R8 tech

40% CO_2 emissions!

Save Energy up to - 30%

Increase Indoor Comfort by + 30%

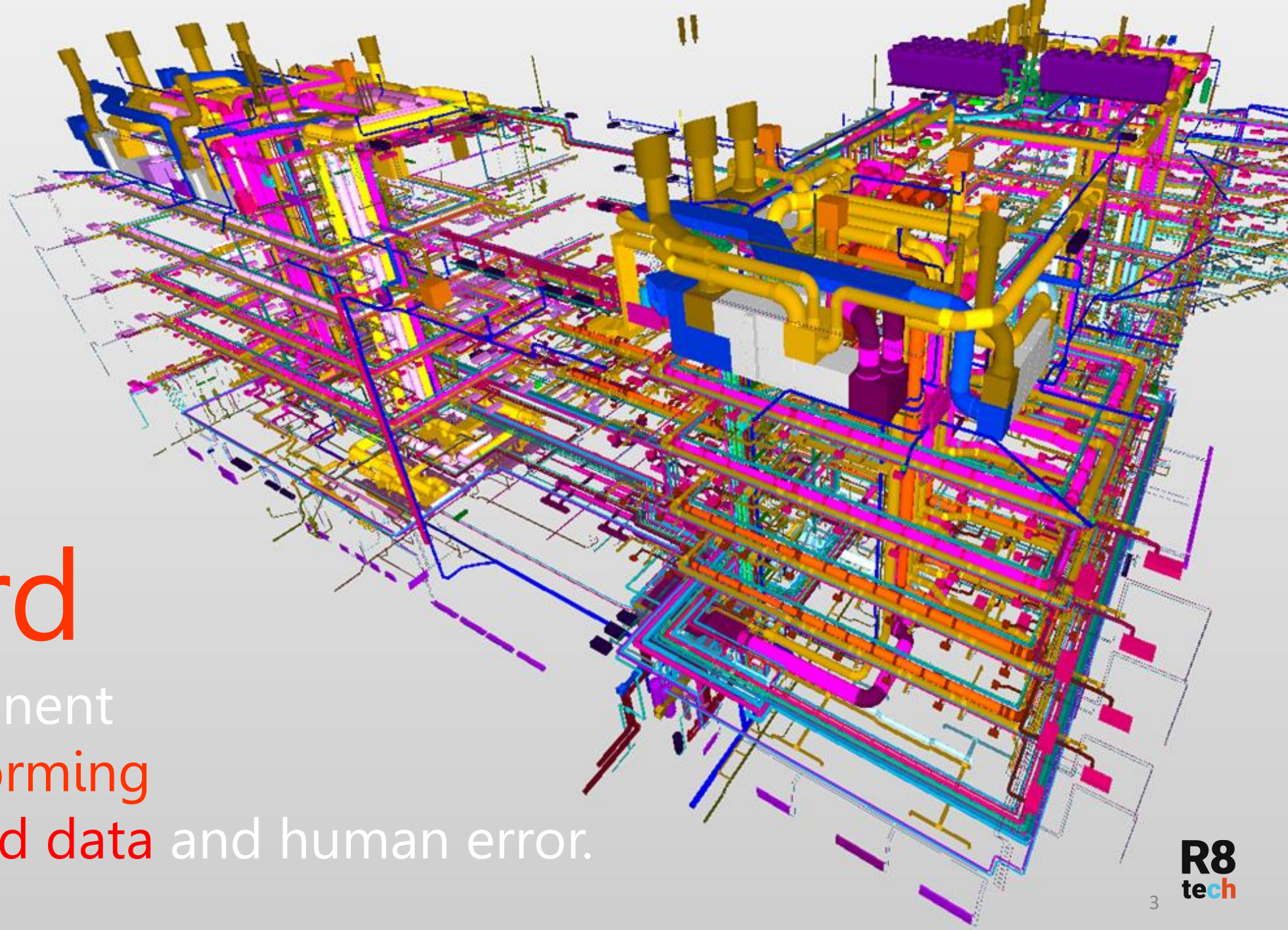
Lubja 4, Tallinn Estonia

R8 tech

25 000
m² office building

~ 3 000
controllable
HVAC components

~ 50 000
datapoints



Every third

HVAC component
is underperforming
due to unused data and human error.

