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Attività CNIT nel settore
Automazione Industriale e advanced manufacturing

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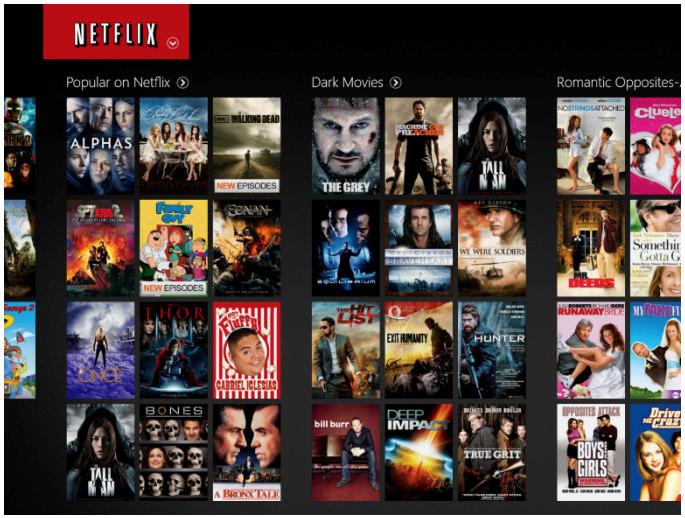
Infrastructure-as-a-Service (IaaS) in ICT

Dropbox



- Dropbox: around 400 million users world wide
- Netflix: around 100 million users world wide
- (Almost) no proprietary infrastructure! They use Amazon's →
  - Focus on the core business (not on the infrastructure maintenance)
  - New business and production can begin without investments
  - Large return of investment for companies running real infrastructure

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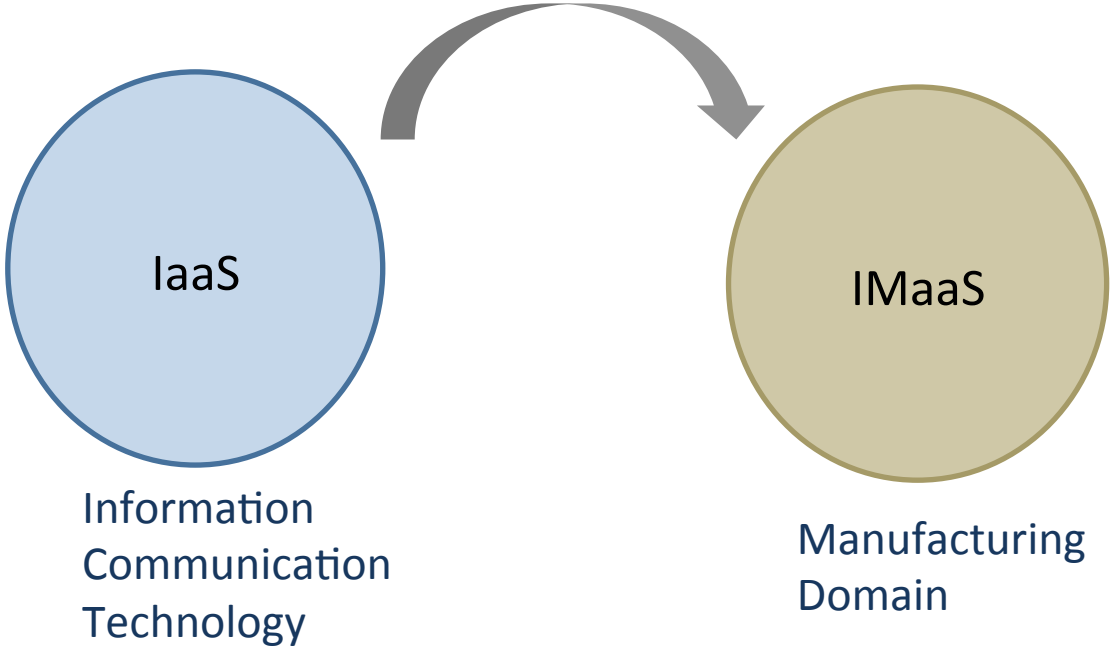
Interessi e Attività CNIT



Cloud Manufacturing

- Ecosystem:
  - Resource providers who own and operate the manufacturing resources which are offered to
  - Users who want to benefit from the manufacturing services offered by the resource providers and pay according to the "pay-as-you-go" model
  - Brokers who act as intermediaries between the resource providers and the users → They operate a software platform with easy-to-use user interfaces

Today no real take off of CM paradigm

Only a few examples (Quirkly, Shapeways, Elkay Manufacturing Company, Ponoko, MFG.com)

Why?

