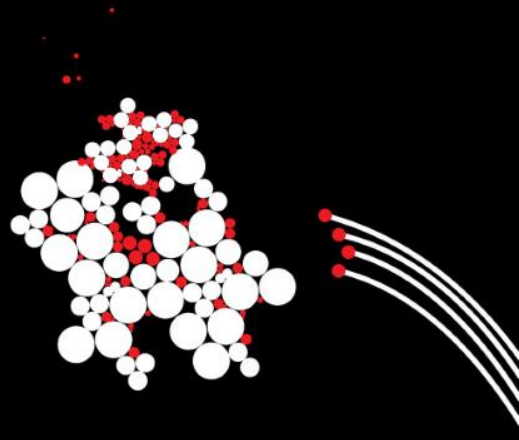
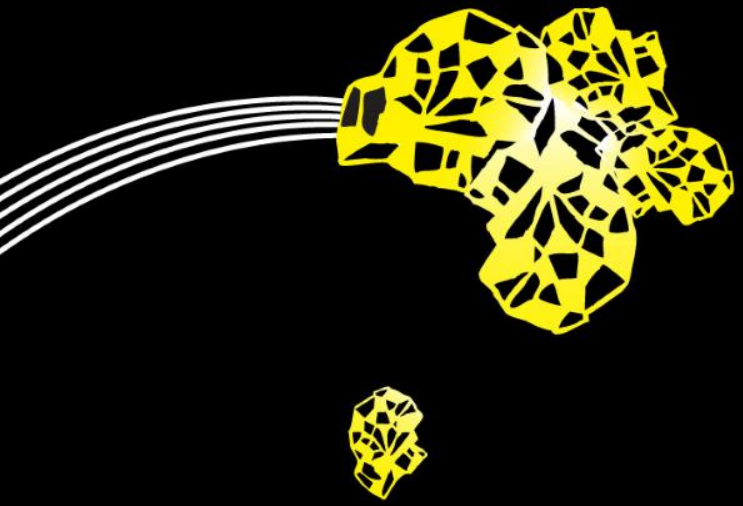
UNIVERSITY OF TWENTE.



# A3 Architecture Overviews (A3AO)
# Goal, History, Adjacent Research

Maarten Bonnema



# The Goal of A3AO's

**Tacit** knowledge versus **Explicit** knowledge

- **Explicit**:
  Well handled by many (formal) models

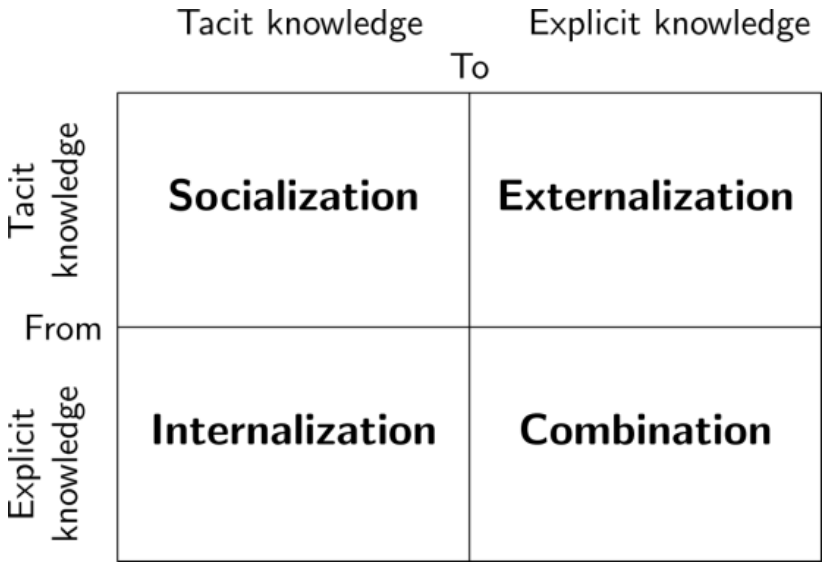
- **Tacit**:
  By definition not well handled by (formal) models

