nexMACHINA

THE COMING TECHNOLOGY

Smart, creative & human cities

Madrid – Bilbao – Barcelona

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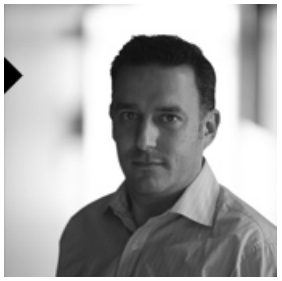
ABOUT US

Nexmachina is formed by a team of professionals experienced in the world of systems, wireless technology and communications. Their challenge is to apply their knowledge to the new era of Internet of Things, offering solutions that allow towns, cities and companies to have more intelligent infrastructure to be more efficient, sustainable and livable.



Fernando Presa (39)
Founder & CEO

Ana Sevilla (39)
Administration

Juan Carlos Chueca (41)
CTO

Mikel E. Peña (28)
Systems

Gerardo Calvo (42)
Project Manager

Guillermo Barandica (25)
Support

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ABOUT THE COMPANY

- Spanish company with offices in Bilbao (HQ), Madrid and Barcelona
- Specialist in Wireless technology, M2M, IoT
- Over 15 years of experience in projects with AAPP, SMEs and large accounts
- Authorized by the Spanish government as a telecommunications operator in free band
- Own monitoring platform - iQmenic - M2M and wireless communications devices
- In the vanguard of products and Services for Smart Cities and Smart fabrics
- I + D to develop new M2M solutions

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OUR VISION

IoT, Internet of Things

New industrial revolution, all smart and connected (Cities, towns, factories, vehicles, homes)

Why now?

The main reason *is that "the capacity of calculation is a lot cheaper now, **what it takes** to incorporate an increment of smart electronics and communications in objects and machines".*

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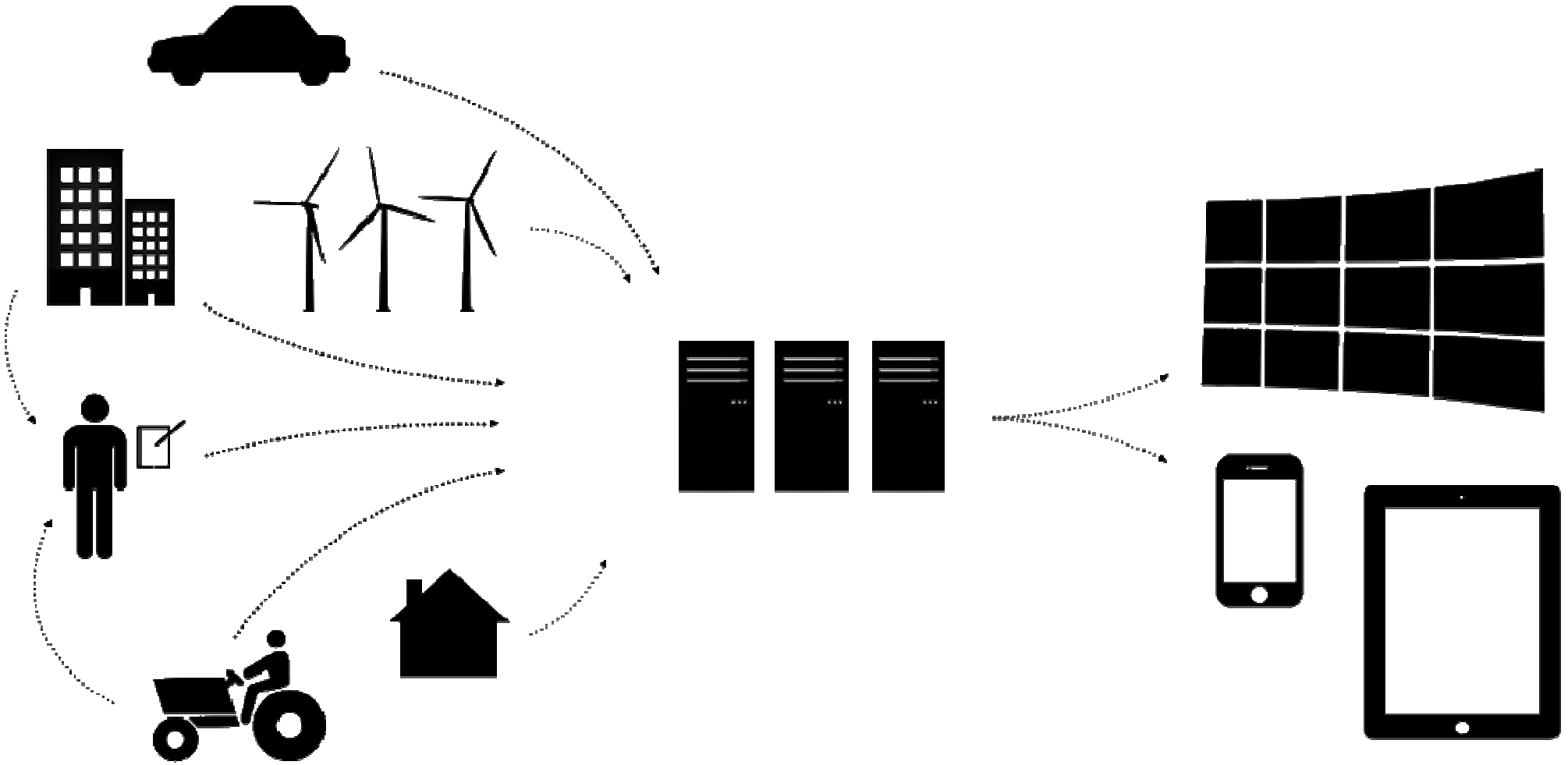