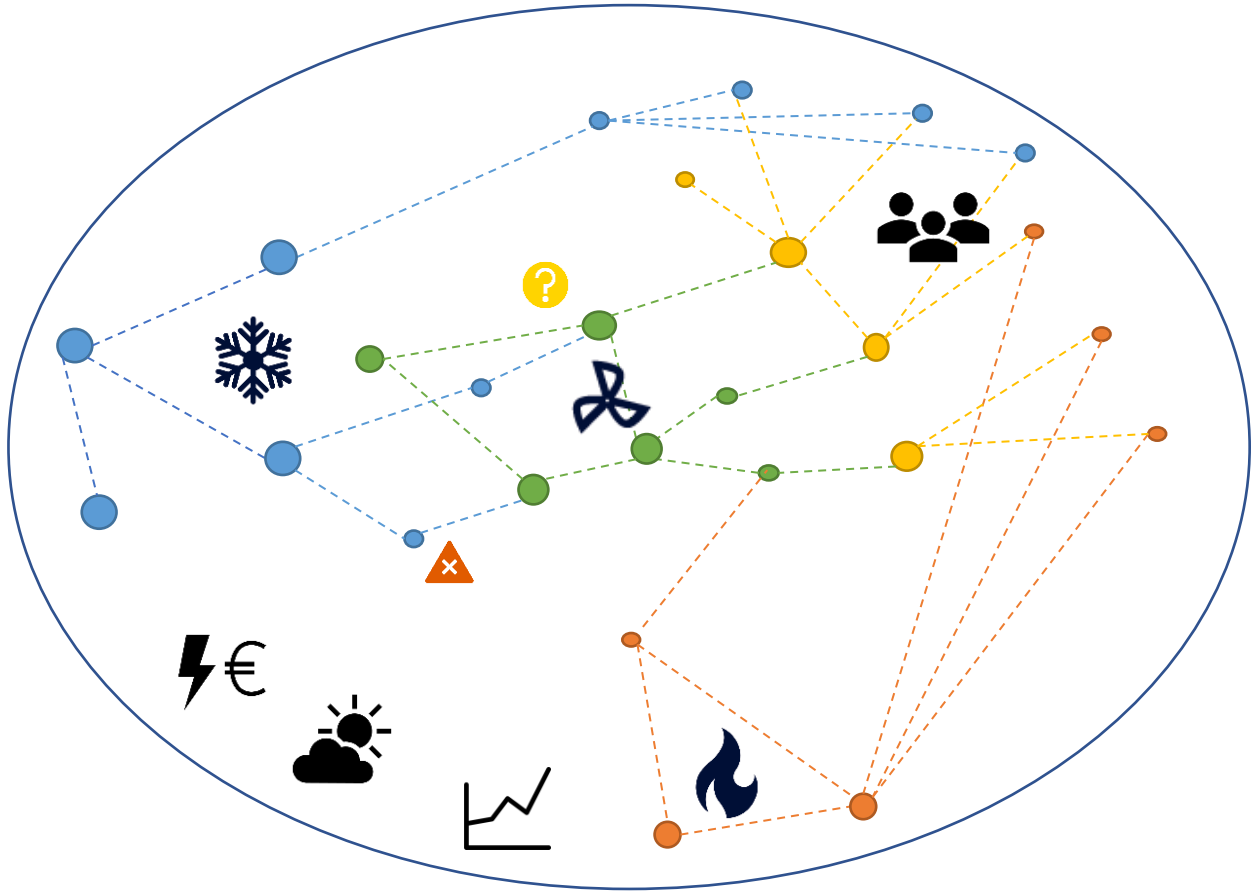
R8 tech

Automated Process Management

Building automation systems are **sub-isolated** and "managed" independently.

