

Big data meets tourism: Catalonia launches project to turn Barcelona province into a smart and sustainable destination

Surrounding the Catalan tourist hotspot of Barcelona is a network of 35 regional destinations that are about to change the landscape of sustainable tourism management.

Some say Catalonia has a success problem: few tourism destinations parade a similar mix of cultural heritage, natural diversity and culinary art paired with kilometres of sandy beaches. But while tourism represents an important economic factor especially for the province's capital Barcelona, the sector also poses challenges to local residents and sustainability. The capacity and effects of the annual tourist penetration have been vigorously measured in the Barcelona region for many years and allowed for a unique Tourism Information System to be put in place by LABturisme (Tourism LAB), the technical tourism office within Diputació de Barcelona (Barcelona's Provincial Council). The system relies on the analysis of an impressive amount of 40 tourism indicators, but its real strength is in the integration of big data to measure the sustainability and competitiveness of 35 regional destinations within the Barcelona province.

LABturisme has dedicated its activities to research, training and education for tourism technicians and looks back at over ten years of data collection and analysis that ticked many boxes in the European Tourism Indicator System (ETIS) scheme, which the destination is implementing since 2014. Damià Serrano Miracle, Head of LABturisme, says, "*The ETIS scheme provided a good framework to be able to benchmark our findings against a set of universally recognised indicators. But at LABturisme, the magic words are big data and smart destination. We believe that in order to create sustainable destination profiles, you also have to consider things like mobility and transport statistics, supply and demand data, website visits and social media engagement.*"

In order to carry out data collection in all regions, cooperation with local stakeholders was of great added value to the project and provided an opportunity for LABturisme to make collaborators understand that sustainability is important, but may only yield effective benefits in some years time. Since the evolution of sustainable measures is best measured through benchmarking, the project coordinators have implemented a scoring system that compares and ranks the sustainability of destinations and creates a healthy battle between all 35 regions in their sustainability evolution.

The researchers at LABturisme also recognised that national benchmarking has its limitations, says Damià: "*It would be a mistake to think that just because two regions are located close to one another geographically, they face the same challenges in touristic development or territorial planning. Take Maresme county at the Costa Barcelona and the Bages county further inside the mainland for example: even though the two regions are less than 80 km apart, demographic indicators, publication density and economic activity are very different. So we shouldn't use national affiliations as the basis for comparing the competitiveness of regions, but rather compare apples with apples, such as mature coastal tourist destinations in Spain with very similar destinations in Italy or Greece.*"



As big data become more and more important in sustainable tourism development, so will the value of smart tourist destination indicators and EU-wide benchmarking. The LABturisme approach may well have replication potential in other Catalan regions and the city of Barcelona itself and definitely contributes to other efforts in sustainable tourism development that Catalonia has been internationally recognized for: in November 2015, the autonomous community was awarded the certification of first Biosphere Destination as an integral tourist region by the World Tourism Organisation (UNWTO) and the Global Sustainable Tourism Council.

Further information:

LABturisme. Diputació de Barcelona.

<http://www.diba.cat/web/dturisme/labturisme>

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