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Seniors are increasingly using the web to shop, find news and information, and connect with friends and family. But many websites are not designed with seniors in mind. You can make your website more senior-friendly by following a few simple rules of thumb... and the end result is often improved usability for users of all ages.

In 2007, surveys conducted by the Pew Research Center found that 32% of Americans aged 65 and over are using the internet. This number will skyrocket over the next 10 years as a wave of technophile Baby Boomers – the so-called "Silver Tsunami" – attains senior status. Seniors can be especially enthusiastic internet users. However, designing websites that seniors enjoy using requires taking into account seniors' unique usability requirements.

Today's seniors have unique website usability requirements for three main reasons:

- 1. Physical changes associated with aging
- 2. Generational differences in computer experience
- 3. Use of older computer technologies

## Physical changes associated with aging

As we age, we experience changes in eyesight, motor control, and memory. All of these changes have implications for how we interact with computer interfaces. For example, due to changing eyesight, many seniors experience difficulty when websites contain text that is small or has limited white space. Changes in motor control result in less precise use of the mouse; thus, seniors also require larger targets for clicking and do better with static interface elements.

#### **Recommendations:**

• To improve readability, use high-contrast text and background colors. Use a larger font size (at

least 12 pt) or ensure that your site is set up to allow users to increase the text size as desired. In addition to page text, ensure that important hyperlinks, commands, and logos are large or can be resized.

- Use more white space between lines of text. This is especially critical for hyperlinks and command buttons. Using more white space improves readability and also reduces the number of erroneous clicks due to less precise control of the mouse.
- Avoid long pull-down menus or fly-out menus. Large, static interface elements are easier targets for clicking
- For clickable elements, require single-clicks, not double-clicks. Double-clicks can be difficult for users with more limited motor control.
- Older users can have more difficulty recalling their path through a website and remembering what links on a page they have already visited. Use sequence maps or breadcrumbs so users can easily see where they are. Clearly distinguish between visited and unvisited links.

### Generational differences in computer experience

Many of today's seniors retired from the workforce before computers and the internet became the workplace staples they are now. As a result, their experience – and comfort level – with computers and the internet is more limited than that of recent generations. Older users are often unfamiliar with specialized computer terminology, as well as web design conventions that more practiced users find intuitive. (For example, in a recent usability study conducted here at Blink, roughly 80% of participants aged 48-66 years old were unfamiliar with the practice of clicking on the company logo as a way to return to the homepage.) Seniors who don't feel confident about their computer skills may also be worried about "making mistakes." They can be overly cautious when exploring new websites and may be reluctant to click on links and commands whose functions they are uncertain about. Due to security concerns, they may be especially wary of websites that ask them to download software, register their email addresses, or provide other personal information.

#### **Recommendations:**

- Use clear and simple language throughout your website. Avoid overly technical information and jargon. Jargon-heavy error messages and "fine print" can be especially confusing and intimidating to novice users.
- Label buttons, important links, and other key interface elements with straightforward descriptive labels such as "Home" and "Search." Some older users will be unfamiliar with even the most basic web design conventions. If page space is an issue, consider using roll-over "tool tips" to explain objects' functions.
- Make sure that forms and instructions are "supportive and forgiving," allowing users to enter information in a way that is natural to them. One example of a forgiving design is allowing credit card numbers and phone numbers to be entered with or without hyphens
- Encourage exploration by making it safe to explore. Include "escape hatches" that allow users to cancel, undo, or back-pedal if they find that they have made a mistake, followed the wrong link, or just want to start over.
- Make it easy for users to get help. Include obvious links to help pages and company contact
  information. Always include a phone number: Many older users prefer to talk with a real person
  about their questions and concerns.

### Use of older computer technologies

Computer hardware, software, and internet capabilities are constantly changing, enabling ever faster, more complex, and more interactive website functionality. But many older users are not keeping pace with these changes. For example, data from the Pew Research Center indicates that in 2007, roughly 85% of users over age 65 are still using dial-up to access the internet. Older users are also much more likely to be using older computers with less powerful processors and lower-resolution monitors, running older internet browsing software, and relying on "bare bones" hardware devices, such as mice that lack scroll wheels.

#### **Recommendations:**

- Plan your website testing to include hardware, software, and connectivity configurations that will mimic an older user's experience. Ensure that key aspects of the user experience are functional and responsive under less-than-ideal circumstances.
- Widen page margins so that your website can be viewed successfully on monitors with lower screen resolution and narrower aspect ratios. A margin of 1.5 inches or greater is recommended.
- As much as possible, minimize the need for extensive scrolling. Too much scrolling is already a
  pain point for many users; it is even more so for users whose mice lack the convenience of a
  scroll wheel. Increasing text size often results in a longer page, and finding ways to maximize
  text while minimizing scrolling can be tricky. One solution is to break longer pages up into
  sections and allow users to jump from section to section via forward links placed at the end of
  each section.
- Be aware of the processing and connectivity demands your site makes on users who lack stateof-the-art machines and high-speed internet connections. If appropriate, offer different versions of your site based on a user's connectivity, and consider giving users control over what page elements load automatically (e.g., text only, text and images).

Seniors overwhelmingly prefer websites they find easy to use. It isn't surprising to learn that most other user groups feel the same way. This explains why usability studies often find an added benefit of making websites more senior-friendly: It makes them easier for everyone else to use as well.

#### **References:**

- "Making your Website Senior-Friendly" (NIH) https://nnlm.gov/mar/guides/making-your-website-senior-friendly
- "Older, Wiser, Wired" (AARP) https://assets.aarp.org/www.aarp.org\_/articles/research/oww/university/CarpenterPresentation.pdf
- "Seniors and the Internet" (Pew Internet and American Life Project)

https://www.pewresearch.org/topic/internet-technology/