Deloitte.

A city sees what's possible for its citizens and visitors with a cloud-based command center

The city of Cascais, a 650-year-old city on the coast of Portugal, attracts more than 1.2 million tourists each year. This influx of much-wanted visitors strained the city's resources—from parking to waste management—given its aging IT infrastructure, increased costs, and fragmented technology portfolio. Cascais knew its appeal to tourists would continue to grow, so city leaders adopted a mission: To test innovative solutions capable of being scaled that would streamline Cascais's operations and establish it as an integrated, operational Smart City.

They also decided not just to solve for current problems, but also to create a digital ecosystem, in which Cascais's city operations could efficiently deliver data and insights across mobility, construction, waste management, civic protection, and emergency management. The digital ecosystem needed a central nervous system—a command center that would integrate new digital operations and give leaders a view into the systems and technologies across the city's departments. ⊙

Deloitte Cloud

What happened next

Deloitte Consulting LLP and the city worked together to build a cloud-based Digital Command Center enabled with data visualization and analytics to centralize Cascais's digital operations and manage processes across all departments and technology systems. The team built mobile apps to connect the city to its residents and visitors, allowing them to report problems, upload photos, and learn about changes in the city's services.

The city piloted the program applying Deloitte's 360-degree Smart City framework to a number of domains, including mobility, public infrastructure management, civic protection and emergency management, and waste management. The center collected data from each department and millions of objects across the city, like stoplights. Using analytics to quickly examine data, leaders sped up their decisions and actions, driving operational improvements and faster and better services. One result: A smart waste management system that uses sensors to track capacity on recycling bins, optimizing garbage collection time by city workers. By integrating waste management data with road construction data, city officials can also identify the best times and routes for garbage collection, helping to reduce operating costs and increase energy savings. Integrated data also means more sophisticated logistics and traffic management, potentially saving Cascais's citizens and visitors time and money. Now, the city is building a future-forward model that can be replicated by other midsized cities. For Cascais, cloud not only saved money, but also helped propel its government, citizens, and visitors into a tech-forward future.

The numbers

Example: Waste management

40%
operational costs reduced

20%
energy costs reduced

€900,000
saved annually

Example: Mobility

10-27%
expected mobility cost savings through:

- **2,000** shared bicycles
- **300** parking kiosks
- **1,280** parking spaces
- **12** bus lines
- An electric vehicle charging network

The wins

☑ Scalable solution

☑ Broad mobile solution adoption by citizens

☑ Multiple efficiencies created in each domain through analytics

☑ Better connection with residents and tourists via mobile apps

☑ Transformation into a Smart City

Contact

Miguel Eiras Antunes
Partner | Global Smart Cities
& Local Government Leader
Deloitte Consulting LLP
Tel: +351 201423825
Email: meantunes@deloitte.com