

## Human factors & Agile process

SYSTEEMONTWIKKELPROCES VERSUS USER-CENTRED DESIGN?!

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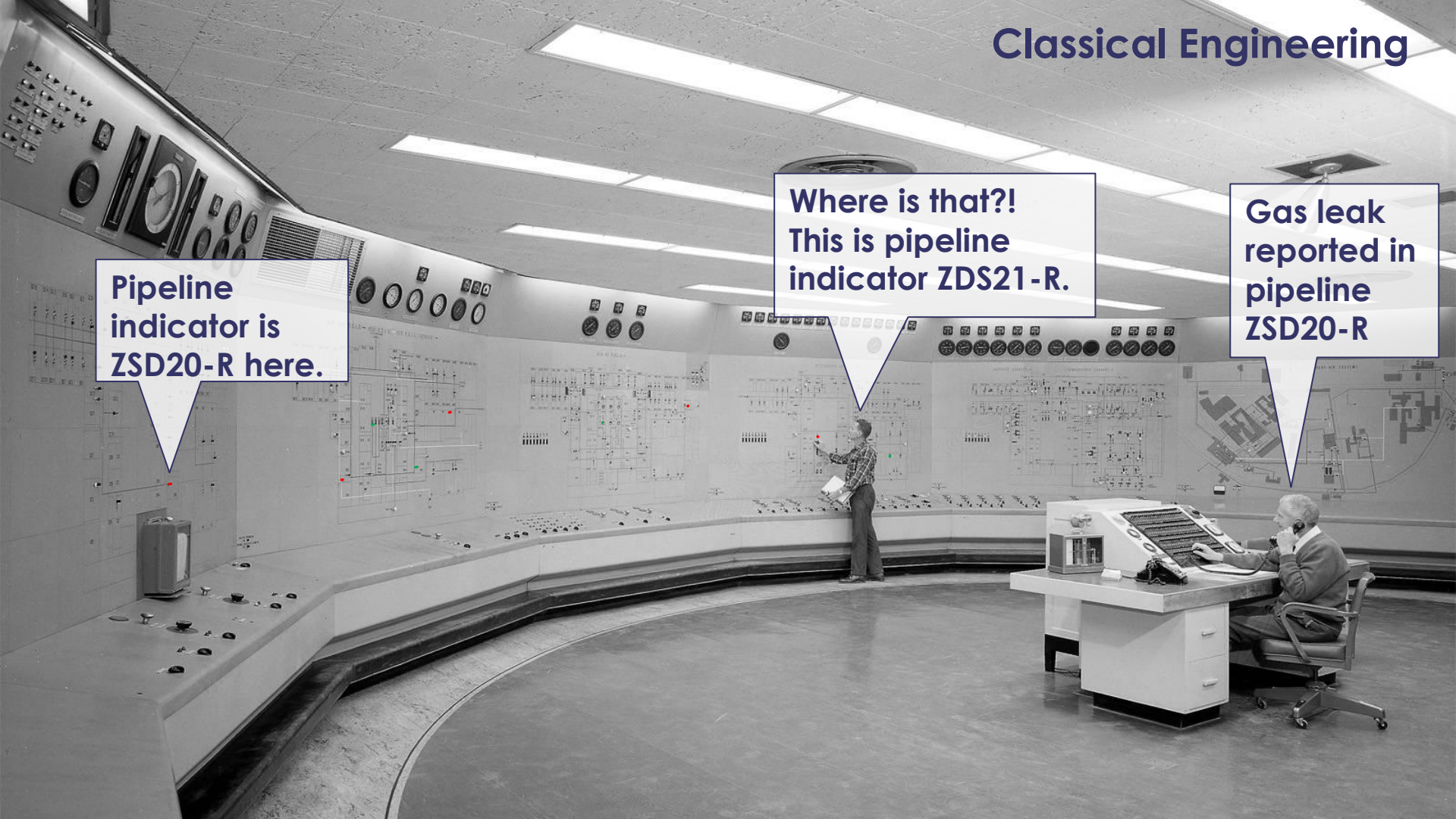


# Classical Engineering

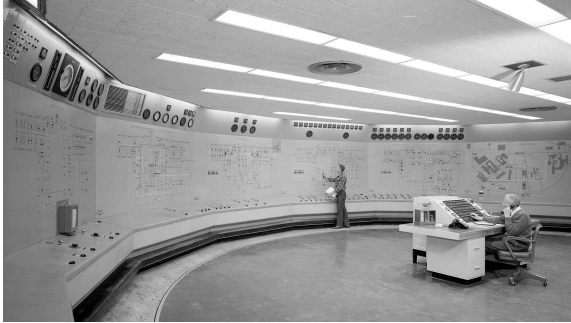
Pipeline indicator is ZSD20-R here.

Where is that?!  
This is pipeline indicator ZDS21-R.

