

Smart Solution designed for people

SMART POI



TECHNOLOGY & PEOPLE MERGED



smartcities.hopu.eu

We are HOP Ubiquitous, an innovative company specializing in IoT connectivity, management and providing consulting services in IoT solutions for Smart Cities.

We design intelligent ecosystems in order to innovate and improve the quality of life of each city, harnessing co-creation tools which enhance the active participation of citizens and stakeholders involved in the socio-economic system.

CITIZENS AND VISITORS PARTICIPATION

We seek to adapt cities to their real necessities by involving citizens in the process of communication,

design and management through intelligent solutions which take into account all information collected.

COMMUNICATION

We improve communications and interactions among the different stakeholders in a city, its habitants and infrastructure.

SUSTAINABILITY

We envision an Intelligent City as an environment where available resources are optimized without harming external conditions and by protecting the sustainability of environment and urban spaces.



SMART POI

POINT OF INTERACTION WITH PHYSICAL SPACES

Smart POIs are strategic areas of interest, consisting of a set of Smart Spots (the specific point of connection) that send a URL and create a physical space of information where everyone approaching can collaborate through a smart phone. Therefore, Smart POIs connect physical objects or places with the smart phone to offer an interactive and multimedia experience. This technology allows to directly open a responsive Web App that contains information designed to answer a specific topic, including text, videos, images and any multimedia material.

INNOVATION

The devices work by proximity (20 meters) both outdoors and indoors. The solution is ready for outdoor environments with an enclosure resistant to inclement weather. Exterior enclosures look and feel offer a discreet

and elegant design that matches the environment using natural materials. In addition, Smart Spots are followed by an identifying sign and a series of simple instructions to guide the user, in order to guarantee that they are able to enjoy the experience.

GOALS

Smart POIs have a multitude of possibilities for the tourism industry, such as filling the information gaps existing in the cities, and connecting the consumer with services and products related to the sector, proximity marketing, geographic targeting, and content broadcasting. Smart POIs technology is a disruptive innovation in the tourism sector that will facilitate and enhance the experience of visitors and citizens.

SMART CITY ECOSYSTEM



Open Data
Transparency & Communication



Environmental Monitoring
Sustainable City



Tourism
Agile Experience



Co-creation Point
Participative citizenship



Open Interfaces
Interoperability

We focus on people to create Human Oriented Products (HOP) to solve real needs and bring to reality smart solutions. Following this philosophy, we have developed an application that involves the citizen insights and improves the connections of the city.

Siidi aims to carry out a co-creation process that allows valuable feedback on the running of each city, particularly in the development of new areas.

The App is adapted to the necessities of the cities, looking at efficiency and tailoring the design and information to

each user in each place. Co-creation service is possible thanks to Smart POIs technology that makes the interaction easy and agile.

The objectives of this application are:

- Involving people in the design of Smart Cities.
- Validate
- Collect relevant data "Big data".
- Business information about interests.
- Avoid mistakes in the planning of the new district.

