

Interactive Design Preferences of 50-Plus Users

Mature Users represent the emerging profitable demographic in today's internet marketplace.

As a group, the 50-plus market represents over 27% of the U.S. population, are responsible for almost half of all consumer spending, and made online purchases totaling \$7 billion last year alone. This paper attempts to prepare marketers for what Pew Research describes as the "SilverTsunami" of mature users who are online and ready to do business.

Design (even more than technology) is the leading factor determining if a user trusts a website enough to do business on that site.

White Paper Contents:

Facing the Design Challenges1
Provide a Solid Architecture2
Use Appropriate Imagery 4
Optimize Color And Contrast 6
Connect with Consumers
through Typography
The Golden Ticket?8

Facing the Design Challenges

A website's design must be crafted to present the site's message in an appealing, yet highly effective way. Targeting the 50+ market accentuates this challenge because these users:

- Often have higher expectations of products and services, including the site itself, when compared to other age groups
- Possess a wealth of experiences which they relate to the site's message
- Can suffer from physiological and cognitive degradation
- May have limited computer experience and online capabilities.

Remember, the average 50+ user did not grow up with personal computers, the internet, or the modern vernacular pertaining to the subject. Many boomers were not introduced to computers until late in their professional careers or until their children engaged them.

As a result, simple issues of "digital accessibility," such as where to click or what to do when presented with a digital interface, are not nearly as intuitive to the older audience as they are to younger, more accustomed users. Therefore, when designing a website, DVD, CD-ROM, or email for a mature audience, the goal becomes to design a simple, functional experience that easily directs the user to their subject of interest, without insulting their age or past experience!

To accomplish this goal, consider the following guidelines:

- Provide a solid information architecture
- Use appropriate imagery
- Optimize color and contrast
- Connect with consumers through typography

Provide a Solid Architecture

The organization, flow, and layout of information define a website's "information architecture". This architecture plays a key role in determining the success of a design. Older adults may have limited computer or internet experience or they may suffer from natural, age-induced short-term memory limitations. These limitations make older adults even more reliant on consistent navigation elements, a clear hierarchical page structure, logical information organization, and strong visual guides to maneuver through a site. Using these techniques to design your site keeps your users from becoming "lost in cyberspace" and instead helps them perform the tasks you want them to.

Navigation Elements

Research has shown that mature users prefer consistent, stationary navigation and obvious, clear navigational elements. Whenever possible, avoid hiding navigation within pull down or expandable menus and keep the section headings consistent throughout the site. In addition, make all navigation elements obvious and label them sensibly.

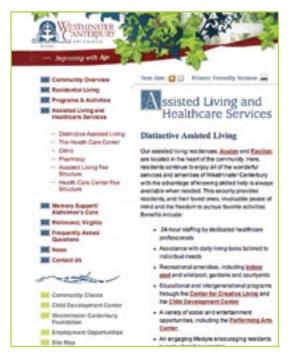
Some conventions can be inherited from internet browsers and operating systems. These systems have preset standards defining what a hyperlink or a button looks like. By using similar looking elements within a page design, older users immediately encounter interactive elements that fit within their existing frame of reference.

To further improve user interaction while browsing, incorporate real-world references or common-place design elements, such as a shopping cart icon on an e-commerce site.

Simple practices like only underlining hyperlinks help users find what they are looking for faster.

Familiar or not, all icons should be paired with a text label for affirmation of its function. However, be careful to avoid using industry-specific terms or "tech talk," such as "pop-up," that may be unfamiliar to the average older user.

Also, ensure your navigation elements and icons provide adequate space for selecting or clicking.
Older adults may suffer from hand-tremors or degradation of their



Obvious navigation, standard treatment of hyperlinks, and pairing text labels with icons make it easy to move through a site.

hand-eye coordination. As a result, selecting an item within the navigation or clicking on a button can become challenging for older users. Designs that include larger buttons with broad clickable areas decrease user frustration and increase the chance that users will complete the action.

Hierarchical Page Structure

Mature users will also respond better to a design that creates a common hierarchy of page elements that remain unified in arrangement and appearance across the website. Consistent spatial arrangements train users to find information in specific areas on the page, be it navigation, body content, or page-related offers. Typography and color can also be used to create hierarchical content levels. Avoid changing page appearances so dramatically between levels in the hierarchy that the user questions if they have left the original site.

Logical Organization

When targeting the 50+ market you should logically group your content, while limiting the depth of the information hierarchy. As a general rule, organize your navigation so your site is no more than three levels deep. At the same time, ensure that your information is grouped in logical clusters and related information is easily accessible, especially for older users who may become disoriented more easily within a site.