- Heating
- Cooling
- Ventilation
- Rooms

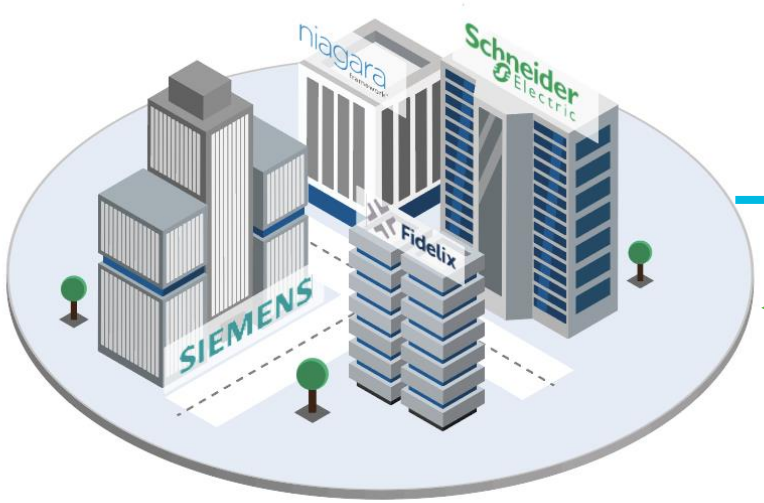
R8 Digital Operator



R8 Digital Operator works 24/7

to ensure highly performing smart buildings

Remote Set Up



READ

WRITE

Cloud solution

R8 tech

Digital Operator powered by AI

Key Performance Indicators

- Energy Efficiency
- Comfortable Indoor Climate
- Technical Condition

R8 Digital Operator works 24/7

to ensure highly performing buildings

Autopilot

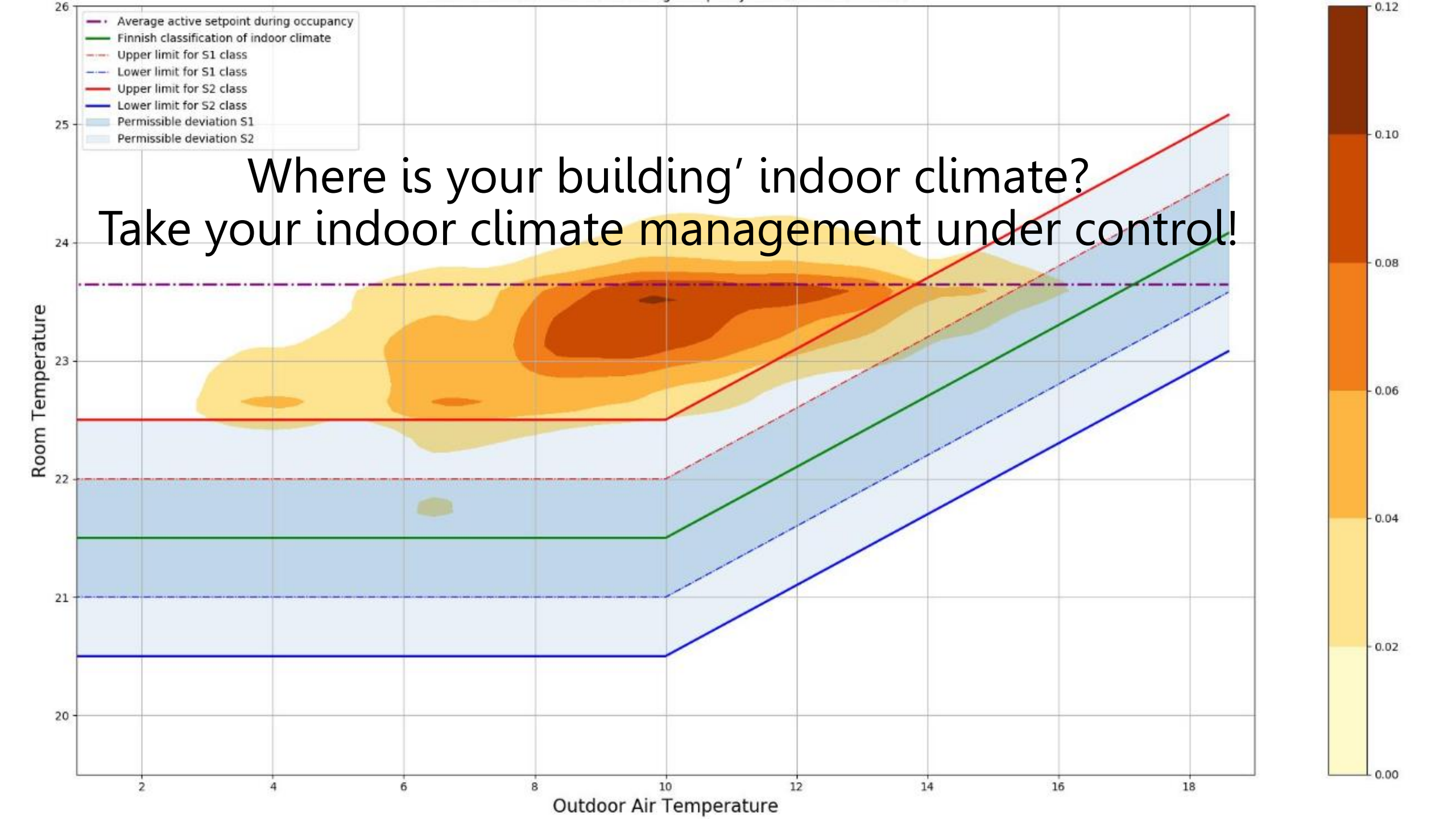
AI maximizes

HVAC systems operational efficiency

Diagnostics