CO-CREATION APP



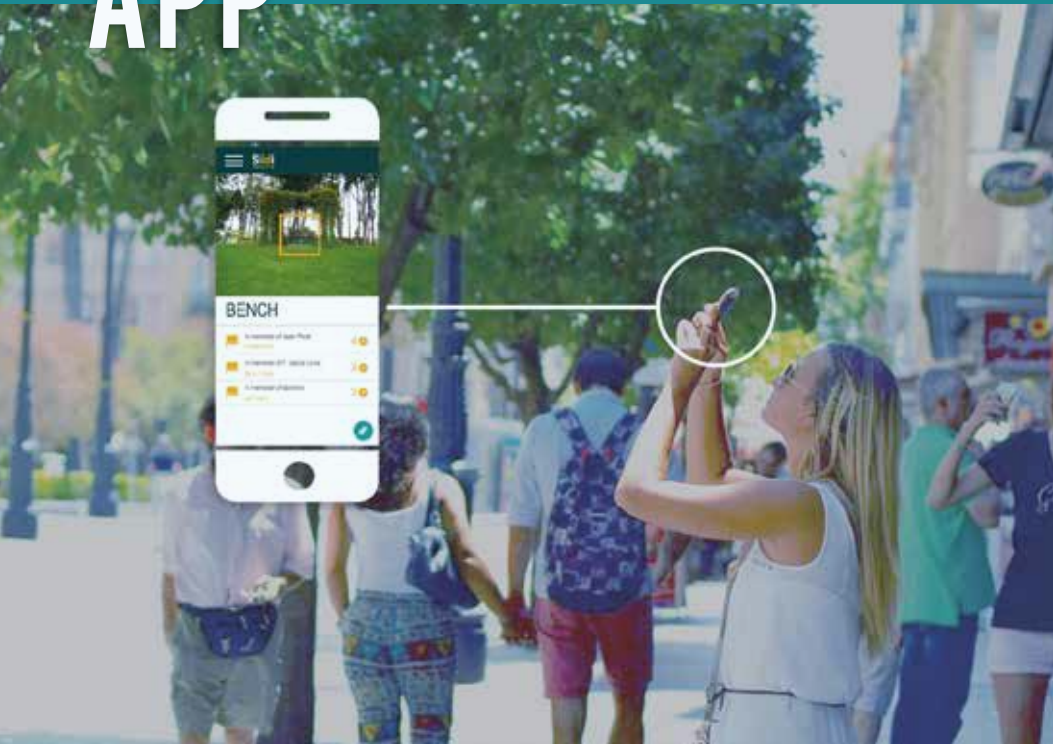
TOURISM EXPERIENCE

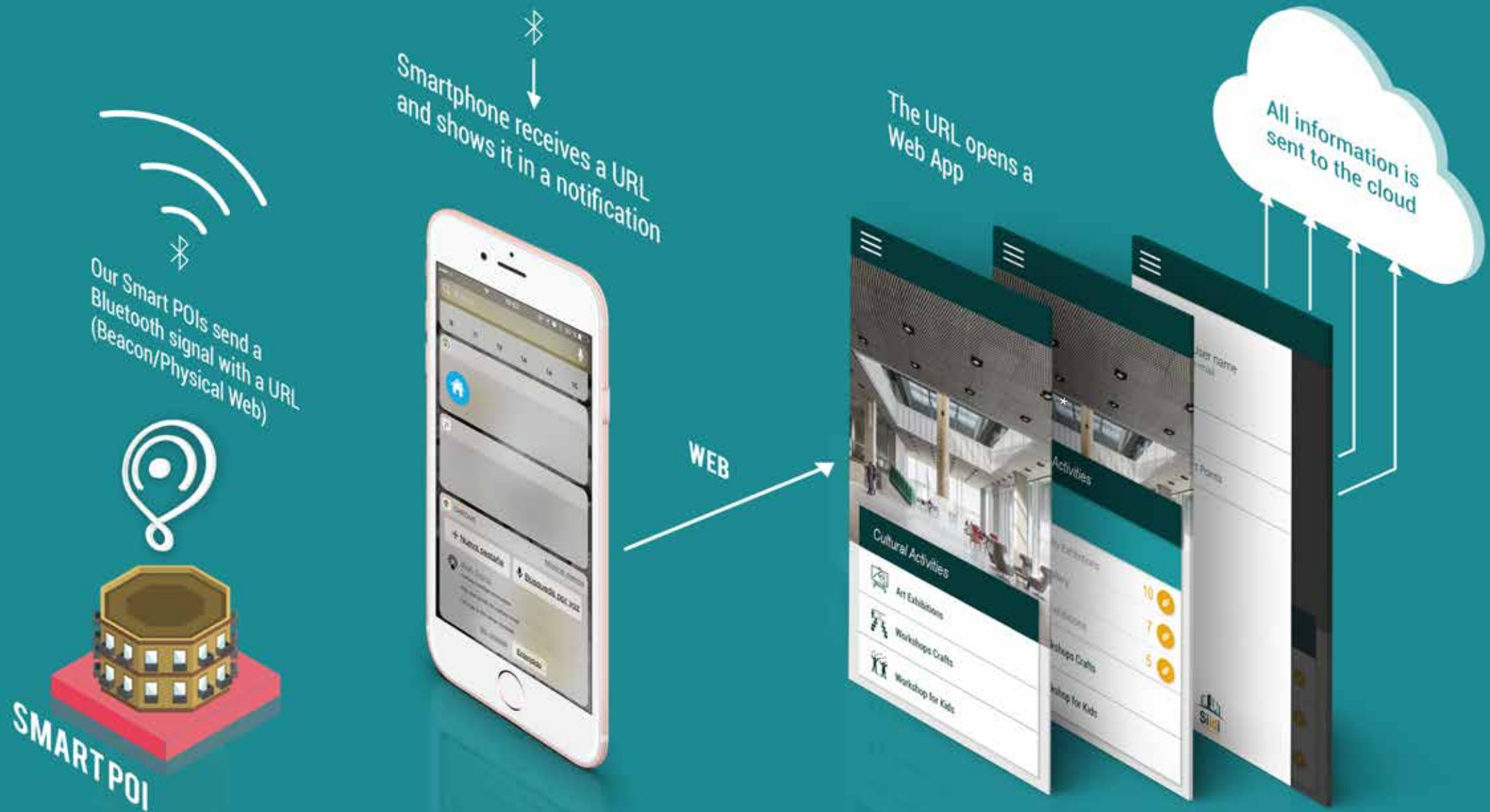
By thinking in a more human and personalized way to improve the integration and interaction of citizens, we discover a more useful way to use technology focused on people.

