

9 weeks Proof-of-Concept

Azure Rapid IoT Prototyping

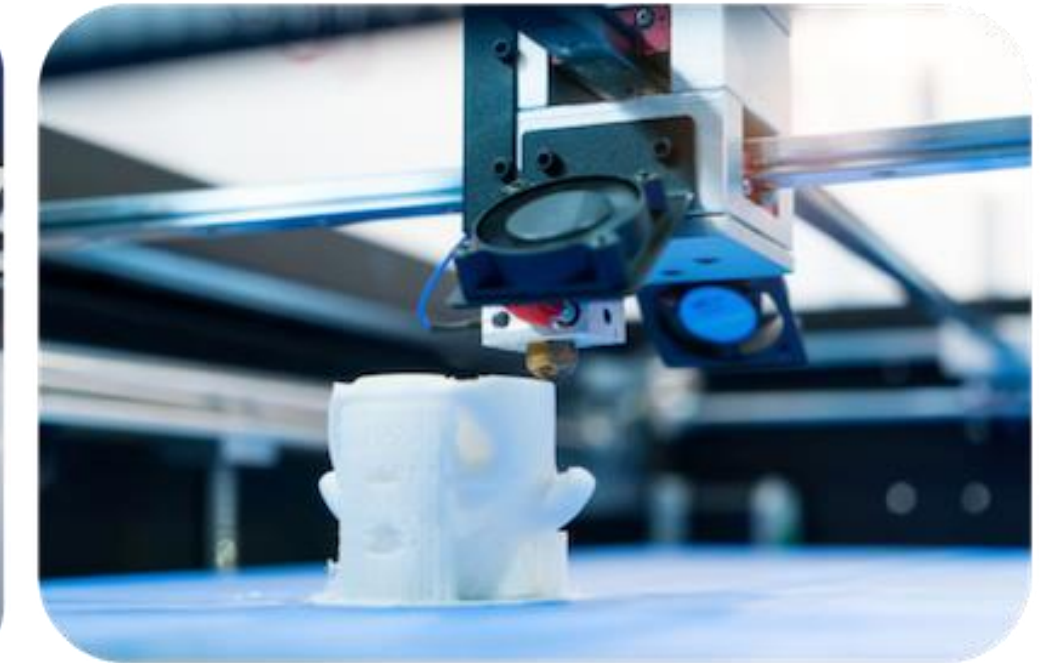
The fourth step - Industry 4.0

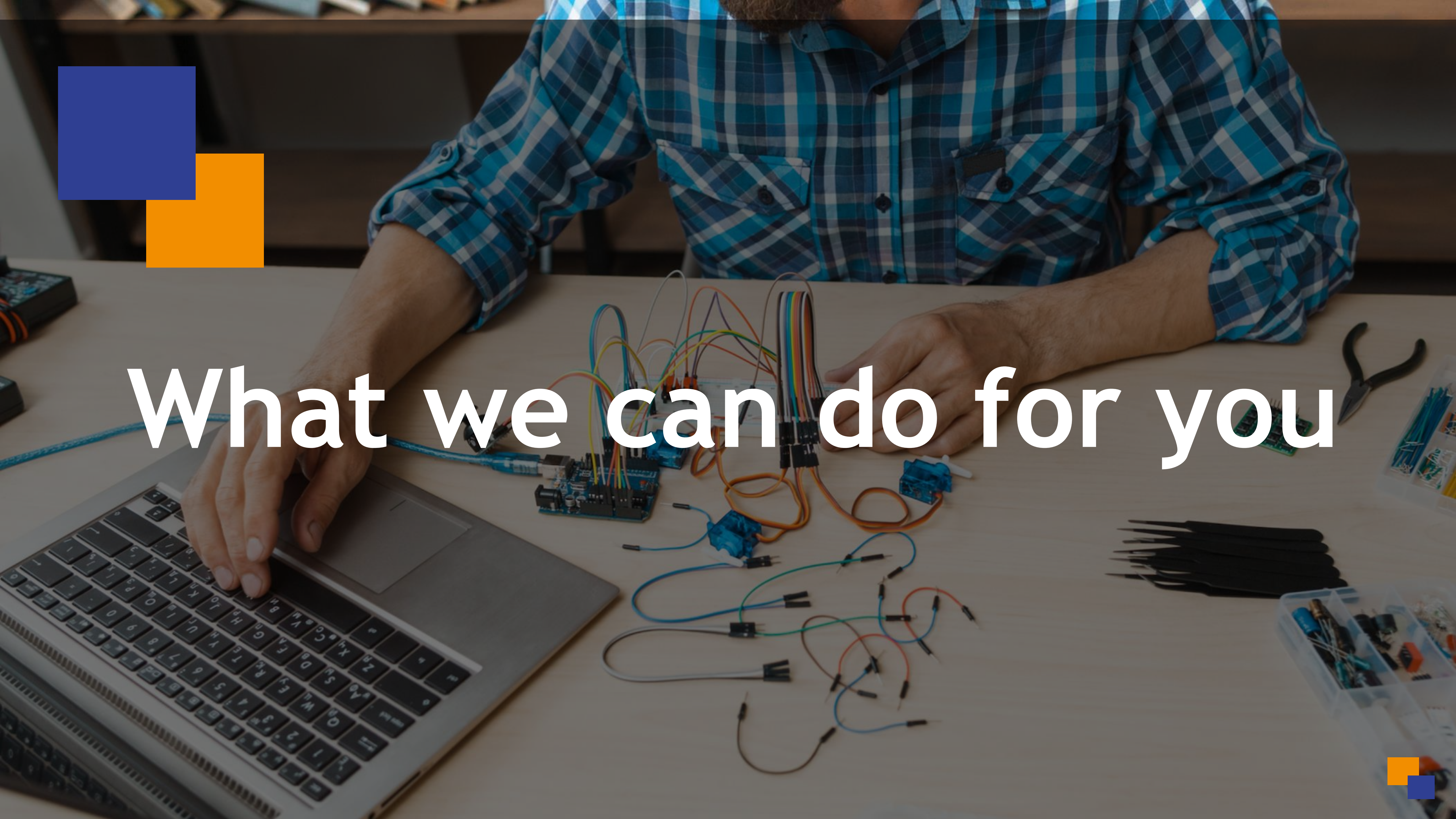
The industry has developed over the decades and revolutionized itself with **three** great steps. The **steam engine** was the first, followed by the **assembly line** and the use of **electronics**. Just as there are today, there were pioneers, doubters and enthusiasts.

