

## OPC UA Information Models as a Core of OT/IT Integration

### Pyry Grönholm, Prosys OPC Ltd























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## Pyry Grönholm

Automation

Valmet

- CEO at Prosys OPC
- MSc Tech
- 20+ Years of Experience in Industrial software and integrations





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# **About Prosys OPC**

- World leader in **multiplatform OPC UA software** development
  - Company located in Espoo, Finland
  - Founded in 1995

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- 20+ MSc and BSc level OPC UA experts and software developers
- OPC Foundation partner in Java communication stack
  development
- Open Industry 4.0 Alliance member



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- 1. Vision
- 2. Information Models
- 3. In Practise





# Vision

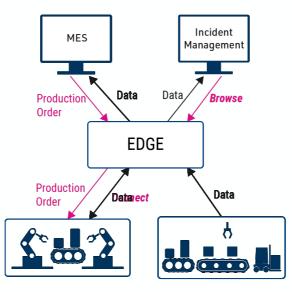
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# Why are standard information models important for this vision?







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## **Example: Prosys Wind Turbine Dashboard**

- Prosys OPC demo for Industry40.tv
  - Based on Prosys OPC UA Forge
  - Simulated wind turbines
  - Data harmonization
  - Autonomous dashboard



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# **Information Models**













# What are OPC UA information models?

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## **Companion specifications**

- Standardized information models
  - Generic or domain-specific
- 82 working groups within the OPCF umbrella
  - A great number of information models
- Machine description or use case-driven approach
- Most available in OPC UA Cloud Library

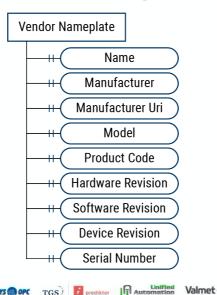


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## **Vendor Nameplate**







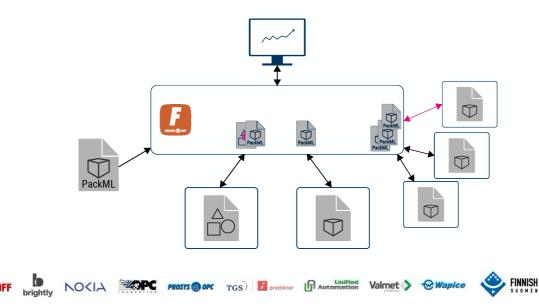
# **In Practice**





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## How to build a system utilizing Info Models?



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## Looking a little bit forward

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- New companion specifications new use cases
- Cloud twins can be created using
  - Information models
  - OPC UA over MQTT
  - Seamless integration to cloud and business systems
- Autonomous auto-configuring systems based on companion specifications









# **Thank you for listening!**