HOP Tourism App generates a source of information that allows your city to be a Smart Tourist Destination through the creation of a natural communication system among services and visitors; thereby, developing a complete and agile experience.

HOP SMART TOURISM APP

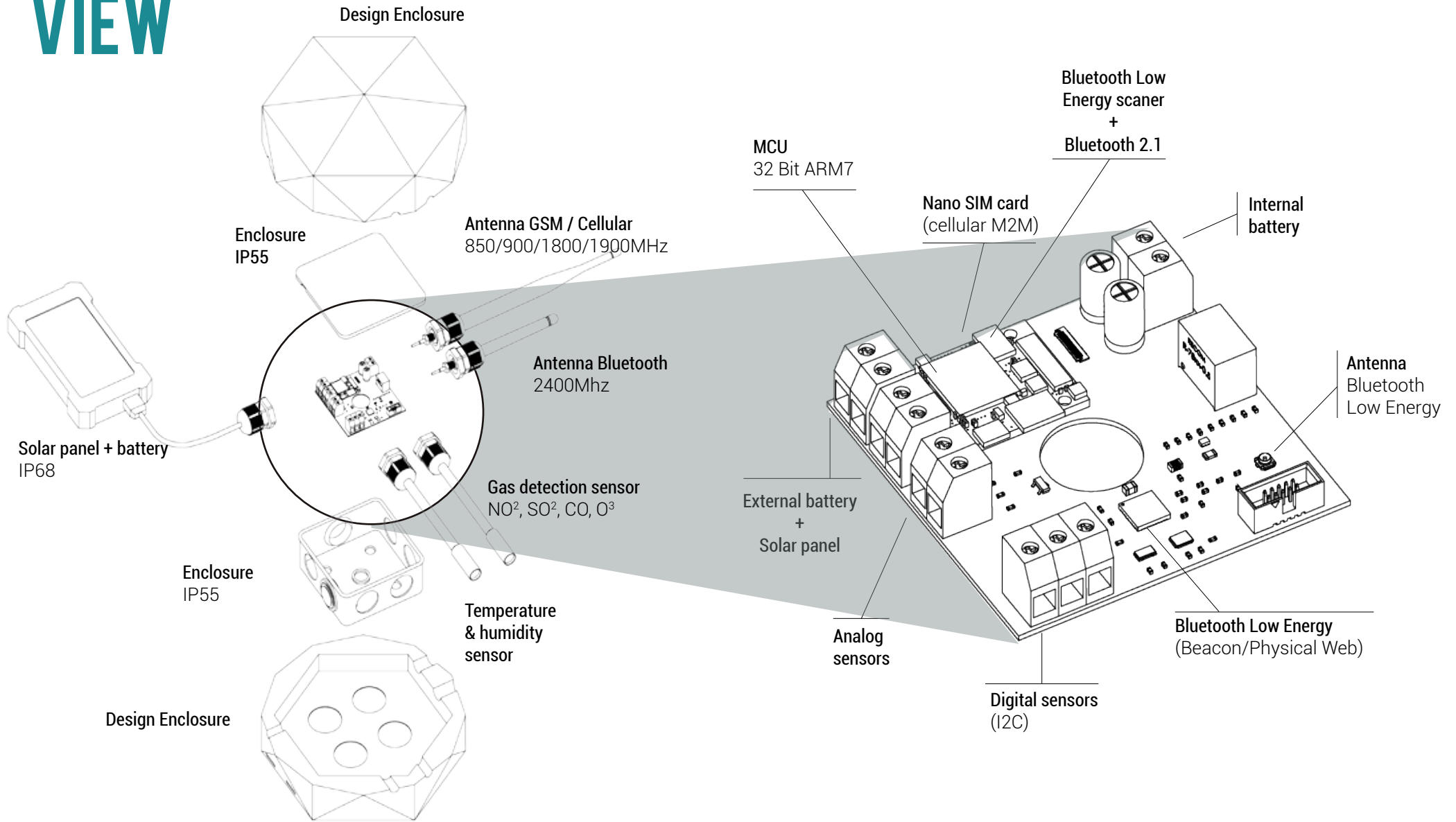
This application permits connecting cultural heritage with visitors by sending interesting information or news about museums, monuments or historical places to users' smart phone. When users stay close to a Smart POI (Point of Interaction); they receive a request for use of the App in the form of a notification. Hereafter, the user has is able to access the information that has been sent by a Smart Spot (beacon). HOP Smart Tourism App is designed to meet the needs of visitors but also of citizens' at the same time as it helps smart and medium tourism companies.





