



IoT and Smart Cities:

A perspective from Algeria

14-02-2018

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Agenda :

- **Smart City and IoT perspectives**
- **Projects to date**
- **Key IoT and Smart City prospects in Algeria**

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Smart City & IOT Perspectives

Everyone is Going Smart What's Happening Around the World?

\$2.1 trillion
Global Revenues
by **2020**

**Smart
City
leaders**

- Singapore
- Barcelona
- London
- San Francisco
- Oslo

**Europe,
US and
Asia**

- Amsterdam
- Valencia
- Nanjing
- Luxemburg
- Vienna

**Middle
East
and
Africa**

- Dubai
- Jeddah
- Doha

Our Vision The Big Picture

Building future cities that enrich people's everyday lives and help fulfill their Dreams & Aspirations through **efficient & sustainable** services

ooredoo
To enrich customers' everyday lives and help fulfill their dreams and aspirations



Human Development
Social Development
Economic Development
Environmental Development

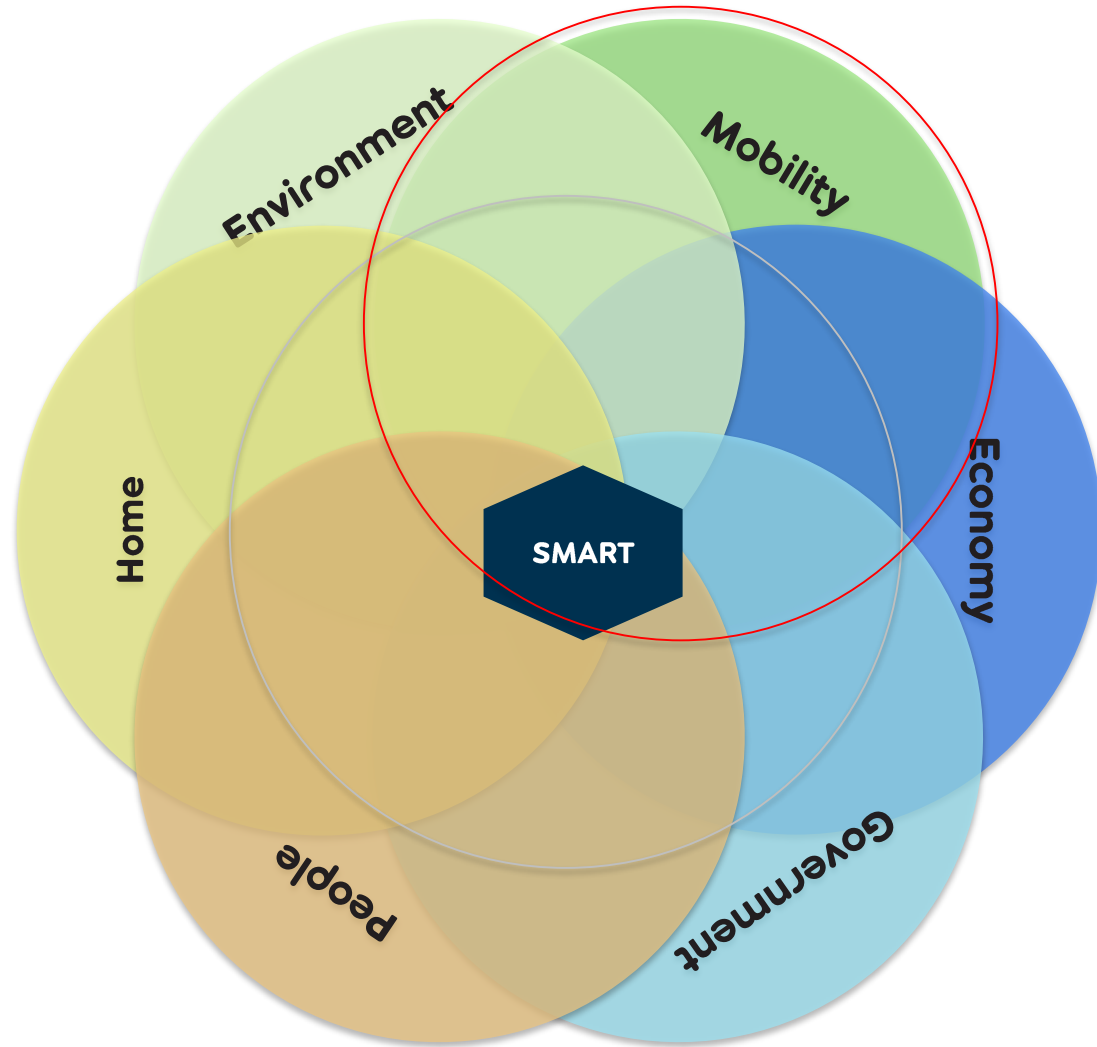
Smart City Vision

Ooredoo Vision

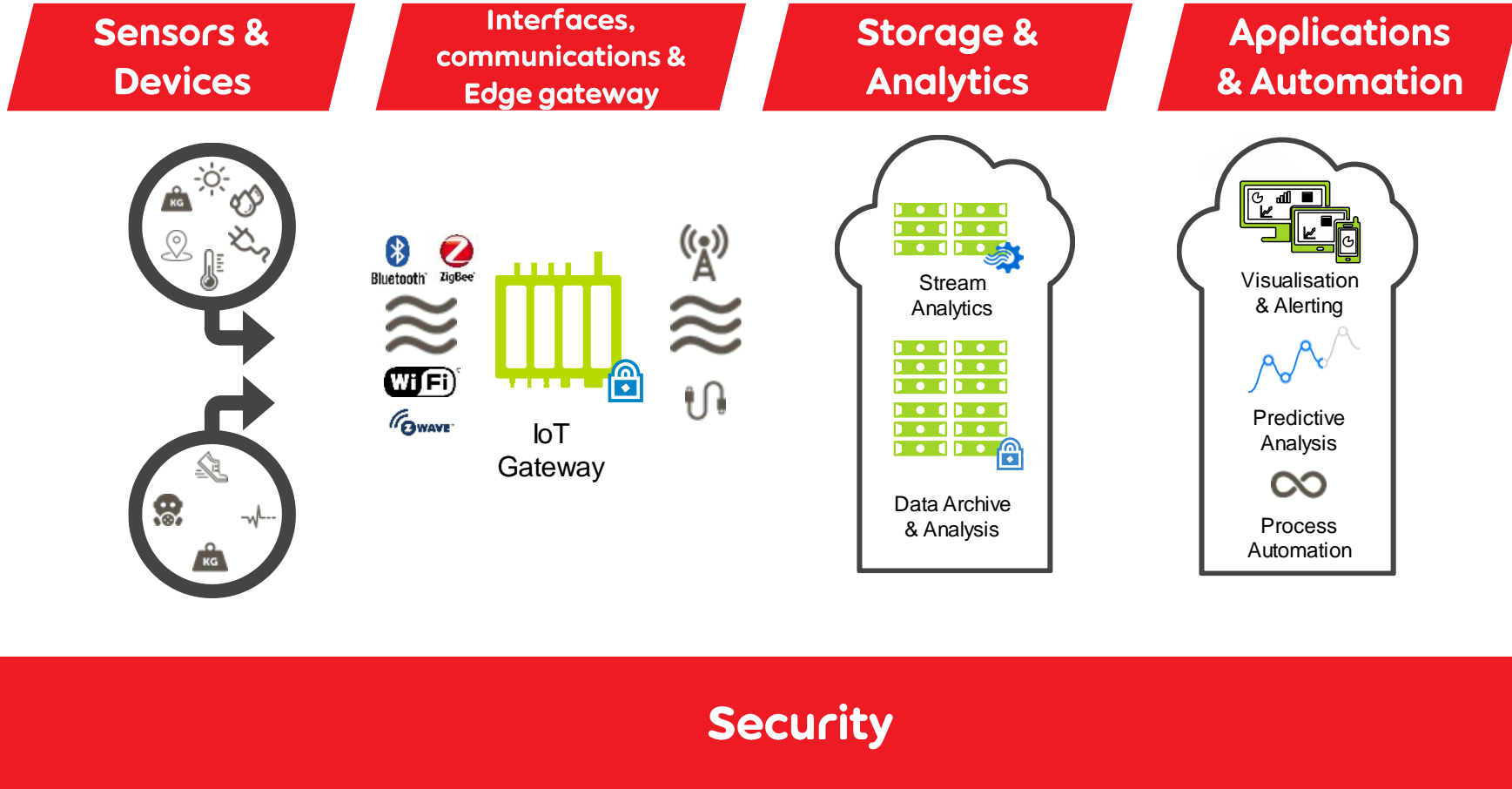
Ooredoo's Contributions

Smart city uses cases

- Smart Government
- Smart Utilities
- Smart Economy
- Smart Transportation
- Smart Environment
- Smart Building
- Smart Home
- Smart Health