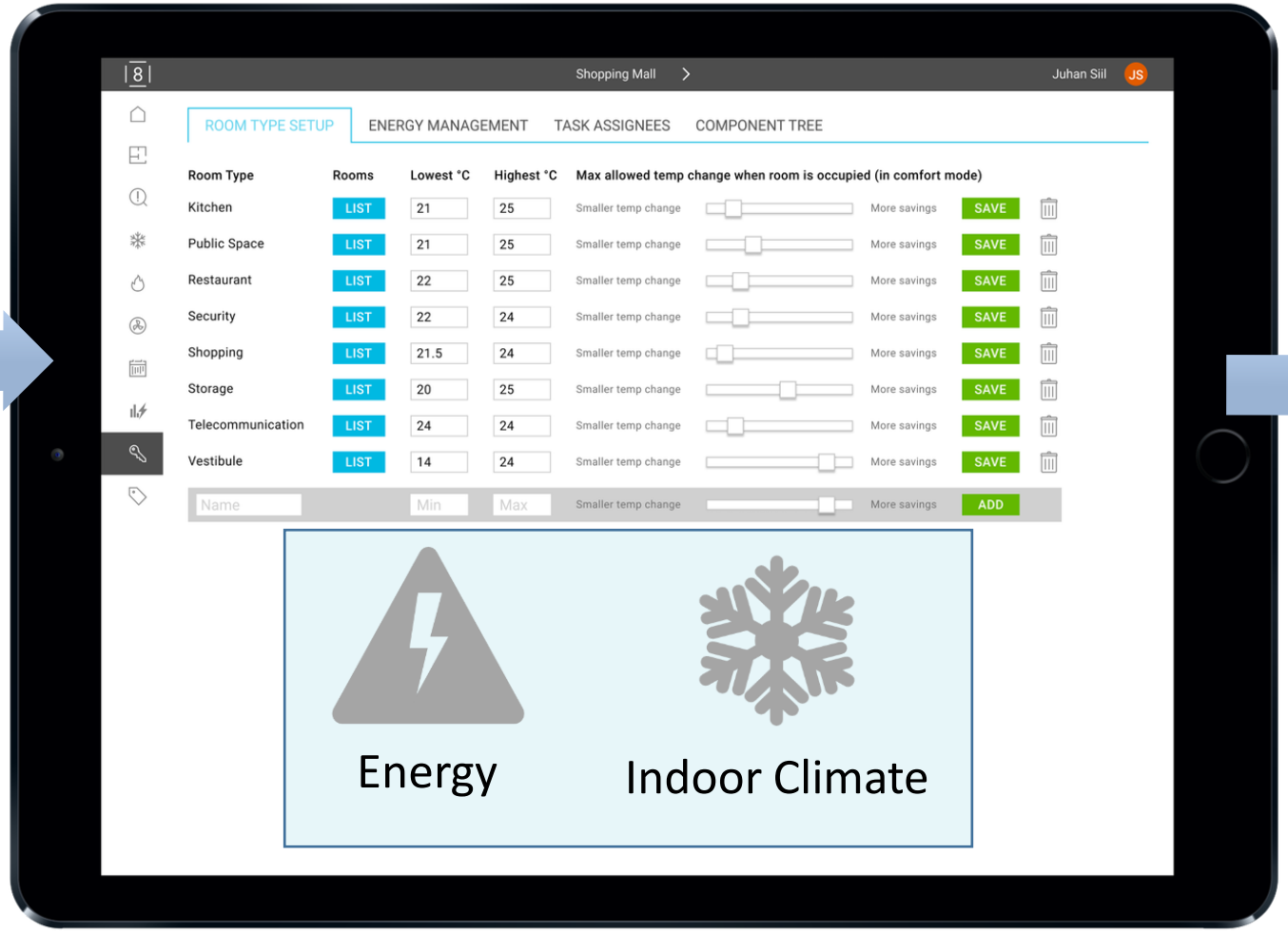
data driven automated analytics detect

HVAC systems faults


Average active setpoint during occupancy
Finnish classification of indoor climate
Upper limit for S1 class
Lower limit for S1 class
Upper limit for S2 class
Lower limit for S2 class
Permissible deviation S1
Permissible deviation S2
Where is your building' indoor climate?
Take your indoor climate management under control!
Room Temperature
Outdoor Air Temperature
26
25
24
23
22
21
20
2
4
6
8
10
12
14
16
18
0.12
0.10
0.08
0.06
0.04
0.02
0.00

