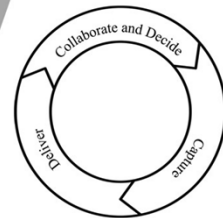
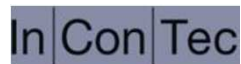


# SMART Vortex



**Scalable Semantic Product Data Stream  
Management for Collaboration and  
Decision Making in Engineering**





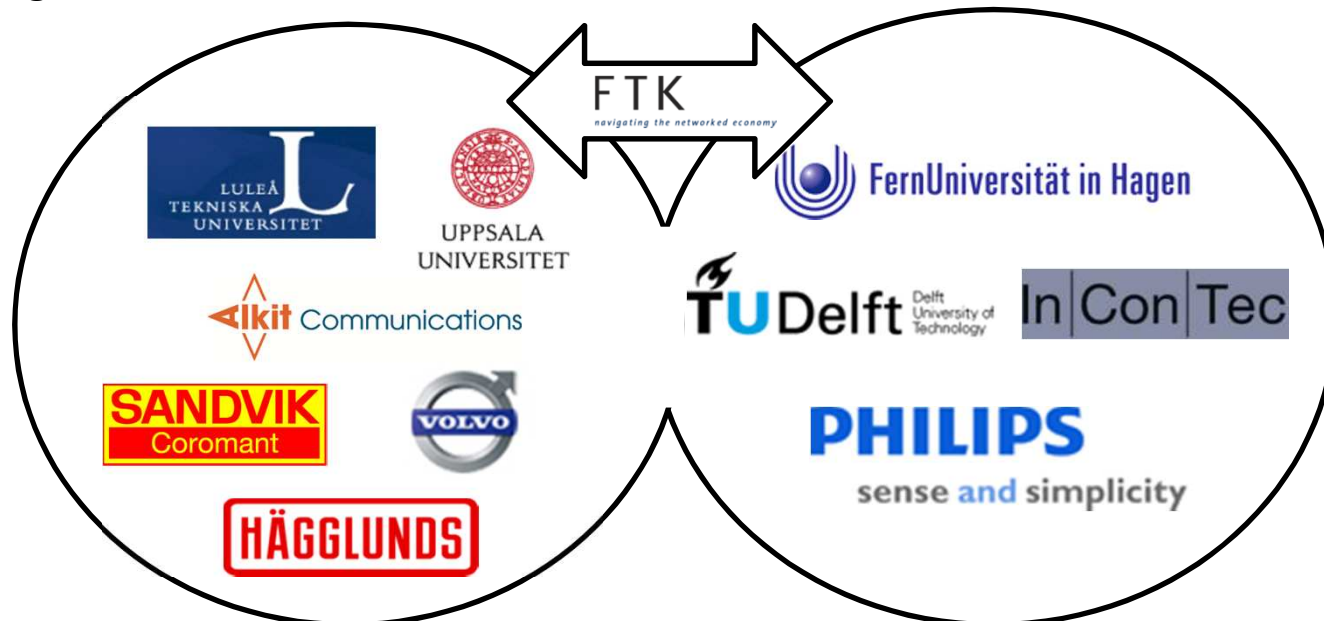
# Profile & Genesis

**SMART VORTEX is an ambitious market driven RTD initiative**

- 14 Partners from 5 EU member states, 7 scientific research institutions, 7 manufacturing and/or advanced services companies, 48 months duration, approx. 900 PM efforts, 10.7 Mio EUR budget , 7.8 Mio. EUR EU contribution

**SMART VORTEX is a result of marrying two long standing collaboration networks around a common vision**

- Both clusters are building on a long standing successful track record of R&D, Knowledge Transfer and Innovation activities





## Why SMART VORTEX?

- SMART VORTEX is driven by:
  1. **market pull:** actual demand from our industry partners and beyond
  2. **innovation push:** new ideas from academia are transferred into actual industry scenarios

Both directions reinforce each other



# Customer Needs and Resulting Industry Challenges

## EU Industry Competitiveness requires

- Knowledge-driven innovative business models
- Service levels must be improved and unexpressed needs have to be identified to secure:
  - high customer satisfaction and loyalty
  - identification of new products
  - domain-knowledge based decision support
  - knowledge based leadership
- Effective, goal driven collaboration among all players in the entire product life-cycle
- Innovation in collaborative cross-organisational settings
- Knowledge based extension of the value-chains





# Communities, Markets, and Timescale

## Target Communities

- Industries with similar data intensive processes and needs:
  - handling and enriching high-volume real-time data streams
  - capturing product data streams with rich metadata about process and collaboration context
  - in complex collaborative scenarios



## Markets addressed in SMART VORTEX

- Improved functional product development in industry (Machining, Aerospace, Automotive, Consumer Electronics/Telecom )
  - Turning tools and products into functional requirements
- Extended offerings in services and maintenance



## Expected Time-To Market of Project Results:

- Early Adopters have existing Demand
- Take-up of outputs within the lifetime of the project





# Relation to Work Programme

The single most important outcome of SMART VORTEX is the **ambitious integration of component results** into an **application solution platform infrastructure** where its components are covering target outcomes a), b), & c) of Objective ICT-2009.4.3.

