



Smart tourism

TRANSFORMATION HANDBOOK

2022

Transformation is in our DNA

The public health and economic crisis triggered by COVID-19 has focused our minds on the need for **a swifter economic and social transformation** – the only way we can count on a full recovery and get back on track for growth.

We believe that **digitalisation is key** to making this transformation possible. Technologies such as 5G, cloud storage, cybersecurity, AI, big data and IoT will be game-changing – as demonstrated by our extensive catalogue of solutions, applications and use cases. Our capacities and experience make us the perfect partner for businesses and local authorities as they take on the digital challenge.

We stand for a **fair, inclusive and sustainable digital transformation**. Our mission is to harness technology for people and planet, lightening the environmental load and offering our clients solutions that get them working more efficiently and sustainably.



Tourism:

a key sector in our economy

TOURIST

Today's tourist demands unique and personal experiences, and they want to be connected throughout their trip. Businesses and cities should be prepared to meet the demands of this new type of traveller.

DESTINATION

With support from European funds, destinations are now turning into Smart Tourist Destinations, offering high-quality services to tourists and boosting connectivity. 5G, edge computing and big data are crucial for the return of tourism.

SUSTAINABILITY

We have to ensure that tourism is transformed in a sustainable way, both for the preservation of the environment and on an economic level, to create employment and revenue in each destination.

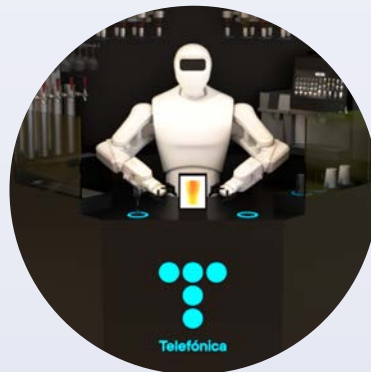


How we are revolutionising tourism

5G ROBOTIC HOSPITALITY

5G AND EDGE COMPUTING FOR THE ROBOTIC SERVICES INDUSTRY

Development of new services in the hospitality sector, applying robotics in areas such as cooking, catering and customer service. 5G is able to bring enhanced functions to robotics, such as image analytics at the edge, telecontrol, V2X deliveries and simultaneous translation.



SANTANDER CITY COUNCIL

CONSOLIDATED SMART TOURISM DESTINATION

We are working with the Santander City Council in its transformation into a smart tourism destination, helping to design its strategy and implement innovative technological solutions that will turn it into a more competitive and sustainable destination, as well as improve the quality of life of both the city's permanent residents and the experience of anyone visiting as a tourist.



LA MANGA 365

INNOVATIVE TOURISM SOLUTIONS

The La Manga 365 project drawn up by the Autonomous Region of Murcia, aims to implement solutions that will digitalise La Manga – an area where tourism is one of the main industries.



INE

MORE DETAILED AND FREQUENT STATISTICS, THANKS TO TELCO DATA

We're working with INE on a new statistical model that combines traditional surveys with mobile phone data. This provides us with more detailed, timely and frequent statistics.





TESTIMONIALS

What our clients say...



Sergio Fuster | **Codorníu Raventós**
CEO

"Raventós-Codorníu has built its strategy around sustainability and innovation, as shown in this demonstration of our Raimat Wine On Tap system. We are launching a sustainable revolution in how we serve a glass of wine. Integrating this type of robotics solution brings us enormous added value, because by adding 5G connectivity and edge computing capabilities, we can innovate in a much more dynamic way."

Gema Igual
Mayor of Santander



"Telefónica is one of the leading names in innovation and technology and we are delighted to have been able to partner with them in our transformation into a smart tourism destination."



Javier Celdrán Lorente
Minister of Economy, Finance and Public Administration, Murcia Autonomous Region

"Thanks to Telefónica, innovative tourism solutions will be rolled out in La Manga."



TESTIMONIALS

What our clients say...



Tomeu Fiol | **Meliá Hotels International**
Global Hotel Technologies Director

"5G is without doubt one of the technologies that will allow us to take the experience of our guests – who form the backbone of our business – to the next level and improve the efficiency of our hotels both in terms of our processes and resources used."

