Smart Tourism Office

The Tool to Overcome Challenges.
Density and Tourist Flows Project

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Interreg Europe
Co-funded by the European Union

Tourism today

Smarter tourism

OUR GOAL

Working on the impact of tourism through **enhancing the visitor experience** , **improving the quality of life of the resident** and the **competitiveness** of businesses

Line of Actions >>

OVERCOMING CHALLENGES

Tourism Flows. Construction of indicators. Tourist housing. Employment.

KNOWLEDGE

Tourism Intelligence System. Studies with the University. Information.

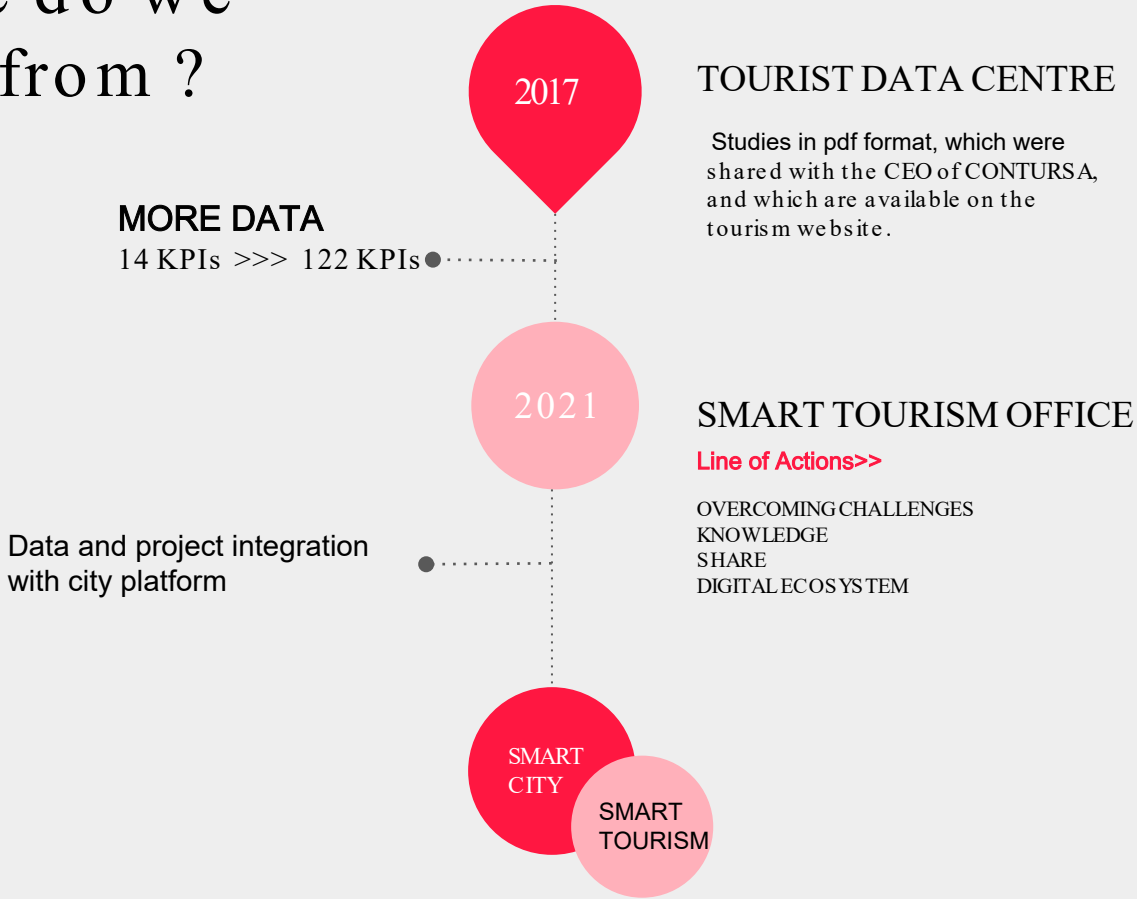
SHARE

Training for the sector. Transfer events. Participation in projects with other organisations.

DIGITAL ECOSYSTEM

Design of the Digital Ecosystem. Emergence of new applied technologies. Internal processes

where do we come from ?



What will we talk about?

