

Report – Visitor Study at Mölndal’s Museum

Mölndal digital guide, Öppna magasinet

Introduction

Visions for Museums (v4m) is a research and development unit at the Interactive Institute in Stockholm. During the period autumn 2003 / winter 2004, v4m conducted a visitor study at Mölndal’s museum at their request.

The aim of the study was to carry out an evaluation of visitors’ experience of, and yield from, “Mölndal digitalguide” – a personal digital assistant with historical multimedia content for the museum visitor. It deals with the culture-historical environment Kvarnby, where the museum is situated.

Within the framework of the evaluation, a second delimited study was conducted in parts of “Öppna magasinet” – the museum’s preserved collection of objects – which has been made accessible to the visitors of the museum. Paul Henningsson, v4m, has had responsibility for the study in co-operation with Halina Gottlieb, director (???) of v4m. Maria-Louise Olsson, head of Mölndal’s museum and Ulla Hasselqvist, Öppna magasinet were co-coordinators at the museum.

Summary

- 9 pairs between the ages of 55-70 participated in the visitor study concerning the digital guide.
- It was the first time that any of the pairs had used the digital guide. Barely half of them had visited the museum previously and two of the pairs had a personal connection to Kvarnby.
- Most of the pairs listened to the guide while in motion/walking. The participants looked at the computer regularly yet fleetingly. A majority passed on the option of interacting with the guide’s screen/functions and a few read the available texts.
- The participants are noticeable uncertain about certain aspects of orientation and the guide’s functions, as they are unsure of what is expected of them and as many experience technical difficulties.
- The content of the guide and environment is commented on briefly in discussions. Problems that people experienced with the guide are a reoccurring topic.
- The guide does however give a deeper experience, reflected through a couple of individuals’ conversations about events and places in Kvarnby.

- A total of 52 people - young, old and pensioners were observed at selected shelf sections at “Öppna magasinet”.
- The participants spent about 6 minutes on average at each shelf section where they alternately examine objects, converse and explore objects and shelves.
- Very few participants use the computer search in connection with one of the observed shelf sections.

- Very few participants notice the booklets that hang from the shelf gables. The few that do look in these like their content.
- Young visitors noticed and were curious about the storytelling computer. They manifested their curiosity primarily by reading and using the touchscreen but are unfortunately disappointed as to its content.
- Older participants appreciate “Öppna magasinet” as it evokes personal memories. Adults were to some degree disorientated and proposed that one should include more stories about families, time periods and/or through environmental reconstructions.

Aim

The aim is to examine visitors’ experience of, and yield from, “Mölndal digitalguide” – a personal digital assistant with historical multimedia content for the museum visitor. It deals with the culture-historical environment Kvarnby, where the museum is situated. To study to what degree the guide stimulates the exploration of the environment in visitors. The target group are older visitors (55 years of age and older).

The goal is to be able to map out possible shortcomings for a continued development of the digital guide as well as to identify possibilities to integrate this communication in different sections of the museum and in different media. The aim is to provide a foundation for the development of richer, more engaging, as well as more user-friendly presentations for the museum visitors.

Methodology

The study is based on a combination of three methods of data collection and observation: recording of visitors’ conversations, interviews and observation of visitor behavior. The combination of these methods allows for different qualities of the museum visit to be studied, while at the same time different data can be compared to each other.

Participants in the visitor study concerning the digital guide were asked to wear a tape-recorder with a microphone while people on their own would walk around the Kvarnby environment with the digital guide. The tape-recorder recorded everything – comments, conversations, environmental sounds, etc. The participants were aware of the tape-recorder and were presented with the option to decline this if they did not want to be recorded. None of the participants declined.

Method: Visitor Conversations

So as to be able to record conversations, pairs were selected as study objects. The recorded conversations were processed with a method based on discourse analysis (???) developed by Fienberg and Leinhardt (2002).

The starting point of this method is the view that museum visitors create joint experiences during their museum visits by sharing observations, reflections, questions, shared experiences and personal references through discourse. According to the authors, verbal interaction has great significance to how museum visitors assimilate what the museum is offering. The longer the conversation develops between people that accompany each

other during a museum visit, the more these people learn and the greater interest they acquire:

“...the conversations that evolve give us a sense of the way the visitors are “engaged”. We call this component ‘explanatory engagement’. Engagement is a measure of the degree to which visitors become involved in particular explanatory opportunities, whether these opportunities exist at specific exhibit stations or in some overarching exhibition theme.” (Fienberg, Leinhardt 2002).

Museum content that in different ways stimulate visitor conversations, such as questions or challenging presentations, create a basis for better understanding, increased interest and favorable situations for learning through the sharing of people’s knowledge with each other.

The method involves practical analysis of conversations during museum visits by abstracting to different levels of attentiveness and discourse. These levels are:

1. Listing – confirmation of perceived observation; identification. Also includes assertions, subjective opinions and questions.
2. Analysis – Description of identified object/process.
3. Synthesis – Conclusion, this includes references to other experiences.
4. Explanation – Elaboration and a more thorough explanation; longer and extended conversations between people.

