

iComfort.

Smart and sustainable
environments.



About us.

iComfort is an innovative SME. We believe that only a just transition can generate sustainable change for the future. We work to be the best ally of companies in the challenge of sustainability and in the improvement of working environments.

In 2025, Nuvap joins the iComfort solution to strengthen IAQ's product and service offerings, providing new opportunities to improve well-being and efficiency in workspaces.

 **iComfort**
SMART AND SUSTAINABLE PLACES



Nuvap
HEALTH IS IN THE AIR

Ambiente



Co2
1000ppm



Pressione
990hPa



Rumore
60dBA



Luminosità
400lux

We are in:

- Roma
- Milano
- Bari
- Cosenza

To improve our software solution, we work with:



**POLITECNICO
DI MILANO**



Politecnico
di Bari



**ROMA
TRE**
UNIVERSITÀ DEGLI STUDI



Agenzia nazionale per le nuove tecnologie,
l'energia e lo sviluppo economico sostenibile



Consiglio Nazionale
delle Ricerche



SAPIENZA
UNIVERSITÀ DI ROMA

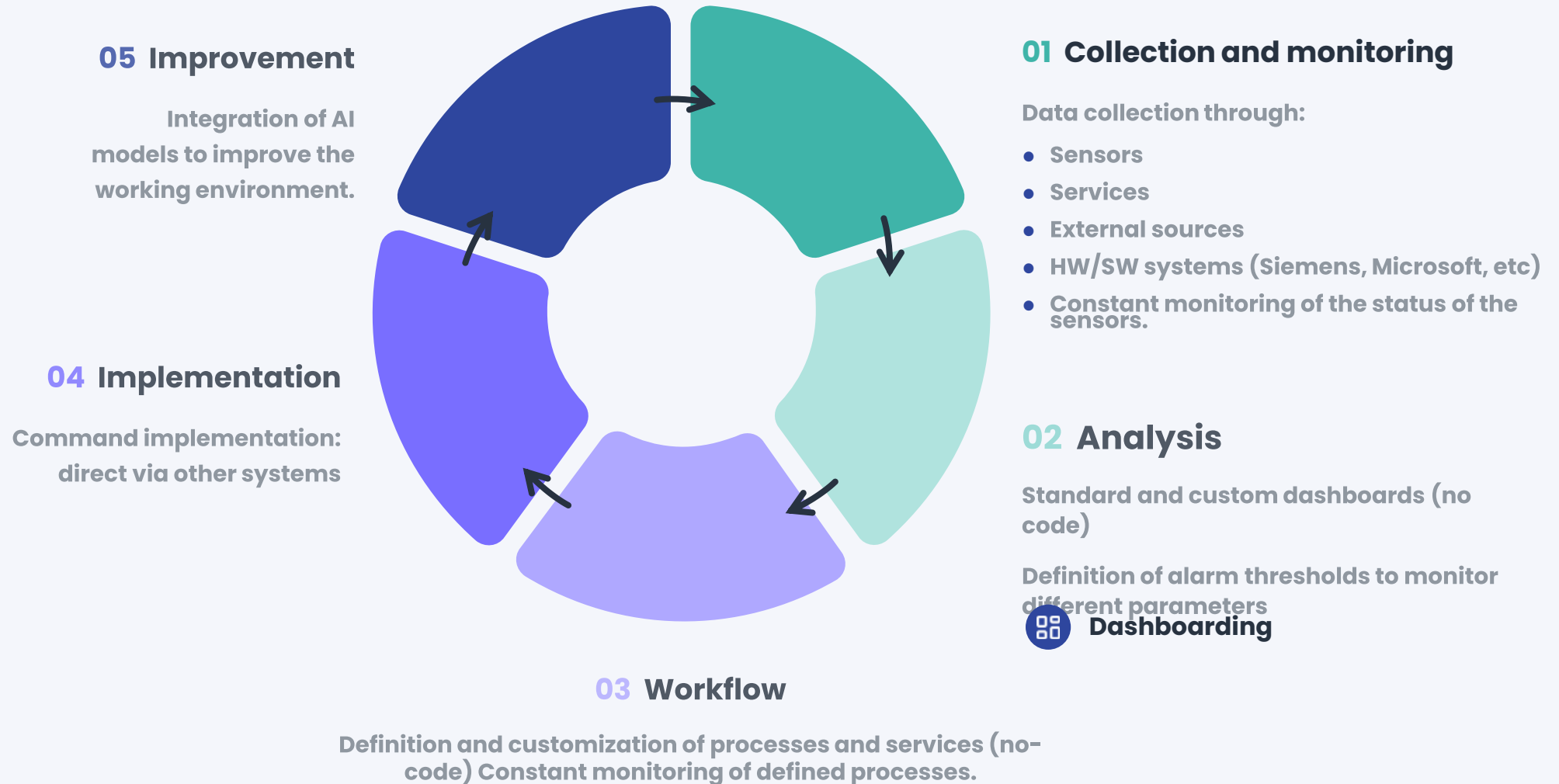


bi-rex
Big Data Innovation & Research Excellence

**eurac
research**

A.I.oT iComfort Ecosystem.

From data to action, in continuous learning





What do we do.

iComfort develops an open software platform compliant with privacy (GDPR), which uses data from multi-brand sensors installed in commercial buildings consisting of:



Environment analytics*

Temperature, humidity, co2, pm2.5, pm10, pressure, brightness, VOC, formaldehyde, ozone, methane, radon, odors, vibrations, water leaks and floor moisture, etc.



Workplace Analytics

Analysis and control of space occupancy in real-time, forecasting and historical for safety and security optimization in accordance with the law. Queue analysis, flow control, man down, etc.



Smart Energy

Monitoring of energy consumption, comparison with PUN, consumption by zone and anomaly detection. Carbon footprint analysis and retrofit to optimize consumption.



Smart cleaning & Waste Analytics

Correct planning of cleaning activities based on occupancy. Analysis of consumption (soap, paper, etc.) and waste management



Digital signage

Visualization for employees of the current status of the building in real time by: totems, tablets, labels, etc.



Booking

Booking desks, rooms, spaces, parking spaces through dashboards, with the integration of devices (e.g. free/occupied rooms, lighting and air modulation).