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Obstacles

No standards, it´s all to get done.

Expected leap to IPv6 standard hasn´t really arrived with number of available addresses than the current IPv4.

Power supply & autonomy, designed devices that generate energy for their own use, or batteries to cover the lifetime of the object.

Advantages

Doors open to extract real services of connected objects, not only the mere consideration of things plugged into the network.

More creativity in the market.

Coexistence of multiple technological solutions.

It doesn´t prevent a SME with a killer business model to get massive adoption.

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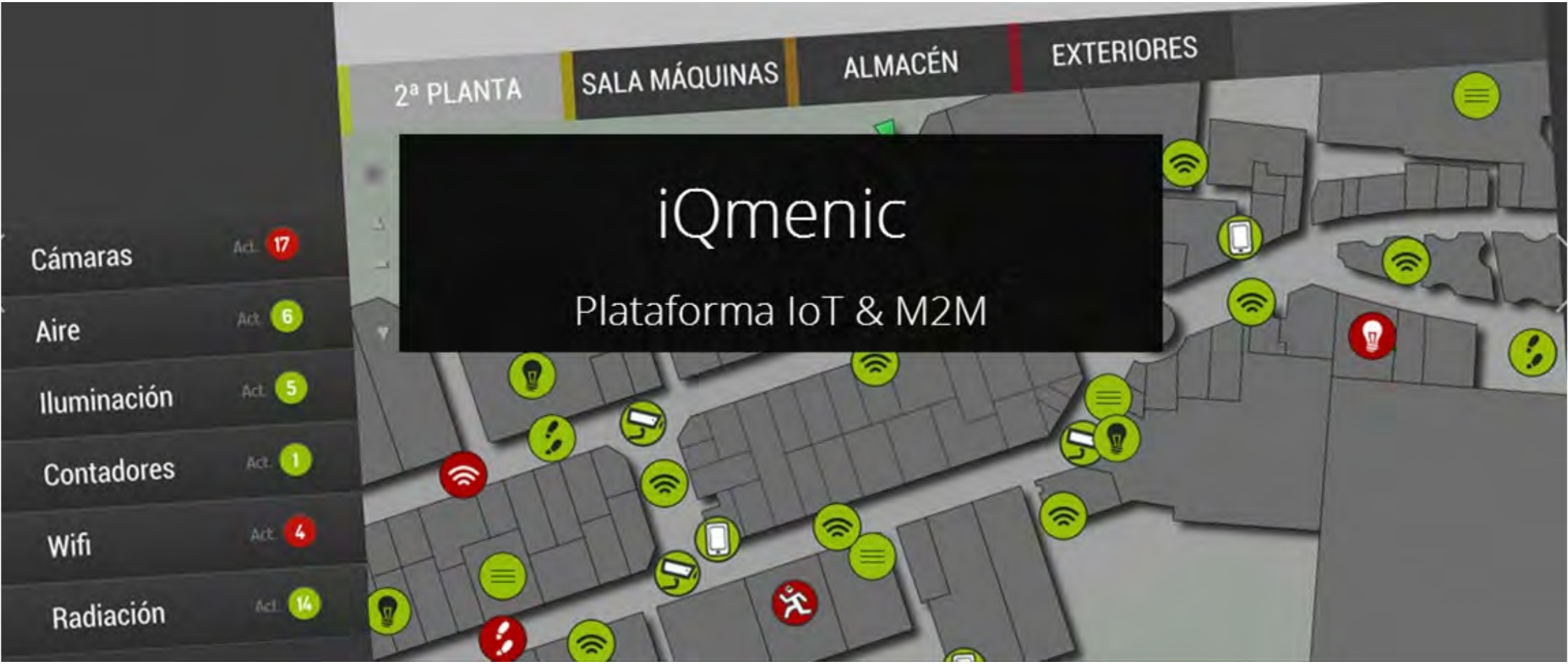

