

First and foremost Handles is not an Accessible Design. Since Handles is the only basis for Navigation in Springfield it needs to be highly accessible.

The platform knew this from day 1, which is why their model was **NOT** Handles.

Their interaction model was **Controller Overrides Handles**. Handles was meant to be an enhancement to their interface.

For Springfield we needed an interaction model that would be our core.

Accessible Design:

Note: These core principles are ideal, however every interaction model will be strong and weak in various principles.

When designing an interaction model, one has to understand the drawbacks as well as the advantages. One also

Needs to understand their core user and potential user.

Perceptibility: Everyone can perceive the design regardless of sensory abilities

Applies to Handles: One of the main issues with handles was everyone perceives them differently depending on visual skin, and screen layouts.

This makes it near impossible to have a consistent use of handles across experiences. People also perceive their interaction differently even when

Shown the same art as we have witnessed in UR.

Operability: Everyone can use the design

Applies to Handles: This was actually ok for handles. Everyone could use handles.

Simplicity: Everyone can easily understand and use the design regardless of experience, literacy or concentration level

Applies To Handles: Handles simplicity relied on screen simplicity which relied on having simple UI designs with minimal options.

If your design called for too many options on a screen, handles became too complex to use consistently and efficiently.

In our case as well as platform; Handles is too complex. We have more control in our case to make our design simpler but platform had their hands tied.

Forgiveness: Minimize the occurrence and consequences of errors.

Applies to Handles: Handles was not very forgiving and was never tuned to be. Attaching to the wrong handle in the midst of

Trying to take action on another handle is a common occurrence. Detaching and Attaching is a very frustrating user scenario.

Simplifying and Reducing the number of screens would help tremendously.

Handles as currently implemented in our product today fails 3 out 4 of core accessibility principles.

You could improve this by various tweaks to Handles, removing screens, simplifying screens.

Other Handles Interaction Design Concerns:

- The same action is used to select as well as change options. This is very flawed. You can never have a selectable option in the same direction as navigation. This is why the T handle causes so much grief.
- Impossible to tune for all users, which is our target. Would need to ship with calibration stage and/or tunable options.