

Public-Private Partnerships using Blockchain and AI: The Ultimate Solutions for Tourism Recovery

Tourism Data Driven Solutions (TDDS) is a global Strategic Consulting firm in Tourism, Innovation and Technology with headquarter in Madrid (Spain) and partners in Brussels, Mexico City, Bogotá, Santiago de Chile and Shanghai.

Member of Turisfera (Canarian Tourism Innovation Cluster), of the Network of Smart Tourism Destinations of Spain and Affiliate Member of the World Tourism Organization (UNWTO).

TDDS helps Public and Private agents to make strategic decisions based on Data Analytics and to advance in the processes necessary to achieve their Competitiveness and Sustainability objectives (People, Culture, Environment and Economy).



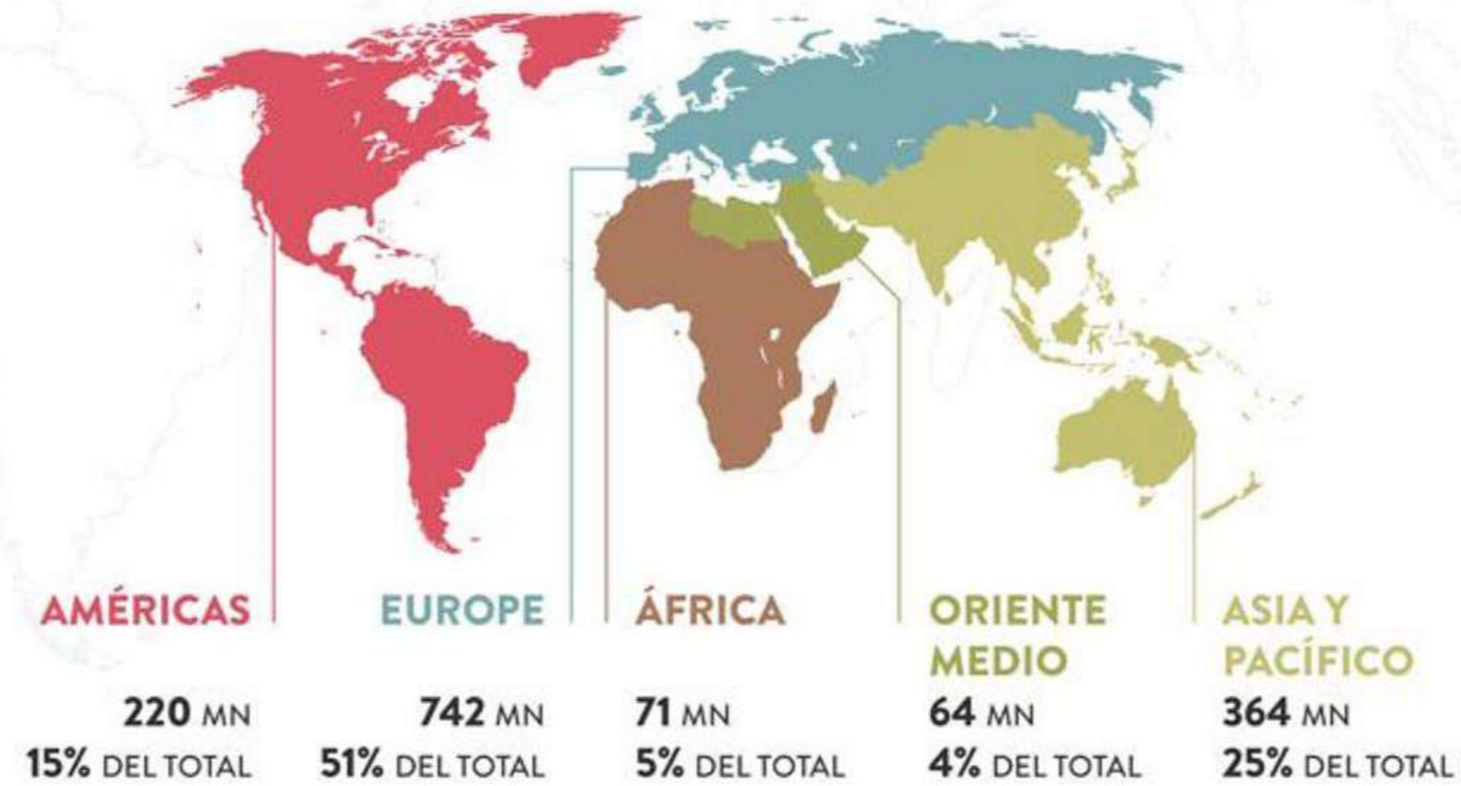
2019 RESULTADOS DE TURISMO

OTRO AÑO DE CRECIMIENTO

1.5 MILLONES
LLEGADAS INTERNACIONALES DE
TURISTAS

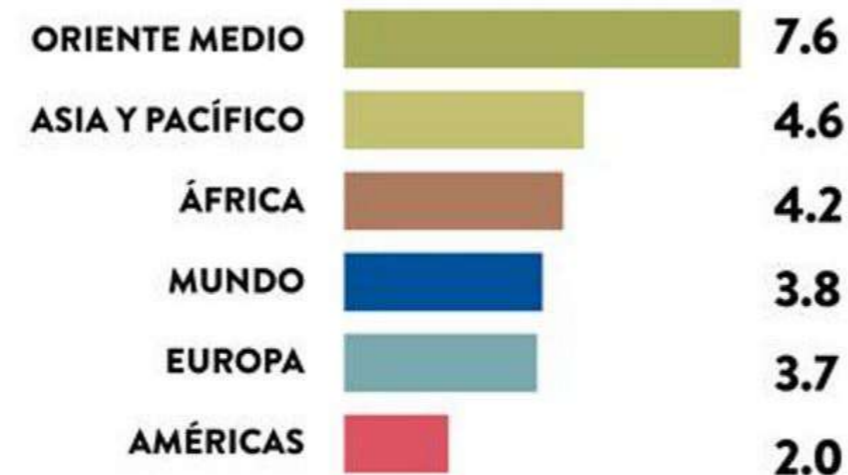
+4% CAMBIO

4 MILLIONES
LLEGADAS POR DÍA



ORIENTE MEDIO LIDERÓ CRECIMIENTO EN 2019

CAMBIO POR REGIÓN EN (%)



PANORAMA 2020

+3% AL +4%

OPINIÓN GLOBAL OMT
PARA LLEGADAS
INTERNACIONALES 2020

47%

DE LOS PARTICIPANTES EN EL
ÍNDICE DE CONFIANZA OMT
CREE QUE 2020 SERÁ MEJOR O
MUCHO MEJOR QUE 2019. 43%
NO ESPERA CAMBIOS.



© Jose Fuste Raga/Corbis



2021
NOVEMBER

INTERNATIONAL TOURIST ARRIVALS

AMERICAS
+ 1.5% (VS 2020)
- 65% (VS 2019)

AFRICA
- 34% (VS 2020)
- 77% (VS 2019)

WORLD
- 20% (VS 2020)
- 76% (VS 2019)

EUROPE
- 8% (VS 2020)
- 69% (VS 2019)

**ASIA & THE
PACIFIC**
- 75% (VS 2020)
- 95% (VS 2019)

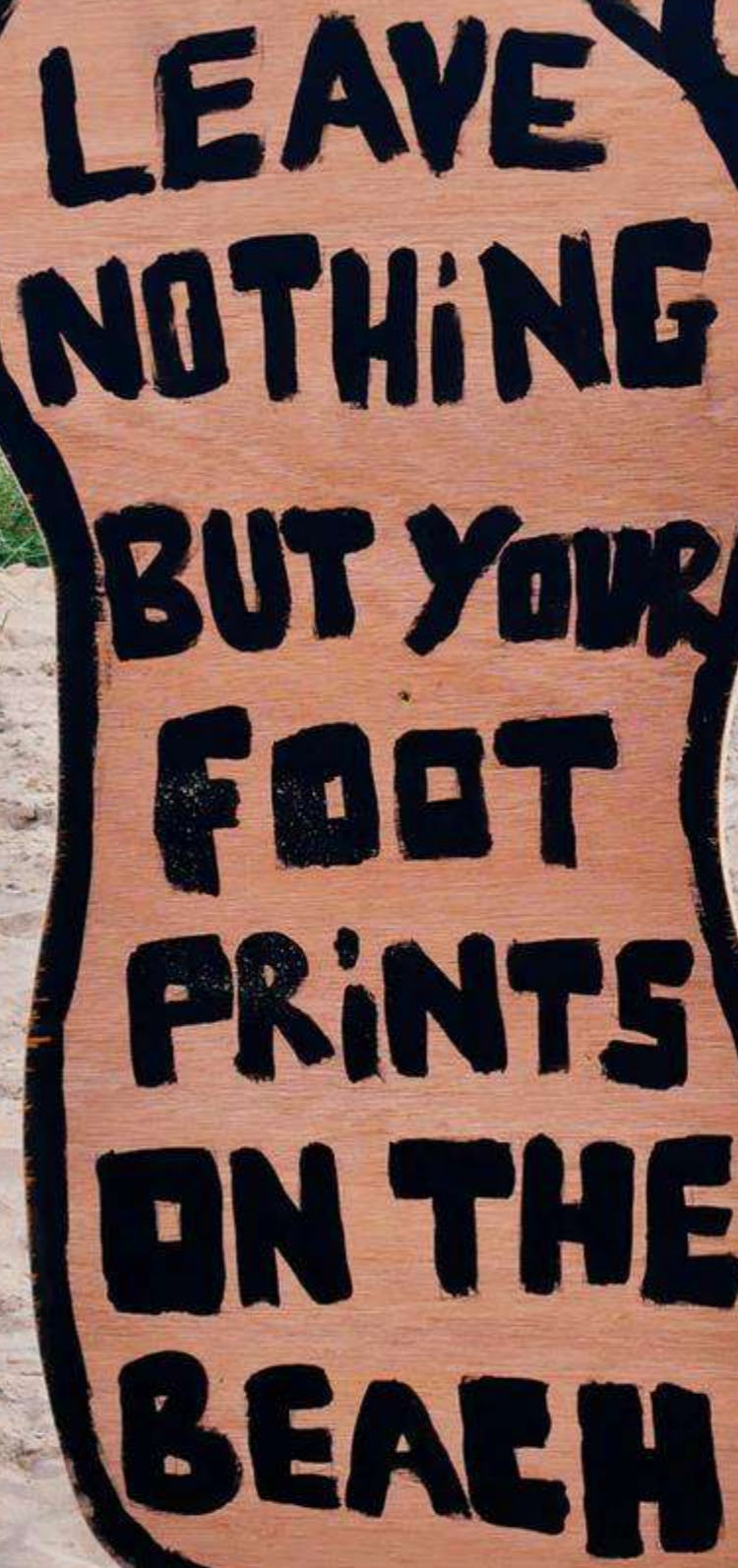
MIDDLE EAST
- 39% (VS 2020)
- 82% (VS 2019)



SOURCE: UNWTO

* PROVISIONAL DATA, Y-O-Y MONTHLY CHANGE BY REGIONS OVER 2019 (DATA AS OF NOVEMBER 2021)



A wooden sign shaped like a footprint, mounted on a wooden post. The sign is light brown wood with a black outline. The text is written in bold, black, sans-serif capital letters. The background shows a sandy beach with dunes and green grasses under a cloudy sky.

**LEAVE
NOTHING
BUT YOUR
FOOT
PRINTS
ON THE
BEACH**





Data

OCT
2021

SOCIAL MEDIA USE AROUND THE WORLD

USE OF SOCIAL NETWORKS AND MESSENGER SERVICES, WITH DETAIL FOR MOBILE SOCIAL MEDIA USE

 SOCIAL MEDIA USER NUMBERS MAY NOT REPRESENT UNIQUE INDIVIDUALS

TOTAL NUMBER OF
ACTIVE SOCIAL
MEDIA USERS*



we
are
social

4.55
BILLION

SOCIAL MEDIA USERS AS
A PERCENTAGE OF THE
GLOBAL POPULATION



KEPIOS

57.6%

ANNUAL CHANGE IN
THE NUMBER OF GLOBAL
SOCIAL MEDIA USERS



GWI.