IoT and Smart City High Level Architecture



Challenges for Smart City and IoT projects



Society

- Uneven expectations
- Variety in usage of ICT
- Small ICT industry size



Regulations

- Foster innovation and digitization of society
- Import of technology
- Data Privacy and open data policy



Technology

- Manpower
- Low ICT penetration
- Security
- Technology standards

Government

- Governance
- PPP
- Funding

Infrastructure

- Carrier agnosticity
- Open innovation
- Sharing

Opportunities

Industrial digital revolution

- Digital infrastructure
- Full ownership
- Leverage

- Open source
- Free zones
- Innovative business models

- Happiness
- Value creation
- Jobs

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Projects to date

Social responsibility and start-ups ecosystem



- The **Start** program was born from a joint initiative of ANDPME and Ooredoo.
- The ambition is develop the entrepreneurship of young Algerians with the goal of helping them to start businesses or innovative Startups in fields related to ICT

- Ooredoo teams organize conferences, training sessions and challenges to work to raise awareness among young people about the use of new technologies and creation. innovative companies.
- These initiatives are designed to create and promote the content "MADE IN ALGERIA", while meeting the expressed need for development of the digital economy in Algeria.
- Promotional programs for the benefit of Algerian youth have been distinguished internationally by winning two Bronze Stevie Awards in 2014 and 2015.

Start-ups have passed from the incubation program



Smart farm - hydroponics for forage and drilling production



System for measuring water quality of high technological quality



Sihhatek is a startup that offers ICT solutions in the medical field



Super Mama Is the first application of Orkidea startups aimed at helping moms monitor the health of their baby



Startup in the transport sector offer a mobile solution integrating ICT



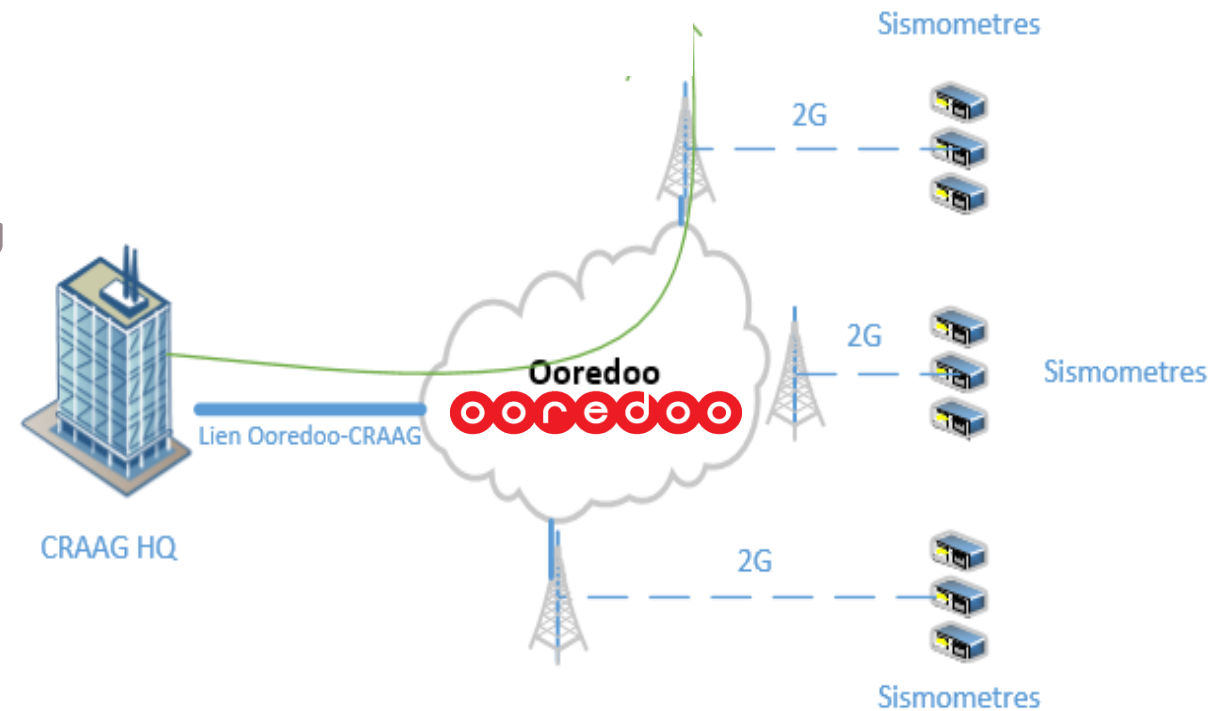
TAB intelligent startups dans le domaine du transport offrant un tableau de bord intelligent