History shows, however, that **progress** and **globalization** cannot be stopped.

The fourth major step stands for **automation, connectivity** and **mobility** that combine security and globalization.

We bring people, processes, and machines together -
seamlessly, invisibly, safely
- into an automated future.

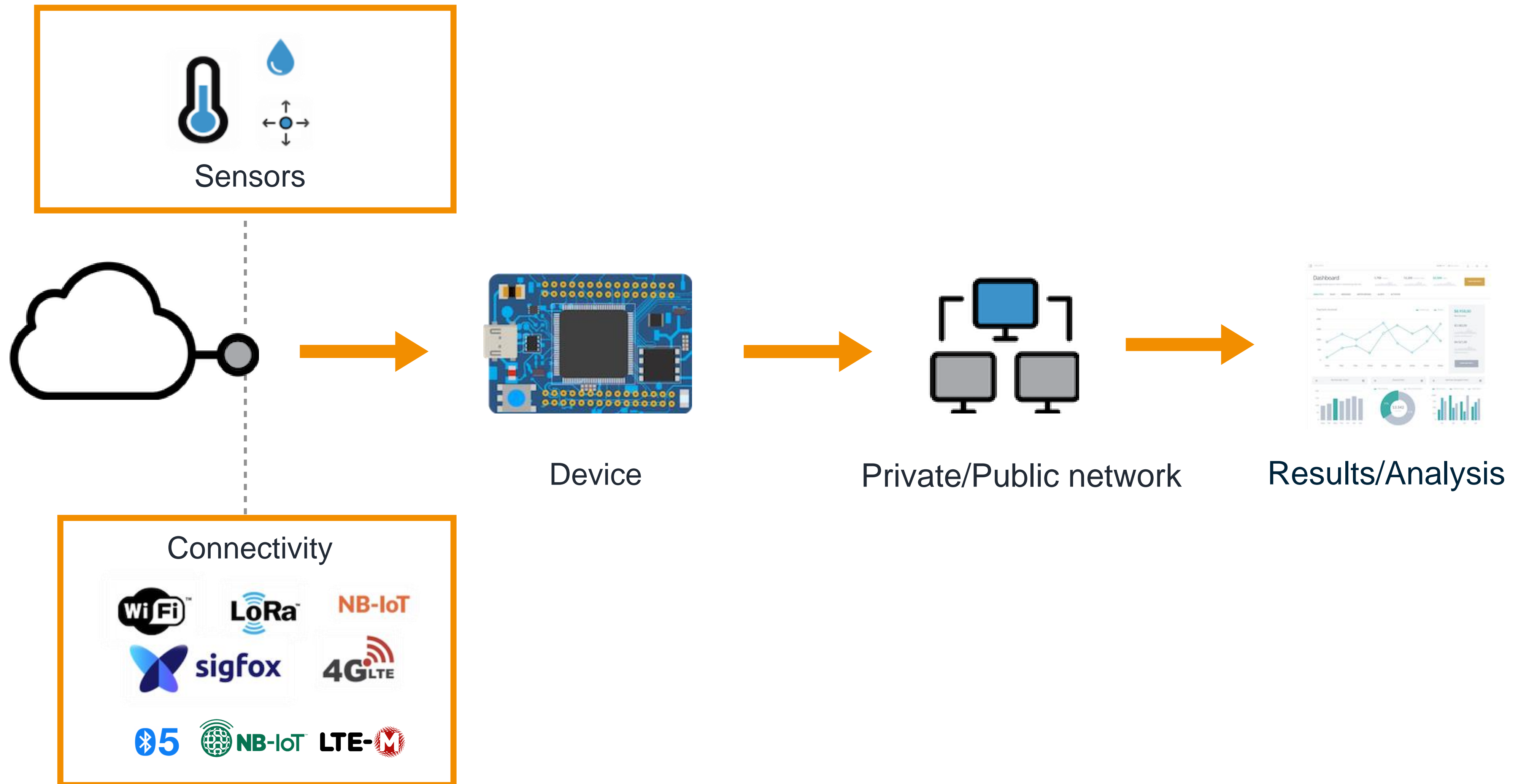


A person wearing a blue and white plaid shirt is sitting at a desk, working on a silver laptop. The desk is cluttered with various electronic components, including a blue printed circuit board (PCB) with several wires connected to it, a bundle of multi-colored cables, and several small blue electronic modules. To the right of the person, there are several black cables, a pair of pliers, and a clear plastic container filled with small electronic components. The background is slightly blurred, showing a desk with other items. The text "What we can do for you" is overlaid in the center of the image in a large, white, sans-serif font.

What we can do for you



Your own intelligent device



Your idea - quickly implemented



2 RapidLab Design

Design of the hardware prototype and the APP views (User Experience Design)



4 Analysis of the test results

„Pro/Contra" workshop, possible adaptation to the prototype

1 Initial Workshop

Identifying needs, ideas and goals



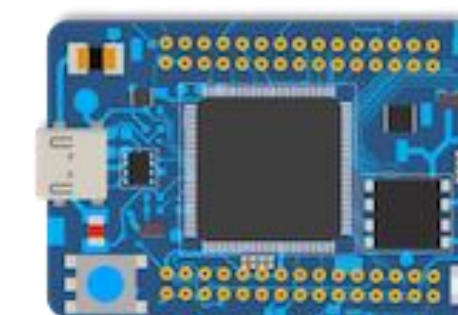
3 RapidLab Prototyping

First PoC, including hardware and mobile/web app deployment of the first test prototypes in the customer's real environment



