



Susa Group

Creating meaningful experiences

## DESIGN FOR EMOTION – (HOW) CAN A MOBILE RIDE SHARING SERVICE MAKE YOU HAPPY?

Increasing the potential of mobile applications to elicit positive emotions can help overcome the prevalent ephemerality of such applications. The study at hand addresses the question of how can the elicitation of favorable emotions be supported during the development process of mobile applications. It empirically demonstrates that the triggering of positive emotions could be effectively supported when users' concerns are considered and incorporated into a mobile application.

### *STUDY OBJECTIVE*

The study was conducted within a master thesis and its main objectives were to answer the questions (1) whether and (2) to which extent it is possible to evoke desire, satisfaction and fascination as emotional responses to a mobile ride sharing application, using an approach, introduced in the product design domain by Desmet et al. (2007), and (3) in how far the chosen approach is adequate to support the design process in the domain of mobile software products.

### *STUDY DESIGN*

The elicitation of the emotions desire, satisfaction and fascination for mobile ride sharing services was explored through an emotional benchmarking study using PrEmo for the German ride sharing services m.mitfahrgelegenheit.de and Caribo (13 German participants: 7 male / 6 female) and a focus group (4 participants: 2 male / 2 female). The gained insights represented the basis for the creation of a new mobile ride sharing service Fahrteiler. The elaborated design was implemented in a high-fidelity prototype and its emotional resonance was evaluated with PrEmo. The outcome of the evaluation (18 participants: 10 male / 8 female) was compared to the results of the emotional benchmarking and conclusions were drawn of how the elicitation of the aforementioned emotions can be supported by mobile applications in the ride sharing domain.



Figure 1: Existing ride sharing service m.mitfahrgelegenheit.de



Figure 2: Existing ride sharing service Caribo

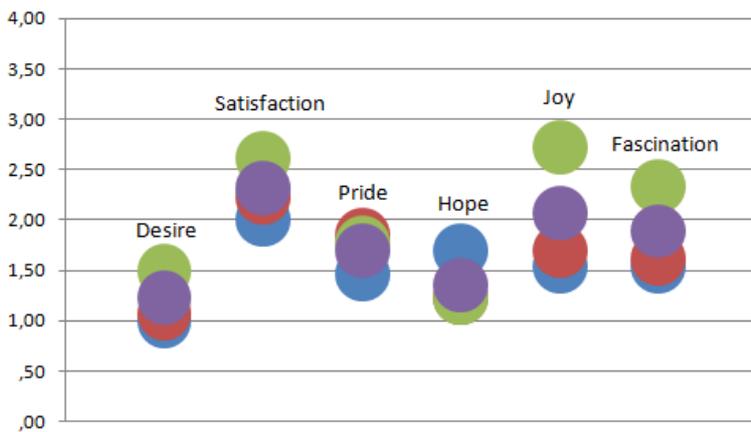


Figure 3: Created ride sharing service Fahrteiler

## RESULTS

A group mean value for each emotion was calculated from the PrEmo results for all three services. This mean was used as a benchmark for the level of elicitation of the given emotion by the tested ride sharing services. Figure 4 and 5 depict the outcome of the comparison for positive and negative emotions.

### Mean comparison for positive emotions

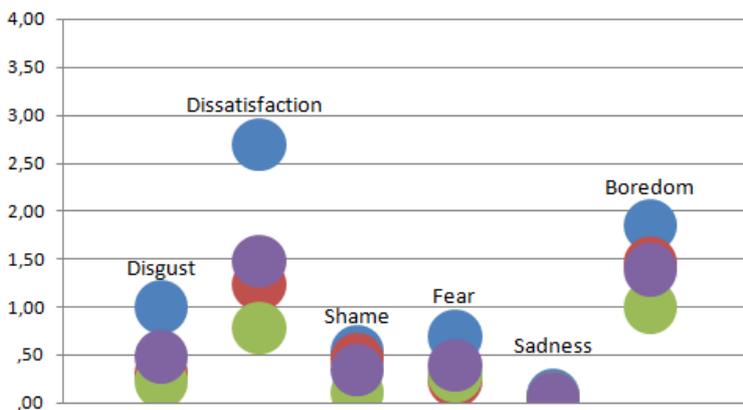


### Legend

- Caribo
- m.mitfahrgelegenheit.de
- Fahrteiler
- Group mean

Figure 4: Comparison of the results for positive emotions from the benchmark and evaluation stage.

### Mean comparison for negative emotions



### Legend

- Caribo
- m.mitfahrgelegenheit.de
- Fahrteiler
- Group mean

Figure 5: Comparison of the results for negative emotions from the benchmark and evaluation stage.

In summary, the new service Fahrteiler reached highest mean ratings for desire, satisfaction, joy and fascination, whereas the difference of its joy rating to the ones for the other two ride sharing services is statistically significant at the five per cent significance level. This prototype was also rated with the lowest mean values for all negative emotions except fear and sadness, whose values are close to the lowest.

### ***PREMO APPRAISAL***

Subjective perceptions, when expressed verbally, make an intercultural comparison difficult, because there are no unambiguous translations of all emotion words existing in a given culture. This aspect was relevant for the current study because all test participants were German. If their subjective perception was to be expressed verbally, its English translation might have communicated a slightly different meaning than what was meant. The non-verbal expression of subjective feelings overcomes this disadvantage and the tool PrEmo measures not only basic emotions such as happy/unhappy, calm/excited but mixed emotions which are related in particular to products.

### ***PERSONAL AND BACKGROUND INFORMATION***

#### Affiliations

The here presented study was conducted by Veselina Milanova, a student in International Information Management, within her master thesis at the Institute for Information Science of the University of Hildesheim, Germany, under the supervision of Prof. Dr. Thomas Mandl and Dr. Ralph Kölle.

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