



SMART STATIONS IN SMART CITIES

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STATION 4.0

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4a New Services For Users & Customers

UNDER THE HIGH PATRONAGE OF

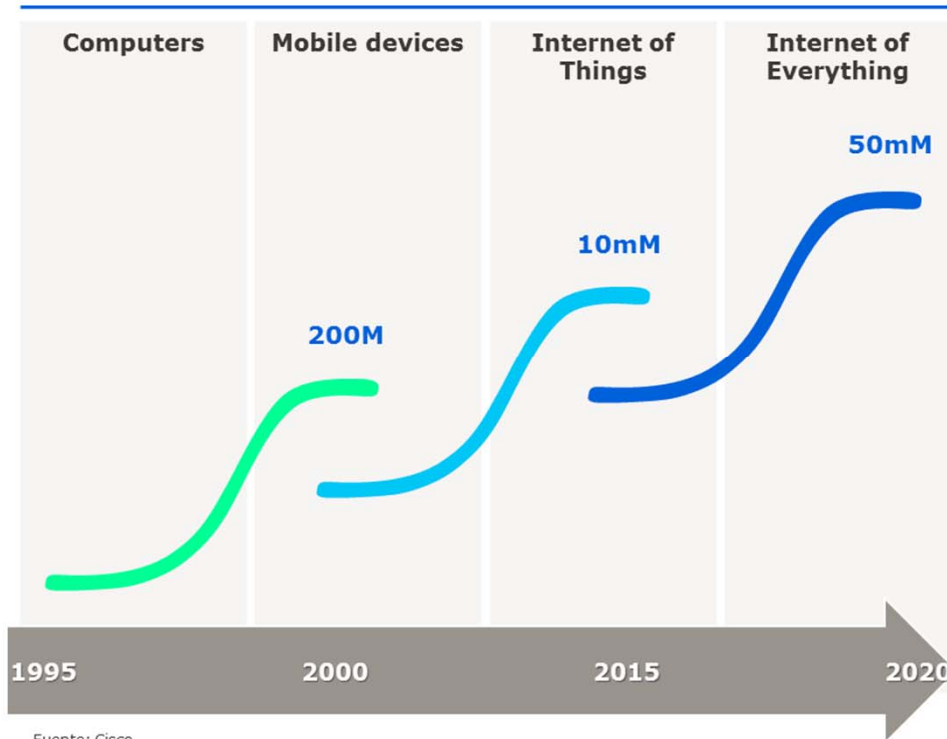


ORGANISERS



Connected devices exponential growth

Growth of connected devices



Fuente: Cisco

Station 4.0



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



Passenger behaviour and expectations



Service performance



Environmental Impact



Security

- Real time accurate information
- New services and value-added products
- Increase in the number of passengers
- High performance of services
- Efficient use of resources
- Operational optimization
- New threats
- 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

Public Space

Passengers

- Buy
- Walk
- Meet other passengers
- Share



Processes between Passenger and Transport

- Fast
- Transparent
- Efficient
- Comfortable and safe



Complex services

- High performance requirements
- Integrated with terminal operations
- High volumen of data




Propose customer high quality services with lowest costs, focusing on the optimization of available resources while keeping an outstanding level of security