5

Your preliminary end product



9 - 12 WEEKS



Multiple industries

Monitoring of the devices
Small and large machines



Health
Patient monitoring



Manufacturing industry
Predictive Maintenance,
Preventive Measurements



Automotive
Driving style analysis



Security and theft protection
Localization of valuable goods



Movement monitoring
Acceleration and motion



Localization
Hotels and cruise ships,
tourism



Building planning
Reduction of running costs





Have a look at some of
our projects

Liquid level measurement

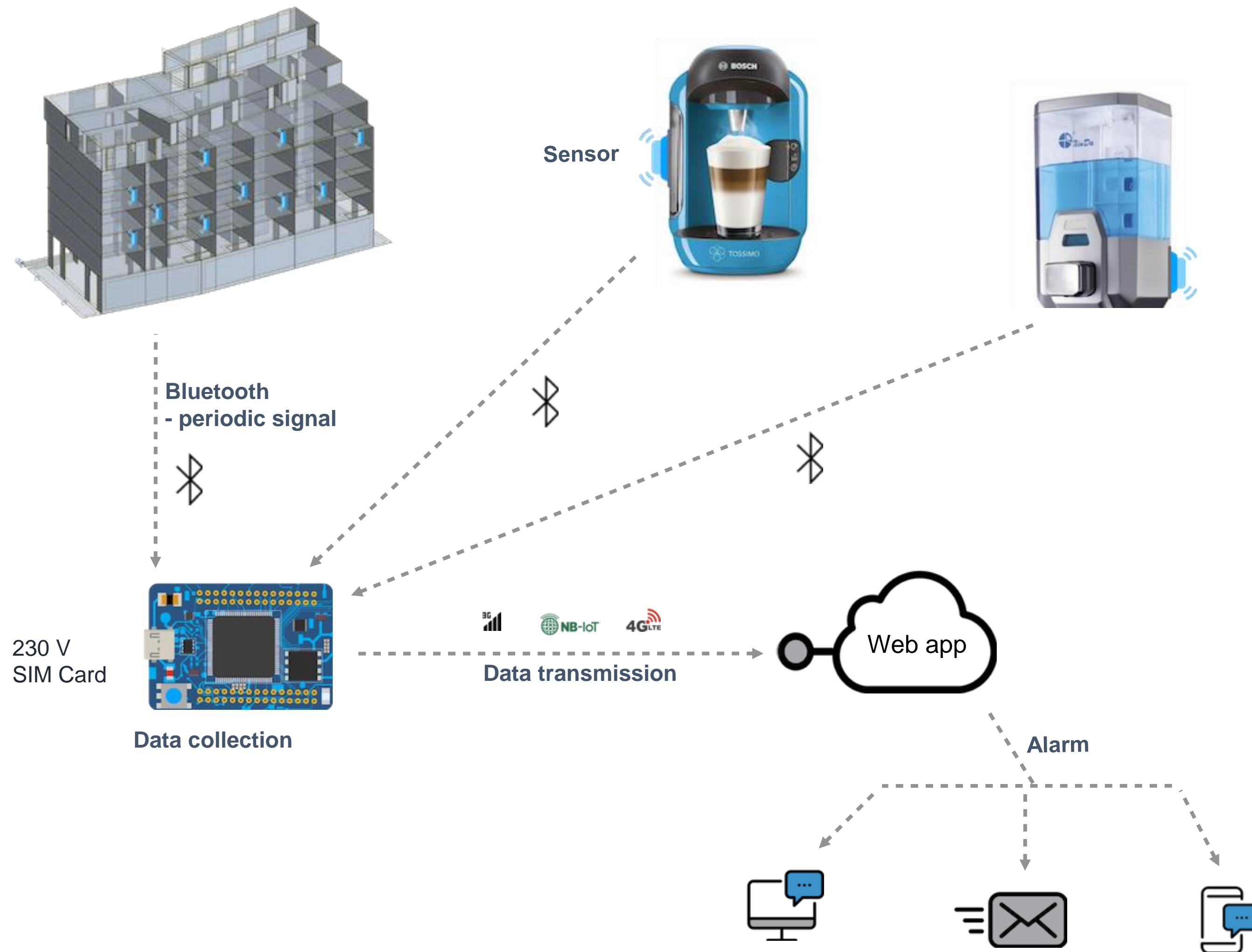
Automatic IoT maintenance service

Process

- Sensor for level measurement
- Agreed periodic signal
- Data transmission to the cloud
- Alarm at critical liquid level

Benefit

- Two-year battery life guaranteed
- Energy-saving Bluetooth module
- Data collection in a central device
- Clear Web App Panel
- Exact determination of refill times
- Maintenance cost reduction



