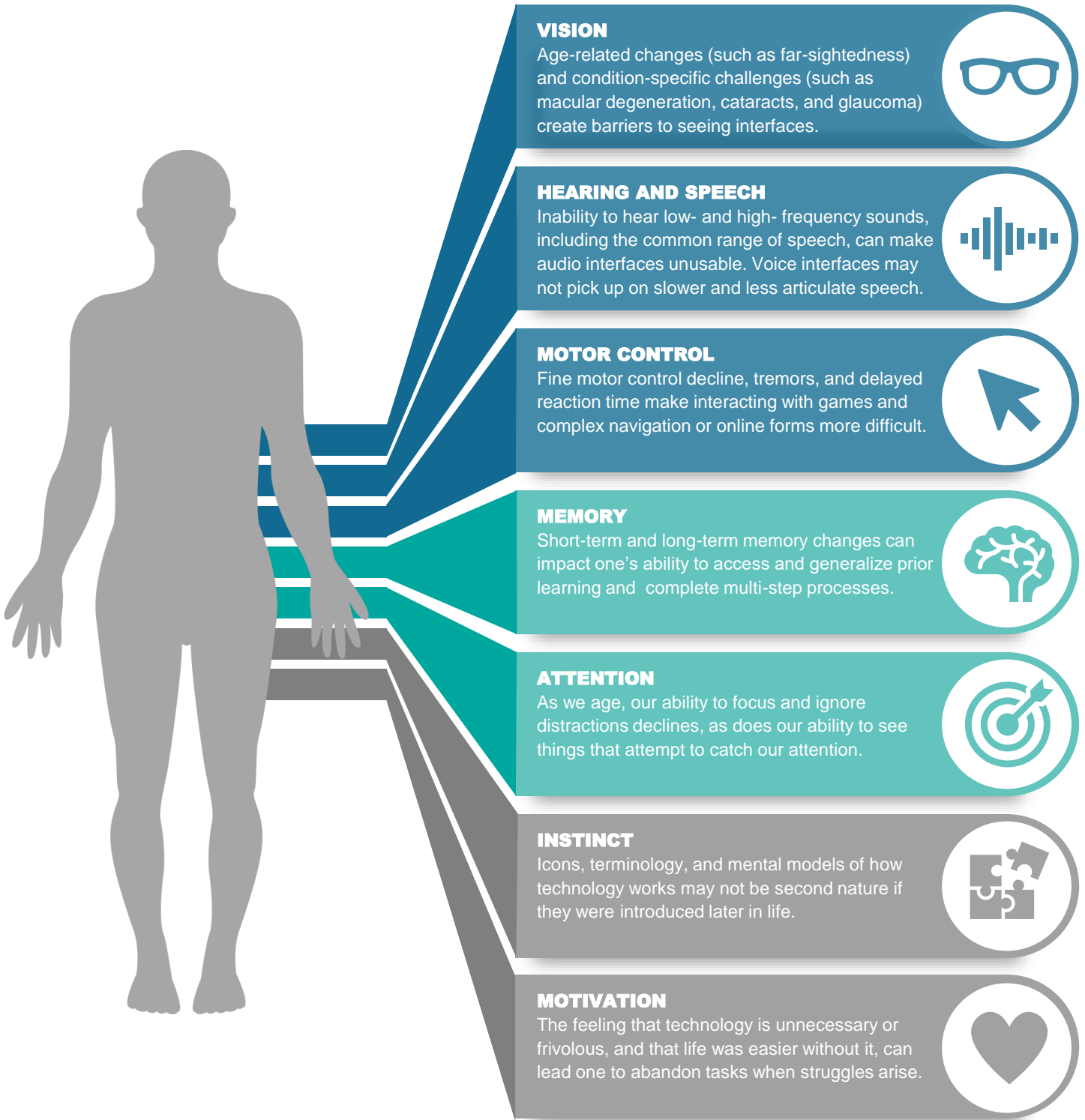


Multi-Faceted Barriers to Technology

As we age, our senses, coordination, and cognition gradually change. In addition, we are all more comfortable with technology that we grew up with rather than tech that was introduced later.



Checking for Barriers

When you or someone you know is struggling with technology, run through this quick list of possible causes before giving up.

- ❑ **Motivation:** Does the person *really* want to complete this task in this way? Do they see the value in interacting with the technology?
- ❑ **Instinct:** Are there icons, terms, interactions, or mental models that require some explanation for someone new to this technology?
- ❑ **Attention:** Is there something in the interface causing a distraction? Are there signals being missed because they are in the periphery or only appear briefly?
- ❑ **Memory:** Are there actions that require remembering what happened on previous screens or instructions that should be written down for reference?
- ❑ **Motor Control:** Are there actions that are tricky to perform due to small or crowded buttons or menus that require quick action or a steady hand?
- ❑ **Hearing and speech:** Are there audio signals that are hard to hear or speech interfaces that don't seem to understand the instructions the user is saying?
- ❑ **Vision:** Are there screens that are difficult to see and read? Are they reliant on subtle changes in color or shading that might be missed?

Additional Resources

- *Designing User Interfaces for an Aging Population: Towards Universal Design* by Jeff Johnson and Kate Finn.
- *The Real Sounds of Hearing Loss* by Audrey Carlson for NPR
<https://www.npr.org/sections/health-shots/2013/04/06/175945670/the-real-sounds-of-hearing-loss>
- Vision Loss Simulator by Versant Health
<https://versanthealth.com/visionloss>
- *Older Adults and Technology: Moving Beyond the Stereotypes* by Susan Nash
<http://longevity.stanford.edu/2019/05/30/older-adults-and-technology-moving-beyond-the-stereotypes/>