Support Sustainability Certifications

Parameter management for maintaining WELL, LEED, BREEAM certifications using modular templates.



Functions in iComfort Plataform.



Over 120 types
of integrated sensors

Workplace analytics



IDisk



People
counter



Meeting
room



E-ink
display



Smart
scene



Buttons



Magnetic
Contact



Level



Car park

Environment Analytics



Air
Quality



Noise



Radon



Losses



Gas



Smells

Energy analytics



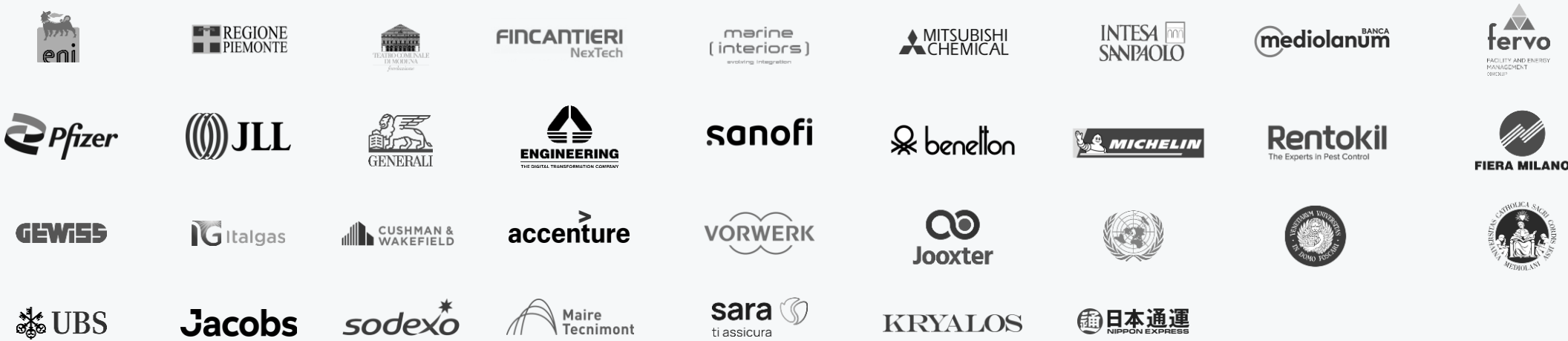
Voltage-Current-
Phase Analysis



Insulators



Actuators



To date, our solution is present in:

Italy, France, Spain, Ireland, England, Brazil, Mexico, Argentina

750.000 m²

**of indoor areas analyzed
through our software platform
and various types of sensors.**

Of which

10.500 sensors

**Installed and managed on the various
customers**

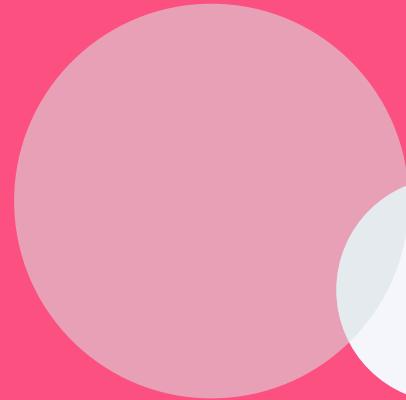
Over 6,000 sensors

Managed in real time

Over 180

Types of integrated sensors

Modules.



MODULES

Environment analytics.

- 1 Parameter monitoring
- 2 Checking Alarm Thresholds
- 3 Retrofit with third-party hw/sw
- 4 Compliance with regulations and support

to Well and Leed certifications

devices



Vibration



Level



Air
Quality



Noise



Pressure
pipes



Central
weather
forecast



Radon



Losses



Counter
pulses



Smells



Gas



Other...

MODULES

Environment analytics.

- 1 Parameter monitoring
- 2 Checking Alarm Thresholds
- 3 Retrofit with third-party hw/sw
- 4 Compliance with regulations and support

to Well and Leed certifications

Application



Air Quality

Real-time monitoring of parameters like CO₂, VOCs, and particulate matter to ensure a healthy and comfortable environment.



Radon

Detection and analysis of radon gas levels to prevent health risks in indoor spaces.



Losses

Advanced sensors detect leaks or infiltrations to prevent structural damage and water waste.

MODULES

Workplace Analytics.

iComfort takes workspace analysis to the next level. The technology developed integrates data from a wide variety of devices, analyzing the behavior of people in space, to create a virtual twin of the entire building.

It provides detailed information to managers, facility managers and process managers, improving the management and efficiency of workspaces.

It also allows you to optimize wellbeing and energy efficiency.

devices



IDisk



People
counter



People
flow



Buttons



E-ink
display



Smart
scene



Desk



Occupancy



Magnetic
Contact



Pir



Motion



Car park

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It also allows you to optimize wellbeing and energy efficiency.

Application



Idisk

Analysis of workstation usage to optimize space and improve efficiency. Current savings consumed.



People Count

Automatic counting of people in an area to better manage capacity and comfort.



People Flow

Monitoring of movement patterns to optimize pathways, enhance security, and improve space management.

MODULES

Workplace Analytics.

The iComfort system monitors space occupancy anonymously, ensuring GDPR compliance. The main advanced features offered include:

- 1 Safety:** Compliance with safety regulations (Legislative Decree 81/2008) regarding the capacity of spaces
- 2 Real-time security:** Immediate verification of the number of people present per floor or area
- 3 Occupancy analysis:** Pre and post occupancy evaluations aimed at optimizing space
- 4 Real-time information:** Instant access to space occupancy data for all employees