+9.9%
+409 MILLION

AVERAGE AMOUNT
OF TIME PER DAY SPENT
USING SOCIAL MEDIA



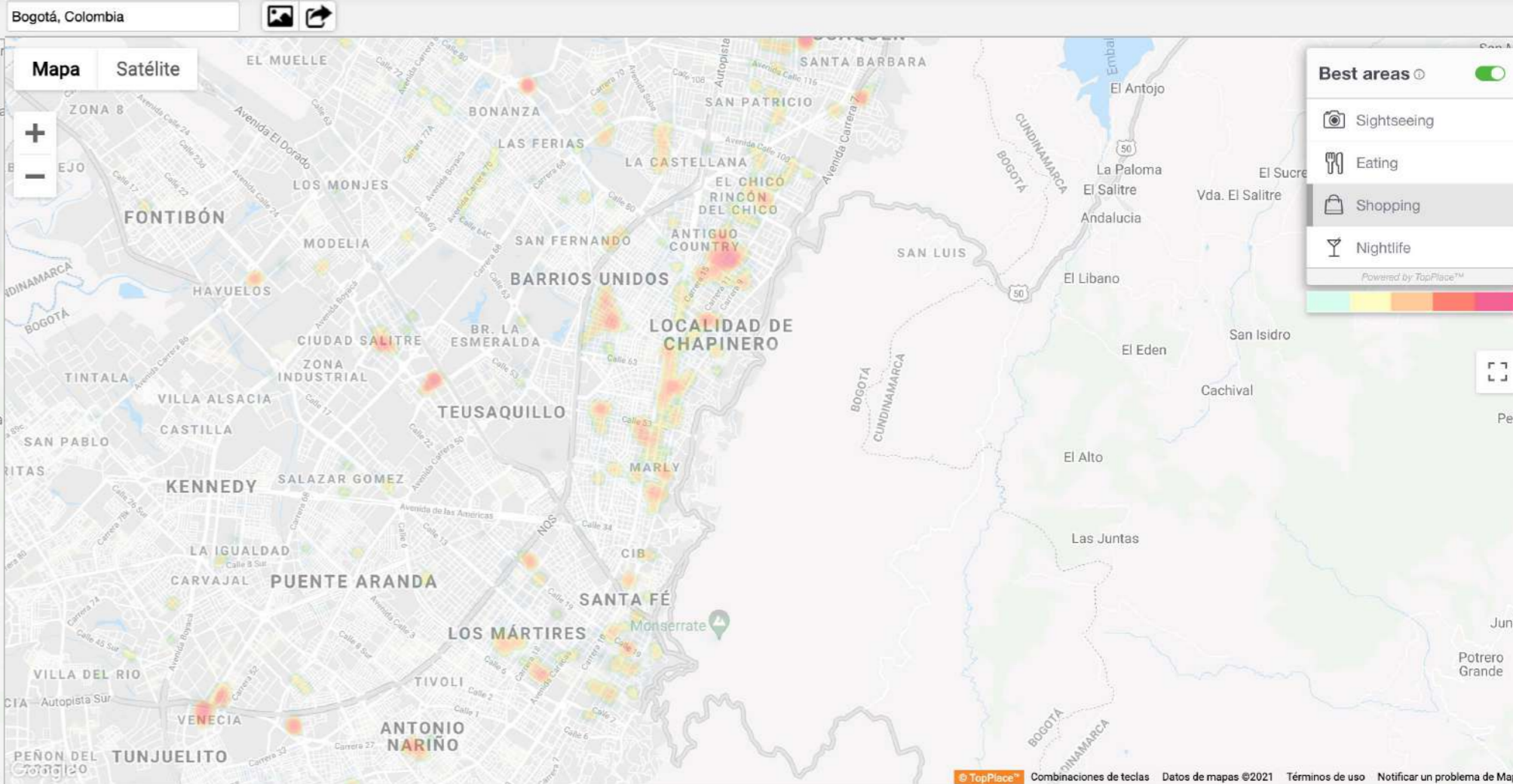
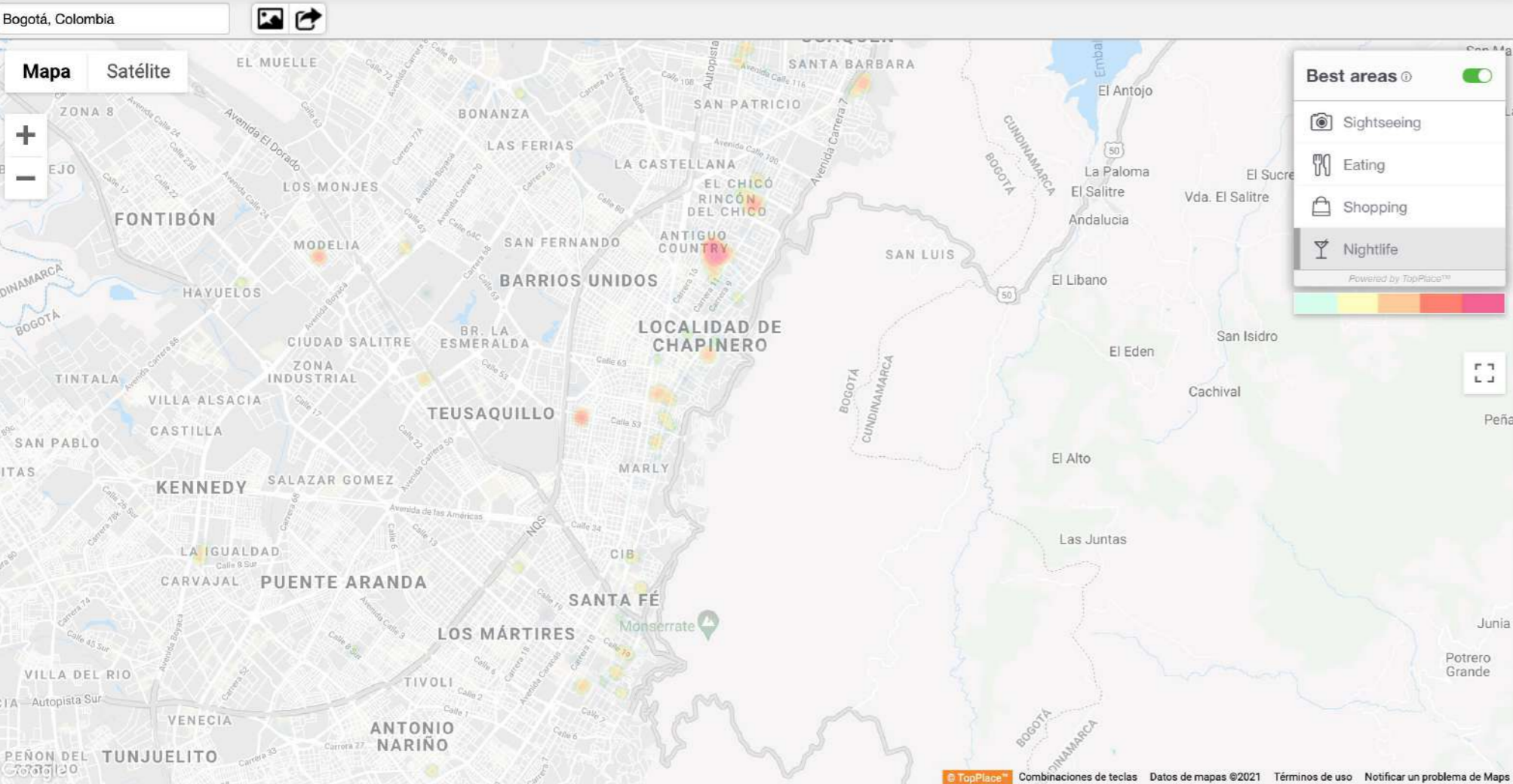
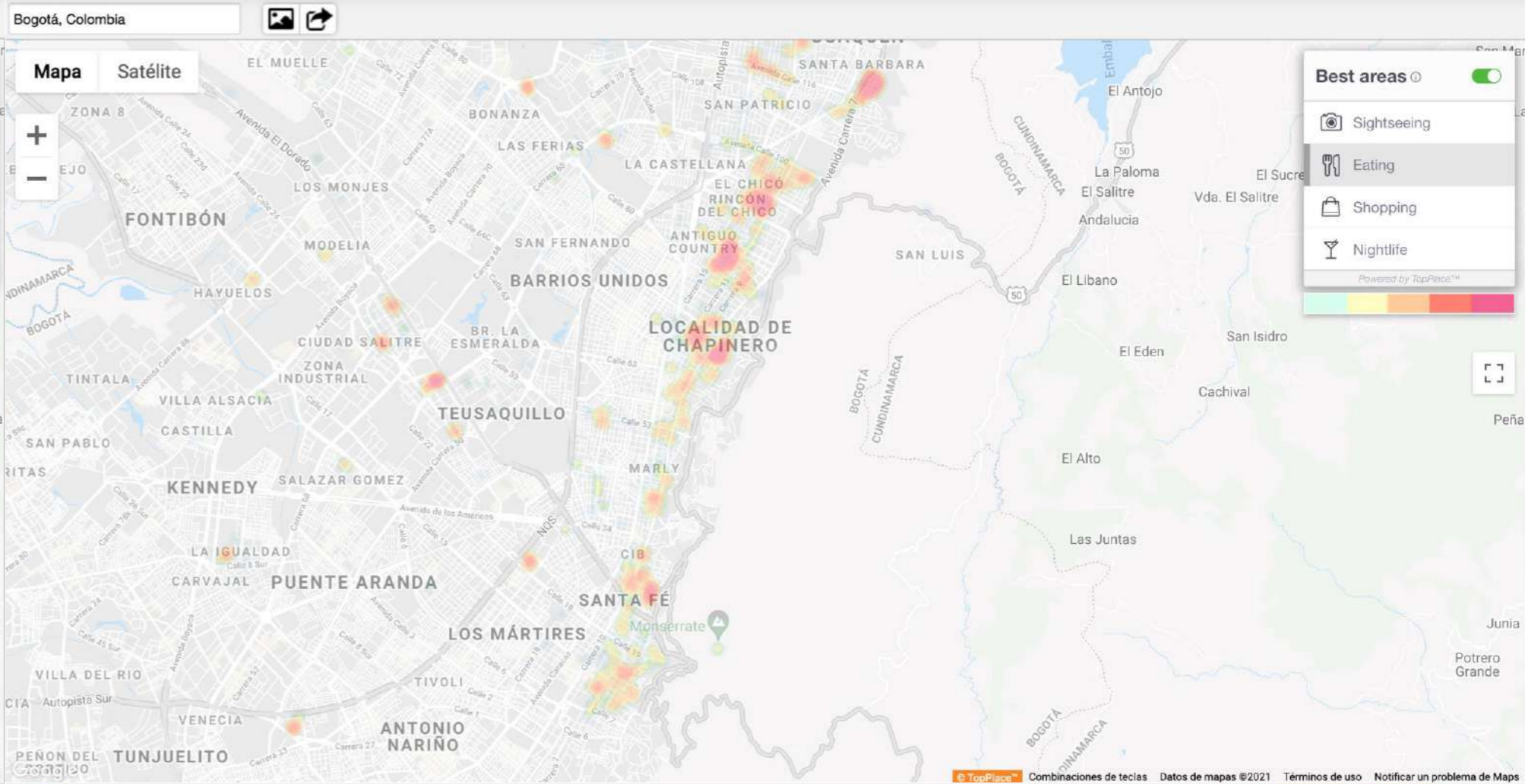
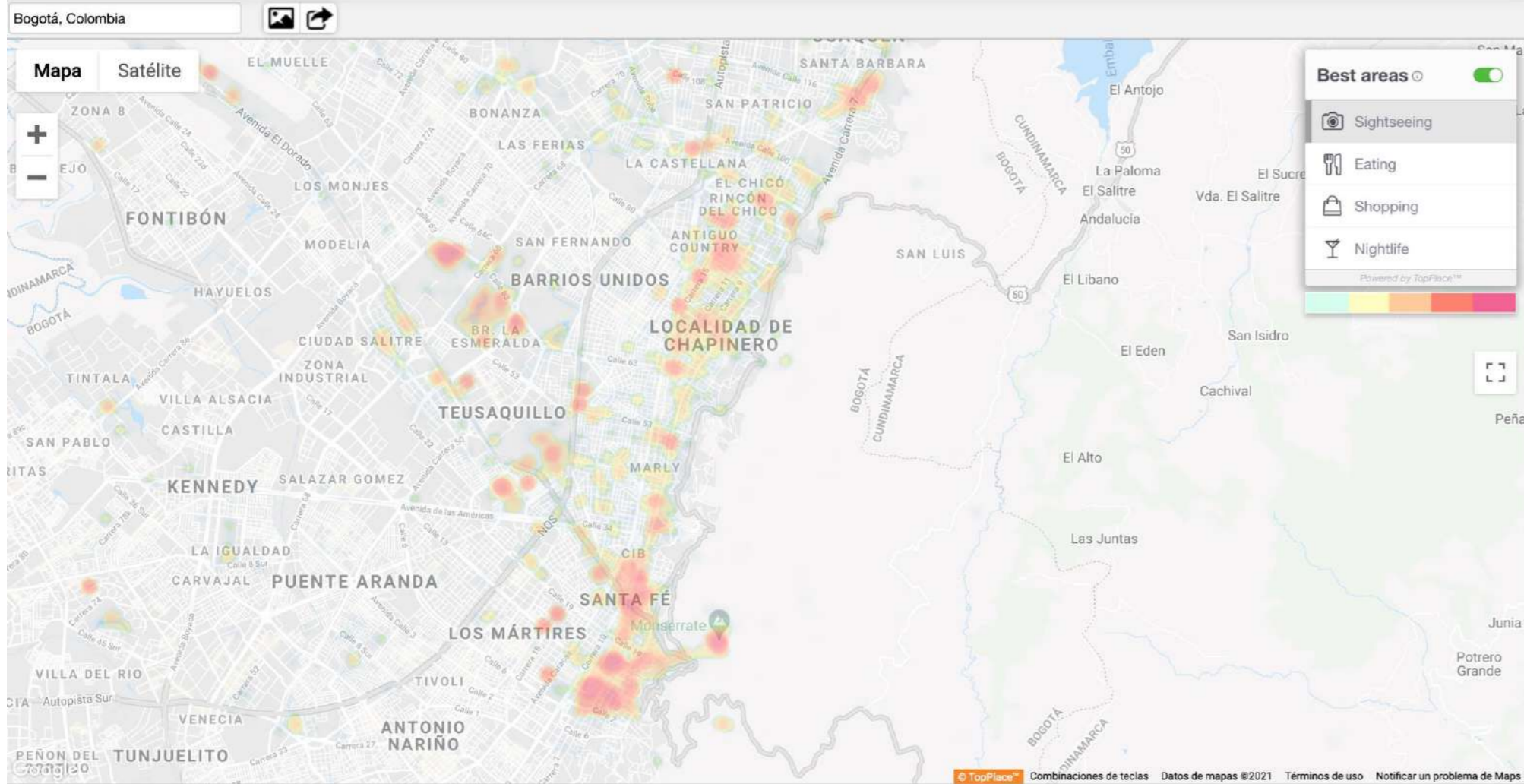
GWI.

2H 27M

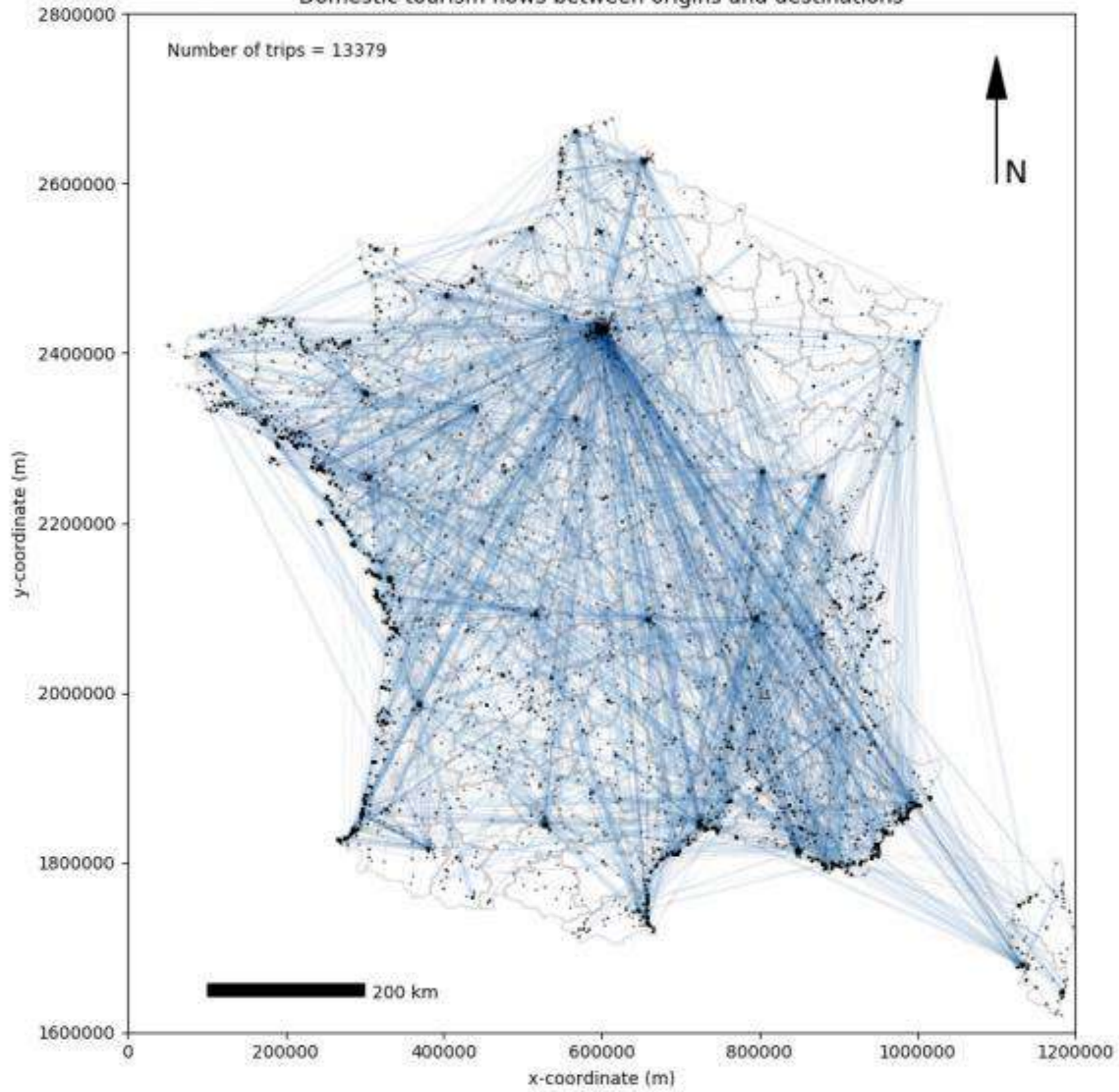
AVERAGE NUMBER OF
PLATFORMS USED EACH
MONTH PER INTERNET USER

