MODPROD
Center for Model-Based Cyber-Physical Product Development

IoT - Visions and challenges
Anders Englund

➔ CEO Attentec
➔ One of four owners of Attentec
➔ Member of the board - Swedish IT and Telecom Industries
➔ IDG Expert Network - IoT
➔ MSc Computer Science and Engineering - LiTH + Case Western Reserve University, Cleveland Ohio
We are a team of dedicated developers and experts in internet of things and streaming media who are passionate about innovative technology.

**Quick facts:**
- Established 2005
- 60+ developers
- Stockholm, Linköping and Oslo
Agenda

● A Vision for IoT
● Where are we now?
● Challenges to overcome and how we handle them
● Summary
IoT Vision - Everything connected

> Sustainable
> Safe
> Servitization
Internet of Things - Business opportunities

- Improved efficiency
- Reduced risk
- Increased turnover
Improved efficiency

➔ Condition based maintenance

➔ Optimized use of resources

➔ Promote best practices
Reduced risk

➔ Dangerous environments

➔ Theft

➔ Monitor legal requirements and rules
Increased turnover

➔ Sell data (knowledge) to your customers

➔ Improve customer communication

➔ New business models - PaaS
Challenges

- Connectivity
- Miniaturization
- Power
- Data Growth
- Standardization
- Trust
- People and organizations ability to utilize the benefits of IoT
Challenge - Data Growth

- Big Data Analytics
- Artificial intelligence

Annual Size of the Global DataspHERE

Source: Data Age 2025, sponsored by Seagate with data from IDC Global DataSphere, Nov 2018
Challenge - Standardization

- How many SIM-cards do you have on a truck today?
  - Integrate or separate?
- IoT standardization slow
  - ISO/IEC 30141 - IoT Reference architecture (augusti 2018)
  - Proprietary solutions
- IT level standards - good
Challenge - Trust

➔ Security
➔ Integrity
A vision for IoT

Summary

★ A sustainable, safe and servitized world
★ Plenty of technical challenges
★ Do not forget people and organizations
Thanks for listening!

Questions?