01

Data for decision making

02

City Challenges

01 Data for decision making

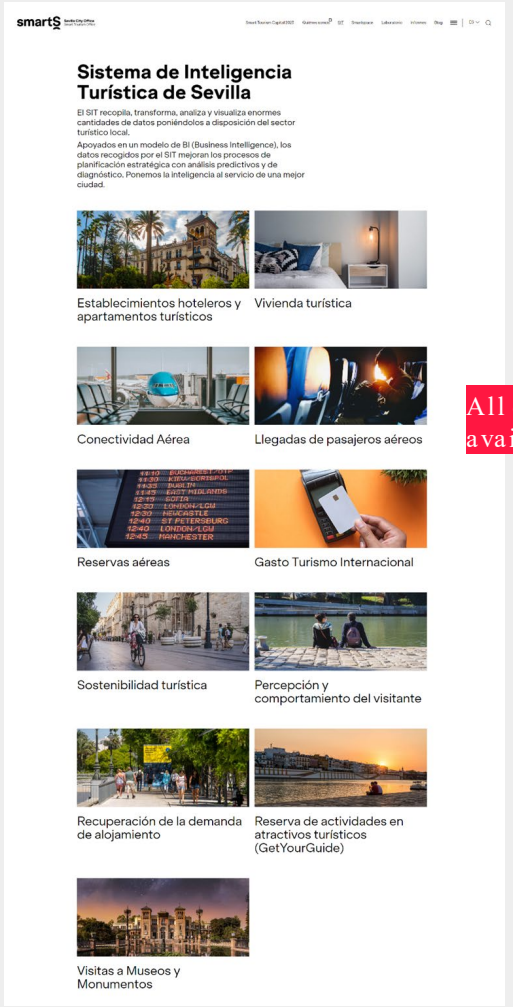
Data for decision making

01.1 Data for decision making

Data for decision making

Its mission is to improve strategic planning processes with predictive and diagnostic analytics.

Hotel Establishments and Tourist Apartments
Tourist Housing
Air Connectivity
Air Passenger Arrivals
Air Reservations
International Tourism Expenditure
Tourism Sustainability
Visitor Perception and Behavior
Booking Activities at Tourist Attractions (GetYourGuide)
Recovery of Accommodation Demand
Visits to Museums and Monuments



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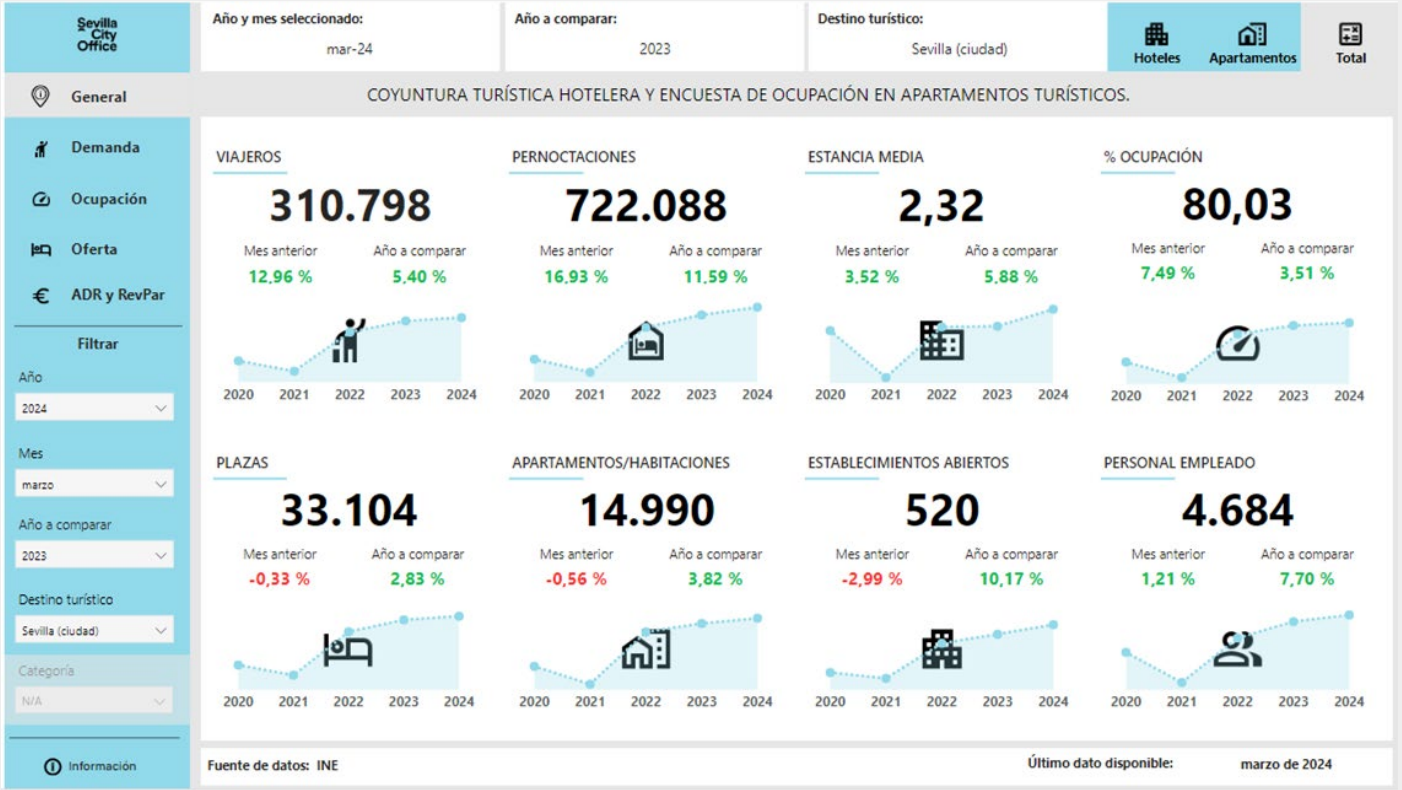
All dashboards are published and available for free on our website.

