

Research Theme "Logistics"



CWI in Bedrijf 2015



Smart Pricing



- **New paradigm:** Increase revenue by smart dynamic pricing
- **Challenge:** ‘Set right price at the right time’
- **Scientific:** Quantitative models for making optimal pricing policies (stochastic optimization)

Application areas

- Airlines
- Car rental
- Hospitality
- Bioscopen
- Culture and heritage
- Golf courses
- Airport parking
- Supermarkets
- Restaurants
- Advertisements
- Online Webshops
- Restaurants
- ...

Smart Pricing



- **Research at two levels:**
 - fundamental research with PhD students (influential publications)
 - applied projects with MSc students
- **Concept of ‘Controlled Variance Pricing’**
 - smart way to balance learning and making money
 - collaboration with web shops
- **Industry collaborations:**

AIRFRANCE KLM



THEATER BELLEVUE



STADSSCHOUWBURG
amsterdam



starwood
Hotels and
Resorts



Emirates



Case Study: Small-Scale Theater



Unconstraining: estimation of ‘real’ demand

Next: optimal price policy, depending on

- availability of seats
- expected demand and number of days prior to the show

Price test: revenue gain some 15%

Hotel business: come to our stand!

Smart Mobility: Digital Road Manager

Many apps, many different advices....



- If 15% follow in-car advice: network unstable
- Digital Road Manager (DRM) platform
- Coordination of traffic
- Smart apps and real-life pilots
- Recognition as 'route-project' by Ministry I&M



Industry partners:

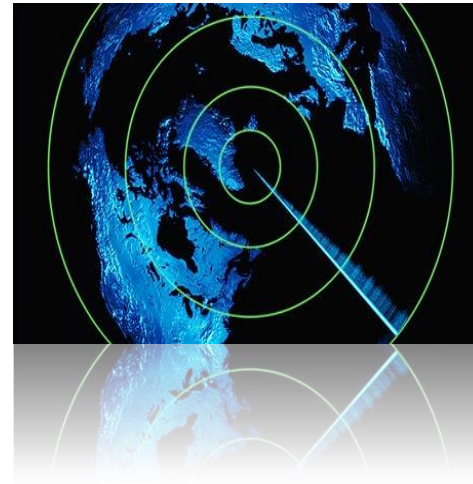


Intemo
INNOVATIVE TECHNOLOGY IN MOTION



Smart Mobility: Incident Management 2.0 ('IMEX')

