What Do Users Want in an HCI Website?

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ABSTRACT

In Fall 1998, we conducted a survey of user interface and software professionals to help guide the design of an online HCI resource. The results indicated that respondents want websites that provide practical content of broad HCI relevance, preferably based on empirical results. They were especially interested in usability methods and principles. Our respondents had a faster network connection, more recent browser version, and higher use of non-PC operating systems than average for web users. Finally, our respondents indicated a preference for practical, accurate, and comprehensive content, a usable navigation system, and fast download times.

Keywords

HCI websites, WWW, HCI professional issues, user surveys

INTRODUCTION

A number of usability websites currently provide various types of information and services about HCI, including for example, the SIGCHI website [1]. In developing our own usability website, usabilityfirst.com, we sought to uncover the needs of software and usability professionals for online information. What types of usability information do users need? What do they value in the design of a website? What are the relevant platform requirements?

SURVEY METHOD

We constructed a survey exploring these questions. The survey and detailed results are available online [2]. The survey was distributed in Fall 1998 through email to colleagues and to volunteers in a usability tutorial, and was distributed in a paper version with the conference materials to a portion of the attendees at the CSCW 98 conference in Seattle. A total of 52 surveys were returned and tabulated (22 through email, 30 paper versions).

Our target population for the survey was intended to be software and usability specialists with an interest in HCI issues. In this regard, we had some concern that surveying the CSCW conference might bias the results strongly toward CSCW interests. This turned out to be true: 73% of CSCW respondents (paper survey) indicated an interest in groupware, whereas only 27% of email respondents indicated an interest in groupware. However, the pattern of results in other areas of interest was quite consistent across the paper and email responses. We therefore combined the results from the two versions of the survey in this paper.

DEMOGRAPHICS

Our survey asked about current job title, education, and experience. The breakdown for job title was: researcher 25%, project manager 15%, professor 13%, usability specialist 10%, other (3 responses or fewer per item) 31%. This indicates a broad range of professions with usability interests.

Respondents came from diverse backgrounds (multiple responses allowed): computer science 42%, HCI 36%, psychology 19%, human factors 17%, interaction design 15%, graphic design 12%, other (4 responses or fewer) 36%.

Respondents had a high overall level of education (31% masters degree, 29% PhD), computing experience (58% had 7 or more years experience in the information technology field), and website design (48% had 1 to 3 years of website design experience and 25% had 4 or more years experience).

RESULTS

Level of interest in usability issues

We asked whether people currently used some type of usability techniques: 63% performed usability inspections, 81% user testing, and 73% task analysis. We also asked whether they would like to apply usability techniques more often (83% would). The surveyed group clearly shows a strong interest in the HCI area.

Types of content and features

A question asking what content and service types users wanted in an HCI website offered 19 alternatives. A second question asked what subject areas users would be interested in, with 20 alternatives. Some of the alternatives overlapped between the two questions. Multiple alternatives could be selected.

The most popular content and service types, with between 50% and 56% of all respondents selecting these answers, were: empirical results, tips and tricks, tutorials and how-to's, design critiques, and prototyping techniques. The least popular choices, chosen by 17% or fewer respondents were: downloads, glossaries, newsletters, conferencing, email updates, games, news, and jobs. In general, it appears that users were far more interested in content than in interactive services and technical features.

The most popular content types selected by respondents were: user interface principles and guidelines 84%, design methods 83%, user testing techniques 73%, information visualization 67%, prototyping techniques and tools 65%,

and website design 63%. The least popular items, with 13% or fewer respondents, were mailing lists, education, and healthcare. Overall, it appears that usability methods and principles were quite popular, while domain-specific topics were less so.

Our question about content types was based on an earlier web questionnaire [3]. This questionnaire had 24 respondents between August and December of 1998. Because it only represented a small subset of the full survey, we do not combine the web questionnaire results into this report. However, while the web questionnaire appears to have reached a different population, the results of the web questionnaire were highly consistent with the related question on our complete survey. Given the success of our email and web surveys, one area for future exploration is whether surveys can be performed more effectively via email and the web than with traditional paper surveys.

Design Style
How should a website be designed to be most satisfying to users? Results from GVU's 9th WWW Survey in April 1998 (GVU9 [4]) indicate that the biggest problems users have in using the web are download time and broken links. We asked users to rank which features they felt most affected a website's usability and credibility. The top three features considered important to usability were (in order of preference) a usable navigation system, practical content, and download speed. Ironically, platform-independence had the lowest rating. (Orderings are based on a weighted sum of the ranked responses.) The top three features respondents identified as lending a website credibility were accurate content, comprehensive content, and author's reputation.

Target Platform
Our survey respondents had a more capable platform than the average web user. For the speed of their network connection, only 6% indicated that they were connected with a 33.6 kbps modem or less (though 17% indicated they didn't know what type of network connection they had). In comparison, results from the GVU9 survey indicated that 52.5% of web users overall had 33.6 modems or slower.

Some version of the Windows operating system was used by 90% of our respondents. However, respondents could make more than one selection: 33% indicated that they used Mac OS and 33% indicated Unix. Thus, cross-platform testing is indeed crucial for this audience.

As for web browsers, 79% indicated they use a Netscape browser, 52% use a Microsoft browser, and 8% use another browser. Only 12% used a version 3.x browser or earlier, indicating that backward compatibility is becoming less of a concern for this audience.

Where Users Currently Seek Information
In free-response questions, we asked what resources people referred to for usability information. Many respondents left these questions blank, but 29% explicitly mentioned that they don't use any usability websites.

Jakob Nielsen was by far the most common source of usability information. Nielsen's website [5] was used by 27% of respondents. While responses to our question about usage of print materials were very low in general, Nielsen's books and articles were on top with 4 responses overall, along with ACM magazines and journals (also 4 responses).

While CHI proceedings (3 responses) and CSCW proceedings (1 response) were mentioned, the number of people mentioning that they use these proceedings is surprisingly low given that 22 of the surveys were returned by CSCW attendees. Other websites that were mentioned between 3 and 6 times were: C|NET, usabilityfirst.com, killersites.com, acm.org, Microsoft, usableweb.com, and Web Review.

DISCUSSION
Nielsen's site was used far more often by our respondents than any other related website. It appears to us that this is because his site largely reflects the preferences of users. His site provides content, including much about usability methods and principles. The content is accurate, practical, and fairly comprehensive, and much of it is based on empirical results. The website downloads quickly and has an apparently usable navigation system. Furthermore, his reputation lends the site credibility. Our survey identifies a few additional areas that may be of particular interest to the HCI community, including for instance, prototyping techniques and information visualization.

Our survey results represent an initial investigation into the website needs of the HCI community. These results provide useful guidance to website developers creating usability websites.

ACKNOWLEDGMENTS

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