Other Visual Guides

When in doubt, offer alternative methods to reach the same content in the event users miss the primary means. Adding tracking elements, such as breadcrumb navigation or color-coded sections, guides users though expansive websites and gives them a sense of location.

Footer navigation or sitemaps offer convenient pointers for the weary user.

You can further enhance user navigation by using consistent indicators for common elements throughout the site. For example, clickable items can always be depicted with a common color or visual style, such as an orange arrow. After spending a few minutes exploring a site, a user's intuition will have them actively pursuing other orange elements, even if they are not consciously aware of the connection.

Use Appropriate Imagery

The imagery incorporated into a web design delivers your marketing message on a personal level, so image choices deserve careful consideration. Presenting relevant, easily accessible images can trigger emotional responses central to the effective delivery of



Use imagery showing older adults engaged in present day activities.

Yellowed photos from the 1960s rarely compel an older user to act on products or services they need today. your message. An older adults' past may include many significant events; however, your goal focuses on selling to the mature individuals they are today, not the younger audience they were ten, twenty, or thirty years ago. The most effective tactic is to speak to them in the present tense, presenting them with imagery and messages relevant to their current life style rather than presenting nostalgic images and messages. Photos of other older individuals living well, enjoying the benefits of a product, or simply spending time with their grandchildren connect the message to the mature user's present life.

Technical constraints can also greatly impact the effectiveness of your imagery. If an older adult has a lower-end computer (such as a hand-me-down from their children) or dial-up internet connection, they may turn off image downloading or become frustrated if imagery is too bulky.

In addition, some older adults suffer from visual impairments that negate the effectiveness of many images. Age-related macular degeneration—a progressive disease that commonly sets in after age 55 and results in varying degrees of blindness—can seriously impact the effectiveness of your imagery. According to the Medical College of Wisconsin, more than 200,000 new cases of age-related macular degeneration develop each year within the United States. It doesn't require a great deal of calculation to determine that this number represents a substantial market segment at risk of being turned away from visual communication.

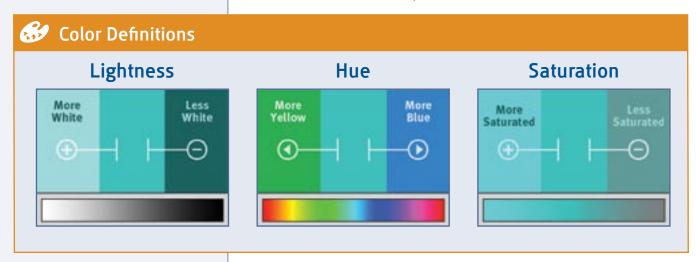
To accommodate these obstacles, use supporting captions and HTML tags to explain your images and their relevance. These practices not only accommodate users' special needs, they also enhance the general mature audience's experience in their leisurely exploration of content. (And don't forget, using text captions promotes search engine indexing which in turn increases site traffic.)

The most common type of color blindness, which affects 8-10% of males, causes confusion between red and green.

Optimize Color And Contrast

Color and contrast can also play a critical role in the success of a website design, especially for users who suffer from color blindness. Color blindness—a deficiency of certain color receptors in the eye that causes portions of the color spectrum to dull or fade—affects more that 1 in 10 Americans. Most commonly, victims lose distinction between red and green or blue and yellow, or in some extreme cases, lose perception of color entirely. For older adults, color blindness is compounded by a yellowing of the cornea that occurs in *all* individuals as they age. As we age, a tinted film forms over the eye, further distorting color perception. Therefore, when choosing a color scheme for your site, use contrast to maximize the separation between colors.

Color can be broken down into three aspects: lightness (the value of the color), hue (the spectral range of the color), and saturation (the intensity of the color).



Contrast is achieved when these aspects are pushed to opposite extremes throughout a design's color palette. Low differentials, such as the hues from yellow to violet or colors of high saturation, bleed together visually and become hard to differentiate. As a general rule, when dealing with the 50+ audience, choose bright and bold colors that will withstand dulled perception. When selecting colors used in close proximity, offer a high degree of separation. Avoid

using colors of similar hue and saturation, and use opposing lightness to most effectively create contrast, such as a dark color text on a white background.



Contrasting Lightness

Contrasting Hue Contrasting Saturation

To test the contrast of your site, try squinting at the design to see what page elements stand out and what disappears. Try it with the diagram below:

Low Contrast

High Contrast

Connect with Consumers through Typography

Presbyopia is not a disease and cannot be prevented.