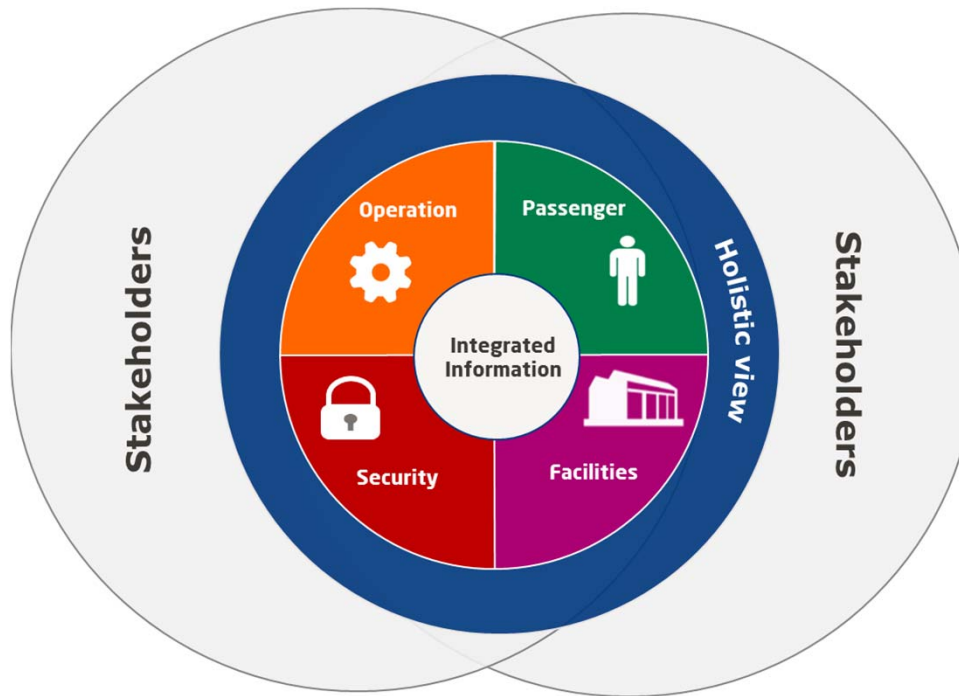
Station 4.0 is built on 4 pillars


 Means of transport

 Terminals


 Social media

 Public Organisms



Passengers 

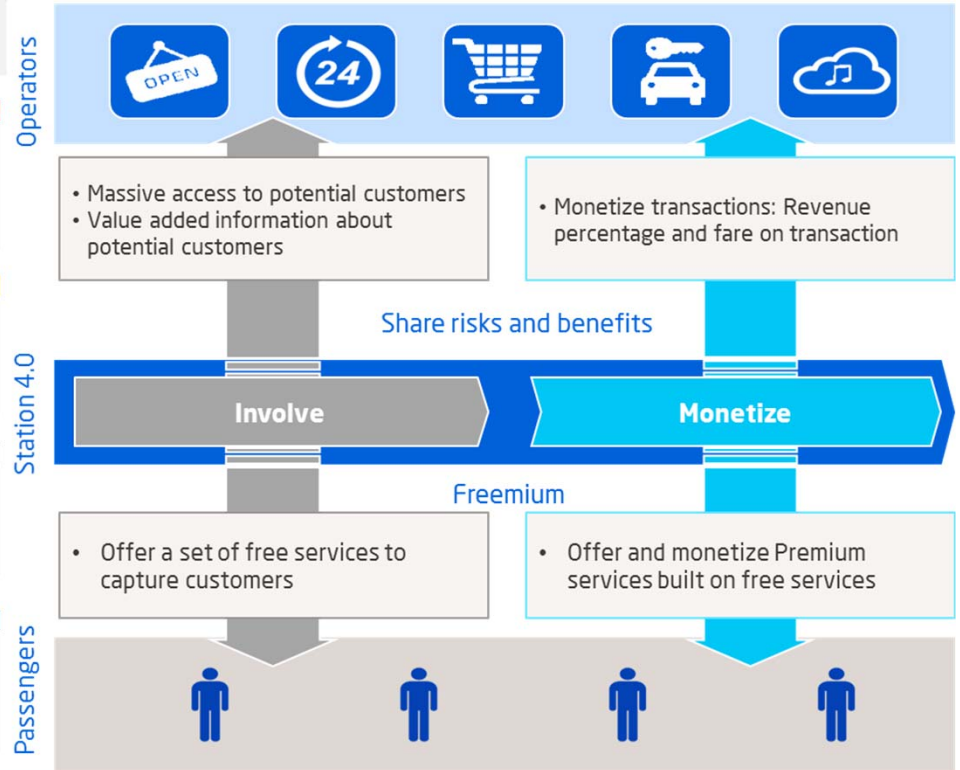
City 

Service providers on terminals 

Operations control 

The integration of all actors in relation with the transport operator promotes transformation to new digital models

