

# CHI 99 SIG: Universal Web Access: Delivering Services to Everyone

Gary Perlman

*This is a summary of a SIG session at CHI 99 on “Universal Web Access: Delivering Services to Everyone” attempting to make simultaneous progress on multiple dimensions of diversity: Multilingual/International/Multicultural, Handicapped/Disabled, Gender, Age, Economics, etc. Wednesday, May 19, 1999 2:30-4:00pm*

## Abstracts

The following made brief presentations on their work and/or views on universal accessibility. No topic encompassed all possible dimensions of accessibility, but the diversity of topics highlights the potential to broaden markets to include more users. One goal of the session was to consider how to broaden these and other projects, while another was to determine how a community of people interested in accessibility can share resources. Part of the discussion attempted to answer what to do next. An online repository is being maintained at: [www.acm.org/~perlman/access](http://www.acm.org/~perlman/access).

1. Evolving Adaptability to Create Internationalized Accessible Multi-platform Web Services  
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OCLC Online Computer Library Center

At OCLC I work on the FirstSearch service user interface, in part on increasing the potential markets by offering French and Spanish versions, improved support for accessibility, additional functionality while maintaining support for low-end machines and legacy browsers. To accomplish this level of adaptability, we have developed some techniques for (1)

separately specifying the functionality, the language strings, and the display format, and (2) setting parameters (e.g., dimensions, fonts, tables vs. lists) based on browser version, availability of JavaScript, screen size, etc. Web pages are dynamically constructed based on function, data, and user options. The user interface architecture evolved over time, with several periods of reworking sub-optimal choices. Even when organized, there is a large cognitive overhead to developers to separate form, function, and language.

To learn about techniques for increasing adaptability, I've found it useful to explore features on volunteer-run services such as (1) The HCI Bibliography site and search service and (2) a CGI script for presenting accessible versions of a variety of usability questionnaires in multiple languages. Some details are available in notes from a BuckCHI Presentation on Universal Access .

2. Electronic Curbscuts to Motivate Universal Access: What You Can Do  
Michael Muller ([mullerm@acm.org](mailto:mullerm@acm.org))  
Lotus Development Corporation

It is sometimes difficult to motivate companies to work toward universal access, if they perceive the beneficiaries as a small and relatively invisible minority. Many people in the disability access communities have advocated the notion of “electronic curbscuts.” Electronic curbscuts work like physical curbscuts: They are innovations that improve access for people with disabilities, but that also benefit huge numbers of other people (the temporarily able bodied, or TABs). I will describe some simple electronic curbscuts and their

extended benefits (e.g., closed captioning). I will then propose a strategy that many of us can follow, to show companies how improving accessibility for people with disabilities can also lead to products and services with greater flexibility, increased functionality, and expanded markets.

3. Once you get onto the Internet: How do you use it?

Ann Marie Paulukonis (paulukon@pilot.msu.edu)  
Michigan State University

While the rest of the presenters are tending to focus on issues surrounding getting people to the technology, I am concerned about what happens next: Just because someone has the computer or has access to the internet does not mean they understand how to use it. How can we identify what our users are bringing with them to this new environment? As developers, how can we work with that information to provide ramps to the new environment that they understand? My present work is focusing on how to make online courses accessible to those who are not familiar with the web.

4. Internationalization: Tailored or Homogeneous Products?

John Armitage and Edward Guttman  
(John@AMandA.com, Ed@AMandA.com)  
Aaron Marcus and Associates, Inc. (AM+A)

Internationalization is really an issue of whether to pursue a product strategy of tailored (localized) products, or homogeneous (single-version) products. This is an ongoing, fundamental issue in marketing and manufacturing of all products, but it is not discussed as such in software design circles. Instead, there is a focus on poorly localized products that contain awkward cultural "signs". Also critical are the motivations of marketers and their cost/benefit analyses for decisions.

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