that museums do not try to understand database users when creating online databases about museum collections (Farber, Radensky 2008; Roberto 2008; Salgado 2008; Samis 2008). Very often the basic idea of the database is to create the web-based museum objects gallery. Similarly, Estonian museums and archives see the creation of improved preservation possibilities and the reduction of the damage caused by usage as the foremost objective of digitisation. The practice of digitisation has so far been focussed primarily on materials most used by researchers. Thus, one can see that in these cases, digitisation is very much a user driven activity. This kind of digitisation practice has enabled the National Archives of Estonia to claim that 90 per cent of their most-used sources are available online. In addition, contract work materials are digitised on an ongoing basis for exhibitions and publications. Materials that the users have not yet discovered in a collection or not shown interest in are not a priority for digitisation, primarily due to the lack of the financial and time resources necessary for the process. Memory institutions also have fewer resources to focus on what Roberto (2008) and Samis (2008) have stressed as vital: that museum objects in the "web of data" should not only be information sources, but also offer interpretation.

I think that much currently depends on financial possibilities. There are ideas and thoughts, and another thing is that people should cooperate in respect of financial possibilities. And cooperation between institutions inevitably takes time. (ELM)

However, this kind of practice leads to an unsystematic and often project-based digitisation process. More often than not, the interviews indicated that digitisation is first and foremost seen as a technical process of generating digital files from documents, and much less attention is paid at the information architecture, interpretations and systematisation of these works. As a first step many memory institutions in Estonia have introduced a web-based ordering and delivery system, which requires a precise order from the client. This potentially makes user interaction with the collections easier, but also challenges them to have greater pre-knowledge of these collections.

So far, all the cultural heritage digitisation strategies have remained on paper and the lack of real cooperation between major institutions has also not enhanced uniform development. Various institutions have created several different databases from similar material, although these do not form an integral whole or make finding information from a single access point easier for users.

Between archives, we have already learnt that users are not interested whether the thing they are looking for is in the state archives, history archives, film archives – users are interested in using the information. (NAE)

Similarly, a shortcoming cited by focus group members, relating to orientation within memory institution databases, is the lack of a single unified system and the complexity of finding databases. In practice, finding and using many museum or archive databases requires guidance from a teacher or advisor because memory institutions lack visibility in search engine results.

I was a senior year student in upper secondary school when ERNI was introduced and it wasn't really a finished product. My literature teacher demonstrated it. For me it was interesting but it was completely different and these were texts that I would not otherwise have read or viewed and it was very interesting. For me, it was a real eye-opener and in some sense I have been using these texts to this day. (2F)

This indicates that proper guidance to online databases can be inspiring for the user, but only a few focus group members have continued to use the databases they found. The use of the databases is made more difficult above all by a lack of knowledge about the content they offer, which makes it difficult to perform a search; moreover, the data structure is too complicated for consistent use.

In the web-based presentation of their collections, experts have so far given low importance to the desire to increase the openness and recognition of memory institutions, and therefore increase the number of users. Facilitating access to collections through web publication can be considered the second objective of digitisation. The superiority of the original artifact is still considered more important than the interpretations and value generated with the help of its digital representations.

Users will definitely be glad if they can see it [data on the Internet]. Because users are very lazy... We would, of course, like to see users checking out those things on the web and having access, but also coming here. I can understand users – archives

are open on workdays and in working hours, and likewise all archives. One has to be retired, on childcare leave or unemployed to be able to go and study archive materials and original documents. (ELM)

In many ways, museum and archive workers in Estonia still portray the object-centredness of the Victorian museum where viewing the glass caskets was more relevant than the experiences and relationships with the museum user and the artifacts. This is also reflected in the view that online databases are only incentives for the user to find their way to the original artifacts stored in the museum or archive.

WIDENING ACCESS THROUGH ESTABLISHED, AND POTENTIAL NEW DATABASES

Depending on the topic of an exhibition the expectations of various target groups, and the relevant context, are taken into account and the ideal viewer of visitor envisaged quite clearly. The same can't be said of the online exhibitions or databases.

One objective of the databases so far created in the National Archives of Estonia has been to improve the availability of collections to hobbyists in addition to researchers.

[T]he physical research hall in this building has approximately 20 workplaces and 40–50 people pass through there every day. Sometimes less and sometimes more. Now we have opened a virtual research hall and I think we will have about sixty users early in the morning [...] and at the best times we will have over 500 users simultaneously from all over the world. Archive using possibilities have increased tremendously. (NAE)

Database search systems and the presentation of materials depend on the system of collection, while the meta-data added to this information is selected based on the needs of the database "ordinary user". In the context of databases, the term 'ordinary user' first of all means researchers of various levels and target groups with specific interests – teachers, students, the media and museum workers. The common assumption is that from the start these users are highly knowledgeable, motivated and interested in museums and studying cultural heritage via the web: if a museum loads something up, these users will come anyway.

