

Optimize production process by tracking industrial tools in a production site

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**Business
Services**



Opening a world of opportunities with our Industrial IoT solutions



Indoor Positioning Systems (IPS) can drive production performance in:

- Keeping track of asset utilization
- Streamlining production process
- Building quality control systems



72%

of organizations have implemented some IPS use cases or are in the process of implementing them*

*July 2016, Global Research Report on the Indoor Positioning Market, Atlas /Vanson Bourne

How does IPS work?

Tags

Also referred to
as trackers /
devices

Locators

Also referred to
as beacons /
observers

Software

User interface
and admin
interface

A leading Aircraft Engine Manufacturer



Tracking accuracy up to
2m



Customer case 1

A world leader in the production of **aircrafts** and **satellites** engines

1,600+
engines produced annually

35
production and maintenance sites

Challenges

Loss and theft of key tools



Improve production, performance & quality



Difficult environment for radio propagation

Production site:

7 football fields

25k key tools

Solution

Orange IPS solution based on BLE Angle Of Arrival

In partnership with Quuppa and Ubisense



With system Integration and customization



Benefits

Up to **2** m accuracy and geo-fencing features

Long battery life for the tags



No radio interference with factory equipment



Diagram of the Orange solution

Bluetooth
Sensors



Diagram of the Orange solution

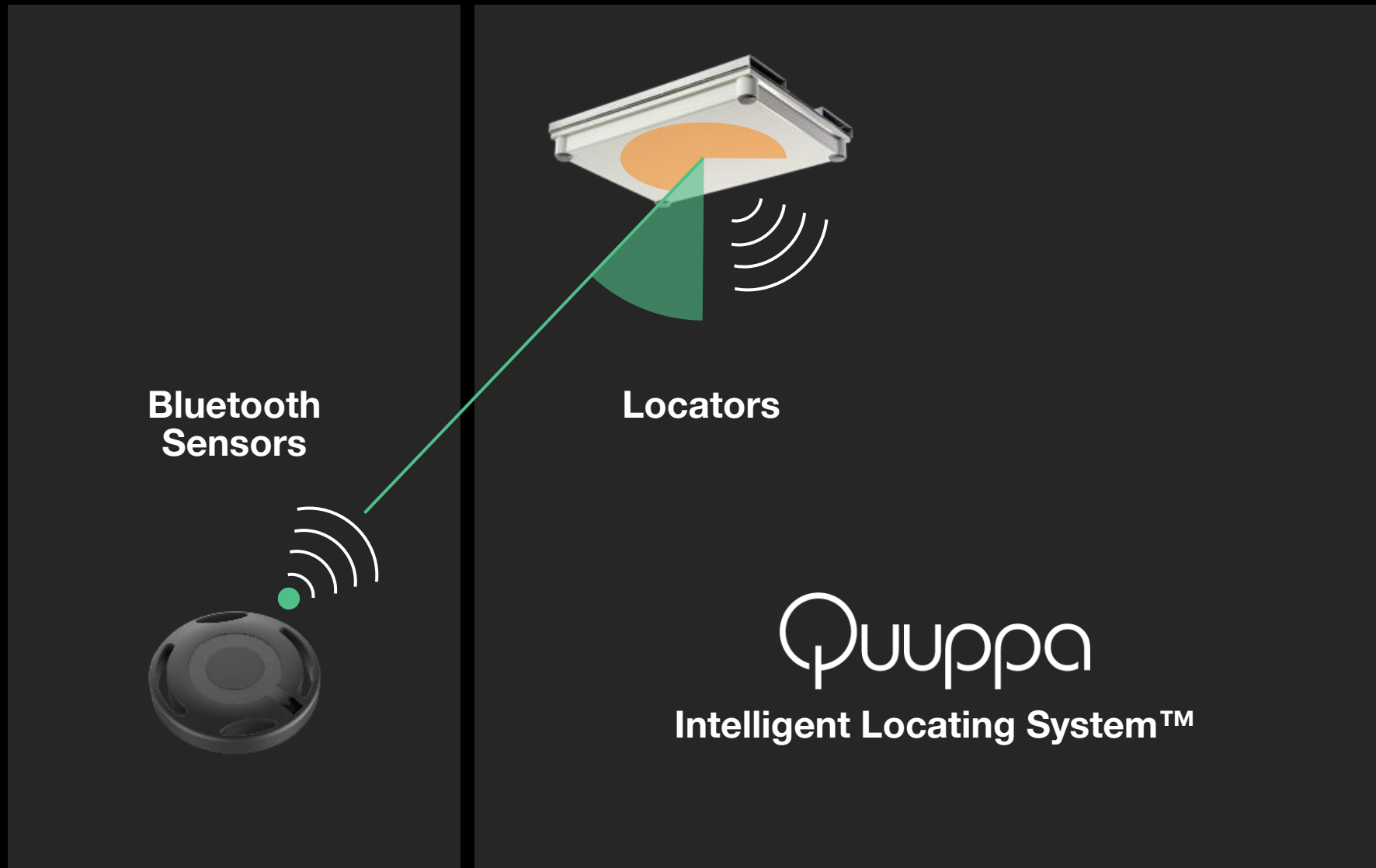


Diagram of the Orange solution

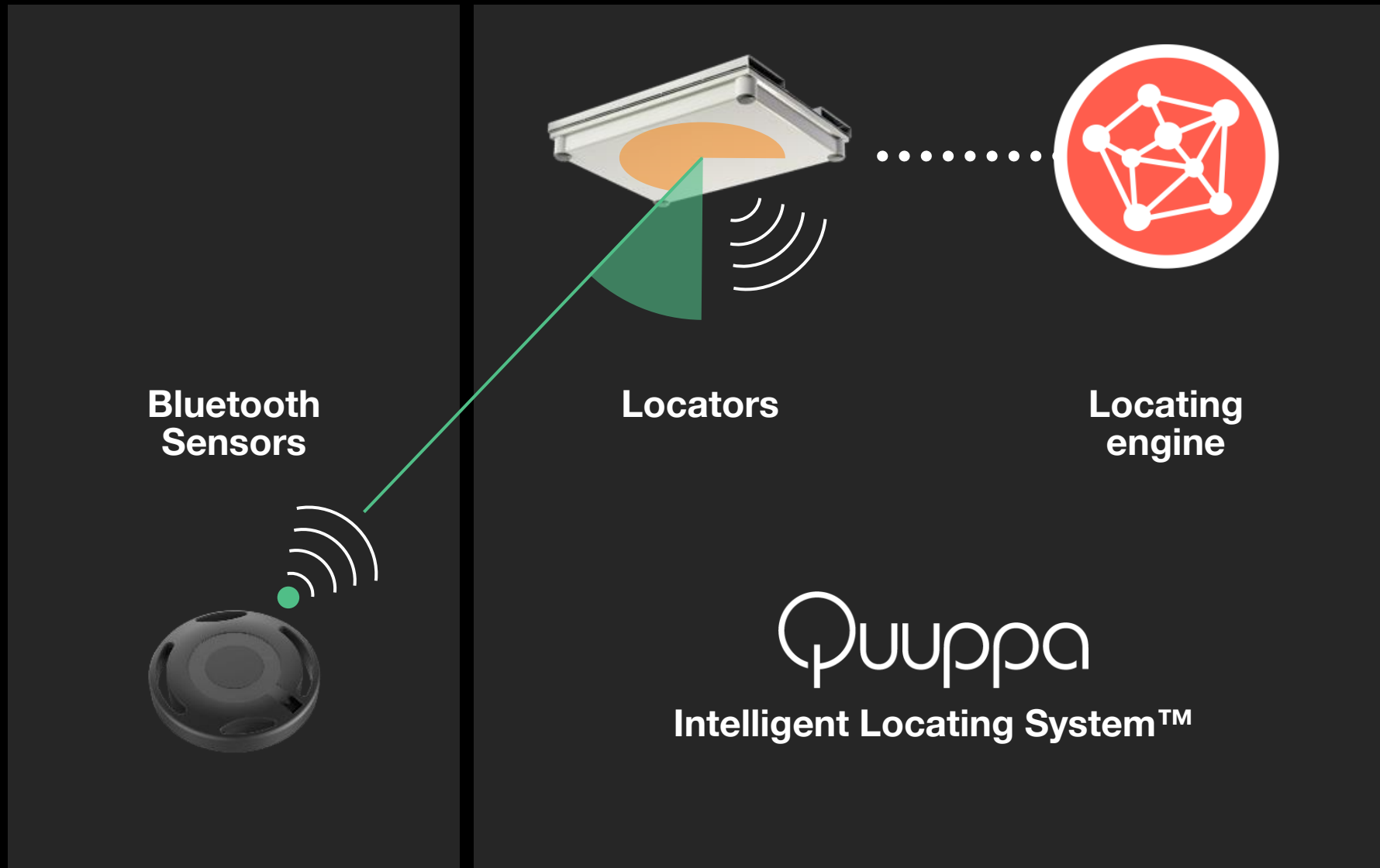
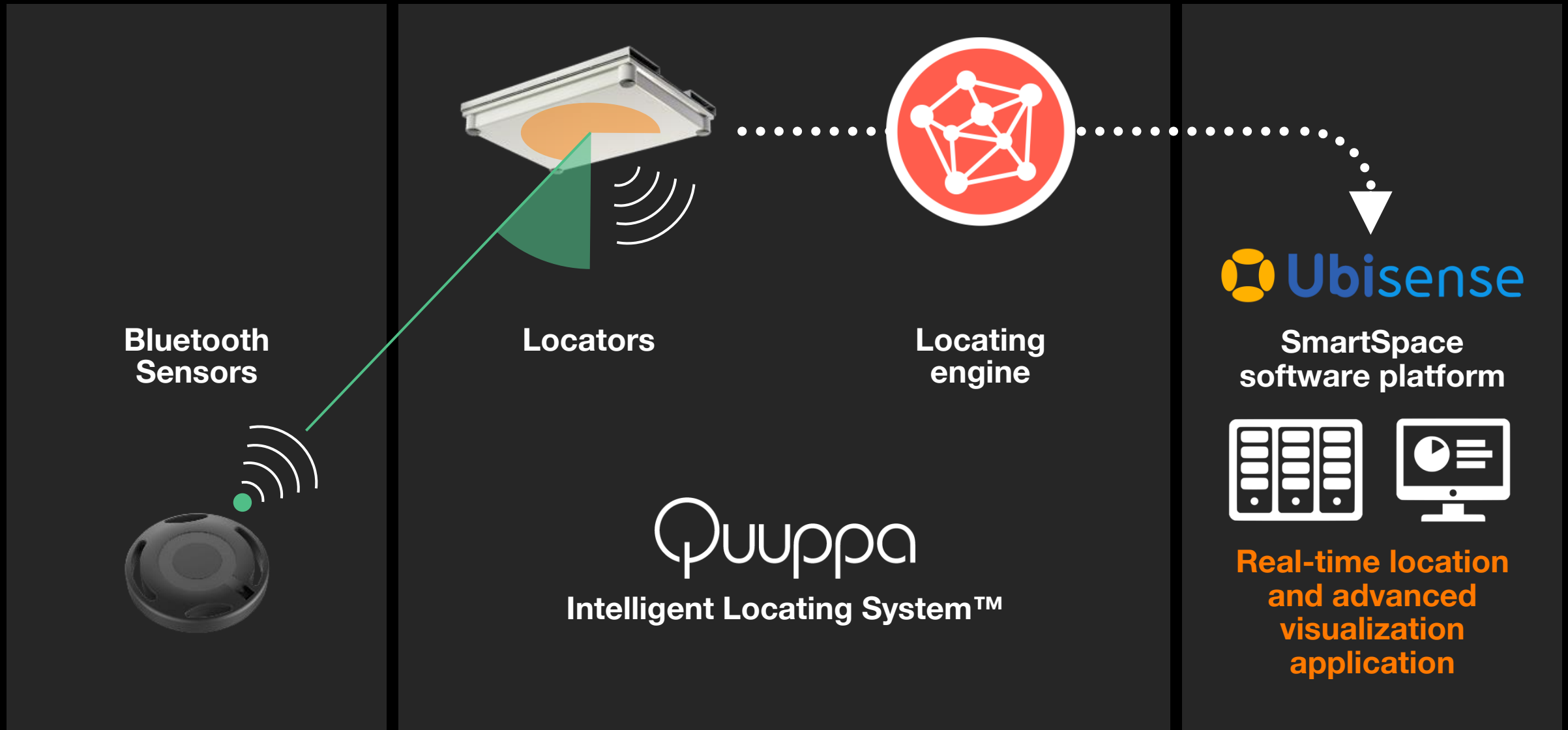
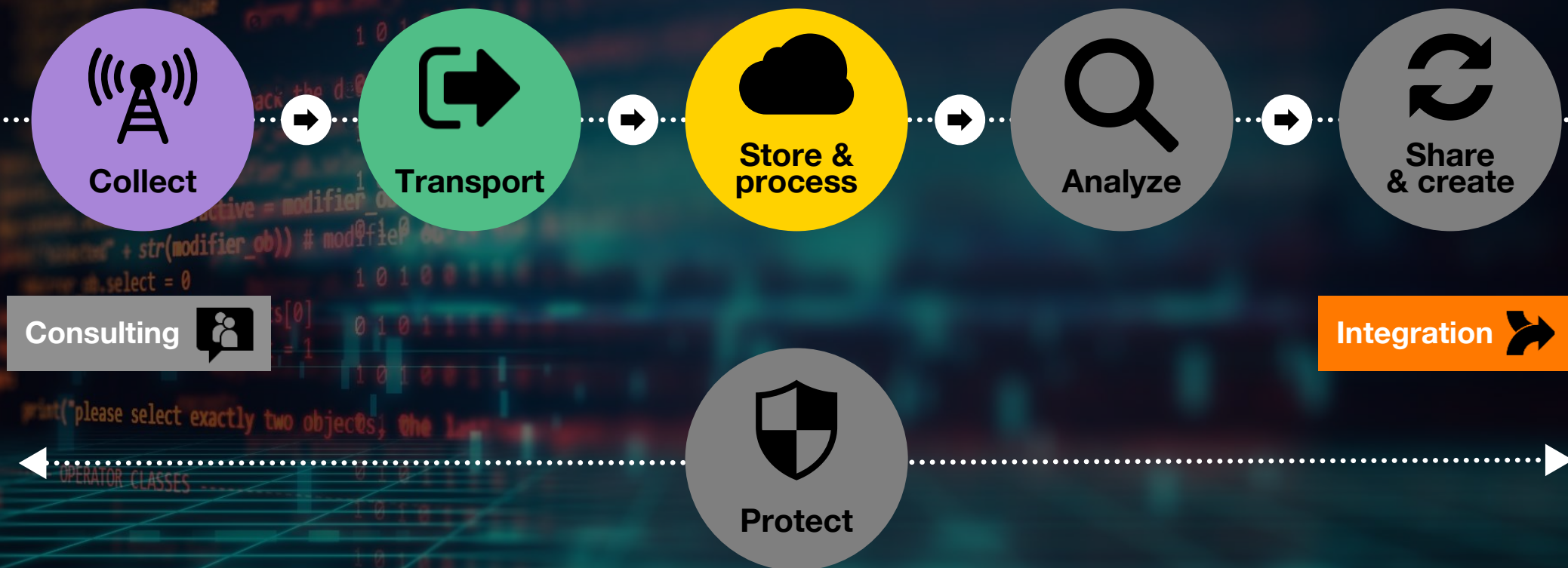


