











- 4,96 m population.
- Castellón, València y Alicante.
- 524 km coastline.
- 25,3 m tourists.
- 9 UNESCO World Heritage sites.
- 22 landscapes with the protected desgination of "Parques Naturales".
- 14 celebrations considered as events of International Tourist Interest.



Invat-tur

Valencian Institute of Tourism Technologies

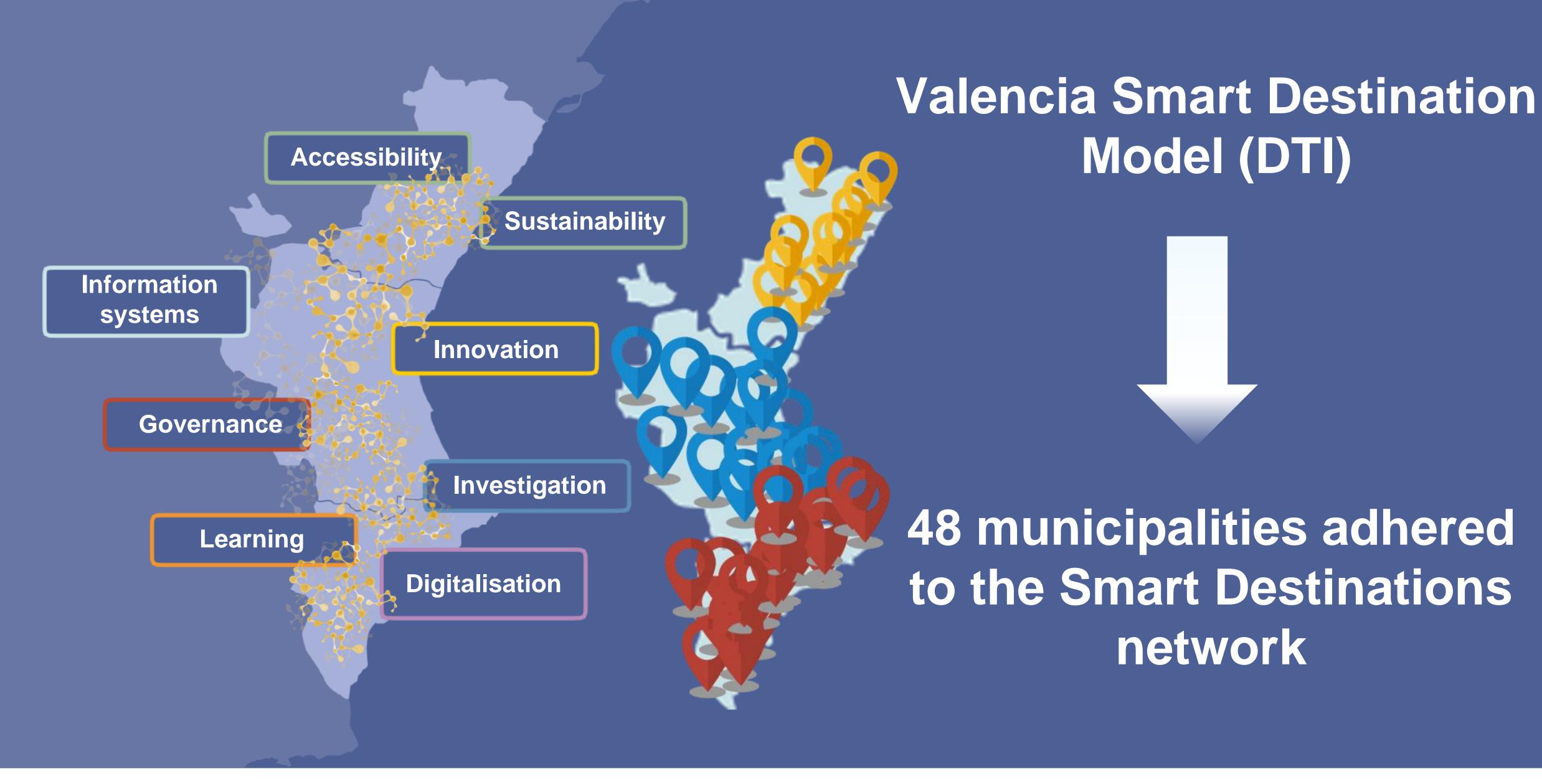
- Public company attached to the Regional Ministry of Tourism of the Valencia Region.
- Promote Research, Development and Innovation among tourist destinations and companies in the Region of Valencia.
- Generation and transfer the tourist knowledge, through the development of R+D+i projects and adaptation to new trends in all aspects of the tourist market.







