Jakob Nielsen's Alertbox, September 8, 2003:

Misconceptions About Usability

Summary:
Misconceptions about usability's expense, the time it involves, and its creative impact prevent companies from getting crucial user data, as does the erroneous belief that existing customer-feedback methods are a valid driver for interface design.

Most companies still don't employ systematic usability methods to drive their design. The resulting widespread ignorance about usability has given rise to several misconceptions that warrant a response. (For the definition of usability and the basics of why and how to implement it, see my previous column.)

Usability Is Expensive

Yes, big computer companies have been known to invest in million-dollar usability labs. Yes, experienced usability professionals are very highly paid. And yes, large-scale user testing to compare multiple design alternatives across several countries can cost $200,000 or more. Ouch.

But most **everyday usability projects are cheap**. Small companies don't need labs; you can run user tests in a spare conference room. Rather than hiring expensive usability professionals with ten years' experience, you can teach existing staff how to conduct studies. And, even though international studies are great, you don't start there: just spend a few days testing five domestic customers.

Even with a budget of $200, you can do usability. The methods are incredibly flexible and scale up or down according to circumstance. On average, best practices call for spending 10% of a design budget on usability. That's a cheap way to ensure that you spend the remaining 90% correctly, rather than blow your budget on an unworkable design.

Usability Engineering Will Delay My Launch Date

Case study reports are typically issued by companies that have followed the entire user-centered design process to the letter, starting with field studies. These descriptions of the great and the good can be daunting for projects with smaller budgets and tighter schedules.

Usability need not be grandiose. The simplest user testing method I recommend

takes three days, but even faster tests are possible -- especially if you use methods like paper prototyping, which lets you crank through new design iterations in a few hours.

One of the main benefits of letting user research drive design is that you don't have to spend time on **features that users don't need**. Early studies will show you where to focus your resources so that you can ship on time.

Finally, usability can save time by helping you quickly **settle arguments** in the development team. Most projects waste countless staff hours as highly paid people sit in meetings and argue over what users *might* want or what they *might* do under various circumstances. Instead of debating, find out. It's faster, particularly because running a study requires only one team member's time.

Usability Kills Creativity

Design is basically problem solving under constraints: you must design a system that can actually be built, that's within budget, and that works in the real world. Usability adds one more constraint: the system must be relatively easy for people to use. This constraint exists whether or not you include formal usability methods in your design process.

Human short-term memory holds only so many chunks of information. If you require users to remember too much, the design will be error-prone and hard to use because people *will* forget things when you overload their memory.

Also, if you're designing a website, it will be one of millions available to users and they'll grant you only so much of their attention before they move on.

These are **facts of life**. All usability does is to **make them explicit** so that you can account for them in your design. Usability guidelines tell you how people typically behave with similar designs. User testing tells you how people behave with your proposed design. You can pay attention to this data or ignore it; the real world remains the same regardless.

Knowing real-world facts *increases* creativity because it offers designers ideas about design improvement and inspires them to focus their energy on real problems.

Following design conventions doesn't destroy creativity. Conventions and standards for interface design are like a dictionary for the English language: they define the meaning of interface units and offer guidelines for stringing them together. But the dictionary doesn't define whether you're writing Harry Potter, a Stephen King thriller, or an Alertbox column. Writing offers ample creative opportunity, despite the standard expectation that you'll use language in ways that readers can understand. Interaction designers can be equally creative,

despite a requirement that they design for the characteristics of *homo sapiens*.

We Don't Need Usability, We Already Listen to Customer Feedback

Market research methods such as focus groups and customer satisfaction surveys are great at researching your positioning or which messages to choose for an advertising campaign. They are not good at deciding user interface questions -- in fact, they're often misleading.

When a group of people is sitting around a comfortable table munching snacks, they're easily wowed by demos of a website's fancy features and multimedia design elements. Get those people to sit alone at a computer, and they're likely to leave the same website in short order.

The most famous example of the demo effect occurs with [3-D user interfaces](#), especially fly-throughs for complex data sets. These systems always look incredibly cool and compelling, yet they almost never work in actual use.

Seeing something demo'd and actually having to use it are two very different things. Likewise, what customers say and what customers do rarely line up; listening to customers uses the **wrong method to collect the wrong data**.

Luckily, the correct usability methods are cheap, easy to implement, and won't delay your project. So why would you rely on misleading methods that are typically more expensive?

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