





# In Un Mondo Cambiato e ... che cambia

## How Smart, Connected Products Are Transforming Companies

Their impact on the value chain and organizational structure. The second in a two-part series. by Michael E. Porter and James E. Heppelmann

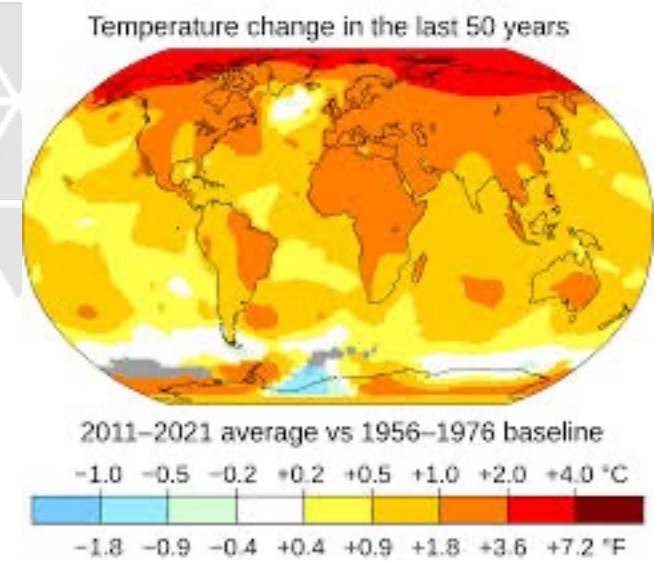
From the Magazine (October 2015)



2015



2020



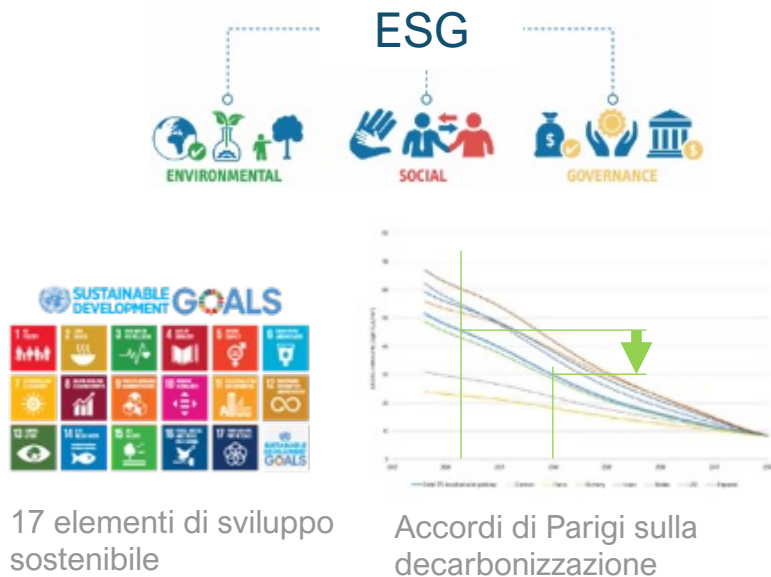
31.12.2022

Digitale, transizione energetica e PNRR: il Presidente Mattarella sottolinea l'importanza di guidare il processo di innovazione

3 Gennaio 2023 Michelle Crisantemi 395 Views 0 Commenti awareness, digitalizzazione, sostenibilità, transizione energetica



# Dove il contesto crea nuovi bisogni e opportunità



Volatilità della disponibilità

Fonti sostenibili e incentivi



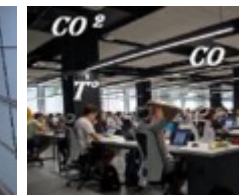
**Cambio delle esigenze nell'utilizzo degli immobili**



Smart working



Co-working



Maggior attenzione per sicurezza e benessere sul posto di lavoro

1

Strumenti per implementare piani di riduzione CO2

Individuazione fattori e determinazione piano;  
Esecuzione piano via servizio/tecnologia

2

Strumenti per implementare piani di saving energetico

Controllo consumi e riduzione costi;  
Revamping impianti per maggiore efficienza

3

Strumenti per implementare piani ottimizzazione del servizio

Intervenire solo dove serve / quando serve;  
Diminuzione delle spese non preventivate;  
Allungamento vita asset

Necessario basare l'operatività sui dati, freschi e affidabili

Fervo Group Confidential

# ...In Pillole



- The Challenge: Outsourcing, workplace strategies, and technology innovations hold immense potential for companies seeking to reduce costs and improve productivity in facilities management
- FERVO Group aim is to conquer market share thanks to technology, knowledge and digital services
- Sustainability, Digitization, Servitization, Metaverse and Multimedia are the Objectives and Focus
- Smart Maintenance, Health , Energy, Carbon Footprint and Comfort are the main pillars together with Multimedia areas to achieve objectives
- Capital spending is not merely a cost: much of this investment is already cost-effective and comes with a return for customer. This is the paradigm change focus
- B2B Market demand is growing and looking for solutions like “OmniVerse Solutions”. Leveraging on the 60Mio€ Fervo Captive portfolio, in the first year will reach 0,7 M€ in revenue and will structure the organisation in order to develop digital solutions and foster its future growth
- In 2026 revenue is expected at 2 M€
- Cost of Goods Sold and other direct costs account for 19% of revenue. Personnel expenses account for 26%
- The core team will evolve from 3 FTE to 14 FTE by 2025, and mainly engineers and pre-sales digital managers will be hired
- OmniReal will reach its break-even point in 2026. In 2026 EBITDA margin exceeds 40% (1 M€)



# FACILITY & ENERGY MANAGEMENT GROUP...ED OLTRE



Unique Group, with a clear identity and a complete offering in the management and streamline of **customer assets** enabling to a greater **sustainability** (eg.: energy consumption and minor CO2 emissions)





70.22.09 Servizio di consulenza strategica finalizzata al miglioramento di un'azienda.

62.01.00 Produzione di software non connesso all'edizione.

62.02.00 Consulenza nel settore delle tecnologia informatiche. (include la progettazione e la formazione)

74.90.93 Attività di consulenza risparmio energetico per via di piattaforme digitali

82.20.00 Attività dei call center

85.59.20 Corsi di formazione e corsi di aggiornamento professionale

**46.51.00 - Commercio all'ingrosso di computer, apparecchiature informatiche periferiche e di software**

**26.20 - Fabbricazione di computer e unità periferiche**



# Il Goal / l'Obbiettivo

Excellent Technique and Service Resilience to deliver..... Supreme Service to our customers



Tennis player FEDERER is widely known for his excellent SERVICE and his resilience in the career. To serve our business: processes, knowledge, timing, customer focus:

ASSURE BEST IN CLASS Service quality to END CUSTOMER

ULTIMATELY INCREASE CUSTOMER LOYALTY

HAVE System efficiency and decision support dashboard



# Il Contesto di Business



# II Contesto di Business



Unique and integrated platform, linking:

- **digital solutions and process engineering**
- **design & consultancy**
- **Enable sustainability streamline** (co2 avoidance-capturing and recycling, energy management streamline predictive maintenance)
- **Improve customer tco**

**WHAT**

Sustainable Real Estate matters to 4 buying persona:

- **Real Estate Investors**
- **Building Owners**
- **Facility Managers** (Corporate facility Managers and Facility Management Firms)
- **Business Executives**

**WHO**

The main driver for investing in Smart Real Estate solutions are ESG policies:

- **Attracting Capital**
- **Increasing Assets' value**
- **De-Risking Real Estate portfolios**
- **Reputation**
- **Sustainability**

**WHY**

# L'opportunità / la Sfida

included  
in our  
solutions  
portfolio

## Be Sustainable

Climate change are impacting planet wellness. it's time to act, even for enterprises

Helping organizations, big enterprises and PMI to adopt a **sustainable** approach to streamline ESG rating: the index gives precise info on ambient impact, social and enterprse direction.

Support is an add value path to streamline ESGs objectives.





# La Sfida / l'Opportunità

**“We have  
ten years to  
transform the  
world”**

(Source: 2020 sustainability trend)



The global call to action towards a sustainable and healthy approach is getting louder and clearer.



**Smart Real Estate** is high on the agenda and closely linked to the key themes:

- **Health & wellbeing**
- **Sustainable cities and communities**
- **Foster Innovation**
- **CO2 footprint**

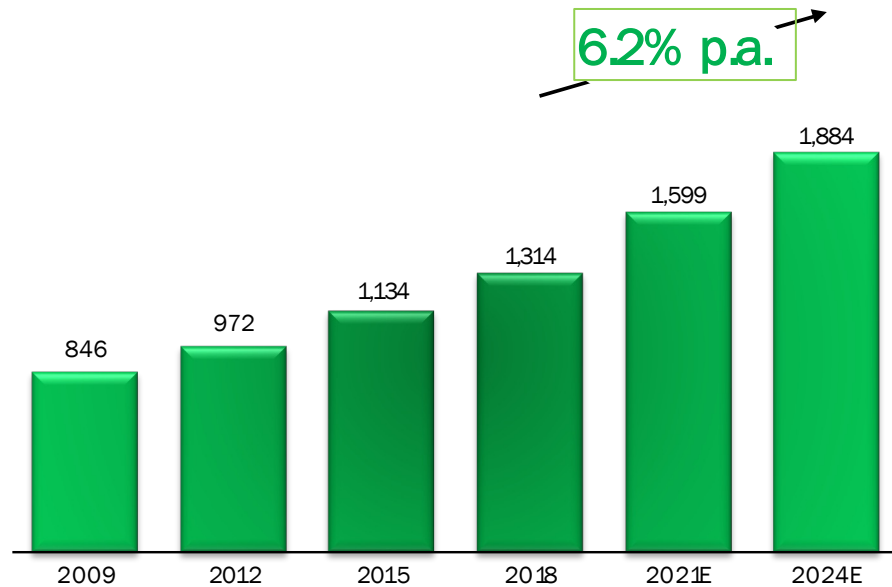
**COVID-19 boosted the attention on Indoor Air Quality (IAQ).**