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Platform for monitoring and management Wireless Sensor Networks, communications, and IP devices.

- ✓ *Automated data collection*
- ✓ *Collective measurements*
- ✓ *Real time monitoring*
- ✓ *Alert Settings*
- ✓ *Immediate response*
- ✓ *A single multi-device application*
- ✓ *Administration and intuitive management*
- ✓ *Updates on remote*
- ✓ *Register centralized data*
- ✓ *Continuous monitoring*
- ✓ *Geolocation*
- ✓ *Completing tasks to changes*
- ✓ *Traceability and automated reporting*

tecnalia Inspiring Business

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iQnode | iQsens | iQcam | iQtrace | iQwifi | iQhub

Sensory device that allows the development of monitoring and action wireless applications aimed at company infrastructures and smart cities.

Features

- Works with different protocols and standard frequencies: WIFI/802.15.4/3G/GPRS/Zigbee/Bluetooth/RFID/NFC.
- Long distance protocol.
- Hibernating low-power operation.
- Compatible with more than 60 sensors.

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iQnode | iQsens | iQcam | iQtrace | iQwifi | iQhub

Wireless sensor network aimed at monitoring, measuring and controlling physical and environmental conditions in urban, rural and industrial environments.

Applications

- Industrial control of machines and monitoring of processes and assets.
- Home automation, welfare and safety.
- Energy efficiency in buildings and facilities.
- Environmental control, air, water, soil and waste.
- Traffic management and parking.
- Precision agriculture, crop status.

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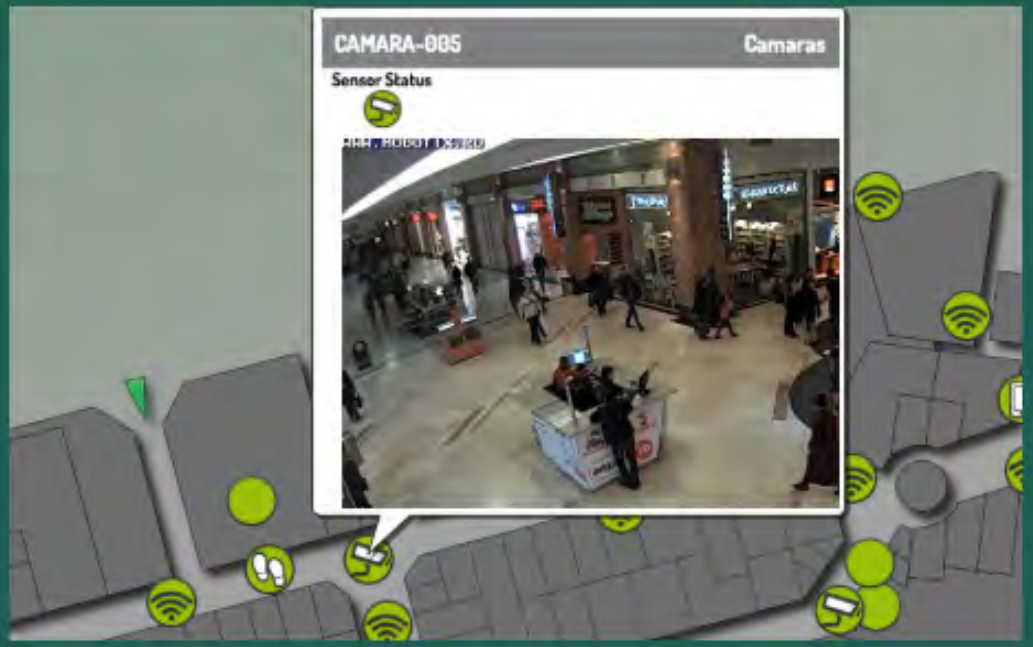
Smart video security solution.