People count



Area User **20/25**

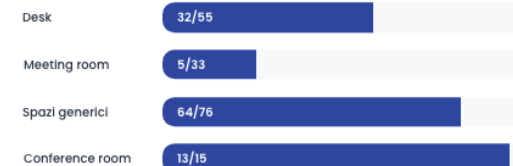


Area Facility **15/30**



Piano 1

Occupazione totale



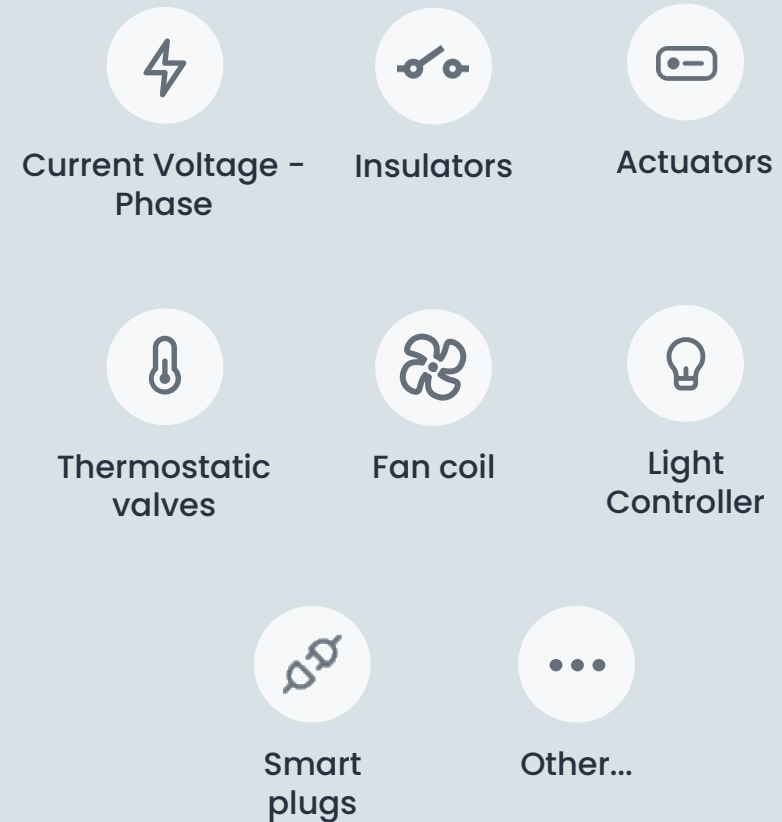
MODULES

Smart energy.

iComfort intelligently manages energy in the workplace. Our technology allows you to optimize the use of energy resources, reduce consumption and improve efficiency.

Through the control of lights, air conditioning and consumption analysis, iComfort Smart Energy contributes to energy savings and the reduction of the carbon footprint.

devices



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Application



Current Measurement

Detection and analysis of energy consumption to identify waste and improve efficiency.



Lighting Control

Automatic adjustment of lighting based on occupancy and natural light to save energy.



Smart Sockets

Intelligent management of power outlets to optimize device usage and reduce consumption.

MODULES

Smart energy.

The iComfort system allows energy to be monitored without the need for recertification to the electrical panel or systems. Features include:

1

Monitoring of energy consumption data

3

Support in energy audits

5

Carbon footprint calculation

2

Access to real-time energy market data (PUN)

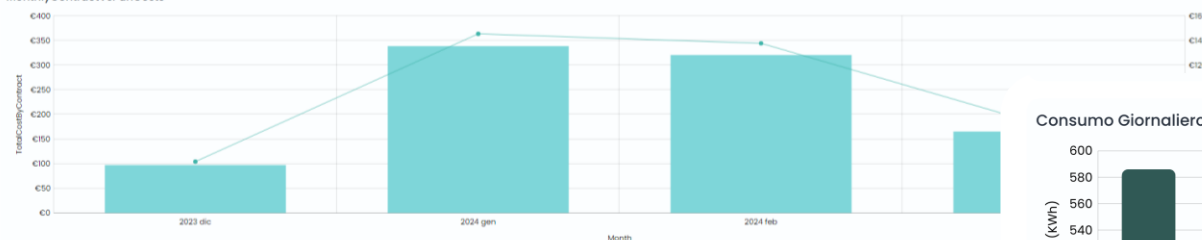
4

Support in energy optimization.

6

Retrofit

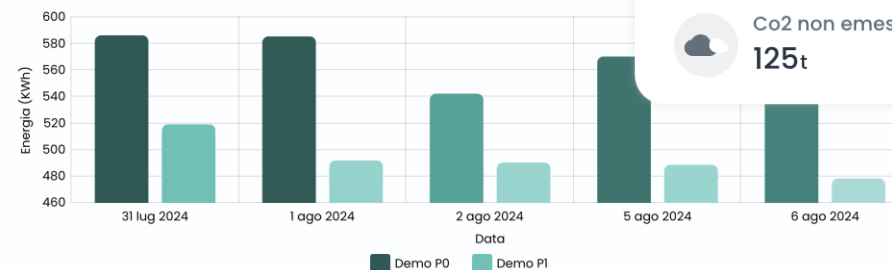
MonthlyContractVsPunCosts



CostDifferenceByMonth



Consumo Giornaliero



Energy ⚡

1,2 Kwh



Alberi salvati
125



Co2 non emessa
125t

MODULES

Booking.

The iComfort system allows you to manage reservations for any space or object within a building and to interact with different types of devices. Offering the possibility of integrating with the other iComfort modules.

In addition, third-party booking systems can be integrated via the Booking backend.

devices



Air
Quality



People
counter



People
flow



Desk



E-ink
display



Noise



Tablet



Pir



Magnetic
Contact



Motion



Car park



Other...

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Application



Desk

Smart booking of workstations to enhance flexibility and space optimization.



Noise

Monitoring of noise levels to suggest quieter workspaces and improve acoustic comfort.