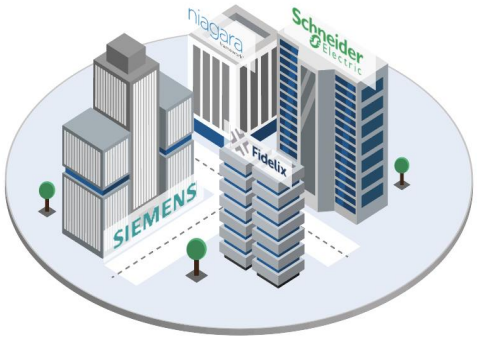
Autopilot & Management

Real-time Interaction



FM

Preferences



Intelligent Control

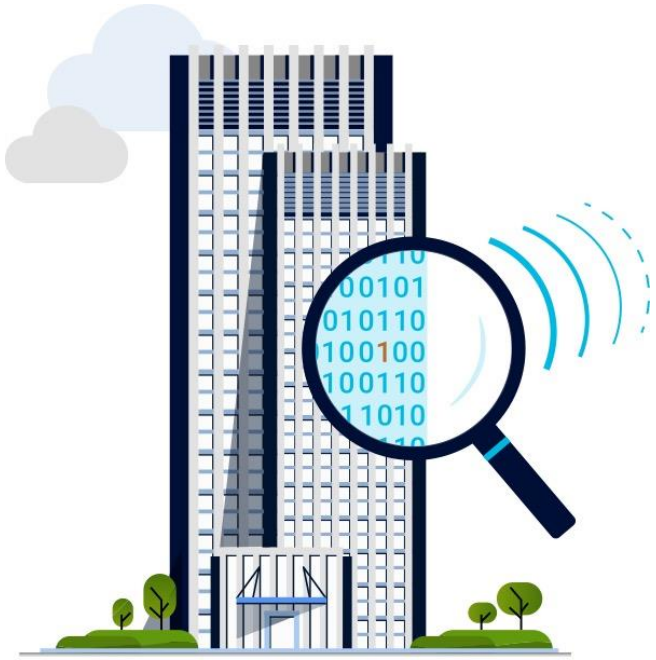
SAVINGS ON TOTAL COST
UP TO
20%
LESS CO_2 EMISSION

Every 15 minutes

R8 tech

Diagnostics

- Data driven fault detection with ticketing and validation.
- 10 times more precise HVAC systems fault detection compared to specialists.
- -20% maintenance and renewal cost reduction over the HVAC systems life cycle of 20 years.
- 59 000+ faults and anomalies detected.



Room temperature is too high, and fan-coil has been working 97.6% of the time past 3 days. Check fan-coil.

The room switches frequently between cooling and heating (35 times during the last 2 days). Calibrate room controller.

Ventilation unit valve leakage has caused overconsumption of 500 €/week

Cooling circuit pump is not following the pressure set point. Check the pump and hydraulics.

Heating plant supply temperature set point is not achieved 75.2% of the time, average temperature difference 14.2°C. Check valve and heat exchanger.

