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Smart access control for smart buildings of the future

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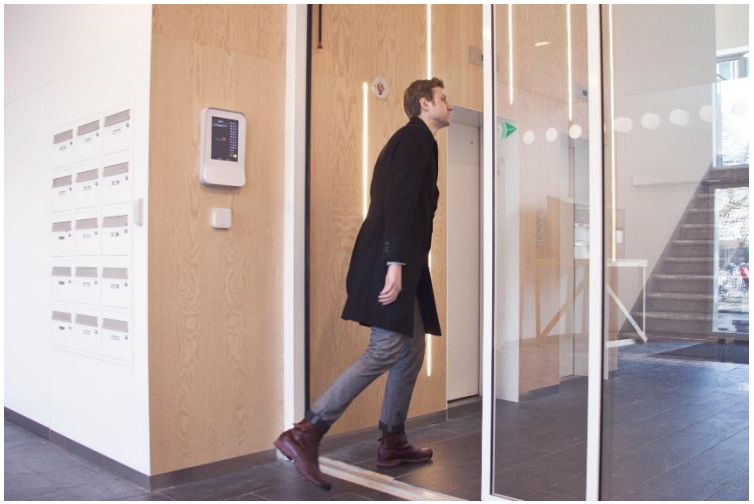
Smart access control for smart buildings of today

The entrance



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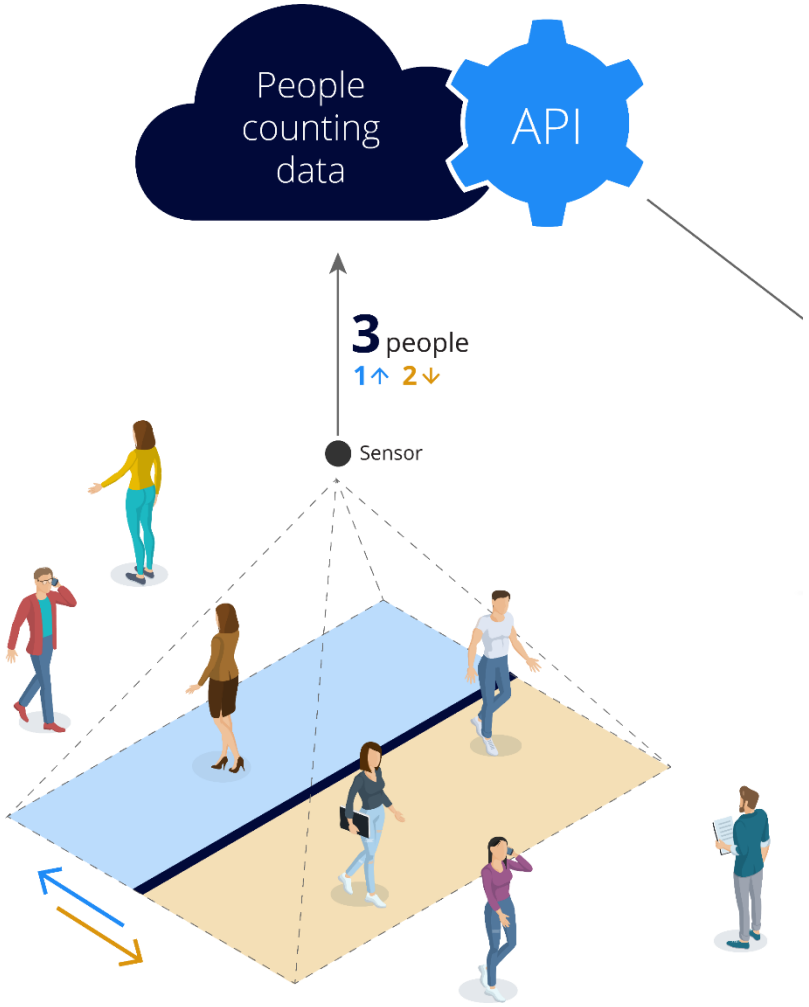
Smarteagle People Counting