Gas leak reported in pipeline ZSD20-R



# Techno Push



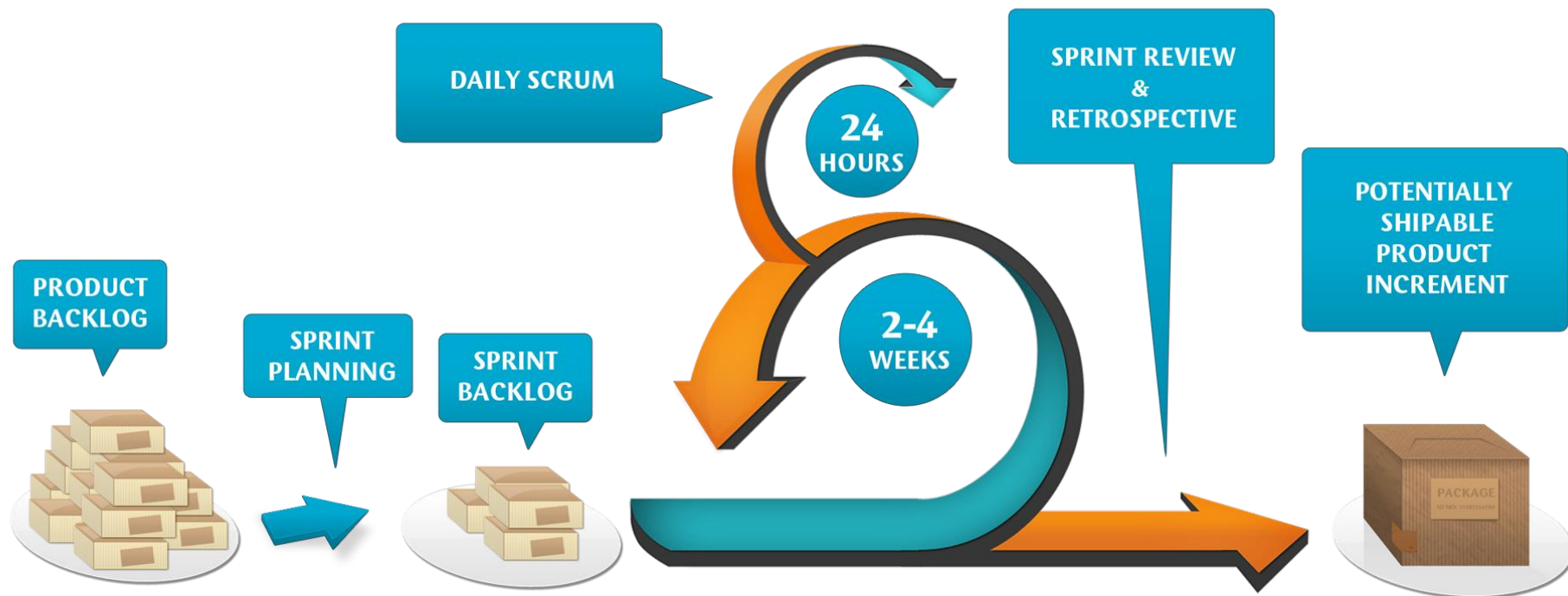
≠ safer or more efficient





# AGILE (SCRUM)

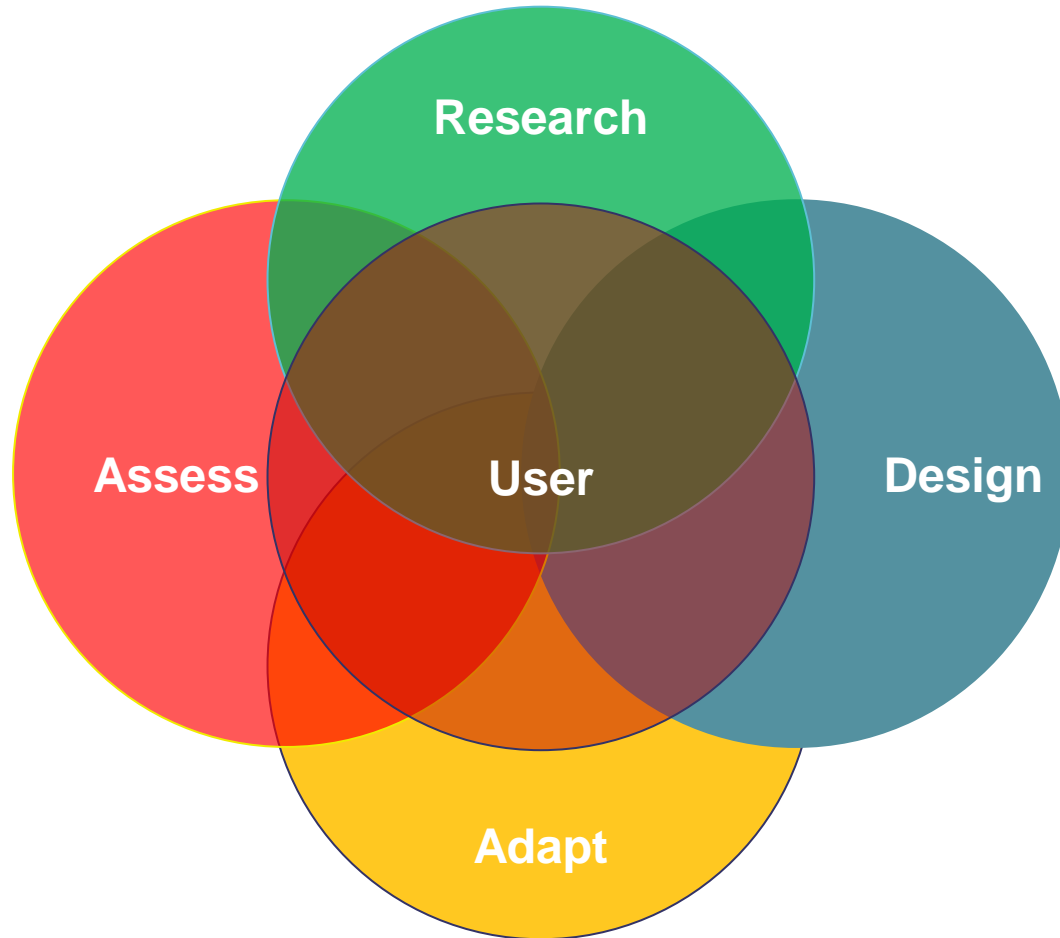
## SCRUM high level process



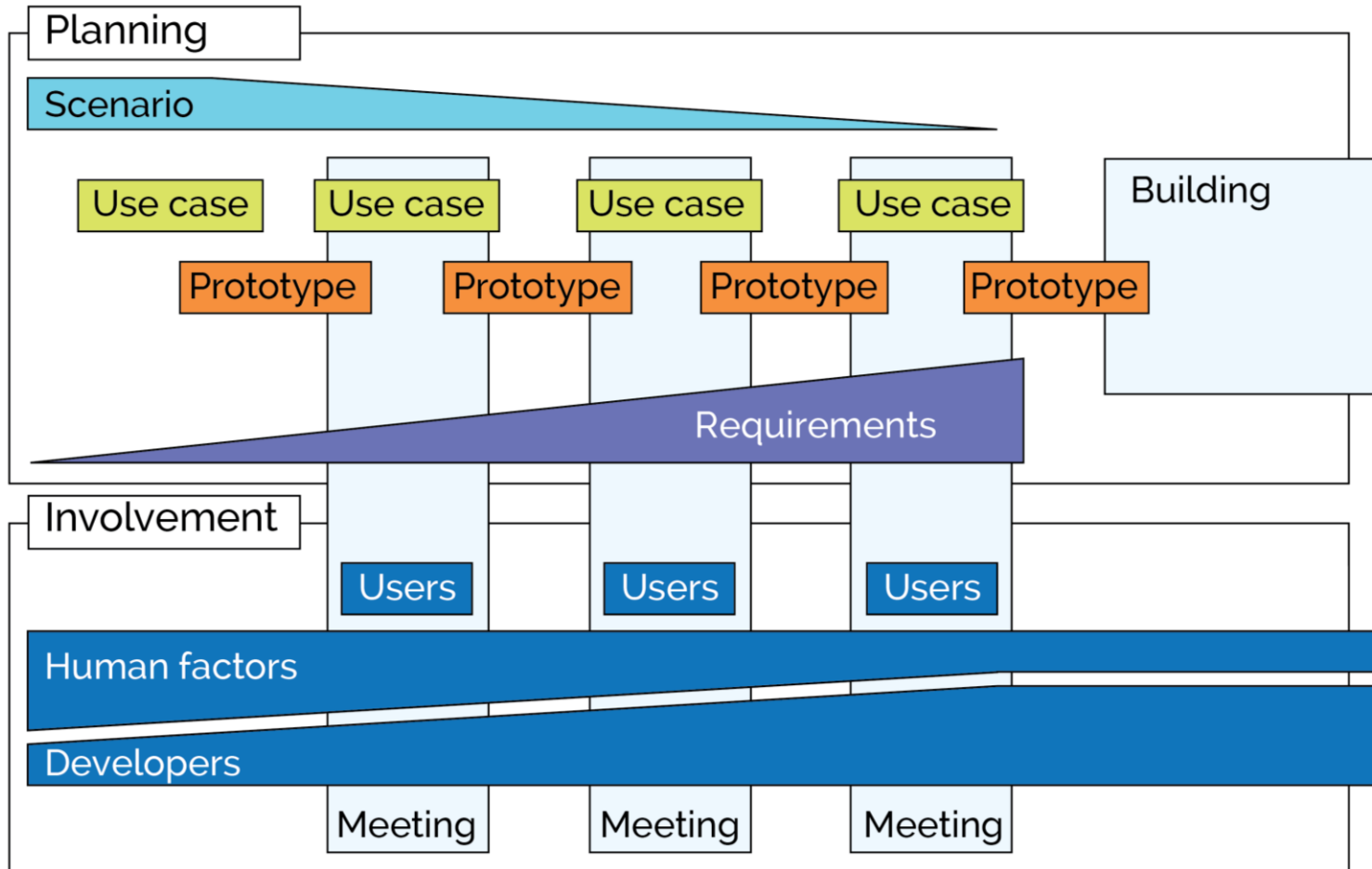
# Problems with Agile (SCRUM)

- Agile is good for refining, not defining
- System/software development from day 1
- Use cases/scenarios
- Homogenous teams
- Bird's eye view
- Iterative process?

