

Beyond usability and user centered design

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Usability problems plague technology today and require the industry to pay more attention to the consumer not only as the target of marketing efforts but also as a user of the product. In order to solve usability problems in a systematic way that can be built into the production process, the industry is looking for methodology. The research community offers valuable experience and ideas for this, and one key area of research is user centered design.

However, while the concepts of usability and user centered design deal with an important part of what shapes the everyday life experience of people, there are other important areas that they do not cover.

The journey of each individual product in the ecosystem of the everyday life is much richer than what can ever be revealed by the stories engineers, marketers and designers develop in the design process, and contains many turns and trials that continually shape the unique relationships between the product and the people who get in contact with it.

This is an individual's context for discussing the characteristics of the product and its usability, but it is in practice too broad for the producers and designers, whose interest is in the end limited and dictated by the market potential for a certain product that fits into the marketing plan of the company. In addition, the existence of the product depends on technological platforms and standards, business and manufacturing networks, cultural and social conventions and public infrastructures which both make the product possible and to a large extent define its design.

Since usability and user centered design usually deal with products, they do not address issues that fall outside of the product context.

This is a serious problem for the users, because many design options that are in conflict with the business interest of the particular producer are not considered. This problem is familiar in the area of information technology, manifested in one way in the tug-of-war between proprietary and open systems, but it is a general "usability hazard" which takes much more subtle forms as well.

Also, a lot of the potential of the technology may already have been lost in the design processes that took place before the product phase. As an example, a mobile phone inherits all the usability problems that may result from the particular mobile communications standard, or from the fact that some countries have decided to support other standards instead of this one.

Another problem is that usability and user centered design are intimately bound to ideas of the user and the utility of a product for performing some task efficiently.

In the design phase the "user" is an abstraction established to represent the future actual users, and this abstraction by necessity focuses on a small set of characteristics, the ones which designers or marketers are able to identify or assess as relevant, of those potential people. People seldom see themselves or each other as "users"; you can easily verify this by asking a family member to talk about his/her life as a user. "User" is a term with a lot of connotations, and obviously implies something that is being used and a situation where use takes place. Many of the needs and interests of those future users may easily be missed because their life and activities are examined through such a limiting filter.

Likewise, the problem with "utility" and "task" is that many phenomena of everyday life that need design can't be naturally understood through these concepts. Intangible but important things like cohesion in the family, sense of freedom, self-expression, being in control of one's own life, being loyal to friends or influencing in the society may completely escape this sort of analysis.

While the aforementioned focus is understandable and actually very useful and efficient in practice for most actual design projects, it will also systematically leave certain kinds of needs and interests of most individuals out of consideration.

The terms "usability" and "user centered design" represent valuable concepts and methodologies for the practice of design. However, the good of the people and society requires that design research must also represent their interest in those areas of design that fall outside of its traditional scope, for example in terms of disciplinary, organizational and methodological boundaries, and that people and social and cultural phenomena are taken into consideration in their full richness and complexity. Terms that are based on "using" and practices, however advanced they be, that frame the design activity accordingly, may constrain us into an invisible cage. We need to set our targets to reside outside of that cage.

In the seminar, I will describe how our research (the Future Media Home project at the Media Lab UIAH) attempts to extend the boundaries.