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Smarteagle People Counting

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Smarteagle People Counting

- Real-time on-board image analysis
- Privacy by design
- Works in any lighting condition
- Data accessible via portal and API

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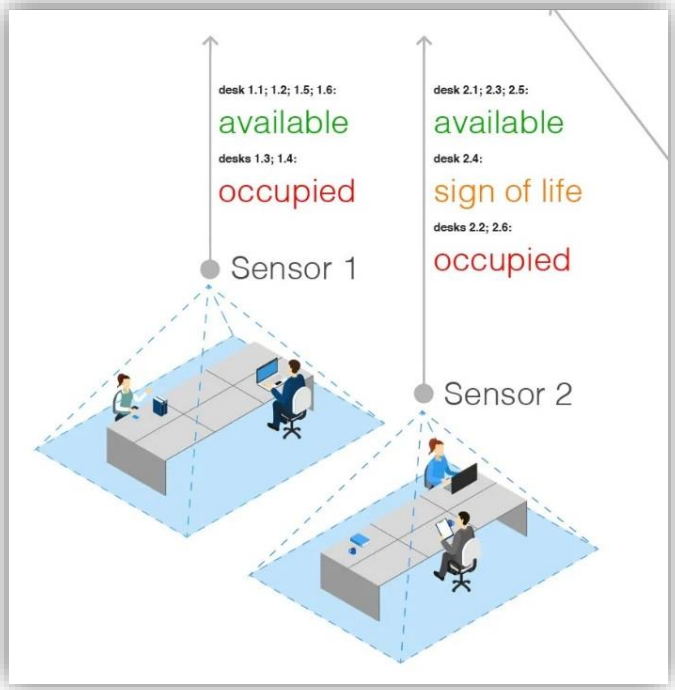
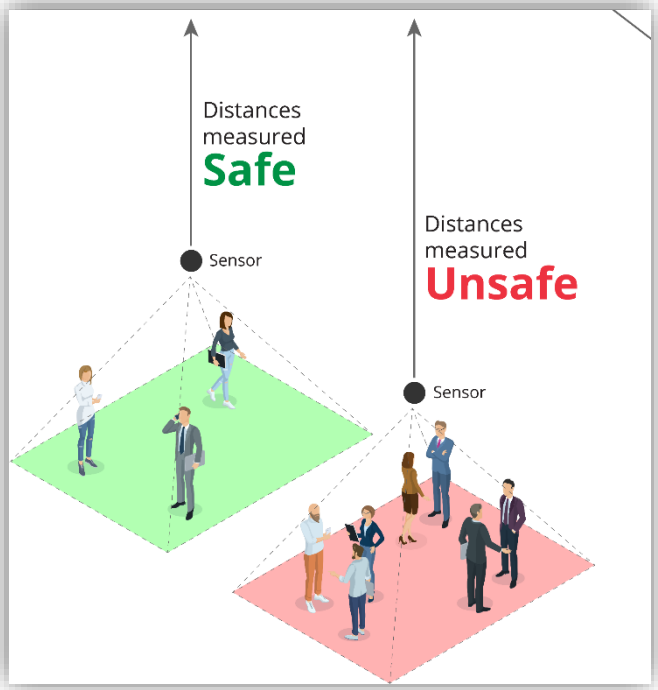
Smarteagle | Applications

- Desk occupancy
- Distance sensing





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Electronic Locks

Challenges

- Battery Powered
- Wired connection

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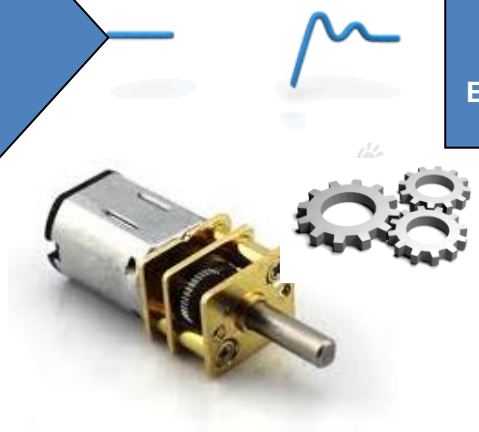
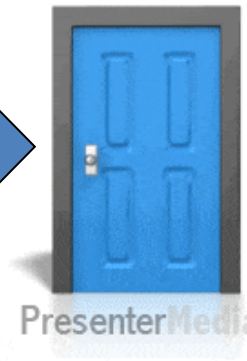
Energy | Harvesting