Ooredoo Project with -CRAAG

A project to have a real-time view of seismic activities was launched in 2013 **with the Center for Research in Astronomy, Astrophysics and Geophysics CRAAG** which allows the transmission of data from seismometers spread over the national territory to the center of calculates CRAAG.

- Networking of a set of seismic stations.
- The network is composed of 87 seismic stations distributed throughout the national territory
- Evolutionary network, it allows the addition, the suppression or the redeployment of the seismic stations
- Routing data to a single center for processing
- Secure connection
- Real-time monitoring of the network of seismic stations.
- Alert of competent services in case of disaster



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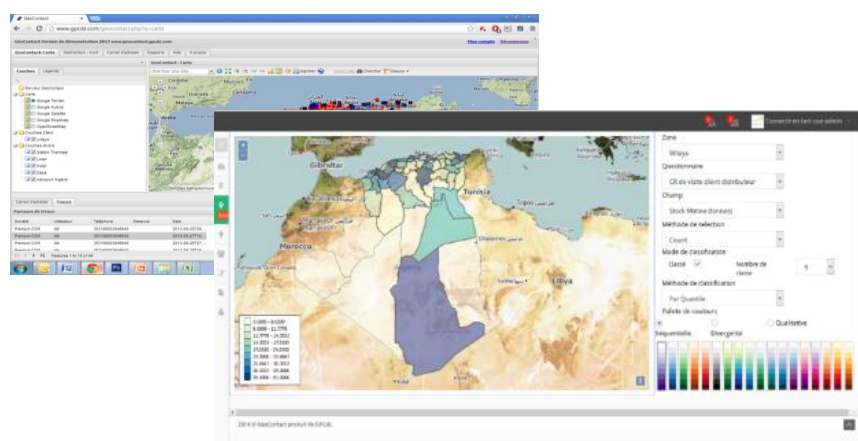
TéléContact : La digitalisation des métiers

TELECONTACT is a set of customizable Web / Mobile tools that support professionals and / or public institutions through the improvement of their business processes, integrating automation, and data exchange liquidity, as well as mobility, which allows feedback in real time and facilitates decision-making.

Applications :

- Surveys, Inspections, Surveys and Census
- Public services
- Preventive and curative maintenance
- Network and Infrastructure Management
- Sales & Merchandising
- Transport and delivery

Module Desktop « Web »



Task delivery



Real time feedback

Application MOBILE

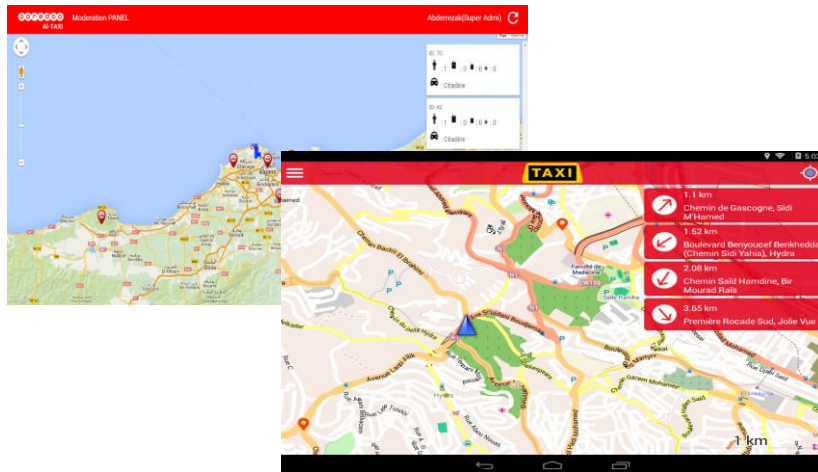


AL-TAXI!