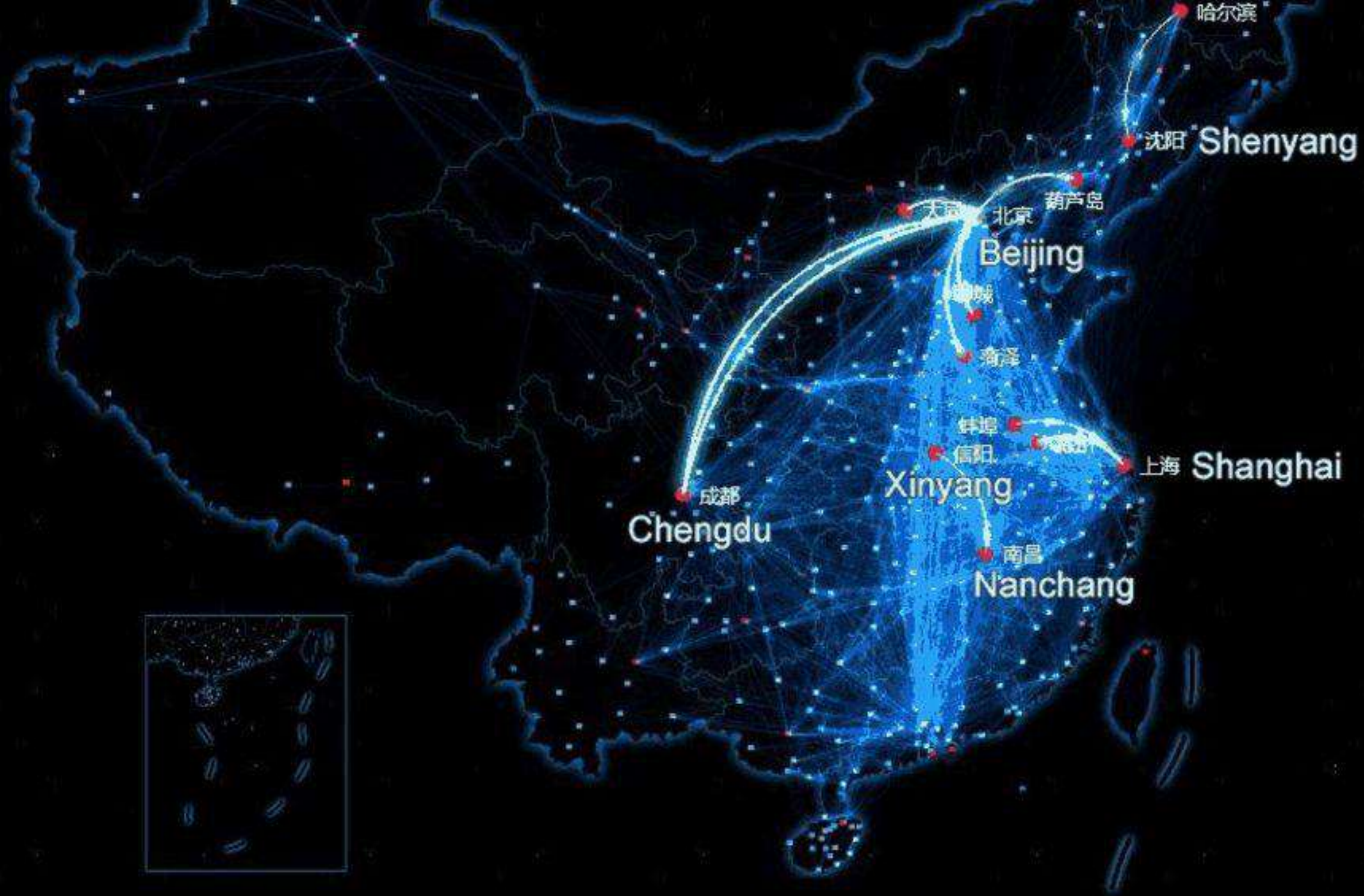


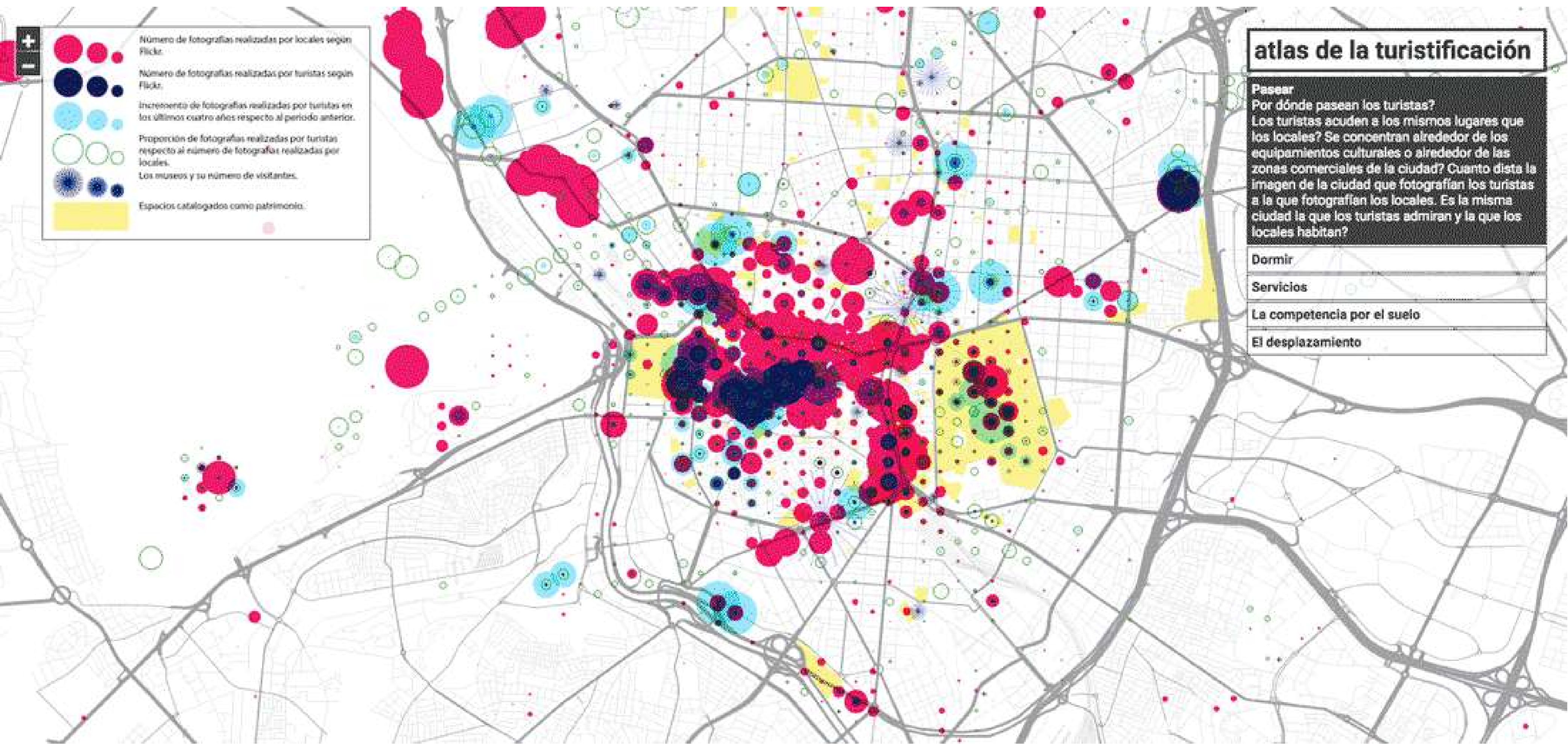
6.7



Domestic tourism flows between origins and destinations





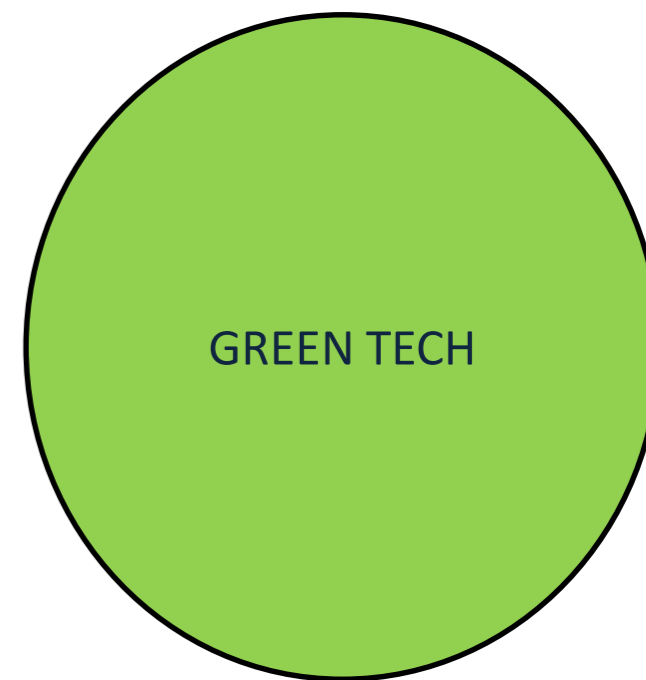
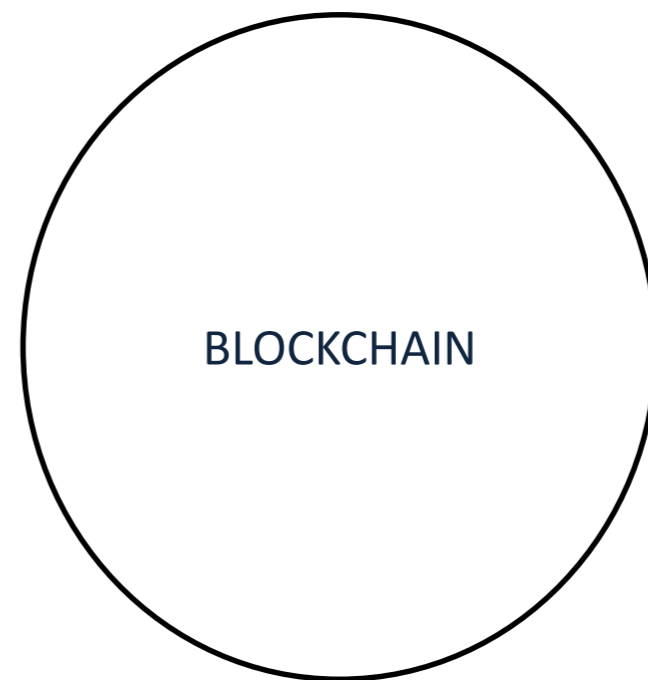
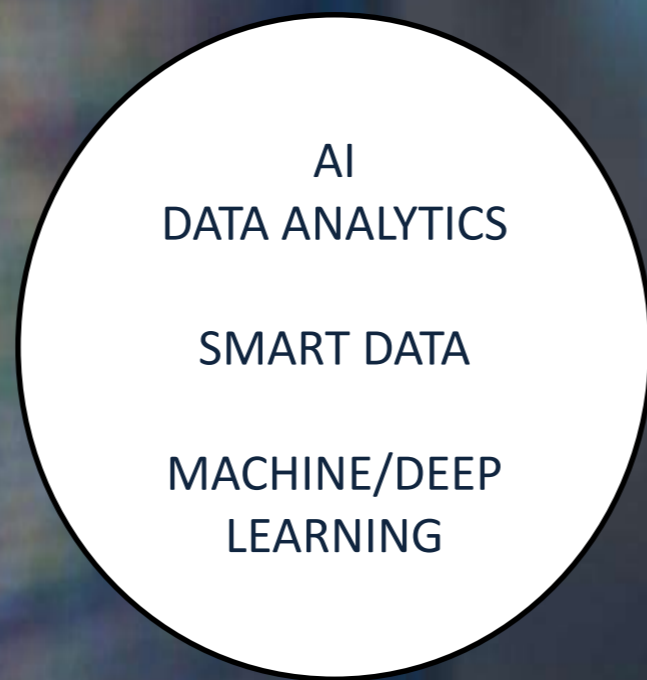
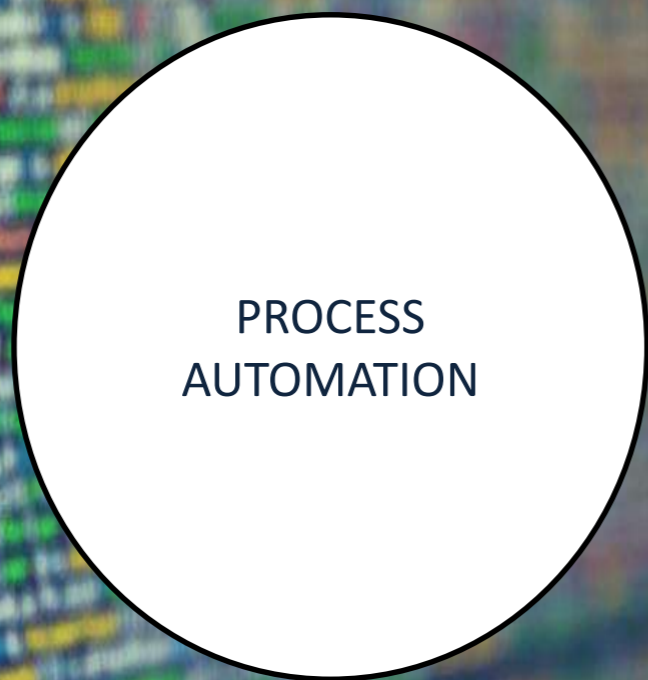
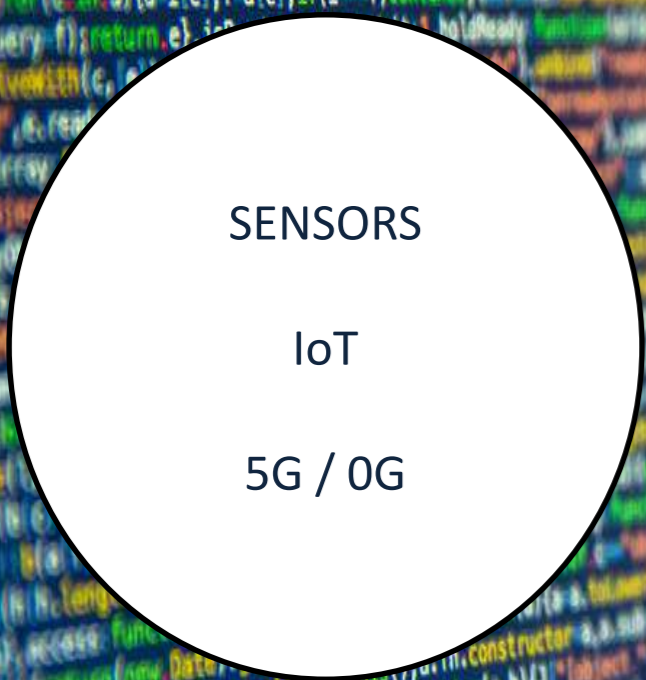


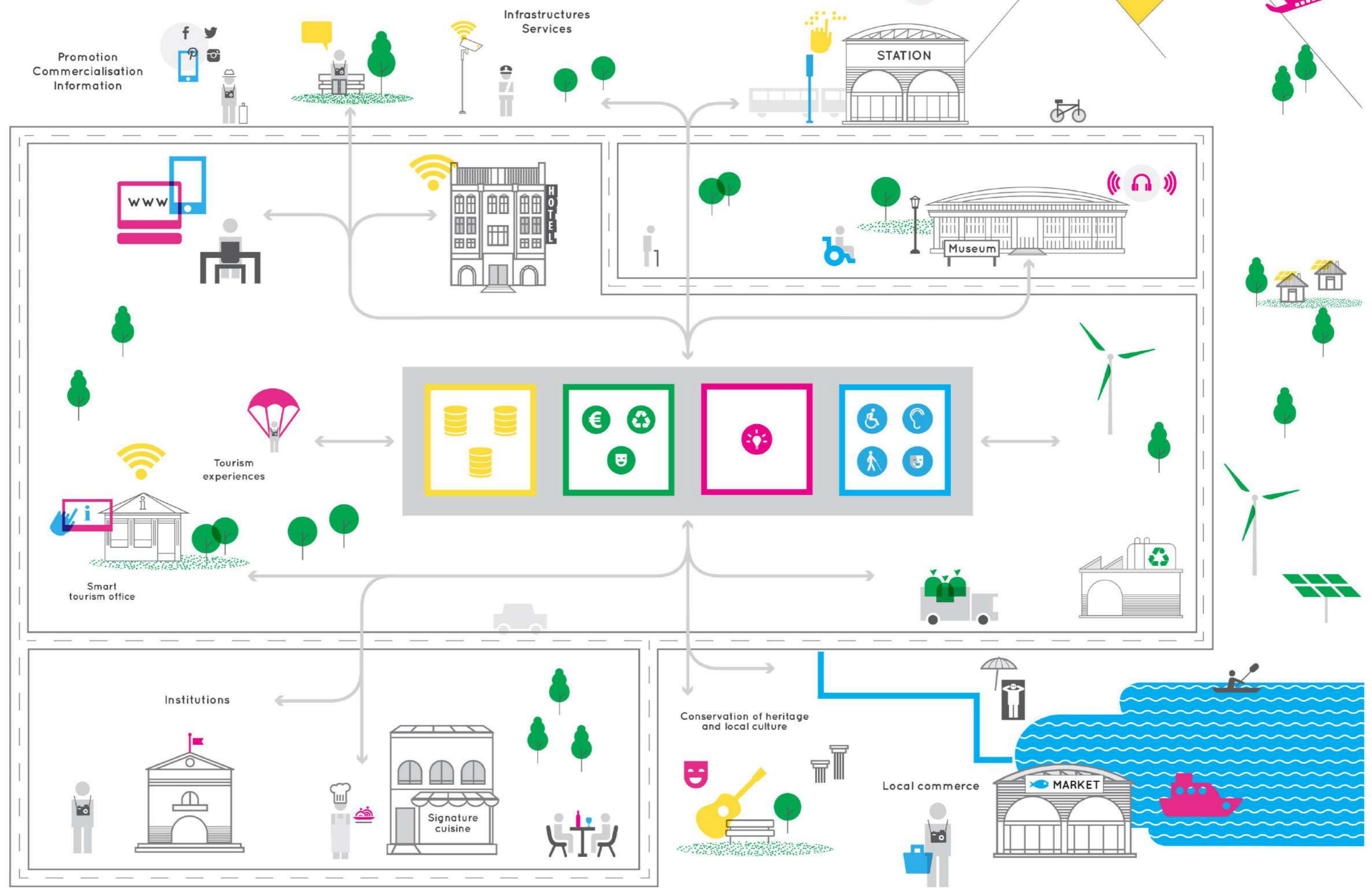
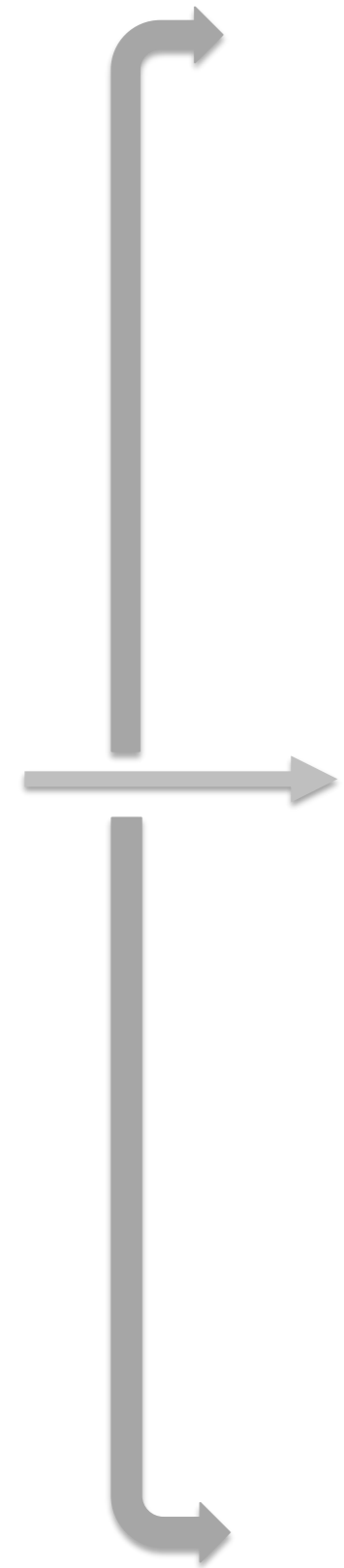
atlas de la turistificación