smart
prevention



smart
detection



smart
reaction

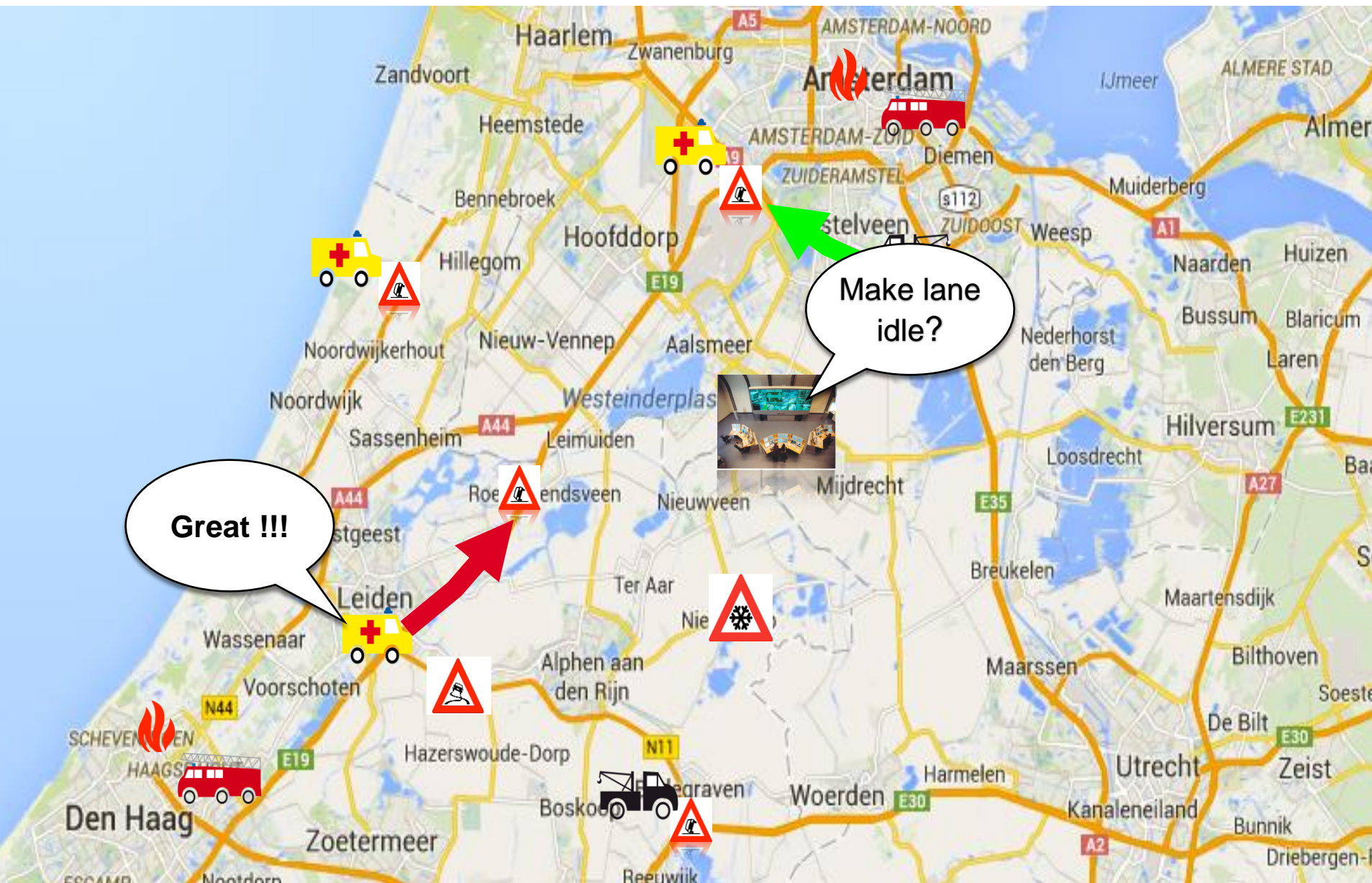


smart
recovery

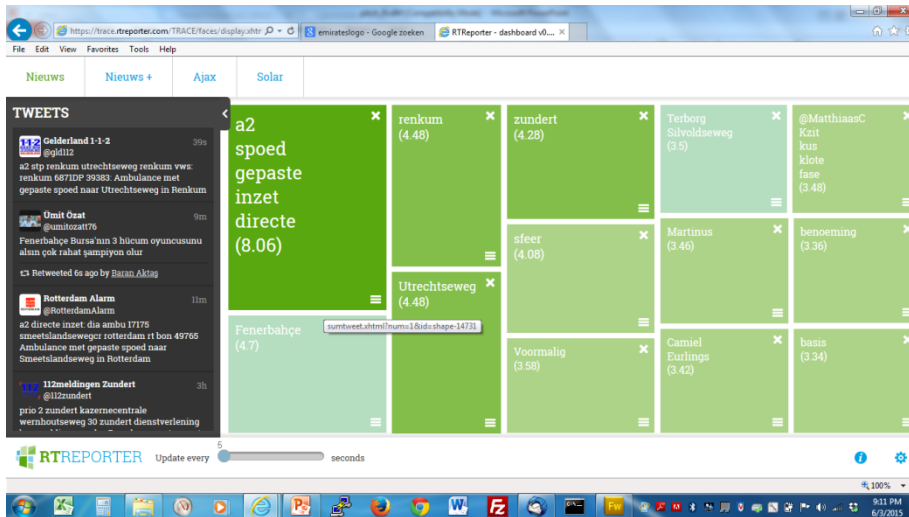
Incident Management2.0



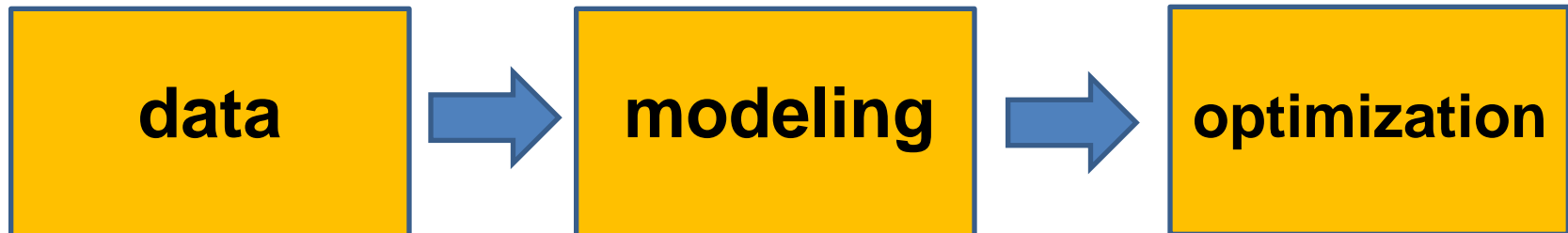
TRAFFICLINK



Smart Analytics



- Many companies collect large amounts of data....
- ... but what exactly to do with it?
- New techniques to extract knowledge out of data



Amsterdam Centre for Business Analytics ('ACBA')

CWI



- Maths & CS & Business Administration & all relevant disciplines
- Bachelor and Master program in Business Analytics
- Postgraduate education in Business Analytics and Data Science
- Multi-disciplinary research centers
- Ecosystem: Business and Science
- One-stop-shop: access to all relevant areas of expertise

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