Emotional factors influencing technology acceptance particularly with regard to mobile service usage

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1. PROBLEM OUTLINE

In December 2008 the 4 billion mark of mobile phone subscribers has been passed. All these people use their mobile phones in different ways and with varying objectives often guided or influenced by their emotions. Substantial profits are no longer gained with standard services like voice calls or SMS but with data services (e.g. Mobile TV or Location based services). Lots of these services are not initially successful even though their high level of usability was pre-estimated by means of traditional test procedures. Hence there is a huge demand for a method to examine individuals' adoption and usage decisions that provides acceptance explanations that are valid regarding reality not only statistics.

2. CONTEXTUALISATION IN THE SCHOLARLY DISCUSSION

Most papers concerning technology usage utilize Davis' Technology Acceptance Model (TAM) [2]. The TAM focuses on the cognitive-rational factors "perceived usefulness" and "perceived ease of use". Emotional factors that surely influence decisions of adoption and usage are omitted. There exist a few attempts to include emotional-affective factors into TAM [e.g. 1, 3 and 6]. Most of them try to gather data c emotional factors via questioning concerning given set of emotions. As emotions are multifaceted and latent variables this might not be the best approach. A more promising approach could be addressing the fundamental criterion of indispensability [5] of a technology either rational-based via cost-benefit-calculations or emotional-based via individual and societal transformations. Indispensability surely causes increased usage of a particular technology.

3. RESEARCH QUESTIONS

Is there a need for special technology acceptance and usage research for mobile services?

Which emotional factors must be considered in the analysis of

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Which way of pursuing a design science approach is useful to achieve valid technology acceptance results?

4. METHODICAL APPROACH

Questioning only provides ex-post notions about emotions and real emotional factors are not measurable with "Imagine you could..."-questions because people can't imagine which emotions might occur if they really experienced a new technology. More interesting information is gained by monitoring and experiments. This is why an experimental approach is going to be used to receive emotional data in real usage context. Deprivation studies [e.g. 7] could provide useful and relevant data and deliver insight into the emotional usage context. Furthermore Design Science [4] seems to be able to address the problem of evaluating results against real world measures.

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