# Google Drive

**UX Case Study** 

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### Project Background

Google Drive is an efficient, effective and commonly used service for file storing, file sharing and file editing. Although when squished down onto a mobile device, the process begins to get much more convoluted. While its foundation is strong, it possesses ample room for potential increases in versatility and efficiency. We wanted to take Google Drive and prepare it for the technological shifts of the future by applying developed technology to the users experience with Mixed Reality headsets.

### **Project Concept**

For this project we set out to fix the multitude of problems that came naturally with using Google Drive on mobile devices. We wanted to emulate an office work space and have it be accessible and efficient at all times, regardless of where you may be or what you may be doing. Our product statement was to "make live editing, group communication and user to user interaction accessible and efficient anywhere, anytime."

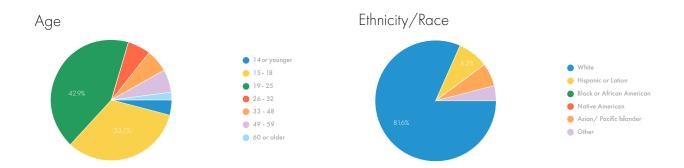
### **Concept Solution**

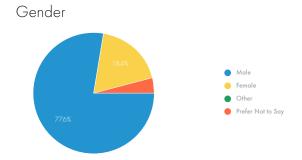
We went about our concept by analyzing how we could touch up the small number of pain points brought forth by Google Drive. To uncover these pain points we produced user surveys and paper prototypes to find the user problems and pain points while using Google Drive. The paper prototypes gave us insight on the user interaction and thought process behind the user's actions when interacting with a mixed reality UI.

### Target Demographic

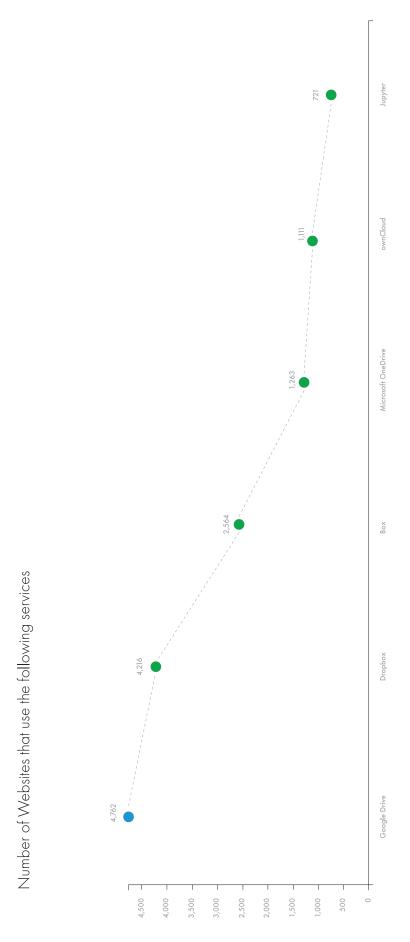
Google Drive is a service that can be useful to absolutely anybody in the world, whether that be a 73 year old woman needing to store her Christmas photos in a safe place or a 15 year old boy looking to work on a school project with a friend that lives a few miles away.

Right now, given the technology driven generation we find ourselves in, Google Drive is more prevelant to a younger demographic simply because they are more comfortable with technology - they grew up immersed in it. Our survey results directly reflect this assumption.

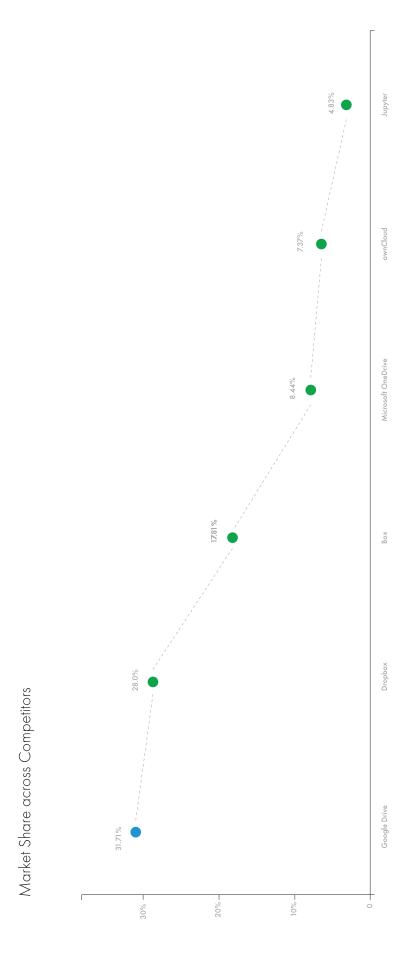




# Competitive Benchmark



# Competitive Benchmark



### Competitor Research

Google Drive's competitors can be split into two overlapping categories; file storage and file sharing. Google Drive is currently at the top in comparison to its direct competitors in both Websites that use it and Market Share.

