

# Team Savox

CEF-vision system

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# CEF Vision system

- Provides vision of the surroundings, cameras and monitors
- Used by soldiers when dismounting vehicles
- Configuration issue!
  - How to customize to the monitor views?
  - Additional monitors, cameras, quad view... ?





"Disobedience, huh? That's a mistake!"

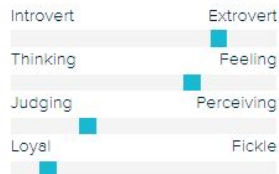
Age: 38

Work: Military officer

Family: Married, 2 kids

Location: Hamina, Finland

## Personality



Disciplined

Confident

Decisive

## Goals

- Guaranteeing the safety of his subordinates in the battlefield
- Getting recognized as an exemplary leader

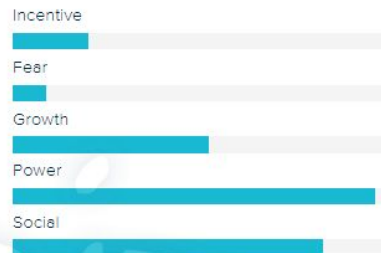
## Frustrations

- Getting blamed on the bad decisions of the squad leaders
- Outdated technology is still used in the Finnish defence forces

## Bio

- Billy is a lieutenant at the Finnish defense forces loves his country and gym training
- likes to keep his subordinates safe to keep their trust
- likes technology
- frustrated about having to put his guys into combat situations where they don't have enough information to make decisions without taking unnecessary risks

## Motivation



## Preferred Channels





"Not that you've learnt it we'll expect you to do it the right way."

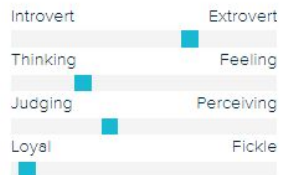
Age: 31

Work: Squad leader

Family: Married

Location: Hamina, Finland

## Personality



fafaf

## Goals

- Succeeding in combat missions

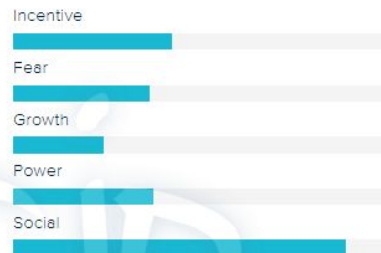
## Frustrations

- Not enough information to make decisions
- Officers having unrealistic expectations of him
- Having to put his friends into unnecessary danger

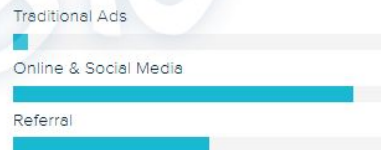
## Bio

- Enjoys tech, likes to customize things
- Friends with the soldiers, doesn't want to put them into danger
- 

## Motivation



## Preferred Channels





"I wish I knew what is going on here."

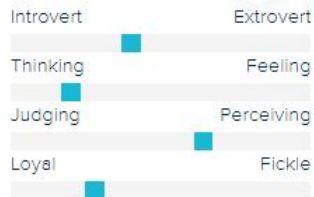
Age: 26

Work: Soldier

Family: Unmarried

Location: Hamina, Finland

## Personality



Decisive

## Goals

- Not to get shot in the face

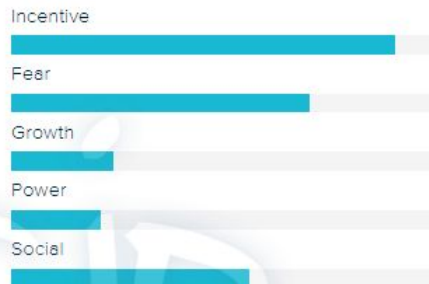
## Frustrations

- At times it seems like the leaders don't know what they are doing

## Bio

- Joined the military because he likes physical activities and there is a guaranteed job at the end of the training
- Often clueless about what is going in the army, because the higher ups don't like to share information
- Stressed about unmounting the SUV in combat when he can't be sure that it is safe to do so
- Works in cramped places
- Not very skilled with technology