** portfolio information updated: 30.08.2020*

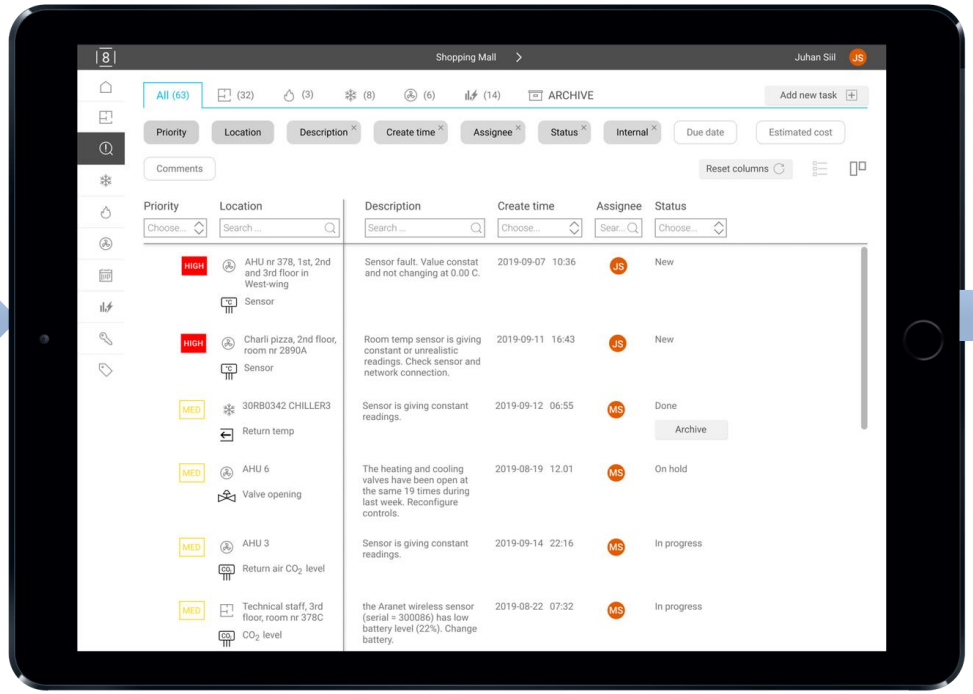
Diagnostics & Management

Transparency & Tasking

Diagnostics

Energy

Indoor Climate



FM

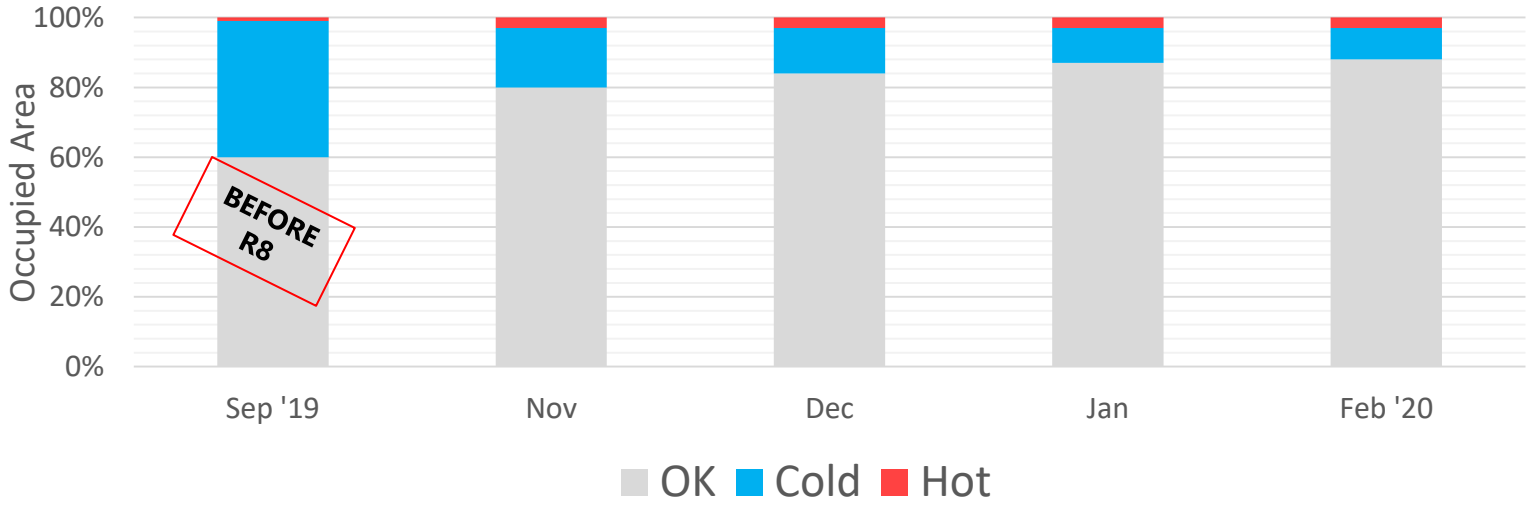
Lubja 4, Estonia

680 000
adjustments made

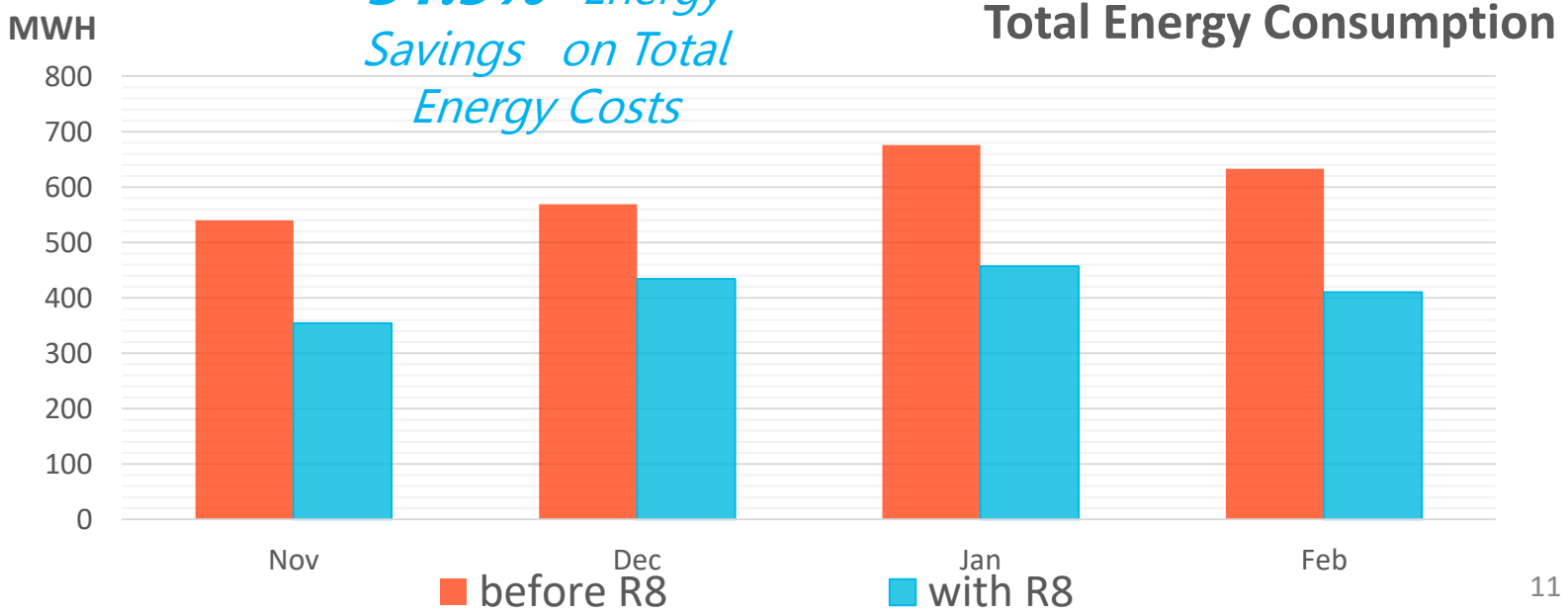
900+
faults and anomalies detected

225 000+ kg
CO_2 savings

Thermal Comfort increase from ***60% to 90%***