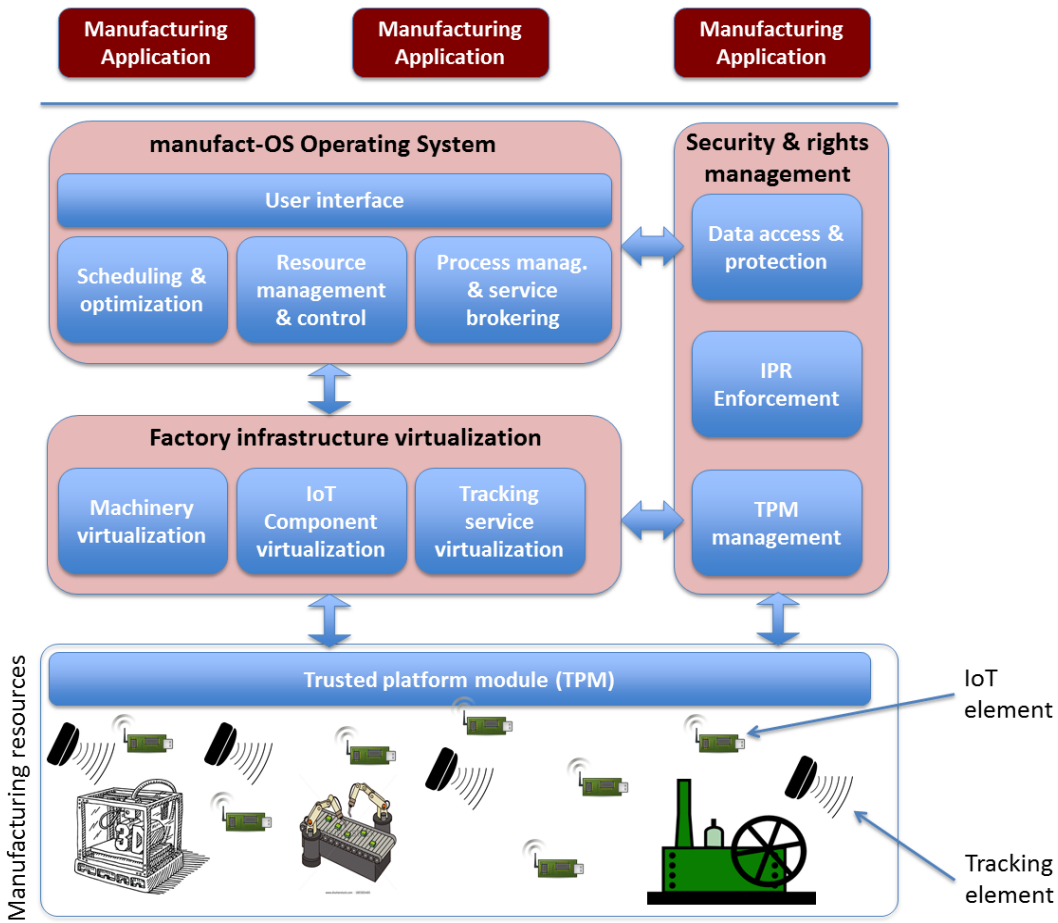
Lack of holistic view of the shop floor:
modern production methods require continuous and full control of the entire shop floor (including sensors and actuators deployed in the environment).

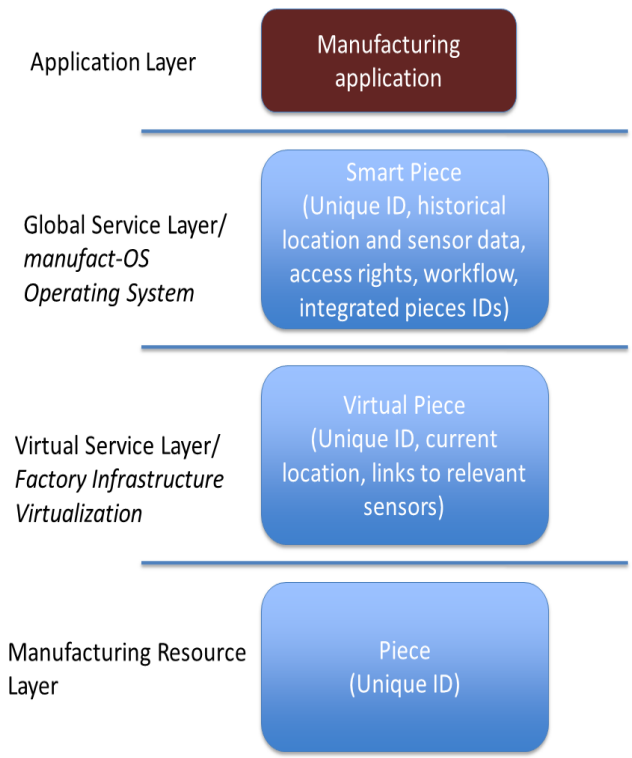
Lack of satisfactory management of trustworthiness and IPR:
No guarantee that the blueprint of the product will not be disclosed to the resource providers.

Our objective

To introduce:

- Holistic view of the shop floor
- Management of trustworthiness and IPR





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Cooperation

- SingularLogic - Large system integrator (Greece)
- Infineon Technologies AG – Large semiconductor manufacturer (Germany)
- Muskita Aluminium Industries LTD – Manufacturer (Cyprus)
- Xenia Progetti S.r.l. – SME (Italy)
- FabLab Catania – SME (Italy)

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