## Motivation



## Preferred Channels



# Customer Journey

## Create configuration for single view (soldier)

|               | Open Software                 | Navigate to create new configuration                 | Choose output (screen) to configure  | Choose the outputs's "view" (configuration) to modify    | Choose input for selected view (single)                       |
|---------------|-------------------------------|--|--|--|---|
| Actions       | Find laptop, start software   | From home screen, choose "create configuration" (F1) | Navigate to wanted output, select "add configurations" (F1)                                  | Edit "view" with (F2)                                    | Navigate to "edit input" (F1), select input (1-8) → save (F1) |
| Questions     | How to use this?              | Can I modify existing configuration?                 | How do I know which is my preferred screen? What is the current configuration of the screen? | Which inputs are configured to this "view"?              |   |
| Happy moments |                               | This seems easy and fast!                            | This is simple! Oh, here i can edit output name!   | Oh, here I can choose type of the "view"! (single/multi) | Oh, here I can change input name!                             |
| Pain points   | "There is not a lot of space" |  | All the outputs are named in a confusing manner!   | Still cant figure out how the outputs are named!         |   |
| Opportunities |                               |  | Allow naming of outputs  | Allow naming of outputs                                  |   |

# Customer Journey

## Create configuration for multi view (soldier)

|               | Open Software                 | Navigate to create new configuration                 | Choose output (screen) to configure  | Choose the outputs's "view" (configuration) to modify    | Choose view type multiview and modify it                                | Choose layout for the "view"          | Map inputs to desired positions of the layout                            |
|---------------|-------------------------------|--|--|--|---|---------------------------------------|--|
| Actions       | Find laptop, start software   | From home screen, choose "create configuration" (F1) | Navigate to wanted output, select "add configurations" (F1)                                  | Edit "view" with (F2)                                    | Navigate to "view type" (F1), select multiview, select "edit multiview" | Scroll between layout designs (F2,F3) | Select "edit layout" → "select input" → save                             |
| Questions     | How to use this?              | Can I modify existing configuration?                 | How do I know which is my preferred screen? What is the current configuration of the screen? | Which inputs are configured to this "view"?              |   | What is suitable for me?              |  |
| Happy moments |                               | This seems easy and fast!                            | This is simple! Oh, here i can edit output name!   | Oh, here I can choose type of the "view"! (single/multi) |   |                                       |  |
| Pain points   | "There is not a lot of space" |  | All the outputs are named in a confusing manner!   | Still cant figure out how the outputs are named!         |   |                                       | I'm not sure which input is which camera, since they haven't been named! |
| Opportunities |                               |  | Allow naming of outputs  | Allow naming of outputs                                  |   |                                       |  |



# Prototype

<https://marvelapp.com/4e7a0dh/screen/53603764>

- Visibility of system status
  - Transitions are instant, so not needed
- Real world experience
  - Keyboard is not the most intuitive way for configuring, but it is mandatory as no other devices are provided. Inputs can be named by location which helps.
- User freedom
  - You can go to previous screen, but there is no “panic exit”
- Consistency
  - Controls are consistent, and just a few exists to provide easy to learn experience
- Errors
  - Not much room for error, as user doesnt input manually much information
- Recognition vs. recall
  - All needed is on the screen
- Flexibility and efficiency
  - Not much shortcuts in design. Maybe copying of presets?
- Aesthetics
  - Barebones UI, no distractions. Primary wish clear, minimal and easy to use UI.
- Recovering from errors
  - As said, not much errors to be made
- Help
  - Self explanatory UI

# Cognitive walktrough

UI is designed so that the user doesnt have many possible ways to operate the device, so mistakes rarely happen. Everything is named clearly so interface is intuitive.

More information on the screen

Some kind of help

Testing in car or sth