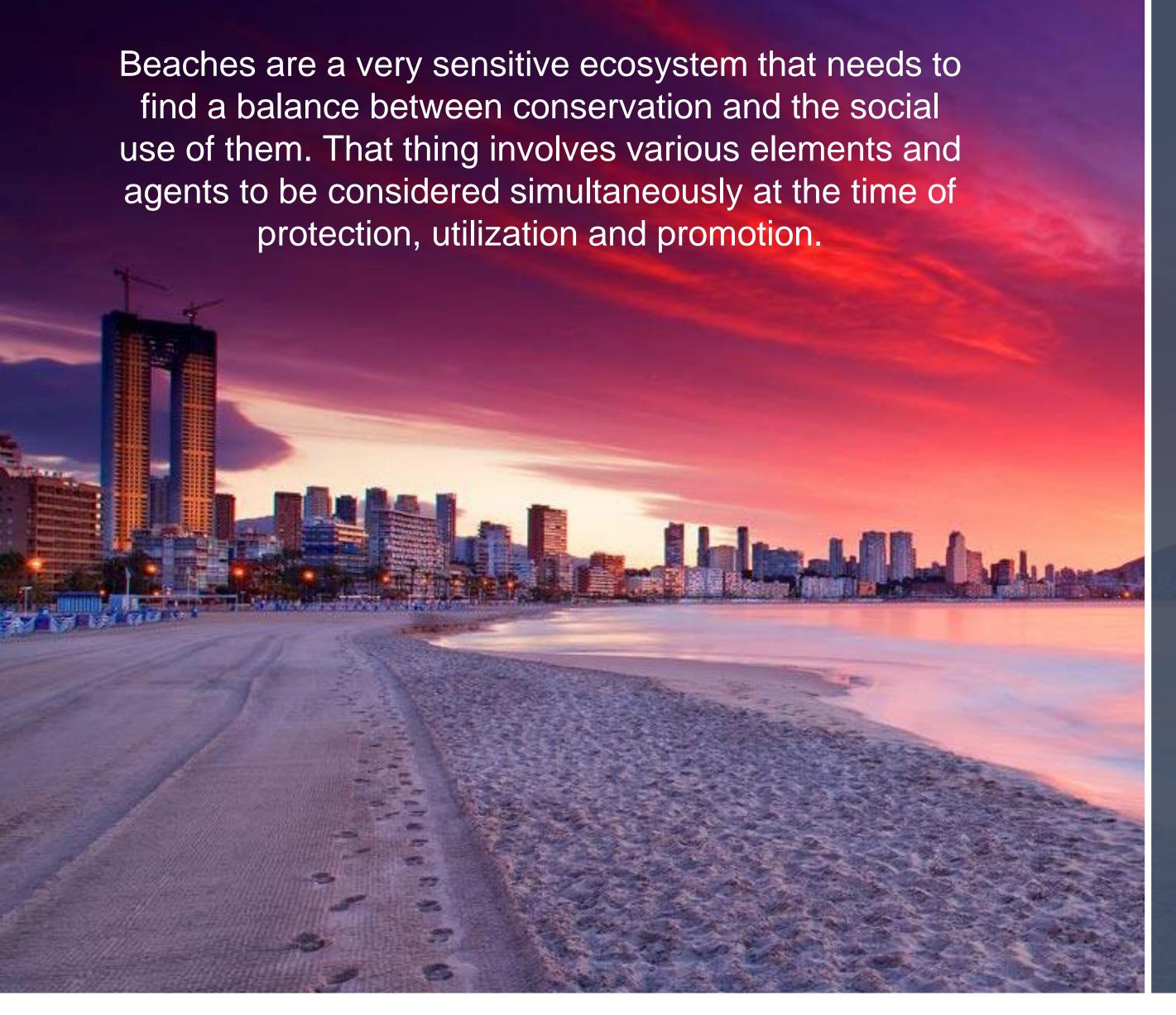














Why a specific study?