AL-TAXI! Is a web and mobile application that allows citizens to order a taxi according to several criteria (destination, location and time of pickup, numbers of passengers ...). It allows any taxpayer having access to this solution to have a view on these commands and to be able to take care of them.

- A mobile application that allows the emission and management of Geolocated commands
- A Taxier application including an onboard vector map with voice guide, which allows the reception or choice of races to be carried out
- A web application, including Dashboards followed by activities, administrations as well as assigning tasks to taxers

Module Desktop « Web »



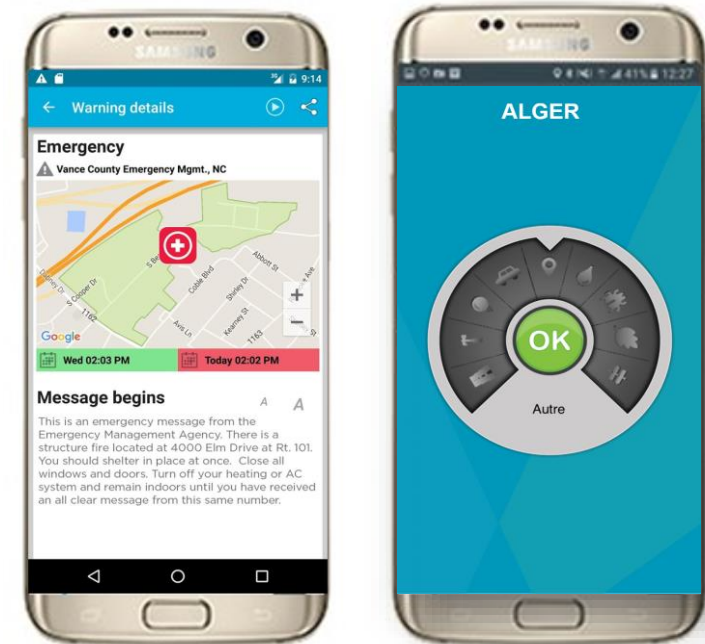
Application MOBILE



I Care !: Solution « Mobile alert »

I care is a mobile application that allows the Algerian citizen to report in real time to local authorities anomalies, problems and malfunction encountered in public spaces, the user has only to take a photo of the incident to report and the system will recognize the location, date and time of taking the picture and will automatically transmit it to the relevant department,

- Road problem;
- Pothole;
- Degradation
- Graffiti;
- Illegible signs;
- Parking problem
- Public lighting problem
- Vandalism
- Garbage or garbage;
- Degradation of material;
- Problem related to vegetation;
- Problem with animals
- Water leak ;
- Other



Fleet management :

Key benefits

- **Customized Reporting**

The ability to create, and more importantly, customize your own reports is a key feature of any competent GPS fleet tracking software.

- **Automated Alerts**

Alerting is another function of GPS tracking software that should be customizable.

- **Geofencing**

Geofencing allows you to create virtual geographic boundaries on a map that can serve a variety of intuitive functions.



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**Key prospects
In Algeria**

Smart Metering

Why?

