CONTEXTUALIZING SMART HOME TECHNOLOGIES WITH AUGMENTED REALITY TOOLS TO FACILITATE AGING IN PLACE

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METHOD
TOOL
AR tool powered by an iPhone and projected to a larger TV screen for better visibility.

PARTICIPANTS
SAMPLE
9 Older Adults 68-80 yrs
60+ YEARS OLD
10+ LIVING WITH MOBILITY IMPAIRMENT (WHEELCHAIR, CANE, ARTHRITIS)

RESULTS
As compared to traditional instructions, participants...
Felt MORE CONFIDENT in their UNDERSTANDING for how Alexa works.
PREFERRED THE AR tool over paper instructions.

Felt MORE CONFIDENT in their ability to TROUBLE SHOOT an Alexa on their own.
FELT MORE INFORMED if Alexa was right for them in their daily lives.

NEXT STEPS
Building on this research, we are exploring the creation of personalized AR experiences that act as guided install tools to show users exactly how to install smart home technology in their own home. This research seeks to understand the value of these experiences in supporting feelings of confidence, mastery, and overall understanding to support aging in place using smart home technology for those with mobility disabilities.

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PURPOSE
For older adults aging with mobility disabilities, smart home technologies can help them to age in place.

However, home assistants have invisible interfaces putting high demands on:
A user's ABILITY TO REMEMBER commands and know what the device can do.

FINANCES, as smart home tech can be a costly investment and a difficult buying decision for those unsure of the value that these devices bring to daily life.

Augmented reality (AR) has the ability to reveal the invisible in the context of the real world and let you virtually try before you buy.

We built an AR mobile tool to show how (a virtual) Alexa works in the context of an actual home environment.

Home assistants, like the Amazon Alexa, can act as a central control hub for smart lightbulbs, thermostats, door locks, and switches without ever leaving your seat.

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