Belén González | **National Statistics Institute (INE)**
Deputy Director General for Tourism, Science and Technology Statistics



"The third statistical revolution is the revolution of data. Here at the INE, we realise that the new sources of information that are so abundant in today's digital society, provide a great opportunity for statisticians, as these new sources will allow us to produce data in a much more timely, detailed and frequent way."



La Manga 365:

tourism and innovation



The La Manga 365 project drawn up by the Murcia region's Autonomous Government aims to implement solutions that will digitalise La Manga del Mar Menor – an area where tourism is one of the main industries – in terms of public transport, traffic light regulation, car park monitoring and road junctions, among others. The four cornerstones of the project include: Tourism, Platform, Governance and Mobility. It also includes the Smart Beach component, which offers innovative solutions such as capacity measurement, connectivity for tourists and the digital card in the visitor app.

BACKGROUND

The project forms part of the first strategy within the EDUSI (Estrategias de Desarrollo Urbano Sostenible e Integrado – Sustainable and Integrated Urban Development Strategies), designed to improve the quality and use of ICTs in urban strategies and smart cities.

OBJECTIVES

Develop an "ICT tourism system" that develops La Manga's tourism, social and economic development. With technologies such as 5G for Wi-Fi coverage and NB-IoT for sensorisation, a leading tourist app can be developed.

BENEFITS

Providing La Manga del Mar Menor with better infrastructure and artificial intelligence systems that will allow a multitude of smart city and IoT services, such as automatic traffic light regulation, IP security cameras and monitoring of car parks, road junctions and buses, amongst others.



FURTHER INFORMATION

Website: [Murcia Turística](https://murcia-turistica.es/)

5G Robotic Hospitality



We enhanced the skills of a robot bartender by using 5G connectivity and edge computing, providing additional functions such as the ability to speak in dozens of languages, or the use of advanced image recognition algorithms to create customer profiles and offer a more personal service.

BACKGROUND

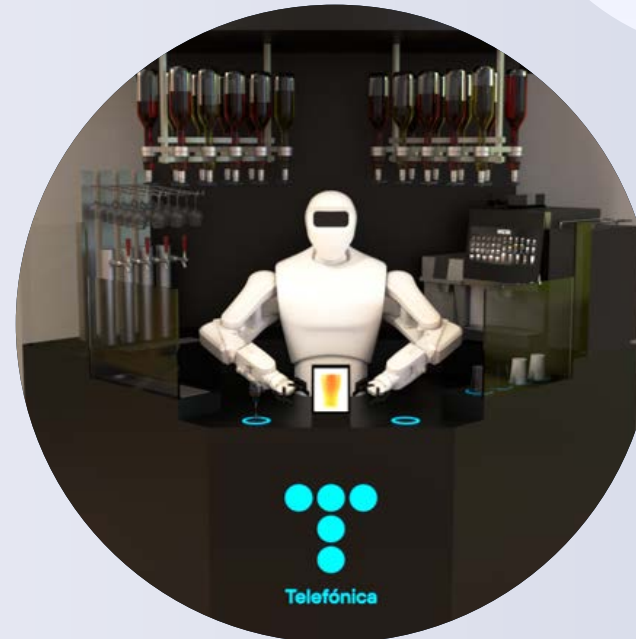
Robotics is being introduced to the world of hospitality as a way of dealing with challenging situations, such as serving food without physical contact during the pandemic and in hospitals, coping with random and unpredictable peaks in demand for catering, 24-hour food deliveries and customer service, as well as increasing our control over food quality, calorie intake and extreme customisation of food.

OBJECTIVES

To enhance the functions of robotic devices using 5G communications and edge computing capabilities, giving them access to an unlimited number of services and more human interactions, along with advanced functions for telecontrol, quality, etc.

BENEFITS

Thanks to 5G and edge computing, robotics can instantly access an unlimited number of services to enhance their capabilities. These include the use of advanced facial recognition and multi-language capabilities to offer a more human robotic service, using V2X vehicular communications for self-driving vending carts or food delivery carts, or applying video analysis algorithms for quality control and calorie analysis of ingredients. 5G helps integrate robotics into the surrounding environment, to offer a more natural and efficient service.



