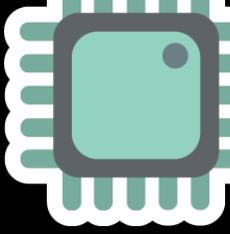




CBI
/ tampere

Core problem discovery

Laura Valtonen

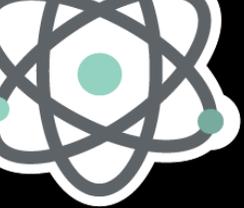


How we approach problems...

- Societal problems and big themes



- No well defined answers in the real world
- No correct way to look at a complex problem



... at CBI/tampere

- Nearly half of the course is about finding the correct problem
- We begin with broad and complex themes and work our way through to a well defined problem
- Thinking of solutions is forbidden before a clear problem exists
 - We tend to rush to a cool techy solution that won't solve any problems
- Extensive research and interviews to validate the problem and to iterate on it
- Prototyping and testing the solution is truly about testing the problem
- **The solution comes easy when the problem is clear**

If solutions are the answers,
problems are the questions.

The key to innovation is to ask the right questions –
to find the right problems.

We choose our own problems

- In life, we can choose to let things pass us by or we can deal with them as problems
- We choose the problems we work on
- It is important that we see the value in solving a problem

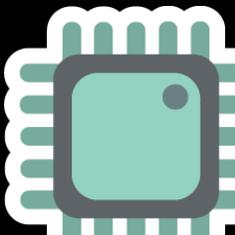


What is a problem?

- COVID-19
 - Global point of view
 - CBI/tampere point of view

What is a problem?

- We often find that nothing is a problem, if we just don't care
- But there's this wonderful quality to people – we really do care
- We decide when we have a problem
- Where you draw the line is different for different people and the solutions for all these lines will look very different



System thinking

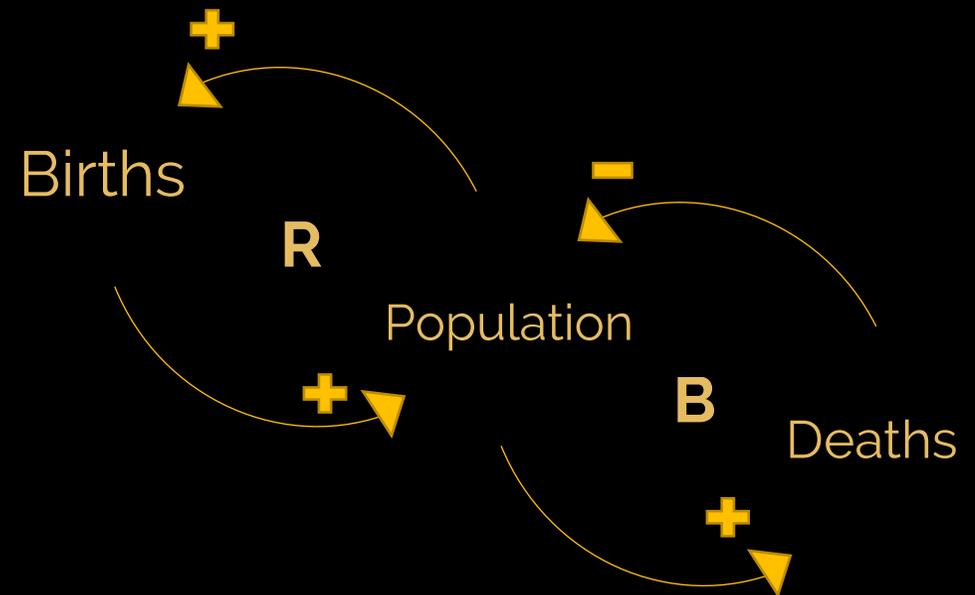
Two most important tools of system thinking:

- Causal Loop Diagram

R Reinforcing loops

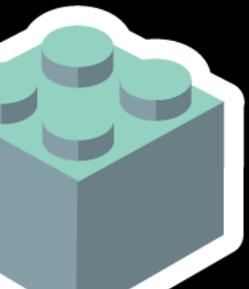
B Balancing loops

- Stock and Flow Diagram



Defining the problem

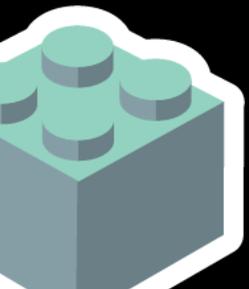
- Big problems are rarely solved alone
- In a team, it is nice when everyone knows what is the problem you are solving, and agrees upon it
- Based on the previous gained knowledge, a clear, focused problem statement can be formed



- Original problem statement:
 - Masks preventing COVID-19 infections are not nice.



- Final problem statement:
 - Personal facemasks for attempts at preventing COVID-19 and other similar infections are socially stigmatised in Europe, uncomfortable, unfashionable, and easily misused, which leads to the increase of people exposed to potential infections, due to people not using them when possible or improper use.



Workshop

- Post-its
- System thinking
- Definition