CONVERT
DOOR HANDLE
MOVEMENT
INTO ELECTRICITY



USE STORED ENERGY
TO POWER
ELECTRONIC LOCK



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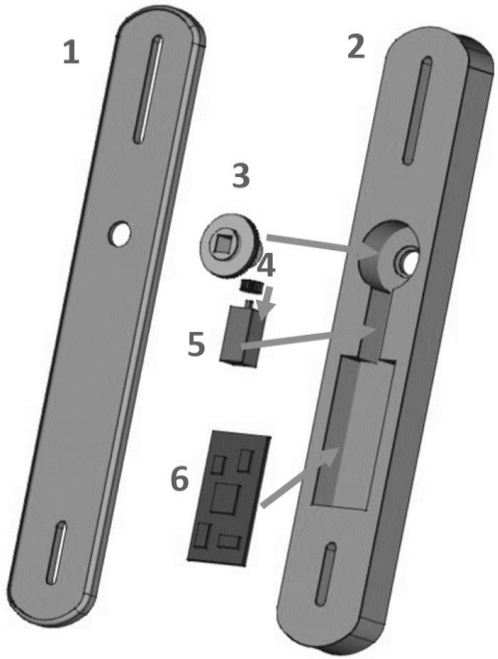
Energy Harvesting

- Harvester placed behind existing lock
- Easy Installation
- Battery recharged at each door opening



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Hands Free Entry

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Hands Free Entry

- BLE enabled locks
- Phone enabled locks
- Automatic Authentication

Unwanted door opening

- Capacitive Reader
- Ultra Wide Band Localization

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Capacitive Reader

- Capacitive BLE reader
  - New BLE chipset
  - Capacitive sensing
  - Detection of human body triggers BLE communication with nearby device

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Ultra Wide Band Localization

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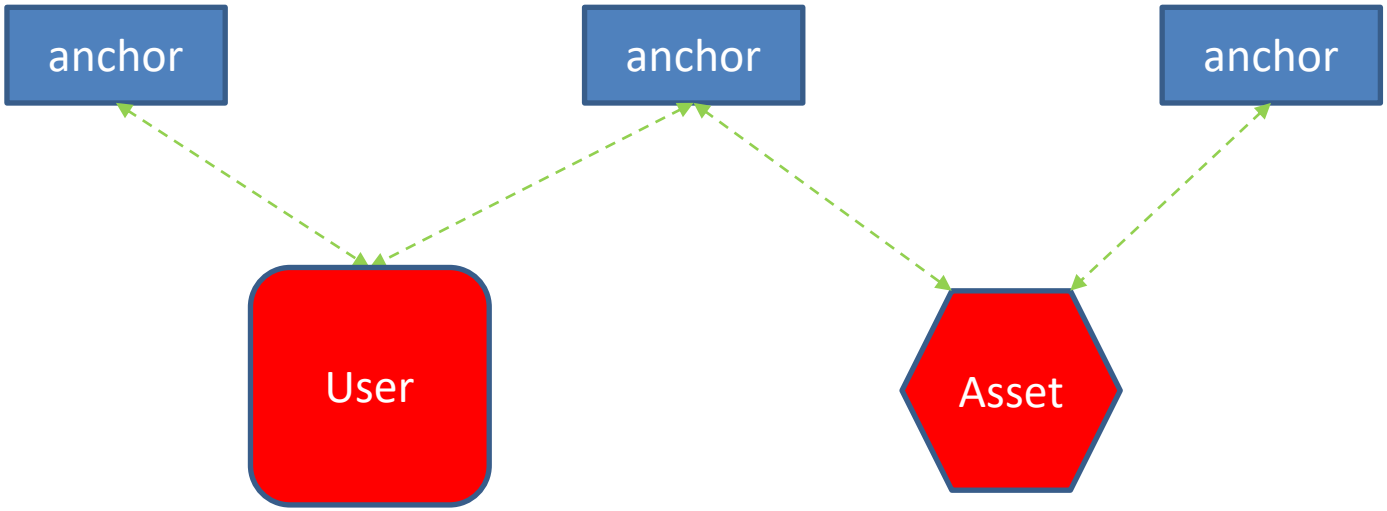
Ultra Wide Band