# La Sfida / l'Opportunità

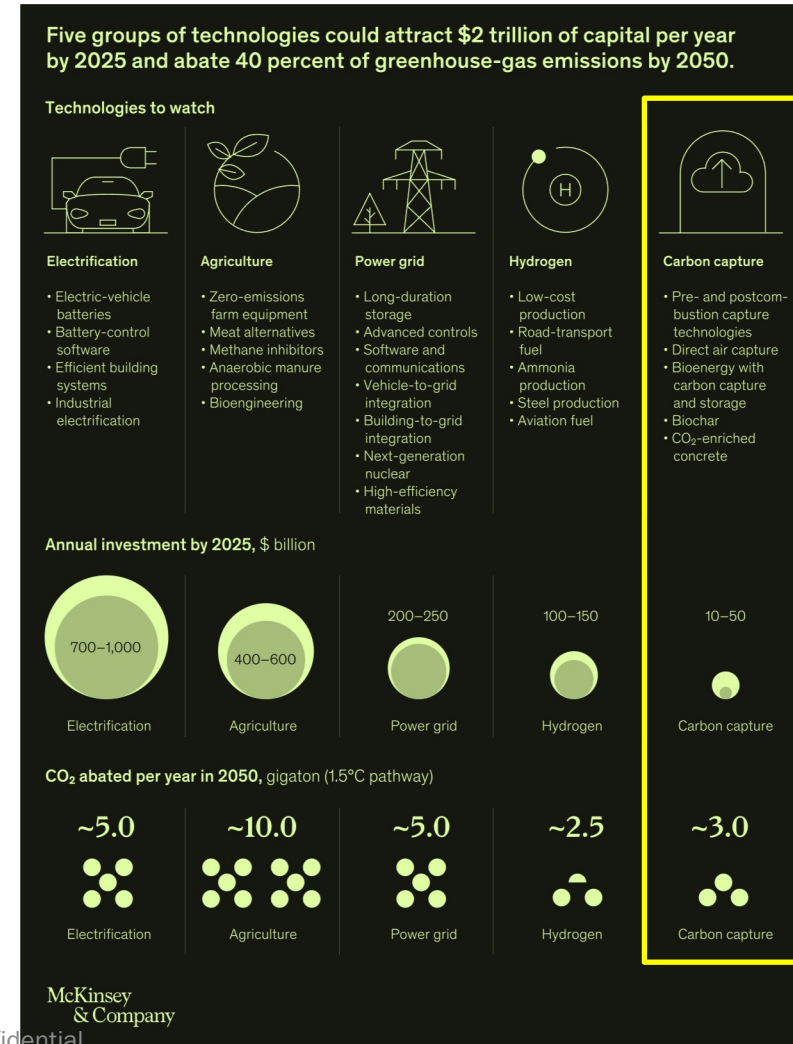
Exhibit 2

## Companies are increasingly outsourcing facilities management

Global market outlook (in-house and outsourced FM spend)  
USD billions

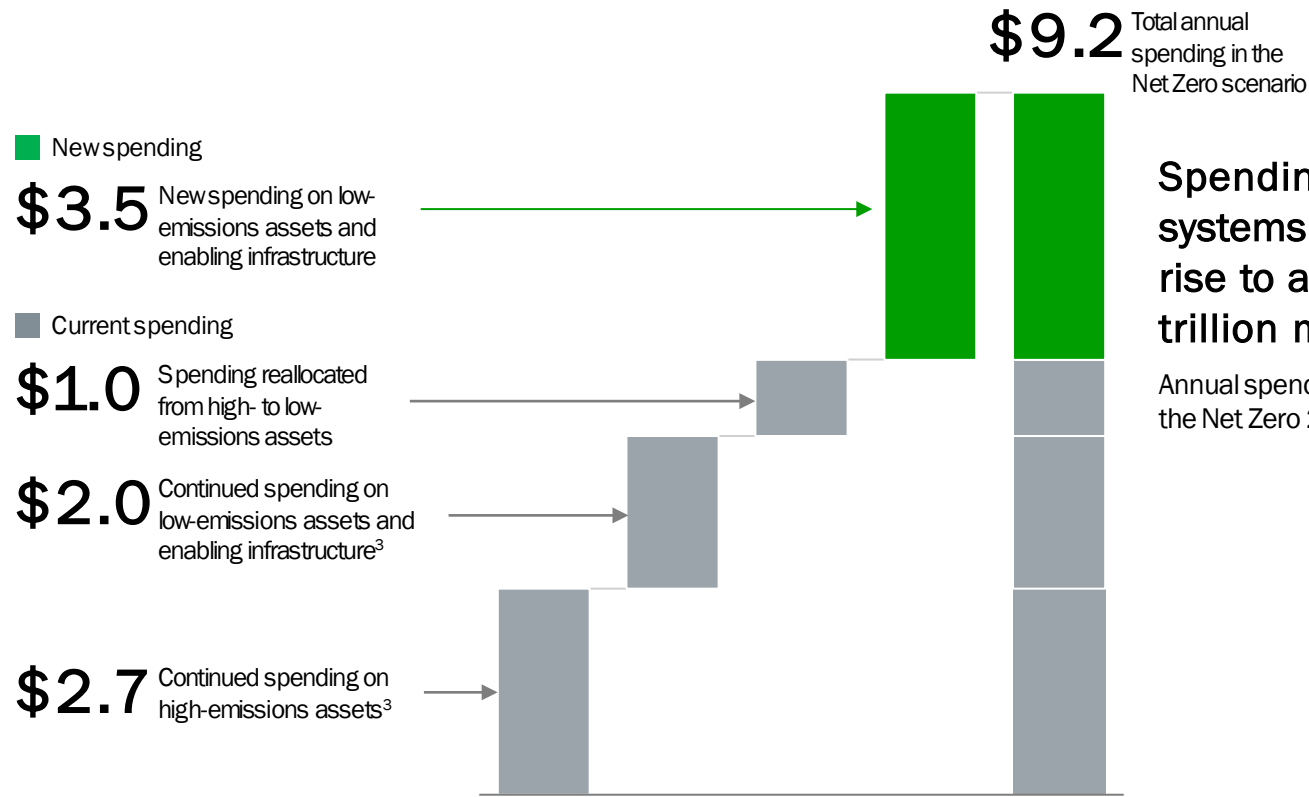


Source: Frost & Sullivan; Global FM analysis 2020; McKinsey





# L'opportunità: L'andamento



Spending on physical assets for energy and land-use systems in the NGFS Net Zero 2050 scenario would rise to about \$9.2 trillion annually, or about \$3.5 trillion more than today.

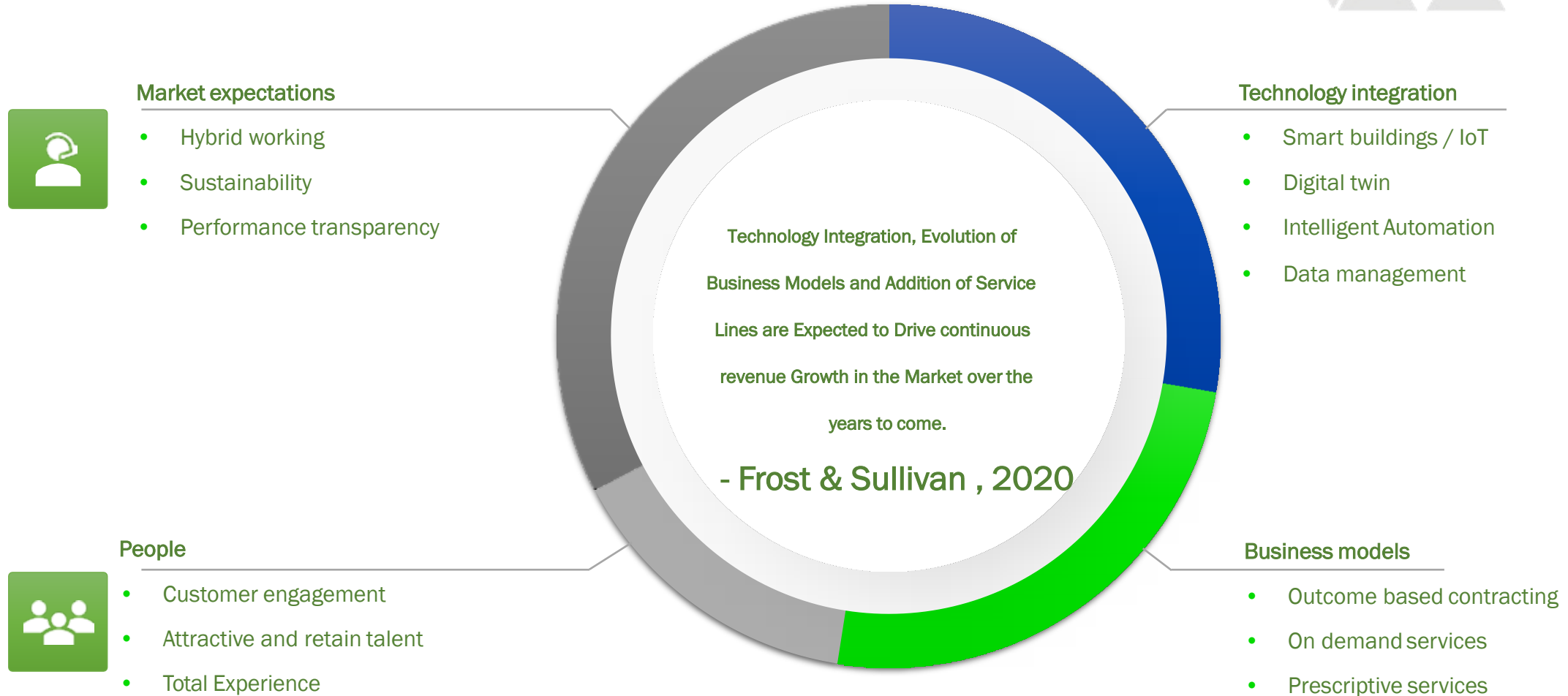
Annual spending on physical assets for energy and land-use systems<sup>1</sup> in the Net Zero 2050 scenario,<sup>2</sup> average 2021–50, \$ trillion