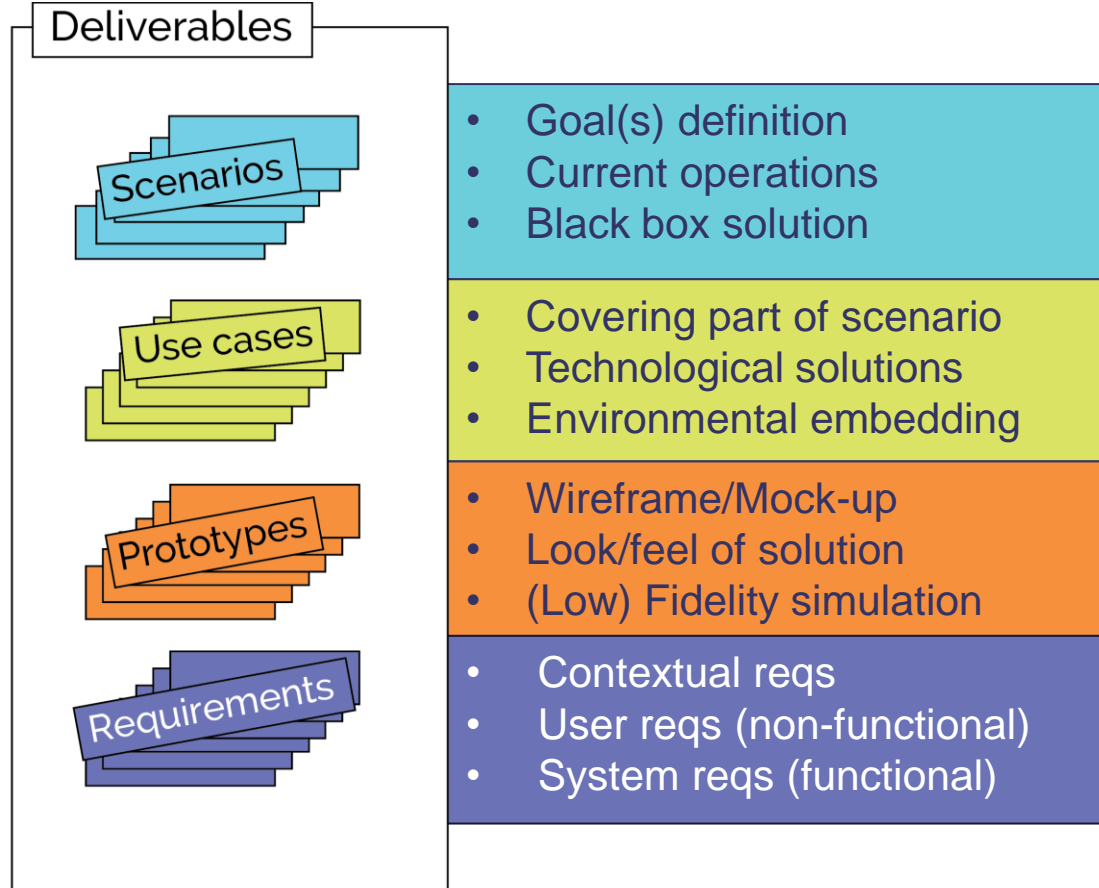
## HF process (simplified)