Something we have found from research that may point to why Google Drive is at the top, is it is the only service out its competitors that does not require a download and/or a paid sign up - all that it requires is a Gmail account. This makes Google Drive the easiest to use in terms of convenience, which is a very prevalent luxury today.





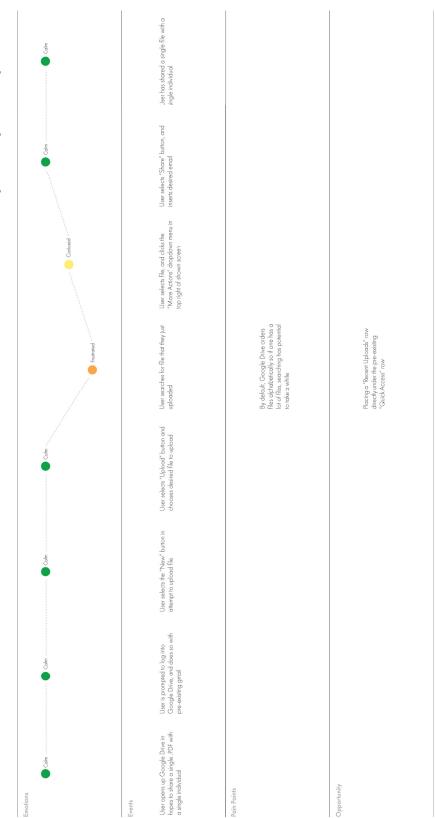






### User Journey Map 1





## User Journey Map 2



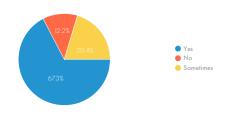


### Research

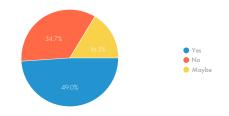
We based our research methodologies primarily off of online surveys. We set out to get a better idea on our target demographic, what people use Google Drive for, as well as the popularity of Google Drive on mobile devices. Out of our 49 responses, we were pleased to see a response from every age group for that fell right in line with out demographic hypothesis. We were also pleased to see that Google Drive on mobile devices was something people were definitely open to try, if they weren't indulging already.

### Research Findings

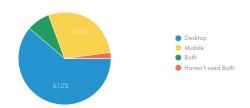
Do you prefer Google Drive to other storing/sharing services?



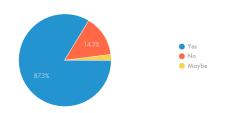
Would you edit Google Drive files on a mobile device?



How do you prefer to use Google Drive?



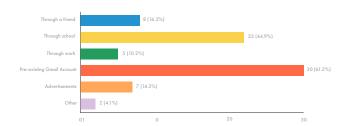
Have you used Google Drive on a mobile device?



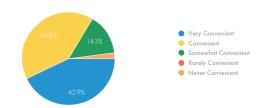
Have you ever used Google Drive?



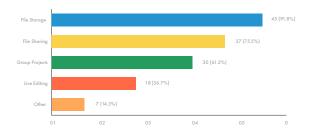
How did you hear about Google Drive?



How convenient do you find Google Drive?



What do you use Google Drive for?



### **Future Market Report**

While using Google Drive on your mobile device may be a convenient way to save time while on the go, it currently is not efficient. The small screen and plethora of necessary app downloads bog down the apps efficiency and make it very difficult to do anything in a timely manner.

We hope to turn this around, and we plan on doing so by implementing Augmented Reality projections via a pair of glasses and/or contacts that is directly connected to either your mobile device or apple watch. These Augmented Reality projections will help greatly in increasing screen size and overall efficiency.

We also plan on implementing Google Lens' by using this already existing technology to be able to capture images and directly convert them in text files that you are able to edit freely.

### **Product Statement**

Make live editing, group communication and user to user interaction accessible and efficient anywhere, anytime.

#### Goals

#### **Business Goals**

this site should help the company to...

- 1. Data Mining
- 2. Increase Service Awareness
- 3. Increase Versatility
- 4. Be the Premium Service

#### **Brand Goals**

this companies brand goals are to...

- 1. Promote Group System
- 2. Be known for Efficiency
- 3. Increase Social Network

#### **User Goals**

as a new and existing customer I want to...