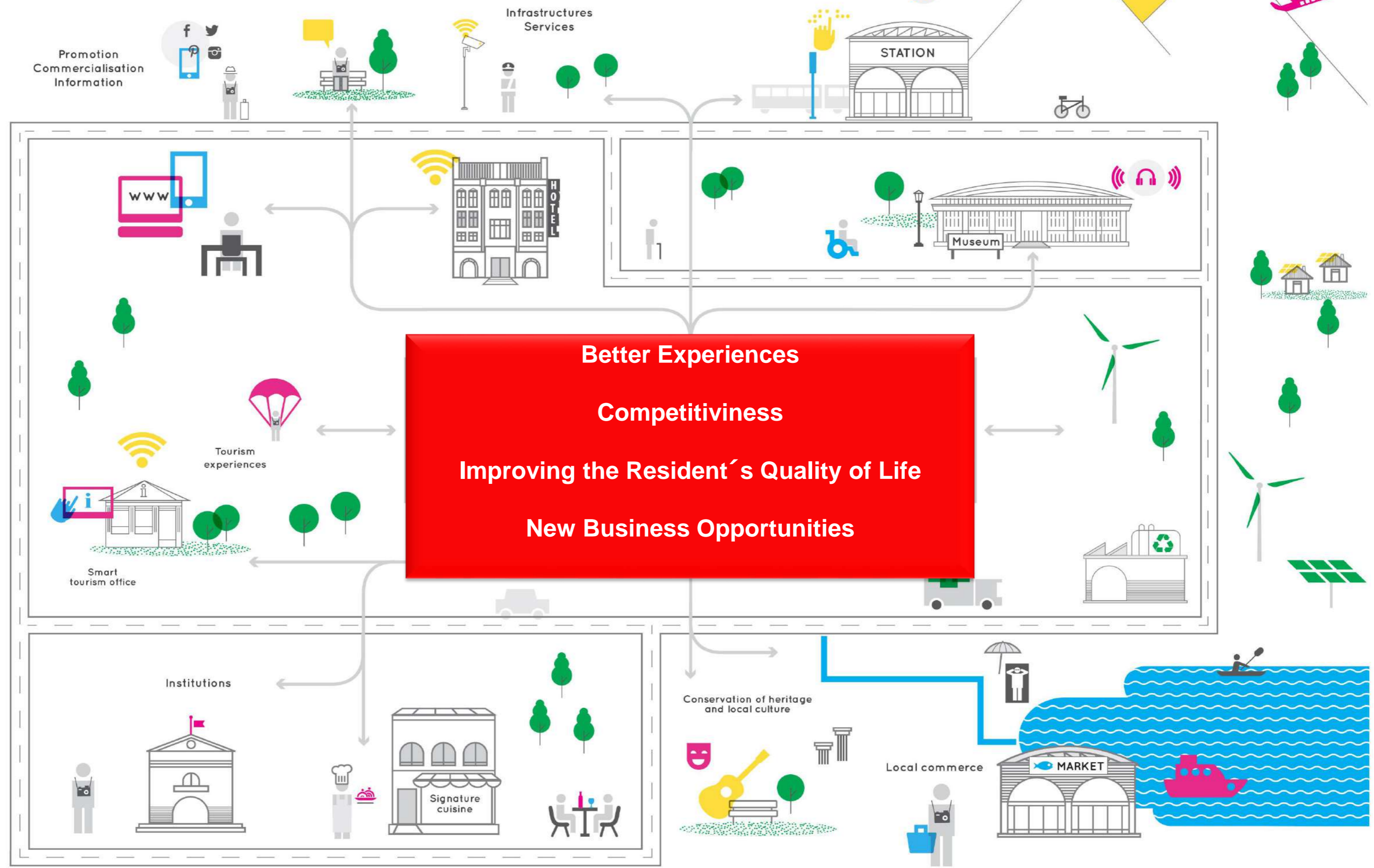
Pasear
 Por dónde pasean los turistas?
 Los turistas acuden a los mismos lugares que los locales? Se concentran alrededor de los equipamientos culturales o alrededor de las zonas comerciales de la ciudad? Cuanto dista la imagen de la ciudad que fotografían los turistas a la que fotografían los locales. Es la misma ciudad la que los turistas admiran y la que los locales habitan?

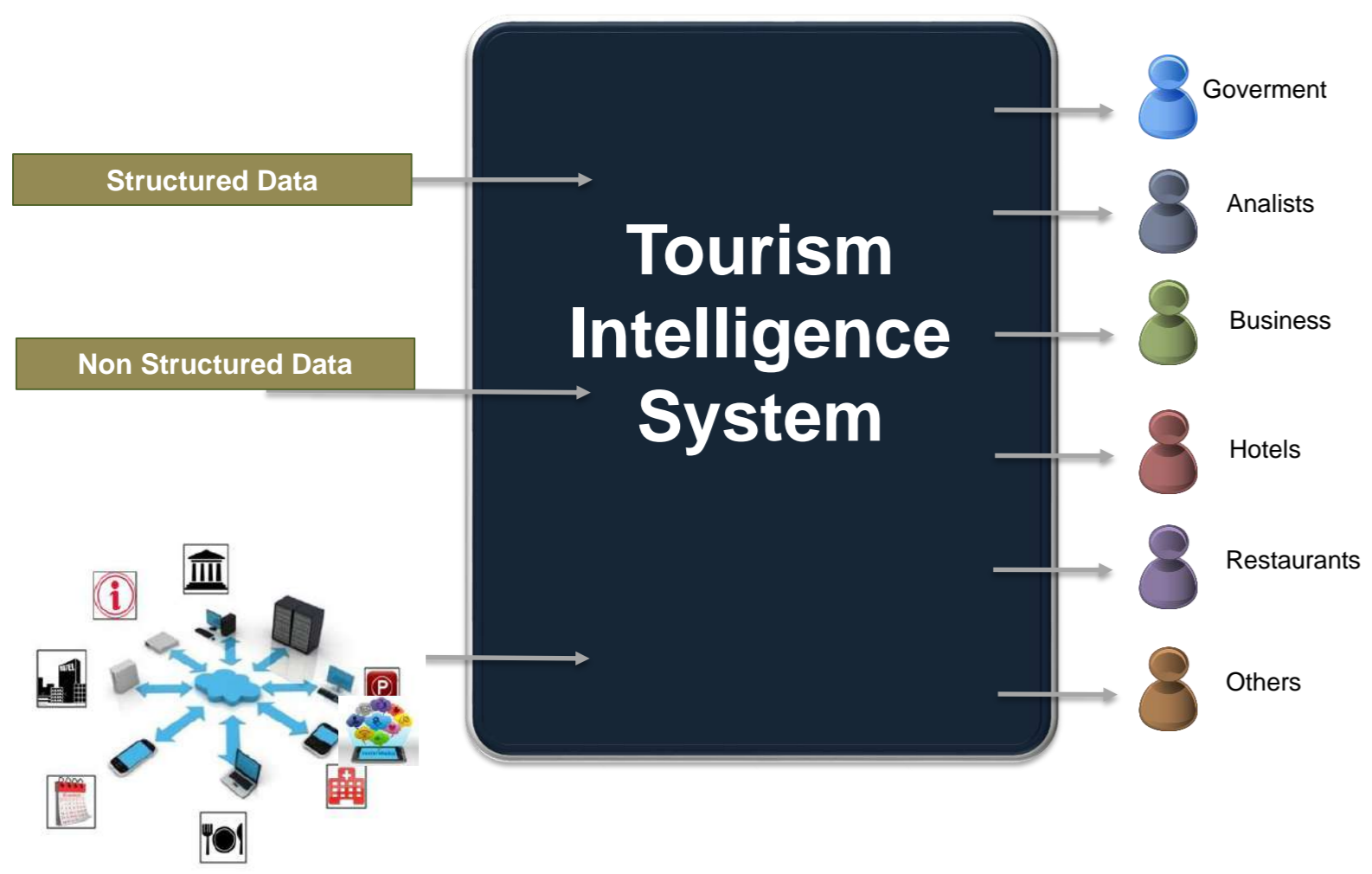
- Dormir
- Servicios
- La competencia por el suelo
- El desplazamiento

Knowledge







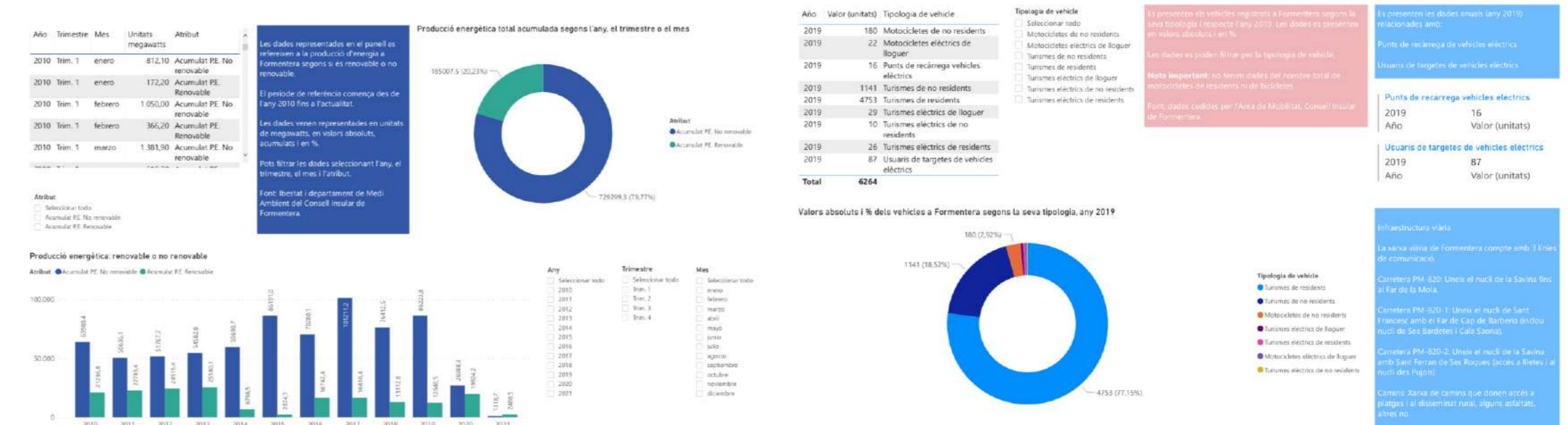
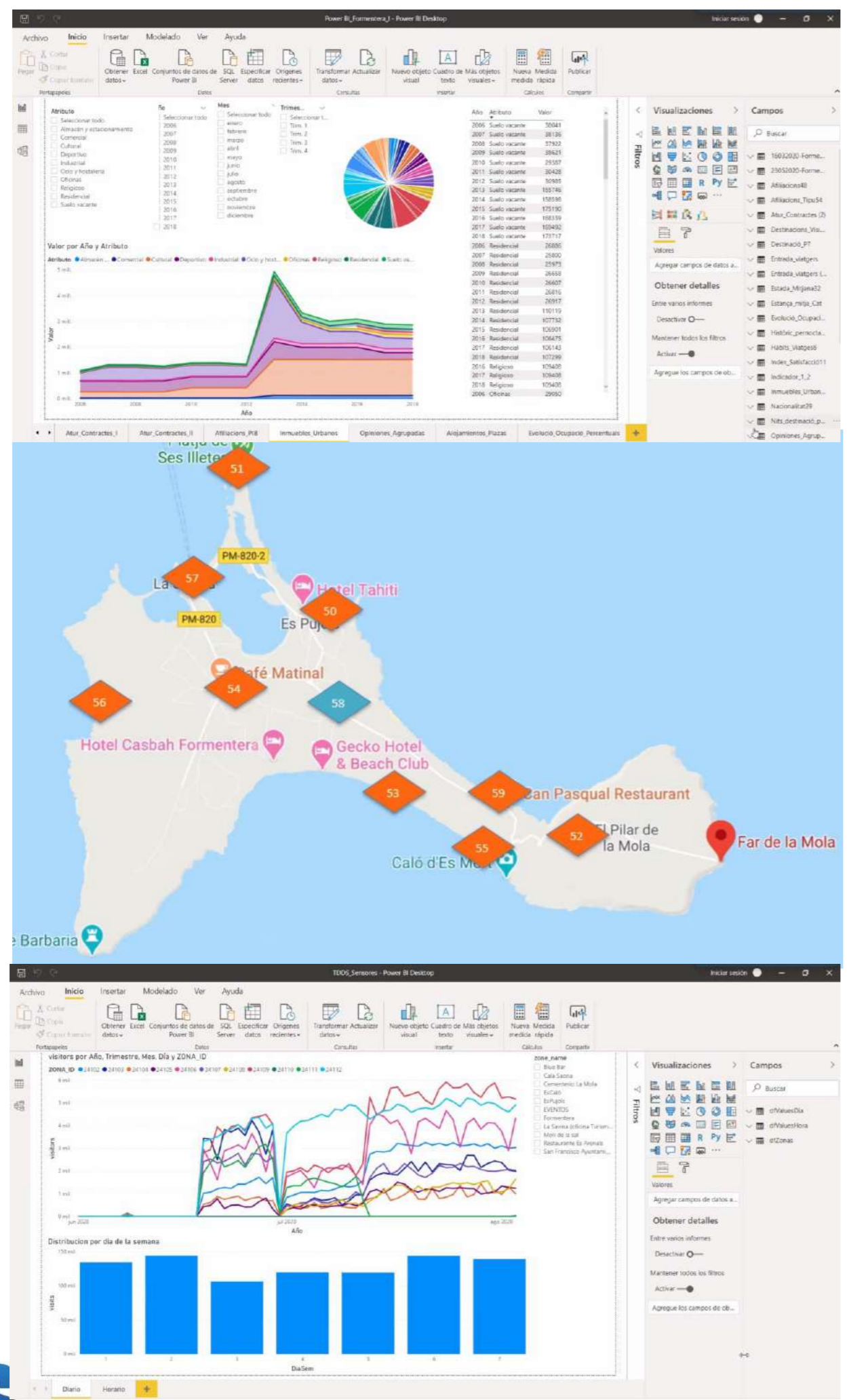


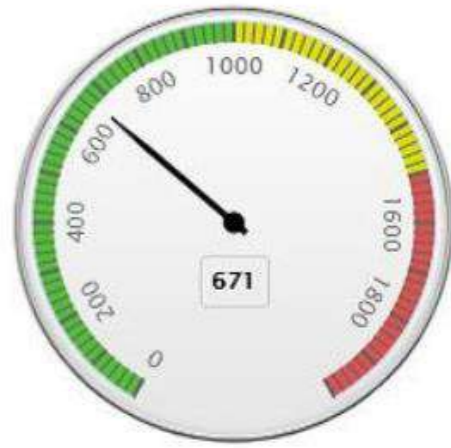


Formentera, Islas Baleares, España

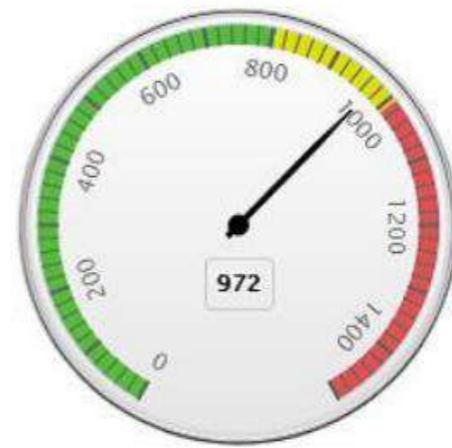
The objectives of Formentera 2020 were:

- To have a tourism observation model that would allow the Insular to make decisions based on the analyses generated by the tourism intelligence department (Data on visitor profile: average stay, etc.; Actual expenditure generated in the segmented by: nationality, areas, months and business/economic sectors).
- Evolve the current Tourism Observatory towards the model proposed in the principles of Smart Destinations.
- To have data on the Human Pressure Index.