- 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°

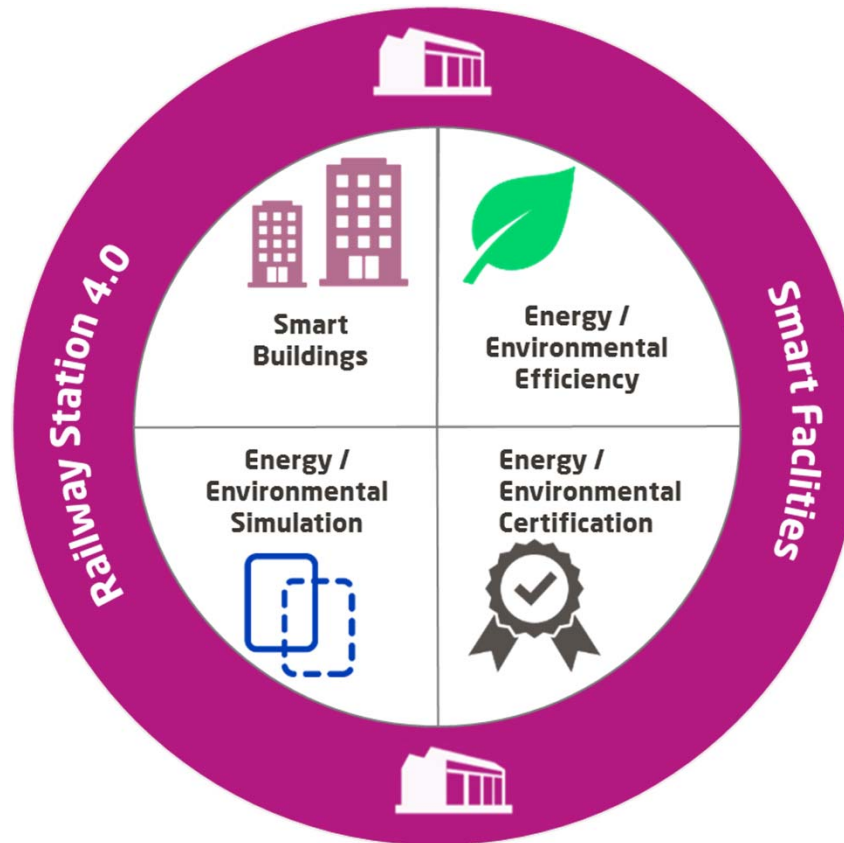
Sustainable station respectful with the environment



Data analytics and rules to optimize consumptions



Simulate and compare information about fares



Real time monitoring and measuring



Secure energy / environmental regulation

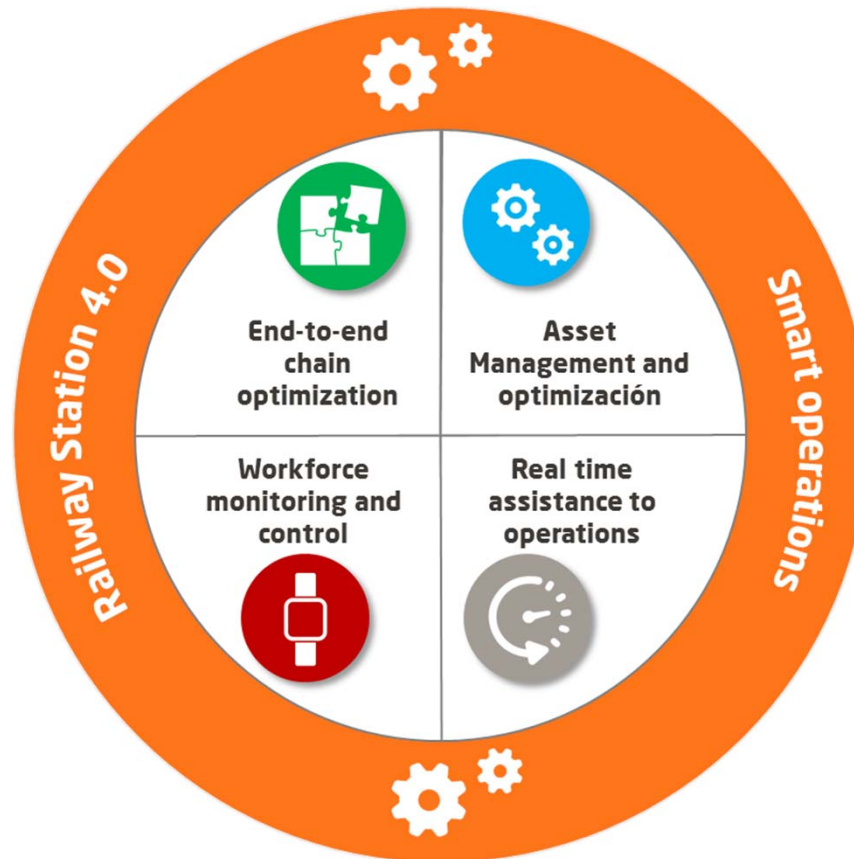
Efficient operations, quality service and adaptation to scenarios



