Printer add on Voice and Accessibility Assistant (AA) test cases and objectives (this is not a full list)
- Accessibility solutions that combined digital and physical product
- The phase one goal is to have screen reader capability for most features offered in the printer
- The phase one goal for the voice command is to enable users to do hands-free copies with 100 + possible settings, using natural language, communicate the voice command received, and when mistakes occur.

1. **Hypothesis**

Workplace assistive technology usually will accompany with some training section

2. **Objectives about the research and concept testing and evaluation**

Discoverability – can users discover and understand the features and the AA layout

      a. Icons on the AA
      b. Orientation
      c. Braille in access areas
      d. Quick access to the accessibility feature menu through Hardware and value adjustment
            i. Volume
            ii. Contrast
            iii. Screen reader
            iv. Font size
            v. Invert color

Screen Reader https://www.youtube.com/watch?v=RRpbL5gs2mg

- When screen reader is on, the first focus order starts with the most important feature of the product (Sam Ogami) Instead of going by the Z-order
      a. It started from the bottom right, Copy button, moving upwards.
      b. Traffic/Usage is the key for focus order prioritization

Voice command https://www.youtube.com/watch?v=ad0oc1Y-MdE

- Perform primary functions
      a. Can user make document copy with the combination of screen reader and voice commands on
      b. When mistake occur, does use know what to do

3. **Research phase 1**
      a. Understand the expectation for screen reader and voice commands
            i. Run some early concept through the participants after the interview
            ii. How people with disability use them today
      b. Process - The team went to a local agency and visited the Lighthouse in SF to do in depth interviews and asked the participant to show us how they use their technology.
      c. Pro/cons: Before we went out, we did some 2ndary research and have our in-house expert taught us a few things about those participants; it's beneficial for us to know how to get around them instead of feeling awkward and doing something improper.

The mix method of interview and concept testing allows us to get a lot of information to redefine the design.

4. **Research phase 2**
   a. Interactive Prototype testing
      i. Can user make copies
      ii. What do they think about the voice command response?
   b. Process: researchers administered a few tasks during the test section to help us understand if the design and expectation of the current version are within the scope and get more feedback from the user on how we can further improve.

   c. Pro/con – the phase 1 research trip helped us paint the picture for the company where the experience will land. We were developing an in house screen reader and voice command solution for the federal sector, and it won't be as fluent as google home, Alexa, or Windows narrator. However, we were able to priorities our design objectives and scope and delivered an experience that puts HP as a market leader in this segment with an in-house solution