Applications

- Multi-device visualization in real time.
- Alerts by motion detection and intrusion.
- People and vehicles counter.
- Face recognition.
- Indoors and outdoors.
- HDTV, infrared, thermal.



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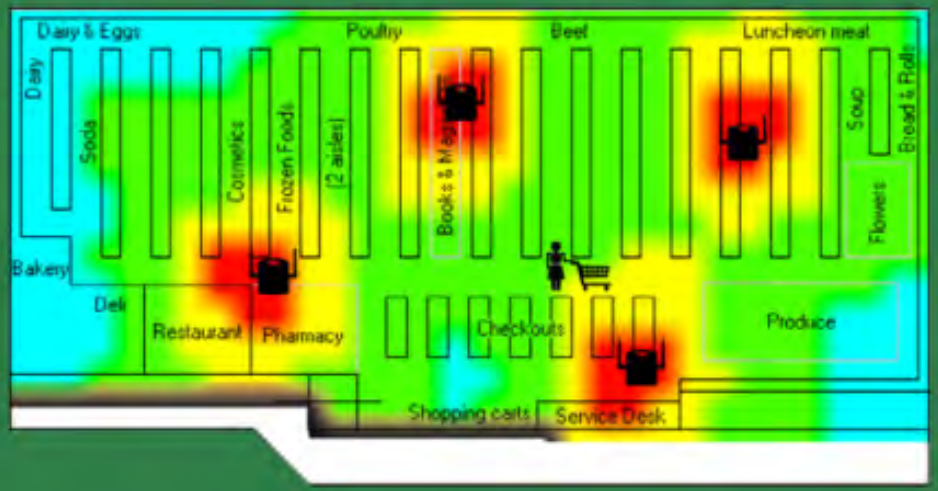
Traceability system for people and objects in the indoors and the outdoors.

Information and maps in real time dwell times, routes taken, influx.



Applications

- Location of assets, devices and people.
- Management capacity and crowds.
- Market research.
- Advertising campaigns.
- Business management and marketing.

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Infraestructure of WIFI networks with public and private access.

High density of concurrent users and devices.

Applications

- **Smart WIFI**, WIFI Mesh networks for companies and institutions.
- **IoT WIFI**, WIFI communications between M2M devices and machines.
- **Home WIFI**, Internet access and home automation.
- **Social WIFI**, integration with social networks.

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Smartbox Hub coordinator of the M2M network for the home and the business

Multi-technology: WIFI, Bluetooth LE, 802.15.4

Sensors

- Safety door control.
- Surveillance video camera.
- Fire Detection.
- Water detection.
- Health well-being.

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EXAMPLES
CURRENT PROJECTS

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MADRID XANADÚ

Madrid Xanadu is one of the best and largest shopping centres of Spain.

PROBLEM

Different platforms for each service working independently.

SOLUTION

Deployment a centralized platform for monitoring and controlling different security services, machines, communications and public traceability.