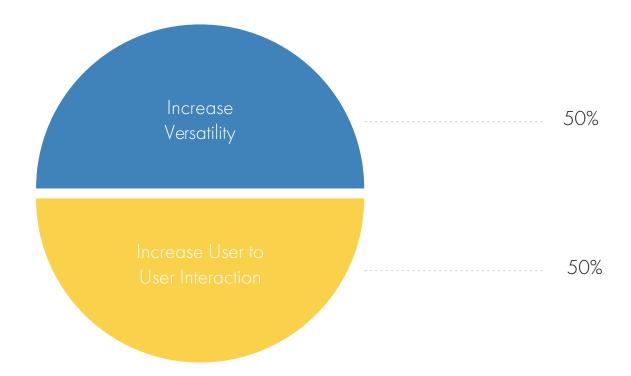
- 1. Increase Efficiency
- 2. Increase Group Experience
- 3. Increase User to User Interaction
- 4. Increase User Time

### **Project Priorities**

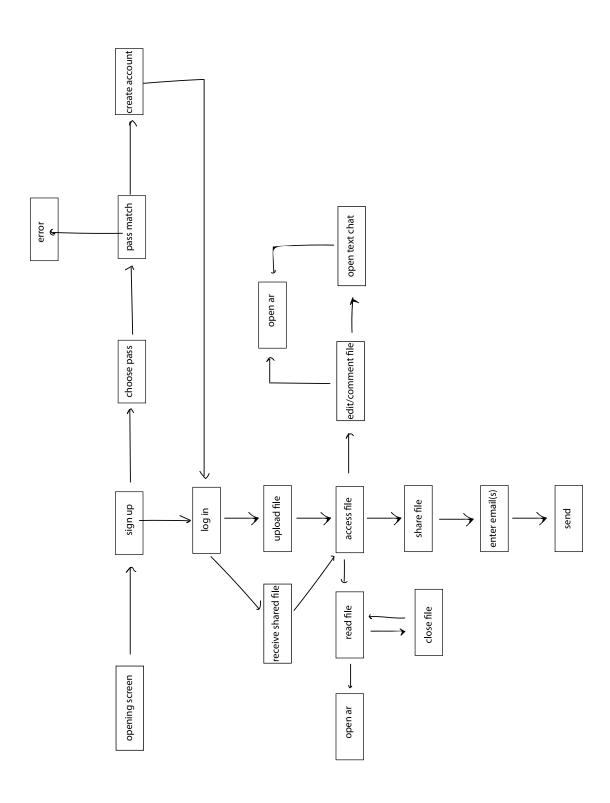
**Efficient** manuevering and sharing of files

Communicate quick, easy and effectively

Experience the workplace anywhere, anytime

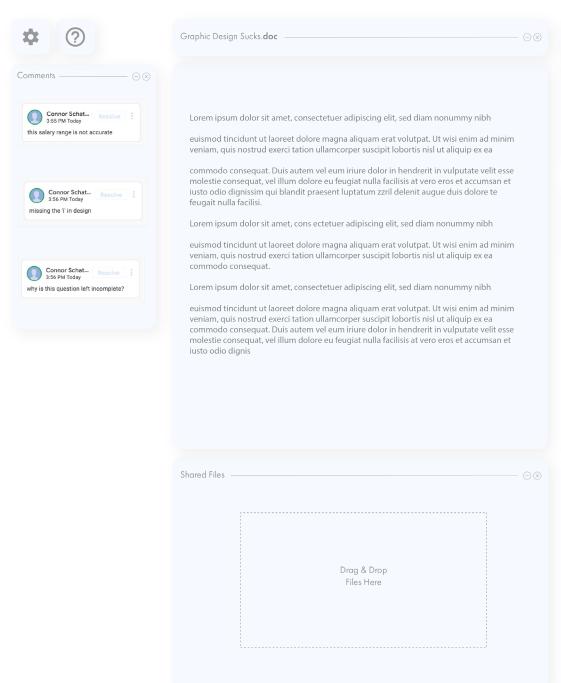


### **User Flow**



### Paper Prototype

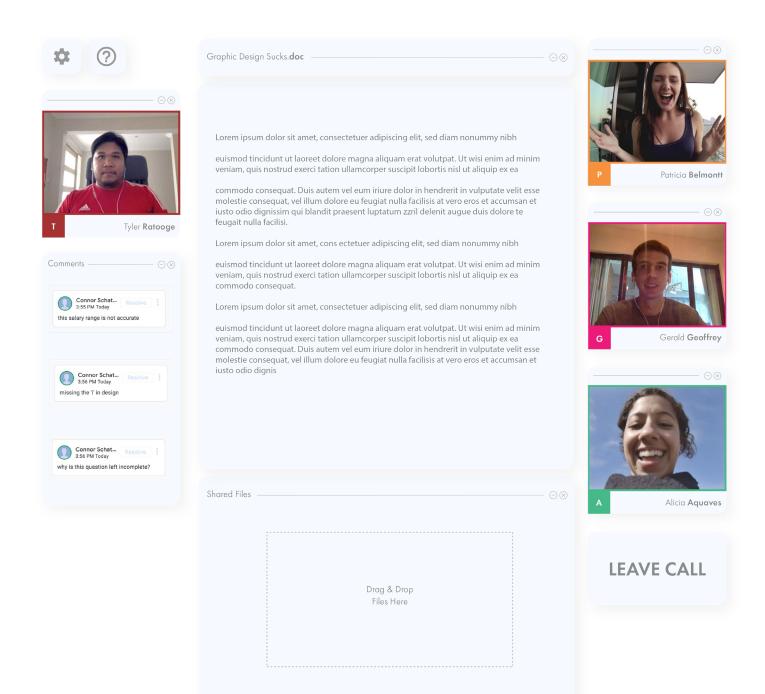
Working on a group file, not in group video call





