

DELIVERABLE B: NEEDS IDENTIFICATION AND PROBLEM STATEMENT

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Table of Contents

1. Client Statements to Interpreted Needs	
2. Grouping of Needs	
3. Priority of Needs	
4. Problem Statement	
5. Unknown Information	

1. Client Statements to Interpreted Needs

Client Statements (Direct Quotes)	Interpreted Needs
<p>“We want to be able to show decision makers... these little 1min videos you’ve created to show them the reality of what could happen if they delay making a decision”</p>	<ul style="list-style-type: none"> - Client wants a short video (1 min in length) - Video depicts what a future with killer robots could look like
<p>“We don’t want to, you know, show blood and gore and things”</p>	<ul style="list-style-type: none"> - Video doesn’t include blood, gore or intense violence
<p>“So you need to... figure out what kind of sensor data... an autonomous weapon would use”</p>	<ul style="list-style-type: none"> - Video depicts the manners in which robots could use sensor stimuli to perform their military tasks
<p>“And then think... of what the built environment... would look like, and how people would adapt that to protect themselves, based on the sensor data that autonomous weapons are going to be pulling.”</p>	<ul style="list-style-type: none"> - Video explores the manners in which humans will adapt to the presence of killer robots (past examples were bunkers, things that obstruct vision, and construction to protect civilians)
<p>“Focus on the fact that there are more resources in those links for you to learn about the issue”</p>	<ul style="list-style-type: none"> - Client wants us to gain a better understanding and background of the issue before even starting the project
<p>“There's concerns about... distinctions between combatants and civilians”</p>	<ul style="list-style-type: none"> -Video shows the concerns that are involved in using sensor data to find the difference between combatants and civilians.
<p>“What we are asking you to do in this project largely revolves around ethical kind of like thinking about the ethical issues, and how they show up in design decisions when people are making these types of systems”</p>	<ul style="list-style-type: none"> - Video emphasizes how things could go wrong for people that are exposed to this kind of dangerous technology - Video anticipates what damage autonomous weaponry could do
<p>“But the point here is that we want people who are experiencing this VR experience to have an immediate and visceral reaction to what they’re seeing.”</p>	<ul style="list-style-type: none"> - Video invokes strong emotions from the viewer (Client mentioned wanting the driving emotion to be concern for the future)
<p>“What we learned from last year with these VR experiences is that simplicity is key”</p>	<ul style="list-style-type: none"> - VR experience is simple - VR experience is short, includes simple assets and avoids complex, branching storylines
<p>“So basically what we need is for those videos not to have any copyright issues associated with them”</p>	<ul style="list-style-type: none"> - All assets included in the project are copyright free, or used with permission from their respective owners

<p>“You'll see them almost cataloged, like we have this problem with these weapons. These kinds of things can go wrong. So follow those links and look into them. We're very much asking you to focus on a few of those issues in your design, in your virtual reality experience, to make it very clear what is the issue or the set of issues very specifically like mistaken targeting or false facial recognition.”</p>	<ul style="list-style-type: none"> - Video has clear examples of specific issues that could result from autonomous weapons - The environment built is based on those issues and makes it clear the surroundings are changing based on those issues (example suggested in meeting: posters, appearance change etc.)
<p>“We want to balance between like fear and concern, and also hope and motivation”</p>	<ul style="list-style-type: none"> - Video invokes feelings of fear and hope
<p>“These systems are using facial recognition, and they falsely recognize a whole group of people. And you know and decide that they're targets. How do you compensate for that?”</p>	<ul style="list-style-type: none"> - Video demonstrates the consequences of allowing robots to make life or death decisions
<p>“People who are experiencing this VR experience to have an immediate and visceral reaction to what they are seeing in terms of what would have to happen in the built environment to protect people from those types of systems”</p>	<ul style="list-style-type: none"> - Viewers watching the video immediately understand the consequences of autonomous weapons and what particular things citizens could do to protect themselves from those dangers
<p>“I think, what we're looking for in terms of the most effective VR experiences here are just kind of like experiences wandering through a cityscape or a landscape. Recognizing how foreign it is...”</p>	<ul style="list-style-type: none"> - Video locale is somewhat unfamiliar, or somewhat unrecognizable (essentially a normal landscape turned unrecognizable)

2. Grouping of Needs

1 - Usable

- All assets are copyright free
- No blood, gore, intense violence

2 - Convincing

- Video triggers immediate/visceral reaction
- Video invokes, fear, concern, hope, and motivation

3 - Simple

- Video is about 1 minute in length
- Video avoids complex, branching storylines
- Straightforward story, little to no player intervention

4 - Creative

- Predicting future needs and accommodation based around killer robots, like structures.
- Video includes specific examples of issues with killer robots
- Depicts how robots could use/respond to sensory stimuli

5 - Realistic / Recognizable

- Video depicts a familiar environment turned unrecognizable

3. Priority of Needs (HIGH / MEDIUM / LOW) with Justification:

1. Usable (HIGH)

- If the project is not usable (i.e copyright issues), it physically cannot be presented to decision makers

2. Convincing (HIGH)

- The entire purpose of this product is to convince decision makers and evoke strong emotions (the client mentioned this many times)

3. Simple (HIGH)

- The client mentioned that past projects were incomplete due to being too complicated, so a simple VR experience should be prioritized

4. Creative (MEDIUM)

- Without creativity, it would be hard to engage with the viewer and convince them of the consequences of autonomous weapons, especially if the environment is foreign

5. Realistic / Recognizable (LOW)

- It was mentioned a couple times that the technology exists now, so a realistic environment would look similar to modern day.

- Client mentioned a recognizable environment might allow decision makers to identify with the issue (mentioned somewhat in passing)

4. Problem Statement:

Mines Action Canada, in association with Stop Killer Robots, requires a short, simple, and copyright-free virtual reality experience, to convince decision makers (politicians) of the dangers of autonomous weapons that can kill without human intervention.

5. Unknown Information / General Queries:

To be more inclusive and remove the language barrier, could our VR experience be dialogue free (latent need)?