SCAN ME

Data for decision making

Monthly reports on the markets and on the current situation as a whole are published.

01.1 Data for decision making



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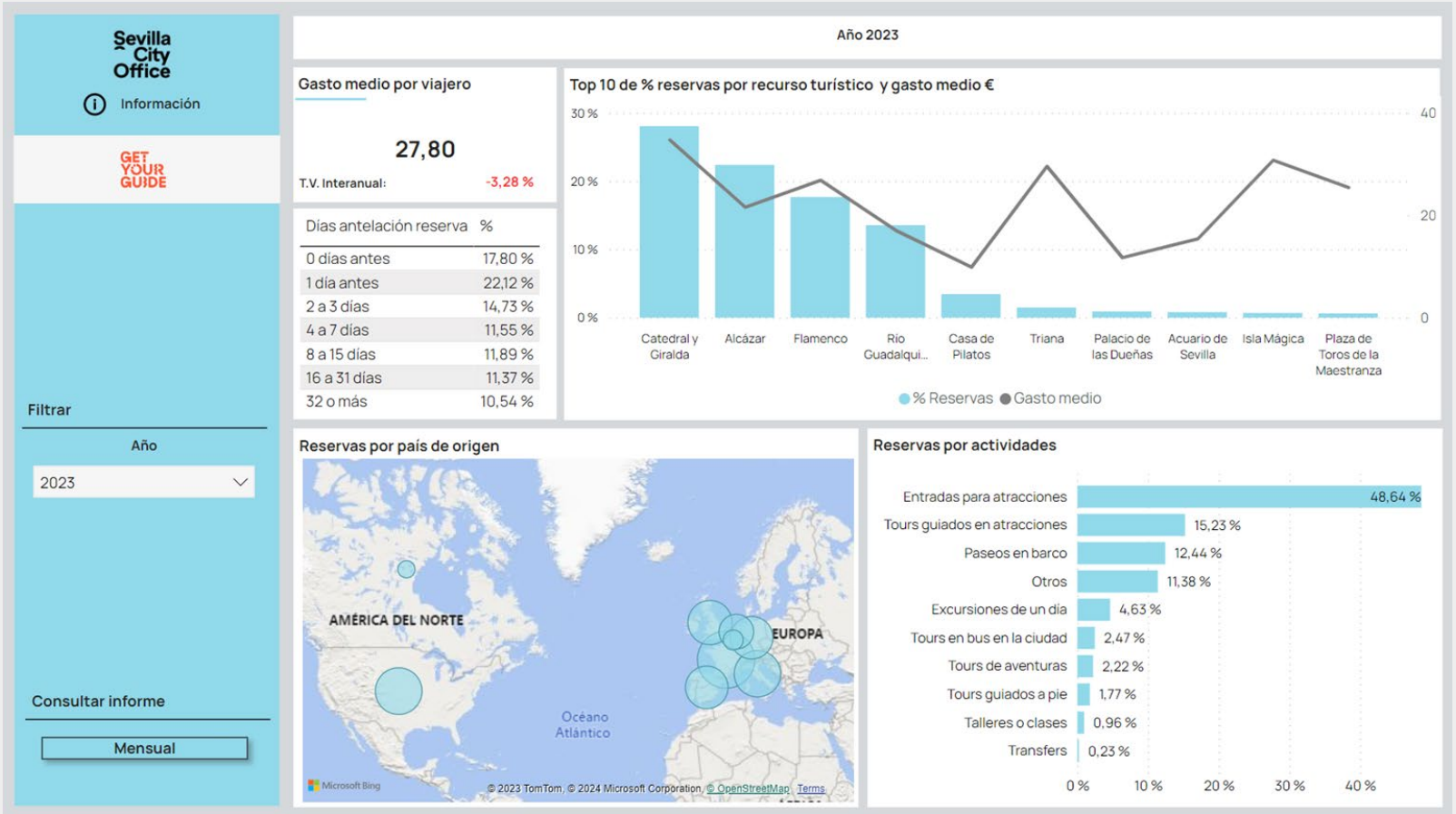