### Paper Prototype

Working on a group file, inside group video call



# **User Testing**





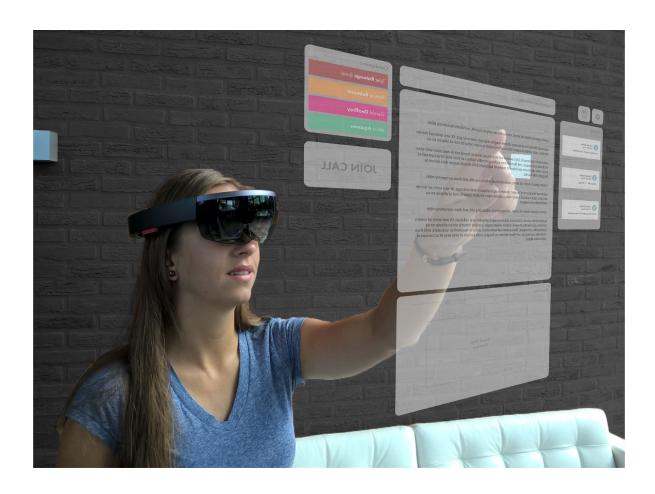




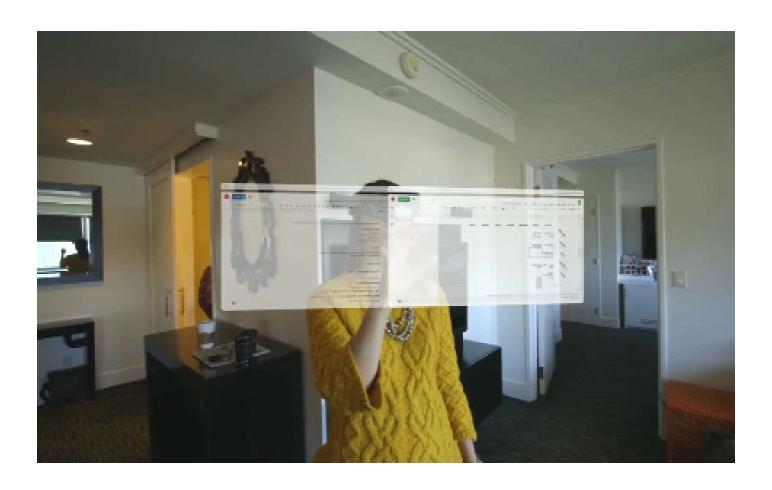
### **Usability Testing**

We learned quite a bit from out usability testings. Our biggest take away from our first testings was the need for some sort of navigation bar/browser that would allow you, and guide you through different work space windows. We also found that there was confusion on what was being shown, versus what was private to the user doing a group call with multiple individuals. Our second time around at testing we found that there was confusion within the process of sharing a file within your group call, in comparison to what was already being shared. Most subjects had a difficult time imagining the paper prototype to be in front them in a mixed reality setting, but we still found the tests to be very successful and helpful in our design and development process.

# Concept Mock Up



# Concept Mock Up



### Challenges

We ran into a few challenges along the way. Initially, it was hard to prepare the simplicity of Google Drive to be set in the future, for the majority of the app is straight forward and efficient against its competitors. We also found it difficult to properly expand upon what Google Drive is, without entirely changing the product and what it stands for. Once we got our concept rolling and it was time to do some usability testing, it found that the subjects had a very difficult time imagining the paper to be MR screens accessible by touch directly in front of them.

### Reflections

For not having access to a mixed reality headset, we felt as if we handled our problems properly and effectively. However if we did have a headset we would have been able to expand upon this project much more thoroughly.

Google Drive is adaptable to mixed reality, and a lot of opportunity was uncovered throughout the process

In the beginning we focused our suverys too much on the mobile aspect of google drive rather than our hopes to implement MR.

# Meet the Designers

Connor Schattenkerk

Chancellor Gardiner