# AGILE UCD: proposed process

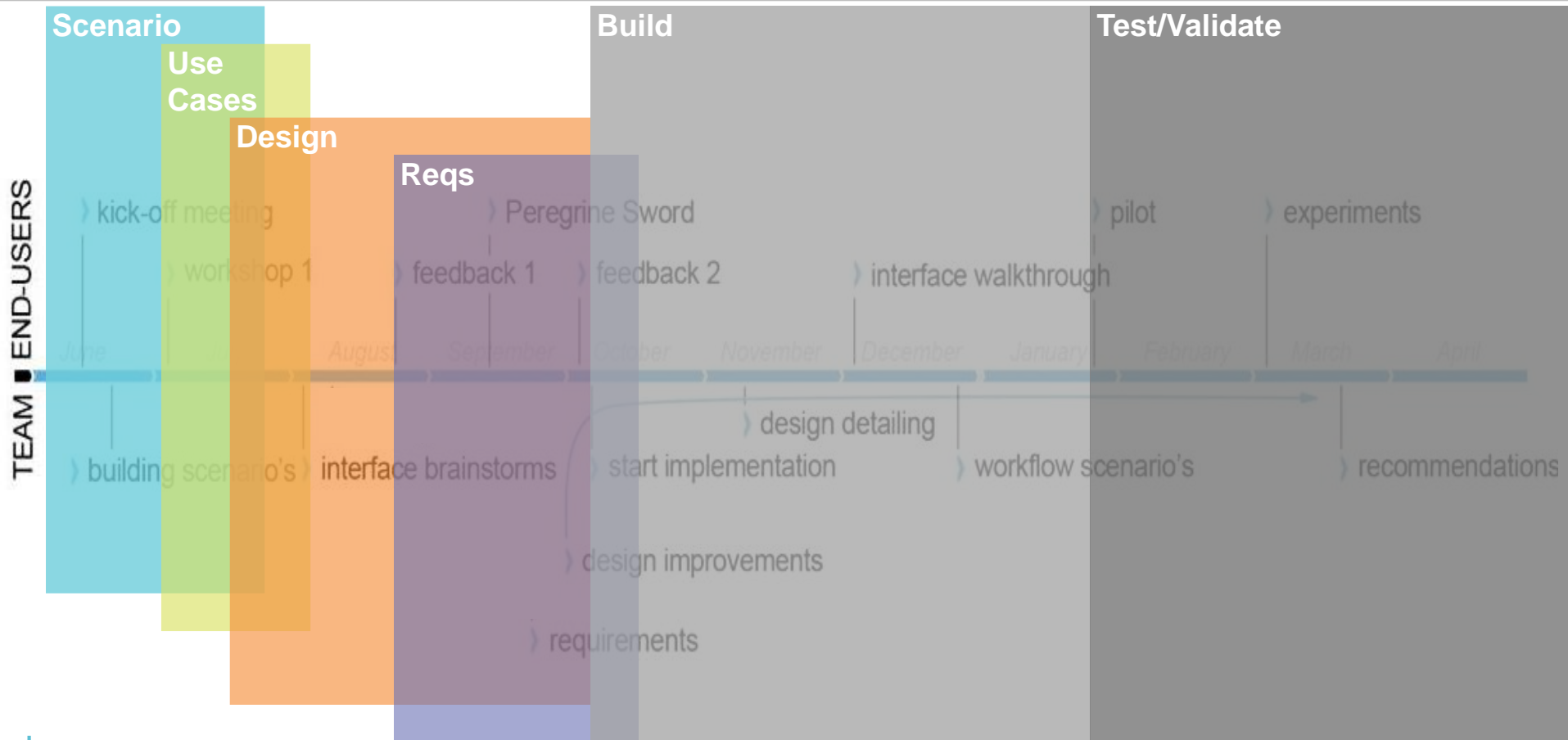


# AGILE UCD: Deliverables





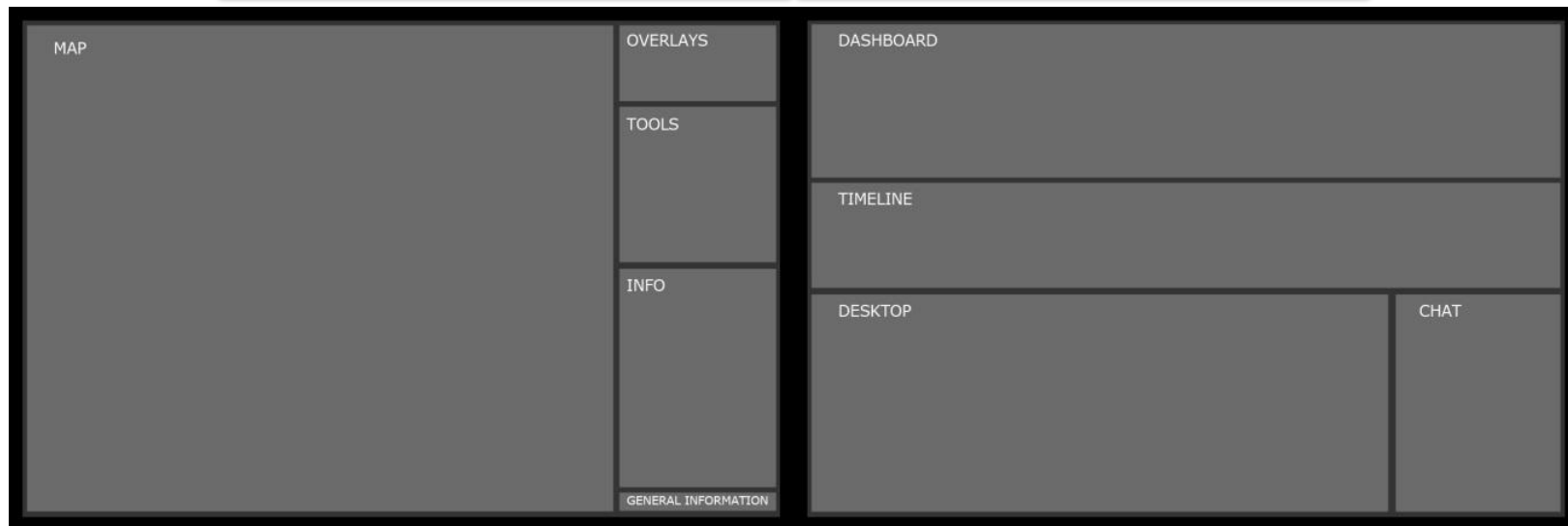
# Example CZman



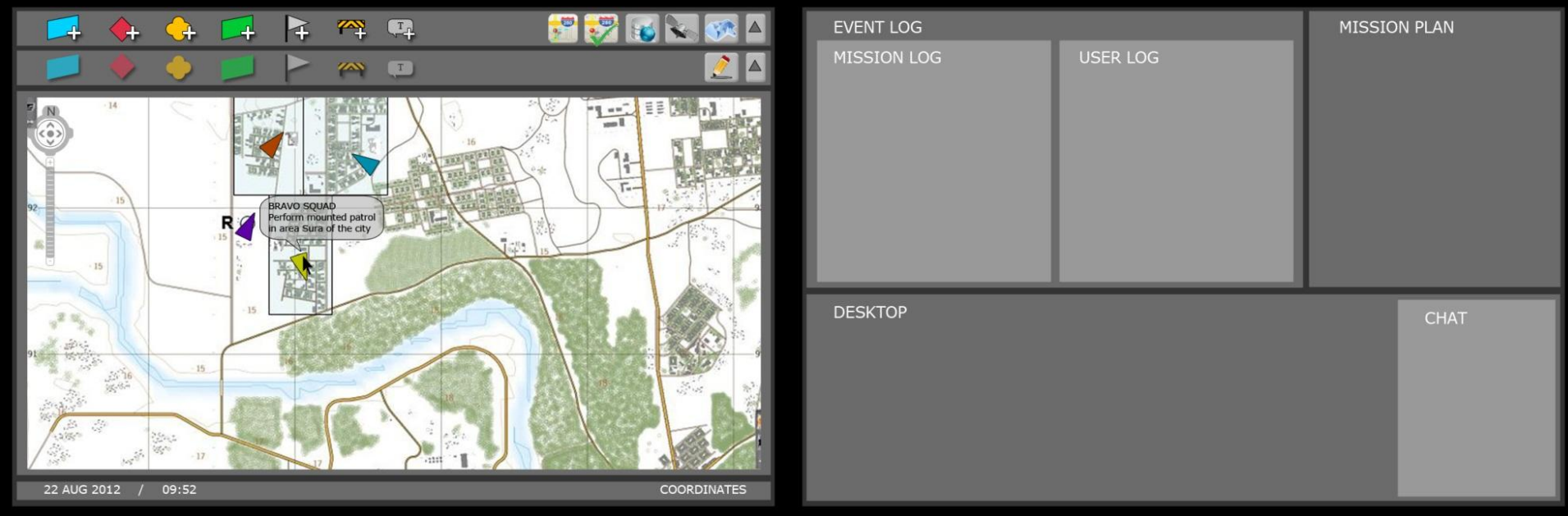
# First sketches

Primary screen  
*Map based*

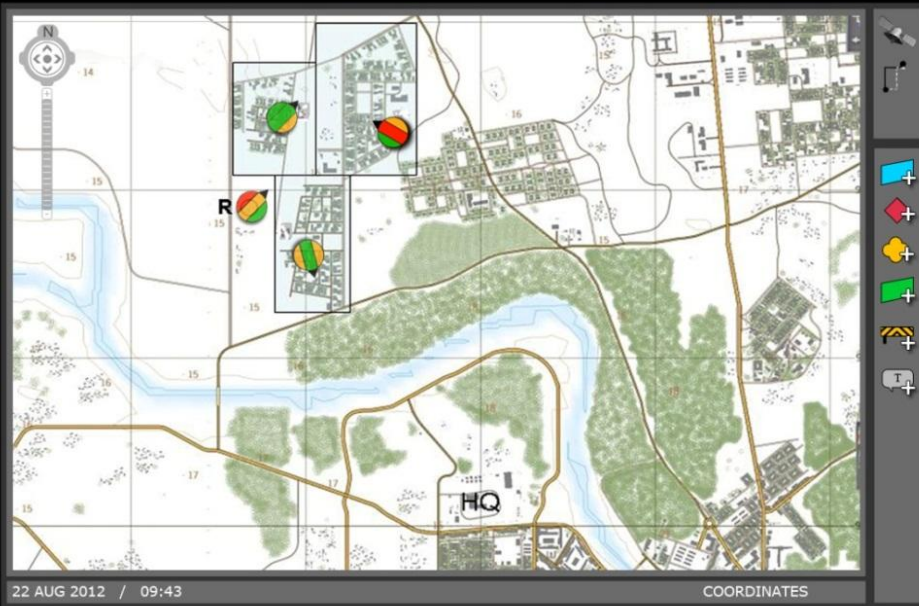
Secondary screen  
*Information based*



# After 1<sup>st</sup> workshop/brainstorm



# After 2<sup>nd</sup> workshop



## BRAVO SQUAD



**MISSION**  
Perform mounted patrol in  
area Sura of the city.

**OBJECTIVE**  
Make as much contact with  
the people in the city as  
possible.  
Escort Field Humint Team (2  
pax) for meeting with local  
mayor.

