What matters - User Values or Value to the End-User?

Abstract
In this workshop paper we review the HCI and design research literature on user values and value in order to understand the meaning of the terms. With this understanding we hope to make a contribution to the development of technology products that are of worth to users.

Keywords
User values, user value, product development

ACM Classification Keywords
H.5.2 [Information Interfaces and Presentation]: User Interfaces—User-centered design

Introduction
HCI is not alone pondering the meaning of the term value and values. Also in design research the issue of what constitutes user value and what is the source of value has not been solved and there is no commonly accepted definition [4]. The workshop on Value-Centered HCI asks in Call for Paper among others the following questions: Are we talking about the value to the end-user of the product being designed? Are we talking about the embedding of user values in a designed product? Considering these two questions, it feels that the answers to these two questions are not
exclusionary but complementary. If user values are embedded in a designed product, one would think the product will also be valuable to the user. Therefore both should be taken into account in the value/values/worth discussion in HCI. In this workshop paper we present how the different terms have been used in the literature. We also illustrate why answering yes to both questions is important when designing products that are of worth to users.

**Human values in HCI**

It is suggested in design of technology that human values should be used as accounts and aspiration for design [7] and to be included in the set of criteria by which the excellence of technology is judged [7][8]. Value Sensitive Design has an interest in designing systems that support enduring human values [8]. These are values with moral and ethical import, and might include e.g. value of privacy, ownership, equality, freedom from bias and trust [8].

In the field of game design, the reason to include human values in design criterion has been the fact that whether designer intends to incorporate them or not, some values will be reflected in the final design anyhow [7]. The problem is the unintentional values that are reflected for example by the tasks the player needs to perform in the game (e.g. earn money in The Sims) [7]. Since the designs originates from a human, it inevitably inherits, whether conscious or not, more or less the values of the designer. Boehner et al. [3] presented how critical technical practice (CTP) enables identification of values underlying design. With the CTP approach the values that go into design are exposed and designers can debate the choices and make judgments.

However, the goal of the design should be to express the values and needs of the user, not the designer. Also, can human values based design solution provide ultimate value to the end-user in a certain context?

**User values**

User values term is perhaps the vaguest term in value/values/worth discussion. Values are, according to Rokeach [10], enduring beliefs that certain processes or goals are better than others. Since values guide human behavior by pointing desirable goals in general in life, user values could be a term that refers specifically to intuitive user behavior in relation to some product or service.

For example, in consumer marketing Allen [1] studied how values influence preferences for products and their features and hence product choice. He found out that consumers use not only rational attribute-specific, but also emotion-laden, intuitive and holistic judgments of products or services. Latter type of judgment, (based on the product’s symbolic meaning) is directly influenced by values the individual holds unfiltered by the matter of product features. Individuals who value a comfortable life may seek out and in turn have positive attitudes towards objects that bring about a comfortable life (e.g. luxury cars, large homes).

**Value to the end-user**

It is agreed in product design that product or service should deliver value to the users as “no matter how technologically innovative or manufactured by standards the product is as if it does not connect with the values of consumers, it will fail” [5]. Concern in product development is that the design should be based on the users’ authentic needs [2] and what really
matters to the user [6]. In the previous chapters we have explored the scope and definitions of human and user values. However, to understand what the value is to the end-user of a product we need to look at product side of the relationship as well. Value to the end-user is not only dependent on product properties but also on the user experience.

The user evaluates the product on the basis of what it offers, not only what is or what it does [10]. According to LaSalle & Britton, people use both objective and subjective criteria to assign value. Objective criteria relates to the essential nature of a product or the offering’s inherent value, meaning e.g. product’s material value that is tangible and measurable. Subjective criteria are based on the symbolic or associative value of a product. It is what a product or service means to an individual as a result of the benefits derived from using and owning it [10]. A similar definition of value to the end-user is given by Boztepe [4], who claims that user value is created as a result of the harmonious combination of product properties and what users and their local context bring to the interaction with the product.

Conclusion
Figure 1 illustrates the proposal of this workshop paper. We postulate it is relevant to consider both user values and value to the user in product development. User values are motivational factors that guide user behavior in different user-product relationships. Some user values are e.g. of ethical import, some psychological and some practical. The substantive value of the product to the end user is realized as user experience in the product usage. Identifying and embedding of user values to the product being designed improves the value of the product as serving not only user’s practical values and goals but also psychological and social values.

Citations


