Archetekt Blueprints

Client-Facing Prototyping: The Value of Use Data from Real-Life Situations

Prototyping is a key component of any designer's toolkit – from graphic design, and industrial design through to strategic design. It's a well-established mechanism for trialing and gaining feedback on products and services before their full deployment. As a tool in the design toolkit, prototyping has been in use for many years. However, the growth of interaction and service design has seen its application move outside of the workshop and into client-facing spaces – particularly in the case of retail environments – but client-facing prototyping can usefully be utilized across the private, public, and non-profit sectors.

Part of the growth in the popularity of prototyping in client-facing spaces is that it enables a deeper and more thorough use of data and feedback in the co-design and co-production process (Howard and Somerville 2014). This user-involvement thus allows for greater value to be derived from the prototyping process for the creation of final products. For, while a prototype can be utilized in a fully contained environment – such as a consumer-experience lab – much more useful data can be obtained by deploying a prototype in real-life situations.

Part of the hesitation in using prototypes in open or semi-open environments is

concern with various forms of risk – particularly brand risk. However, risk can only ever be mitigated and there are many options for how that can occur in a prototyping situation. We need to be aware though of the very many positive benefits that can arise through these more open forms of prototyping.

There are three particular new use-cases that can provide useful data that can most easily be obtained through using these more open types of prototyping. These are:

- Integrated digital/analog experiences;
- The use of practice-oriented design; and
- Understanding of broader organizational implications.

The increasingly integrated nature of digital & analog experiences

In a well-researched definition, 'user experience' is defined as:

a subjective, dynamic and context dependent perception of a system, object, product or service that a person interacts with through a user interface (Law *et.al.,* 2009).

Generally understood in terms of digital interaction the concept of user interface can also operate in an analog environment as well. The example of the interface in an analog environment would be a service representative or similar point of face-to-face engagement.

The distinction between analog and digital engagement is becoming increasingly problematic as people often operate now with a range of digital devices at hand during face-to-face engagements. As an example, a customer in a physical retail environment may be using their Smart Phone to both text friends for recommendation and ask questions, as they simultaneously explore the online version of the store that they're currently in, as well as the retailer's competitor's sites as they analyze and review their purchasing options.

Users engagement in this sort of real-time mixed-world's approach is difficult to simulate in a lab environment and so it becomes difficult to acquire solid use-data on the value of prototypes without opening up the prototyping experience field. Prototyping of services and products therefore needs to move forward with this merging of the digital and analog taken as a given. Given the newness of these forms of combined analog/digital behavior as these previously separate worlds come together a focus on prototyping in terms of these processes will provide high levels of novel data for refining products and services.

In an interesting aside these forms of mixed-world behavior are actually being utilized by an increasing number of companies. Examples include Amazon opening their first physical bookstore in Seattle and other retailers – such as Julep – taking the concept of omni-channel operation native: operating in this manner from their very launch.

Similarly, retail giant Sephora's mobile apps allow customers to scan products, read reviews about them and perform other pre-purchase forms in the research in the store or online.

Given these shifts, in-store prototyping allows a channel for achieving the quality and depth of data about users real-time engagements with product to provide the most solid base for value production in the design and build out process of new products and services.

Practice-Oriented Design

Another key development in recent years – although less utilized to date in prototyping – is practice-orientated design. At it's most simple, practice-oriented design is the shifting of focus away from products and services *per se* and towards practices of use. In other words, it's not about stoves but cooking. It's not about cars but commuting. In short, it's about how and why we use products and services.

A key implication of this shift is that 'user needs' are seen to be a result of involvement in practices rather than a given set of individual desires or motivations (Warde, 2005: 137). The dynamic nature of practices therefore means that 'user needs' are actually a malleable and plastic construct which are tied to norms of existing behavior. What this means in terms of product and service development, is that these practices can be influenced and modified by design. This in turn means 'user needs' can also be influenced and modified by design (Shove *et. al.*, 2008:

8). While this is in itself not a novel realization, it is of value when we also realize that understanding various mechanisms of persistence and change in practices can help inform the development of innovative and more sustainable ways of living and doing (Ingram *et.al*, 2007).

Undertaking this type of prototyping allows for the capture of much greater use-data on the embedded nature of practices than is found in more controlled prototyping environments. In fact, this type of thick ethnographic prototyping data is almost impossible to collect in controlled environments.

An important result of the realization that services and products work to enable practices, then allows for the follow on realization that innovative sustainable products can be readily designed to enable innovative sustainable practices. Doing this would greatly increase the range of values that consumers acquire when they purchase or consume a product – including the import of broader social changes towards sustainability.

Broader Organizational Implications

Another aspect of the broader user experience that is still under-developed – both theoretically and practically – in the use of prototyping is how the introduction of new products and services impacts on the internal structures and processes of the organization. Generally analysis has been historically focused on the interaction of consumers with the

product or service and any organization-based focus is on the service representative – with analyses generally going no deeper within the organization. This is problematic as any external engagement by an organizational representative is always shaped and structured by the internal operations of that organization. Changes within an organization always lead to changes in user-experience.

A great example of where this realization has been seriously taken into consideration was by Commonwealth Bank in Australia. As they set out to improve their customer experience through an increased focus on the digital experience an early realization was made within the organization that their corporate structure was slowing things down – and was an impediment to the long-term value of these shifts. As a result of this realization, Commonwealth Bank moved to quickly restructure the organization internally to promote the role of IT within the bank and to bring it, along with banking operations, under the management of a single executive (personal communication). This increased the speed with which they were able to process inquiries which then had a dramatic impact on user-experience. While prototyping played only a minor part in this realization and subsequent build out of products it does signal the extent to which internal organizational structures and processes impact the user experience of products and services.

Research in Action

There are a number of immediate takeaways from this research that can be usefully put into practice to help organization's prototyping practices. These include:

- Designers need to be aware of the ongoing collapse in the distinction between operating in a digital versus an analog environment. The collapse of this distinction is changing the ways consumers interact with, and consume, products and services as these worlds become increasingly integrated.

- Engagement with, and consumption of, products and services occurs within an inter-related web and network of practices. This opens up opportunities for greater understanding of the role that products and services can themselves play in changing consumers' patterns of consumption and use.

- Consideration needs to be given to the impact that the design and production of new products and services plays on the internal structures and processes of an organization. Often ignored in user- and service-design the internal machinations of an organization will both affect, and be affected by, new products and services.

References

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