* Physical Web is a new technology developed by Google to interface digital and physical world. Compatible with iOS, Android and Google Chrome.

EXPLODED VIEW



TECHNICAL SPECIFICATION DATASHEET

Enclosure	Outdoor protection IP55 (Resistant to water and dust)
Radio Interfaces	1 x Bluetooth Low Energy 4.0 Scanner + Bluetooth 2.1 (Dual Mode)
	1 x Bluetooth Low Energy Beacon (Eddystone / Physical Web)
	1 x M2M Connectivity (Cellular GPRS) - SIM card
MCU Core / Clock Speed	32-bit ARM7EJ-STM RISC processor / 260 MHz
RAM / Flash Memory	4 MB / 16 MB
Cellular Quad-band	850/900/1800/1900MHz (GPRS - Class 12 modem)
Power Consumption	20mW-72mW-160mW @ standby (no radio)/standby(GSM+BT)/Always-on
External Interfaces	I2C Probe and ADC (GPIO) interface for external sensors - Temperature and humidity Probe - Environmental monitoring Probe - Noise/acoustic Probe
Dimensions	80mm x 80mm x 36mm (IP55 encapsulation)

Temperature Range	-20 °C to 80 °C operating temperature
SIM Card Slot	Nano SIM Card Connection - 12,3mm x 8,8mm (4FF)
Power Supply	3.5 ~ 4.2V (USB compatible)
Battery Charger	Li-ion battery charger
Internal Battery Connection	JST 1.0 Connector (1200mAh Li-on internal battery)
Energy Harvesting	Solar Panel + 10000mAh external battery (IP65 protection)
Bluetooth Low Energy Co-Processor	Texas Instrument CC2541
Antennas	Internal Ceramic Antenna Bluetooth Low Energy
	External Antenna GSM/GPRS (Cellular)
	External Antenna Bluetooth Low Energy
Software Full Stack	IPv4 / IPv6 Connectivity – Internet of Things
	RESTFul (HTTP / CoAP) – Web of Things
	OMA Lwm2m Device Management (Firmware Upgrade Over the Air)
	FIWARE NGSI Data Models (POI + Device + Extensions)



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