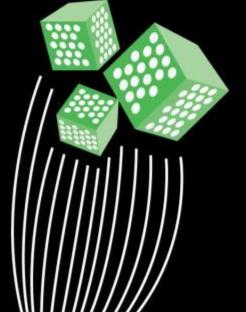
UNIVERSITY OF TWENTE.



The Expansive Hospital Game

Frederick van Amstel, PhD Researcher

Construction Management & Engineering Dept.











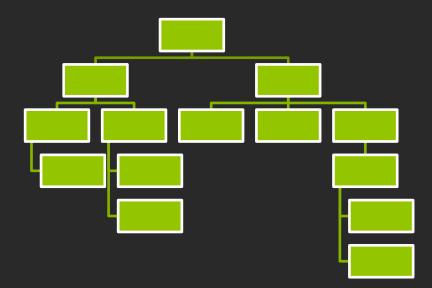
BIM Werkplaats



This is not how healthcare construction projects do organize

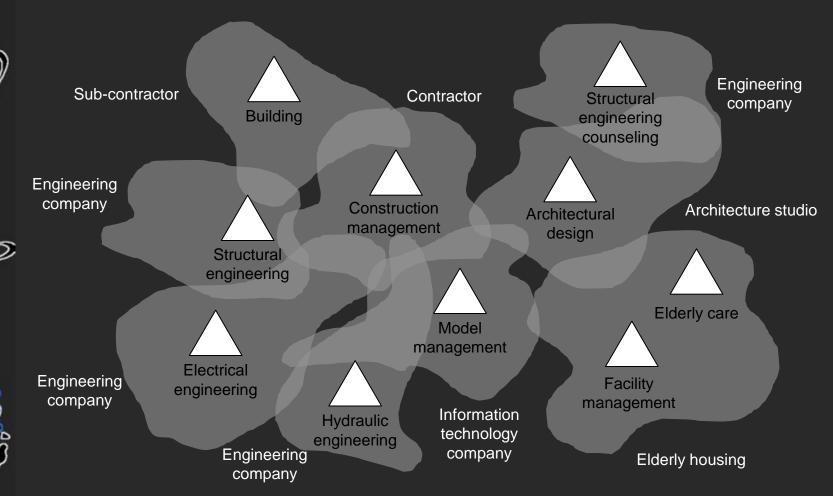


Top-down hierarchy



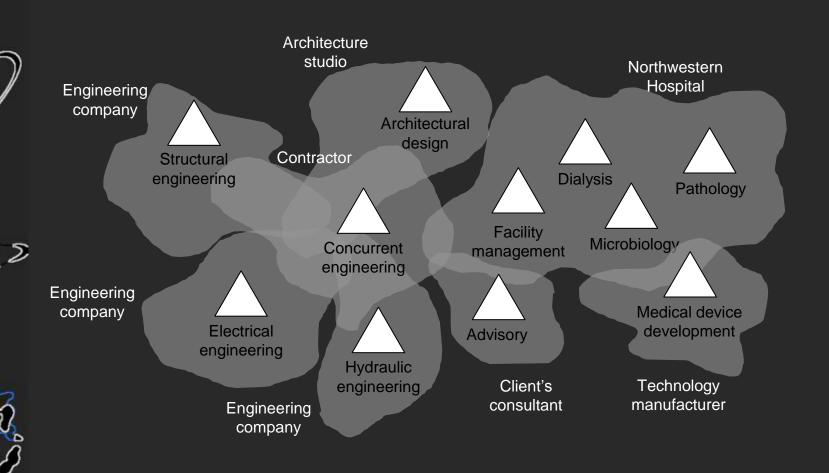


Healthcare construction projects emerge amidst the boundaries of many organizations





Collaboration across organizations is not easy





How to learn collaboration in multi-organization projects?



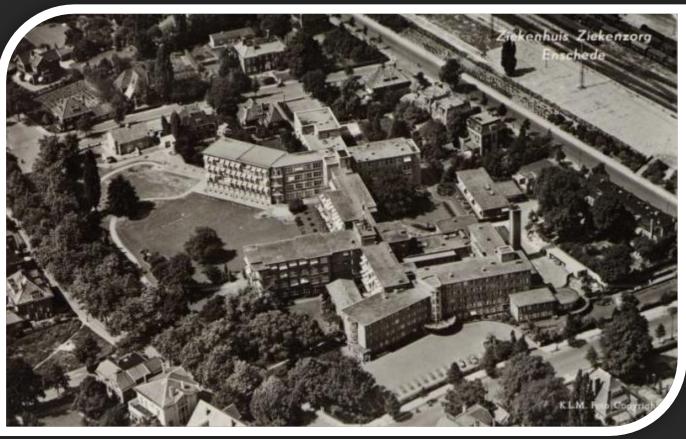


- Fun and safe way to try
- Simulate long processes
 (25 years in 2 hours)
- Highlight the consequences of player's actions





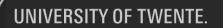
Game plot: constant hospital expansion





Game plot: constant hospital expansion







Game components



UNIVERSITY OF TWENTE.



Game roles



The Architect



The Engineer



The Builder



The Director



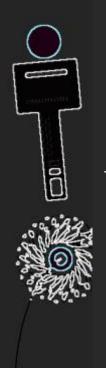
The Facility Manager



The Nurse

UNIVERSITY OF TWENTE.