The hypothesis for studies conversations of museum visitors (Fienberg, Leinhardt 2002) is that people with a personal connection to a certain place or subject have a greater chance to develop “explanatory conversations” by supporting analyses (level 2) with their own references/existing related knowledge (level 3).

The method, which has been developed primarily for indoor exhibitions (non-digital presentations), has in the analysis of the digital guide been supplemented with two freestanding conversational concepts: **orientation** and **handling**. These are parts of the conversation which do not touch upon the direct experience of the content, but are assumed to influence the possibilities for people to form their own understanding and to create their own experience of the tour with the digital guide in Kvarnby’s environment.

By “orientation” we mean situations where the visitor actively discusses physical orientation, direction of movement and the “micro-logistics” of the wandered tour. “Handling” refers to the person’s active description of the physical handling of the digital guide during the course of the tour, its functions and accessories (anything that is not part of guide’s produced story content).

Conclusion

The study demonstrates that older visitors that listen to audio narration will stop to explore various details of the environment and will exchange brief comments about what they see in the environment and about what they hear/read from the handheld computer.

Interviews and post-commentary show that people have enjoyed using the digital guide and have had a constructive attitude to the fact that the museum provides them. This is also confirmed by the museum's own surveys in the past.

Analysis of the conversations and observations shows that certain conditions are critical, and can hinder visitors from fully experiencing the contents of the digital guide, the environment of Kvarnby as well as experiencing the guide together as a pair/group.

The majority are unsure or very unsure of when and where the narrated walk begins or is played thereafter. This uncertainty is also evident in regard to what is expected of them when using the guide, when the frequency of the playback is perceived as uneven by the users. A large part of the conversation of the walking-tour deals with a continual checking to see whether the partner has content played to them and whether this content corresponds to the content of the other person, as well as to agree upon where and how they should move on. This is due to the fact that it seldom happens that both people listen to the same sequence simultaneously.

In just over half of the pairs it is clear that the reoccurring uncertainty and asynchronous playback disrupts the pair's prospects to have lengthier discussions. This is critical, since it is through sharing experiences verbally that a widening of interest and knowledge can occur within the visitor. This is of course not what the museum had in mind, but technical problems, people's uncertainty regarding the digital guide's automated playback, its functions, references in narration and aspects of orientation all contribute to making the interplay between people, the guide and environment more difficult.

It is the aspects of orientation (versus the content and usage) of portable museum guides that are problematic for the visitor who shares experiences in a pair/group. Stidoer (?*?) has shown that conflicts often arise between user contexts as well as demanding / non-intuitive guides based on screen-based interfaces (Garzotto 2004, Heath/vom Lehn 2003).

Even though the sample data is small, it is clear that for interviewed people, who had a personal connection, own memories or experiences from the places, the guide forms a starting point from which more elaborate conversations about historical events, environments and people can take place. This is confirmed by other studies concerning conversations between museum visitors in culture-historical exhibitions and other related events ("Learning Conversations in Museums" 2002). This ability has the effect that the digital guide's technical lapses don't always have to be detrimental; it compensates and completes the guide by verbally recounting stories about the place and events during their walking-tour, and thereby initiates discussions. For people with knowledge of the locality, an overall orientation is also helpful as it allows them to spend more time experiencing the tour and gives them a time estimate of how long a walk through the area will take. For people with no prior knowledge or connection to Kvarnby the above situation is worse if it should be considered dependent on the guide's content to make the environment come alive.

Apart from technical disruptions, the lack of clear points in the physical environment that indicate the place of an “event station” is a problem, and is necessary so that people know where content is to be expected during the tour. The absence of points of orientation can be linked to the fact that names that come up in the narration do not come up on signs/plaques in the physical environment. The fact that the narration sometimes overlaps into “event stations” that are next and that people predominantly listen to the guide while in movement is unfortunate as some of the details in the narration are played in places where it is intended for the listener to be stationary.

In conclusion, the digital guide about Kvarnby is best suited for people that already possess a lot of pre-existing knowledge and interest for the place as well as people with a personal connection to it (such as locals). To make Kvarnby more accessible to other museum visitors a number of adjustments and added features have been proposed.

References

Fienberg, Joyce; Leinhardt, Gaea “Looking Through the Glass: Reflections of Identity and Conversations at a History Museum” (2002) *I: Learning Conversations in Museums*. New Jersey: Erlbaum Associates.

Garzotto, Franca m fl “Evaluating Context-Aware Mobile Applications in Museums: experiences from the MUSE project” (2004) *Museums & the Web 2004*. Pittsburgh: Archives & Museums Informatics.

Heath, Christian; vom Lehn, Dirk “Displacing the Object: Mobile Technologies and Interpretive Resources” (2003) *I:ICHIM '03, Cultural institutions and Digital Technology*. Ed. Bearman, David; Perrot, Xavier; Trant, Jennifer. Paris/Pittsburgh: Archives & Museums Informatics.