

How Cultural Needs Affect User Interface Design?

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This paper discusses how cultural aspects should be addressed in user interface design. It presents a summary of two case studies, one performed in India and the other in South Africa, in order to identify the needs and requirements for cultural adaptation. The case studies were performed in three phases. First, a pre-study was conducted in Finland. The pre-study included literature study about the target culture. Explored issues included facts about the state, religions practiced in the area, demographics, languages spoken, economics, conflicts between groups, legal system, telecommunication infrastructure and education system. Second, a field study was done in the target culture. The field study methods used were observations in context, semi-structured interviews in context, and expert interviews. A local subcontractor was used for practical arrangements, such as selecting subjects for the study. The subcontractors also had experience on user interface design, so they could act as experts giving insight to the local culture. Third, the findings were analyzed with the local experts, and the results were compiled into presentations and design guidelines for user interface designers. The results of the case studies indicate that there is a clear need for cultural adaptation of products. The cultural adaptation should cover much more, than only the language of the dialog between the device and the end user. For example, the South-Africa study revealed a strong need for user interface, which could be used by non-educated people, who are not familiar with technical devices. The mobile phone users are not anymore only well educated technologically oriented people. Translating the language of the dialog to the local language is not enough, if the user cannot read. Another design issue discovered in the study was that people were afraid of using data-intensive applications (such as phonebook or calendar), because the criminality rates in South Africa are very high, and the risk of the mobile phone getting stolen and the data being lost is high. In India, some examples of the findings are the long expected lifetimes of the products, and importance of religion. India is not a throwaway culture. When a device gets broken, it is not replaced with a new one, but instead it is repaired. The expected lifetime of the product is long. The importance of religion, and especially religious icons and rituals, is much more visible in everyday life, than in Europe. For example, people carry pictures of Gods instead of pictures of family with them. Addressing this in the user interface would give the product added emotional value.

Discussion

D. Damian: What was the major change that Nokia made after this study.

M. Mäkäräinen: Its difficult to say. People realized that localizing the product was not just a matter of translating text.

H. Stiegler: Do you think that 3 years is a long time in a repair culture.

M. Mäkäräinen: No.

M. Damian: How does Nokia decide where to go to do these studies.

M. Mäkäräinen: It depends on where mobile phones have some penetration and a large potential market can be seen.

H. Lutfiyya: Do you think the UI design process will change the way that people will interact with the phone.

M. Mäkäräinen: The way people interact with the phone is different in different cultures no matter what the UI design process is.

N. Graham: What level of precision did you have about what you wanted to find out.

M. Mäkäräinen: Our scope was too broad we tried to cover every phase. For this year I planned to cover only the visual facets. We observed people making phone calls and reading e-mail and doing other types of communication but it should be more narrow.

J. Willans: I guess there is a tradeoff between Nokia's commercial interest and some of the knowledge learned in this study.

M. Mäkäräinen: Commercial aspects and business models were not analyzed in this study.