

# **Working Group 4: Tourism, Health and Resilience Management from the perspective of a Smart City Platform**

**Smart Tourism: a path to more secure and resilient destinations**

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## Working Group 4. Objectives

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Meeting the challenges of a smart, sustainable, safety and resilient tourist destination calls for a revitalization model that will enable it to improve its competitiveness.

Analyze a set of solutions ensuring the sustainable development of the tourist destination, improving its accessibility and interaction with the visitor, in addition to its integration with the territory and the quality of life of its residents.

Explore various use-cases in the sphere of tourism that provide counter measures to build resilience in smart and sustainable cities.

## Key success factors and conclusions

The experiences derived from this report provide some interesting insights into where the “smart tourism destination state of the art” is at present. It shows the importance of continue developing standards and norms as well as improving the smart destination methodology framework in order to overcome barriers for successful use cases implementation.

- A clear long-term vision, leveraging on existing resources, both in-house and external
- Progressive implementation through projects with real short-term impact
- Collaborating with the citizen, making him/her a part of the city and services, as well as the recipient of the services
- Active involvement of officials and workers to build and share the vision
- Service delivery models suitable for public-private collaboration and innovation
- Sharing experiences, knowledge and resources between cities and territories

## 2. Report executive summary

Resilience Management from the perspective of a Smart City Platform

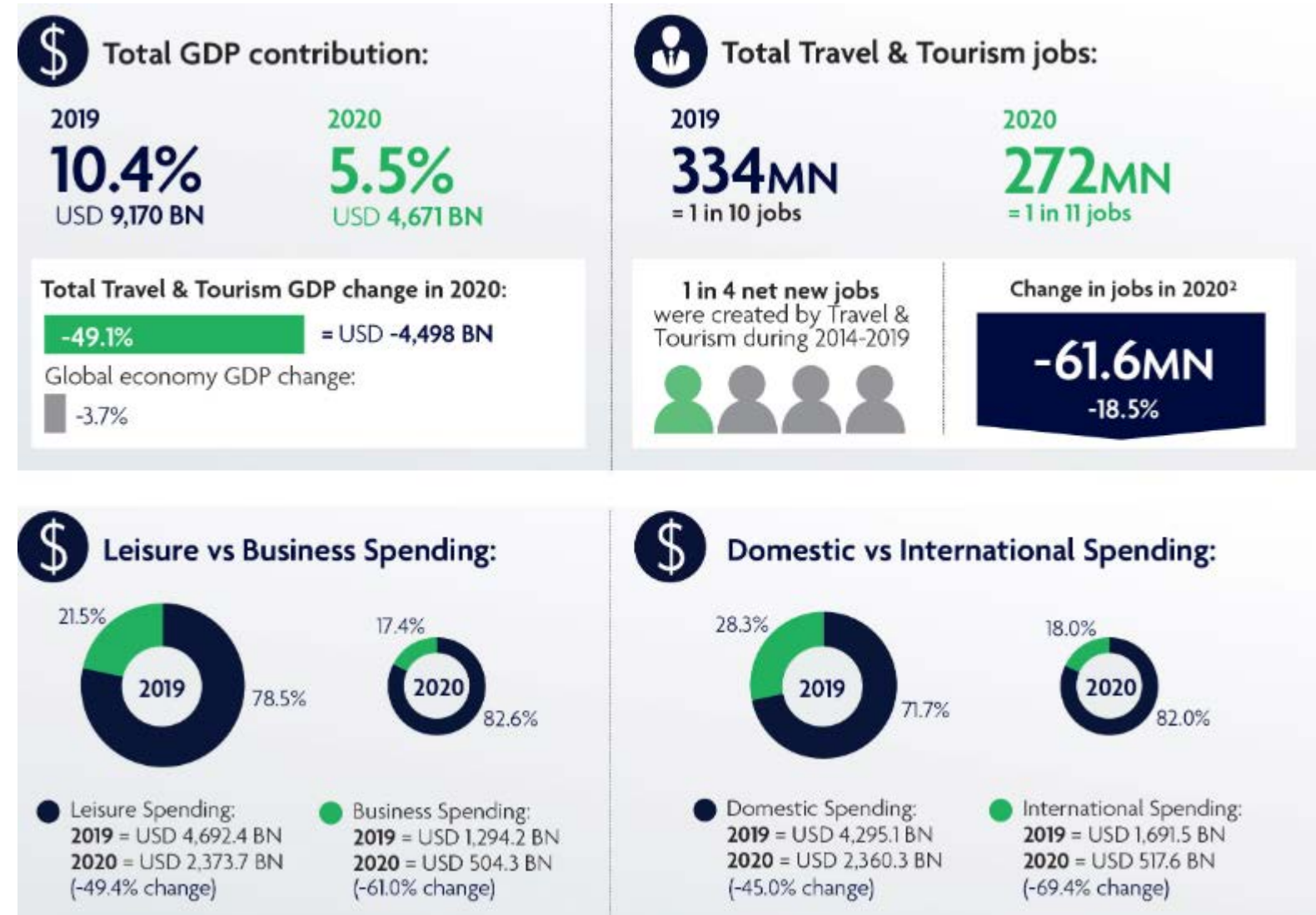
**Smart Tourism: a path to more secure and resilient destinations**