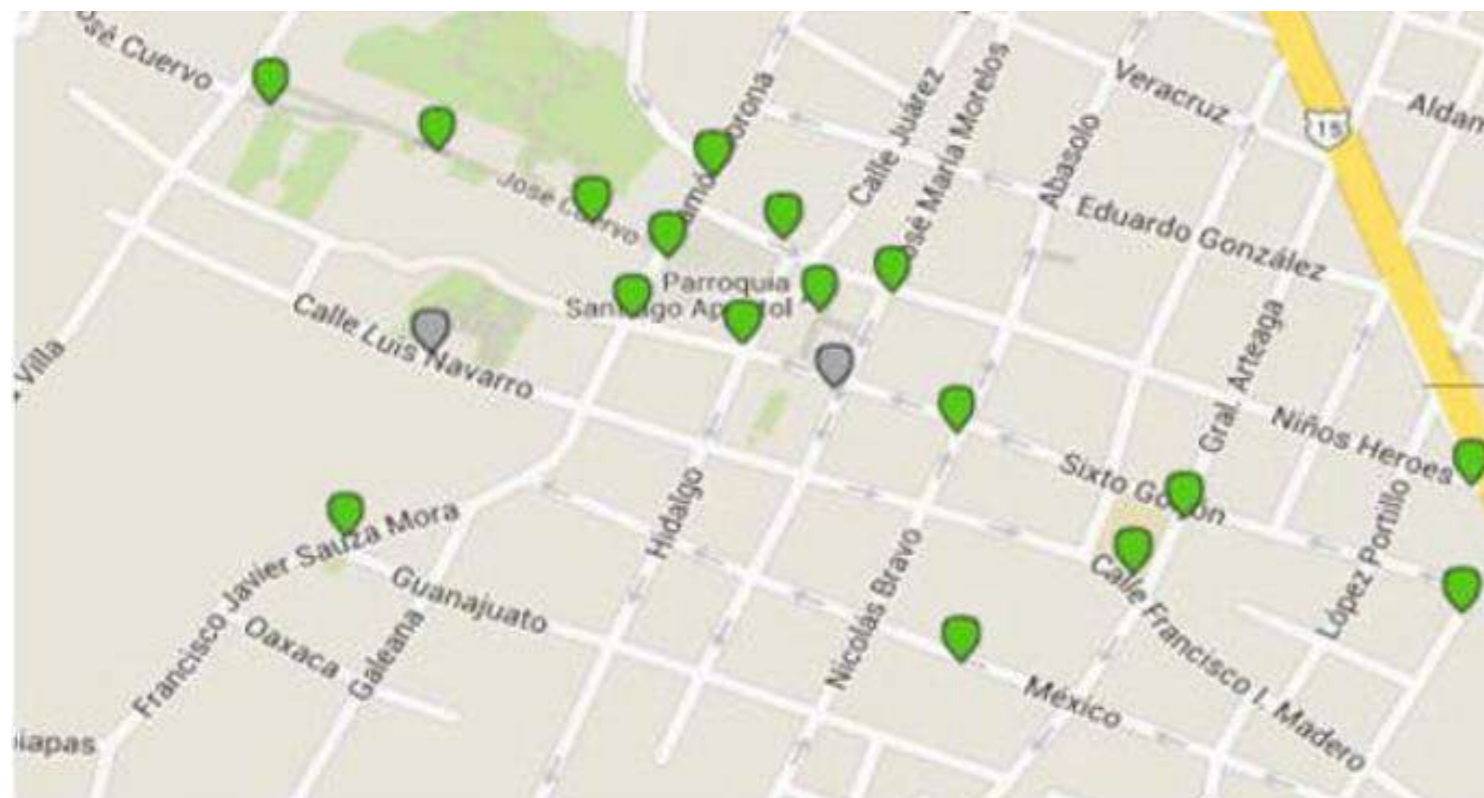
CAPACIDAD DE CARGA VEHICULAR

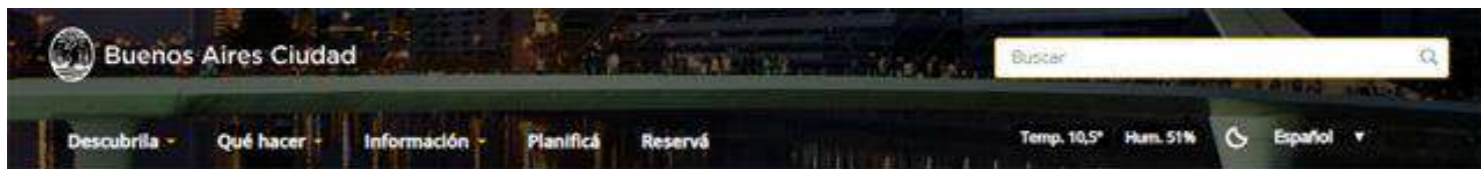


CAPACIDAD DE CARGA DE PERSONAS

Tequila, Guadalajara, Jalisco, México

- To be a **Smart Tourism Destination (Strategic Plan and Master**
- To have a **Tourism Intelligence System (SIT)** for the city with types of data to enable informed decision-making, connected the SIT.
- Land the Plan with **concrete actions and concrete indicators of implementation**, mainly in terms of carrying capacity and flow management.





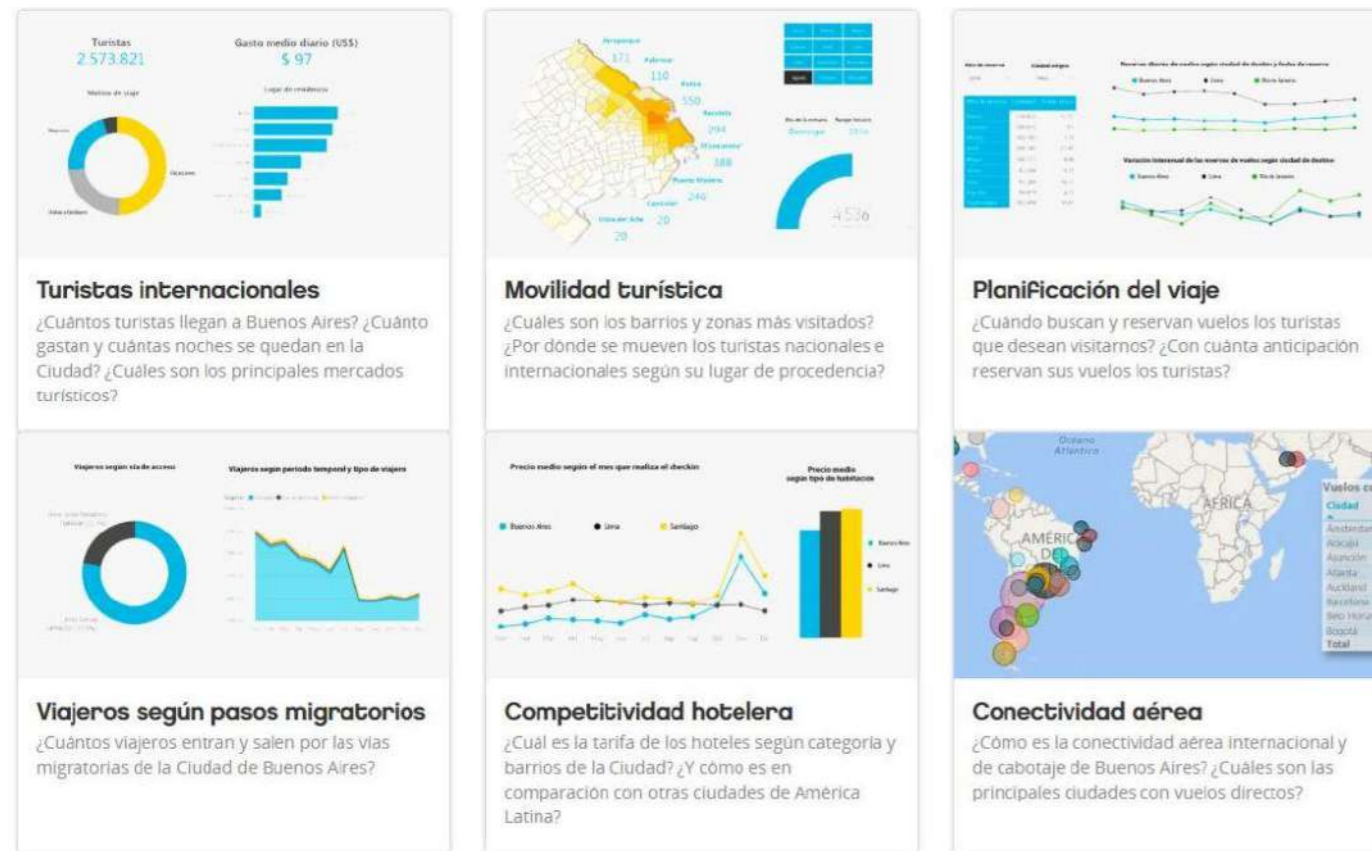
Observatorio Turístico

El Observatorio genera inteligencia de mercado para orientar la toma de decisiones en el sector público, empresas y profesionales, potenciando el turismo como una actividad estratégica para el desarrollo económico y social de la Ciudad de Buenos Aires.

Elaboramos informes periódicos con indicadores clave que permitan proyectar las tendencias a futuro, aplicamos técnicas de Big Data para analizar nuevas fuentes de información y comprender mejor el entorno, y realizamos investigaciones cualitativas sobre el comportamiento de los principales segmentos y mercados turísticos.

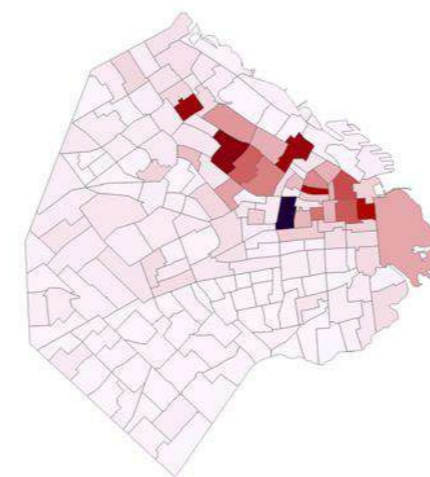
Sistema de Inteligencia Turística

Te damos la bienvenida al Sistema de Inteligencia Turística, una plataforma digital que te permitirá visualizar de forma dinámica los principales datos del turismo a partir de múltiples fuentes de información.

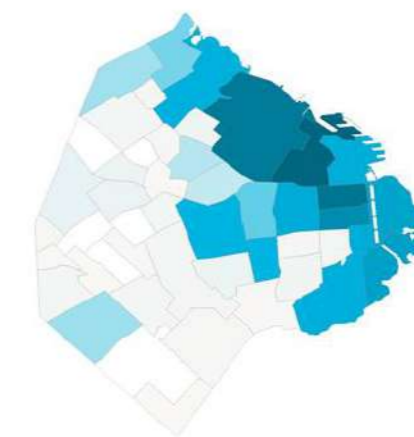


Buenos Aires, Argentina

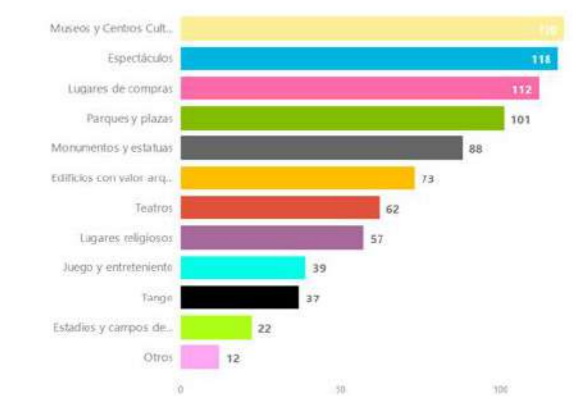
- **To be a Smart Tourism Destination (Strategic Plan and Master**
- **To have a Tourism Intelligence System (SIT) for the city with types of data to enable informed decision-making, connected the SIT.**
- **Plan with very complete indicators. Sensorisation of points in city, recording of spending by credit cards, mobility, etc.**



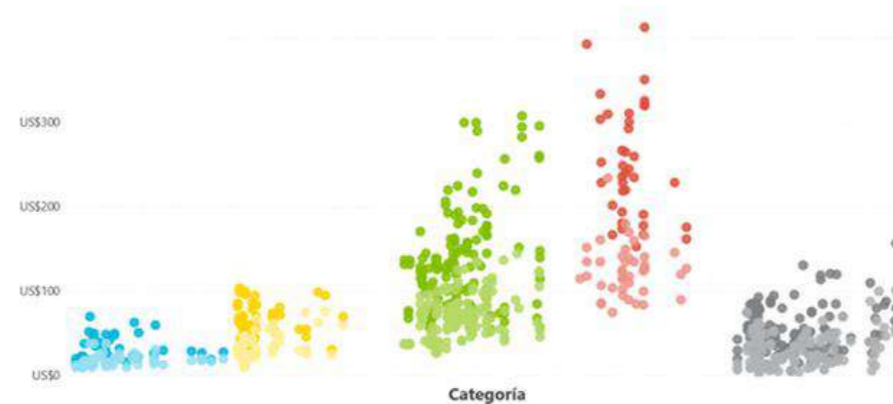
Top 5 barrios según ticket promedio



Atractivos por categoría



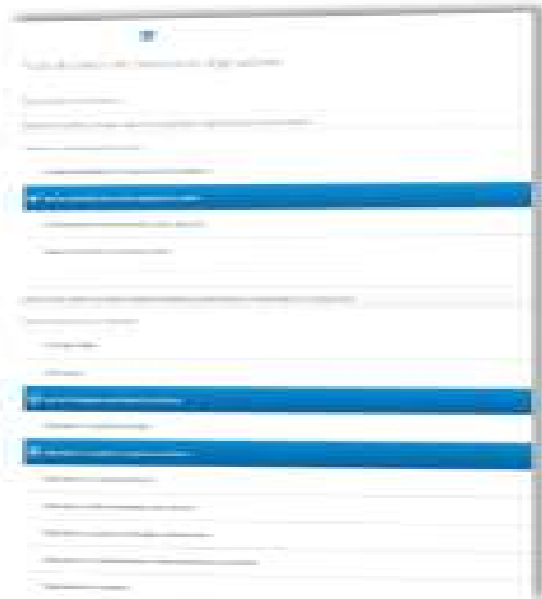
Precios mínimos y máximos según categoría



