Understanding Imagery Scientists at the U.S. Department of Defense

My Role
User Experience Researcher

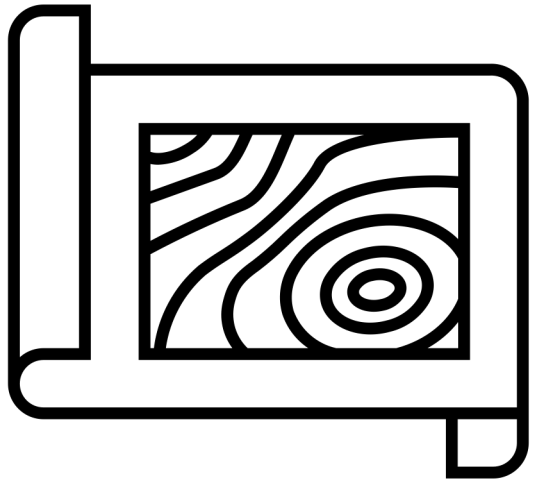
Project Brief
I worked with the agency's Chief of Technology Office to refine the Beta version of agency software from a user-centric perspective. Through our research, we uncovered insights and created personas of imagery scientists that inform the development of a more effective software program.

Understanding the Problem Space

The agency wanted to create an effective tool to aid imagery scientists.

Imagery scientists are the specialists responsible for extracting, processing, and analyzing imagery data to create intelligence reports that inform policy makers and senior government officials on issues of global or regional importance.

There was software in the Beta development stage being used by a small group of imagery scientists to aid them in their work as the product development team continues to research, design, and develop the program's development scope.



Research Goals

- Understand how imagery scientists **utilize the tool in their daily work**.
- Discover **pain points, unmet needs, and positive aspects** of the software program.
- Identify **areas of improvement** for the tool to become an asset for imagery scientists moving forwards.

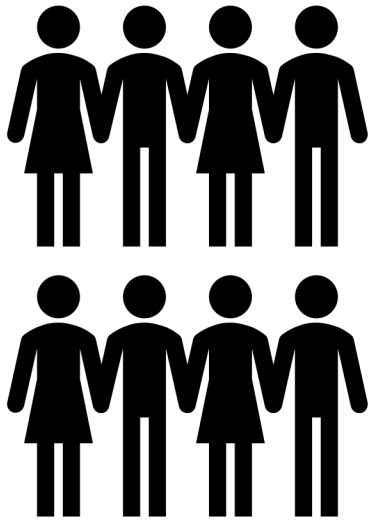
Participant Recruitment

Participants were recruited from a small pool of imagery scientists familiar with the program.

For the scope of this research project, we sought to interview 5–10 imagery scientists with experience using the program in question.

Due to the specific nature of the software, only a small group of imagery scientists had experience with the program and would be able to provide the research team with critical information.

We created a screener to identify personnel that met our requirements, and we ultimately conducted interviews with eight participants in total.



In-depth Interviews

We conducted 60 minute 1:1 interviews with eight participants.

With our research goals in mind, we held in-depth conversations with imagery scientists to learn how they were using the program and understand any pain points or favorable aspects they experienced while using the tool.

Interviews were conducted remotely for convenience due to the ongoing COVID-19 pandemic at this time.

Uncovering Insights

The in-depth interviews yielded relevant and actionable insights for future development.

Each interview was recorded and transcribed. There was a debrief following each interview to discuss emerging patterns, themes and any other key takeaways followed by a more in-depth thematic analysis.

An analysis of the qualitative data collected from the interviews provided rich contextual information of imagery scientist's priorities and pain points while using the program that will receive design considerations for future rounds of development.

Final Deliverables

We distilled our insights into detailed personas of the end users.

After collecting, analyzing, and synthesizing our data, we delivered personas of imagery scientists detailing their workflows, goals, and experiences with the product.

We additionally created a project report highlighting themes and recommendations for the development team to consider when refining the software.

Our process and findings, categorized by themes and recommendations, were compiled in a presentation that was delivered to the Chief of Technology Office.

Project Impact

- Our research provided in-depth **insight into user needs** to create a more effective and responsive software package.
- We connected with the end user to thoroughly **understand moments of friction and delight** when using the product.
- We created informative **personas of the end user** and a **report of recommendations and findings** that were warmly received by the client.