# Digital Transformation, a vital partner for safe and resilient tourism

It is essential for society to be increasingly better prepared to respond to potential crises that, as in the case of COVID-19, have a detrimental impact on destinations. Tourism as a sector needs to be better prepared in times of crisis in order to protect people and destinations. Technology and digitization are powerful tools for moving towards a tourism industry capable of ensuring its resilience in any scenarios

**Tourism and travel (including its direct, indirect and induced impacts) contributes approximately 10.4% of the global GDP and generates one out of every four jobs in the world**



Source: Annual Economic Impact Report 2021, World Travel & Tourism Council

# The sector's ability to cope with crises is critical to the economic development and sustainability of tourist destinations

## 1. Anticipation and preparation

Identifying and understanding the threats in order to build a resilient tourism approach to operate and thrive in this dynamic, diverse and global environment.



## 2. Effective and rapid response

Systems that help to respond in an agile and coordinated manner to the needs of the population, optimizing the mobilization of resources in a dynamic manner according to the circumstances of each territory and city.



## 3. Return to normality

Provide tourist with an experience that incorporates the safety and security of feeling cared for and safe during their trip and stay at the destination taking into account their needs.



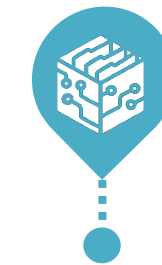
Technology companies share the mission of contributing with their digital solutions for Smart Tourism to make travelers want to return to the destinations as soon as possible



Prediction tools



Blockchain



Digital Twins



Artificial Intelligence



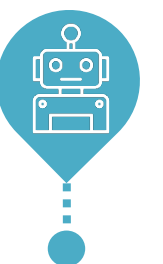
Cybersecurity



Advanced digital APPS, Webs and bots



AR & VR



Robotics

# The Smart Tourism Destination

## A Tourist Destination is Smart when:

... **Uses the technological infrastructure provided by the Smart City.**

... **Improves and personalizes tourism experience and makes visitors aware of the products and services available.**

... **Gathers and offers intel to DMOs, local institutions, and local tourism business.**

**Innovative space on the territory that uses cutting edge technology.**



**Integrates human capital, leadership, social capital, and innovation.**



**Holistic and interdependent system, comprising distinct stakeholders and creating a whole ecosystem.**



**Impact on the social economic activity across the territory and quality of life.**



# The Spanish Smart Tourist Destinations Framework



**An ecosystem of more than 380 agents: destinations, and DMMO as titular members, institutional members and collaborating members such as associations, businesses and academic institutions. Destinations receive knowledge, technical assistance, tools and support in their digital transformation process.**

**A common methodology to become Smart Tourist Destinations based on five pillars:**

## Governance

Strong tourism governance that must create a strategic vision for the future of the destination, identify and implement all actions identified as strategic for the destination.

## Innovation

A continuous improvement process, carried out systematically, to brings new ideas and facilitates value generation, helping to reduce risks.

## Technology

Digital transformation of the destination across the board, deploying and incorporating cutting-edge technologies for critical processes.

## Sustainability

Treating the authenticity and cultural diversity of the destination with respect, and expanding the opportunities and benefits of tourism to the local population are key to social and economic sustainability.

