

SMART CITIES

Waste Management

HOW CAN TELEFÓNICA TECH HELP?

We provide accurate and quality information in real-time about the filling level of the different containers.

Waste Management is a solution based on IoT devices that helps municipalities and management companies **monitor in real-time the filling level of containers**, allowing for optimal planning of collection routes.

Population growth in urban areas generates a greater accumulation of waste, negatively impacting the visual environment and making waste management more difficult.

Unnecessary routes are made without accurate information, increasing operating costs and emissions.

It is possible to obtain real-time data on the status of the containers with our solution, **optimizing collection routes, reducing costs, and minimizing environmental impact** thanks to our solution.

WHO IS THIS SERVICE FOR?



Public administrations, such as town halls, associations of municipalities and provincial councils.



Urban managers seeking to have exhaustive control over the fill level and access to containers in real-time.

OUR VALUE PROPOSITION

Our service

The Waste Management solution includes the following components:

- › **Filling sensors:** These provide real-time information on the capacity level of the containers.
- › **Smart locks and NFC cards:** These guarantee controlled and safe use of the containers, allowing access to be managed efficiently.
- › **IoT connectivity:** This uses secure protocols to send information from the devices to the management platform.
- › **Software platform:** Processes raw data to provide real-time information on the status of containers. It also generates optimized collection routes based on fill level.
- › **Optional components:** These include a citizen app, which facilitates interaction with users and the promotion of responsible recycling habits.

What does it allow you to do?

This solution will allow you to:

- › **Monitor the fill level in real-time:** Obtain accurate data through the installed sensors, identify trends, and predict future behavior.
- › **Calculate efficient and profitable routes:** Optimize the planning of pickups according to the fill level of the containers, reducing costs, and emissions.
- › **Manage data and alarms:** Monitor the data collected by the sensors and set up alarms in case of incidents, such as fires or container overturns.
- › **Control access and record activity:** Ensure proper use of containers through smart locks and NFC cards, allowing for detailed access and usage records.

Benefits

Resource optimization

Plan routes based on real-time data, reducing the use of collection vehicles and decreasing fuel consumption, which contributes to more efficient and sustainable management.

Constant availability

It allows users to dispose of their waste at any time of the day, 365 days a year, eliminating time restrictions.

Increased citizen well-being

Avoid the accumulation of waste in urban areas, reducing the presence of overflowing bins and rubbish in the streets, improving the quality of life.

System accessibility

It guarantees an adequate number of bins in relation to the population using them, ensuring their strategic location in buildings or streets to facilitate access.

Telefónica Tech's differential value



Own platform

An in-house development that integrates all the solutions necessary to digitalize spaces, gain detailed knowledge of the business and customers, increase sales, and optimize operational processes.



Adaptation to customer needs

We offer a personalized solution through the combination of technologies, sensors and optional information modules, ensuring an optimal response to the specific needs of each customer.



End-to-end solution

Optimized and managed by Telefónica Tech, with a single point of contact for centralized and efficient service.



Big Data from the Telefónica Tech network

We enrich our knowledge of customers with sociodemographic data (gender, age, income level, etc.) obtained from our mobile communications network, a competitive advantage exclusive to top-tier network operators.

BUSINESS MODEL

The service offers a comprehensive solution that includes the necessary hardware (sensors, smart locks, NFC cards, etc.) and the software for device management and data visualization. It also covers deployment, initial configuration and integration with analysis and/or visualization platforms that the customer already uses, guaranteeing a personalized and efficient implementation.

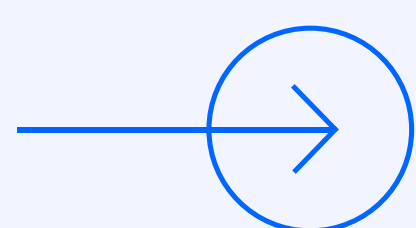
RELATED PARTNERS



RELATED SERVICES

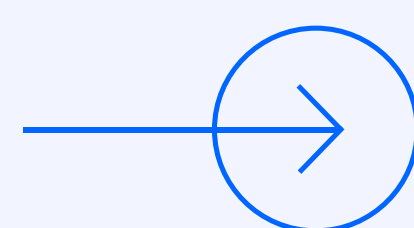
Smart Parking

Accurate, real-time information on city parking zone occupancy. This solution enables better management and planning of available resources, enhancing operational efficiency and improving citizen satisfaction.



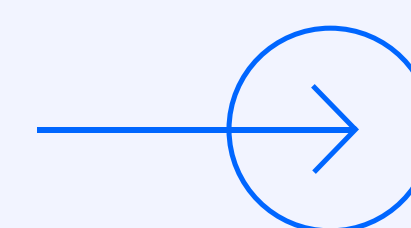
Air and Noise Quality

We assist you in implementing more sustainable urban planning, reducing pollution, and keeping citizens informed at all times about the environmental quality of their surroundings.



AI & Data Consulting

We design a master transformation plan centered around data, guided by your business priorities. Based on these priorities, we build a technological ecosystem of IoT and Artificial Intelligence, enabling your company to leverage the potential of these new technologies to generate new revenue streams, optimize costs, or reduce risks.



Contact us to start the digital transformation of your organization.