10



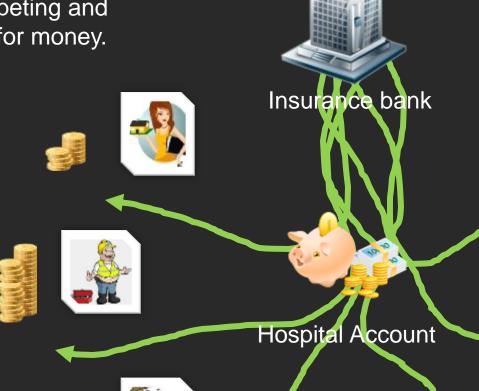


Succesfully treated patient

Money flow

UNIVERSITY OF TWENTE.

Players must balance between competing and collaborating for money.





Player's accounts





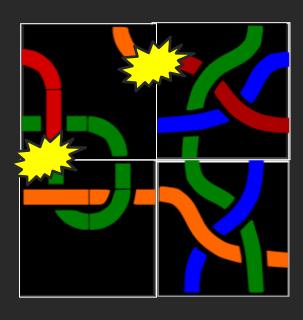
Building rules

Building block

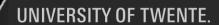
Requirements



Service layer

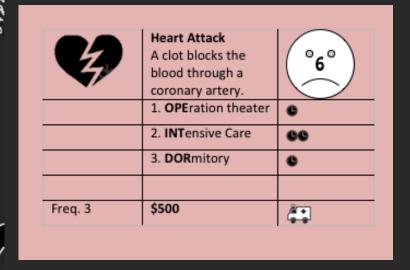


Clashes

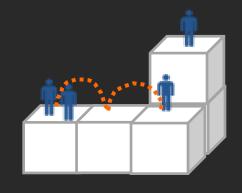




Operating rules



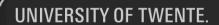
Patient card



Patient pawn



Income







Contract types

Moderating the construction guys.



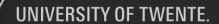
Traditional



Fast-track



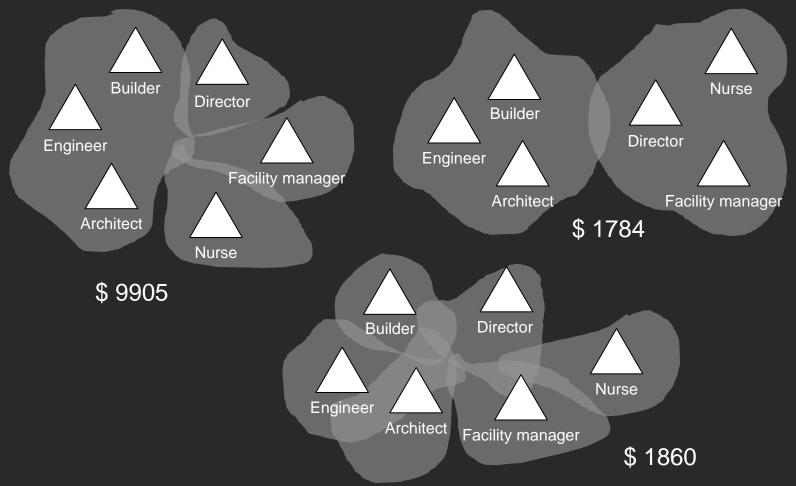
Integrated



Playtesting results



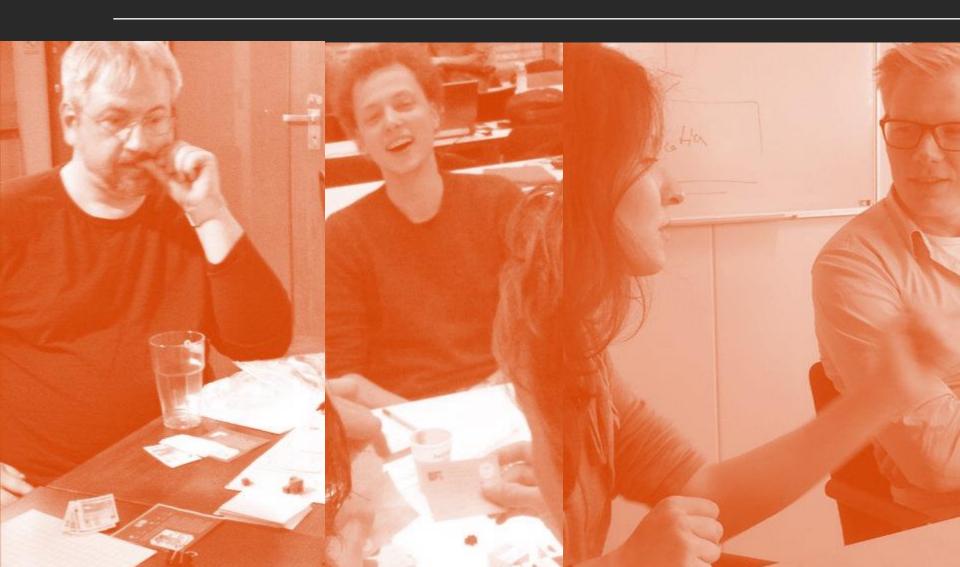
Organization performance



Learning outcomes

- Contracts have a great impact on collaboration
- Collaboration is a free choice
- Tendency to egoisthic behavior when the stakes are high
- Players begin to collaborate when they realize the big picture
- Information models help seeing the big picture

The fun test





My Research Interests



- Participatory Design
- Activity Theory
- Cultural Studies
- Frederick van Amstel <u>f.vanamstel@utwente.nl</u>
- Twitter @fredvanamstel
- http://fredvanamstel.com