## Accessibility

Develop a "universal design for everybody" that allows anyone full access to the destination, without exclusions of any kind, guaranteeing the equal right to fully enjoy the destination



# Standards & Norms

To improve the management and tools for Smart Tourist Destinations so as to create a consistent framework for developing Smart Tourist Destinations (STDs) aligned with the process of creating smart cities



## ITU

**Y.4200** - Requirements for interoperability of smart city platforms.  
**Y.4201** - High-level requirements and reference framework of smart city platform  
**Y.4461** - Framework of open data in smart cities  
**Y.Suppl.34 to ITU-T Y.4000 series** - Smart sustainable cities - Master plan  
**Y.Suppl.32 to ITU-T Y.4000 series** - Smart sustainable cities - A guide for city leaders  
**Y.Suppl.34 to ITU-T Y.4000 series** - Smart sustainable cities - Setting the stage for stakeholders' engagement



## ISO

**ISO/FDIS 21902** – "Tourism and related services. Accessible tourism for all. Requirements and recommendations"  
**ISO/DIS 23405** – "Tourism and related services. Sustainable tourism. Principles, terminology and model"  
**ISO/DPAS 5643** – "Tourism and related services. Measures to reduce the spread of COVID-19 in the tourism industry"



## UNE

**UNE 178501** – "Smart Tourist Destination Management System. Requirements":  
**UNE 178502** – "Indicators and Tools for Smart Tourist Destinations"  
**UNE 178503** – "Smart Tourist Destinations. Semantics applied to tourism"  
**UNE 178504** – "Digital, smart, connected hotel (HDIC) to smart destination/smart city platforms. Requirements and recommendations"

# A revaluation model of the destination that allows it to improve its competitiveness



**Solutions that guarantees the sustainable development of the touristic destination by improving its accessibility and interaction with the visitor as well as its integration with the territory and the welfare of its residents.**

## **Transform the current Destination**

**“From within”, starting from the present legacy, with focus on digitalizing operating models and safe visitor interaction**

## **Revamp the Destination**

**Future growth by reinventing and dynamically adjusting the destination’s value proposition, product offerings and distribution, and improving visitor interaction and the quality of life of residents.**

## **Create the Destination of the future**

**Trough preemptive measures and intelligent preparation so we can adapt products, channels, resources, services and infrastructures, offering a destination with every possible guarantee to respond to any crisis**

# Tackling the different phases of the digital transformation of the destination requires a technological model based on the following pillars:

**Focused on heritage tourism management to meet the economic and social needs of the destination through the use of new technologies that link the physical and digital worlds, improve relations with tourists and adapt supply to demand through a destination resilience model that guarantees its sustainability, increases its activity and minimizes its impact on the environment.**

## **Promotion and Relationships**

New promotion and relationship channels that deliver a 360° vision of the tourist with advanced relationship capabilities.

## **Space Management**

Physical and digital world integration for real-time monitoring, operation and management of heritage, leisure and/or natural tourist sites.

## **Tourism Intelligence**

Use of advanced analytics techniques to extract value from every interaction and tourist behaviour with the destination, its offering and services