Booking Tablets

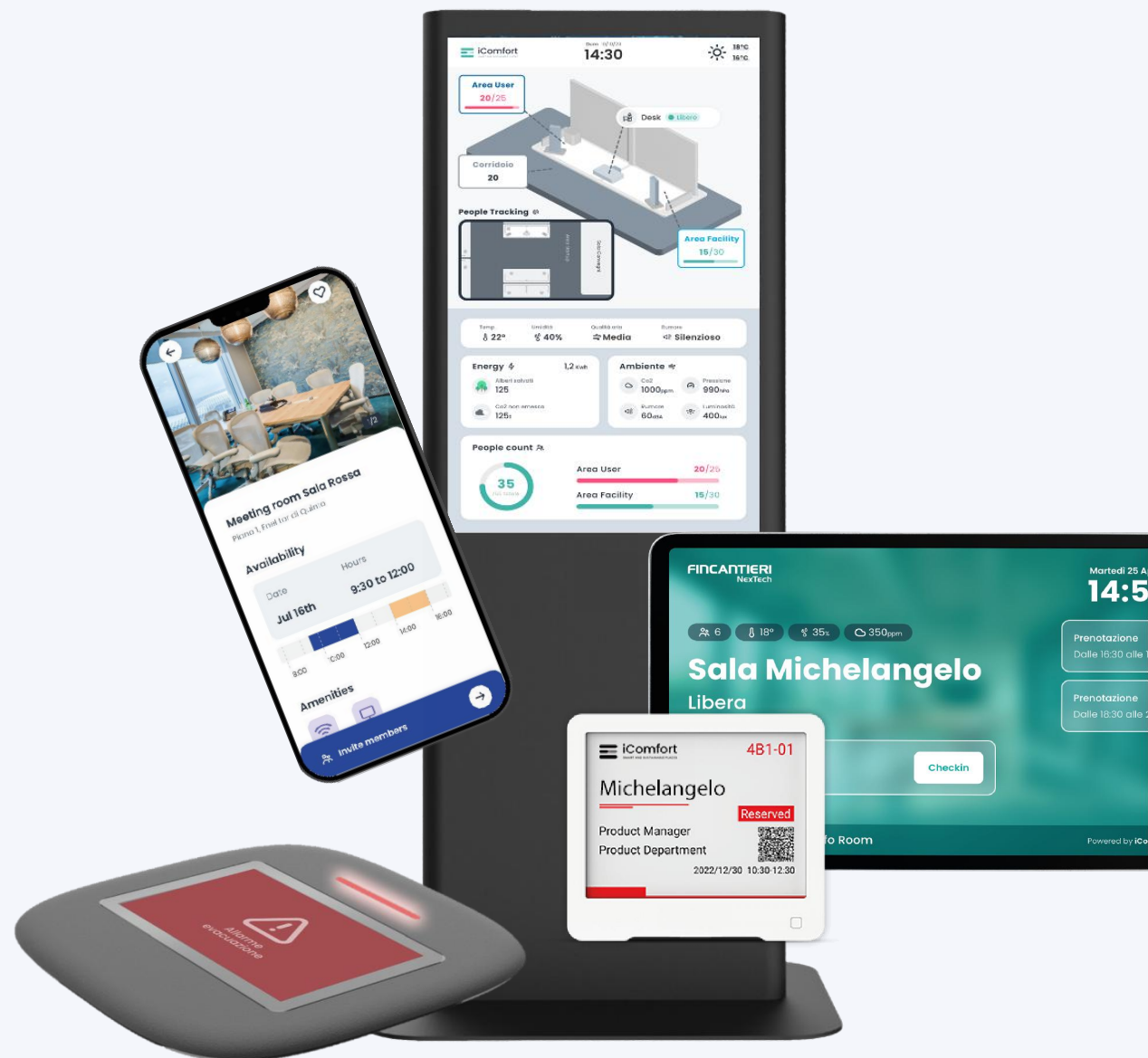
Intuitive digital interfaces for reserving meeting rooms and shared spaces with ease.

MODULES

Digital Signage.

iComfort redefines communication within workspaces thanks to Digital Signage. Using smart labels, tablets, totems and advanced systems, real-time information on the status of spaces and the entire building is provided.

This technology offers crucial data on occupancy, reservations, air quality, energy consumption and much more, greatly improving the user experience.



MODULES

Digital Signage.

The iComfort system allows:

- 1 Creating customizable areas inside the screen
- 2 Definition of the schedule by areas
- 3 Integration of widgets from other sources (weather, news, etc.)



MODULES

Smart Cleaning.

The iComfort smart cleaning function allows cleaning activities to be communicated to cleaning planning systems in an efficient way based on actual occupancy and the parameters detected in the spaces.

devices



Motion



People
counter



People
flow



Air
Quality



Losses



Level



E-ink
display



Pir



Smells



Other...

MODULES

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Application



Trash level

Sensors in waste bins to optimize garbage collection and reduce resource waste.



Odor detection

Monitoring air quality in restrooms to trigger targeted cleaning and improve hygiene.



Motion sensor in Restrooms

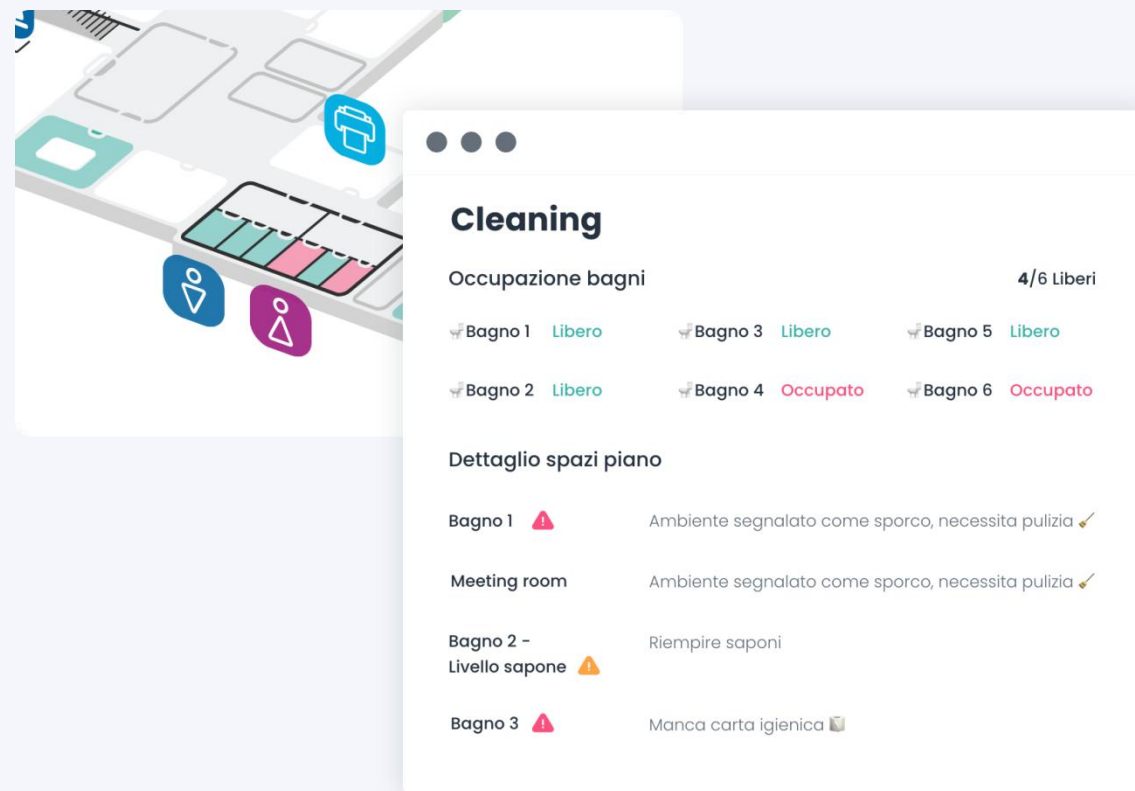
Tracking restroom usage to schedule cleaning based on actual needs.