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Ultra Wide Band Localization

- Accurate localization (< 10 cm) of Assets and People
- Enable automatic door opening
- Increased security

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BGRID

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bGrid

Insight in building parameters

- Temperature(°C)
- Relative humidity (%)
- Ambient light (lux)
- CO_2 (PPM)
- Presence (PIR)

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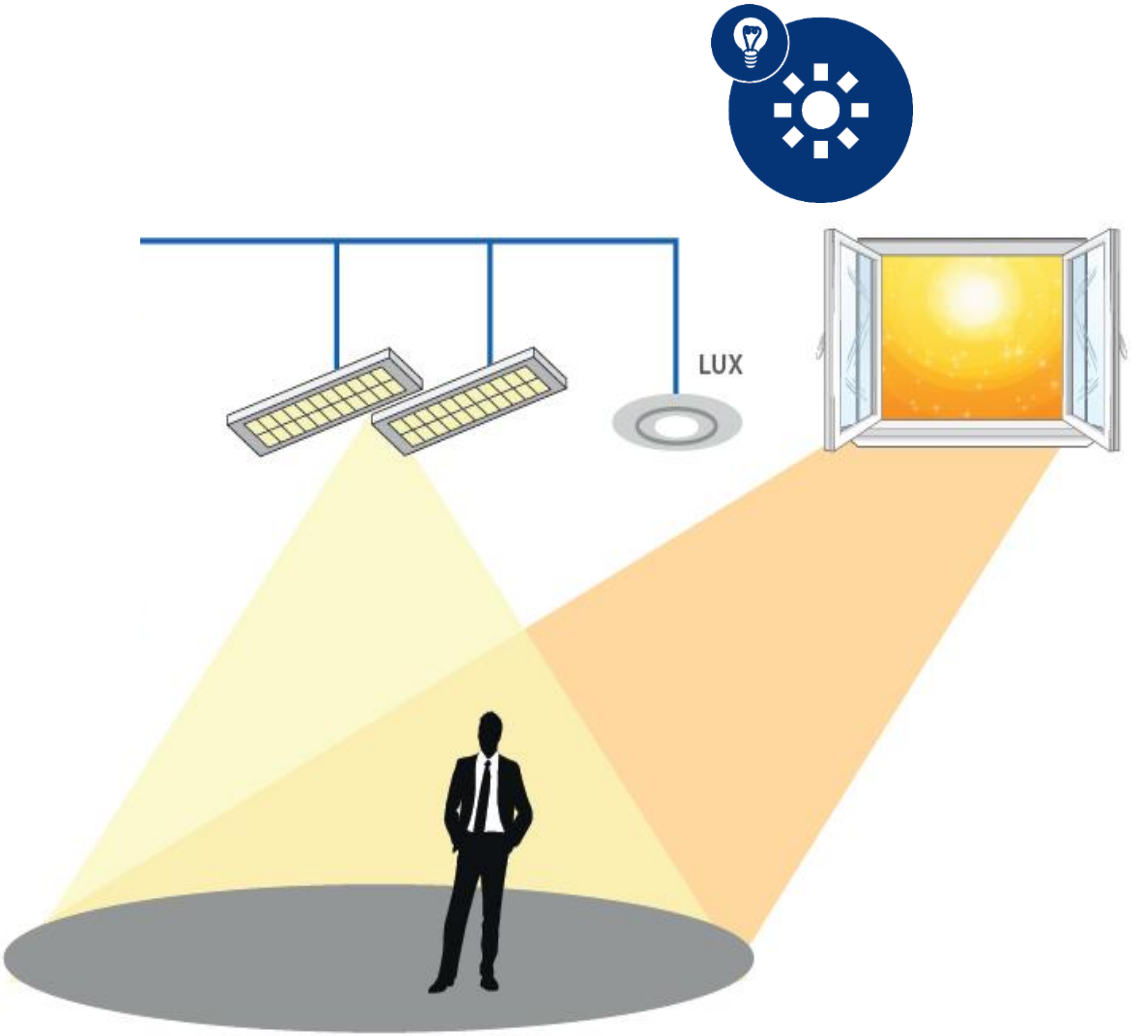
bGrid

