SmartSenior

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Problem

● Seniors with smartphones feel anxiety when using them

● Require help from family members to learn basic tasks

Solution

● Create an app that teaches seniors how to better utilize their smartphone
Contextual Inquiry Customers

Where / How

- La Comida Dining Hall / Downtown Palo Alto
- Relatives
- Verizon representative

Who / Why

- Seniors
- People with knowledge about seniors and their smartphone usage
Contextual Inquiry Customers

Roberto, Verizon Associate

- Guides seniors through the initial set-up process
- Teaches them how to use and operate the touchscreen
- Shows them the basic smartphone functions and usually has to repeat instructions 5-6 times
Andrea (73), Driver

- Uses her phone almost exclusively for calling
- Dislikes texting
- Calls her children for help or downloads instructions on her own
- Would use more functions, if the screen were bigger
Mary (>60)

- Uses her phone to make calls, send text messages, and share photos
- Gets help from her children
- Her children download apps for her.
- She does not use the App Store on her own
Seniors rely on family/friends for help

Don't use some features of phone because too confusing

Prefer larger screens and buttons

Don't use App Store and use very few pre-installed apps

Rely on traditional methods of communication: books, courses, asking an “expert” (store representative)
Task Analysis Results

Who is going to use the system?

- Elderly (over the age of 50) who will benefit from smartphone usage
- Unfamiliar/uncomfortable with using advanced features
Task Analysis Results

What tasks do they now perform?

● Basic tasks (phone calls, texting)
● Using internet, emailing (with help from others)
Task Analysis Results

What tasks are desired?

- Confidently doing advanced tasks (internet browsing), maps and navigation
- Step-by-step guide for using apps
Task Analysis Results

How are tasks learned?

- Friends and family, store associates
- Classes -- "iPad for Dummies"
- Books -- "iPad Beginning"
Task Analysis Results

Where are the tasks performed?
- Everywhere, while traveling to and from
- At home
Task Analysis Results

What is the relationship between customer & data?

- Plenty of "data" (guides on how to use smartphones)
- Hard to access (need to know how to use internet)
- Hard to understand
Task Analysis Results

What other tools does the customer have?

- Traditional, physical equivalent (calendar, address book)
Task Analysis Results

How do users communicate with each other?

- Call family members
- Within the (senior) community
Task Analysis Results

How often are the tasks performed?

- Weekly (phone calls)
- Daily (emails, calendar)
What are the time constraints on the tasks?
- Urgent situations (phone calls, texts)
- Takes a long time to learn tasks
Task Analysis Results

What happens when things go wrong?

- Call family/friends for help
- Go to store associates
- Become disillusioned with idea of smartphones
Representative Tasks

Provide interface to complete basic tasks

- Allow users to easily make calls, send messages, and surf the web
- Make it easier to find built-in apps
- Make built-in apps less confusing, cluttered, and frustrating to use
Representative Tasks

**Teach users to use built-in interface**
- Users eventually do not need our app to accomplish tasks
- Increase users’ comfort levels
- Enable users to learn complex tasks on their own
Representative Tasks

Connect users with those willing to help

- If users get stuck they can reach out to someone
- Create a sense of community to encourage continued learning
1. Direct OS Integration

- Software changes -- simplify functionality
- Initial phone setup involves interactive tutorial
- Permanent help button
- Helpful AI interface (like Siri)
Early Design Sketches

Direct OS Integration - Permanent Help Button

[Diagram description]

- Simplified options: Phone, Texting, E-mail, Apps
- Press "?" button (always there)
- Use your finger to press one option as if it was a button. OK
- Instructions on how to use current page:
  - 363-217-5611
    1 2 3
    4 5 6
    7 8 9
  - #0x
    Press ? OK

- To dial the phone, press the numbers with your finger. Then press call.
Early Design Sketches

Direct OS Integration - Setup Tutorial

Tutorial At Beginning of Phone Setup

1. Hello! Let's set up your phone.
2. Who is someone you can contact? Name [Space] Phone [Space] Pick are: son daughter
3. Let's try calling them. Press this to call
4. Enter their number
5. Good! Let's set up your email. Pick a provider:
6. Let's try emailing someone. Press this to write an email
7. Who are you sending it to?
8. This is where you type it:
9. Good! Let's set up... etc

-at any point, can repeat the previous step.
2. Phone & Tablet

- Interactive tutorial on a tablet
- Tablet has phone simulator and mirrors actual phone in real time
- Clicking anywhere on the tablet provides info/tutorial
- Animation to highlight specifics
Early Design Sketches

Phone & Tablet - "Playground" Tutorial
Application Ideas

3. Novice/Expert Crowdsourcing

- Solves problem of how the seniors would initially get the app
- Have a social media element
- Beginner encouraged by mentor and by seeing their friends improve
- Progress tracking
- Real time notifications in both directions
Early Design Sketches

Novice/Expert Crowdsourcing

[Diagram showing a sequence of steps involving Tim and a grandparent using an app to send and receive information.]
Summary

- Seniors have trouble using certain features of their smartphone and require help
- Major problems include small interfaces and confusing instructions
- We want to make it easy for seniors to learn
- Learning will start right at the beginning at phone setup
- Collaborative with other seniors trying to learn
Questions?