

Dimensions of experience design

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The challenges of user experience design are many – not least the fact that many people consider it simply a buzzword, while others think it is just a 21st century name for usability. Where, for some, these might be matters of mere terminology or semantics, I see these problems as indicative of a lack of sufficient reflection about what user experience really means – both in theory and in practice.

A PERSONAL PERSPECTIVE

I work within a group called “Customer Experience”, which has responsibilities across all of our business groups. I am the leader for user experience within that group and my first challenge was defining a difference between customer experiences and user experiences in a way which made sense for us. The exaggerated version of this difference has been between customers’ experiences with the brand (‘Logitech’) and users’ experiences with the product. This leaves a lot of room for interpretation still (such as software installation and documentation).

Importantly, our whole group (CX and UX) has to address physical products which all embody a degree of hardware / software integration. Logitech has no pure software products and very few (if any) pure hardware products. Logitech’s product range is broad, from mice and keyboards to webcams and speakers, through to universal remote controls, security camera systems and network music systems.

Furthermore, the majority of our products are generally considered to be ‘peripherals’ and we have to take care to advertise the broad contexts within which they will work (e.g. operating systems, hardware configuration, network availability, etc).

My Philosophy

For many years I argued that one could not design user experiences – that the user experience is an interaction between a specific user and a ‘product’ and that you could only design the ‘product’ side of this interaction. My preferred language was that one had to design for user experiences. Tim Brown’s closing plenary at CHI2004 in Vienna caused me to rethink some of this and I began to appreciate that in a heavily-controlled context it could be possible to design the user experience (e.g. Disney theme parks, or the Apple

store). But the most interesting UX design challenges seem to all lie in the uncontrolled spaces – which makes the fundamental question still one about how we design to enable great user experiences?

The second change in my perspective came from being closer to the marketing side of the organization and with reading Gilbert Cockton’s work on ‘value-centered HCI’ (e.g. Cockton, 2004) which led me to explore how a customer’s perceived value of a product influences their experience of it and to then ask the question about how this might relate to our understanding of frameworks, activities and methods for user experience design.

KEY DIMENSIONS OF UX DESIGN

Talking about UX design as one large thing can be useful, but if left it be an amorphous lump then we are not doing ourselves any favors. The dimensions I want to draw out are

- top-down versus bottom-up
- time-scale of design
- novelty
- newness of users

These dimensions all affect the balance of activities and processes that we need to use in doing UX design.

Top-Down versus Bottom-up

This is the key element of Tim Brown’s closing plenary from CHI2004 and it is central – top-down UX design addresses contexts where the design team are in complete control of all the important elements of the experience (most of the text-book examples of UX design fall into this category). By contrast, bottom-up UX design is for situations where one does not have control over all the elements and one’s design task it to provide elements that come together with others to enable an intended experience. The vast majority of UX challenges fall into this category.

Scale of design

The scale of UX design project can vary dramatically, from a single product to a family of products or a brand, as well as from something that ships in 6 months to a vision for products not expected to ship for 3 years or so.

Novelty

Creating a UX design plan for a new concept – a new category of experiences – is a different challenge from planning the UX design of a familiar product category.

Newness of users

As well as the novelty of the product (experience) concept, there is also the question of whether our target user population is new to us, or whether they are already familiar.

THE TOOLS IN THE UX SHED

In considering the impact of these different dimensions it is important to consider the different elements of any UX design process. No one of these is particularly new, but I'm not sure it has been recognized that they interact in different ways in different projects. Also, the skills required for each and the deliverables of each are very different from each other.

But most importantly these three areas are not different ways of doing UX design, but critical tools that are all needed and that play best together.

Design Research

Design research has many different connotations, but in this context it is easiest thought of as the equivalent to market research, but for product (experience) design, not product (experience) marketing.

Thus the intent is to explore the design constraints and opportunities for the envisioned product (experience) with current or future 'users'. Here immediately one sees the relevance of understanding novelty and newness of users, as these have a huge impact on the possibilities and challenges for doing.

Experience prototyping

Prototyping an experience, or envisioning an experience, is concerned with solving the problem that experiences are hard to communicate. The idea is to create something that enables another person (or even yourself) to get a feel – understanding – for the imagined experience.

<p>What I hear, I forget ... What I see, I remember ... What I experience, I understand.</p>

The importance of this prototyping step cannot be overestimated – this step is the equivalent of sketching and model-making in traditional industrial design.

Buchenu and Fulton Suri (2000) wrote the definitive paper on this topic which has sadly not been bettered, despite 9 years having passed. All too frequently within the CHI community the experience prototype is

seen as the end result, rather than as a part of the process of user experience design.

Within the context of UX design, an experience prototype is a communication tool – a conversation starter – both amongst the design team, with our colleagues and with our hoped-for customers and users.

Experience Specification and evaluation

An overlooked area of UX design is specification and evaluation. Although it is tempting to believe that a good prototype will be sufficient to communicate the intended experience, it is rarely sufficient. However, a traditional product specification is rarely adequate either and our challenge is to work out new ways of creating specifications against which progress can be tracked and evaluated.

Product (service, experience) design are long complicated processes and many decisions get taken without good understanding of their impact on user experience – and usually because there is no specification or tools to enable the user experience to be part of that discussion.

Beaugard and his colleagues at Intel (2007) have made good progress in this direction and their ideas have a lot of potential, but it isn't clear how well they can be applied across the spectrum of UX design challenges we encounter. One of the great strengths of their approach is the recognition that usability can be a powerful tool for tracking UX design progress, not just for finding local design weaknesses.

CONCLUSIONS

We have a lot of work to do sorting out the complex space that is UX design and collecting our case studies and examples that help us to map it clearly.

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