



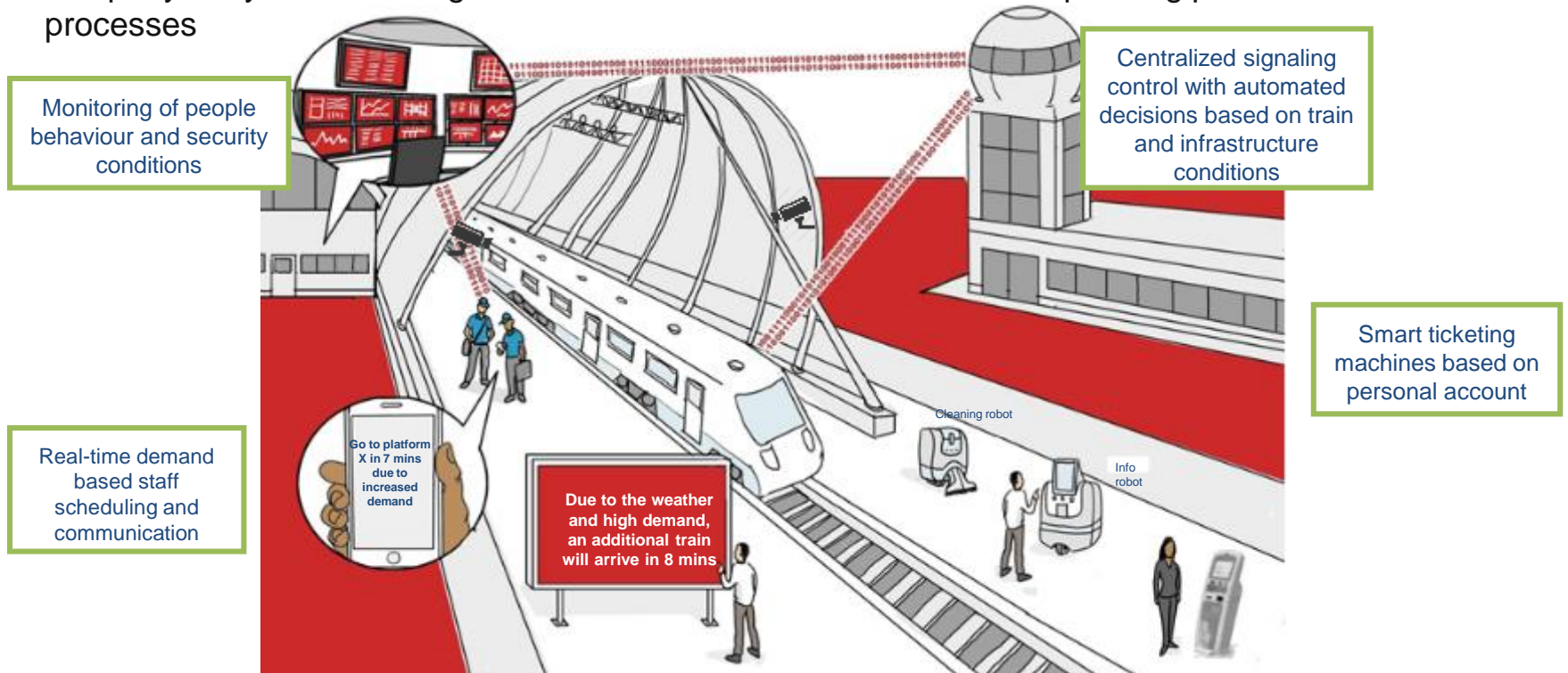
IoT - La digitalizzazione nel settore ferroviario

N.Mazzino, V.P.Digital Railways and Innovative Technologies

A.Trombetta, V.P. Portfolio, Business Development and Innovation

These terms are often used as synonyms but they indeed have a different meaning and span

- **Digitization** is transformation in digital format of paper documents, signals, and data
- **Digitalization** is the transformation of processes, functions and activities based on the availability of digital data
- **Digital transformation** is the overall effect of the digitalization on the business/customers/activities of a company or systems leading to a new definition of business models/operating procedures/ manufacturing processes



Integration of train, station and infrastructure information allows for demand based dynamic timetabling and train schedule adjustment