Feedback from database users has so far been completely neglected and in the few instances some comments have been made, they are in general positive. This has given grounds to presume that the databases are user-friendly and that finding the necessary information is easy. There is no information about various user groups, and the following is a rather common answer:

But we haven't received much feedback on who is the ordinary user of databases. It is clear that the media uses it, various portals, teachers – from them, we have received feedback – when they are asking whether they can use it or telling us that they found this or that fault and could we please fix it. (ELM)

Cultural heritage institution professionals see that the web environment could bring people with no research or museum interest to museums, particularly the younger age groups. Digitised collections and search systems enable museums to attract interest and

bring in wider user groups to view original materials and artifacts. Similarly, the participants in the two focus groups assumed that good and user-friendly databases would help bring them closer to the museums' activities. Users were asked to describe ideal web portals that would draw them to museums, and five principles can be summarised from their discussions.

1. A memory institution must have a presence on the Web along with all of its content, as often it is not possible for users to visit the institution.

Here the indication is that, although professionals would like to see online collections as leading to the physical museum or archive experience, the youth focus group participants see this as a less important factor. Museum professionals do not believe that users will completely lose interest in viewing originals because of digitisation. They are confident that no virtual exhibition or database can replace a three dimensional original copy or an old photograph, film or document. A digital database is seen as first of all an incentive to interest the user and spark the desire to see the original. At the same time the experts admit that many users will probably not make it any further than the databases. However, for the participants in the youth focus groups, museum databases should be able to sustain online representations on their own.

2. A database must contain an introduction to its structure and data, and contain abundant illustrations, video material and interviews. When digitising materials, museums often focus on one type of material at a time – for instance, all glass negatives (daguerreotypes) all maps, etc., while users would much rather have materials that are interlinked through a story. Here the digital museum can almost be described as undergoing a rebirth, in a fairly similar way to that in which the Victorian museum as a storage space of objects was reborn through Neurath's revolution in early 20th century (Henning 2006).

3. The data (i.e. list of sources, digitised sources) must also include interpretations, context and background information that would help create associations and create a whole, as well as containing links/references to other related databases. While in the museum context professionals see digitisation as an aim of its own, and want to have the objects tell their own stories, young users are much more interested in having that work done for them through the provision of materials that are already interlinked and have interpretations provided.

4. Multifaceted information should be structured pursuant to user profiles so that it is possible to distinguish between information that is relevant for researchers, and that which is relevant for users who simply wish to find interesting information, and so avoid information "noise".

Here the young focus group participants indicate a clear understanding of the differences between potential digital heritage material audiences. The possibility of differing user levels is somewhat distant from the heritage professional's view, in which all database users are perceived as professionals and equally interested and knowledgeable in all aspects. In our focus groups, two different potential audiences – secondary school pupils, and university students and young researchers – acknowledged that interests in different subject matters vary, and therefore the differentiation of user profiles seems like a good (albeit time- and resource-intensive) solution.

5. Various cultural heritage databases should be consolidated in one environment and the structure should be unified.

The super-database of all Estonian cultural heritage materials seems to be a common wish for all – the bureaucrats who drafted the Estonian Digital Cultural Heritage Strategy, museum workers and potential users. However, today the lack of resources, strategic planning or a conceptualised understanding of public and museum needs stands in a way of this dream coming true.

ENGAGING USERS IN THE CREATION OF COLLECTIONS

The third objective of digitisation is to engage users in the collection of digital materials and the creation of cultural heritage via the web. Henning (2006: 130) sees that the Internet in its database-like structure would enable museums to re-enact the Foucauldian dream of the return of curiosity, and thus the age of curiosity cabinets from the history of museums. Yet in many ways despite the opening up, and participatory proclamations, of Estonian digitisation policies, in reality the digitisation of materials is ultimately focused on keeping the “Victorian era glass caskets”, even though they are now in the digital form. Cultural institutions are still seeking solutions for participatory engagement that would satisfy all the parties. Although the most natural thing in Estonian digital space is online commentaries, and users are familiar with seeing them in variety of forms and environments, there is still a distinct disinterest in participating in the museum’s activities. This is by no means helped by the fact that museums are looking for a quality of material that, for the professional, is not always reflected in those hastily scribbled remarks of the online commentary tradition. The high standards and strict rules applied to items normally worthy of museums’ attention raises the entry requirements for participatory projects in some cases to unreachable levels.