1. We have sized the total spending on physical assets in power, mobility, fossil fuels, biofuels, hydrogen, heat, CCS (not including storage), buildings, industry (steel and cement), agriculture, and forestry. Estimation includes spend for physical assets across various forms of energy supply (eg. power systems, hydrogen, and biofuel supply), energy demand (eg. for vehicles, alternate methods of steel and cement production), and various forms of land use (eg. GHG-efficient farming practices).
2. Based on the NGFS Net Zero 2050 scenario using REMIND-MAGPIE (phase 2). Based on analysis of systems that account for ~85% of overall CO<sub>2</sub> emissions today. Spend estimates are higher than others in the literature because we have included spend on high-carbon technologies, agriculture, and other land use, and taken a more expansive view of the spending required in end-use sectors.
3. Our analysis divides high-emissions assets from low-emissions assets. High-emissions assets include assets for fossil fuel extraction and refining, as well as fossil fuel power production assets without CCS; fossil fuel heat production, gray-hydrogen production; steel BOF; cement fossil fuel kilns; ICE vehicles; fossil fuel heating and cooking equipment; dairy, monogastric, and ruminant meat production. Low-emissions assets and enabling infrastructure include assets for blue-hydrogen production with CCS; green-hydrogen production using electricity and biomass; biofuel production; generation of wind, solar, hydro-, geothermal, biomass, gas with CCS, and nuclear power along with transmission and distribution and storage infrastructure; heat production from low-emissions sources such as biomass; steel furnaces using EAF, DRI with hydrogen, basic oxygen furnaces with CCS; cement kilns with biomass or fossil fuel kilns with CCS; low-emissions vehicles and supporting infrastructure; heating equipment for buildings run on electricity or biomass, including heat pumps; district heating connections; cooking technology not based on fossil fuels; building insulation; GHG-efficient farming practices; food crops, poultry and egg production; and land restoration.

Source: McKinsey Center for Future Mobility Electrification Model (2020); McKinsey Hydrogen Insights; McKinsey Power Solutions; McKinsey–Mission Possible Partnership collaboration; McKinsey Sustainability Insights; McKinsey Agriculture Practice; McKinsey Nature Analytics; McKinsey Global Institute analysis

20/03/2023

# Il cambiamento dei Servizi di Facility





# Come Abbracciare ed amare la sfida/l'opportunità: Digital Smart Building Services

## ENERGY

Building Energy efficiency is one of the major pillar to drop CO2 debit

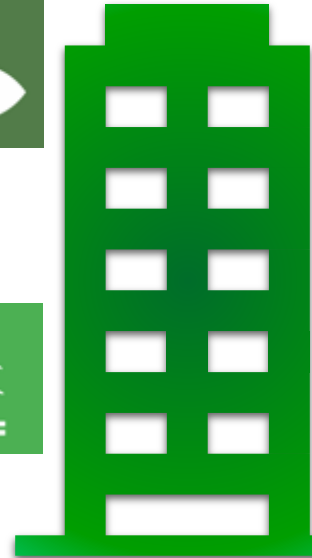
## GREEN

Smart control of gardens, parks, ornamental plants, contributing to CO2 management

## CLEANING & BEYOND

Smart services monitoring about:

- Cleaning:
- Reception & switchboard:
- Concierge and security:
- «Office boy» and postal services:



## COMFORT

Smart Space management (desks, parking, etc..) increase .

## HEALTH

Services that aim to preserve and improve the health of the occupants inside the building. Indoor Air quality and Battery killing sanitation Robots a couple of samples

## GENERAL SERVICES

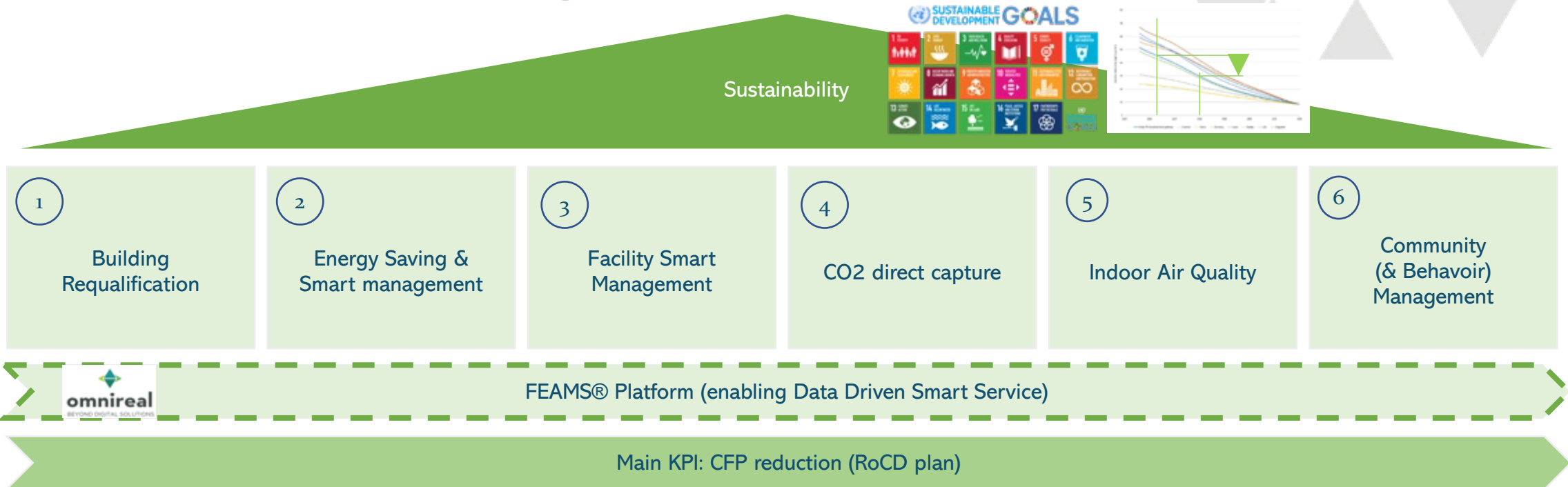
Proactive and Predictive maintenance aimed to measure and streamline the TCO for customers, to drive CO2 footprint

As indicated in the last edition of the Smart Building Report, the **services** offered by a Smart

Building may vary depending on the **intended use** of the building itself.

Hereby an overview of the main **categories** of services made available and enabled by a **Smart Building**.

