

Precision in Persona Development

Problem

Personas are often differentiated on information (e.g. demographic, psychographic) that does not reflect users' attitudes towards the product.

- Do personas reflect actual user groups?

1. Elicit users idiosyncratic views

Repertory Grid Technique

Subjects' idiosyncratic views on a set of products are elicited using a structured interview technique

- 3 products: "in what way is one different than the other two?"
 - Beautiful – ugly
 - Easy to use – difficult to use
- Every subject brings his/her "own" attributes
- Subjects rate products on their personal attributes as well as on *preference* and *dissimilarity*

2. Identify homogeneous user groups

Multi-dimensional Scaling

Distances between subjects are calculated from the in-product correlation of their preference or dissimilarity ratings and visualized in two or more dimensions

$$R_{ij} = \frac{\sum_k D_i(k) \cdot D_j(k)}{\sqrt{\sum_k D_i^2(k) \cdot D_j^2(k)}} \quad D_{ij} = 1 - R_{ij}^2$$

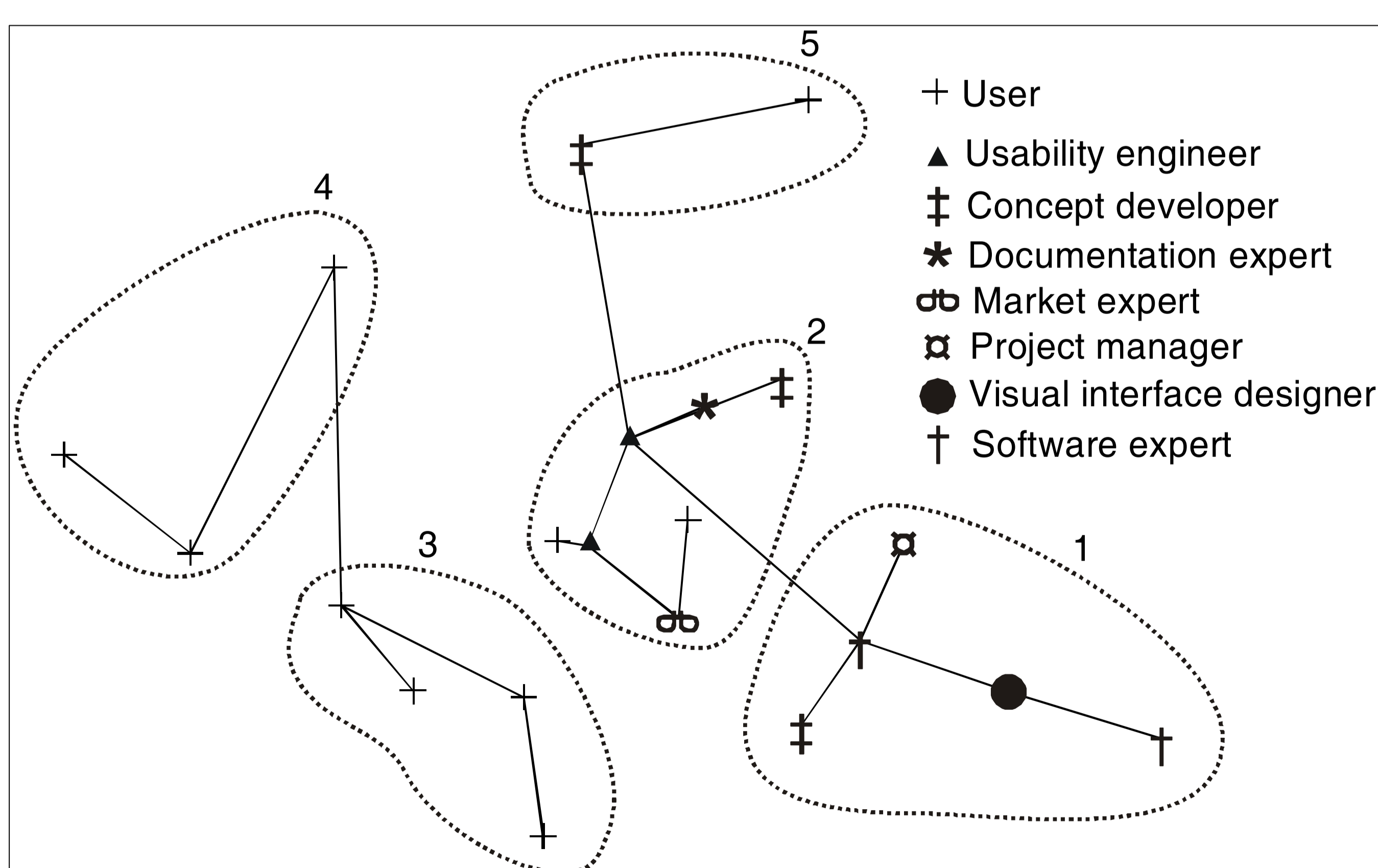


Figure 1. User segmentation map based on correlations between dissimilarity scores

Objective

Develop a user profiling technique that:

- can be used as a first step in persona development
- can inspire a set of diverse personas that reflect the diverse attitudes towards the product

3. Visualizing subjects' perceptions

Each homogeneous group of subjects is analyzed separately with Multi-Dimensional Scaling. The product configuration is derived from dissimilarity scores, attributes and preferences are visualized as vectors.