MODULES

Smart Cleaning.

The iComfort smart cleaning function allows you to efficiently plan cleaning activities in the workplace based on the actual occupancy of the spaces.

- 1 **Organization Support**
- 2 **Identification of areas of attention**
- 3 **Material Consumption Analysis**
- 4 **Occupancy analysis**
- 5 **Waste analysis to improve environmental impact**

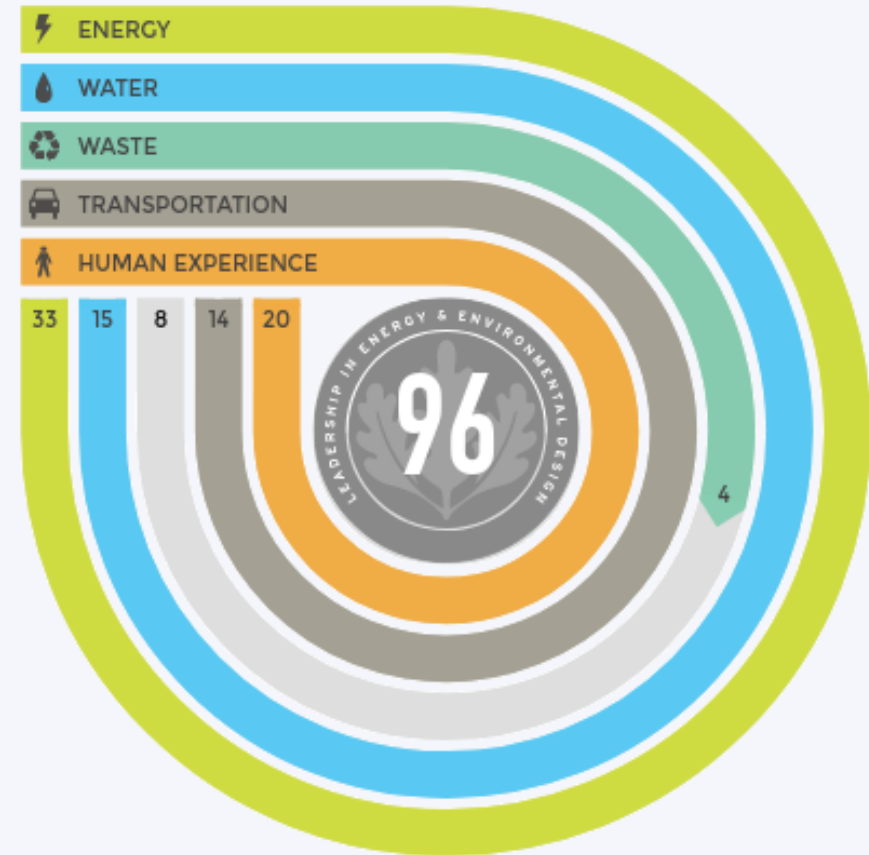


MODULES

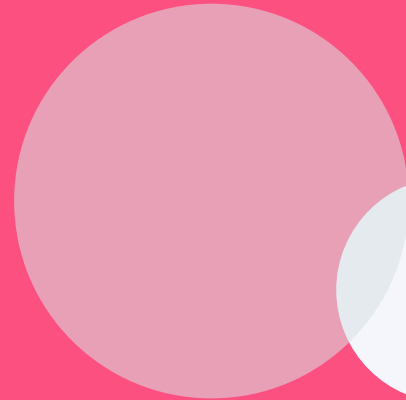
Support for sustainability certifications.

Comfort offers an advanced solution for monitoring environmental parameters thanks to a technology that integrates cutting-edge devices to analyze and improve the sustainability of workspaces, creating a healthier and more productive environment.

We monitor the parameters of the **Leed** and **Well** certifications to allow a clear view of the state of the building.



Customers Cases





REGIONE PIEMONTE.

**KEY
RESULT**

Utilizzo dello spazio migliorato
2.500 scrivanie per 3.500 dipendenti

**KEY
RESULT**

- Risparmi significativi sui costi**
- 21% di risparmio energetico annuo grazie alla gestione intelligente delle scrivanie
 - Programmi di pulizia e manutenzione ottimizzati

**KEY
RESULT**

- Esperienza lavorativa migliorata**
- Maggiore comfort in ufficio
 - Maggiore coinvolgimento degli utenti grazie alle interfacce smart desk

**KEY
RESULT**

Benefici per la salute e il benessere
Approfondimenti basati sui dati per incoraggiare comportamenti più sani sul posto di lavoro

**KEY
RESULT**

- Efficienze operative**
- Processi di gestione degli spazi semplificati
 - Processo decisionale basato sui dati per i futuri layout degli uffici

REGIONE PIEMONTE

SKYSCRAPER: EVOLVING OFFICE SPACES

Challenge:

Adapting office infrastructure to support hybrid work models for 3,500 employees

Solution implemented:

2,500 smart stand-up desks with IoT devices and data analytics

Long-term Impact

- Support for the evolution of work models
- Demonstrated leadership in smart building technologies
- Improved employee satisfaction and productivity
- Significant reduction in operating costs and environmental impact



VATICAN MUSEUMS.