At one point we were having a whole lot of trouble with it; because spam robots discovered it and we had 300 comments along the lines of “see beautiful girls here”. Then we solved it by restricting comments from abroad. [...] But we did create the option, hoping that people will write down their customs. But we need to think about how to change it. Because back then it wasn’t so common to comment on every article, saying that it is stupid. Today, this is much more common. (ELM)

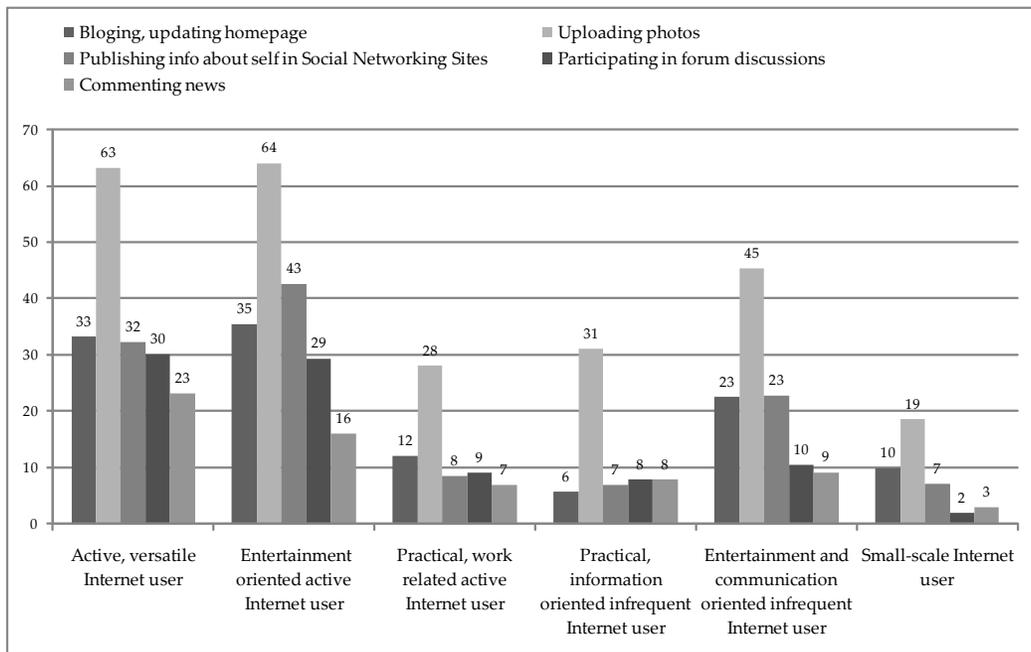
Saldago (2008) and Farber and Radensky (2008) have shown in their studies that users are more prepared to interact with museums in the context of new technologies and web databases, but only if the systems are user friendly. So the most important factor in creating web databases are the understanding of the users needs and their potential motivations in using materials. It is also important to trust users and the public in creating new cultural heritage, and to help them establish an environment for communication. However, as Durbin (2008) has shown in her paper about Web 2.0, that modern online possibilities should not be viewed as not being technological or experimental, rather they should be seen as tasking museums to interact in new ways with the public.

Figure 4 gives an overview of how familiar Estonian Internet users are with contributing content online. Two thirds of the most active online participants – versatile and active entertainment oriented users who we have referred to as the key target groups

for the museum – have uploaded photos to the Internet. This indicates that there is at least some willingness and habit to provide content in the online environment. At the same time, in the more passive groups, one can see that almost all content creation practices have been tried out by less than 10 per cent of the group. In many ways, this can generate dilemmas for museums. Those who are more familiar with participating in the online environments may be seen as not so “serious” in their Internet use and thus also the content they contribute may be more entertainment related.

All the professionals interviewed understand that it is of no use for a museum if users

Figure 4. Percentage of Internet users ever contributed to particular types of online content.



collect materials on their own, yet have no option to add them to the museum’s collection. The creation of these possibilities requires changes to be made in the work organisation of institutions as well as separate management of materials and communication with users. At the same time, professionals expect that when users add materials to web-based databases, they must act in a way that is compatible with the institution’s collection systems, i.e. be knowledgeable of cataloguing and meta-data information. Nevertheless, experts find that the collection of digital material has helped them to better understand users’ needs and to observe and understand their activity patterns in the Internet environment. In many cases, the interviewees thought that users have not yet developed the habit of contributing to memory institutions, and that at the moment electronic contributions have become less personal than information received in the conventional written form.

Well, when we were collecting school heritage, it differed from 1992 most of all by the fact that [at that time] there was an option to reply electronically. [...] People

could get questionnaires both by e-mail and from the computer. But the material we received on paper was more properly and purposefully prepared, because anything can happen on the Net. [...] People write a little bit and anonymously, but there is no anonymity on paper. [...] if it is organised and assisted by teachers – you can't always check that with computers. (ELM)

These contradicting results indicate that although there is a willingness and need to listen to the user as a source of modern heritage material, at the same time “ordinary people” have a perceived distinct lack of the skill necessary to participate in museum activities. At the same time, some members of the general population have enough practice creating online content that, should there be incentives from the memory institutions to provide content, they might be able to do so. However, content creation practices are not overly popular and in cases where people might be interested in participating in a museum or archive's activities, they might not have the necessary skills. And if the “quality” threshold set by the museums is very high this only increases the skills barrier even more.