Diagram of the Orange solution



Datavenue portfolio applied to the Aircraft Engine Manufacturer project



CHANTIERS DE L'ATLANTIQUE



Tracking performance
99% tags located



CHANTIERS DE L'ATLANTIQUE

- Europe #1's shipbuilding company
- Builder of the world largest passenger ships



Building site key figures



362 x 66 meters

80 football fields

150,000 parcels /day

Objectives

- Reduce production cost and delivery penalties
- Optimize logistics and team work



Challenges

- Solution cost vs accuracy and vs business model
- Solution needs to be moveable
- Heavy metallic environment

A project driven by co-innovation

1

Market Study,
solution design

H1 2017

2

First demo
on board

H2 2017

3

POC

July 2018

4

Feedbacks

March 2019

Diagram of the Orange solution



**Bluetooth
trackers**

Diagram of the Orange solution

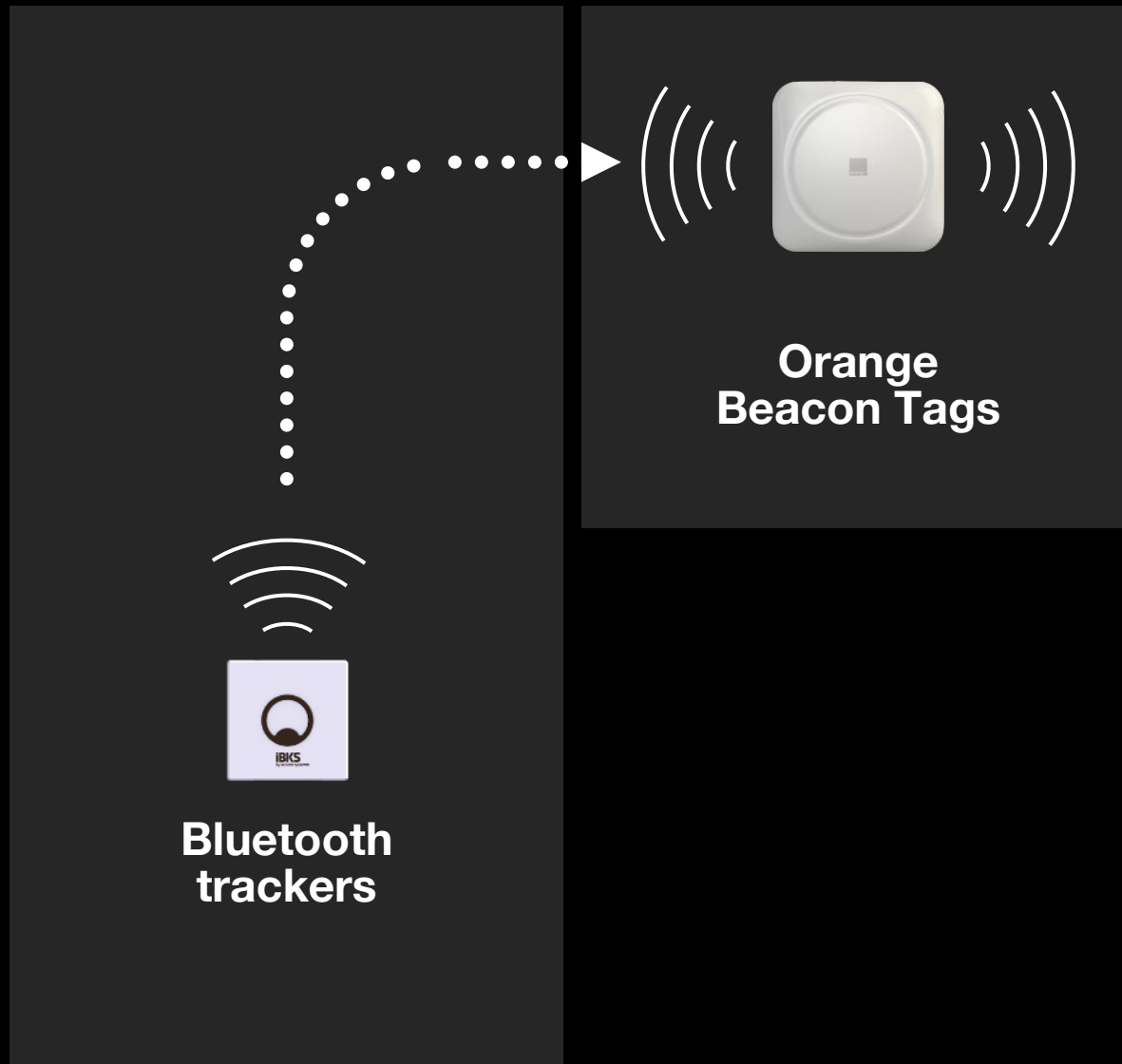


Diagram of the Orange solution

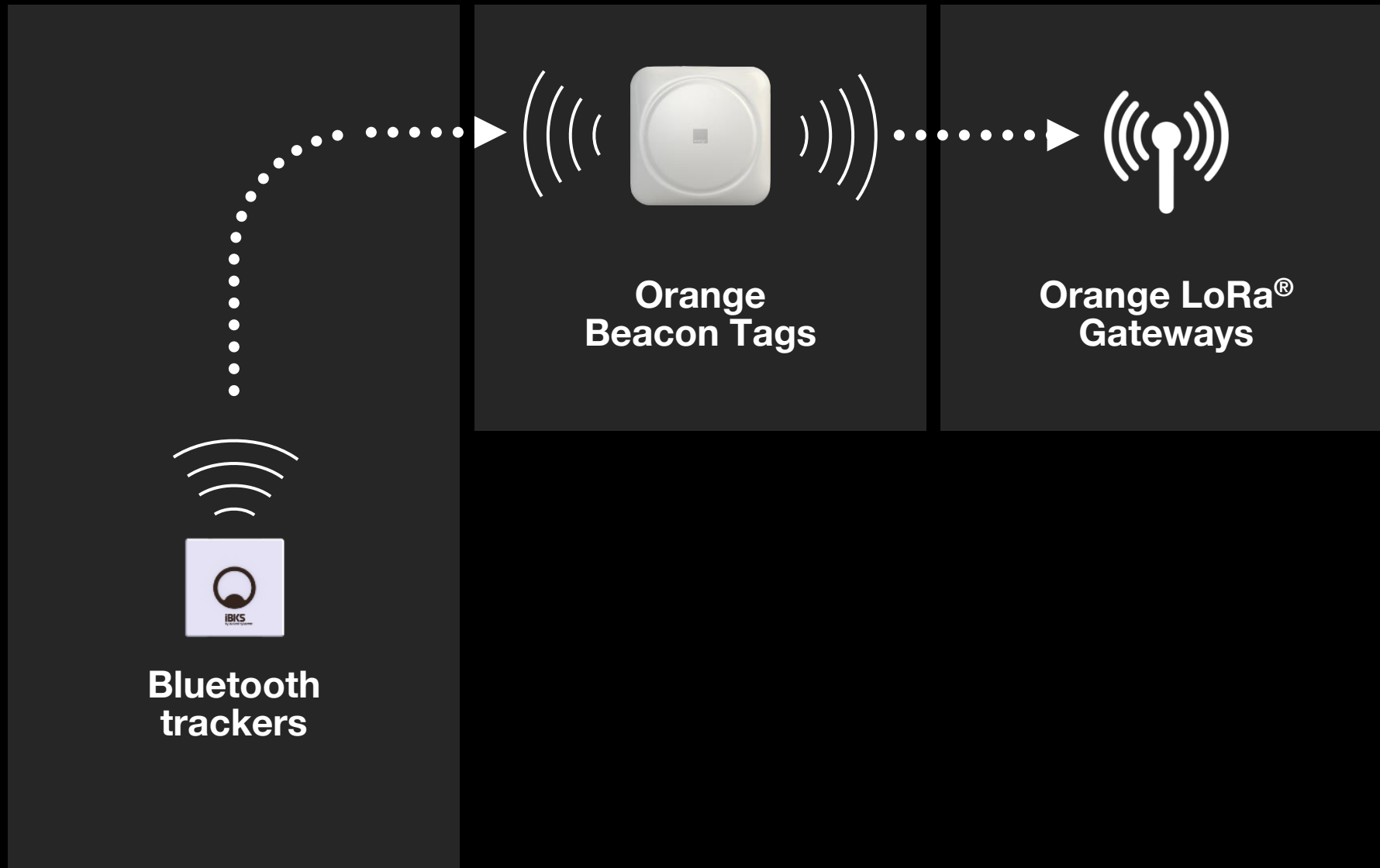


Diagram of the Orange solution



Diagram of the Orange solution



Locating a parcel on the ship's floor plan

orange

Business Services

smart tracking [indoor]

OAB - Demo

Welcome, Grégoire Thillaye Du Boullay

EN

Maps

Lists

Dashboard

Settings

Places

Search

Places 3 of 3 places

Spaulding Etage 1

Spaulding Etage 2

Stand

Spaulding Etage 1

Last update: 06/12/2018 15:46:47

-3m, 8m

Asset: POMPE HYDROLIQUE... ☆ ✕
Ref.: OAB00010
Tag name: TAG00010
Tag id: d51790dfa606
Last position:

5 m
20 ft

Leaflet

Datavenue portfolio applied to the Aircraft Engine Manufacturer project



We can support you on each step of your Industrial IoT projects



Key Takeaway

1. Unique choice of technologies...
to power your Indoor tracking use
cases: BLE, Ultra Wide Band, Wifi...
2. Best in class partners & matching
Orange assets...for innovative,
tailored IoT solutions
3. We can support you on each step
of your Industrial IoT projects



Come and see us:

Demo booths:



**Business
Services**

**Collect
Abu Dhabi explorer
IoT Cockpit**

Partner Talks:



18:20 Balcony room



Come and see us:

Let's innovate – together

Drive production performance, increase business efficiency, and open up a world of new opportunities - with our Industrial IoT solutions.

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Thank you...
we're listening

A project driven by co-innovation

1

**Market Study,
solution design**

No solution meeting budget
Need for specific solution
design

2

First demo on board

Qualifications and
radio tests
Demo with customer's
Executive committee

3

POC

Concepts evaluation
Testing number and location
of beacons
Testing location accuracy,
radio waves propagation,
LoRa connectivity...

4

Feedbacks

The IPS solution meets
customer performance
requirements
Need to deploy on site LoRa®
gateways to extend coverage

H1 2017

H2 2017

July 2018

March 2019

**Companies thrive
on innovation.**

**We work to
shape yours.**