## DASHBOARD



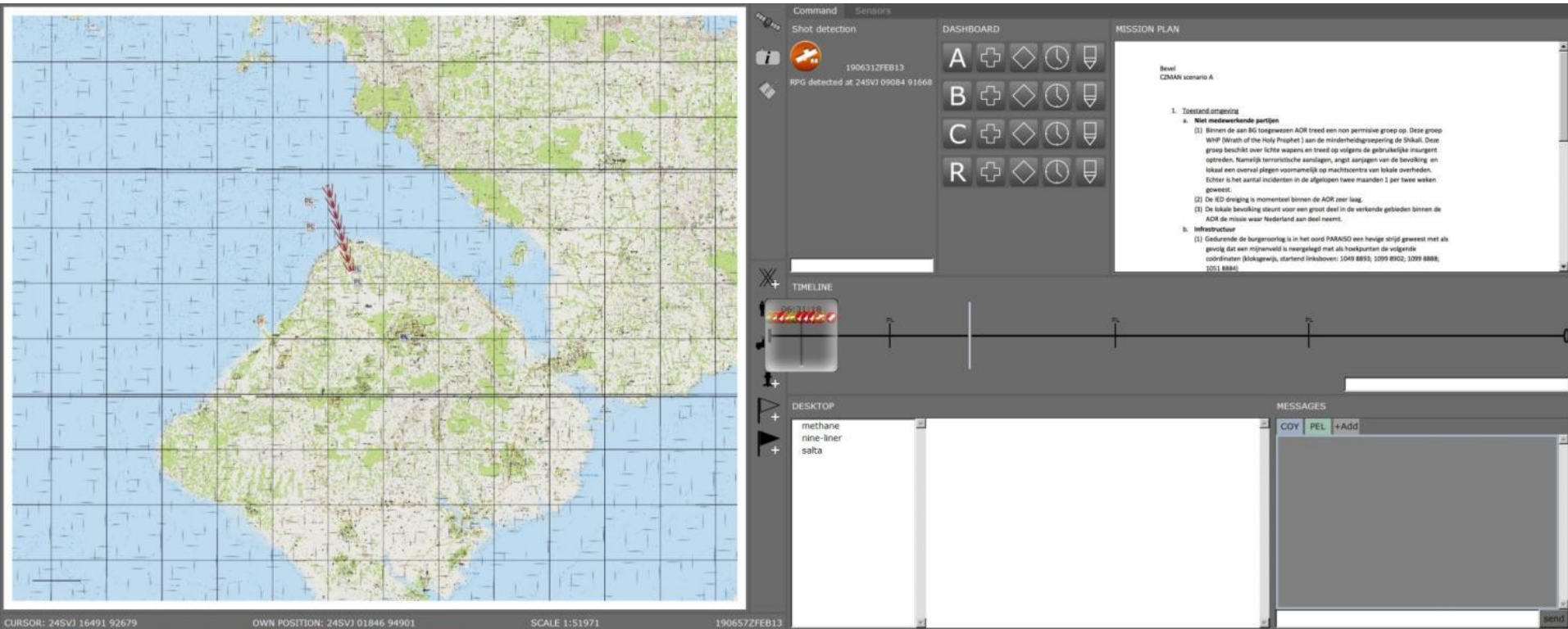
## MISSION LOG



## DESKTOP

## CHAT

# Experiment





# Recommendations

The interface displays a top-down map view with various icons and a central circular radar-like display. The dashboard on the right includes a 'ROADBLOCK' section with a 'Specify' button, a 'DASHBOARD' with icons for A, B, C, and R, and a 'MESSAGES' section with a list of communications. Below these is a 'TIMELINE' with markers for PL JIVE, PL TANGO, and PL WALZ. At the bottom, a 'DESKTOP' window shows an 'Instruction forms' table with fields for location, call sign, precedence, special equipment, number of patients, security of P.U.P., marking of P.U.P., nationality, and landing point.

