

# Innovation Eco systems in the context of CPSoS

Interactive session 4.4B - IEEE SoSE conference, Thursday June 17th, 17:30 - 19:00









www.nordic-iot.org

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#### Agenda - 17.30-18.55

- Interactive Session at SoSE 2021 on "Innovation Eco systems for SoS"
- Introduction (Martin Törngren)
- Keynote: Professor Ron Adner
- Round of reflections and discussions with the panel
  - Monica, Martin K., Nicolette, Tobias, Kim
  - Each panelist asked to provide reflections/questions in turns
  - Discussions!
- Reflections and questions from the audience
  - Do pose questions in the chat!
- Final wrap up reflections by panel including keynote
  - 1-3 key obstacles and 1-3 key success factors w.r.t. successful innovation ecosystems
- Wrap up





#### Purpose of session

What are hurdles and best practices – insights – that can help stimulate and form innovation ecosystems in the context of CPSoS?

## Innovation ecosystems

Merriam Webster definit the complex of a commu functioning as an ecologi

Electricity network infrastructure E-road Related services Payment service Collector Utility measurement Information handling system Access control System for Power plants **Business** areas reading usage Maintenance Investment Ownership Transformer Management E-network 40-130 kV Electricity connection point to Transformer E-road station E-network, 10-20kV

An "innovation ecosystem":

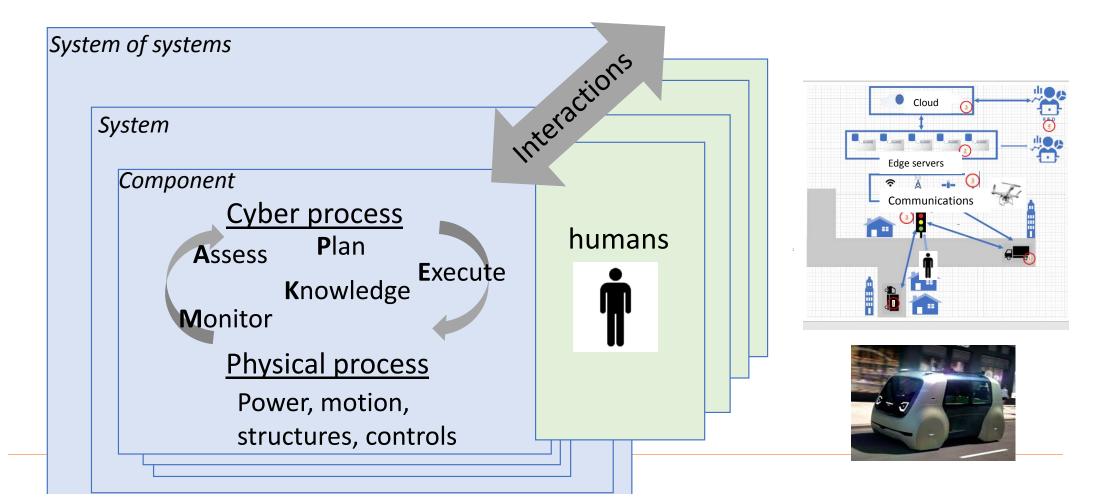
 describes the variety of players / stakeholders that are critical for innovation



Example CPSoS domain: Intelligent transportation systems

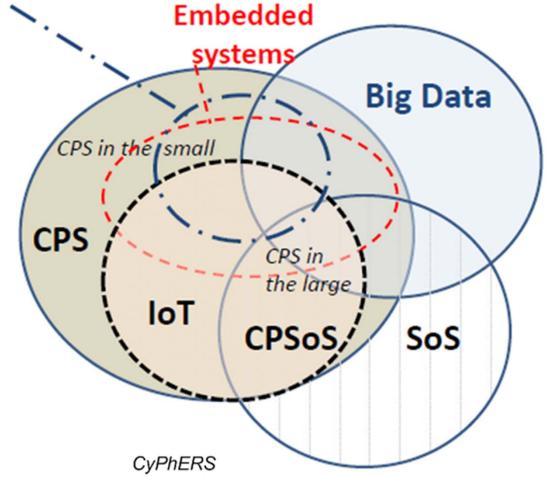


### Context: Cyber-physical systems



#### SoSE 2016

#### Mechatronics



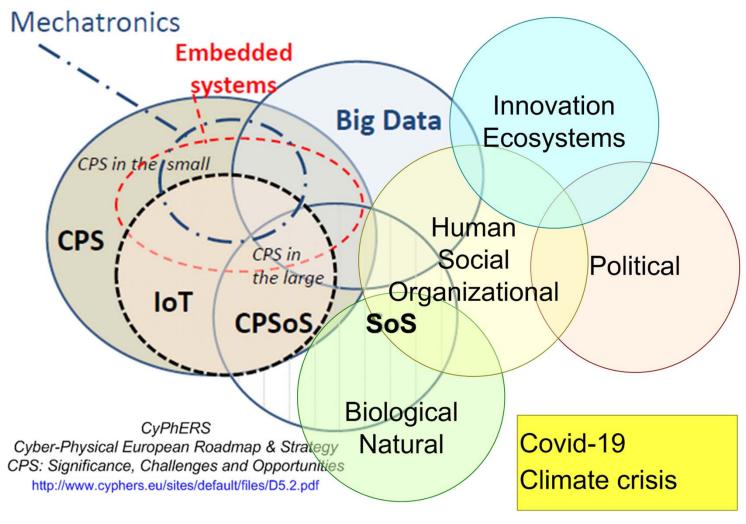
Cyber-Physical European Roadmap & Strategy CPS: Significance, Challenges and Opportunities http://www.cyphers.eu/sites/default/files/D5.2.pdf



#### For Innovation Eco-systems



#### Anno 2021?







- What are hurdles and best practices insights that can help stimulate and form innovation ecosystems in the context of CPSoS?
- Technology advancements
  - → New services/capabilities with opportunities for entirely new SoS, within and across existing domains
  - → Unprecedented innovation opportunities but with new eco-systems needing to be formed!
- Complex multistakeholder settings; fragmentation; regulations; business/collaboration models
- Innovation vs. cautionary principle
- How can innovation be accelerated or at least not prevented when referring to new cyberenabled opportunities across traditional domains?
  - E.g. open innovation by data sharing data; successful models for data sharing while meeting legal requirements and mitigating risks?
- Experiences, pitfalls and best practices in multi-domain collaborations and open test arenas



#### Program: Keynote speaker and panelists!

- **Keynote speaker**: Professor Ron Adner
- Panelists:
- Prof Ron Adner (Tuck School)
  Prof Monica Bellgran (KTH)
  Dr Martin Karlsson (Atlas Copco)
  Prof Nicolette Lakemond (LiU)
  Prof Tobias Larsson (BTH)
  Prof Kim Wikström (Åbo Akademi)
- Panel Chair: Prof Martin Törngren (KTH)