KEY RESULT

Enhanced Visitor Experience

- 15% reduction in waiting times
- Significant improvement in customer satisfaction ratings
- Optimized visitor flow throughout museum spaces

KEY RESULT

Advanced Artwork Preservation

- Implemented AI-driven environmental control for the Sistine Chapel
- Improved climate management for major artworks
- Real-time monitoring of temperature, humidity, and air quality

KEY RESULT

Increased Security Measures

- Real-time security monitoring and alert system
- Improved response times to security incidents

KEY RESULT

Sustainability Improvements

- Reduced carbon footprint through optimized operations,
- Better resource allocation based on visitor patterns

KEY RESULT

Data-Driven Decision Making

- Comprehensive analytics on visitor behavior and preferences
- Insights for exhibition planning and resource allocation
- Continuous improvement of museum operations

VATICAN MUSEUMS

IMPROVING CUSTOMER EXPERIENCE

Challenge:

- Manage high visitor volumes efficiently
- Ensure optimal conditions for artwork preservation
- Enhance overall visitor experience
- Improve museum sustainability
- New security paradigm

Solution Implemented:

Integrated smart building and crowd management system with AI-powered analytics, air quality monitoring

Long-term Impact

- Preservation of priceless cultural heritage for future generations
- Enhanced global reputation for innovative museum management
- Improved balance between public access and artwork conservation
- Model for sustainable practices in cultural institution



ROMA 3 UNIVERSITY



**KEY
RESULT**

Enhanced Classroom Utilization

Optimized scheduling, classroom occupancy rates

**KEY
RESULT**

Significant Energy Savings

18% reduction in energy costs for classrooms, Automated energy management based on occupancy and schedules

**KEY
RESULT**

Improved Learning Environment

Enhanced air quality through real-time monitoring

**KEY
RESULT**

Data-Driven Decision Making

Real-time analytics on classroom usage patterns, Insights for future space planning and resource allocation, air quality monitoring

ROMA 3 UNIVERSITY

FUTURE-PROOFING UNIVERSITY

Challenge:

Understand and optimize classroom utilization across multiple departments

Solution Implemented:

Smart classroom management system with integrated sensors and data analytics

Long-term Impact

- Positioning the university as a leader in smart campus initiatives and increasing Greenmetric ranking globally
- More efficient use of university resources
- Enhanced student and faculty satisfaction with learning spaces
- Potential for interdisciplinary research and innovation in smart building technology



TEATRO PAVAROTTI MODENA



KEY RESULT

Energy Optimization

- 30% reduction in energy consumption
- Real-time energy usage monitoring and automated adjustments
- Enhanced Heating Efficiency (35% reduction), Smart thermostat implementation

KEY RESULT

Improved Indoor Environmental Quality

- Real-time monitoring and control of co2 and humidity levels
- Occupancy Optimization
- Data-driven insights on space utilization patterns
- Automated lighting based on real-time occupancy

KEY RESULT

Data-Driven Decision Making

- Centralized dashboard for real-time monitoring of all building systems
- Continuous improvement through trend analysis

PAVAROTTI THEATER

SUSTAINABILITY IN AN ANCIENT THEATER

Challenge:

- High energy costs
- Suboptimal indoor environmental conditions (humidity, air quality, etc.)
- Inefficient space utilization Underperforming auxiliary services (e.g., bar services)

Solution Implemented:

Integrated smart building management system with energy monitoring, environmental , people flow and occupancy tracking

Long-term Impact

- Substantial reduction in operational costs and carbon footprint
 - Enhanced occupant comfort and satisfaction
 - Improved asset value through modernization and efficiency gains
- Model for sustainable and smart building management practices

800T

FINCANTIERI



FINCANTIERI SHIPYARDS



KEY RESULT

Enhanced Production Efficiency

- Real-time monitoring of production processes across all shipyards
- Increased overall production output and reduced delays

KEY RESULT

Equipment Resilience and Reliability

- Implementation of continuous monitoring systems for critical equipment
- Predictive maintenance based on real-time equipment condition data
- Significant reduction in unexpected equipment failures and downtime

KEY RESULT

Energy Optimization

- Comprehensive energy monitoring across all shipyard operations
- Data-Driven Decision Making Centralized data dashboard for real-time insights across all shipyards

FINCANTIERI SHIPYARDS

SUCCESS STORY

Challenge:

Ensure production efficiency across multiple shipyards, Enhance strategic equipments resilience and longevity, Optimize maintenance costs, Improve energy management in large-scale industrial settings

Solution Implemented:

Integrated smart industrial management system with IoT sensors and advanced analytics

Long-term Impact

- Significant improvement in overall operational efficiency and productivity
- Reduced environmental footprint through optimized energy use
- Enhanced competitive position in the global shipbuilding industry
- Improved worker safety through proactive equipment management
- Model for smart manufacturing in large-scale, multi-site industrial operations

FINCANTIERI CRUISE SMART CABINS





KEY FOCUS

Smart Cabin Innovation

- Implementation of fall detection systems for passenger safety
- Real-time occupancy monitoring for efficient service Real-time monitoring of production processes across all shipyards
- Increased overall production output and reduced delays

KEY FOCUS

Casino ROI Optimization

- Advanced player tracking and behavior analysis
- Data for Personalized marketing

KEY FOCUS

Energy Efficiency and Occupancy Management

- Smart energy management systems in cabins and public areas,
- Occupancy-based climate and lighting control

FINCANTIERI SMART CRUISE

R&D PROJECT

Challenge:

Major cruise line company seeking to innovate and enhance guest experience

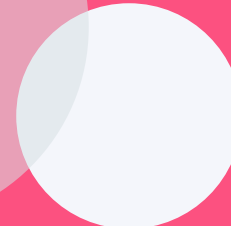
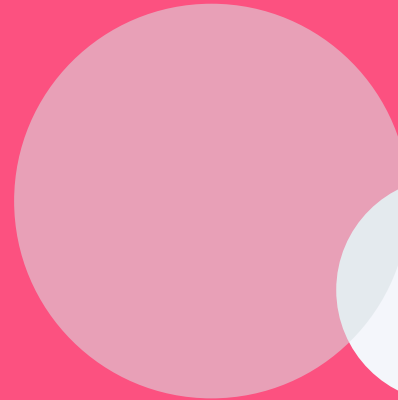
Objectives:

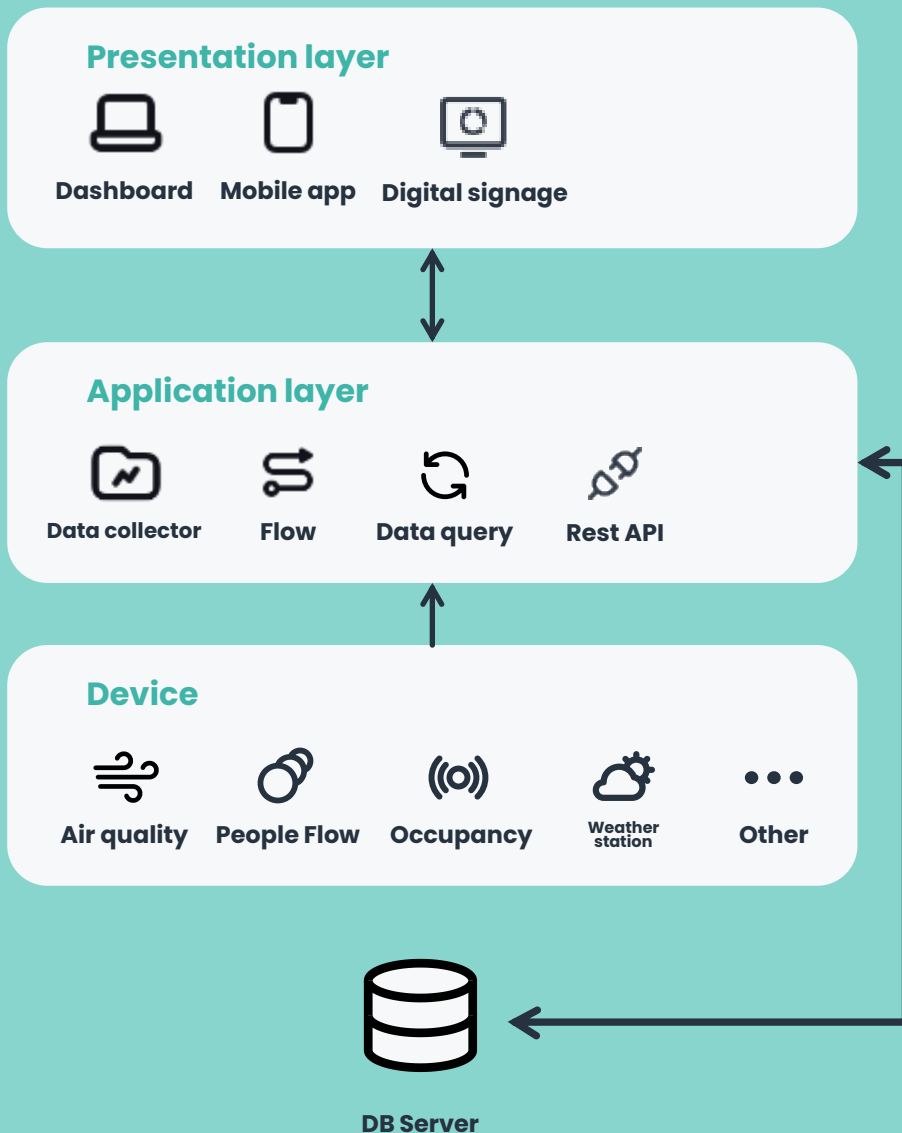
Transform cruise cabins and public areas (theater, casino, bars, restaurants) into smart, interactive environments

Long-term (potential) Impact

- Positioning as an industry leader in cruise ship innovation
- Enhanced sustainability profile and reduced environmental impact
- New revenue streams through premium smart cabin offerings
- Improved operational efficiency and cost management across fleet

Technical Aspects





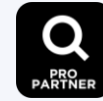
Features.

- 1 Open in/out platform
- 2 On-Premise Systems o Cloud
- 3 Supporto Multitenant
- 4 Device agnostic
- 5 Customizable for each customer
- 6 Proprietary software and source code
- 7 Compliant with security criteria



We are integrated with:

SIEMENS



And many more...

iComfort and certifications for green and smart building.

iComfort supports various points of international sustainability certifications through its platform.

Thanks to various checks carried out on over 40 points associated with different certifications, and with reports that can be automatically sent to certification bodies periodically such as:

- Air Quality* *powered by Nuvap*
- Temperature and humidity
- Noise
- Occupation of spaces
- Water monitoring
- Energy monitoring





Cross-functional software features.



Workflow

Creation of processes based on services and data.



Alert

Definition of alarm thresholds to monitor different parameters.



Dashboarding

Creation of customized no-coding dashboards.



Integrations with external services and systems

iComfort is sensor agnostic that can be integrated with third-party services.



Monitoring devices

Constant monitoring of the status of the devices.



Artificial intelligence

Integration of AI models to improve the working environment.



API

Possibility of integration with your code and services.



Soon new...

New capabilities to integrate and manage other types of data.

Built-in communication protocols.