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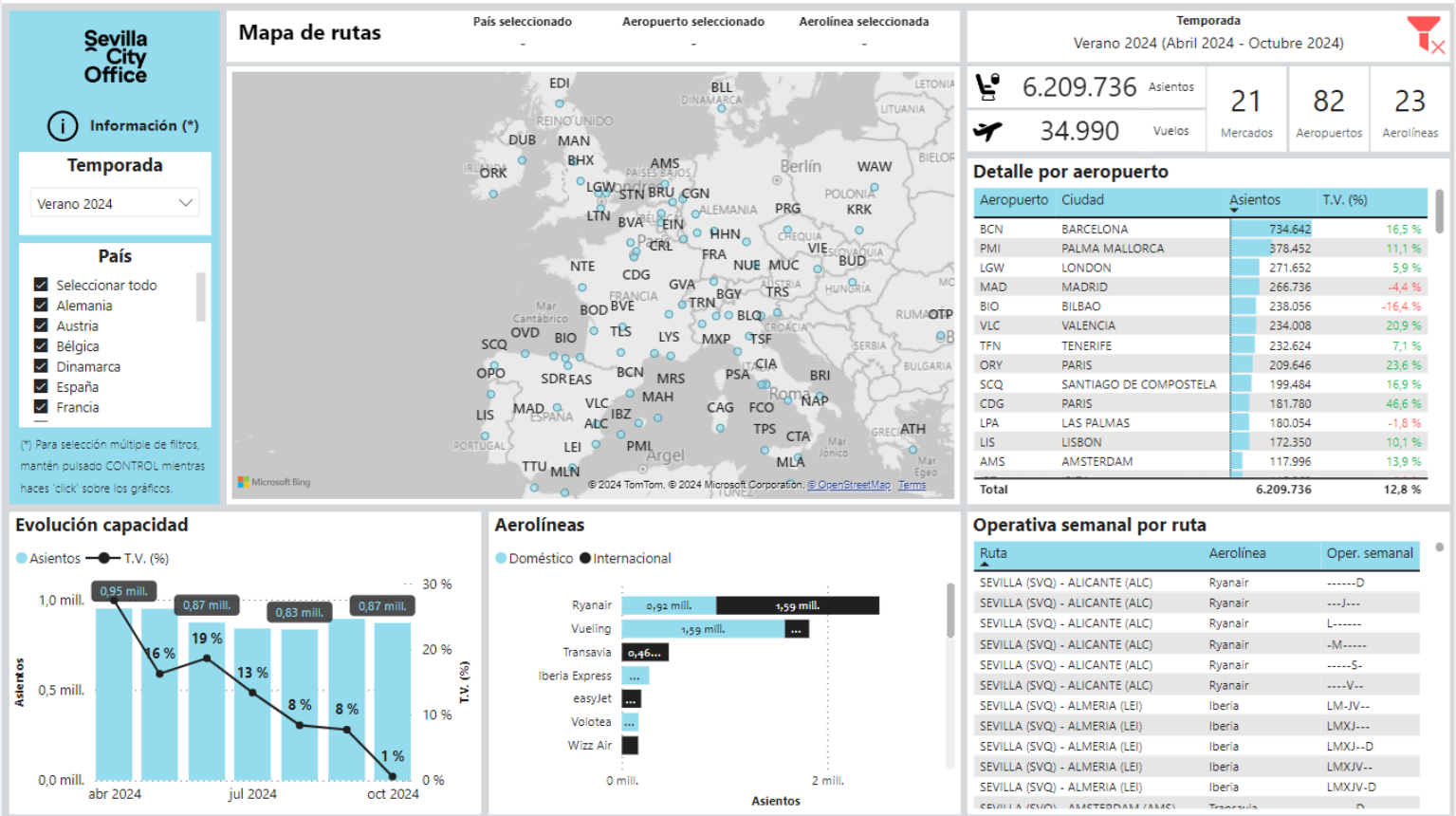