# La nostra filosofia per la Sustainability: “holistic” thinking, ovvero “hands-on”!

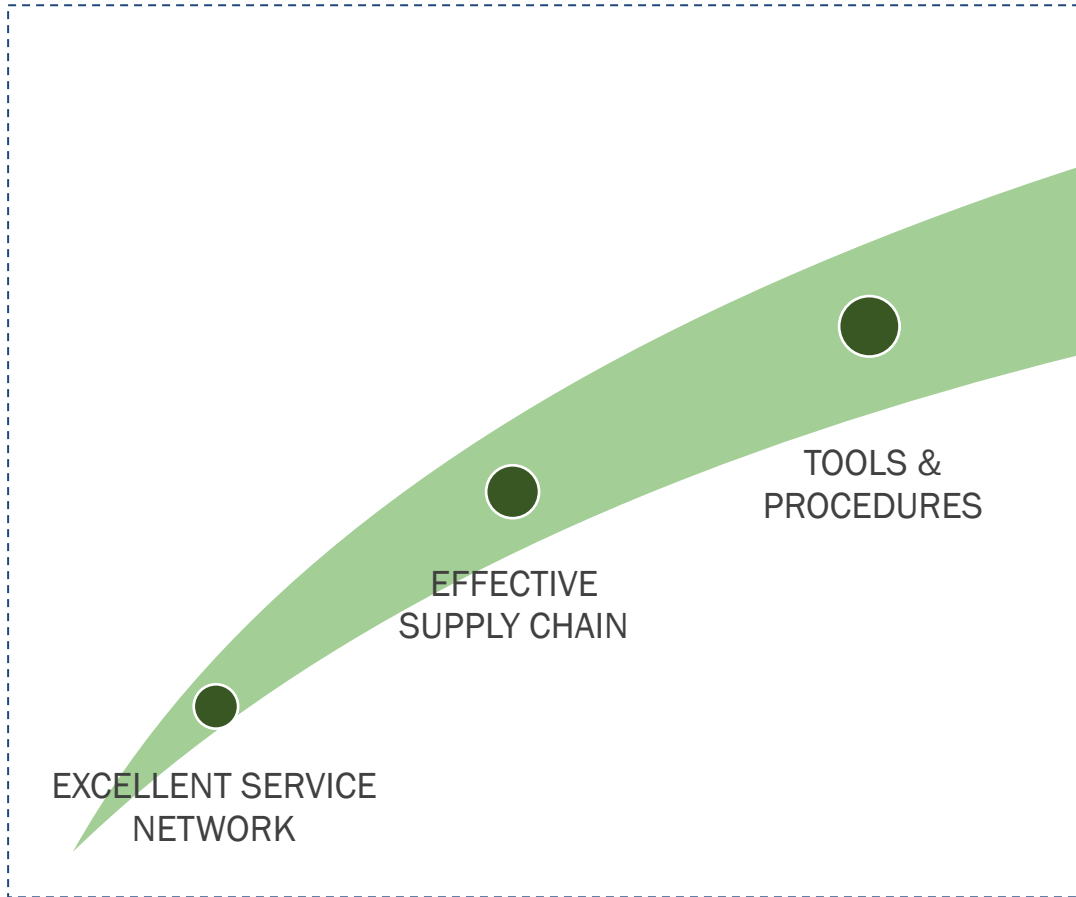


Capability to manage the Key points for success:

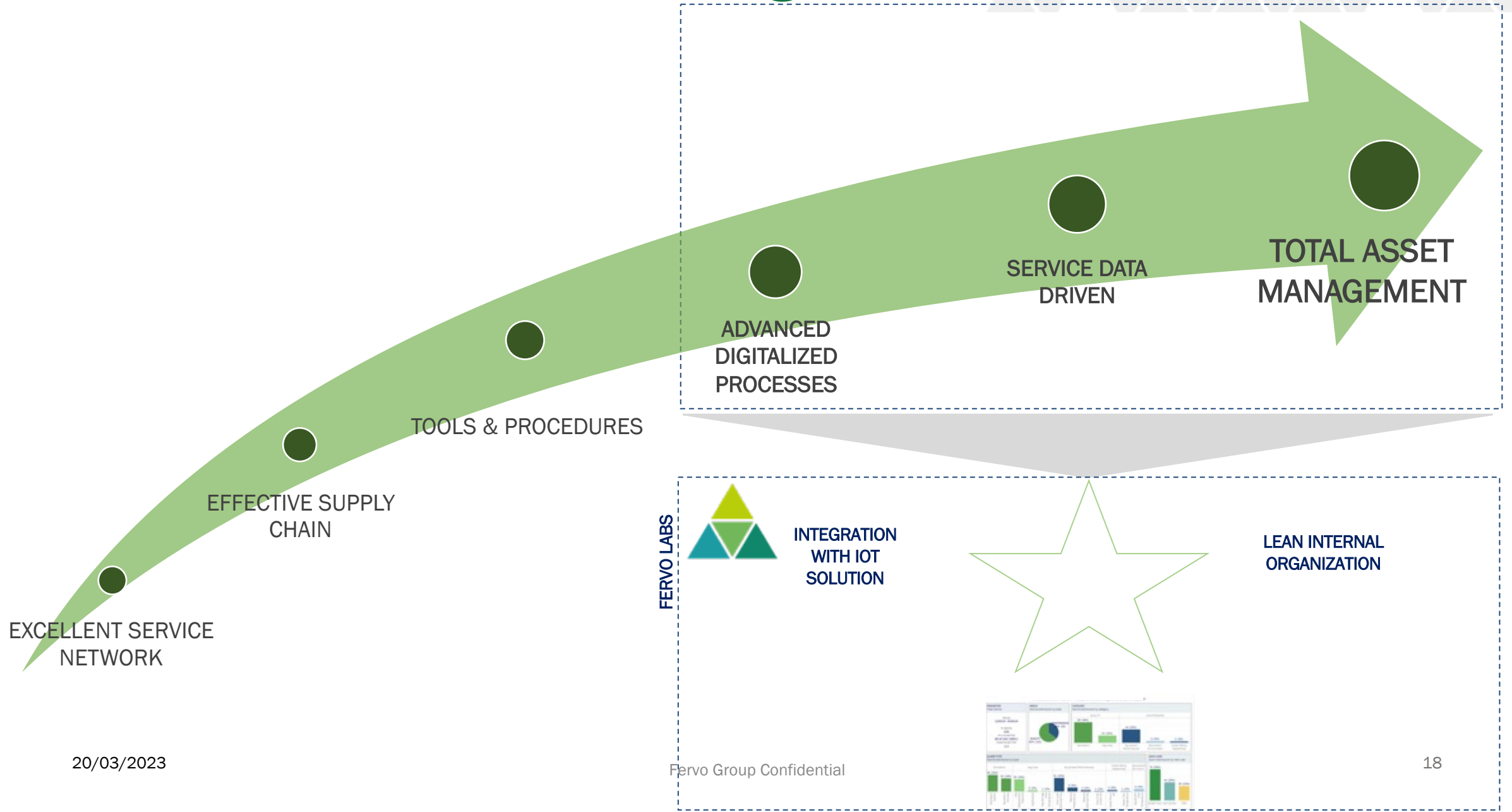
- 1\ Fact Based approach, to manage «fluid» buildings' occupation/usage
- 2\ Holistic View and Multicompetences, to address Sustainability in its multi-dimensions, with interlinked effects
- 3\ Very understandable KPI, to manage RoCD\* plan (\*Reduction of Carbon Debit)
- 4\ Focus on Execution: monitoring is paired with Smart Service