CONCLUSIONS

The key gap between heritage websites and their uses potentially stems from the different user practices of heritage professionals and their target audiences. When people for whom heritage is mainly related to their professional activities – with all their long-standing professional practices – start designing online databases and websites for youngsters whose “holy-trinity of the Internet” are formed by MSN, Orkut and YouTube, then there is a strong potential for miscommunication. In order to make web environments that are usable, the key is to understand the user's motivation for wanting access to digital heritage materials.

Every memory institution sees its main role as storing and preserving its collections. Digitisation is one way of maintaining the ideal storage conditions for the museum or archive objects by making use of their digital copies, thus enabling the storage of the original. At the same time, all over the world, the user of the museum has been increasingly in focus and museums are becoming more and more user-centred instead of being centred on their collections. Creating and interpreting cultural heritage has been distanced from the experts and curators, and rather the community whose cultural heritage is at stake is seen as the main interpreter. However, the community does not always grasp this role. In our discussion with cultural heritage institutions' professionals and members of young audiences, who are foreseen as the key target groups for digital collections, it transpired that audience members are keen on searching through and looking at heritage materials, preferably across various collections, but they would rather have the interpretations with the material. While the technological opportunities, whether Web 2.0 or another platform, are more and more readily available, the role of the user is as fuzzy for the Estonian museum and archive employees as it is for young members of potential audiences. It is often felt that we first have to sort out the data – digitise, organise, make available – and only then can we look at the interpretations.

The key focus of the interviews, both for professionals and users, was centred around making digitised materials available to users. This inevitably boils down to the question

of maximally effective information architecture. With increasing amounts of information available online, both users and producers of online materials feel that the searchability, clarity and variety of information is vital. However, in many cases, museum and archive professionals feel that users should master the traditional practices of cataloguing and key-wording the artifacts rather than having the museums and archives adapt those to new conditions. Although no one assumes that cultural heritage must compete with social networking sites or YouTube, one should face the fact that memory institutions are seen as aspects of the entertainment sector and that young people today are first and foremost familiar with the aforementioned online environments. This poses a challenge for the memory institutions to grasp the possibilities offered by those online spaces, while still maintaining the traditional values and conceptions necessary for their professional identities. Many museum and archive experts feel that as existing cataloguing systems and database structures have worked for museums for nearly a hundred years, they should continue to do so. Others understand the challenge of opening museums up and the need to adapt to less experienced users' knowledge.

Despite the fact that traditionally the logic of different memory institutions differs – museums see their role as more focused on interpretations, while the primary focus of archives is one of storage and availability – users of heritage materials online do not care so much about the institutions' backgrounds. For them, the key concern is the availability of the materials and assistance that professionals can provide in interpreting these materials.

In conclusion, we can say that in many ways, the online spaces and databases of the museums and archives provide a multitude of challenges. The first role of digital cultural heritage is to aid the storage of artifacts and to save them for the future. At the same time, institutions are not that interested in updating their own cataloguing or meta-data processes and thus may miss out on the opportunity to increase the usability of the materials once they have been digitised. Thus digital collections may remain as unused and untouched as the originals in the vaults. Secondly, although the need for relevant and easy-to-use online spaces is understood, the underlying assumption is still that people need to come to the museum to see the originals, and not just make use of the digital copies. In seeing digital space as merely complementary to the "real" environment, many good opportunities may easily be missed. Thirdly, there is a need for mutual education in order to increase museum and archive participatory possibilities, and therefore to grasp the potentials and opportunities hailed by new technologies. When museums see little value or relevance in user-provided materials, users will not easily learn to provide materials that are of interest for museums. Today, new technologies provide the potential to close the gap between memory institutions and the general population; however, unless there is a considerable change in the way memory institutions think about the audiences of the heritage, this potential may never be realised.

NOTES

1 Four interviews with employees of the Estonian National Museum – referred to as ENM, six with employees of the Estonian Literary Museum – referred to as ELM, one interview with an employee of the Estonian Sports Museum – referred to as ESM and one interview with an employee of the National Archives of Estonia – referred to as NAE.

- 2 Referred to as 1 for the pupil's focus group and 2 for the students and researcher's focus group, F or M for the speaker's gender and numbered for the order around the table.
- 3 The interviewed experts are quoted with reference to their institution.

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- Authors' group interviews with secondary school pupils, university students and young researchers in 2008.
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