01.1 Data for decision making

Next Steps

Work on obtaining the city's data within the city, and not purchasing it from external companies

Cohesion

Training

Digitalization

02 City Challenges

Density and Tourist Flows

02

We are not the smartest, but we surround ourselves with those who know best.

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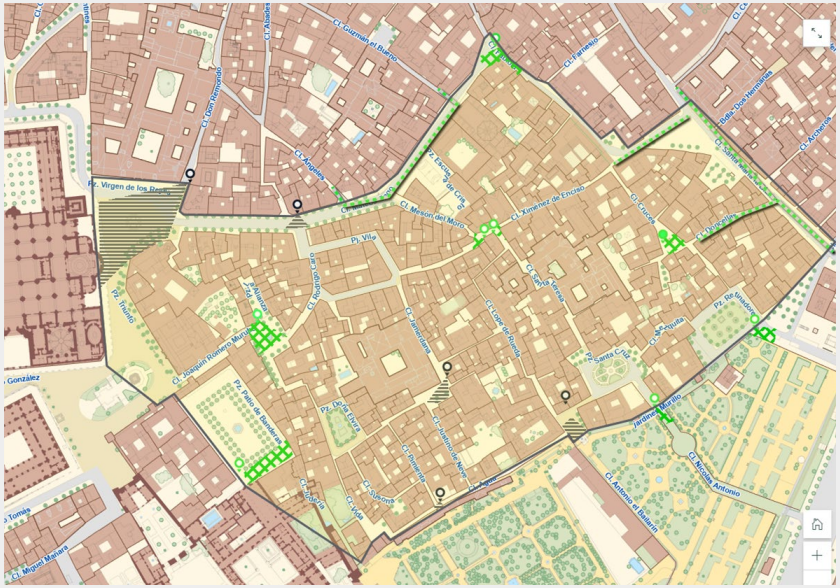
OUR GOAL

Relieve congestion in the Santa Cruz neighborhood and redirect flows to other areas of the city.

Boosting other tourist hubs in the city (northern area, Nervión, Triana, Macarena, etc.).

Improvement of the quality of the visitor's experience and the quality of life for residents.


Pl. Virgen de los Reyes
Pl. Triunfo
Pl. Villa
Pl. Santa Cruz
Jardines Murillo
Pl. Alfaro
Pl. Refinería
Pl. Ponce de León
Pl. Doña Elvira
Pl. Alcázar
Pl. Contratación
Pl. Triunfo de la Inmaculada
Pl. Ximénez de Enciso
Pl. Alfalfa
Pl. Jesús de la Pasión
Pl. Pilatos
Pl. Ntra. Sra. de los Reyes
Pl. Ntra. Sra. de la Antigua
Pl. Ntra. Sra. de la Paz
Pl. Ntra. Sra. de la Salud
Pl. Ntra. Sra. de la Victoria
Pl. Ntra. Sra. de la Encarnación
Pl. Ntra. Sra. de la Esperanza
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02.1 Density and Tourist Flows

3 Steps

Analyze the reality:
How many tourists go? How long do they stay? Where do they move? What is their experience?

