# Assessing Visitor Behavior and Attitudes in the medien.welten Exhibition

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#### INTRODUCTION

The Technical Museum Vienna is currently hosting a long-term exhibition on media history and convergence. It combines traditional object exhibits, computer-enhanced hands-on exhibits (abacus, telegraphy systems...) and a large space dedicated to new media including a blue screen TV studio (for news reading), photo/sound booths, 6 touch screens with information on media history, an Austrian TV archive, and computers for exploring digital media. Visitors can buy a *smart.card* which stores collected or created data when put onto card readers (videos, photos, sound, information bookmarks). Via the museums homepage, they can access their digital backpack from home and download data. They can also send e-mail to present or online visitors.

#### **EVALUATION APPROACH**

The data generated automatically by using the smart.card allows tracking of visitor movement and behavior. We are interesting in assessing visitor attitudes towards the card and in actual card usage. We also use data from all computerenhanced devices to assess overall visitor behavior. Data analysis is supplemented with qualitative observation (~16 hours) and 30 half-structured interviews with a representative sample of visitors (children, couples, students, senior citizens, teachers, families...). Data analysis can verify impressions of observation (typical interaction patterns). Observations and interviews generate new questions for data analysis and contextualize quantitative results. Assessment should deliver hints for improving the exhibition, smart.card features, and improve our knowledge on visitor tracking requirements.

## **RESULTS OF EVALUATION**

By February 2004, ~920 cards were sold or given to visitors. 100 cards were used in multiple museum visits. Approx. 25% accessed their backpack via web. The smart.card proves *difficult to sell* as many visitors visit the exhibit as part of the museum and just stroll through. Buyers and test users spend

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more time in the exhibition and give better grades in interviews than non-owners. Most visitors judge access to the digital backpack via internet as interesting and value the interactivity of card and installations. Most card-owners interviewed and observed were keen to test card features and fill their backpack. The TV studio is especially popular and is adapted for personal greetings. Interviews revealed that the card mostly serves people interested in new media and, as is, offers little value to historically interested visitors. Visitors suggest providing online access to more information and complete contents.

Statistics show relative short sessions at the media.matrix. Yet visitors miss background information on specific exhibits. Thus more contextualized means of providing information might serve visitor needs better, allowing people to "focus on the displayed objects" [1]. Observation shows striking differences between visitor types. While young people are primarily interested in modern media, older people often circumvent these and seem inhibited by touch screens. Thus most visitors only concentrate on familiar media instead of developing new interests. An exception are mixed media approaches - the computer-enhanced hands-on exhibits which attract visitors of all ages and interests and have high usage statistics (number of sessions and length of sessions). Providing more of these hands-on installations seems a viable solution to engaging diverse visitor types and sparking interest in new topics. Interaction patterns differ between kinds of exhibits. Hands-on exhibits attract both solo use and small groups, while computer terminals are mostly used by single persons. The TV studio encourages large groups and some inter-group interaction (rare for other exhibits). Suggestions for further development of the exhibition therefore include providing an experience of the networking of media within the exhibitions physical space and to encourage more interaction across visitor groups (see [1,2]).

#### **ACKNOWLEDGMENTS**

Programmers of Imagination, museum personal, visitors.

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