FURTHER INFORMATION

Video: [Barman 5G](#)

Santander City Council: consolidated smart tourism destination



Santander is a consolidated smart tourism destination that has successfully reinvented itself, implementing innovative technological solutions applied to tourism management. The city is currently putting in place new information and communication channels designed to enhance the experience of tourists before, during and after their visit. Thanks to the rollout of the tourist card, the city's unique app, interactive technological spaces, multichannel customer service and its 360° resident-tourist CRM development, we are actively improving the experience of anyone visiting the city and we are able to offer ever more tailored services. Santander also has a comprehensive management platform which integrates data from tourism-related big data, sensorisation, municipal systems and other data sources, helping those in charge of managing the destination to make better-informed decisions.

BACKGROUND

Santander City Council has been developing a smart city road map for over a decade, working on numerous initiatives that have without doubt helped to consolidate its status as a smart tourism destination.

OBJECTIVES

Together with Telefónica, Santander is rolling out strategic technological solutions that are key for reactivating the tourism sector, increasing the city's safety, sustainability and competitiveness.

BENEFITS

- New tools for the end-to-end management of the city as a tourist destination and the marketing of its products and tourism services.
- Increased tourism knowledge and smart management of tourism resources.
- Upgrading the destination thanks to value-added services that improve the quality of life of residents and enhance the tourist experience.
- Increased security thanks to its beach capacity management.
- Greater transparency and increased public-private collaboration with the sector.



National Statistics Institute:

more detailed and frequent statistics, thanks to Telco data



The INE is working to move away from their traditional model, which is 100% based on surveys, towards a hybrid model that combines surveys with data from Telefónica's mobile network, among other features. Firstly, this will allow sample sizes to become more universal, but it will also allow for public statistics to be updated more frequently.

SOLUTION

Here at Telefónica, we are working with the public authorities on two very distinct areas: digitalisation and datafication. We are materialising this with the rollout of platforms for managing public authority data, with a special emphasis on data governance and advanced analytics. This enables us to process and harness all this data, so that public authorities can make the most informed decisions possible.

BENEFITS

Thanks to new data sources, the INE will be able to provide society with much more information, much more frequently, in much greater detail and in a much more timely fashion.



Other cases from the sector

Here is an example of Telefónica's digital solutions for companies and destinations, to improve visitor experiences and manage tourism in a smart and sustainable way.

SMART TOURISM DESTINATION PLATFORM



Comprehensive destination management platform that integrates all of the data sources available at a destination. All of this information can then be used to make the best decisions based on real data and create a bespoke visitor experience.



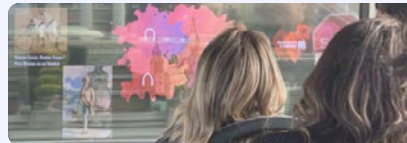
5G SIMULTANEOUS TRANSLATION



We provide a simultaneous translation solution for over 80 languages that, thanks to the low latency of 5G and edge computing, is instant enough to allow users to maintain a free-flowing conversation in different languages in real time.



5G AND AUGMENTED REALITY FOR TOURISM



Immersive content allows reality to be mixed with simulated or 360° video elements to be able to see cultural events and local festivals, recreate historic events or monuments that no longer exist, superimpose additional information on the most compelling attractions and enjoy the local gastronomy while discovering the surrounding countryside.

BIG DATA GIVES US GREATER INSIGHT INTO TOURISM TRENDS



IoT and big data technologies allow us to quantify tourists and combine that information with sociodemographic variables. Advanced analytics provides us with a more in-depth knowledge of tourists and opens up a world of possibilities in terms of predictive tourism.

Other cases from the sector

SMART TOURISM INFORMATION SYSTEM



This application aims to help tourist destinations to make decisions by implementing strategies based on data, such as: the profile of each tourist, where they come from, the service they have chosen, what they are spending, what they are consuming, etc. This will help to make tourism more sustainable, smarter and more inclusive.