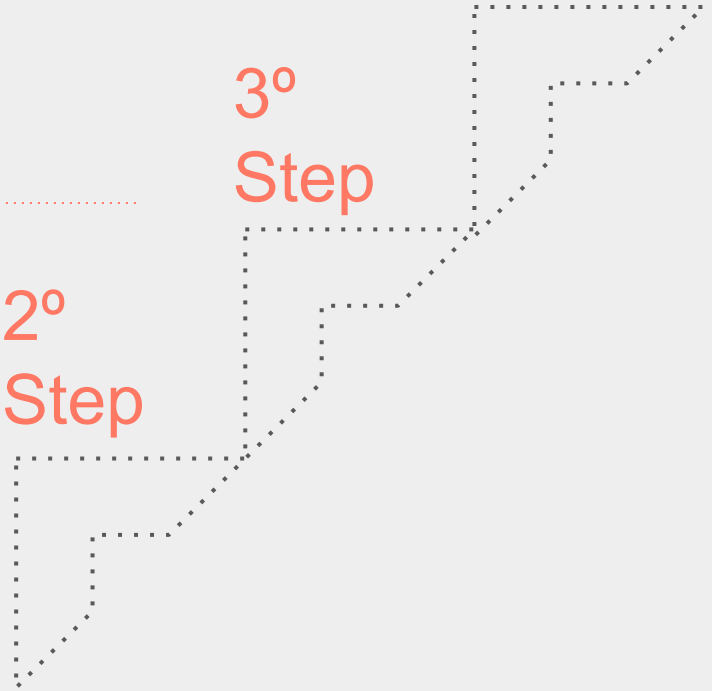
1º Step

Prototype solutions:
Prototype solutions with companies, the university, and the city council's interdepartmental commission.

2º Step

Analyze the impact:
Analyze the impact of measures through the indicator system

3º Step

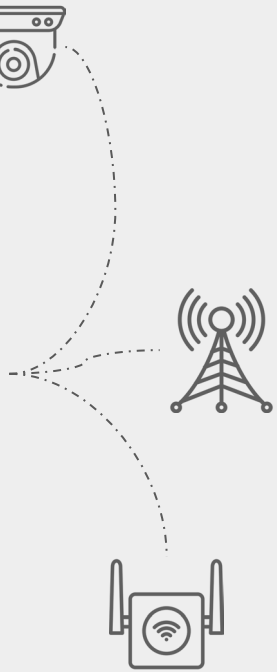


What's Happening?

Analyze the reality

We combine technologies to analyze how they can help us achieve our objectives (mobile network operators, Wi-Fi tracking, sensor cameras).Experimental project in which companies and universities collaborate.

Our objective is to manage the destination to improve the quality of life of residents and the visitor's experience.



Which is the reality?

Why we use three technologies?

Optical Sensor
People Counter within its angle of Vision

Wifi Tracking
Count devices, not people.

Mobile Operator
The only entity capable of identifying whether individuals within view are residents or visitors.

Density and tourist flows

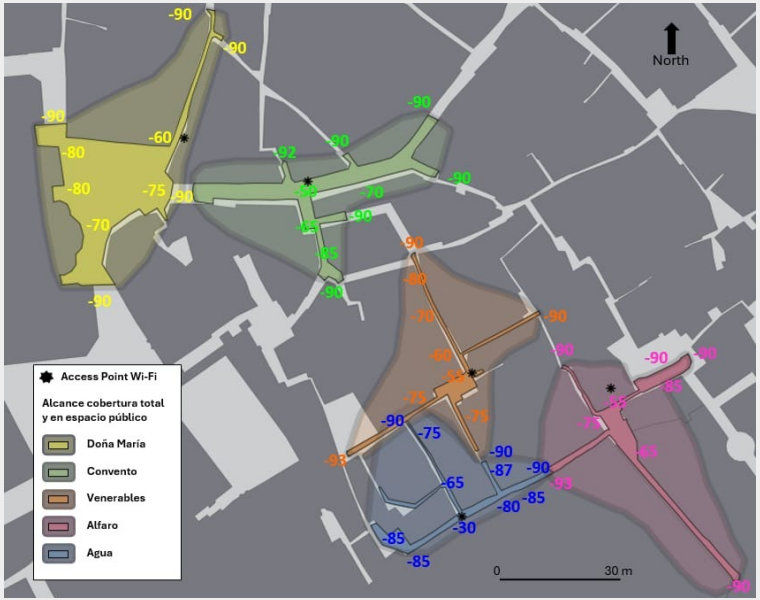
Wifi Tracking
hey can see whether or not someone passes through the various access points (APs).

