Did Poor Usability Kill E-Commerce?

Summary:
User success rates on e-commerce sites are only 56%, and most sites comply with only a third of documented usability guidelines. Given this, improving a site’s usability can substantially increase both sales and a site’s odds of survival.

Did poor usability kill e-commerce? No. First off, despite the closure or dramatic downscaling of many sites, e-commerce is not dead. Second, sites have gone under because expenses were greater than revenues, and usability mainly impacts the second of these parameters.

If Users Can't Buy, You Don't Make Money

How much impact does usability have on revenues? In a recent study, we watched users make 496 attempts at performing tasks on e-commerce sites. The test spanned 20 sites based in the U.S., focusing on large sites but including a few smaller ones as well. On average, the user success rate was 56%.

E-commerce sites lose almost half of their potential sales because users cannot use the site. In other words, with better usability, the average site could increase its current sales by 79% (calculated as the 44% of potential sales relative to the 56% of cases in which users currently succeed).

Many of the now-deceased sites might well have survived had they increased revenues by 79%.

International usability is even worse. Based on our study of Northern Europeans shopping at the same 20 sites, we estimate that the sites could increase their overseas sales by 49% if they provided those users with the same quality of user experience that they offer domestic users.

We always find even greater usability problems when we study the effectiveness of North American designs in Asia, Latin America, and Southern Europe. Thus, sales in these regions could increase more than our Northern European estimate if the sites sufficiently emphasized international usability.

Clearly, e-commerce sites have great potential for improving usability and thus increasing sales. We’ve published a 389-page report with 207 guidelines for e-commerce user experience based on our usability studies. After reviewing several midsized e-commerce sites, we found that on average they complied with only 37% of the 207 usability guidelines. Compliance was particularly egregious in international usability, where the sites followed only 15% of the guidelines.
Best-selling sites are better at following the e-commerce usability guidelines: Across 10 big e-commerce sites, we found an average compliance rate of 53% with the 207 guidelines (i.e., 110 guidelines followed; 97 violated).

**Forget the Web's Realities? You Die**

Even a site that scores well on usability guideline compliance and enjoys the resulting good sales can go under. We've seen several examples. When you spend too much money building an infrastructure that will take 10 years to utilize, your cash flow will obviously suffer.

In 1997, I predicted that specialized sites will generate most of the Web's value. My assumptions then were somewhat too optimistic: I assumed that Web advertising would generate one cent per page view, and that the Web economy's total value would amount to $1.3 trillion by now. As it turns out, online advertising has revealed its worthlessness at an even faster rate than I expected, and we have not yet seen a sufficient uptake in new business models based on micropayments. Even so, I stand by my basic analysis: Smaller, targeted sites are the Web's foundation.

During 1999 and early 2000, many e-commerce executives disagreed with my analysis and spent aggressively to "get big fast," as the saying went. They were wrong.

**What to Do**

Assuming a decent product, e-commerce can work and be profitable if sites follow two basic principles: control expenses and improve usability so that fewer users are turned away.

E-commerce is nothing but mail order using an electronic catalog. Anything that can be profitably sold by mail order can sustain an e-commerce company. In fact, e-commerce can do much better, especially when selling complex B2B products and services.

If it's designed right, an e-commerce website can be far superior to a catalog. Good design means offering users more content and photos than a traditional catalog, along with multimedia demos (where appropriate), regular updates, a broad selection, instant international distribution, and an easy way to search the site (following the 29 search guidelines, of course!).

Until micropayments become the standard, Web site revenue will continue to flow from product sales. Making such sales easier for users is clearly your best bet for near-term survival.

**Learn More**

The [User Experience 2001/2002](http://www.useit.com) conference includes an **advanced two-day course** on e-commerce usability based on our recent research. Conference dates are:

- Washington, DC, October 21-24, 2001
- London, UK, November 4-7, 2001
- Sydney, Australia, June 2002
Other topics covered at the conference include web-based applications, interaction design, accessibility ("beyond ALT text"), information architecture, web design, user testing (introductory course), web design (advanced course), paper prototyping, content usability and writing for the Web, competitive usability evaluation, and field studies. I will also present the winner of the best intranet usability of 2001 competition.

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