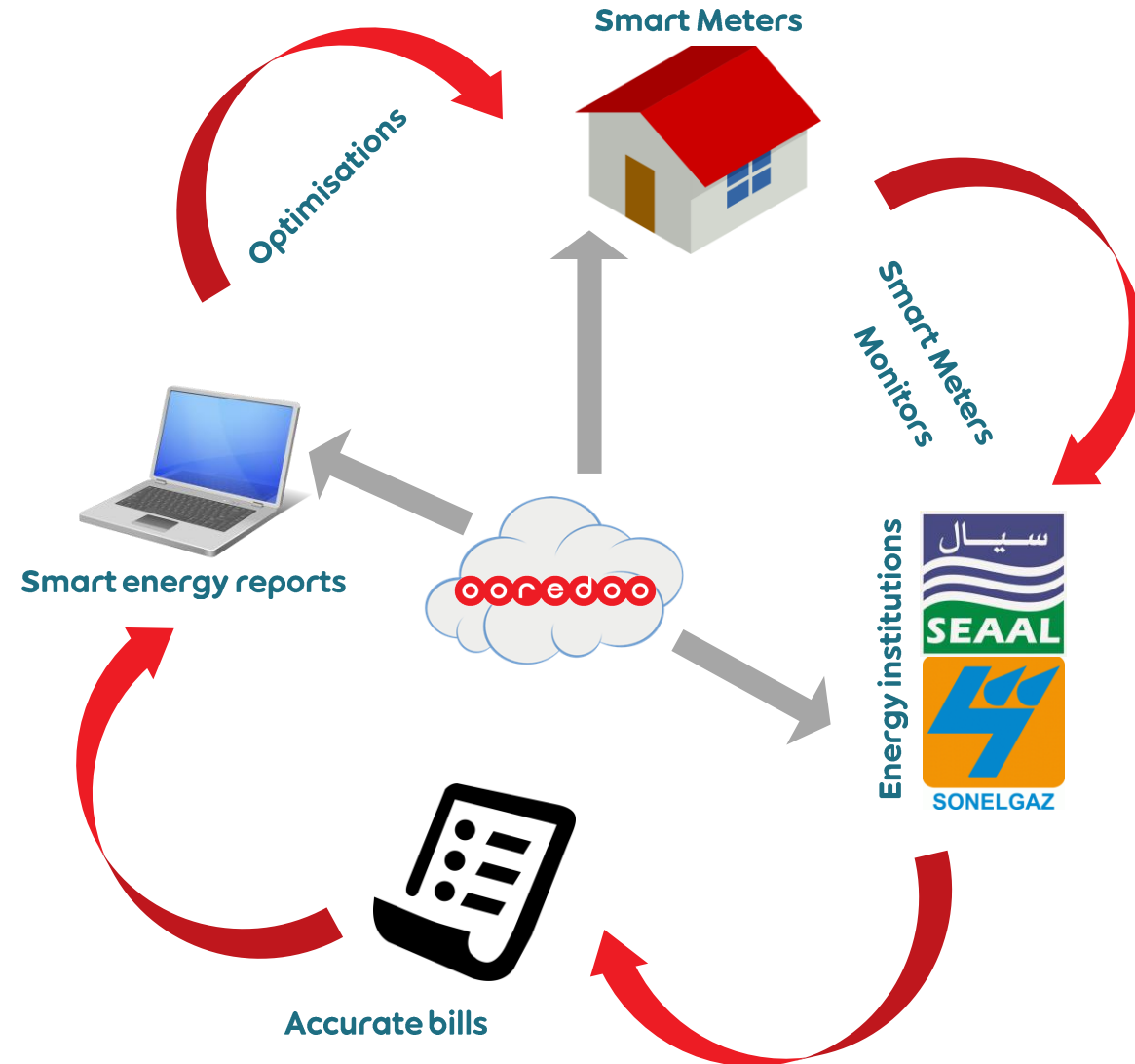
- Waste of resources: water, electricity, ...
- Manual, errors
- Peak usage issues

What?

- Connected meters
- Real time data
- Automated identification of leakages
- Data management, digital experience

Benefits?

- Savings for individuals, businesses, community
- Experience, Service levels
- Grid management and planning



Smart transport and Traffic

Why?

