



ERP 4.0

Towards a new generation of
embedded enterprise resource
planning systems

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PPP: FoF Smart Factories



Objectives

- Leverage Intelligent Objects: Programmability, Memory, Sensors, Communication
- Enable M2M Communication: information exchange, enactment of actions, collaborative control, ...

➔ The production system as cyber-physical system



Expected Results

- Increase automation and control of production systems and whole value networks
- Optimize vertical interconnections between technological and administrative processes



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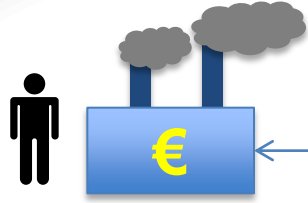
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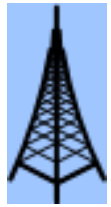
ERP 4.0 Concept



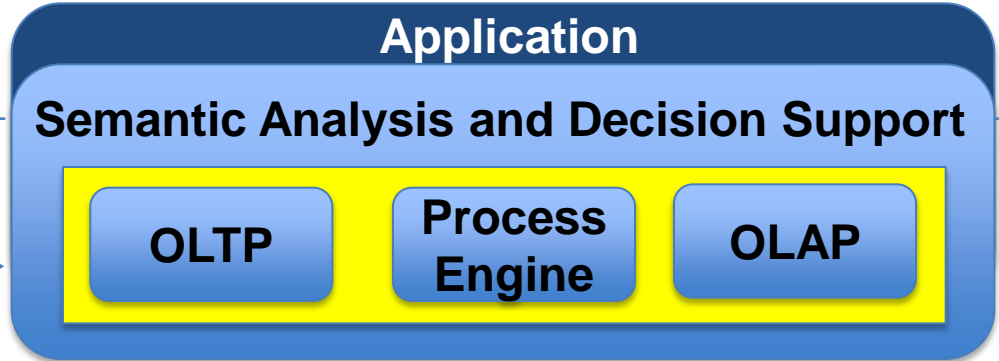
Information,
Recommendation



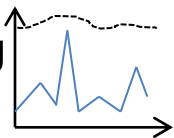
Optimisation of
manufacturing systems



Quality
Monitoring



Signal analysis,
Machine-learning



**Column-based in-memory
database**



HPC Hardware

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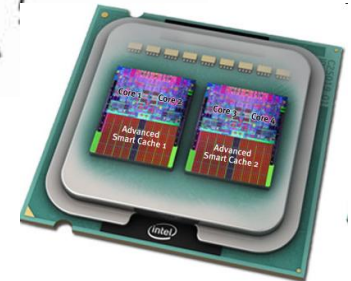
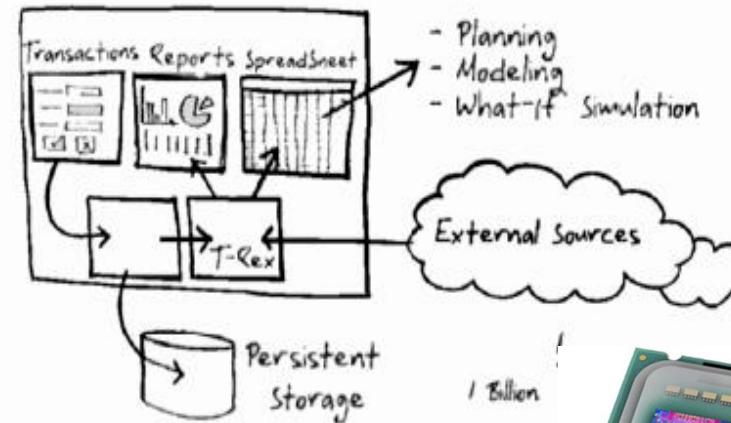
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Roles and Partners



- Software Vendors
 - Machine control
 - Production control
- Application Partner
 - Manufacturing company
- Research Partner
 - Sensor partners
 - Schedule optimization
 - Signal processing



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