# Questo traghetta da un Servizio Tradizionale...



# ...Ad un Total Asset Management





# La Tecnologia



# Ed I Suoi Pilastri di Servizi (e Piani)



## HEALTH

Air Quality:  
Analytics per  
pollutant/device

Battery Killing  
Sanitization

CareOfYou  
(Smart Bracelet)

Revenues:  
recurrent subscription fee



## MAINTENANCE

Service Level  
Analytics (Planned and  
UnPlanned Maintenance)

Overall Efficiency      Equipoment

Revenues:  
recurrent subscription fee



## ENTERPRISE

API  
Custom Analytics  
Custom Services

Revenues:  
Fixed service + recurrent  
subscription fee



## ENERGY PERFORMANCES

Pre-defined PDF reports (On  
demand service)  
Data Export

Revenues:  
recurrent subscription fee



## COMFORT

Smart Space Management

Revenues:  
recurrent subscription fee



## METaverse

All VR, AR, MR and App tailored  
development in addition to tool  
renting

Revenues: Fixed  
services + recurrent  
subscription fee

# FEAMS® end-to-end technology expertise

Data  
Analytics



Internet Of  
Things



Energy  
Management

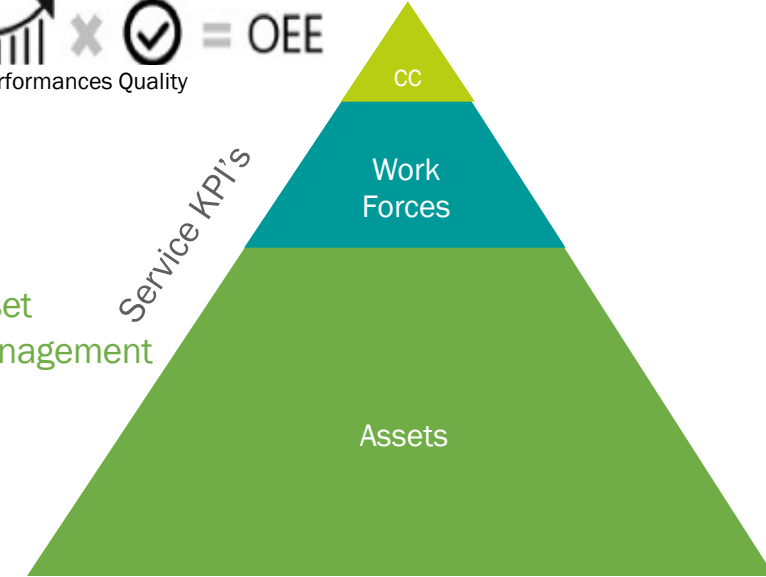


Asset  
Management

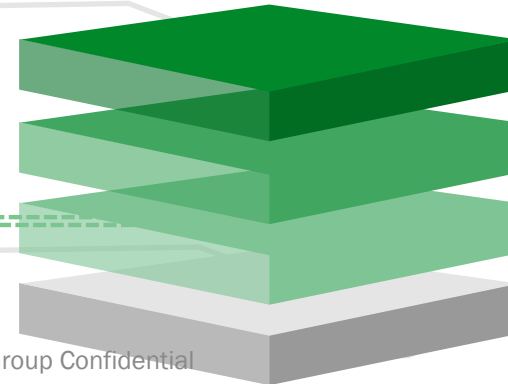


Artificial  
Intelligence

$$\text{Availability} \times \text{Performances} \times \text{Quality} = \text{OEE}$$



Data +  
Applications



Analytics/Algorithms  
Machine Learning /Artificial  
Intelligence  
Measurements techniques