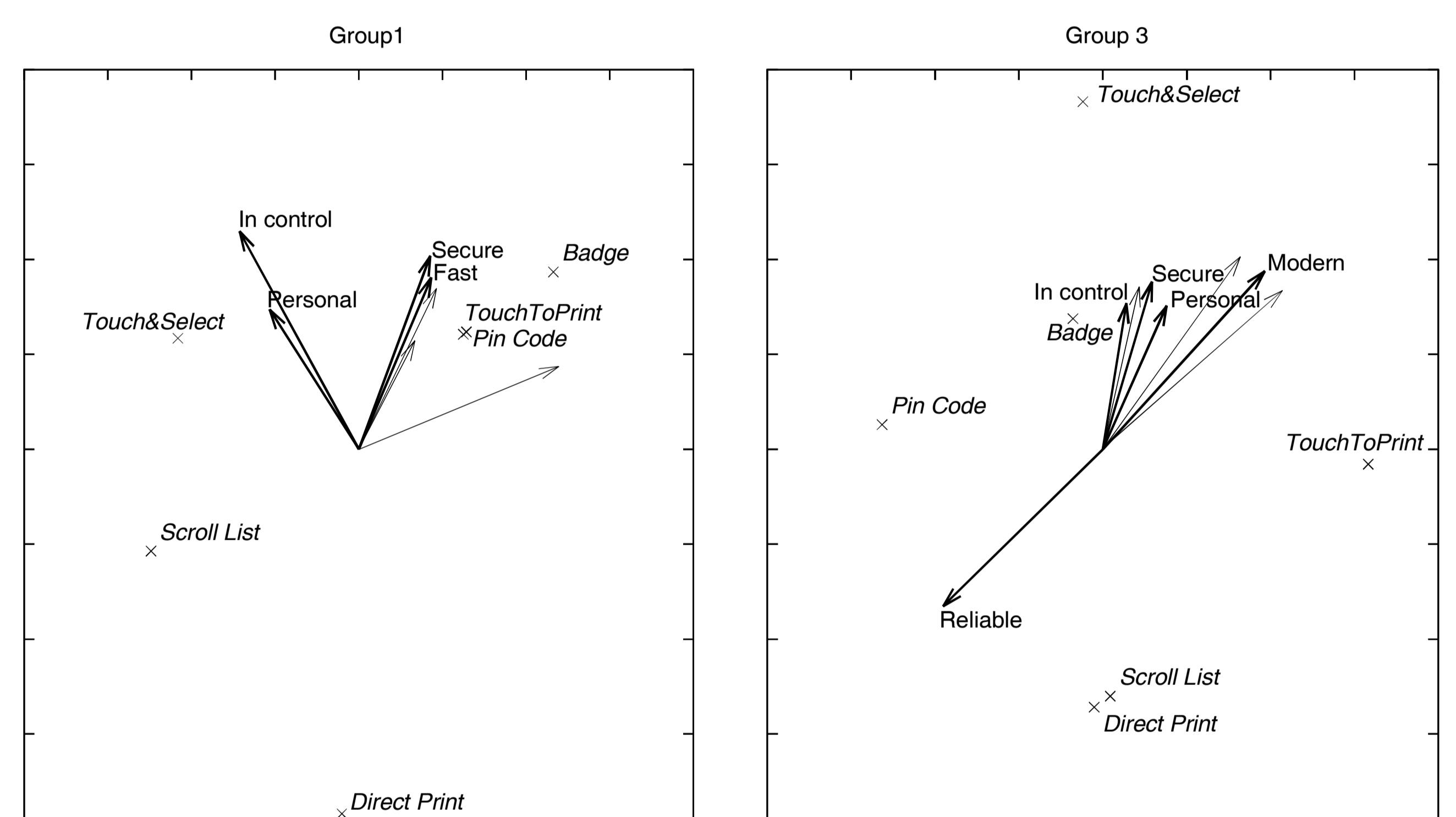


Figure 2. 2-D perceptual maps of Group1 and Group3

Conclusions

The proposed technique:

- follows a pragmatic approach to user modeling by distinguishing users based on how they perceive and appreciate products rather than on abstract demographic and psychographic information
- accounts for users' idiosyncratic views in contrast to other approaches where a priori defined attributes are imposed
- can be used in different phases of the product development, for instance using concept sketches but also for benchmarking between competitor products.

References:

- [1] Karapanos, E. and Martens, J.-B., Characterizing the diversity in users' perceptions, in C. Baranauskas, ed., Human-Computer Interaction - INTERACT 2007, Springer, 2007, pp. 515-518.
- [2] Karapanos, E., Martens, J.-B. and Hassenzahl, M., Accounting for diversity in subjective judgments (submitted), CHI'08, 2008.