

# MARIA (49)

## Bilingual community health worker

- Community college + healthcare certificate
- Bilingual (Spanish dominant)
- Smartphone from her phone service, home computer primarily her husband's, for his business

### **Ability**

Prefers Spanish language sites, when she can find them; needs information and instructions written clearly

### **Aptitude**

Adventurous, but not very proficient; husband and daughter set up bookmarks for her

### **Attitude**

Thinks it's wonderful to be able to have her favorite websites with her at all times

### **Assistive Technology**

Skype Translation site

“I love this. It's all here ... when I can find it.”

“When a site is confusing, I just leave.”

“When I hear and see it, health information makes more sense.”

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17.8 million people in the U.S. speak English “less than well.”

Hispanic U.S. adults are more likely to use mobile devices and mobile search. They are more likely to take mobile pictures and video.

# CAROL (74)

## Grandmother with macular degeneration

- Graduated from business college
- Retired; worked as a bookkeeper for a construction company for 25 years
- Older computer at home; basic mobile phone

“I just couldn’t understand what the screen was saying.”

### **Ability**

First signs of macular degeneration, mild arthritis; hearing aid; no special AT on computer

### **Aptitude**

Used computers when she worked as a bookkeeper, but now her grandkids keep her old home computer updated

“My eyesight has been going for years.”

### **Attitude**

Willing, but not adventurous

### **Assistive Technology**

Enlarges text, but little other adjustment

“Some sites have text that’s just so small.”

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11 million people in the U.S. have age-related macular degeneration; many more have other forms of degenerative eye diseases.

After age 65, people have steep increases in disability, with over 59% experiencing a loss of hearing, vision, or dexterity. (U.S. Census says 38% of all adults have disabilities.) They are more likely to take mobile pictures and video.

# EMILY (24)

## Cerebral palsy, living independently

- Graduated from high school and working on a college degree
- Lives in a small independent living facility
- Works part-time at a local community center

### Ability

Cerebral palsy, difficult to use hands and has some difficulty speaking clearly; uses a motorized wheel chair

### Aptitude

Uses the computer well, with the right input device; good at finding efficient search terms

### Attitude

Wants to do everything for herself; can be impatient

### Assistive Technology

Augmented & Alternative Communication (AAC) with speech generator, iPad, scooter with joystick control

“The ones I like seem to have everything in the right place.”

“When I go online, I just want to do things like everyone else.”

“The online form didn’t say anything about it. The whole trip was a waste.”

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800,000 children and adults in the U.S. have one of the forms of cerebral palsy.

People with disabilities are often unemployed or underemployed. Among all U.S. working age (18–64) people with disabilities, only 21% are employed full- or part-time.

# JACOB (32)

## Blind paralegal and a bit of a geek

- College graduate, legal training courses
- Shares an apartment with a friend
- Paralegal, reviews cases and writes case summaries
- Laptop, braille display, iPhone

### **Ability**

Blind since birth with some light perception

### **Aptitude**

Skilled technology user

### **Attitude**

Digital native, early adopter, persists until he gets it

### **Assistive Technology**

Screen reader (JAWS on his laptop, VoiceOver on his phone) Audio recorder (to take notes), Braille display

“When a site works with my screen reader, I have control over my own experience.”

“Sometimes I miss important information because it’s hidden.”

“Sometimes I need to know what color something is.”

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People with visual disabilities make up about 2.6% of the world’s population (about 0.6% are blind).

In the U.S., about 1.8 million people can’t easily see printed words and oOnly about 10% of people who are blind can read and write braille.

# LEA (35)

## Editor, living with fatigue and pain

- Masters degree
- Writes for a trade publication
- Works from home
- Desktop computer

### **Ability**

Fatigue from fibromyalgia, trackball, and special keyboard

### **Aptitude**

Average user

### **Attitude**

Wishes people would understand how hard it can be for her to make it through the day

### **Assistive Technology**

Split keyboard for less strain on her wrists, keyboard controls to minimize arm movement, Dragon Naturally Speaking

“Don’t make me work so hard.”

“I like pages with links at the top of the page.”

“Using a mouse takes more energy than you think.”

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5 million people in the U.S. have fibromyalgia, 80–90% of them are women.

People with fibromyalgia and related diseases like lupus, ankylosing spondylitis, and rheumatoid arthritis have increased sensitivity to pain.

# STEVEN (38)

## Deaf graphic artist and ASL speaker

- Art school graduate
- Graphic artist in a small ad agency  
Works from home
- iPad, iPhone, MacBook Pro; good computer at work

### **Ability**

Native language is ASL; can speak and read lips; uses SMS/IM, Skype, and video chat

### **Aptitude**

Good with graphic tools, and prefers visuals to text; poor spelling makes searching more difficult

### **Attitude**

Can be annoyed about accessibility, like lack of captions

### **Assistive Technology**

Sign language, CART—Communication Access Real-Time Transcription, Captions, Video chat

“It’s annoying when videos on the web aren’t captioned.”

“It’s easier to participate in discussions using text.”

“If a site is just a big wall of text, I’m likely to leave.”

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10.5 million (3.5%) people in the U.S. are deaf or have a significant hearing loss and 48 million people in the U.S. report some degree of hearing loss.

500,000 to 2 million people use American Sign Language (ASL).

Sign is not a universal language.

# TREVOR (18)

## High school student with autism

- Lives with family
- Goes to high school
- Computers at school; laptop at home; basic mobile phone with SMS

“I like consistent, familiar places on the web.”

### **Ability**

Autism Spectrum Disorder. Uses larger text and a program that hides everything but the text, so he doesn't get distracted

“When I can learn the pattern, I can find my way.”

### **Aptitude**

Uses the computer well for games, but doesn't learn new sites easily

### **Attitude**

Prefers familiar sites in an established routine

“Reading is hard for me.”

### **Assistive Technology**

Text preference settings, Chat and forums, Power keyboard user

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1 in 88 children in the U.S. have Autism Spectrum Disorder, ranging from severe to mild social and communications challenges, from classic autism to Asperger's.

5 times more boys than girls are diagnosed with ASDs. The majority do not have an intellectual disability.



# VISHNU (48)

Engineer, global citizen with low vision

- Engineering degree
- Works for a medical software company on projects for international use
- Born in India, finished graduate school in Malaysia, lives in Singapore
- High tech all the way at work; two mobile phones and a laptop for personal use

## **Ability**

Speaks three languages: Gujarati, Hindi, English, and a little spoken Mandarin. Uses contrast adjustment to see the screen clearly

## **Aptitude**

Expert user of technical tools; frustrated searching across languages

## **Attitude**

Sees himself as a world citizen, and wants to be able to use any site

## **Assistive Technology**

Contrast adjustments, Screen magnification software, Personalized stylesheets for colors that make it easier to read text

“I want to be on the same level as everyone else.”

“If I can adjust my screen, I can read comfortably.”

“Translating in my head is easier with simpler sentences.”

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An estimated 135 million people have partial sight.

Many people in south Asia speak at least three languages: their regional language, Hindi or Mandarin, and English.