Voice over Wi-Fi Mesh Network

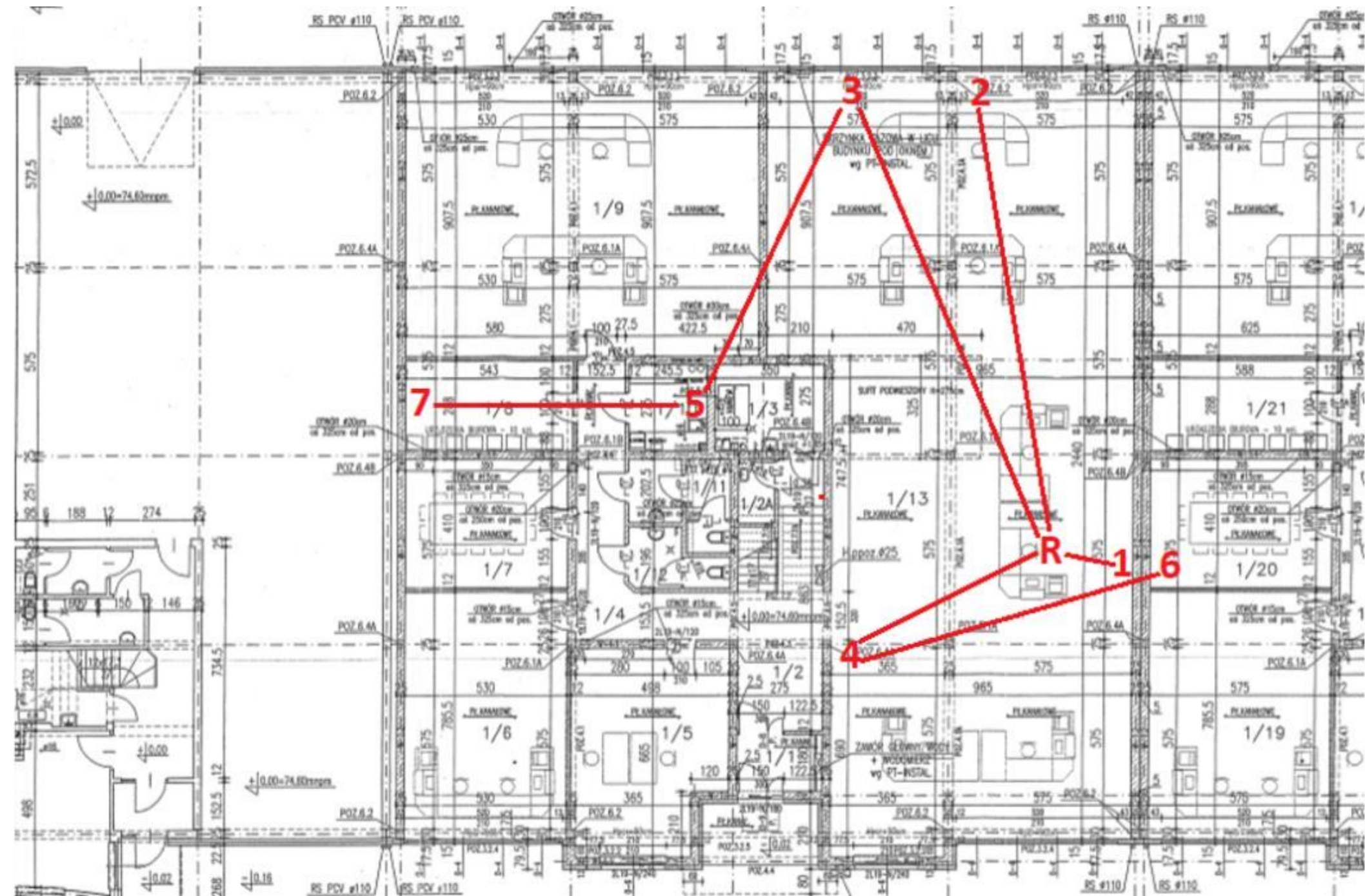


Benefits

- No cables
- Ease of adding new devices to the network
- Low latency

Process

- Root sensor contains a microphone
- All nodes contain a speaker
- Nodes forwards sound between each other
- Maximum latency is 100ms



NB-IoT & LTE-M research

LTE-M

- Partnership with Orange Poland - access to beta LTE-M APN in Poznań
- PoC based on NRF-9160 development kit
- One of 1st companies to run LTE-M in Poland

NB-IoT

- Usage of Sierra WP7702 module in IoT devices mounted in elevators
- Collecting data from running elevator and transferring to cloud

