Age-Friendly Game Development
A PRIMER FOR GAME DESIGNERS AND DEVELOPERS
Closing the Gap for 50-plus Gamers

Technology plays a significant role in the lives of older adults and they comprise a large and growing segment of the multibillion-dollar market for games, consumer apps, and electronics. However, two-thirds (67%) of 50-plus adults do not feel technology is designed with them in mind, resulting in friction, frustration, and lost opportunities for both companies and consumers.

This guide is intended to help companies, developers, and innovators in the gaming sector integrate age-inclusive principles into their product development process, from design to marketing. Our goal is to offer expert guidance, actionable steps, and simple checklists which can help close the gap between great products and consumers of all ages and abilities.

What Is Age-Inclusive Design?

Age-inclusive design actively considers older adults’ unique needs and preferences in the ideation and planning of a product and maintains this focus throughout the development process. It creates a more inclusive user experience by accounting for differences between younger and older users. By contrast, disability-centered design can reinforce stereotypes about aging, resulting in products or services limited in scope or utility. While accessibility features are often very helpful for older adults who are experiencing changes in sensory, cognitive, or mobility functionality, they may fail to fully address the needs or wants of 50-plus users.

Design which is not inclusive can lead to complaints, legal challenges, planning delays, and costly retrofits as a product or service matures. Poor design can also negatively impact brand reputation. The relative cost of retrofitting a product or service to become inclusive increases significantly over time, rising to as high as 10,000 times the cost of starting with an inclusive design in the first place. Therefore, inclusive design can help mitigate costs when applied from the beginning of the development process.

A few key points to keep in mind:

- There is no “typical senior.”
  Age is intersectional; one of many factors to consider in your overall inclusive design strategy. Be sure to consider gender identity, race and ethnicity, socioeconomic and geographical diversity, and educational attainment among other factors, as these may yield dramatically different perspectives on usability and design.

- 50-plus segment represents a wide variety of ages, stages and savviness.
  People at different life stages or different work experiences may engage very differently with digital experiences.

- Multiple-age related changes are best addressed together.
  Older adults may experience multiple age-related changes that affect their ability to use digital technology. The effects of multiple changes can interact with one another, making them even more difficult to overcome.

- "Designing Down" to older adults is not the right approach.
  50-plus users are not looking for less capable products; they are looking for powerful products that are easy to use.

- Play to the strengths of older consumers.
  Older adults often possess greater expertise in roles, professional skills, and life experiences than younger adults. Where appropriate, design can benefit from this difference by giving older adults a way to use these advantages.

- This is a dynamic market.
  Patterns of tech adoption are changing among older consumers just as they are changing among other demographics. Older adults are keenly interested in current and emerging areas including mobile health apps, smart home, remote learning, entertainment and more.

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The Market Case for Age-Inclusive Design

People 50-plus constitute a large and influential market for technology products, devices, and services, including games. Seven in ten (71%) of those 50-plus made a tech purchase in the past year and their annual spending on technology has increased significantly since 2019, averaging $911 in 2023. As Gen Xers, the first generation that grew up en masse with mainstream video games, continue to celebrate their 50th birthdays, and with Millennials starting to turn 50 in 2031, it’s only reasonable to expect this trend will continue.

Nearly one-half (45%) of adults ages 50-plus are “gamers,” defined as those who play games at least once a month, representing about one in five (21%) of all U.S. adults ages 18-plus. As the digital gaming industry continues to grow and evolve, it is important to acknowledge the increasing presence and significance of older adults in the player demographic.

Audience Segments: Passion vs Value

There are several ways to segment 50-plus gamers. Two of the most useful models 1) identify audiences by shared attitude, behavior, and demographic characteristics, and 2) consider context for play and player-assigned value to games.

AARP Research’s 2023 study on the 50-plus gamer identified five segments among 50-plus gamers, with the largest groups being “Mainstream players” and “Indulgers.”

OF 50-PLUS GAMERS:

<table>
<thead>
<tr>
<th>Segment</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Dabblers&quot;</td>
<td>15%</td>
<td>Play occasionally to alleviate boredom. They do not consider gaming to be of great benefit and have no desire to increase their gaming activity.</td>
</tr>
<tr>
<td>&quot;Mainstream players&quot;</td>
<td>35%</td>
<td>Mostly mobile-only gamers who seek entertainment and mental stimulation. Word games such as Wordle are popular among this group.</td>
</tr>
<tr>
<td>&quot;Indulgers&quot;</td>
<td>23%</td>
<td>Consistent daily playing habits, but often experience feelings of guilt about spending too much time on gaming. They prefer gaming on mobile phones and tablets and enjoy casual games.</td>
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<tr>
<td>&quot;Enthusiasts&quot;</td>
<td>19%</td>
<td>Have a strong appetite for playing more, but they don’t allow gaming to consume their entire life. They value strong storylines and like to explore a range of genres, including Action-Adventure games and Roleplaying games (RPGs).</td>
</tr>
<tr>
<td>&quot;Immersives&quot;</td>
<td>7%</td>
<td>Make gaming a fundamental part of their identity and lifestyle. They are passionate console/PC gamers and they find social connection through massive multiplayer online games.</td>
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Age-friendly Best Practices: Design for Strengths

