Social networking across devices: opportunity and risk for the disabled and older community

Introduction

The disabled and older community, arguably two of the most marginalised groups in today's society, via the Internet has an opportunity to be connected in a way that we have not seen before. Connected not just with other disabled users but also to family, friends, co-workers, employers, prospective employers, schools and colleges. This is a huge opportunity for marginalised users to be part of wider community as a whole while interacting on what in theory should be a level playing field.

According to Tomi T Ahonen, technology author and strategy consultant , the Internet is the first media to cannibalise all prior media that came before such as print, TV and radio and add to it three new elements we have not seen before: interaction, search and social networking.

Social networking is the pinnacle of connectedness and represents a whole new means in itself to interact with others and search for information. It is no longer a web of information but a web of people with shared ideas, interests and needs.

Using mobile in combination with social networking builds on this further by giving us personal, permanent connectivity at the point of time you need it. As outlined in Opera's Opera's State of the Mobile Web Report April of 2008:

"Social networking is popular worldwide and is the leading source of Web traffic for mobile devices".

We do not just want to consume content, we want to generate content and mobile is fast becoming the primary means to do that. In a 2008 survey on mobile usage from IBM Dr. Sungyoul Lee, Global Consulting Leader, Electronics Industry, IBM commented:

"…over 50 percent of consumers would substitute their Internet usage on a PC for a mobile device….Worldwide adoption of the mobile phone as the preferred device for accessing the Internet is just around the corner."

Users with disabilities do also have multiple devices and want to connect to their social networks of choice across these devices. Sites however, lack the accessibility to allow users to comfortably do this. If sites are inaccessible then the people who stand to benefit the most will be left behind.

A very compelling use case for this location sensitive services whereby via mobile social networking users can get updates and information based on location. This could be essential for a wheel chair user, for example, who needed to find an accessible restaurant or hotel whilst at a certain location.

Barriers

Social networks are notoriously inaccessible. UK charity AbilityNet did some research in 2008 into the [accessibility of the most popular social networking sites](#) (Facebook, MySpace, YouTube, Yahoo and Bebo) and found that there were key issues locking users out. A few of these issues include: ():

- **CAPTCHA's:** visual CAPTCHA's lock out blind users, people with low vision, reading problems, or cognitive impairments as well as many users who do not consider themselves to have an impairment. Many older users have deteriorating eyesight or issues with perception which make CAPTCHA's extremely frustrating.

- **Authentication: r**emembering user names and passwords can be difficult especially when subscribed to a number of sites. Social networks are like "walled gardens" in that it is not easy to port from one to another. This is a huge drawback magnified on a mobile phone.

- **Navigation:** social networking sites typically have more inks and content that the average site. This can be problematic for keyboard only users including people using a mobile resulting in pages becoming time consuming to navigate.

- **Alternatives:** many of us rely on alternatives for images, audio and video in order to access content. A deaf user needs captioning for video whist a blind user may be lost in a photo sharing site that lacks alternative text for images.

- **Rich Internet Applications:** Key tasks such as adding friends, messaging and commenting may be reliant on inaccessible scripting.

- **User generated content:** It is difficult to encourage the creation of accessible content by users. This can produce varying levels of difficulty for disable users depending on the nature of the site. Photo and video sharing are a case in point.

Possible ways forward

As we become more involved in using social networking for work purposes as well as social purposes it is essential that as a community we work together to address some of these problems.

CAPTCHA

There are alternatives to CAPTCHA such as audio and logic questions but none of these are generally accepted as being a suitable full alternative (see the RNIB article [CAPTCHA: if your name's not down you're not coming in](#)).

Ways of breaking CAPTCHA's have also been suggested such as [WebVisum](#), [ReCaptcha](#) and [CaptchaKiller](#) however these are niche solutions that not all users may be able to understand. Ultimately they also do not solve the

problem.

A real alternative to CAPTCHA is yet to be found. As this is an industry wide problem perhaps there is some mileage in industry collaboration, possibly within W3C working with the security sector, to work to address this issue together.

OpenID and OpenDD

OpenID eliminates the need for multiple log-ins benefiting not just disabled and older users but all users alike by enabling fast, easy access across multiple sites and possibly multiple devices. OpenDD allows users to port your data from one social network to another, keep track of your friends network and synchronise data across services. Other services also exist such as the DataPortability.org and Open Social Foundation

More research and collaboration with such organisations is necessary to both ensure accessibility as well as stop fragmentation.

Community projects

Advocating for change and asking owners to make their social networks accessible can be difficult. As competition to be the dominant social network strengthens everyday in an already saturated market accessibility can slip down the priority list.

Bringing the disabled and developer community to work together to create their own solutions for existing sites is often a fast track to achieving change. This type of activity also sends out a very clear and public message to social networks that they can, and therefore should, be made accessible.

Examples of recent community projects include:

- **Scripting Enabled:** Set up by Christian Heilmann in 2008 these accessibility hack days bring together developers and disabled users to hack popular sites and solutions based around real need.

  So far events have happened in London and Seattle with participants from Yahoo!, Google, AbilityNet, United Response, RNIB, University of Washington, BBC and many more. Completed or ongoing projects include Easy YouTube, Slideshare, Flickr and maps.

- **Project: Possibility:** Similar to Scripting Enabled Project: Possibility runs accessible code-a-thons in universities in California. So far solutions have been hacked for IM clients, maps, and so on.

Web accessibility and open standards

While user generated remains a problem social networking sites should be encouraged to build the framework of their sites using the W3C Web Content Accessibility Guidelines (WCAG) and Authoring Tool Accessibility Guidelines

(ATAG).

The Web Accessibility Initiative [Accessible Rich Internet Applciations](#) specification should also be implemented in order to help access for screen reader users. Browser and assistive technology vendors must also ensure that they also support WAI ARIA.

Accessible cross device widgets with WAI ARIA built in would ensure that users could network seamlessly from both the desktop and their chosen mobile device. Given that many users access social networks using widgets on their phones this is key.

Conclusion

Collaboration is essential if the accessibility of social networks is to move forward. Industry must work together to support both the development and implementation of opens standards across device and develop accessible and secure solutions to facilitate authentication and registration on sites.

Outside of industry we must find ways to encourage end-users and developers to work together in order to define the issues and build solutions that people really want rather than second guess what the disabled community want.

Building solutions in isolation from the community can run the risk of building applications that don't quite do what a user needs in turn wasting valuable time and effort.

Disabled users should be involved in user testing across sites and using multiple devices. Feedback should also be solicited through community outreach and via the very social networks that need to be fixed.

Education and better explanation of how to use social networking sites, is also key. Simple and straight forward help documentation and instructions for forms can help make rich interactive sites seem a lot less daunting and a lot more usable. Equally more education for developers as well as students in schools and universities is essential. Building accessibility into real world projects as Project:Possibility does is an excellent model for moving forward.

As most people in the industry look towards W3C for guidance on issues around accessibility an ongoing working group publishing information and guidance for accessible social networks with input from industry would be key.