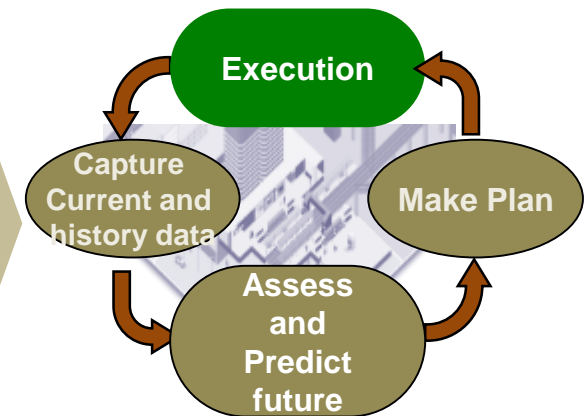
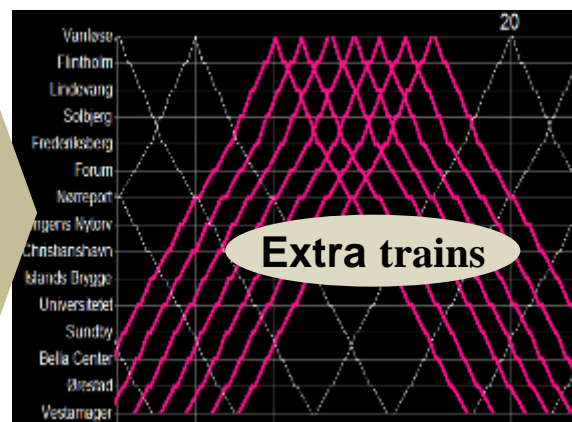
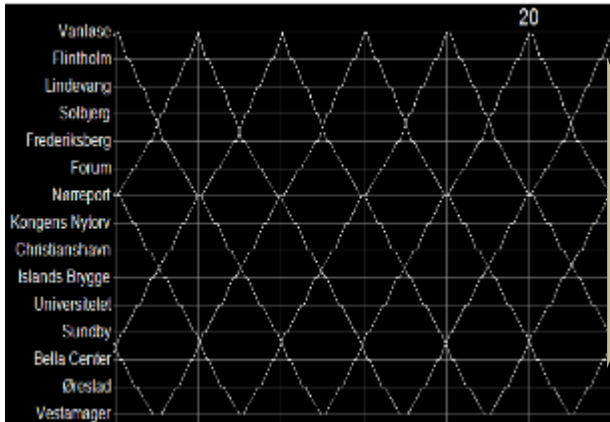
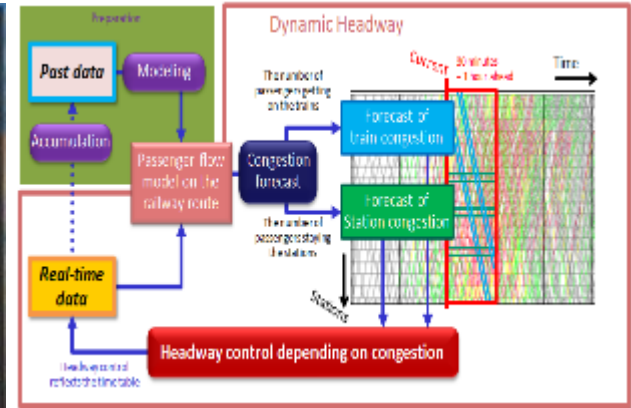
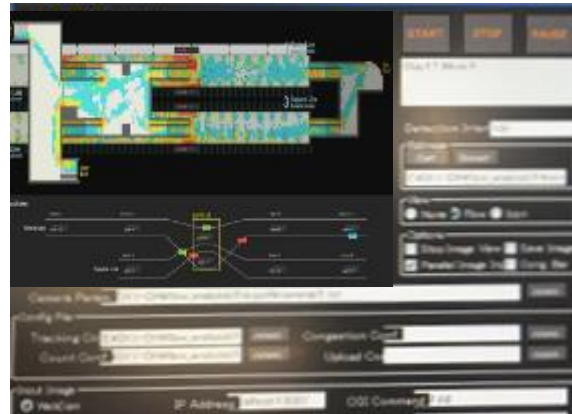
Congestion monitoring, human flow and demand forecast enable dynamic train operation according to the real-time demand captured by several sensors