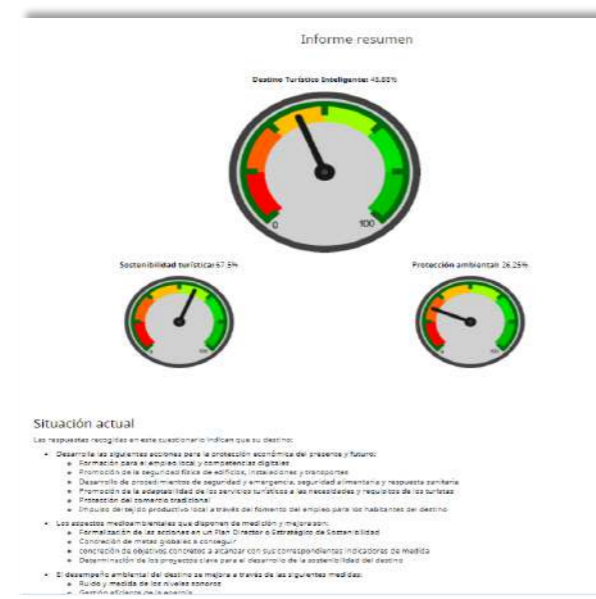


Autodiagnóstico DTI

Cuestionario on line



Resultado on line inmediato



Informe comparado con áreas de mejora personalizadas



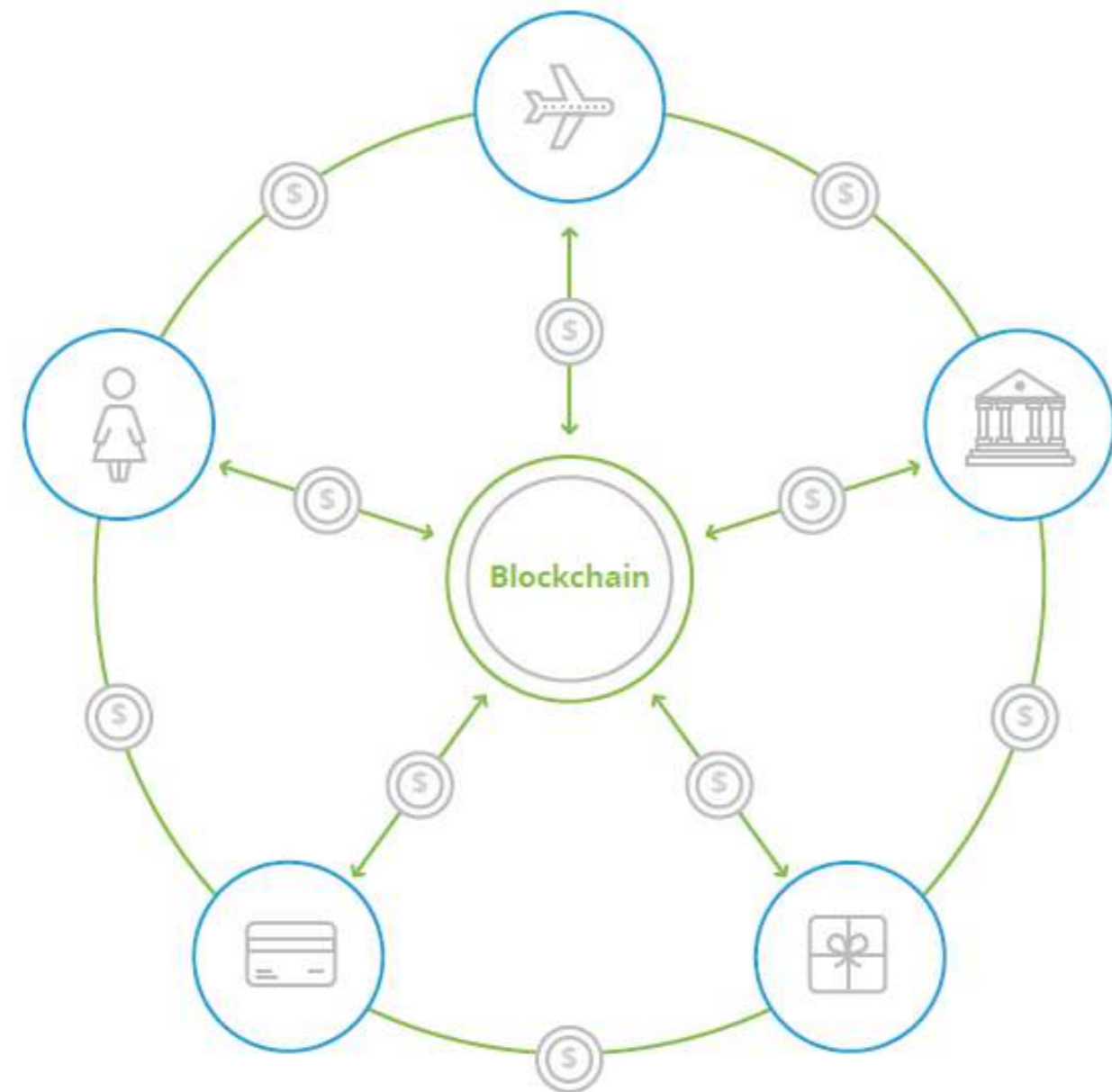
The Smart Destination Self-diagnosis is an online and fillable tool developed by TDDS, which allows to have in a days a very accurate picture of the situation of the in relation to the five pillars of the Smart Tourism Governance, Sustainability (environmental, socio-cultural economic), Accessibility, Innovation and Technology.

The Self-diagnosis is based on the DTI methodology developed by Segittur, the UNE 178501 and 178502 and the experience in implementing Smart Destinations of TDDS in recent years.

Deploying this questionnaire in a destination, region or country allows to know and compare its status as a smart destination and to programme public policies that help its development.

AI (machine/Deep learning) helps to give a first report and recommendations to destinations.

cleverus[®]



**Intelligent learning tourism platform for
Customer Loyalty,
Activity Recommendation
and Tourist Behavioural Patterns**

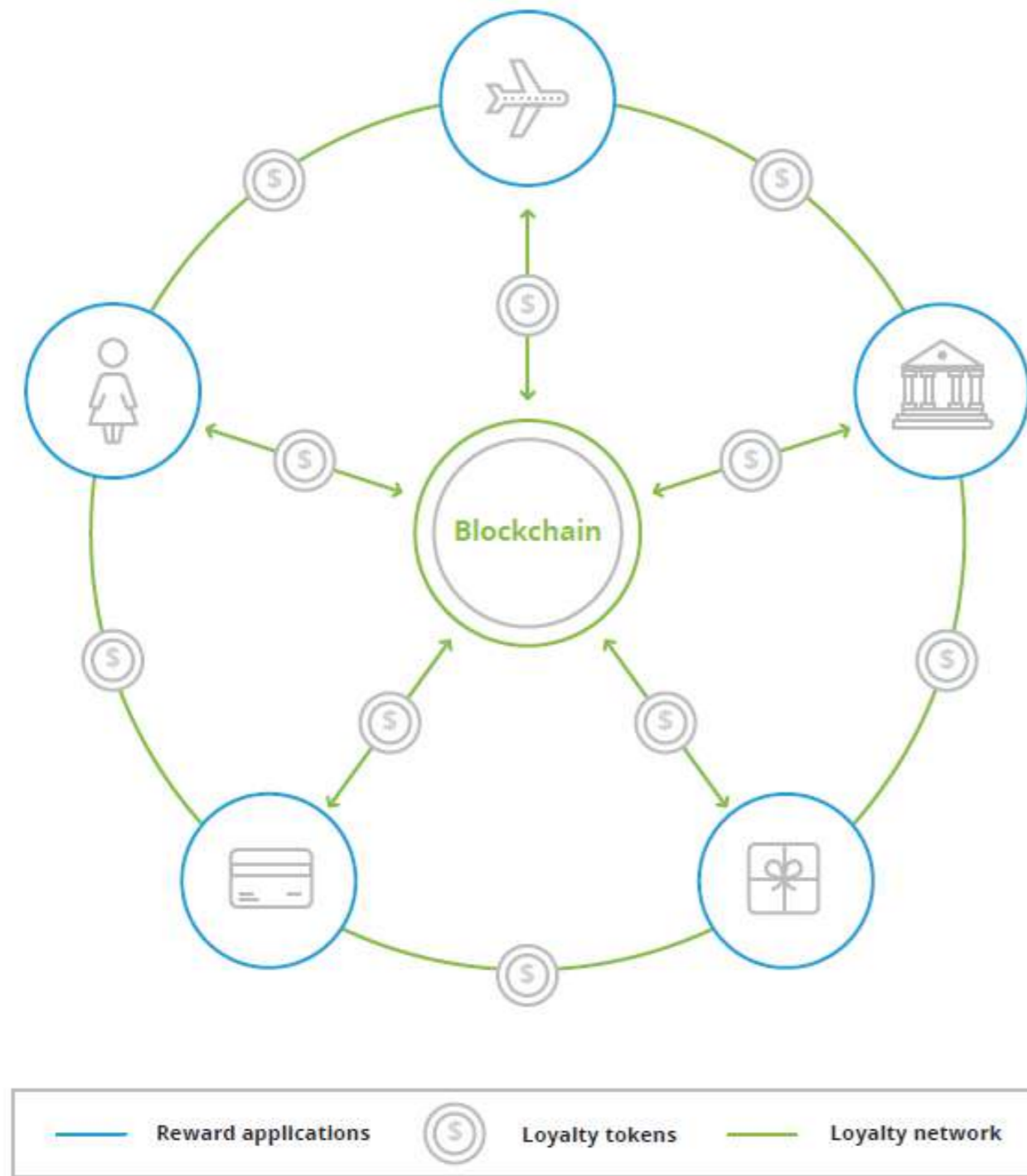
cleverus®

What is Cleverus?

Cleverus is a smart platform based on a distributed registration architecture (blockchain + artificial intelligence) at the service of the tourism sector.

Cleverus will provide new capabilities for customer loyalty through the recommendation and development of customized services, products and tourism packages thanks to data analysis using Machine Learning and Deep learning models .

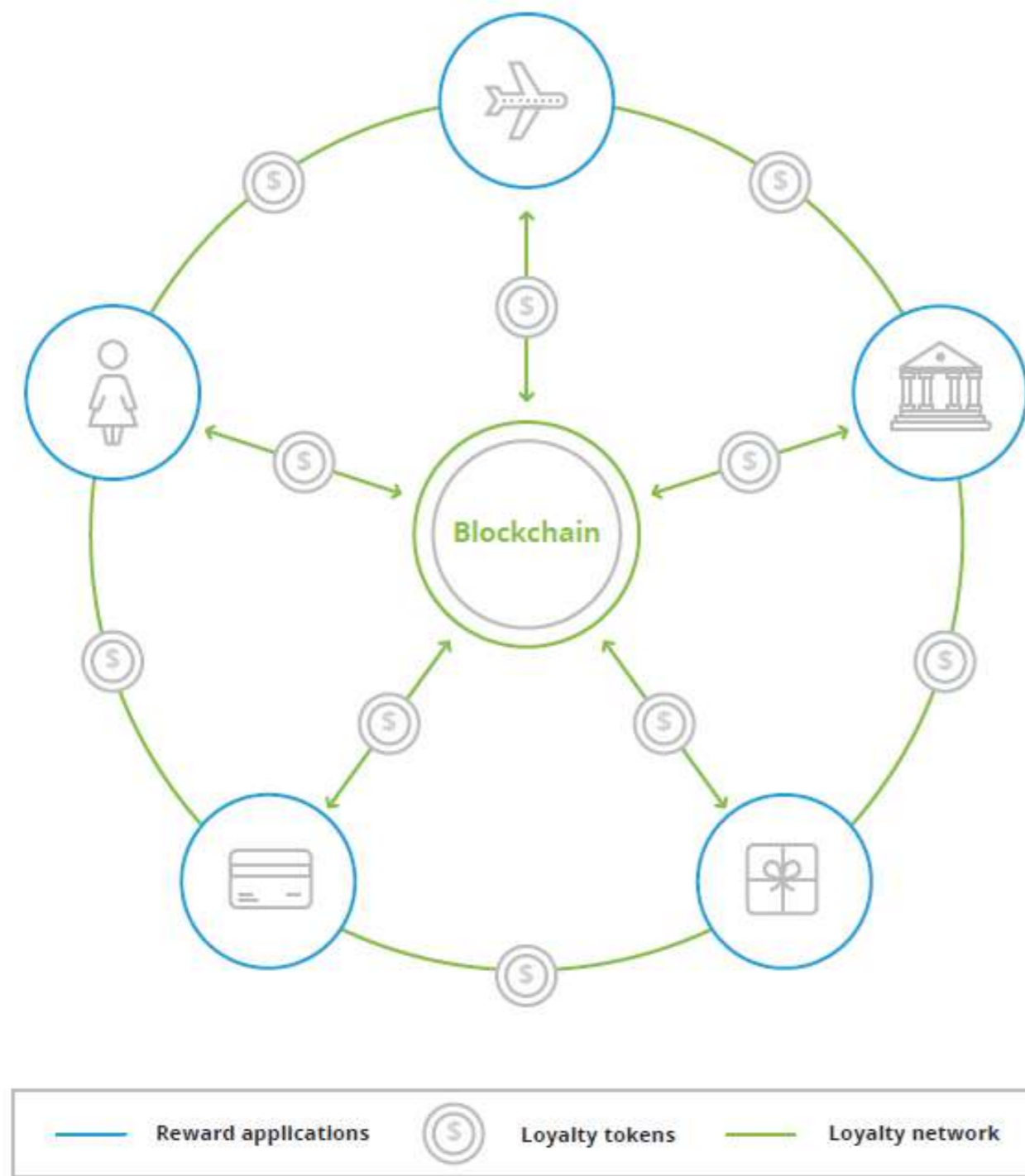
Cleverus uses new techniques based on Deep Reinforcement Learning and hybrid neuro-symbolic algorithms to improve customer loyalty programs through the recommendation of services, products and tailor-made tourism packages.





The Innovation

It is a software **designed for tourist destinations**. Cleverus creates an **ecosystem of public and private entities located in the same destination**. It offers services and products where the **user can obtain points and redeem them with a single number (QR code) within the destination's ecosystem**.



The platform uses **Smart Contracts in the loyalty process** so that **customers automatically receive the agreed bonuses** according to the services purchased in order to obtain discounts, attendance at private events, exclusive promotions or other premium products thanks to customer loyalty.

The platform is **based on a modular architecture designed under the Distributed Ledger Technology paradigm**. The architecture will integrate various modules for **information capture, communication between modules, data analysis and information representation**.

“Distributed Registration and Deep Neuroevolution Learning technologies
for the creation of the Single Digital Multimodal Transport Ticket at Global level.