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

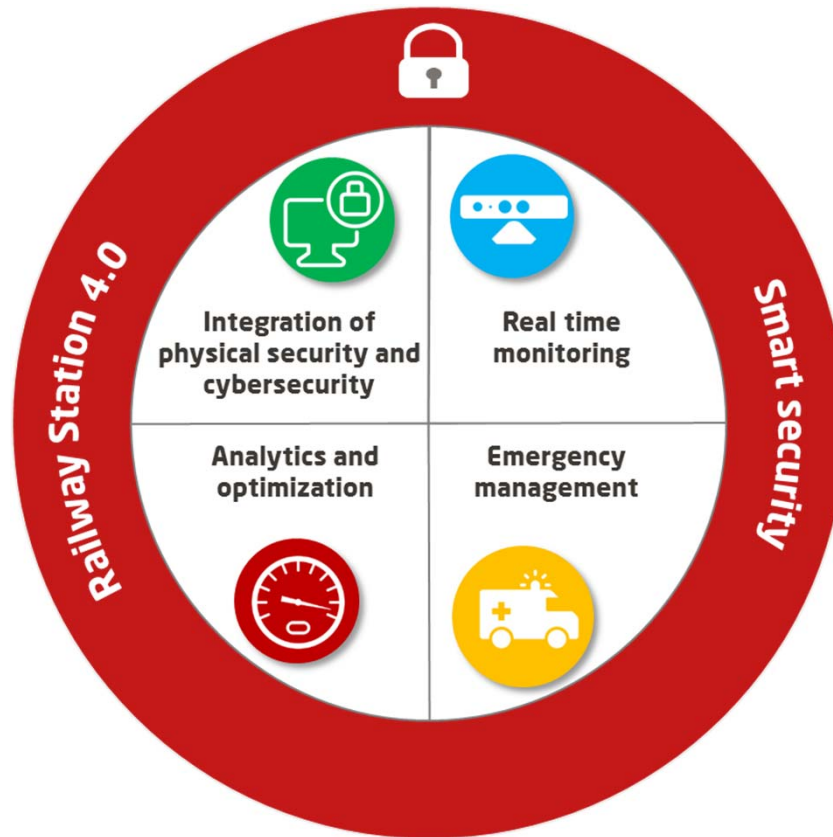
Digital security on a single platform



Face recognition cameras integrated with cybersecurity



Analytics and optimization rules



Efficient and safe real time monitoring



Smart emergency management to minimize response time

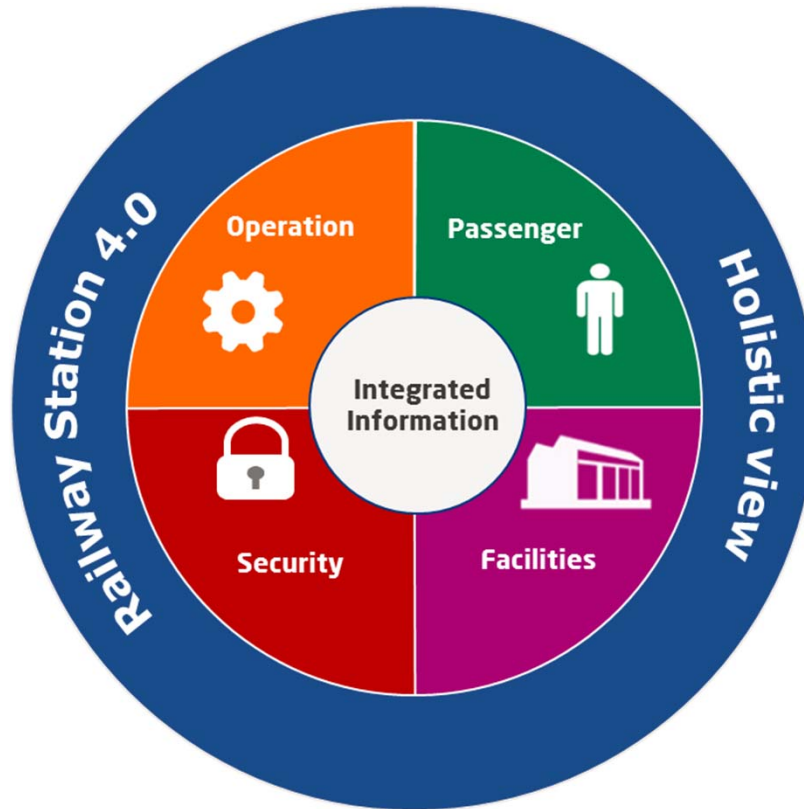
Integrated information Dashboard



Centralize and store information



Monitoring with analytics to optimize station 4.0



Real time monitoring



Collaboration among actors



THANK YOU
GRACIAS

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