**ROADBLOCK** Specify

Unknown  
Added by PC  
080908ZMAR13

Location: 24SVJ 10708 88814

**DASHBOARD**

A B C R

3 x WIA

shot detected

**MESSAGES**

COY\* PLT +Add KVO SREP

ROME: ALPHA, return to bridge 14:23

14:23 ALPHA: ROMEO KVO

ROME: ALPHA Roger out 14:24

ROME: BRAVO status? 14:23

14:23 BRAVO: on the move

send

**TIMELINE**

00:16

PL JIVE

PL TANGO

PL WALZ

**DESKTOP**

**Instruction forms**

- nine-liner
- salta
- call for fire
- fuco

**Mission planning**

- Mission plan
- UAV police station
- Crossing Zebra
- Human Terrain

**NINE-LINER**

LINE 1	LOCATION	GRID 0584 9747
LINE 2	CALL SIGN	123.45 A3C
LINE 3	PRECEDENCE	B1 C2
LINE 4	SPECIAL EQUIPMENT REQUIRED	NIL
LINE 5	NUMBER OF PATIENTS (litter or ambulatory)	L2 A1
LINE 6	SECURITY OF P.U.P.	P
LINE 7	MARKING OF P.U.P.	Sign mirror
LINE 8	NATIONALITY	A, D
LINE 9	LANDING-POINT	RED SMOKE

search ...

CURSOR: 57685 84589 OWN POSITION: 56749 84263 SCALE 1:1000 211433ZSEP12



# Lessons learned

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## ■ Heterogenous team

➤ Researcher / designer / software architect + developer + sales person

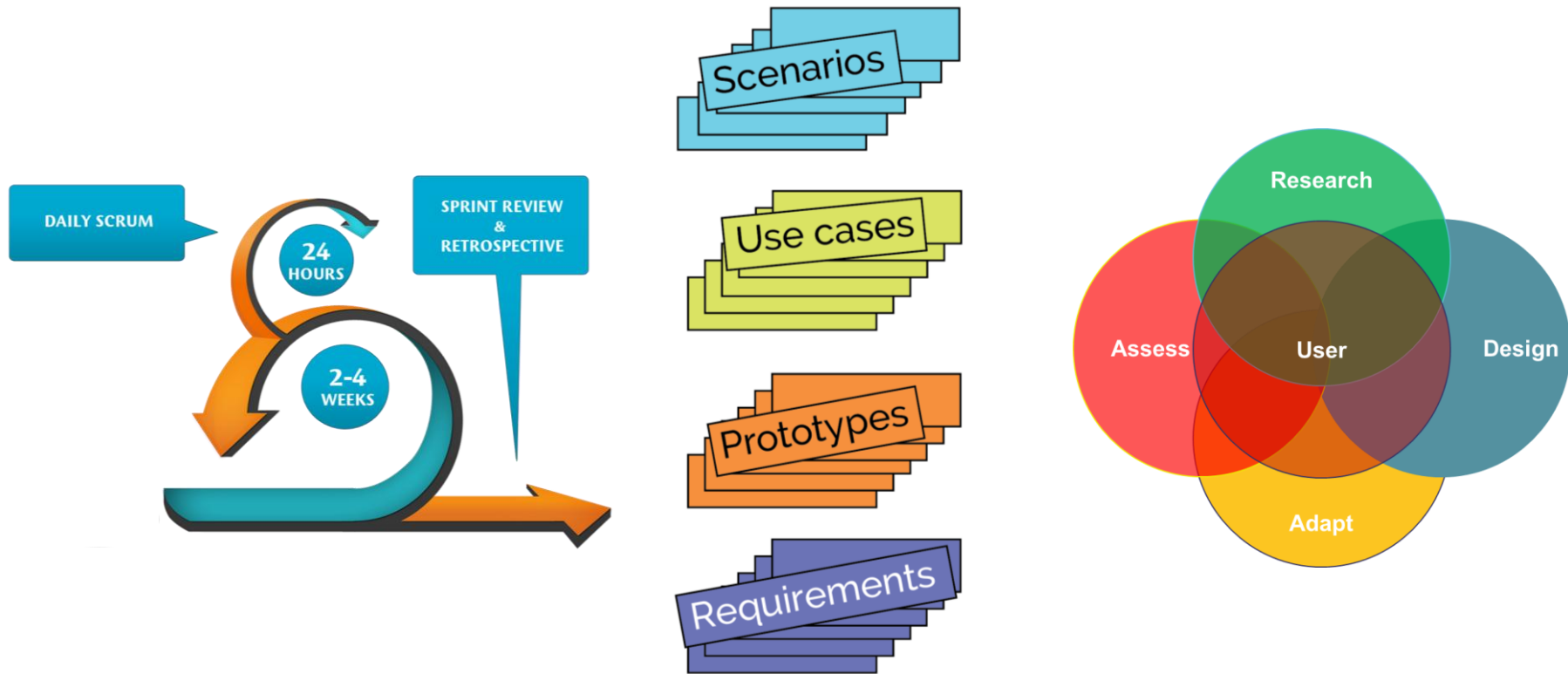
## ■ Think, plan, do!

## ■ Agreement in team about scenario

## ■ Dare to brainstorm (divergence / convergence)

## ■ Try out & validate multiple concepts

# Questions?



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**THALES**