



NCTI 2008 Innovators Conference

Session Title	Breakout Session: Understanding the Global Marketplace
Names of Presenters	Annuska Perkins, Jeffrey Bigham, Leslie Conery, Yong Zhao
Date	Thursday, November 20, 2008

Summary Four speakers, each working internationally, spoke about issues related to globalization as well as “localization” – the process of making a product work in a local culture. Yong Zhao shared the term “glocalization” to capture the dual nature of this work.

Annuska Perkins, Senior Accessibility Program Manager, [Accessible Technology Group](#), Microsoft Corp. (*Moderator*)

Set the stage: What kind of opportunities come out of working on a global scale?

Example from Annuska of rolling out VISTA Ease of Access page; some findings:

- Microsoft did usability testing and got unexpected comments about the old wheelchair icon;
- Microsoft went to an abstract icon of flowing arrow and to the term Ease of Access;
- The “localizers” at Microsoft were already translating Ease of Access in other languages;
- Implemented a web survey to track self identification and task based questions to make suggestions;
- Microsoft replicated the study in Japan where it was not well received;
- Created redundancy on the welcome page by providing the information outside of the web survey.

Another example from Annuska was shared – a newly developed accessible web media player built on SilverLight 2.0. It has the isographic icons for captions, audio narration, and sign language and is built to support three alternative formats and alternate languages. Still in alpha development stage, but getting some interest generated as a way to create and handle accessible multimedia content.

Jeffrey Bigham, WebAnywhere, Winner of the Accessible Technology Award for Interface Design, 2008 Microsoft Imagine Cup International Competition

WebAnywhere, <http://webanywhere.cs.washington.edu/>, is a self voicing web portal and will run on any terminal over low bandwidth. It requires no installation. It has some elements that would assist people with low vision as well as being designed for the blind. It is designed as open source (webanywhere.googlecode.com) so that the community can contribute and this is also allowing for rapid iterations of design. There is an intelligent process that pre-reads the content



and then stores it in the browser cache as an MP3, but to date this has not resulted in an appreciable lag time in text to speech delivery.

As T. V. Raman said, the web is evolving from a collection of documents to a hyperlinked cloud of applications ([link to Raman's notes](#)). However, these applications are less useful if they can only be accessed on a single computer – which is a typical case when someone uses assistive technology. This was the motivation behind the design for WebAnywhere as a screen reader in the cloud.

Posting the code made it instantly available around the globe. It was published in May 2008 and use peaked at about 5,000 users a week. After the July Imagine Cup, media picked up the press releases and they got global recognition. There has been hundreds of emails from users, many have requested extra features. The most common request has been for additional languages. Given the open source code, individuals have offered to provide language translation and are already working on this.

Comment: Free downloads like WebAnyWhere are an easy way for others to try out AT without purchasing or even admitting that they may need it.

Leslie Conery, Deputy CEO, [International Society for Technology in Education](#) (ISTE)

ISTE, what it is and does:

- Has an international membership with 80 affiliates, 20K individual members, 100K educators connected;
- Hosts annual conference in the US and semi-annual in Singapore;
- Works with content teachers, not just the IT folks;
- Explores differentiation as a common term across the globe;
- Maintains a SecondLife gathering once a week with a teacher sharing space - this is a global community; and
- Created NETS (National Educational Technology Standards) for students and teachers.

Discussed how the process of developing the NETS has helped ISTE learn the lesson on localization while going global -- other countries don't want to adopt the standards wholesale but want ISTE officers to discuss the process of how they were developed and agreed upon. To date they have worked with Costa Rica, Brazil, Australia, and Egypt – asking how we take the NETS standards and localize them to get buy in from local communities?

Leslie had just returned from the Hong Kong International Worldwide Innovative Teacher Competition where 62 countries were represented, mainly by mainstream classroom teachers. Many of the projects showcased how these amazing teachers are meeting the needs of all students. "Teachers are so creative and innovative; take it to teachers."

Yong Zhao, Distinguished Professor, Michigan State University; Founding Director, Center for



Teaching and Technology and the U.S.-China Center for Research on Educational Excellence

A few principles:

- Globalization AND localization = Glocalization
- Globalization contributes to the long tail economy – eBay, etc. – you may have a small market locally but your global market is huge
- Globalization is creating new staffing models with programmers from across the globe

Anything we do today can be considered a global product; as soon as you post something – it's global.

The Confucius Institute, <http://confucius.msu.edu/default.asp>, offers among many other things:

- the first online high school course to teach Chinese, it is serving students from everywhere; and
- *Zon*, a multi-player online game with the objective to learn Chinese culture and survival skills, it is a collaborative effort with players offering content to the game

"I have seen many businesses move into China and fail because they fail to localize and understand the local culture; you can easily appeal to the super class citizens who are already globalized, but what about the majority of the people?"

As humans, we have a local mind, it's hard to understand to other points of view. That's why we need to grow the new/next generation of entrepreneurs to understand global markets, culture, and competencies.

Technology brings huge changes to society. If you push too hard, you can be completely rejected. Example: Microsoft created the "black screen" to turn off pirated copies of Windows. The backlash was so robust, China is creating a *Red Flag* Linux distribution in protest. Microsoft might miss out on the China market by pushing too hard.

Discussion

Comment: *Technology designers seem to take on the stigmas/attitudes that have been attached to labels and work to design stealth technologies. When will technology push back on the stigmas? And how to we work with the fact that in other cultures, the stigmas can be even stronger?*

Annuska Perkins: As children are mainstreamed, their devices have to be mainstreamable, too, and not down the hall. We need to customize the devices, too, by color or shape. We need to treat our users as consumers.

Comment: *Stop looking at the teachers, look at the kids. The stigmas are disappearing among the kids – look at the use of text messaging among the deaf kids – it's so popular!*

Yong Zhao: China has been denying the existence of disabled students for a long time. The hosting of the Paralympics games brought great visibility of the issue to China.



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Steve Jacobs: There are seven consumer groups across the globe at highest risk of exclusion:

- 1. Users of English as a Second Language (ESL);*
- 2. People living in countries where bandwidth is low;*
- 3. People 65+ years of age;*
- 4. Individuals who never learned to read;*
- 5. People living in societies that speak many languages;*
- 6. People who access the Internet using hand-held appliances; and, of course,*
- 7. Consumers with disabilities.*

Using design practices originally created to accommodate the needs of people with disabilities also address accommodating consumer groups 1-6 above... which can all be mainstream business benefits for accessible design.

Comment: In Canada, we focus on multiculturalism and multi-lingual; and Chinese is not monolithic, Chinese in Toronto is not the same in Hong Kong, for example.