
Beyond Usability to User Experience

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Abstract

Usability is the practice of making products work. User experience (UX) is the practice of making products. In this position paper, I explore how UX research is bigger than just usability, and some of the methodological implications of asking UX questions. Then, I look at some of the trade-offs that arise when UX focuses on other parts of the product lifecycle.

Keywords

Usability, user experience, corporate settings

ACM Classification Keywords

K.7.2. The computing profession: Occupations. H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction

Traditionally, usability research has focused on one primary question: Does this product work? Although there are a variety of methods for answering this question, they all boil down to asking potential customers to use the product, and then seeing how well that experience goes.

There is no doubt that usability research is critically important to developing successful products, but gains can also be found when we move beyond usability to user experience (UX). UX research incorporates

usability, but it also asks bigger and broader questions that are at the heart of innovation: What are our customers' real needs? Do our products provide more value than they cost? How can our company delight our current customers while continuing to grow? What are the right strategic directions for future product development? When we move beyond usability to UX, all of these questions become fair game.

UX and the Product Lifecycle

Whereas usability research typically takes place after design and before product release (perhaps iteratively), UX research requires involvement at all phases of the product lifecycle using a wider variety of methods. In doing so, however, UX research must change focus and method depending on the questions being asked. In the interest of space, I'll briefly consider the methodological implications of asking questions about customer needs—an early stage in the product lifecycle.

What Are the Customer Needs?

There can be little doubt that we need to understand our customer needs if we're going to design delightful experiences. There are many different approaches to understanding their needs, however.

- **ASK CUSTOMERS THEIR NEEDS:** Perhaps the most obvious way to understand customer needs is to simply talk to them about their needs. In the hands of a skillful moderator, customers can provide valuable information in almost any setting—from a casual conversation to a formal focus group. Although this is often an easy and useful to get started on understanding customers, however, it's important to keep in mind that there are often

significant needs or constraints that are not verbalized, even with a great moderator.

- **SHOW CUSTOMERS THEIR NEEDS:** Early in my UX career, I worked with a team that was developing communication devices for firefighters. Throughout this project, we went to the fire station once or twice each week with our latest ideas, which were usually nothing more than rough sketches on paper. Each time, these firefighters told us in no uncertain terms exactly what they thought of our ideas. It was initially disheartening to hear these firefighters trash my ideas, but every time they did so, I learned something new about their needs. By showing them our rough design ideas—and sometimes even attempting to design in front of them—we elicited many unspoken assumptions that the firefighters would never have thought to tell us otherwise. In a number of subsequent projects, I've found this technique to be useful when there is time to iterate over ideas with a small, consistent group of customers. By expressing our understanding of our customers' needs in a tangible way, they are often able to teach us things that typically go unspoken (and correct our misunderstandings).
- **LET CUSTOMERS SHOW YOU THEIR NEEDS:** When the costs of developing and distributing products is low, a powerful technique for understand user needs is to give customers a product and see what they do with it. Google Labs has been fairly successful at using this technique to sift through many project ideas. By making early, not-yet-refined products available for customer experimentation, Google receives quick feedback on which ideas meet user

needs, which don't, and which can be improved upon.

- **LISTEN TO CUSTOMER SUPPORT:** As heretical as it sounds, sometimes UX researchers don't need to talk to customers in order to understand their needs. In my work at PayPal, I've found that building close relationships with customer support agents (and their managers) often provides me with an excellent starting point. After all, these individuals spend most of their time talking with customers and helping them solve problems. In coordination with other methods, feedback from customer service agents can provide valuable insight into customer needs, especially for projects that focus on redesigning current products.

Although there are many different ways to go about understanding customer needs, these methods—especially in combination with one another—are some of the core skills that a UX professional can bring to the table when included early in the product development process. Of course, the best method for a specific project will depend on a number of contextual factors such as availability of resources, corporate competencies, and development timeline.

Navigating Trade-Offs

Unfortunately, creating the best user experiences is about more than simply meeting customer needs. There are always trade-offs involved. UX within corporate settings must always remember that it serves two masters: the customer and the business. Consider two of the many trade-offs that I've wrestled with at various points in my career.

