

## **ID3 PROJECT 2A: RESEARCH REPORT**

Maybe Dropbox will be a better place to put all this stuff and sync it, Google drive is kinda crazy rn.

Smart devices are nearly everywhere now, however some areas are moving slower than others. This can be for various reasons, whether is be simply the ubiquity of the current way or the sheer cost of innovating in the space. When trying to innovate in a space such as retail shopping, it seems like you are walking into a graveyard of *smart* ideas and innovations. Especially with clothing. Very few innovations seem to make it into the land of thread.

With much of product design coming from roots in industrial design, attempting to create a physical object felt familiar and yet incredibly challenging in totally new ways. Designing physical constraints is something incredibly useful, and surprisingly hard to execute well. How does the user know what side is the top? How do they know what end to point at their item? We knew we'd have to craft something that to the user looked incredibly simple and approachable, but with the right balance of interaction design principles to ensure ease of use.

Wanting to innovate the monolith that is retail shopping, I chose one of the most ubiquitous pieces of technology in the retail space: the barcode scanner. A staple of the retail store employee experience. The primary action of the scanner is obviously to scan barcodes. Keeping that in mind, would someone with no prior knowledge of what a barcode scanner is or does, would they be able to do it?

## For the purposes of this, lets assume



is the barcode scanner under consideration.

Right away the design of the device affords a shape similar to a joystick that looks like something that should be gripped. A quick scan would allow most people to understand where to grab it, as the constraint of a large top area and an awkward lower section guides the user to holding the middle area. If you were given the task of "scanning something" and then handed this device you would most likely find out that the yellow thing is important, and in order to use it, you'd have to grab it properly. This shows the excellent blend of constraints and visibility. Giving the yellow colour to the main action of the device is a great decision, as it immediately

leads the user to it while presenting its importance. All of these design decisions so far have led the user to holding the device the right way and pointing the right direction. Affordance wise, I think it is relatively obvious what the control does. I think in our culture at least we associate a trigger with something coming out the front of something. If you were going into this with the context of it being a scanner, then I think it works relatively well. Feedback is the answer so this, when you pull that trigger you are instantly greeted with a red light coming out the front of the machine. Excellent. Along with this you have now mapped the trigger to the red light, completely the understanding of the main goal of this product. The last piece of feedback is the act of scanning, in which the machine will beep and flash the light on the rear-top of the device. This completes the main action of the product. Overall, it works well.

What can we learn from this? Quite a few things. One is that a lot of thought it needed to ensure that the customer holds the thing properly enough to use it, as simple as it may sound. Another is the inclusion of both audio & visual feedback, ensuring the user notices that something has happened. Overall I think our product does a poor job of these things. It is something we should consider rethinking before the final submission.