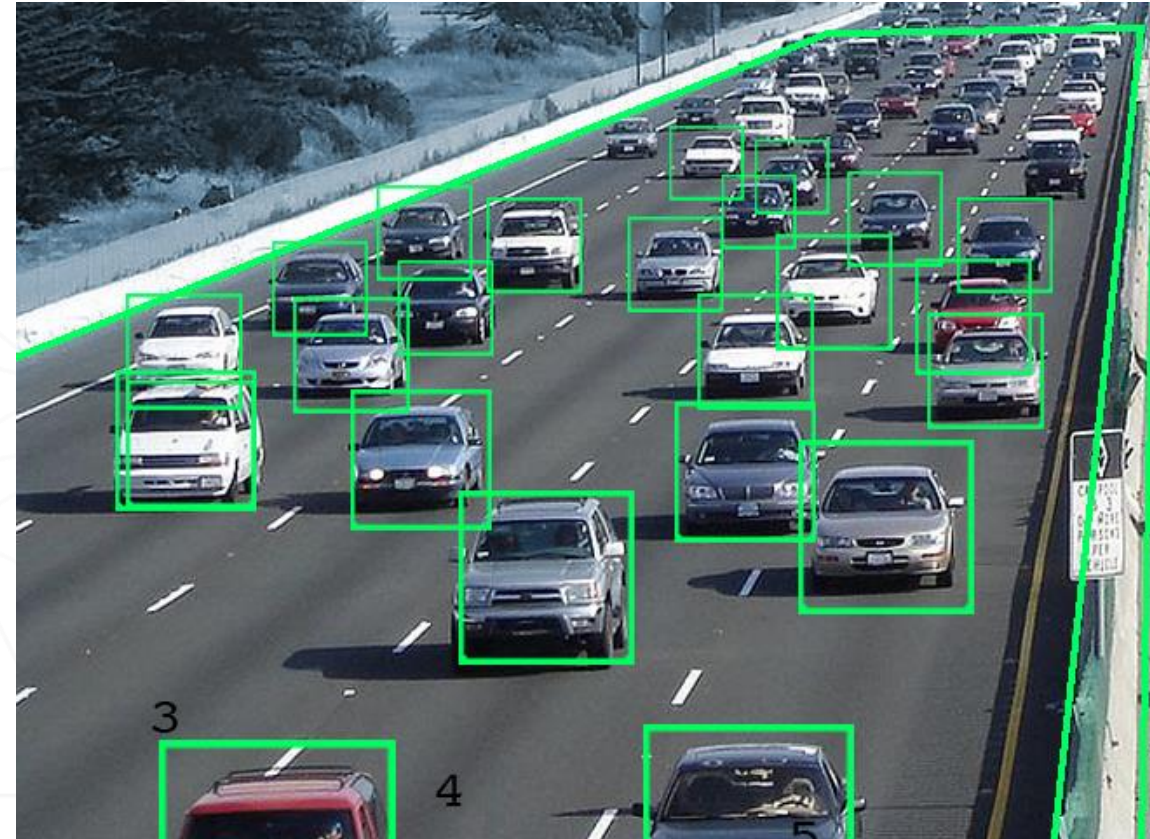
- Congestion, waste of resources
- Accidents
- Pollution

What?

- Roads monitoring
- Traffic analysis
- Incident detection

Benefits?

- Infrastructure planning and development
- Public transportation optimization
- Information
- Emergency



Source : <https://www.picomixer.com/STA.html/>

Smart Security

Why?

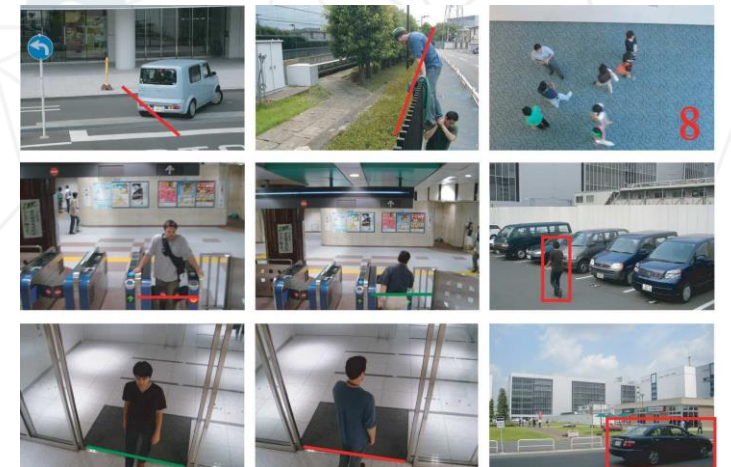
- Vast areas areas and assets to protect
- Threats

What?

- Video Motion Detection
- Intrusion Detection
- Line Crossing
- Object Left or Removed

Benefit?

- Security
- Automation



Source : <https://www.intelli-vision.com/intelligent-video-analytics/>

THANK YOU 😊

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