Mobile Operator
The operator cannot track movement between streets; it analyzes large areas.

Wifi Tracking Location and Presence Analytics

It takes advantage of the signals emitted by smartphones, tablets, and laptops when they are not connected to a network. These signals are called "Probe Requests," and devices emit them when searching for nearby networks.

02.1 Density and Tourist Flows



Wifi Tracking Location and Presence Analytics

This is a study on the signal strength of devices. The closer to the access point (AP), the stronger the signal. It is greatly influenced by the thick walls of old buildings.

We use unidirectional APs installed at heights over 5 meters.

02.1 Density and Tourist Flows

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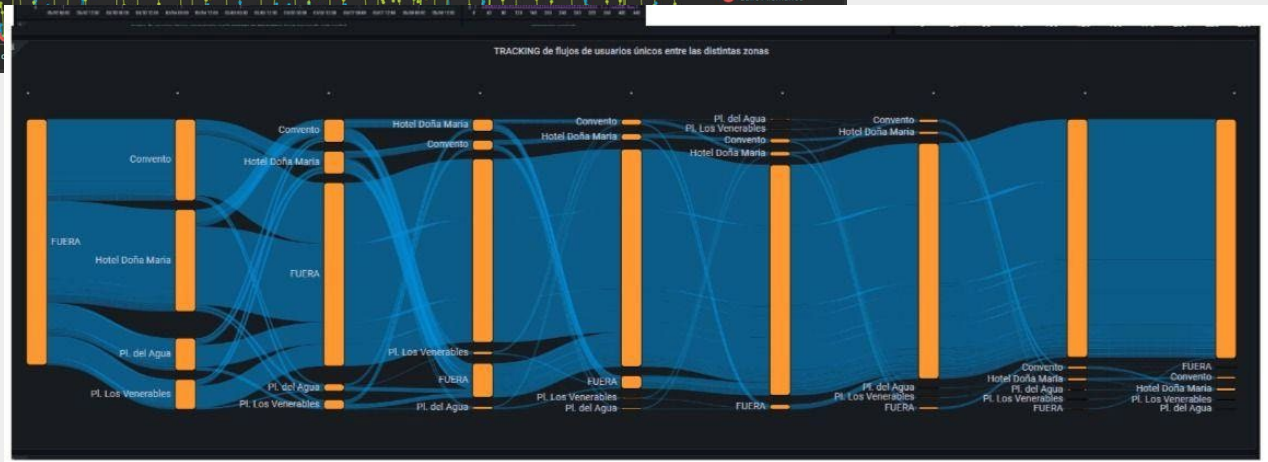
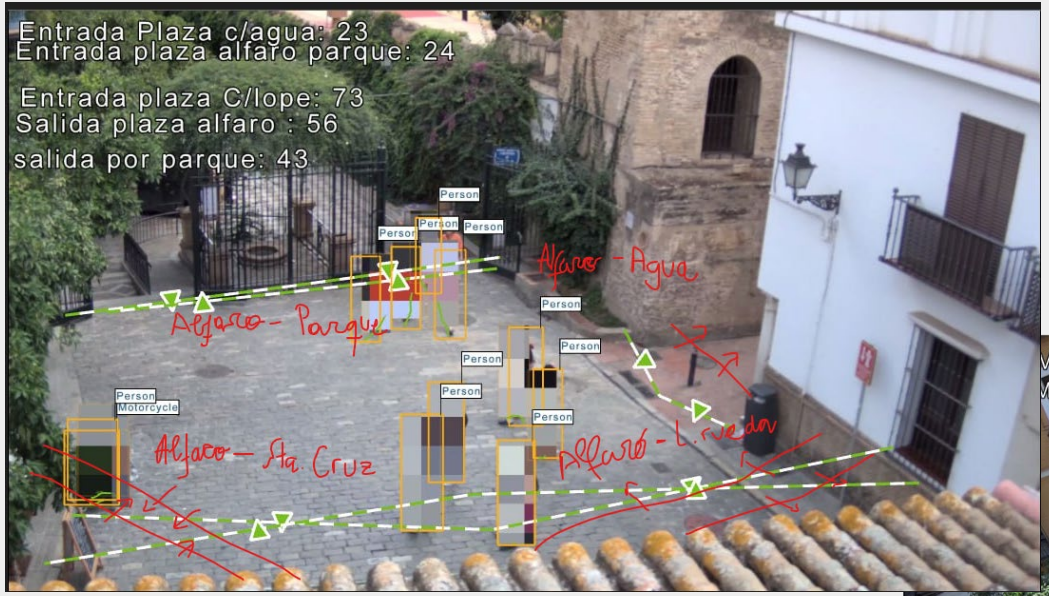
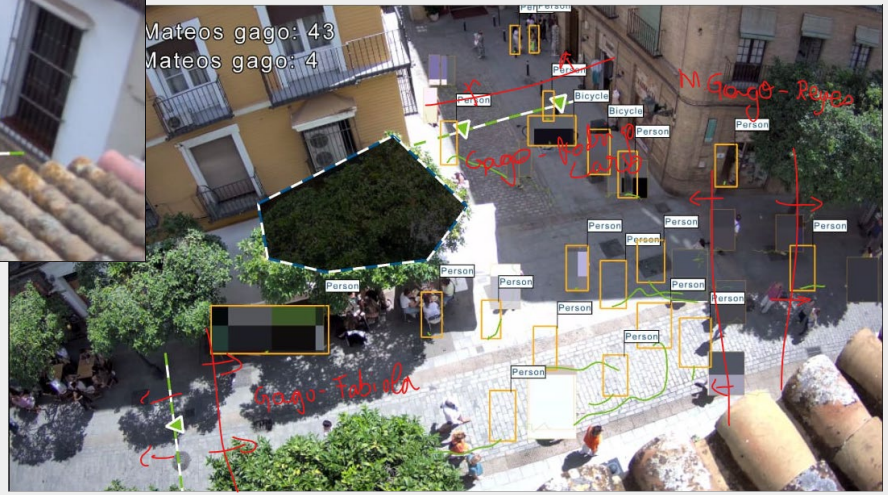