In the framework of the DTI model of the Valencia Region



Management of public administrations

The profusion of competent administrations in their management that makes it difficult to implement new models.



Quality and environmental management systems

Used by destinations but without a technological and innovative approach.



Users

High sensitivity in the user's perception of changes on the beaches.



Services

Improvement in terms of services provided on the beaches: accessibility, sustainability, security...







Focus of the study

Agents involved



Destination managers

As promoters of change and proposal for improvement in management models



Beaches users

Improving the perception of the destination through quality and new services





Business

Providers of services on the beaches, integrating into the DTI model and opening the possibility of new business models



DTI Model

Aligned with the Smart Destinations
Strategy of the Valencia Region







Areas of Study

Three areas of action on the beaches of the Valencia Region



Sustainability

Beaches more sustainable environmentally, economically and socially

Accessibility

Beaches for everyone. With adapted services and new possibilities to facilitate inclusion

Security

Safer Beaches With better management and control over the environment







SMART BEACHES GRAPHIC MODEL VALENCIA REGION Signaling Weather radar Optical /acoustic Discharge prevention Adapted High precision notices **UVA** sensors Assistants Al Adapted **Foot Flag** UVA Exposure Temperature equipment **Emergency Services** Smart Control of consumpt Real-time monitoring Foot Flag with Timing **Parking** Connected services anchored chairs uto diagnosis Direct intervention Traffic control Adapted sports facilities **Electric Auto Generator** Real-time monitoring Pedestrian prioritization **Info Panels** Assistants Photovoltaic /wind turbines CO2 reduction Tactile Clean energy Adapted Self-consumption Sensorized Flags Adapted Substrate sensor Bath indication **Bathroom Areas** Threshold alarms Flying flag Information Substrate status Real-time monitoring Assistants resence of waste Universal accessibility Wearable location Location of people / objects Drone Alarms for invasion of zones Bather surveillance Ship surveillance Real-time monitoring **Water supply** Real-time monitoring Supply / drinking separation eak detection Smart traffic lights Control of consumption Pedestrian prioritization Safety information **Bollards Architectural** Adapted **barriers** Video surveillance Invasion prevention Services Geopositioning Analysis of images Elimination barriers Safety information Real-time monitoring Parking spaces Adapted offer Vandalism Alarms Alternative Adapted transport Assistants Al Forensic analysis Transport. Video Presence of the lifeguard Bathymetry **Smart buoys** surveillance farine background monitoring Electric vehicle Location of species Auto diagnosis Occupation Chargers Preximity iBeacons Discharge detection Ship surveillance Real time monitoring Restrictions on access: Etertric vehicles Indications for the blind State of the sea Mobile devices WIF Optical /acoustic Information Floating objects Presence of jellyfish service instructions Occupation density Sensor connection layer GENERALITAT VALENCIANA **RED DE DESTINOS TURÍSTICOS INTELIGENTES**

COMUNITAT VALENCIANA



USED TECHNOLOGY









VIDEO Video surveillance that allows the analysis of images to monitor in real time indicators such as occupation, improve security, prevention, detection of compliance with regulations, presence of lifeguard, etc.



COMPANIES AND SERVICES

PAYMENTS AND SERVICES

Mobile payments without contact, NFC, apps that allow the management of the reservation from the source and genera te customer profiles, historical, loyalty

Notifications of changes or delays in itinerary, reservations vailability, etc.