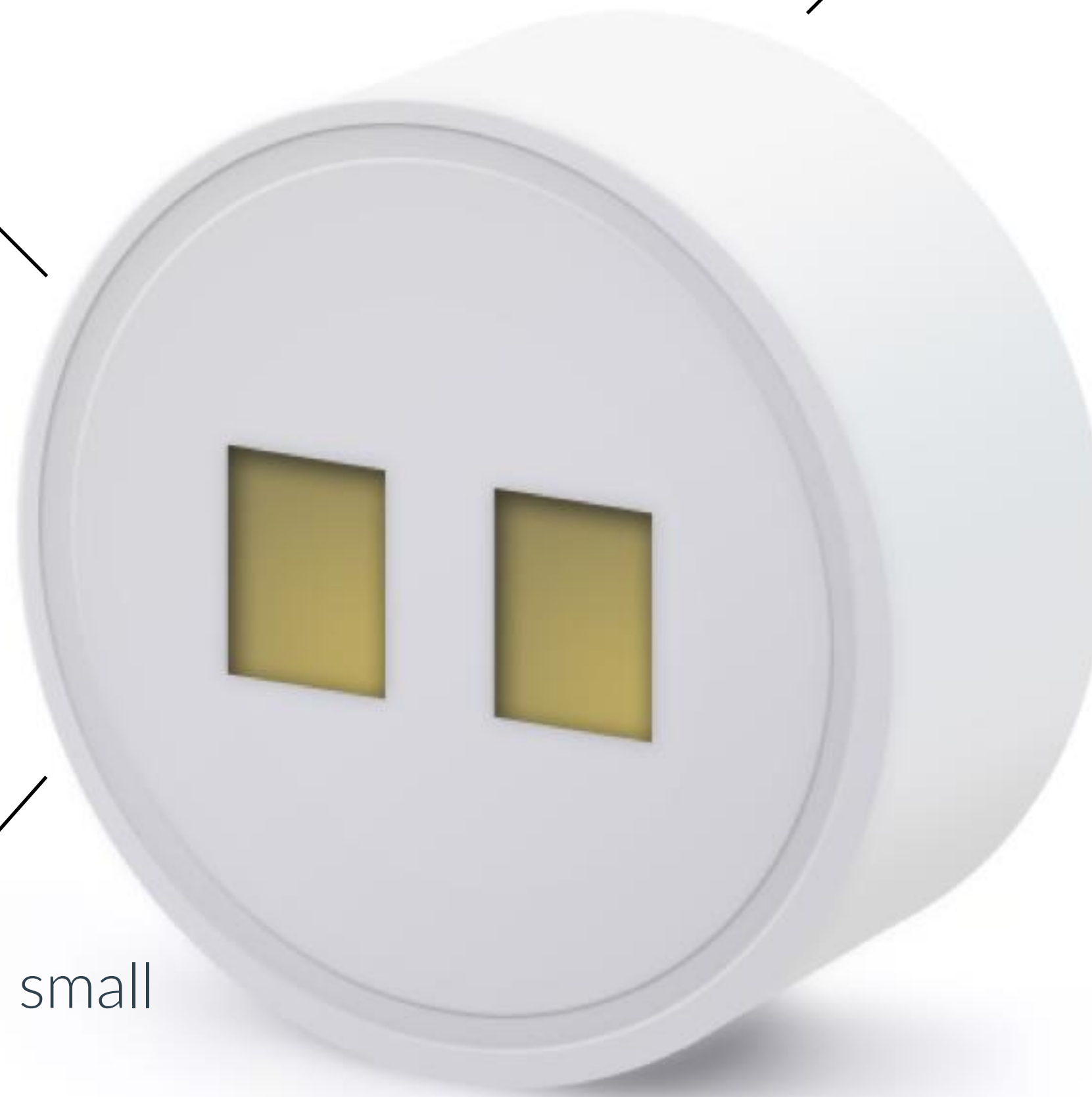


RapidLab People Counter

A small device that can do a lot.