OPTICAL SENSOR

Data capture, no video, is displayed. The camera identifies learned patterns. The development of sensor technology is constantly evolving to respond to future analysis.

02.1 Density and Tourist Flows





02.1 Density and Tourist Flows

What's Happening?

Relevant aspects to consider in terms of data protection

Prepare a thorough impact analysis before deployment.

Work with highly secure and trustworthy providers.

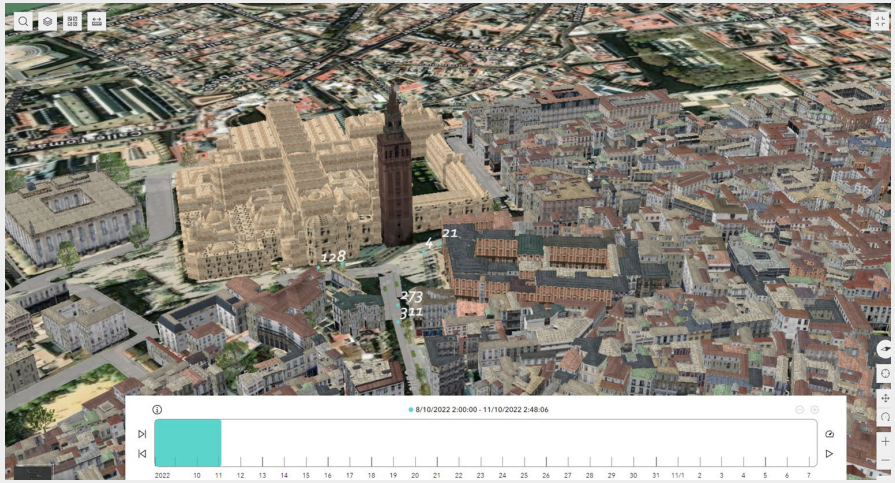
It is mandatory to set a start and end time for daily analysis.

Demonstrate legitimacy for the common good.

Mark the area with signs that communicate the project.

Digital Twin

We have created a digital twin of the Santa Cruz neighborhood so that everyone can work with the same data in a more visual way and potentially develop predictive models in the future.



NEXT STEPS

Field work to identify device errors depending on installation height, lighting conditions, etc.

Identify the flow analysis performed on individuals.

Work on a formula that determines how many people are present when including these three data points.

Include all the data in a digital twin to work with it.

Gather the commission to discuss possible solutions.

#Sharing is smart

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