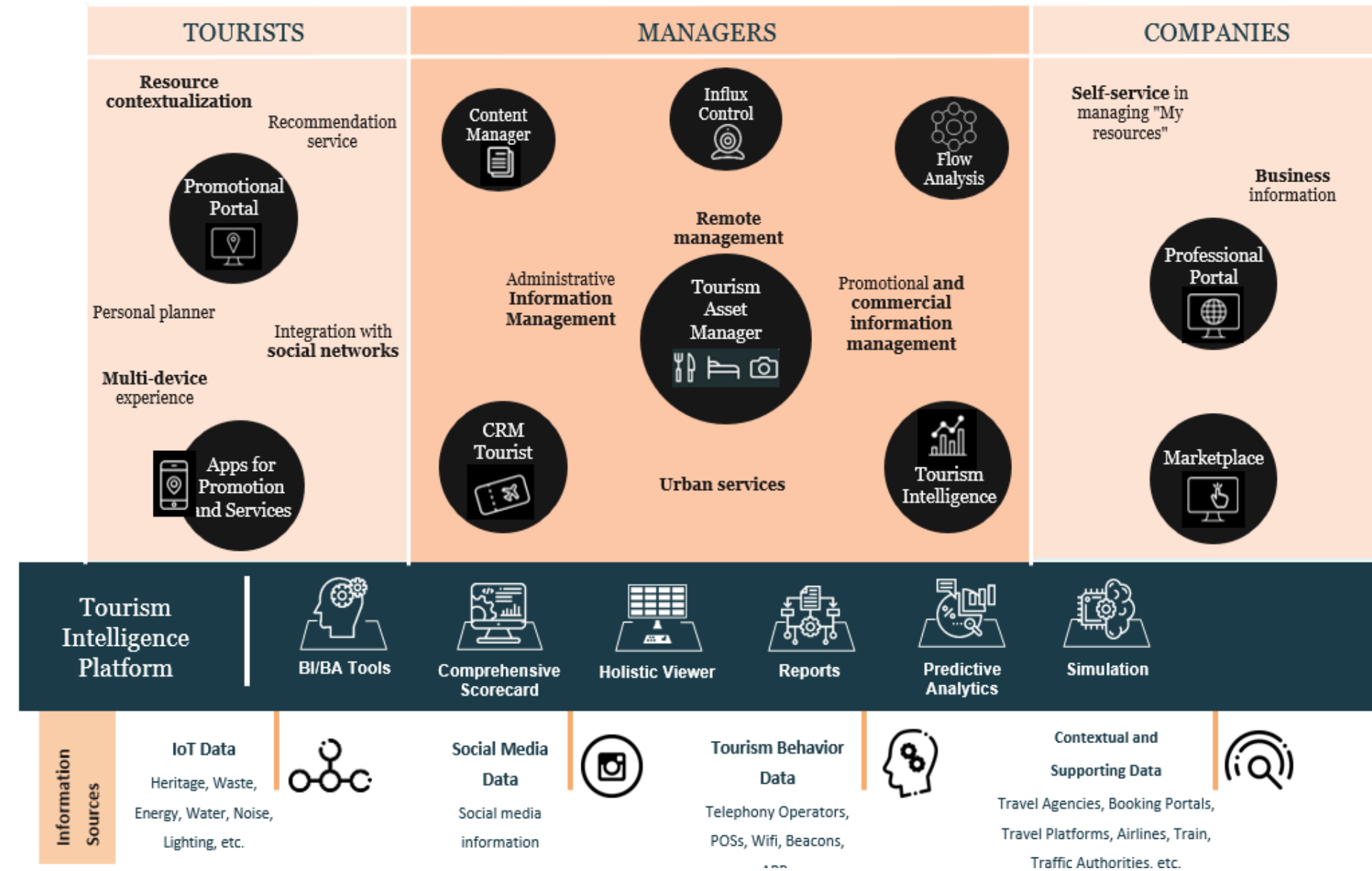
# Smart Tourism Destination Platform

**A Smart Tourism Technology Platform supports the end-to-end management of the tourist destination, both from a promotional and administrative point of view, and the relationships between the different stakeholders of the destination.**

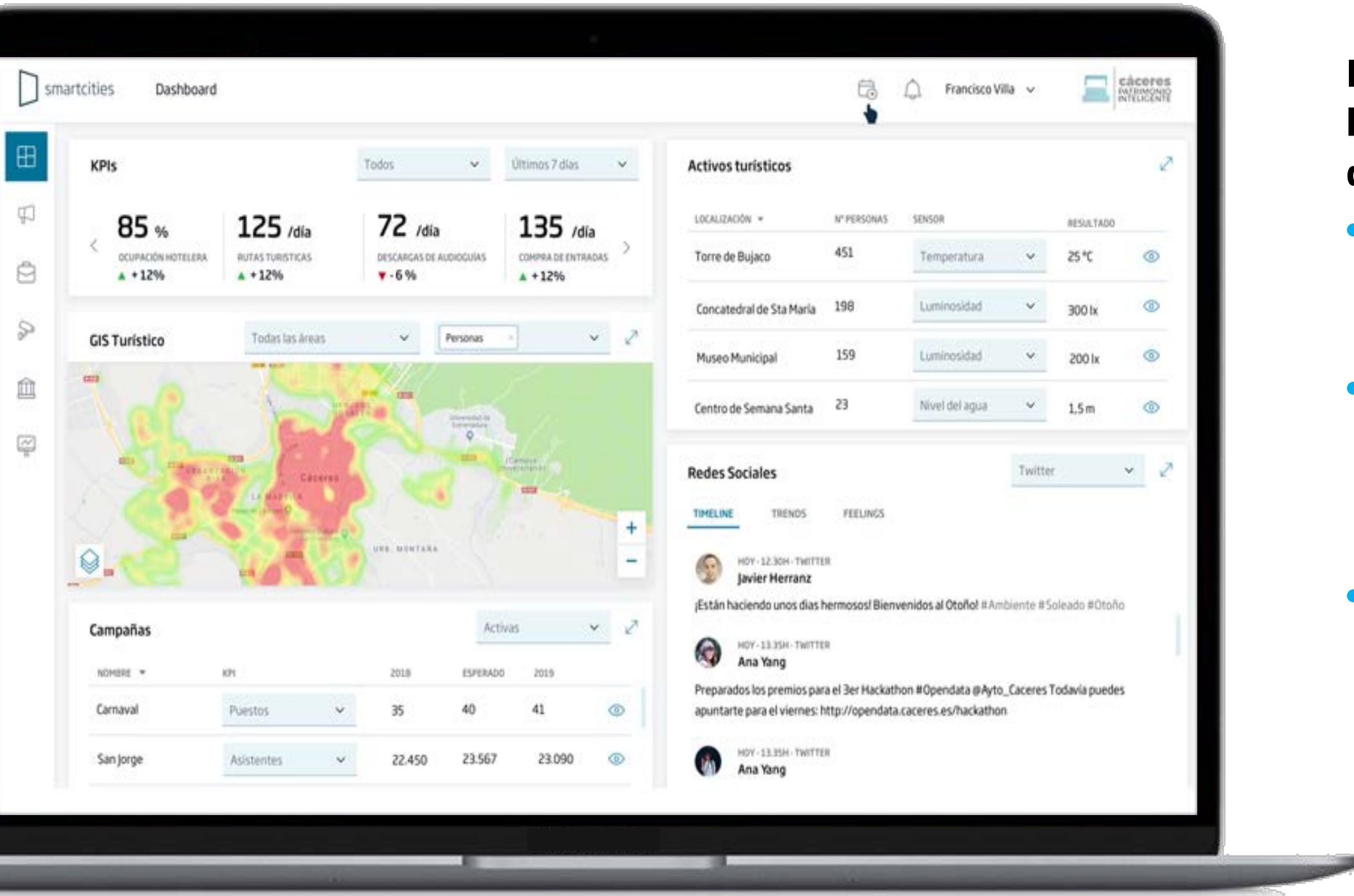
**Multichannel content manager for the development, creation, publication and updating of all the destination's tourism content and assets through web portals, mobile applications, totems, etc.**