31.5% *Energy Savings on Total Energy Costs*



References: 650 000+ m2

R8tech in Numbers

11
countries

500 000+
datapoints

650 000+ m^2
portfolio size

10 000 000+ kg
CO_2 savings

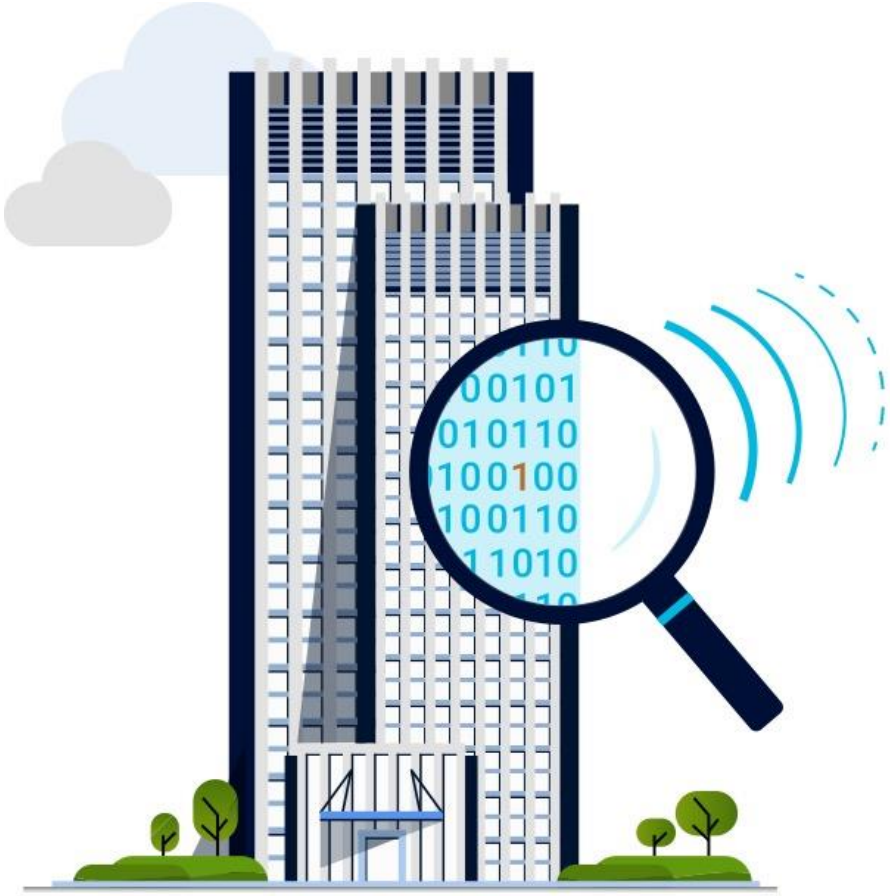
2017
founded

** portfolio information updated: 09.11.2020*

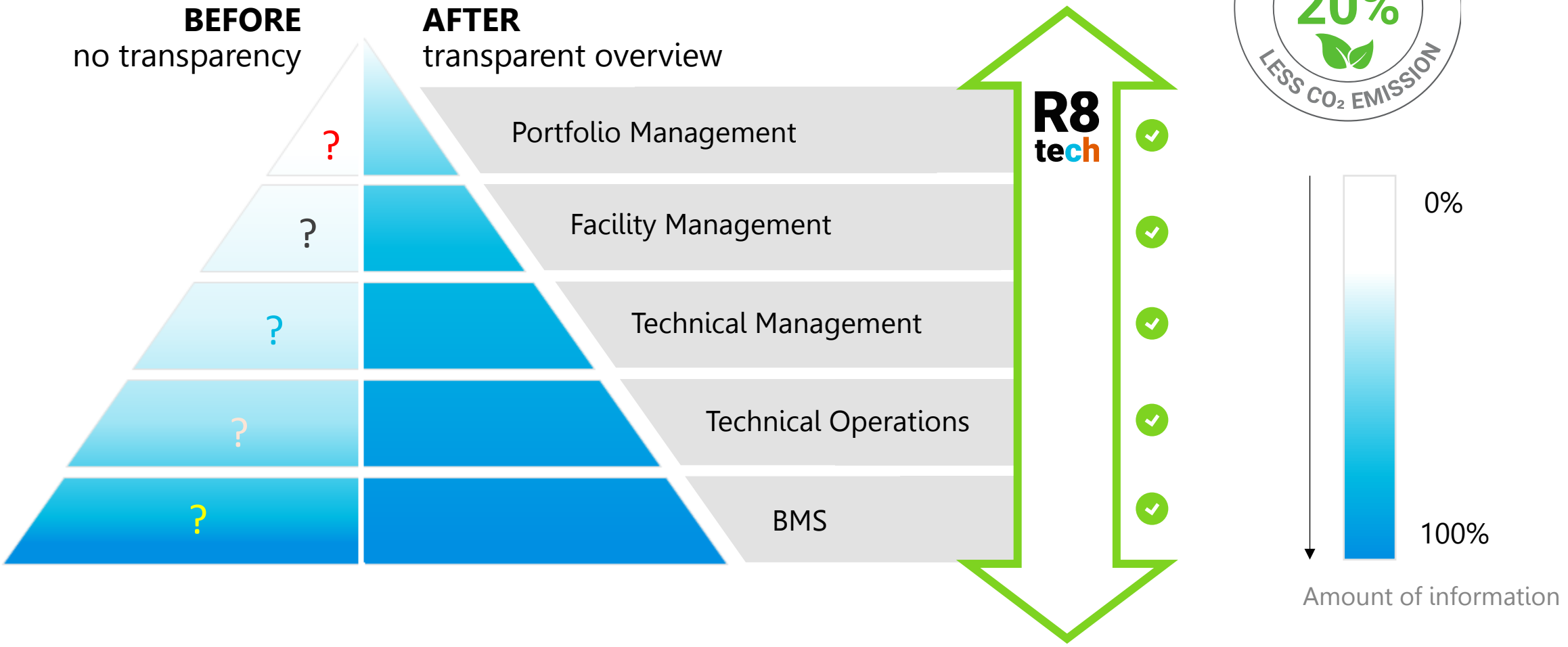
Digital Operator integrates securely with all common and modern BMS without any additional hardware.

We are known for...

- Simple remote onboarding
- Results instead of monitoring, analytics, consulting only
- Transparent overview
- Results driven business model



Information flow with R8 Digital Operator



KPIs

Indoor Climate

Energy Performance

Technical Conditions

Thank you!

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www.r8tech.io