OnePass[®]



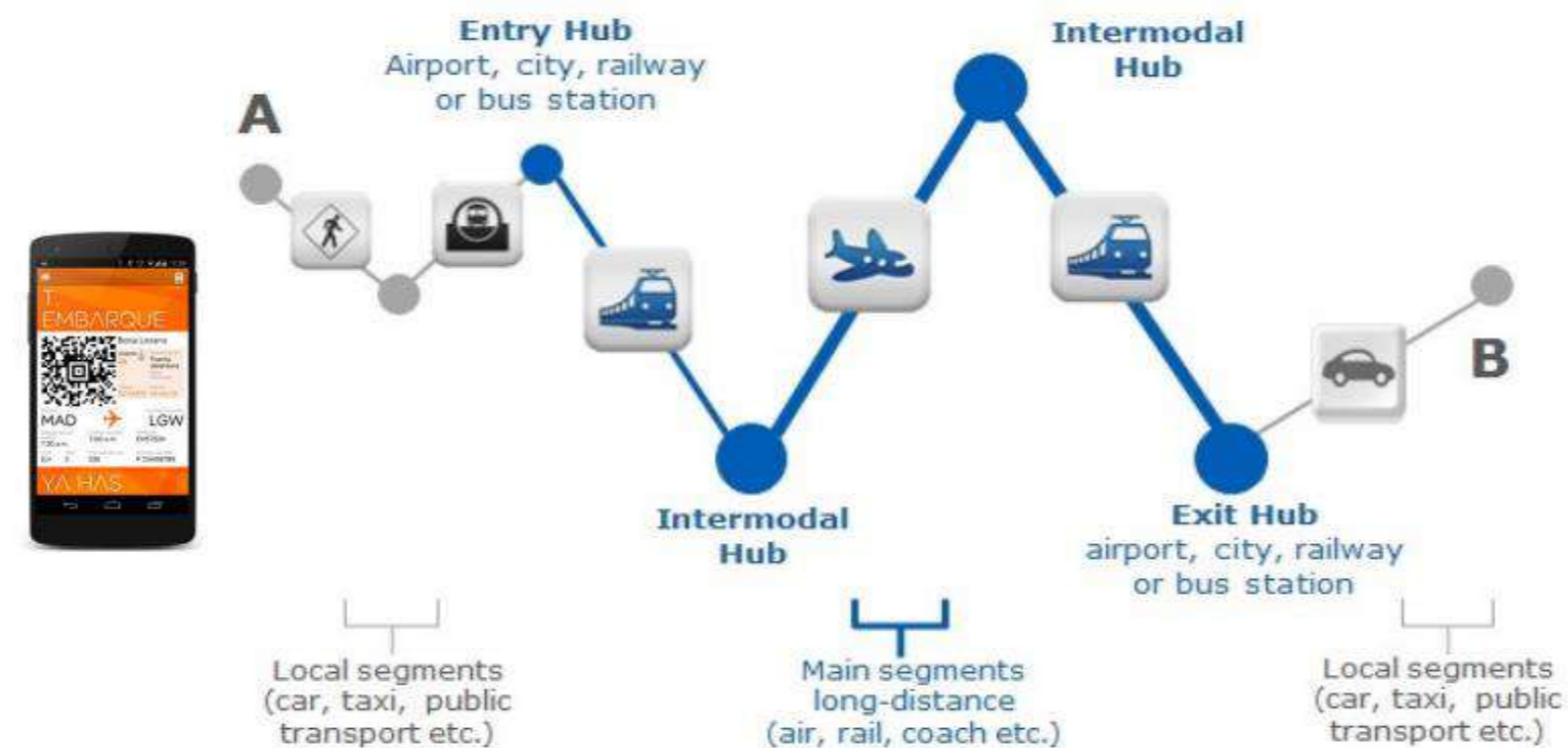
OnePass[®]



OnePass will be the **first multimodal e-ticket**, allowing medium and long-haul travelers to move around the world in complete safety **with a single QR code**.

The customer will have the choice to have a **fully insured ticket**.

The combination of **Blockchain** and **Artificial Intelligence** will make possible to create an interconnected community with all the players involved in the travel chain.





hi +
card[®]
Health Identification Card

The new Concept of Health Card

Problem: Medical Information Management when Travelling

hi +
card



Patients do not own their medical information.

- Medical centers and social security are the ones who control our information
- If patients were in control of our medical information, we could put it to better use.



Accessing your medical information is very tedious.

- The wide variety of different entities that hold the information makes it difficult to have immediate access to our medical data.
- The means established for accessing it are neither convenient nor efficient.



Medical information is not stored in a secure manner

- The government does not make use of state-of-the-art technology.
- Bugs and inefficiencies are generated that create risks in the systems.



It is crucial to be able to translate health information into another language in case of emergency.

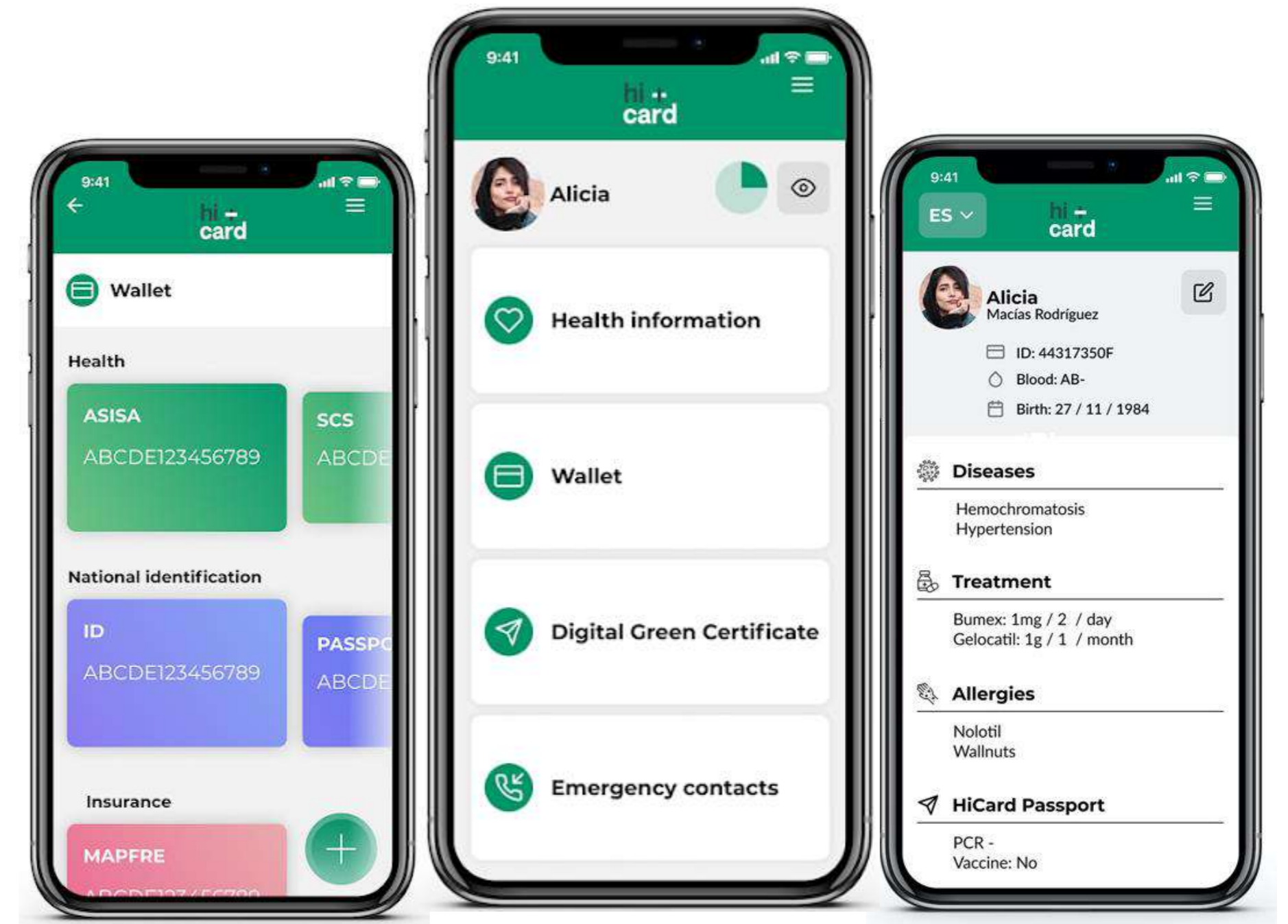
- In case of an emergency abroad it is necessary to be able to translate your information (pathologies, allergies, diseases, etc.) in order to be able to communicate your health condition and assess your options, allergies, illnesses, etc.) to be able to communicate your health status and to assess options.
- Overseas it can take days to receive your health information.

hi+Card Travel



Securely store, organize and access your information when and where you want it.

- Store and organize all your medical information that you want to have at hand in a totally secure way (diseases, allergies, test results, treatments, vaccinations, etc.).
- Wallet: Digitize all your **cards** and **certificates** (insurance and health cards, cards, medical certificates, etc.).
- Instantly translates your medical information into the language of the target country or territory. Currently available in 7 languages: English, Spanish, French, German, Portuguese, Italian and Russian

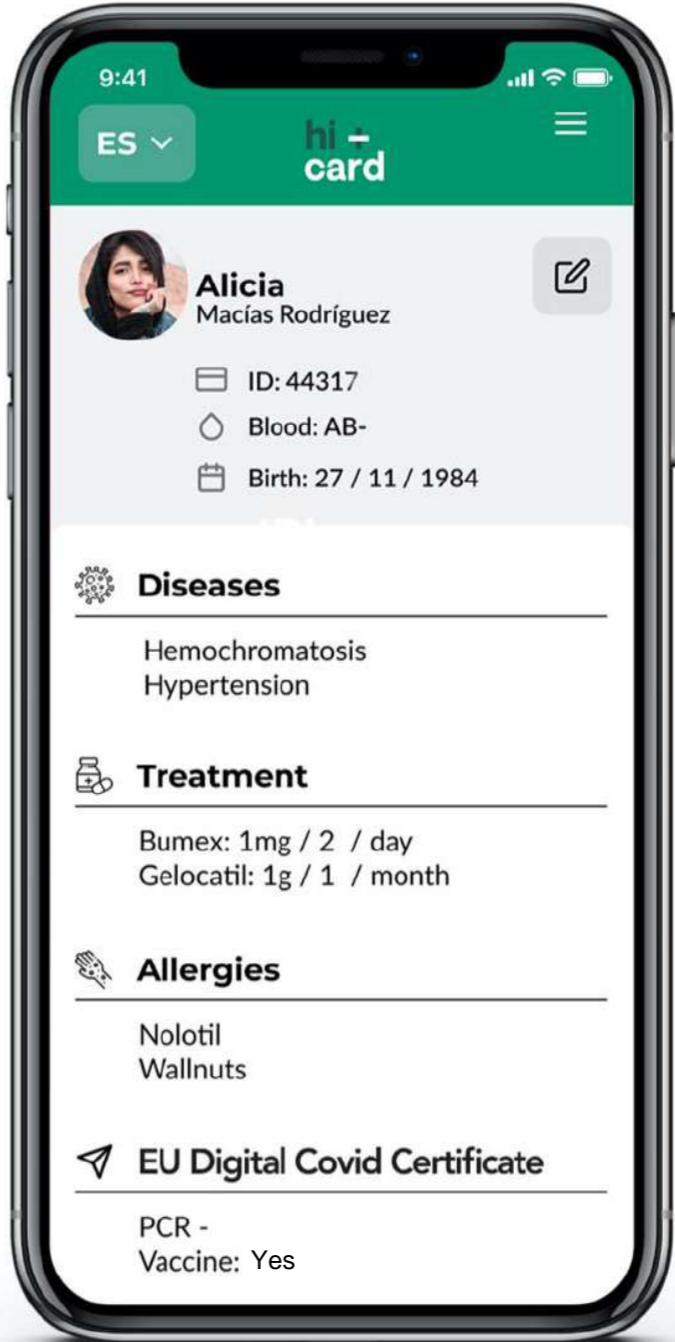
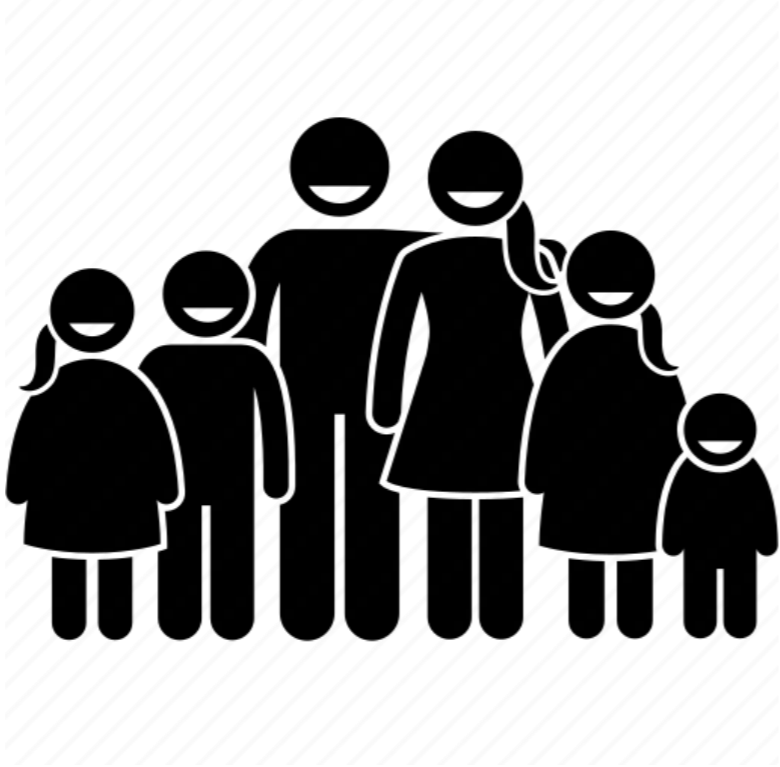


hi+Card Travel

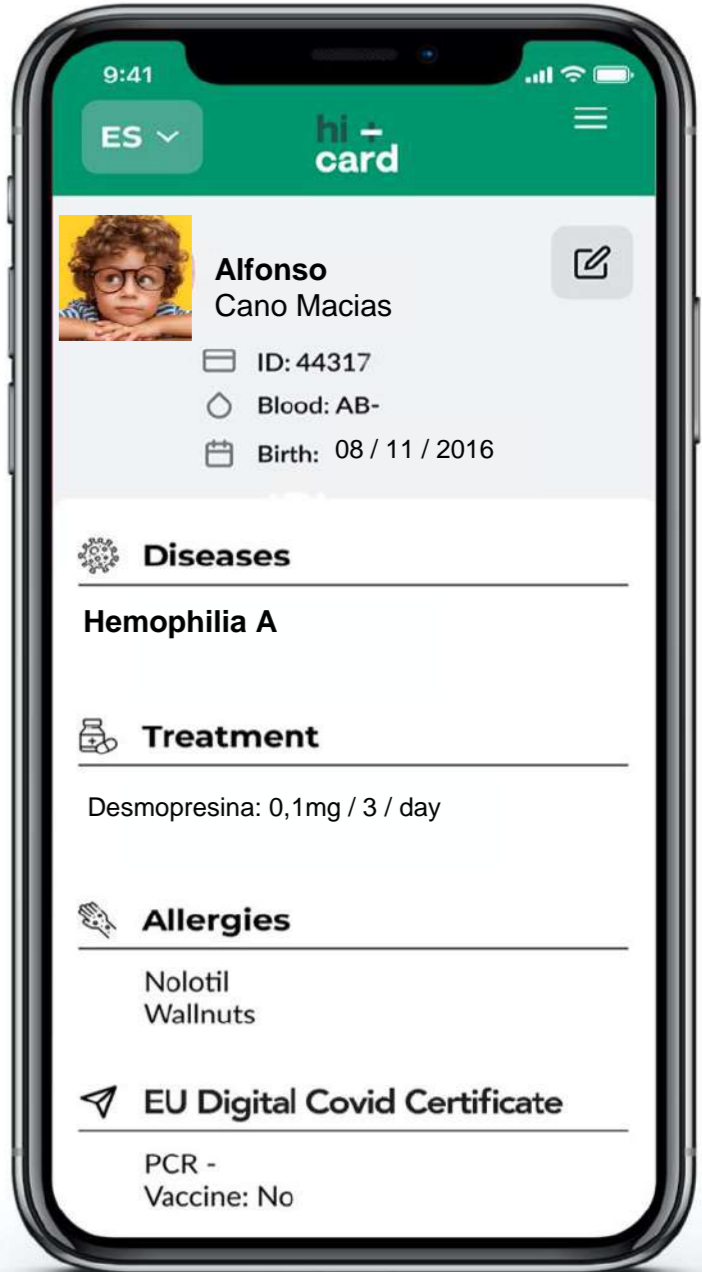


In addition, the user can create multiple profiles to carry all the **medical information of his family** (children, parents, partners, etc.) on his cell phone.

It has been a recurring request from users when traveling with families with young children with a chronic illness, separated parents to carry on their mobile the medical profile of their children or in the case of traveling with elderly parents or people with disabilities, among others.



¡Nueva Funcionalidad!