SAFE SPACES AND TOURIST DESTINATIONS



We help create safe spaces via connected elements and sanitisation certifications of spaces, replacing physical cards and brochures with digital tools, thermographic solutions, as well as physical and logical safety solutions.

DIGITAL HOTELS AND ROOMS



The hotels of the future will integrate agile identification mechanisms, cybersecurity, traceability and a personal service for guests staying in digital rooms. The guest experience will be arranged in a dynamic and reactive way, and can be adapted and improved according to user feedback posted on social networks in real time.

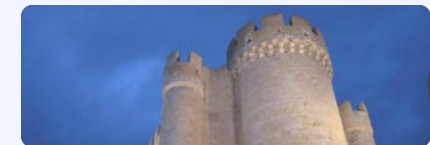


DIGITALISATION OF TOURIST DESTINATIONS



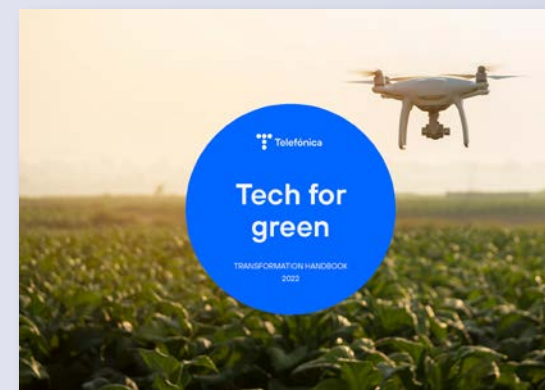
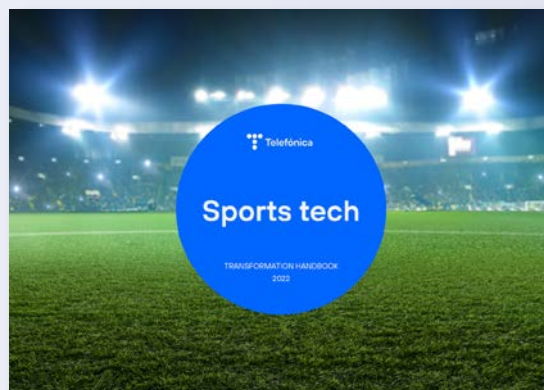
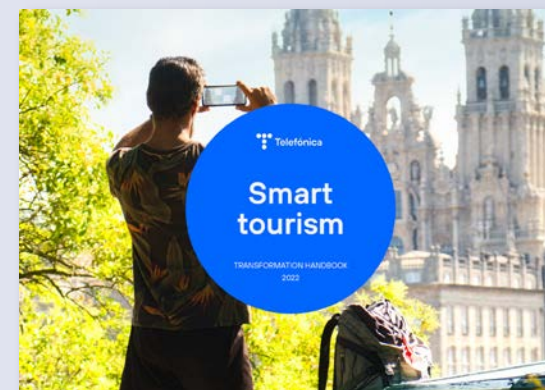
The digitalisation of tourist destinations aims to put all the information visitors could need at their fingertips and enhance their experience. With AI, content can be modified and adapted to each visitor's profile. All these services to transform the building have been made to improve its connectivity.

SMART HERITAGE

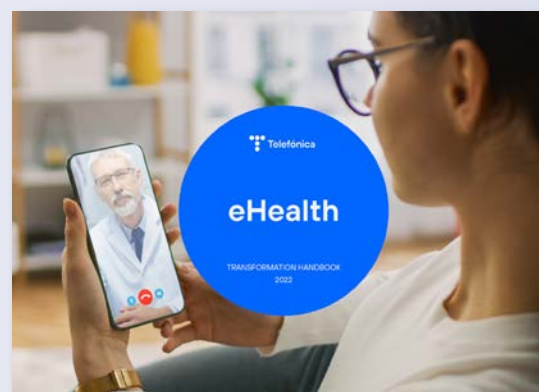


Preventative conservation allows significant savings to be made in resources, by avoiding and minimising deterioration and optimising investments. Technology can really help to showcase our heritage and even digitalise an entire pilgrimage route, such as the Camino de Santiago.

Transformation handbook collection



Transformation handbook collection





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telefonicatech.com