Public Transportation Analytics

Victor Ciriza, Advanced Development Lab Manager
XRCE Grenoble
Xerox and Public Transport

A range of solutions for secured revenue collection and optimized services, fleet management and passenger information systems

400 systems in operation worldwide:


- A comprehensive Web based platform Atlas ®
- More than 120 contactless smart cards ticketing solutions already installed and running
- Over 50 CAD-AVL systems

More than 200 million transactions processed worldwide every day!
Our Public Transport Customers

More than 400 customers in 35 countries
Transportation Analytics

- Visualize
- Model
- Optimize
- Forecast
- Deploy

Parking Enforcement Analytics
Ridership Visualization
Public Transport User Profiling Engine
Ridership Simulation Engine
Parking Dynamic Pricing Engine

Current Projects
Public Transportation – Customer Led Innovation

Observations
Public transportation authorities and operators gather a lot of data but are poorly equipped to use it

1. Collect the customer needs
2. Joint prototype development
   • Real needs
   • Real data

1. Transfer to Xerox Fare Collection Platform - ATLAS
Public Transportation Analytics: 3 packages

1. Visualization package
2. Analytics package
3. Simulation & optimization package

ATLAS platform
Transportation Data Analytics Vision

DATA

WEATHER
DEMOGRAPHICS
GIS
SOCIAL NETWORKS
SENSOR NETWORKS

XEROX SERVICE DATA
PUBLIC TRANSPORT
TOLLING
PARKING

CLOUD

ANALYTICS PLATFORM

VISUALIZATION
DIAGNOSTICS

SIMULATION
FORECASTING

MODELLING
CONTROL

AUTH
THROTE
STORAGE
PROCESS

PORTAL
SERVICE DESK
PRIVACY
KB

DATA & BIZ INTELLIGENCE CONSUMERS

TRANSPORTATION AUTHORITIES (CUSTOMERS)
CITIZENS
PARTNERS
LOCAL ECONOMY STARTUPS
UNIVERSITIES

VALUE-ADD PARTNERS

XEROX

Xerox Public Transportation Analytics

- Cost-effective
- Large-Scale
- Automated and real-time
- Customized to problems
- Built with real customers targeting real challenges