Smart Communities Tech
Italian Technology Cluster for Smart Communities

INNOVATION MEETING

SMART AND COLLABORATIVE MOBILITY

Il progetto Track LOG - Verso un tracciamento capillare della logistica dell'ultimo miglio

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NGS brief

- Funded in 2015
- Spin-off company della Scuola Superiore Sant'Anna.
- Headquarter at Polo Tecnologico of Navacchio (PI)
- Solutions:
  - Smart Logistics
  - Smart Factory and predictive maintenance

Impresa Spin-Off della Scuola Sant'Anna

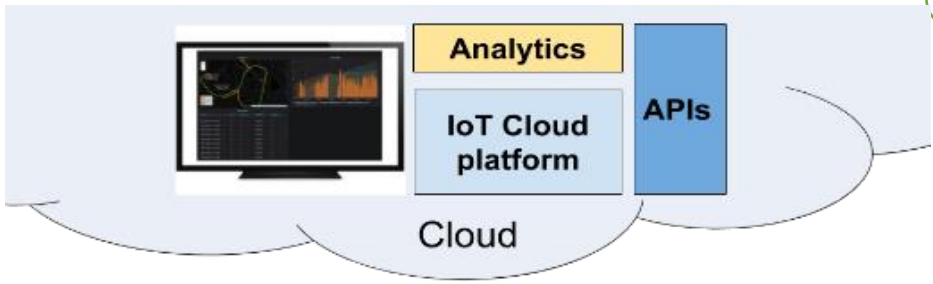
Scalable IoT systems and solutions

Hardware and Software

IoT Cloud platform and analytics

Consulting and customization

Objectives



Supply chain complete visibility

Last mile logistics & production optimisation

Asset management and circular economy

Greener Logistics

Compliancy with forthcoming Physical Internet

Serialisation, Track&Trace, Monitoring

Serialisation

- Follow the production, evaluate production time
- The supply chain as distributed warehouse

Track&Trace&Monitoring

- Where is located the goods?
- When these will arrive?

Analysis

- Provide human understandable aggregated information
- Event, metadata and statistics to support fact-based decision making

Standardised, secure and ad-hoc access

- All the supply chain must have the access to the data
- Privacy and encryption

Serialisation: the supply management enter inside the facilities

Track in line the production

- Follow the production
- Assign to each smart basket SN

Understand the amout of semi-finished product

- Distributed warehouse

Visualise the whole sub-contractors’ supplly chain

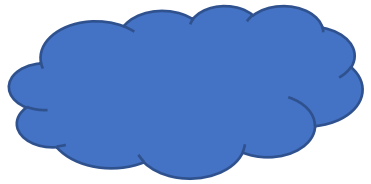
- Secure and ad-hoc access

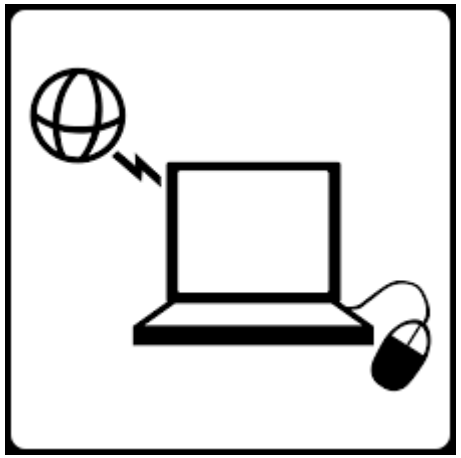
Smart & connected Basket/Pallet

Equip a re-usable basket with an active IoT device

Serialise and associate goods to smart-basket/pallet

Locate and monitor goods and assets





Pallets/baskets as a service… plus services!

Re-usable vs. disposable containers

- Circular economy & asset management
- Reduction of waste
- Greener supply-chain
- Pallet/basket as a service (as for cargo containers)

Services for logistics

T&T with improved granularity

- At the pallet/basket level
- At the lower levels (serialided goods)

Specialised monitoring

- Trucks and container can provide general purpose connectivity and information!!!

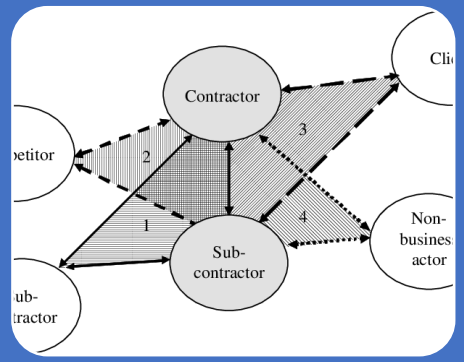
The Cloud view

- Scalable data ingestion
- Real-time reporting
- Pdf reporting
- Analytics
  - Feature extraction - Aggregated data
  - Human-understandable representation
  - Fact-based real time s

Connected goods: some motivating examples

Expensive wine

- Serialisation to avoid counterfeiting and providing “made in” information
- Supply chain complete monitoring
  - Level of product available in the supply chain
  - Quality monitoring of each SN (e.g., bumps or exceeding temperature)



Subcontractor supply chain

- Position of the goods
  - Level of product already done
- Statistical characterisation

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NGS srl
New Generation Sensors

GRAZIE

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