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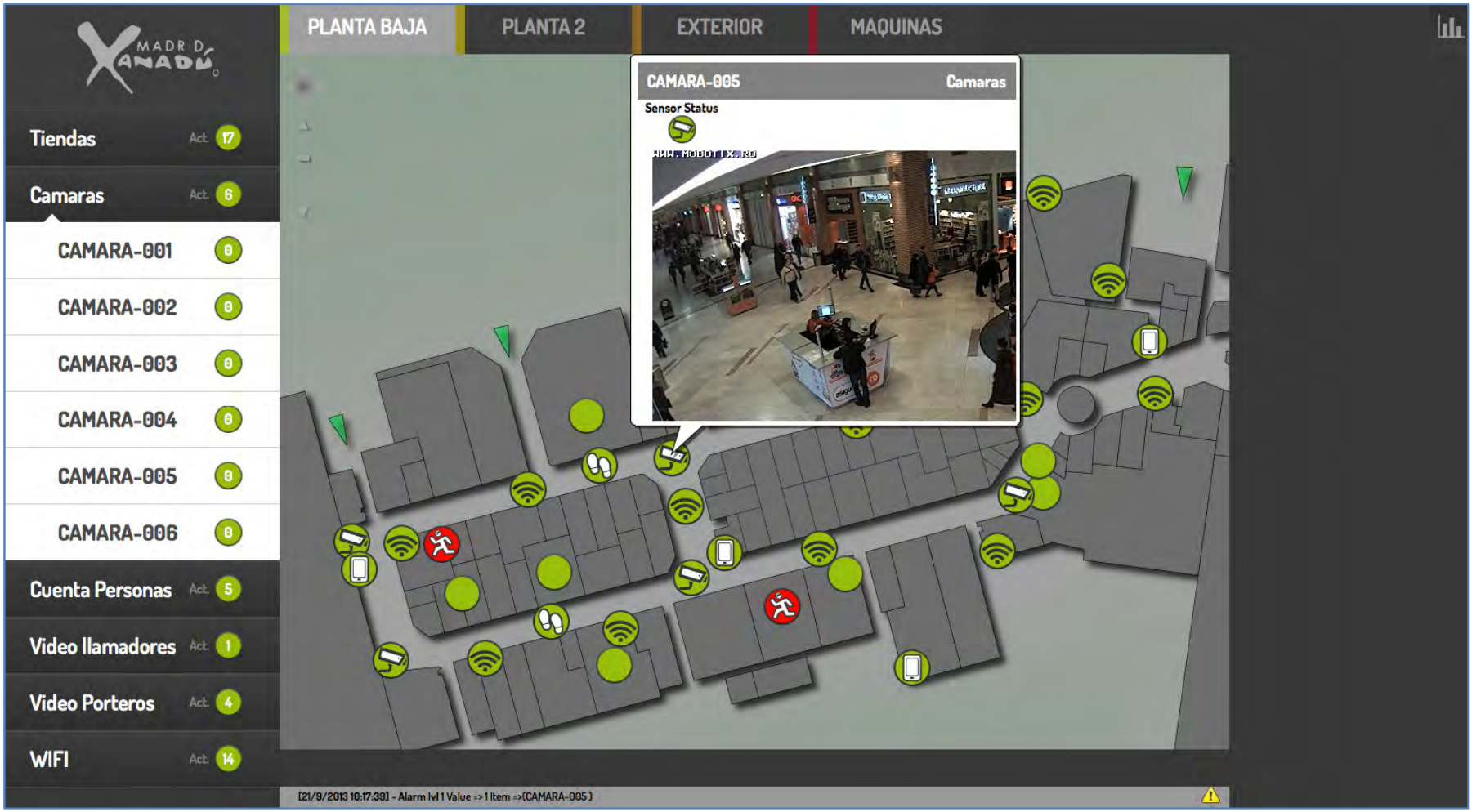