Counting people
entering/exiting in real time

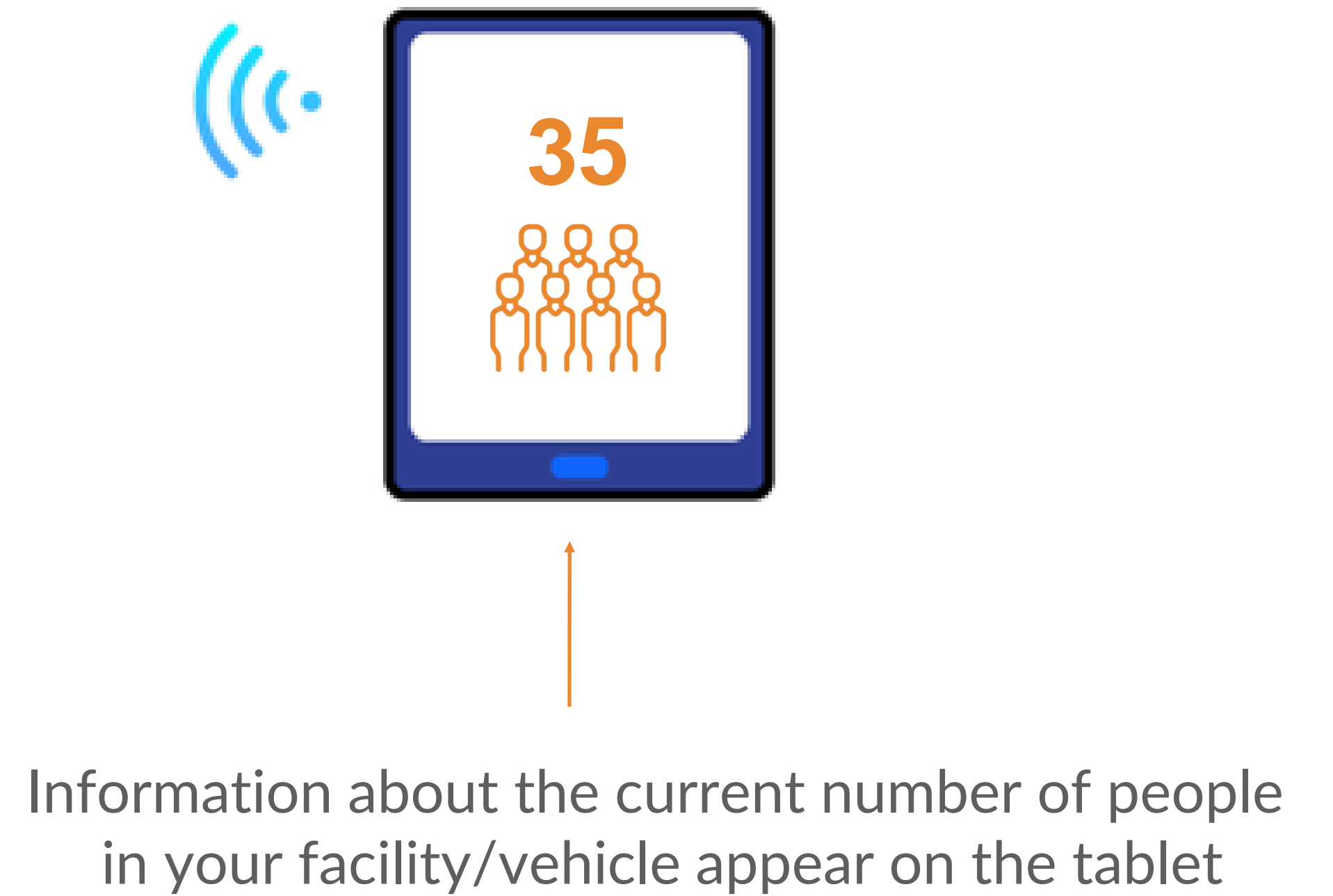
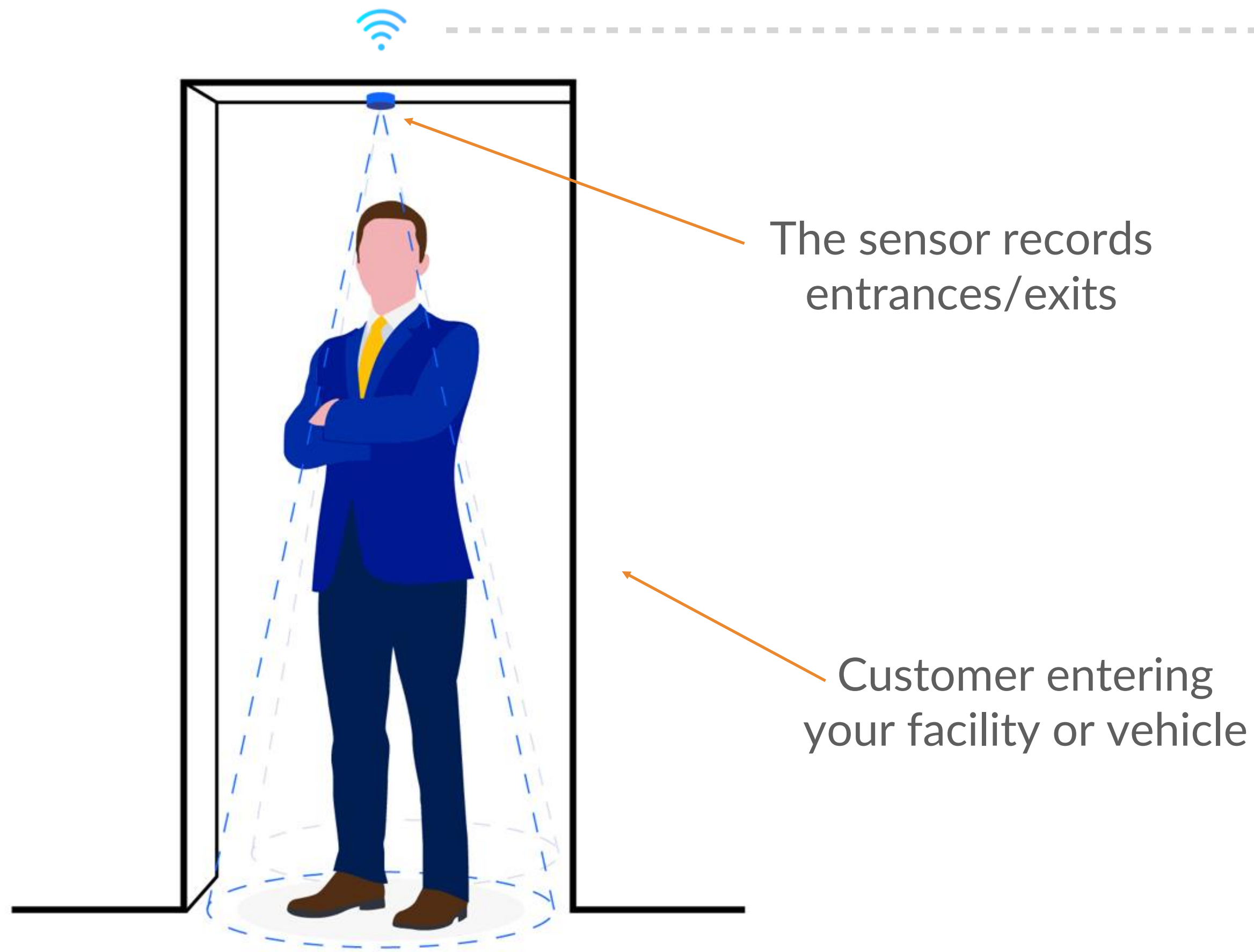
People traffic monitoring
of both large supermarket chains and small shops, and service facilities or your buses/trains