ADMINISTRATION CONTACT

Notifications on supply, street cuts, events in the environment, institutional announcements, direct line with e-admon, collaboration (job boards, local development)

APPS - CRM - WEB

Geolocated locations. Responsive web pages Digital services Surveys, promotions, loyalty, opinions, connection with CRM of the entity.

E-COMMERCE

Commercialization of services / traditional products, snack services in the sand, online booking of sunbeds, beach

NEW EXPERIENCES

Augmented reality, gamification, smart labels, location of rental products.





LOCATION

09

BEST INFORMATION IN MOBILE DEVICES

Augmented reality, expanded nformation when aiming at an object or area, monument service

POI's

. .

Mobile, Geolocated, digital information, each device is a sensor. Interactive information panels, virtu assistants.

PARTICIPATION

Custom messages based on user's location, participation in surveys, prevention and warning of emergencies, control of catastrophes

CONNECTION

Identified wifi access, connection count, data ransport in both

ACCESSIBILITY

Multi-language audio guides, indicative signs for the blind, geo-positioning of accessible areas, notices



SECURITY



NEW SERVICES VISITORS

ARRIVAL

Personalized welcome with information on services, traceability in the beach area, smart recommendations, download of recommended applications.

RECOMMENDATIONS

Notifications about available services, nearby places of interest, purchases, reservations, Cultural agendas, parties.

COMMUNICATION AND ASSISTANCE

Virtual assistants in Al who attend the visitor's language Geofencing, bluetooth beacons, messages sensitive to the context of the tourist and the enviroment

ENHANCED EXPERIENCE

Access to beach information through augmented reality, 3D or VR experiences, gamification. Physical or virtual information panels

MOBILITY

Suggested routes, transport information in real time, traffic recommendations, sustainable 🗖 cycling infrastructure

CULTURE

Information on cultural events, history and legends about the area, audioquides, traditions, ethnotourism, Recommendations in the vicinity of the beach.

FEEDBACK

Monitoring activity anonymously, repository of tourist postcards ready to share on social media, checkin's collection on visit time





ECOTOURISM

Species sighting points, monitoring of protected species, restricted areas (marine

NAUTICAL SPORTS

Diving and snorkeling routes, ports and anchorage areas, legacy, increased services to boats.

COMMUNICATION AND ASSISTANCE

Virtual assistants in Al who attend the visitor's language Geofencing, bluetooth beacons, messages sensitive to the context of the tourist and the environment.

PUBLIC TRANSPORT

Information on public transport about beach occupation, service routes, sea TRAM state, environmental conditions

Book the hammock on the beach from the hotel. and issue notices when it is

RESERVATION OF SERVICES

Request food at the beach bar

Massive occupation zones with recommendation of alternatives Art and culture options, exhibitions on the beach, sports events calendar.

DINAMIZATION





SEA CONDITIONS

COASTAL LINE

Detection of algae remains or discharges Solar radiation, sand state, coastal

WATER SUPPLIES

Separate network of drinking water and not drinkable according to uses. Control of consumption.

SECURITY

Fire alarms Anti-vandalism video surveillance

Smart parking, waste optimization Renewable energies (Solar, wind, hydraulic). Optimized waste collection

SUSTAINABILITY

Sensation of leaks and blockages, light pollu-

HABITABILITY

tion, noise levels, occupancy levels



"El Destino Turístico del Futuro - Future Smart Destination"

