SMART STATIONS IN SMART CITIES
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STATION 4.0

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4a New Services For Users & Customers
Connected devices exponential growth
Evolution of Railway Stations

**STATION 1.0**
- Limited Infrastructures
- Security and Efficiency

**STATION 2.0**
- Availability of services
- New lines of revenues
- Services for customers

**STATION 3.0**
- Focused on the customer

**STATION 4.0**
- Last Technologies
- Integration with Cities
- New Business models

Strategy based on the collaboration of different stakeholders: railway operators, Infrastructures, businesses, etc
Challenges on the digital transformation of the Station

- Real time accurate information
- Increase in the number of passengers
- Efficient use of resources
- New threats

- New services and value-added products
- High performance of services
- Operational optimization
- Need of security systems

Adaptation to the new digital era is the base for new business models and to be in a privileged position in the railway industry
Propose customer high quality services with lowest costs, focusing on the optimization of available resources while keeping an outstanding level of security.
The integration of all actors in relation with the transport operator promotes transformation to new digital models.

Station 4.0 is built on 4 pillars:

- Means of transport
- Terminals
- Social media
- Public Organisms

Stakeholders:
- Operation
- Passenger
- Security
- Facilities

Holistic view:
- Integrated information

Stakeholders:
- Passengers
- City
- Service providers on terminals
- Operations control

NextStation
Involve passengers

Collaboration with operators, stores and service providers

Monetize value-added services by integrating all information and data

Improve experience with access controls free of physical barriers

Real time information and automatic assistance to passengers

From anonymous crowds to well defined individuals, permitting a holistic passenger view: Digital Passenger 360°
Sustainable station respectful with the environment

- Data analytics and rules to optimize consumptions
- Simulate and compare information about fares
- Real time monitoring and measuring
- Secure energy / environmental regulation
Efficient operations, quality service and adaptation to scenarios

End-to-end optimization of station processes

Monitoring, analytics and rules to optimize staff assignment

Optimal maintenance through root cause analysis systems.

Real time assistance to operations, reducing maintenance costs
Digital security on a single platform

Face recognition cameras integrated with cybersecurity

Analytics and optimization rules

Efficient and safe real time monitoring

Smart emergency management to minimize response time
Integrated information Dashboard

- Centralize and store information
- Monitoring with analytics to optimize station 4.0
- Real time monitoring
- Collaboration among actors
THANK YOU
GRACIAS