LoRaWAN™

MQTT

LoWPAN

DALI+

Modbus

PROFI
BUS

CAN BUS

IO-Link

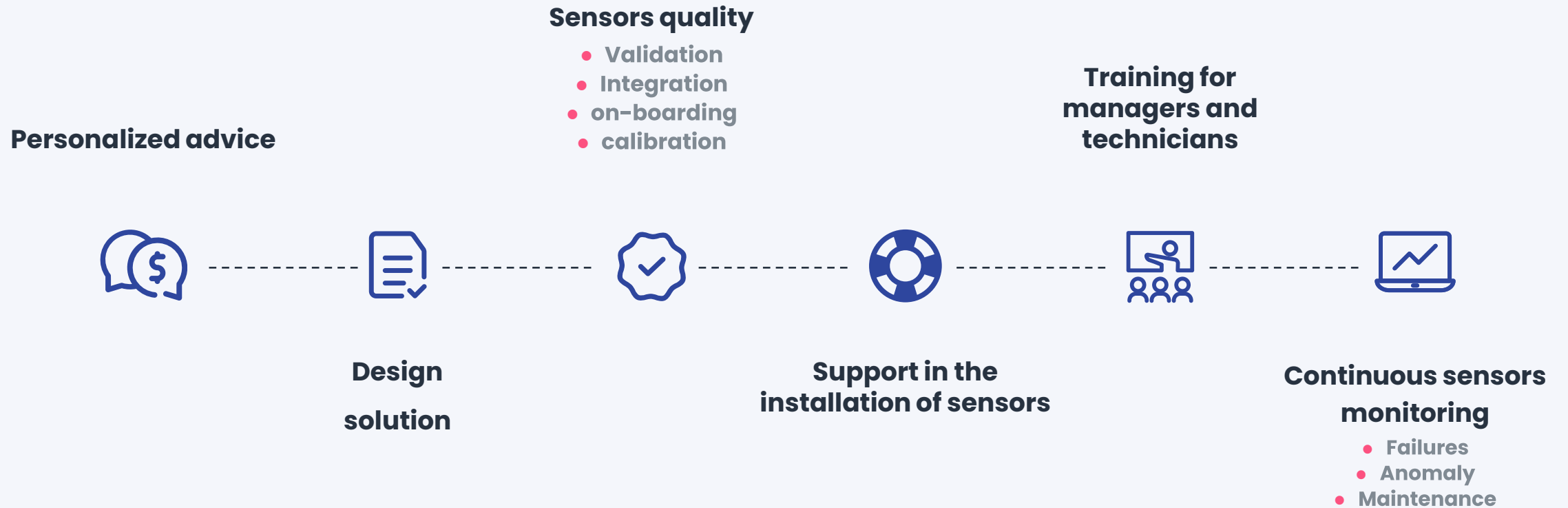
ASHRAE BACnet™

OPC UA

KNX

Service Support.

We follow our customers in all phases of the project



ESG.

Governance

iComfort Booking e Digital Signage:

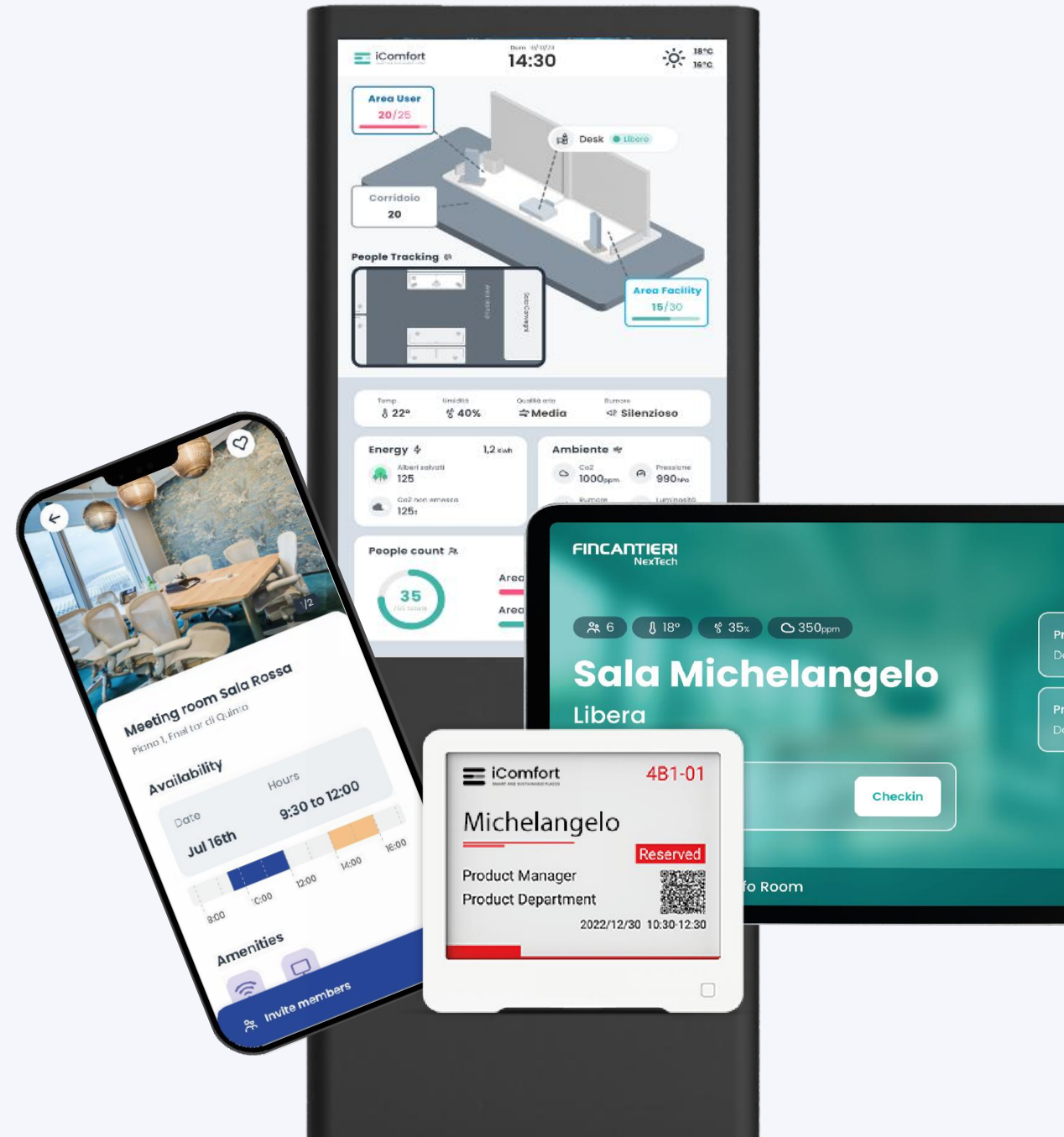
- Promotion of a collaborative, inclusive and flexible environment, which supports the work-life balance and well-being of users and employees.

Data analysis and monitoring:

- Improved business management and operational accountability, reduced operating costs and increased efficiency.

Privacy by design:

- Strengthening corporate trust and reputation, reducing legal risk and improving relations with stakeholders.



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