Diseño basado en la serie de Infografías

creadas por Francis Ortiz - CreaSolutions.es









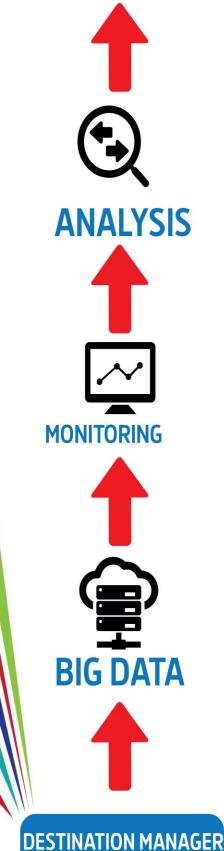
http://invattur.gva.es/







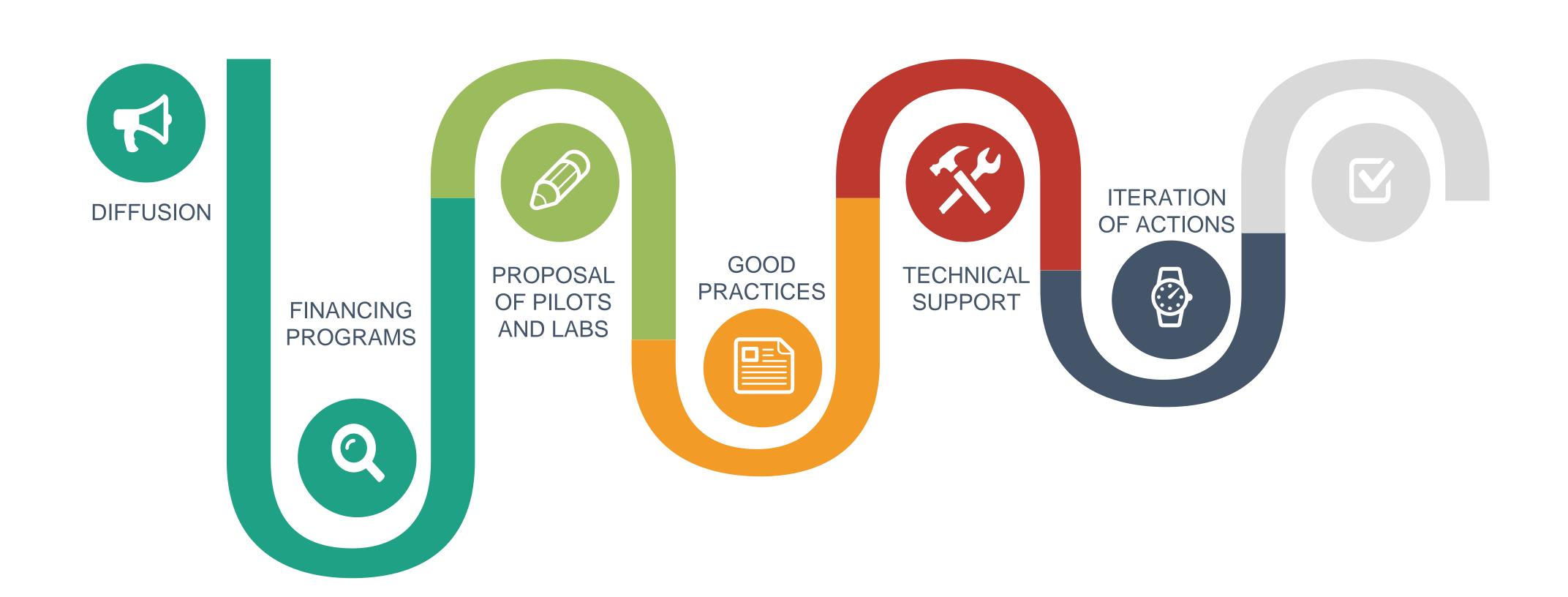




TOURIST OFFICE

PDCA Model

Invat-tur holds the Technical Assistance for Smart Destinations









Technology allowes the achivement of:

- More efficient beaches. With a more efficient management of its resources and better perception of services.
- More sustainable beaches. With the reuse of resources and technology that integrate the environment, the social and the economic in the environment.
- With **better services** that increase the perception of quality, help in their choice and provide new economic models.
- Better managed. With the obtaining of data and indicators that allow a more rational model in the management of beaches.
- More secure. Emergency and everyday use, ensuring tranquility of users and the information to them.
- More accessible. Beaches for everyone, with advanced services for people with disabilities, universal accessibility to integrate and improve everyone's satisfaction.