**Digital marketplace: offering tourists the full range of the destination's products and services**

**CRM: rendering tourist segmentation and profiling capabilities**



# Comprehensive Tourism Management System



It is essential a comprehensive tourism intelligence system based on indicators that provides the destination differentiating elements:

- **Unified management:** the unified management of all indicators and processes of the destination; from monitoring, operation and promotion of tourism
- **Distributed intelligence:** getting the most out of the data, analyzing tourist flows, making it possible to direct demand and adapt the destination's offer to the needs of each visitor.
- **Productivity of the destination:** contributing to improve the use of tourism assets through the personalization of visitor services, directly impacting the destination's economy.

# With a wide range portfolio of solutions that through different use cases bring intelligent resilience to each Destination according to their needs



## Tourism space management

- Safe cultural and architectural heritage
- Capacity monitor
- Social distancing
- Face mask usage control
- Tourist pattern analysis



## Promotion and interaction channels

- 360° Planning
- Safe and customized offer
- Safe and advanced tourist services
- COVID-free tourist services
- Virtual immersion at the destination
- Safe tourism gamification



## Local service supply and demand management

- Professional portal
- Marketplace
- Local economy stimulation
- Scheduling and reservation manager
- Digital tourism community



## Tourism Intelligence

- Visitor segmentation and profiling
- Visitor behaviour and mobility
- Economic impact observatory
- Tourism spatial planning strategies
- Safe destination reputation analysis



# Success cases

## Cáceres Smart Heritage

The City Council of Cáceres has implemented a Smart Tourist Destination Platform where they can visualize the state of the city, creating unified and integrated strategies with the different actors of the city, knowing the profile of the tourist and sizing services and infrastructure to improve the perception of the tourist.



## Las Palmas de Gran Canaria – Blue Intelligence

Implementation of an open IoT and Big Data platform capable of integrating and managing multiple sources and devices under predictive rules and models and transforming them into relevant information, not only for citizens and tourists, but also for managers, who will help them make decisions that are better adapted to the city's needs.



## Vatican Museums

Project to develop digital solutions and technologies managed by an intelligent platform that enables the sharing of information among all the agents in the value chain in order to offer users more attractive and safer experiences that will attract more visitors and boost the museum's economy while respecting its environment.



## Valencia - Descarbonizing Tourism

Strategy based on a sustainable tourism development model, capable of extending profitability to the social and environmental level, effectively contributing to the protection and enhancement of the cultural and natural heritage, with special emphasis on those resources that give the destination its greatest authenticity and uniqueness.



## La Nucia Smart Sports Destination

Smart Tourist Destination specialized in sports implying a new way of selling, operating, serving residents and visitors and relating to the institutional, business and social environment. Is a pioneering and innovative project which relies on the power of the Camilo Cano Sports City, recognized as the Best European Sports Village of all time.



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Thank you!