In the context of complex systems architecting

# With A3AO's, we Create Knowledge!

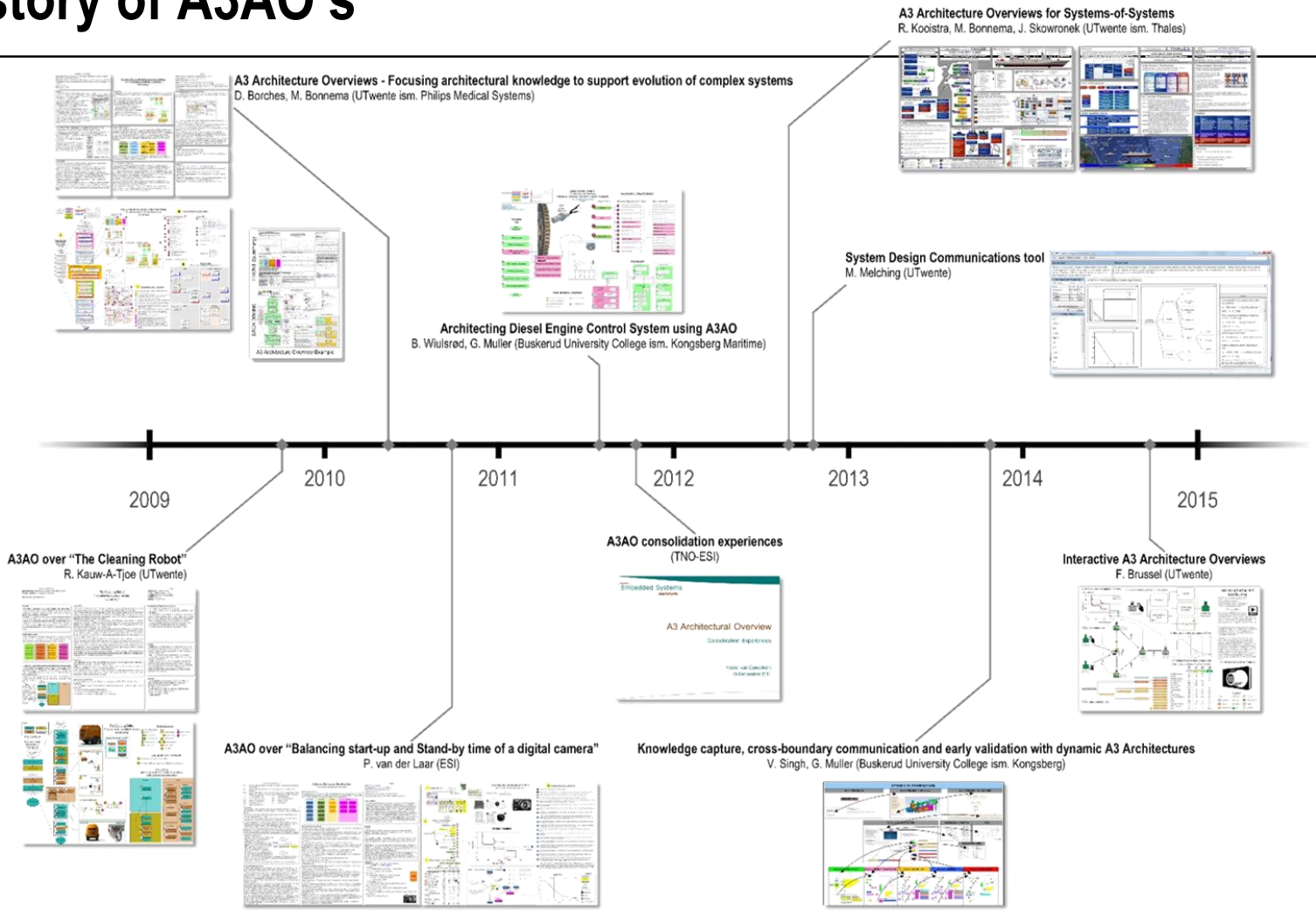
"…the key to knowledge creation lies in the **mobilization and conversion of tacit knowledge**."

"[knowledge] conversion is a "social" process **between individuals** and not confined within an individual."




Nonaka, I. and H. Takeuchi (1995). The Knowledge-Creating Company : How Japanese Companies Create the Dynamics of Innovation, Oxford University Press.

# History of A3AO's






Picture by Frank Brussel

# Adjacent Research

- Architecture Modelling
  - PhD work by Krijn Woestenenk, Defended on 6 March 2014
  - Modelling Architectures with a limited set of concepts
  - Allowing integration with existing tooling
  - May be used as formal backbone to A3AO's
- Systems Thinking
  - What are useful thinking patterns in systems design