Game designers should not assume cognitive or physical abilities have decreased simply because of age, nor that the 50-plus player wants slower games and simpler challenges. Instead of “designing down,” games should play into and further develop the strengths and abilities of older adults, including but not limited to:

1. **Greater vocabulary, experience, or accumulated knowledge:**
   Each type of intelligence ages differently. Crystallized intelligence, also known as accumulated wisdom includes things like vocabulary, experience, and accumulated knowledge, tends to peak in middle age and remain relatively stable throughout later life.

2. **Ability for introspection, reminiscing, and identity exploration:**
   Reminiscing about past experiences and people can be a positive and adaptive activity for older individuals which can be translated to video games. Dr. Bob De Schutter, professor at Northeastern University, refers to this translation in games as “gaminiscing.”

3. **Closer connectedness:**
   Older players typically have more selective, intentional, and deeply valued relationships than their younger peers. Games often foster close connections and have a significant impact on older players, including intergenerational play with family members. For example, one in five (21%) play with a child or grandchild.

4. **Altruism:**
   Older adults tend to possess a higher level of emotional maturity and altruistic tendencies. Game designs allowing players to contribute to a larger community can resonate strongly with this demographic.

Listen to the Player

One of the most important critical needs in game design is to listen to your players and this is, perhaps, particularly crucial for game designers aiming to cater to the 50-plus demographic. To ensure games maximize the strengths of their older players, they must match their unique needs and wants.

**Game design considerations:**

- Use player-centered game design methods: Bring 50-plus adults into the ideation, design, and testing phases of game development. By incorporating people from the target demographic throughout the entire development process, the final product will be more inclusive and accessible to a wider range of players;

- Minimize Memory Requirements: Indicate when recalling information is necessary and provide easy access to memory aids. Allow players to revisit tutorials at any point in the game;

- Make text easy to read: Write and format content so players can quickly skim and understand the main points through the use of headings, bullet points, and bolded text;

- Accessible Interface Design: Simplify and scale the interface, avoid drag-and-drop mechanics, and provide quick-start options for players who struggle with managing menus. Additionally, provide assistance with aiming and selecting, such as auto-aim, target locking options, or auto-centering options; and

- Control Difficulty and Play Speed: Allow players to set their own pace by offering options to change the difficulty level or slow down gameplay. Again, this does not mean dumbing down the challenge of the game; often the exact same content can be provided at a customizable pace.

**Visual considerations:**

- High Visibility: Allow for high contrast or other color calibrations and allow for disabling or dimming distracting visual elements to make it easier to see important information. Clearly highlight important items in the game and interface and allow font customizations, such as larger fonts, to enhance readability; and

- Visibility Alternatives: To support important visual information, use audio cues and make it easy to understand what is happening in the game. Ensure key events are not easy to miss.

**Audio considerations:**

- Adjustable audio: Incorporate options for adjusting volume and playback speed to accommodate individual needs and mix the audio in a way which emphasizes sounds important to gameplay; and

- Audio alternatives: Include audio alternatives, such as closed captioning or transcriptions, to ensure accessibility for those with hearing impairments.

**Input considerations:**

- Recognizable, Customizable, Alternative or Simplified Input Devices: Some older players may not be as familiar with gaming conventions, so offering input options as well as shortcuts and macros can reduce frustration and make the game more accessible; and

- Stronger Haptic Feedback: Providing stronger haptic feedback options can be helpful for older players who may benefit from additional sensory cues. However, allowing for customization can also be important as too much haptic feedback can be annoying for some players.
Key Takeaways

When considering age-inclusive game design, don’t forget:

☐ **Every little bit helps**—even if you can’t apply all guidelines in this document, implementing some is better than none;

☐ **Implement sooner than later**—use this guide from the very start of your project;

☐ **Don’t stereotype 50-plus players**—there is just as much, if not more, variety among this audience as there is among younger players;

☐ **Focus on player strengths**—aging comes with decline in some areas, but players aged 50-plus are still capable of adapting and improving their abilities;

☐ **Don’t dumb down**—50-plus players want interesting challenges just as much as any other demographic;

☐ **Context matters**—older players have established identities, compared to their younger, still developing cohorts, and games need to fit within such contexts; and

☐ **The market is dynamic**—patterns of tech adoption change among older consumers as they do for younger demographics.

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Meaningful Play Is Important

Play is an important part of how humans negotiate and accept themselves and the world surrounding them; it is an intrinsic element of successful aging. Play for its own sake is meaningful for 50-plus gamers, but it’s not automatic. We see that 7 in 10 older gamers believe play is important to healthy aging. To facilitate meaningful play in later life, game design needs to be age-inclusive.