UX vs. Corporate Capability

A few years back, I did some consulting work for Pitney Bowes's research lab. The goal was to discover ways that Pitney Bowes could move into the healthcare space. As we began talking with various stakeholders in this industry, we quickly saw all sorts of needs that we could imagine solving. After hearing about an incident where a patient's medical records were mistakenly faxed to the local pizza parlor, we came up with a number of design ideas around fax machines. When we heard from doctors that it can be difficult to find patients when the names are not written on the hospital rooms, we immediately thought of ideas that could preserve patient privacy while helping doctors find their patients.

But, when we took a step back, we realized that Pitney Bowes doesn't make fax machines nor does it make signs for hospitals. Solving these particular customer needs were simply not part of our corporate capability. Instead, we eventually settled on helping hospital staff route and manage documents. Since Pitney Bowes specializes in routing and managing the mail system, this was clearly an analogous situation. This solution was within our capabilities.

In moving UX into the product lifecycle, companies and researchers will have to wrestle with this trade-off. When UX researchers see problems, we tend to want to solve them. The challenge is learning to distinguish between those needs that you are capable of meeting and those that are best served by someone else.

UX vs. Business Plan

At PayPal—as at any company, I imagine—we periodically hear customers complaining that our fees

are too high. If we were truly trying to produce the best possible user experience, the solution would be obvious: we should get rid of our fees! Clearly, providing our services for free is simply not a possibility. The fact is that the best user experiences are not necessarily the most profitable and UX research must be balanced against a viable business plan.

In my experience, this has been one of the most difficult challenges to navigate as a UX professional, especially when UX moves to earlier stages of the product lifecycle. In my work in healthcare at Pitney Bowes, our UX team struggled to present our ideas to the company's senior management because our concerns were different. We spoke of customer needs and solutions to those needs, but management wanted to know about how we were going to make money off of those solutions. (Since we were asking for several million dollars in start-up funding, that's not an unreasonable question.)

Although we were able to partner with individuals more skilled at developing business plans, our training in HCI did not adequately prepare us to navigate this trade-off. As UX moves into a place of corporate prominence, it's important that we train future researchers how to understand, discuss, and participate in creating business plans.

Conclusions

Although there are always exceptions, generally companies these days see the value in conducting usability research. As a community, however, we have a challenge in moving beyond usability to UX. To do this, we must be able to clearly articulate the value that

UX research provides and the many ways that it can fit into the product development lifecycle.

As the UX community transitions beyond usability, I feel that I have something small to contribute and something large to learn in this workshop. Although usability testing is an important part of my job, I have spent a significant amount of time working at the fuzzy front end of innovation. Having participated in the entire lifecycle of a number of products, I have insights from my experiences to contribute, especially related to balancing customer and business needs.

At the same time, I look forward to having the chance to learn from others' experiences. There are a number of hard problems in moving UX to a central role in the corporate environment, and I certainly don't have all of the answers. Although I'm fortunate enough to work for a company that values UX—the CEO keeps telling investors that it is the key to our success—I believe this workshop will help me be more effective within my own corporate environment and within the larger CHI community.

Through this workshop, I hope to both contribute to the larger discussion of UX in corporate settings and learn from others' experiences how to make myself more effective within my own organization.

Author Bio

Jim Hudson is a Senior User Experience Researcher at PayPal, an eBay Inc. company. In this current role, he works with projects that are at all stages of the development lifecycle—everything from understanding customer needs to end-stage validation of nearly complete designs. Prior to joining PayPal, Jim worked in

the Advanced Concepts & Technologies (AC&T) division of Pitney Bowes, where he worked on developing product concepts based on broad strategic directions that the company wished to pursue.

With a Ph.D. in Computer Science from Georgia Tech, Jim has long been interested in questions of methodology. Much of his academic work into the social

psychology of online interaction has focused on what he terms quasi-experimental methods—methodological techniques for gathering rigorous data *a la* quantitative studies while maintaining the messiness of real world environments *a la* qualitative studies. Jim recently published his first book, *Chatting to Learn*, an academic discussion of how online educational discussions differ from their traditional face-to-face counterparts.