Legibility boils down to one simple truth: text that is not easily read is easily ignored. Aside from creating good contrast between typography and its background (see illustration above), keep in mind specific considerations to accommodate Presbyopia (farsightedness), which studies have shown is unavoidable in older adults.

An estimated 90 million U.S. residents either have presbyopia or will develop it by 2014.

The simplest and most effective solution to address farsightedness is to increase text sizes. Where 12-point (or smaller) type may be effective on a website targeting a younger market, 13- or 14-point body text is more effective for an older audience. Left-aligned text with increased line height also improves legibility by offering a constant left starting point and greater visual separation between lines. Also monitor column widths to ease older eyes' flow across

a page. (Best practices recommend setting the primary content column at about 60 characters.) Avoid over-use of all-caps and small-caps, instead use mixed-case to increase word recognition.

The typeface can also greatly affect legibility. Most designers agree that non-condensed san-serif typefaces, such as Arial, Helvetica, Geneva, or Verdana, provide the cleanest, easiest-to-read appearance on computer monitors. Apply a medium or bold weight to the typeface to enhance the text's presence on screen. Avoid heavy script fonts or unique character shapes. Remember, if younger users would spend one second deciphering artistic character shapes within a heading, older user may spend five, increasing the likelihood that they may become frustrated with a site.

Legibility of Text

Easily Legible





The Golden Ticket?

So, are design guidelines alone the magical solution for communicating with older individuals on the internet?

No. But they do provide a strong starting point for all good web design, regardless of the audience.

Remember, building a "50+ friendly" website does not mean you have to alienate a younger audience.

Good interactive and usability design improves users' experiences, regardless of age. Designing for the 50+ audience simply requires stricter adherence to some basic design principles. Designs for boomers *may* be more conservative than some other sites, but creativity still runs free to develop unique, professional, and appealing sites.

To learn more about capitalizing in the 50+ marketplace visit Immersion Active at www.immersionactive.com

About Immersion Active

Capturing the 50+ market through interactive marketing is a challenging but achievable task. For businesses that want to take advantage of the expanding opportunities of today's mature users, Immersion Active offers the knowledge and experience to deliver results. Through research and testing—creativity and strategy—Immersion Active helps their clients engage and excite users about their products and services.

Founded in 1998, Immersion Active is the interactive agency for the mature market. Services include the creation of standalone projects (e.g., websites, CD-ROMs, and DVDs) as well as multi-channel e-marketing campaigns that incorporate banner advertising, search engine marketing and optimization, and email. The recipient of over 70 awards for their work, Immersion Active is focused on proving that solid interactive marketing can be exciting, ageless— and effective.

Works Referenced

Alpay, Laurence L., et. al. "Easing Internet Access of Health Information for Elderly Users." <u>Health Informatics Journal.</u> 10.3 (2004). April 2006.

http://jhi.sagepub.com/cgi/content/abstract/10/3/185.

"Creating Senior-Friendly Web Sites." <u>Center for Medicare</u> <u>Education Issue Brief</u>. 1.4 (2000). April 2006. http://www.futureofaging.org/PublicationFiles/V1N4.pdf.

Hines, JoAnn. "How to Sell and Connect with Boomers." Jun 8, 2005. <u>Hotel News Resource</u>. April 2006. < http://www.hotelnewsresource.com/article16902.html >.

Hoffman, Paul. "Accomodating Color Blindness." <u>Usability Interface</u>. 6.2 (1999). http://www.cognetics.com/papers/others/paul/colorblind2.pdf>

Lee, Judith, and Gretchen Bailey. "Presbyopia." Feb. 2006. All About Vision. April 2006. http://www.allaboutvision.com/conditions/presbyopia.htm>.

Making Your Web Site Senior Friendly. National Institue on Aging and National Library of Medicine. Feb. 2001. April 2006. http://www.nia.nih.gov.

"Presbyopia." 2002. <u>Laser Surgery For Eyes</u>. April 2006. http://www.lasersurgeryforeyes.com/presbyopia.html>.

Thornhill, Matt. "Marketing to the Middle Age of Aquarius: Five 'New' Priorities for Boomers Over 50." April 2006. <u>The Boomer Project</u>. April 2006. http://www.boomerproject.com>.

"Tracking Survey." Sept 2005. Pew Internet and American Life Project. April 2006. http://207.21.232.103/trends.asp>.

"Wealth with Wisdom: Serving the Needs of Aging Consumers." Jan 9, 2006. <u>Deloitte & Touche USA LLP.</u> April 2006. http://www.deloitte.com/dtt/research/>.