

Bridging the Digital Divide for Older Adults

Dr. Milena Head

Professor, Information Systems
Director, McMaster Digital Transformation Research Centre
DeGroote School of Business
McMaster University



Understanding the Digital Divide

The difference between those that have access and use of internet and those who don't.

Country development

Urban vs. rural

Cost

Geographic &
Socioeconomic

Fear
Attitude
Digital Skills

Fear of making
mistakes, new tech

Lack of interest, don't
see the point, too old

Missing knowledge &
experience



Understanding the Digital Divide

- As ICT become increasingly pervasive, those that are left behind are highly disadvantaged
- COVID-19 has highlighted the vital importance of increasing digital inclusion
- Older adults – often excluded and marginalized with respect to technology.
 - Especially when we intersect lower socioeconomic factors, race, gender and new immigrant status with older adults



From our Older Adult Community ... Consequences of Digital Divide



Missed opportunities

Lack of services

Difficulty with healthcare

Lack of value

Poor care & health
outcomes

Barriers to accomplish
things that used to be easy



Isolation

Voices not heard

Loneliness

Left behind

Feelings of uselessness

Frustration

Socially disconnected

No one cares



Poor overall well-being



Bridging the Divide

Geographic &
Socioeconomic

- Funding for infrastructure development in rural areas
- Access via local libraries, community centres, etc.
- Targeted subsidies
 - Technology
 - Access
 - Education



Bridging the Divide

Fear
Attitude
Digital Skills

- Cognitive support
- Emotional support
- Design



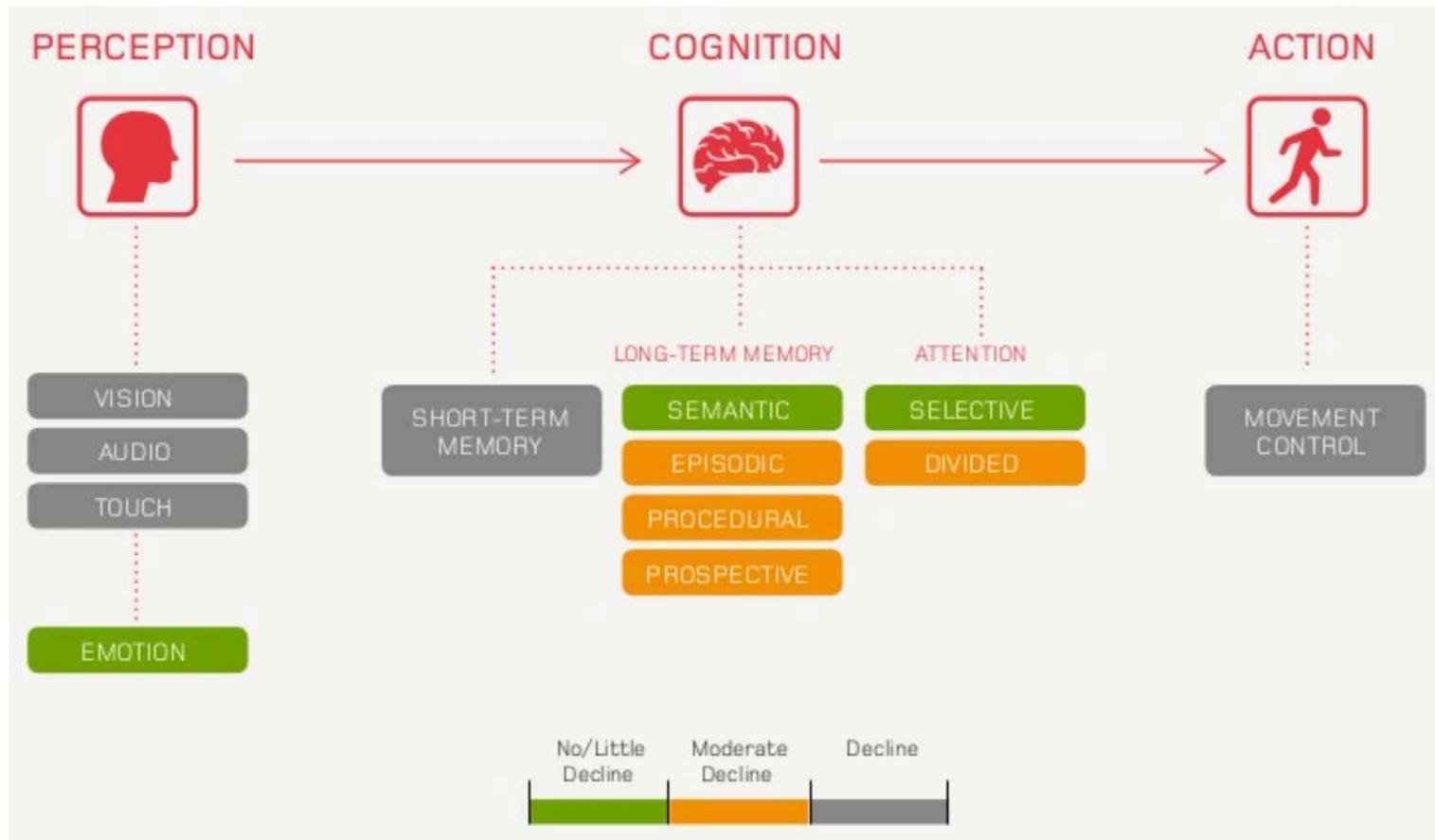
Interface Design



- One size does NOT fit all!
- Differences in motivations, expectations, experiences, comfort, capabilities, etc.