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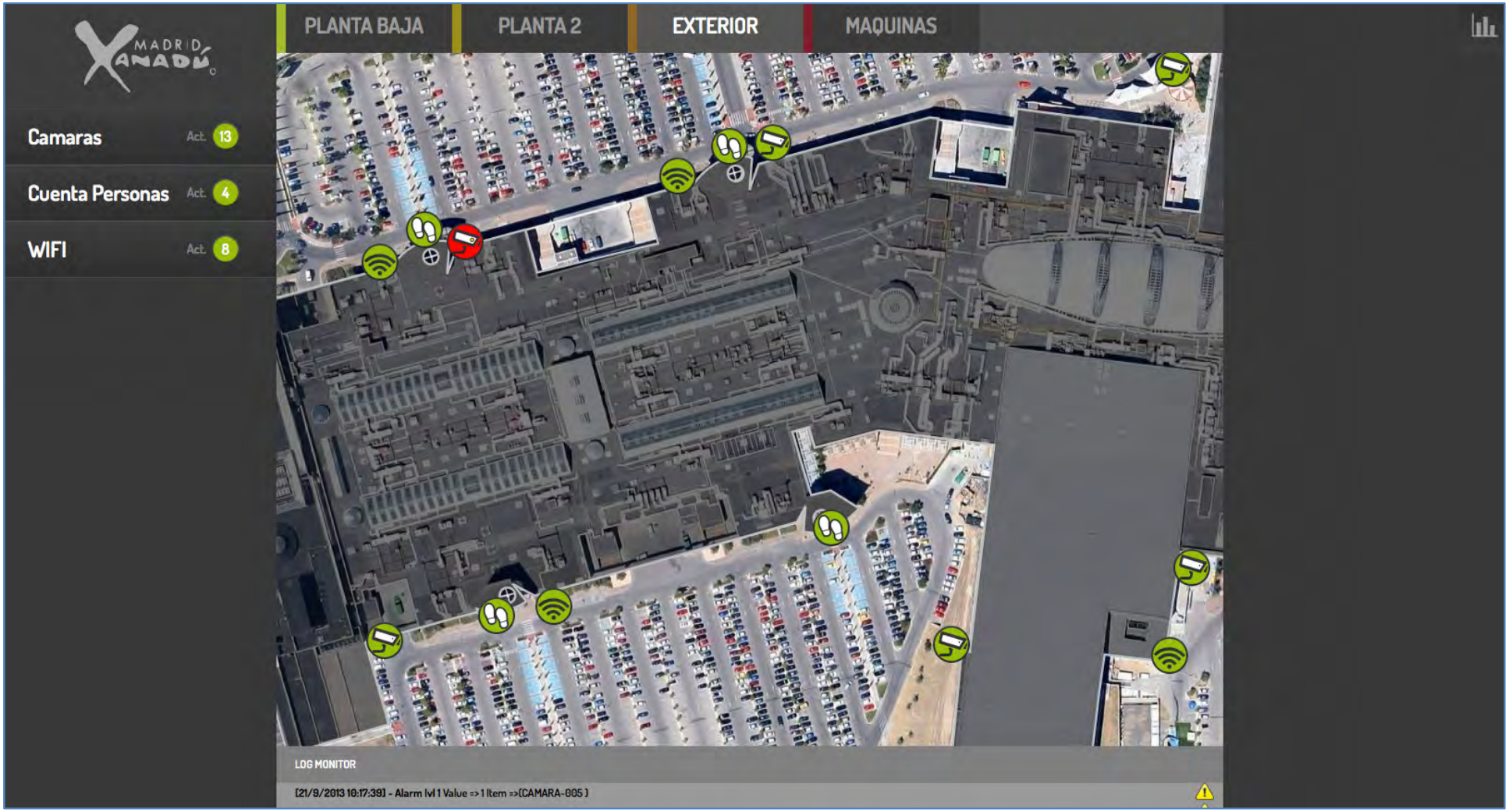

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Medidas Ambientales is a laboratory that annually performs about 11,000 environmental measurements from 7 nuclear power plants in Spain (direct radiation, air deposition, water and food).

medidas ambientales

PROBLEM

All measurements, manually

SOLUTION

SMART NUCLEAR PLANT. Deployment a network of environmental sensors that collect information automatically and monitoring real-time with alerts and reports.

