

EVALUATION OF THE LOTSSENSYSTEM OF THE BERLIN STATE MUSEUMS (SMPK)

Claudia Wölfle
LuraTech GmbH
Rotherstrasse 20
D-10245 Berlin
Tel.: 030/29367-124; Fax.: 030/29376-100
E-mail: woelfle@luratech.de

1 Description of the "Lotsensystem"

The "Lotsensystem" is a self guided, networked visitor information system, generated for the "Staatliche Museen zu Berlin, Preußischer Kulturbesitz (SMPK)", one of the largest unifications of culture in the world. The system includes all kinds of information about 5 of the museums of the Kulturforum. All image and text information are directly generated by an image and text database. This guarantees that only up-to-date information is presented to the visitors. A content management system enables the SMPK to easily update the system.

1.1 Objective

The objective of the Lotsensystem was to offer a large number of different information to various types of visitors. It should inform about the different collections of the SMPK. Its main idea was to present an overview of all collections and main-locations of the SMPK in Berlin. The system should give its visitors impulses and supports for the museum visit. Besides basic information, like opening hours, admission fees, and public transport, the system gives hints on special exhibitions and events.

1.2 Characteristics

The system consists of 9 terminals which are connected via wireless-Ethernet with a database sever. The extensive content management system was built with Microsoft Access and is installed on workstations of employees of the SMPK, which are connected via Ethernet to the Linux server. The user front end is programmed with Macromedia Director and offers substantial information with the help of images, text and audio material – combined in a pleasant and varied way. Besides optical claims - easy handling was in the foreground, to attract even visitors with little experiences of Multi-Media systems and to make them curious.

1.3 Introductory

To get an idea of how the visitors of the Kulturforum like the "Lotsensystem" and if the objectives of this project could be implemented, the user questioning of MUMMS (Measuring the Usability of Multi-Media Software) was carried out at the suggestion of the Berlin State Museum. The Human Factors Research Group of University College Cork, Cork, Ireland (HFRG) already carried out surveys concerning Multi-Media-systems of the Berlin State Museum.

2 The Questioning

2.1 Description

A user questionnaire is a standard way of getting end user reactions to a piece of software: such questionnaires are used quite widely in consumer research.

The MUMMS questionnaire is being developed in response to the rapidly changing patterns and technology of computing today. Multi-media computer products are establishing themselves as part of the market, and it is becoming necessary to develop ways in which these products can be assessed for quality of use by the end users themselves. MUMMS is their appreciation of the quality of a computer application.

The questionnaires contained a number of questions to each of the following points:

- attractiveness
- control
- efficiency
- helpfulness
- learnability
- excitement

The visitor had to give marks on each question from 1 (I totally agree) up to 5 (I totally disagree).

2.2 Realization

The questioning was carried out during two weeks in June 1999 directly in the Kulturforum, where visitors, who used one of the terminals were asked to fill in the MUMMS-questionnaires. 51 persons did so - consulted by a LuraTech employee. The questionnaires were sent for analysis to the Human Factors Research Group of University College Cork, Cork, Ireland (HFRG), and the result reached LuraTech and the SMPK in October.

2.3 Result of Analysis

| | Attractiveness | Control | Efficiency | Helpfulness | Learnability | Excitement |
|--------------|----------------|---------|------------|-------------|--------------|------------|
| Average | 64.35 | 57.30 | 57.99 | 59.52 | 63.52 | 61.40 |
| Median | 66.93 | 58.25 | 58.25 | 60.42 | 64.76 | 62.59 |
| Standard Dev | 11.27 | 12.07 | 11.01 | 10.49 | 8.99 | 11.98 |
| SE Mean | 2.74 | 2.74 | 2.74 | 2.74 | 2.74 | 2.74 |
| Max | 86.46 | 81.50 | 77.78 | 79.95 | 75.61 | 82.12 |
| Min | 38.72 | 32.20 | 36.55 | 34.38 | 40.89 | 32.20 |
| N | 51.00 | 51.00 | 51.00 | 51.00 | 51.00 | 51.00 |

3 Summary

The questionnaires show that the system is attractive and enjoyable, pleasant to use, and users regard it as a welcome change. The controllability of the system is not high, but users remark it is easy to navigate through as it helps the users find what they are looking for.

The system is easy to learn to use and simple enough not to be forgotten. Its main excitement is vivid images.

Users find the system attractive visually and very different to the normal gallery guides. Interactivity is very much appreciated.