Analysis and reporting
to help you better anticipate the demand for your goods and services

Caring for the safety
of your employees and customers

Sensors count, tablet reports



Who is it for?

For small and large businesses. Anywhere where the number of people matters.

Both for:

- ✓ small shops
- ✓ diners
- ✓ service points
- ✓ public premises, toilets, etc.

As well as:

- ✓ large department stores
- ✓ cinemas, theatres, concert halls and clubs
- ✓ malls
- ✓ train stations, swimming pools, sports facilities

We also create dedicated intelligent apps

Developed with

PWA

ANGULAR

Java



- One app for all devices
- Access to hardware (camera/GPS/etc.)
- Offline mode
- Background data synchronization



Technology stack



Summary



Mobile

Android, iOS, Ionic, PWA



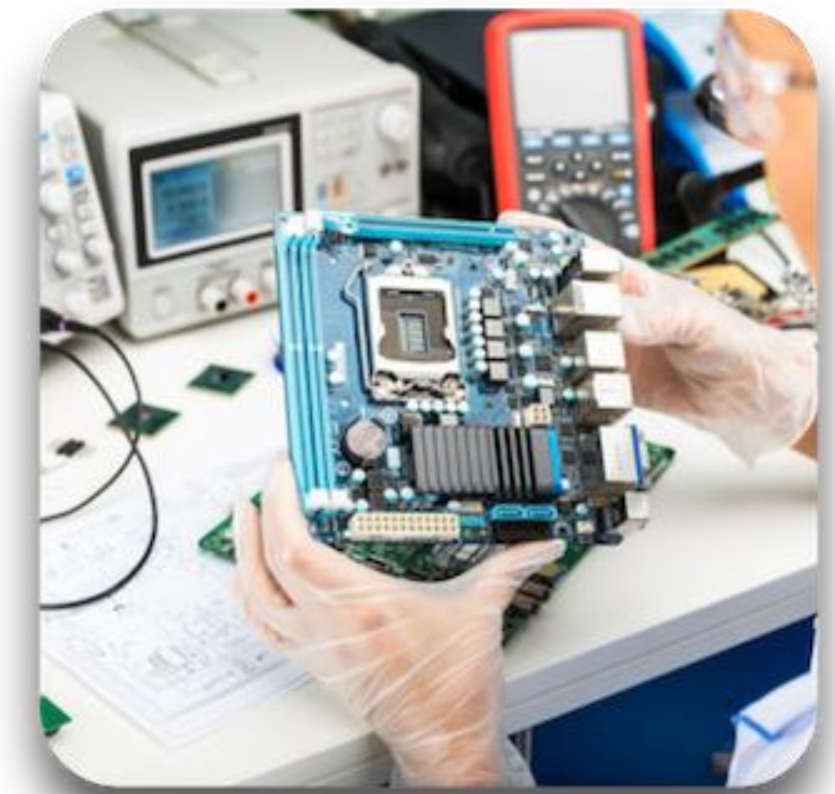
Web

Angular, Express.js, React JS, Java, Python, .Net



Multidisciplinary team

Machine Learning, Blockchain Implementation, Big Data, User Experience



IoT Electronics

PCB design and production, production preparation





About us

About us



The Winner of
SAP Innovmatch
challenge 2017



Microsoft
Partner



Business Applications, Integrations, S4/Hana, ERP, CRM, SRM, Cloud Solutions, Kubernetes, Ariba, C4Hana Suite, Microsoft Solutions



Product Definition Workshops
UX/UI
Web & mobile
Internet of Things

Rapid Prototyping
Field Testing
Big Data
Machine Learning



Machine Learning
Image Processing
Big Data
Natural Language Processing



Virtual / Mixed / Augmented reality

Microsoft
Partner | Mixed
Reality

Our people

Over 130 experts

with the multidisciplinary set of skills to solve any problem



Full-Stack Developers



UX / UI Designers



Mobile Developers



IoT Engineers



Solution Architects



Delivery Managers



QA Testers

Contact us for more!



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