Age-related changes in capabilities



Basic principles that designers get wrong

1. Size, colour and contrast

- Font sizes too small

- Click targets too small 

- Colours used inappropriately

- Not enough contrast between website elements

Overwhelm with dense text, especially when text is stuffed into small spaces without enough white space to separate sections





Stay Connected with Apple Support



Apple > Support

Product Support

- iPhone
- Mac
- iPad
- Watch
- Music
- TV
- Support Site Map

Service and Repair

- Apple Repair Options
- Service and Repair Information
- AppleCare Products
- Hardware Warranties
- Software License Agreements
- Complimentary Support

Resources

- Downloads
- Manuals
- Tech Specs
- Accessibility
- Education
- Business
- Apple Support Videos

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- Contact Us
- Phone Numbers
- My Support
- Apple Support App
- Apple Support Communities

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Basic principles that designers get wrong

2. Navigation

- Aesthetic overriding intuitive navigation
- Overwhelming information
- Mismatch with mental models
- Needs to clearly answer
 - Where am I?
 - Where have I been?
 - Where can I go?



Basic principles that designers get wrong



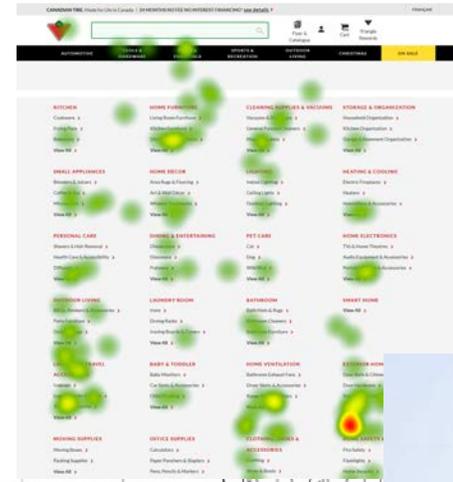
3. User testing with older adults

- Only real way of knowing how someone will interact with a technology is by testing it with them
- Gain insights into usability struggles and successes

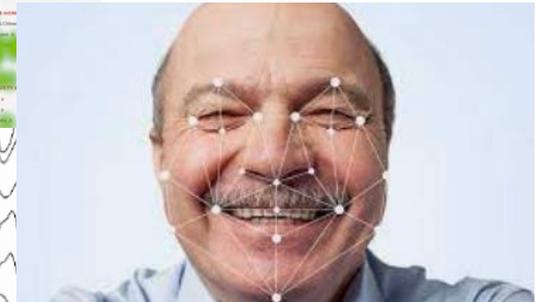
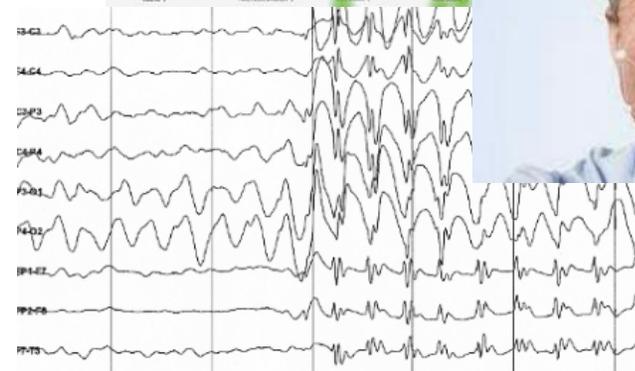


Going beyond surveys

- With surveys ...
 - Low granularity
 - Subjectivity bias
 - Social desirability bias
- Neurophysiological tools



It was difficult for the user to find the right product category



Making it accessible

Mobile User Experience Lab

Bringing research, design, user testing and training to the community.



Policy Implications: To Close the Digital Divide

Principles

- Affordable access
- Access to digital literacy training
- Accessible interfaces
- Accessible support

Processes

- Open & transparent
- Multi-stakeholder
- Co-design with older adults



Some Canadian Initiatives



Canada's Digital Charter

- Principle #1: Universal Access
 - “All Canadians will have equal opportunity to participate in the digital world and the necessary tools to do so, including access, connectivity, literacy and skills”

Canada's Connectivity Strategy

- aims to connect 95% of Canadians to high-speed internet by 2026, and 100% by 2030



Can we do more?



Current focus:

- ✓ Affordable access
- ✓ Literacy and skills

Holistic approach:

- ✓ Accessible design
- ✓ Accessible support

Public and Private Policies



Thank you!
**Looking forward to your questions
& comments.**