Light control

- Presence-based light control
- Daylight harvesting
- Light intensity control via App

Localization

- People finding
- Asset tracking



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SACON

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Bace Gateway

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Heineken Blade

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Heineken Blade

Objectives

- Owners / Users
  - Less Problems
  - Better Use
  - Historic data
- Marketing
- Sales
- Technical Support

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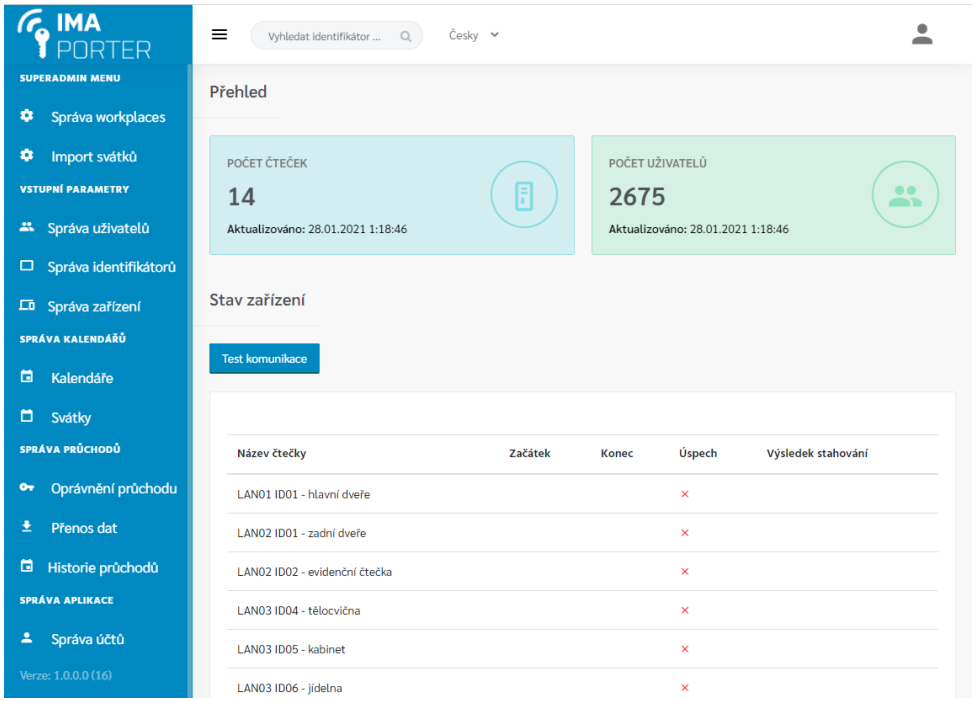
Summary

- Smarteagle
  - People counting
  - Desk occupancy
- Energy Harvesting
  - Simple installation
  - Save on maintenance
- Capacitive reader
  - Cardless entry
  - No unwanted authentication
- UWB
  - Accurate indoor localization
  - Secure communication
- Bgrid
  - Climate sensors
  - Light Control
- BACE
  - Multi-purpose Gateway
- Heineken Blade



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