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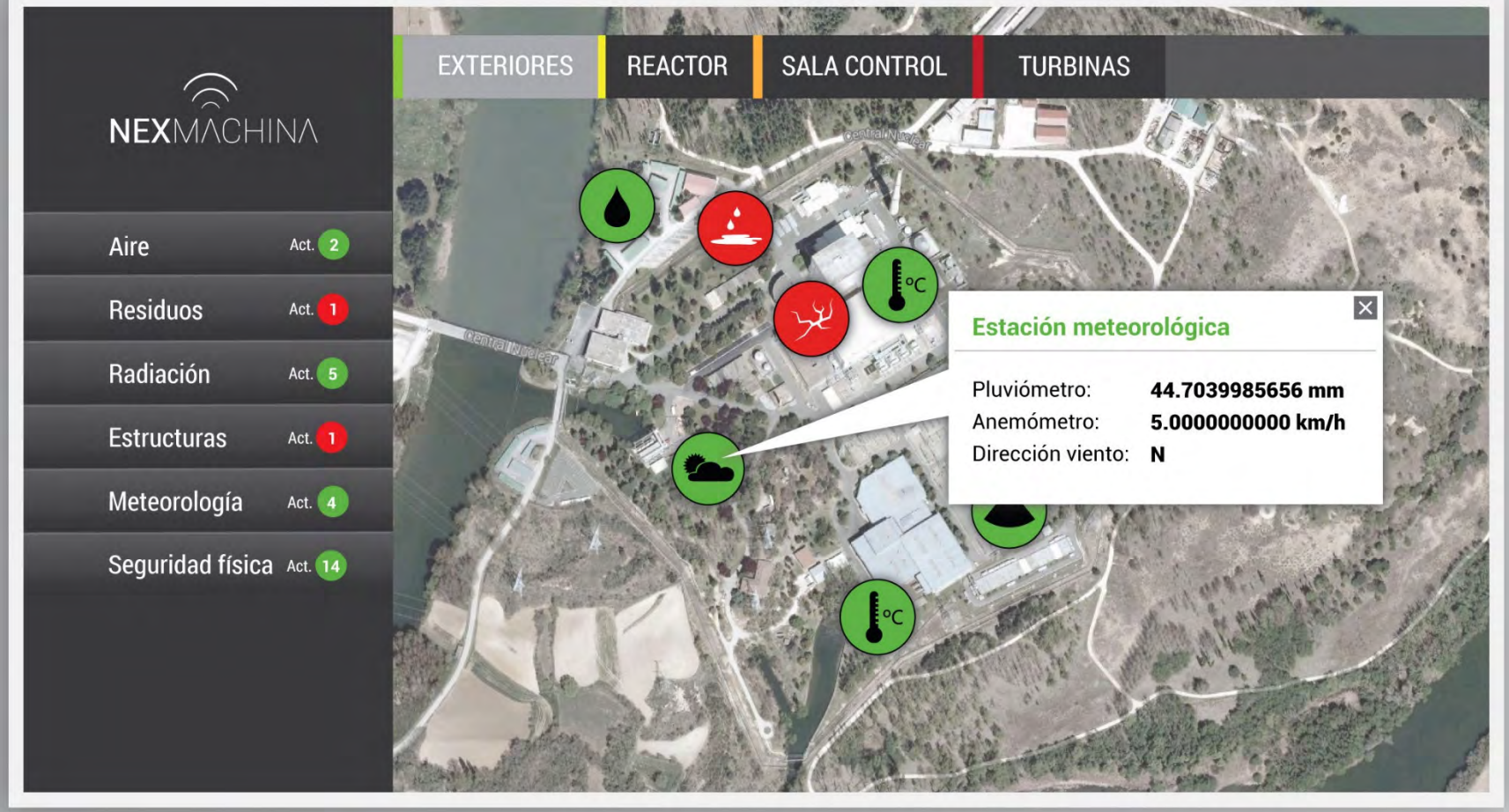

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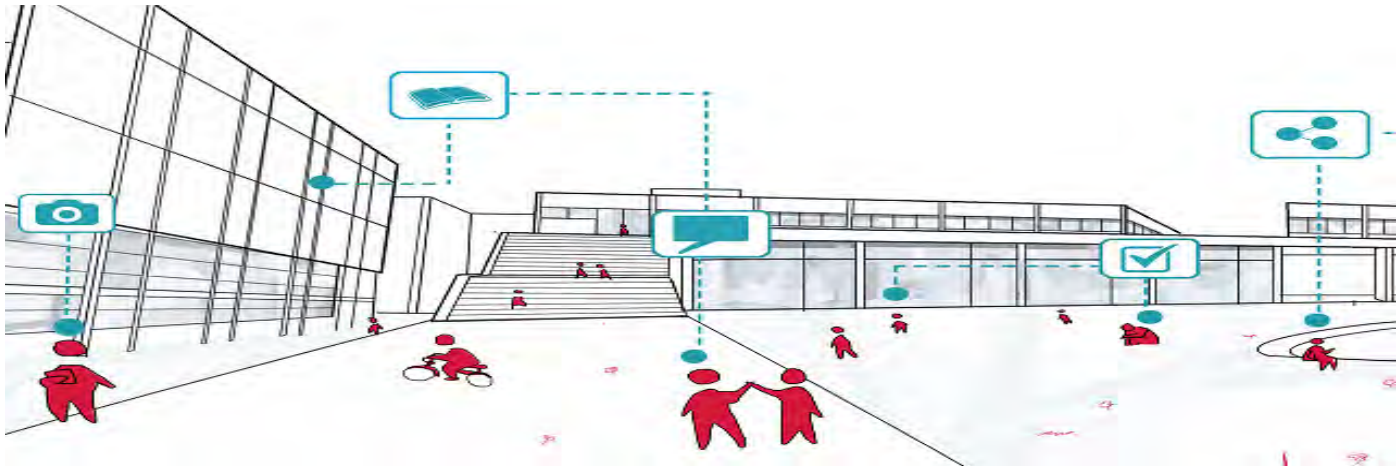
Thanks for listening



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