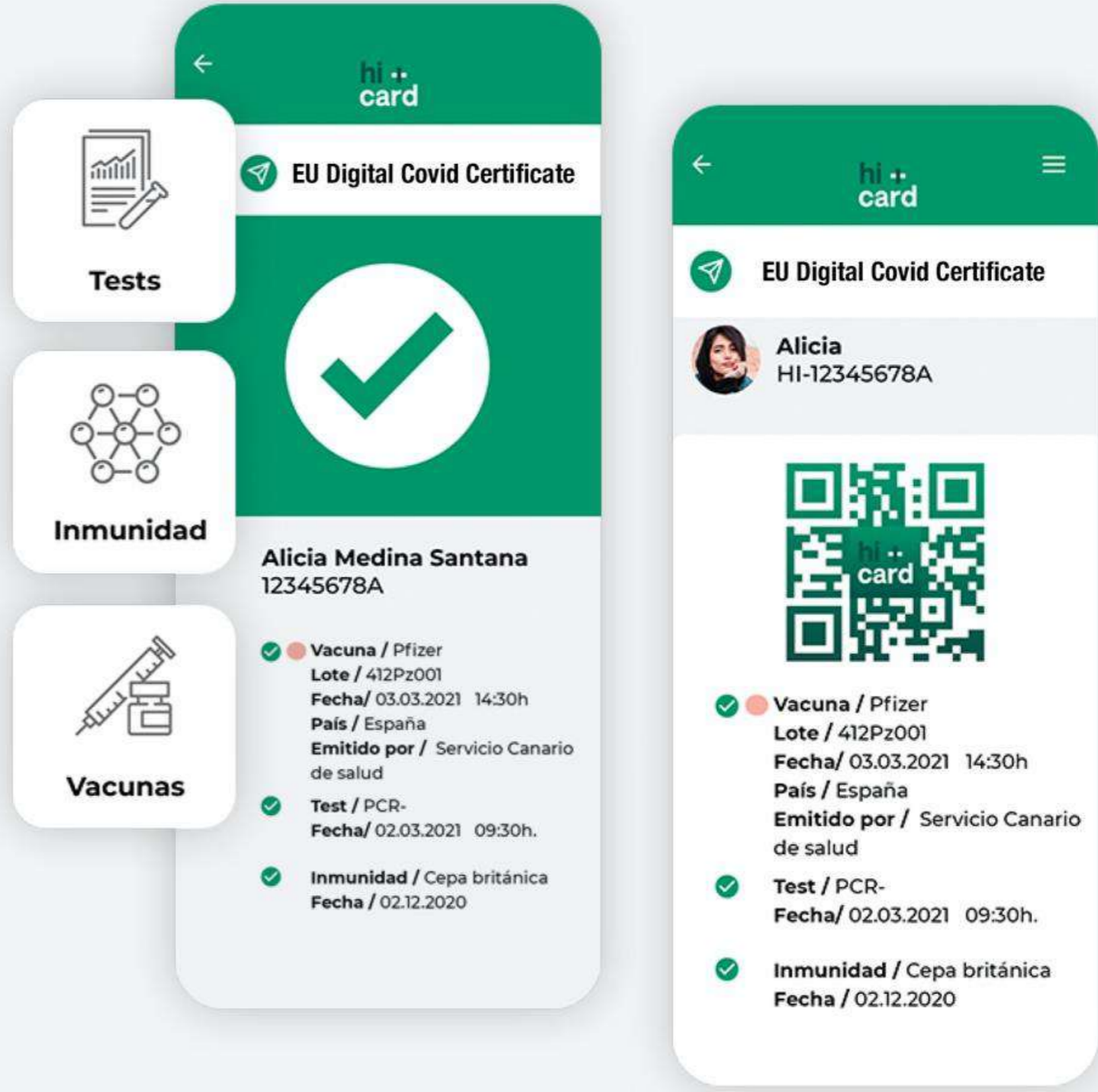


European Covid Certificate or Country QR



hi+Card is ready to support the European Covid Certificate once any country in the world is interested in using it as its own application. Or include your own QR code

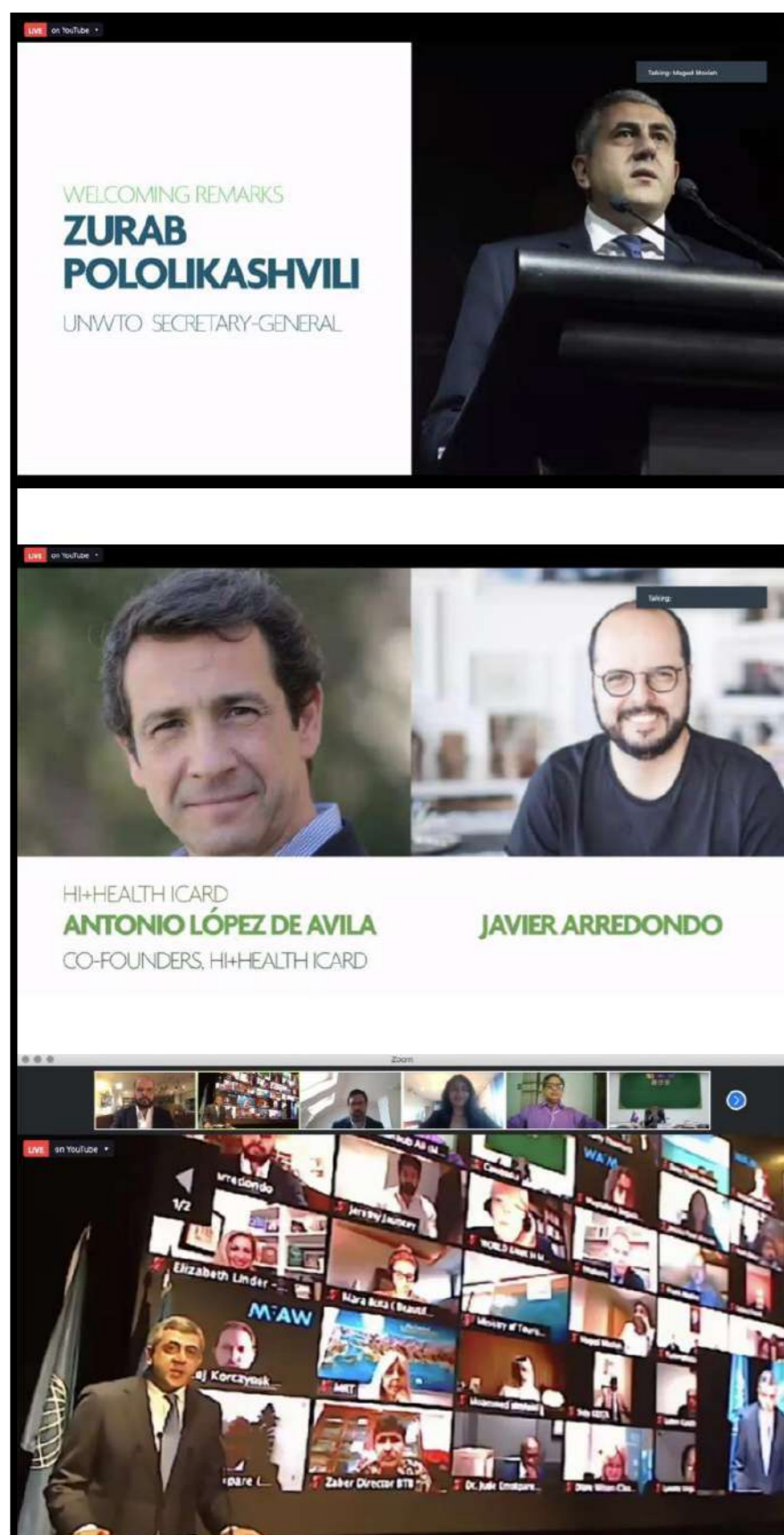
hi+Card is free for governments in its function of Covid passport.



Currently in negotiation and co-creation with different countries and territories!

UNWTO Presentation

hi +
card



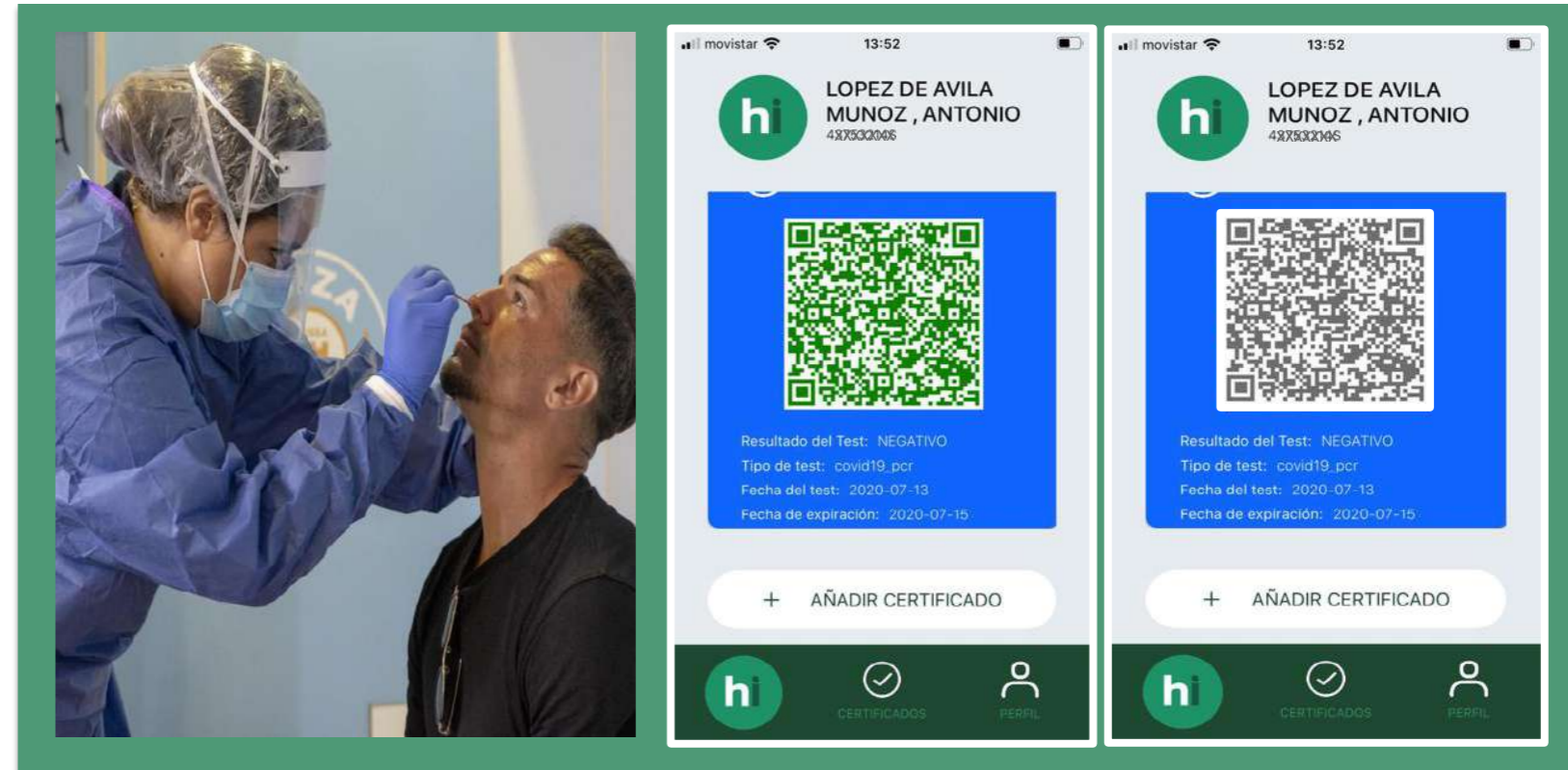
hi+Card was presented on May 2020 (via zoom) to an audience of 9.000 people, including more than 160 tourism ministers.

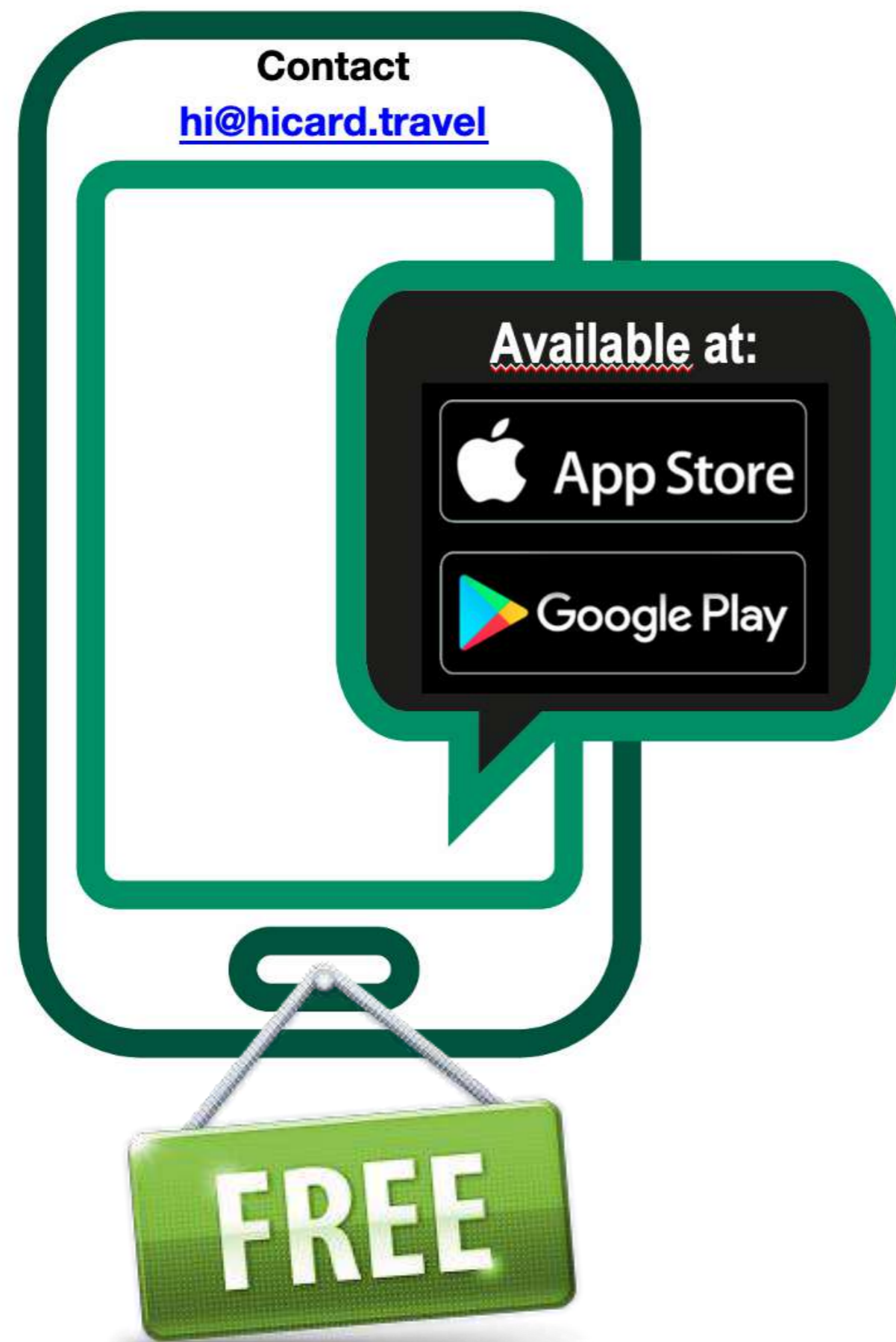
The Healing Solutions Tourism Challenge event was organized by the World Tourism Organization and the World Health Organization (United Nations).

hi+Card beta test: Canary Government and UNWTO



- In July 2020 the **Government of the Canary Islands** and the **UNWTO** organized a trip of more than **100 journalists** from all over the world to showcase the Canary Islands as a safe destination. The app used was **hi+Card**.
- Travelers underwent a **PCR test** by Quiron LAB no later than 72 hours before their flight departure (following WHO guidelines). Quiron LAB uploaded the **test results to hi+Card**, upon written request from the travelers.
- **hi+Card generated a QR** that could be easily consulted when boarding the plane, arriving at the hotel or boarding a ferry.
- The document was stored securely and immutably in the traveler's profile **for 72 hours, after which the QR was no longer valid, turning from green to gray.**





hi +
card[®]
Health Identification Card

The new Concept of Health Card



Antonio López de Avila
CEO

Tourism Data Driven Solutions
Madrid-Bruselas-Ciudad de México
Bogotá-Santiago de Chile-Shanghai
antonio.lopezdeavila@tourismdds.com
www.tourismdds.com
@alopezdeavila

gracias