Regulating passenger congestion rates by real-time data

Extra / Remove train based on the congestion rates

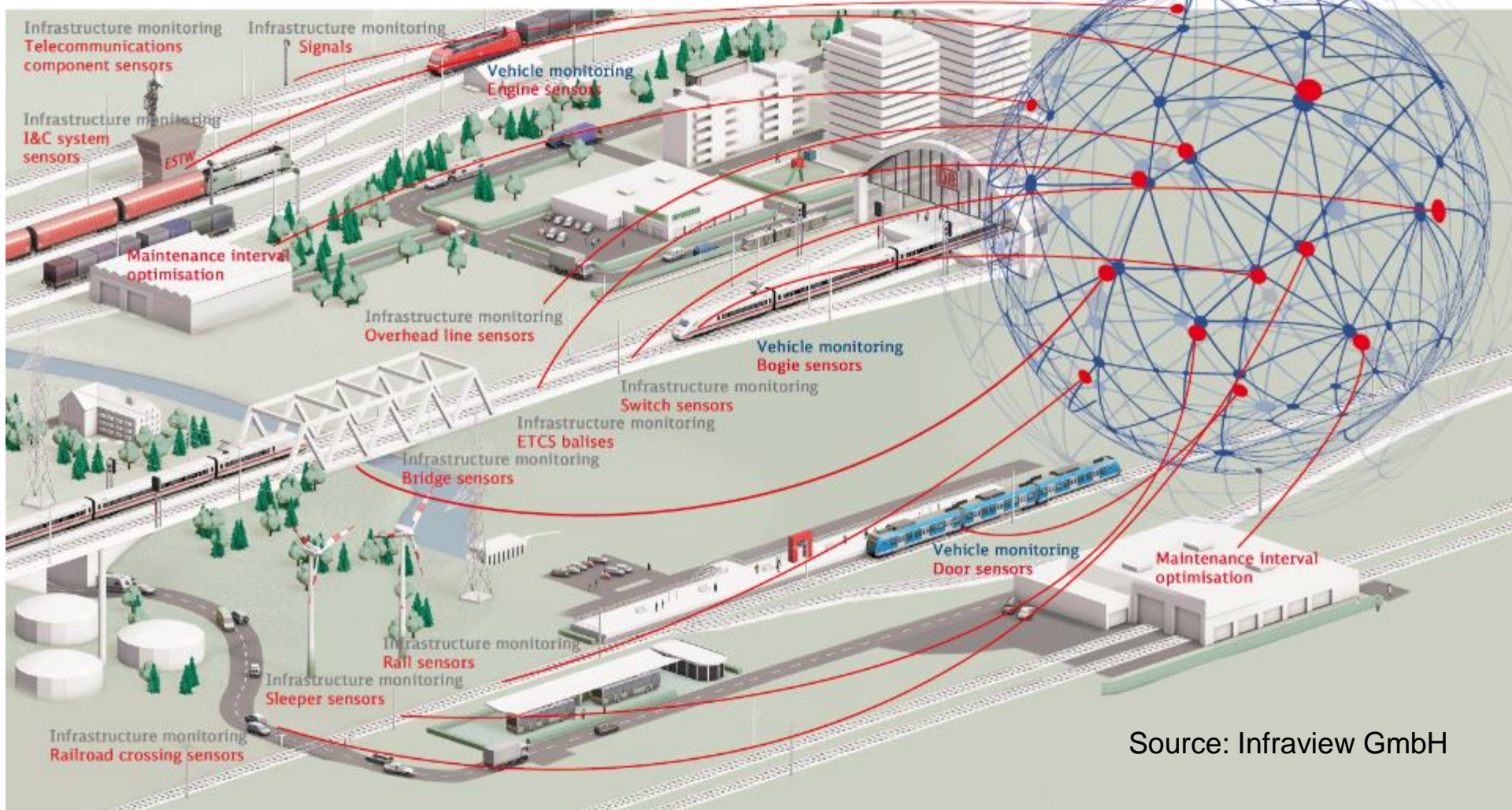
Future demand prediction by AFC

Value creation by stored data



*AFC: Automated Fare Collection

Asset Management & Infrastructure monitoring



Source: Infraview GmbH

Thanks for your attention