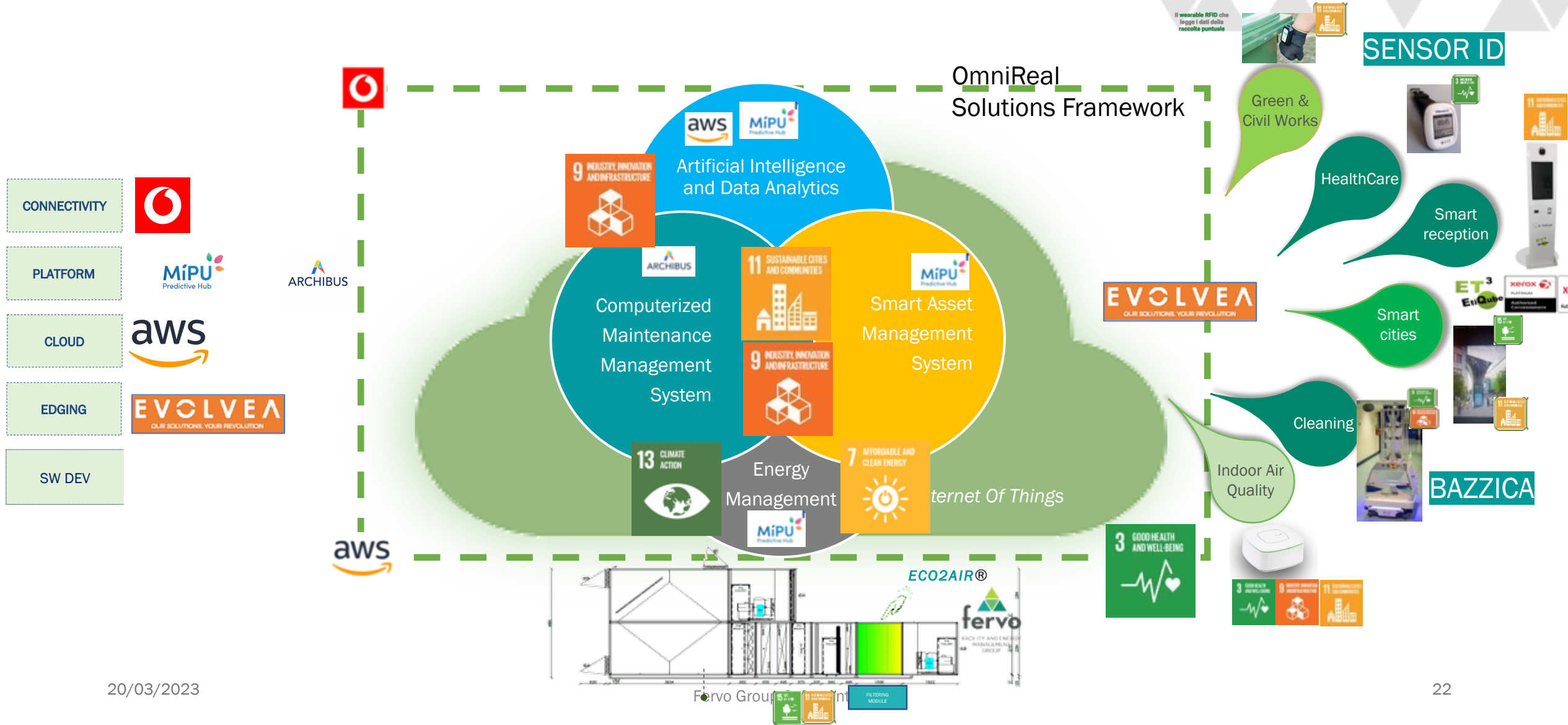
Intelligence

Cloud  
+ App

HW +  
Firmware

Infrastructure

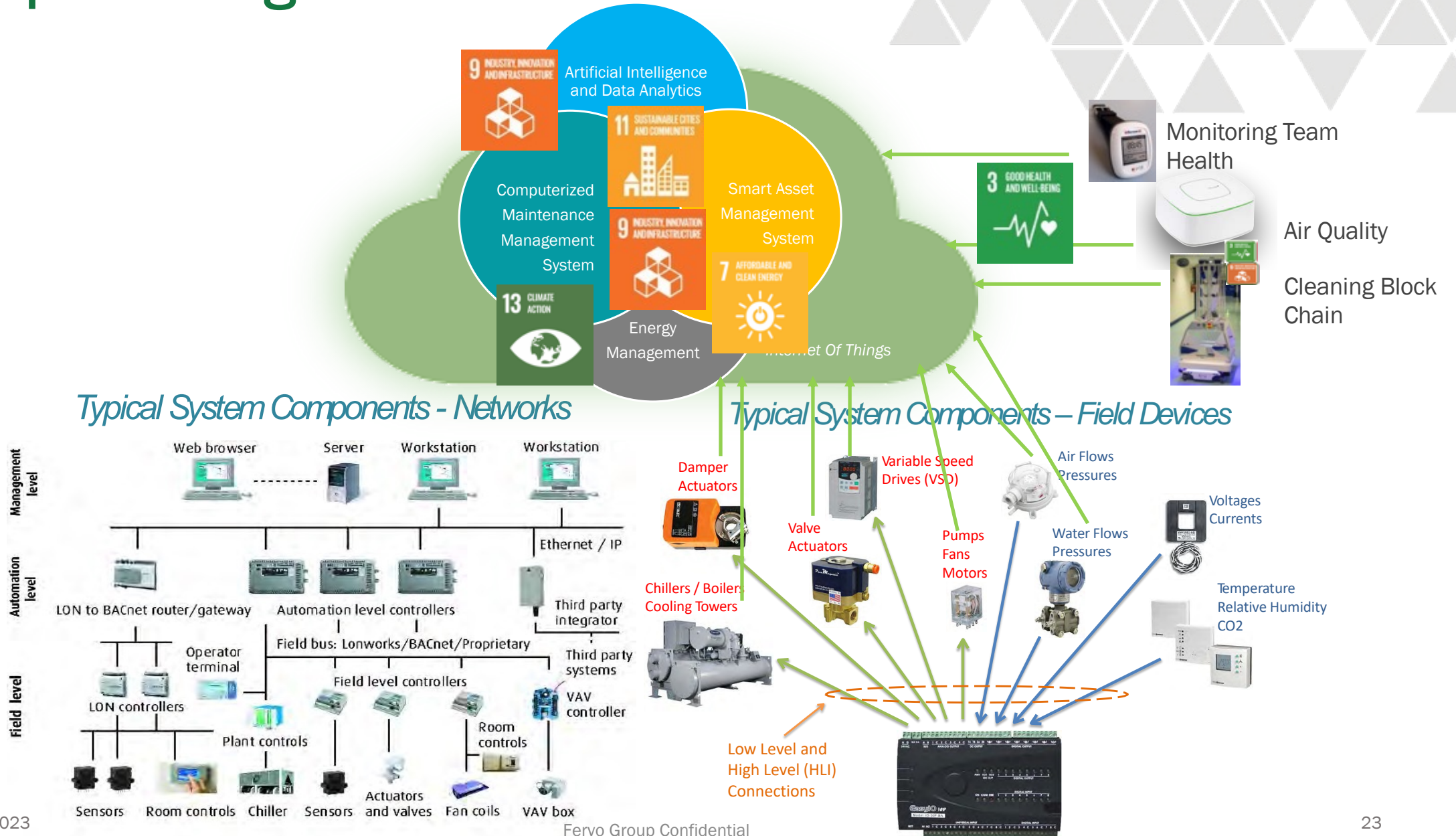
# Piattaforma Integrata & Partnerships



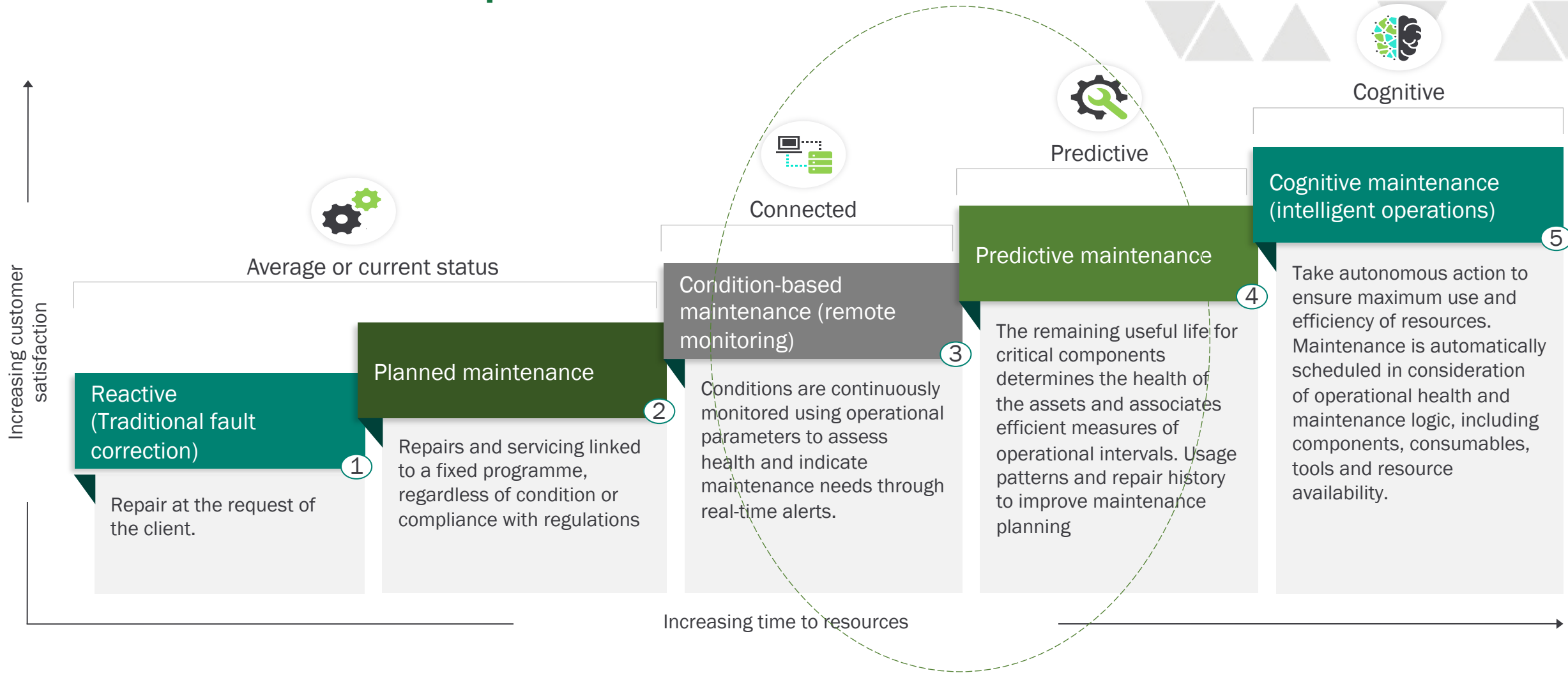


**omnireal** BEYOND DIGITAL SOLUTIONS

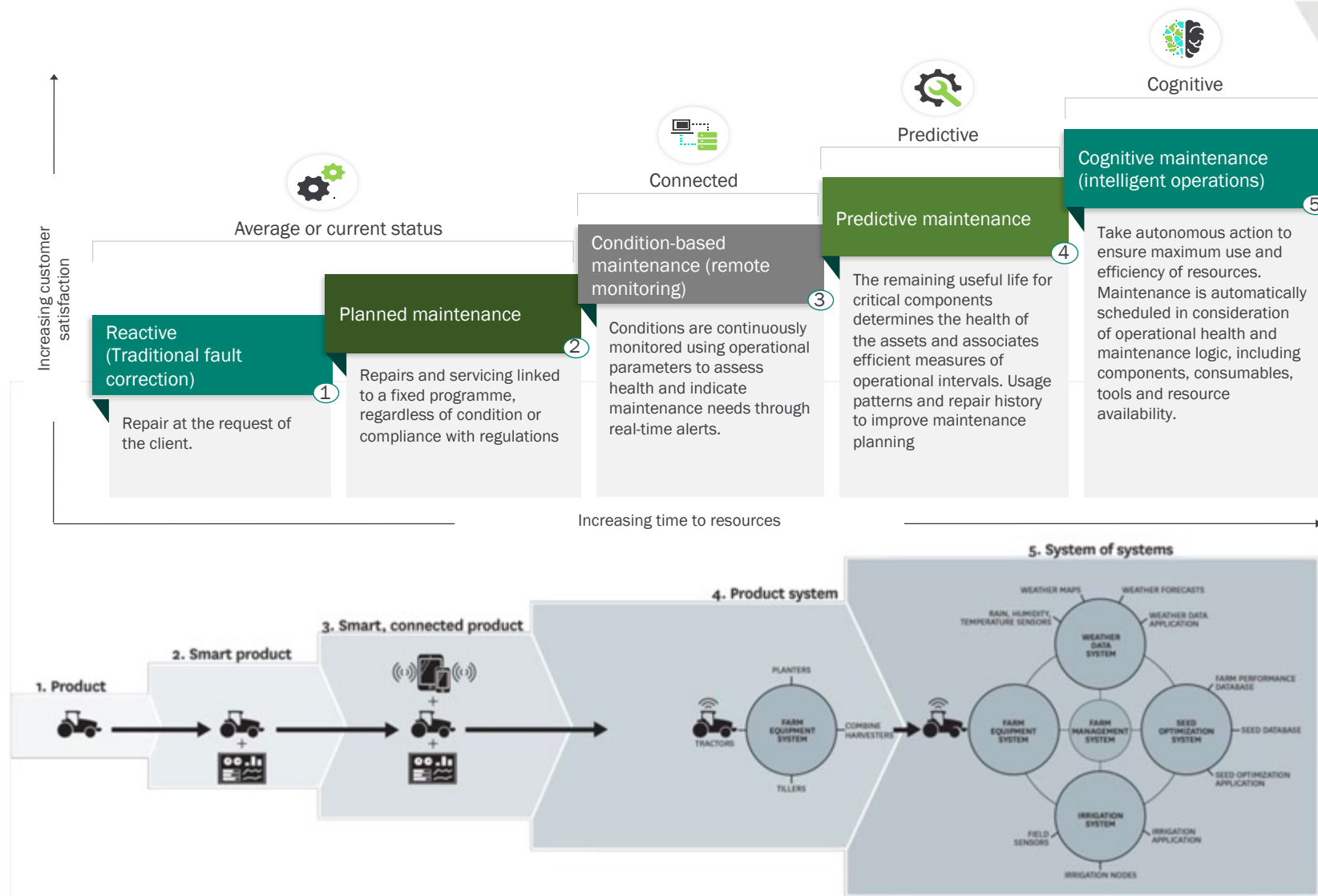
# Sopra ad ogni esistente Infrastruttura esistente



# Facilitare il Modello Manutentivo X5: Creando Valore per il Cliente



# IN Sintesi: Un Partner per Spingere la Real Estate Digital R-Evolution









VILLA ARCONATI

4

fervo

**FUTURE EXPERIENCE**

**VR APP QUADRO**

Lungo il percorso museale saranno presenti n.3. visori oculus Quest, di fronte ad un quadro. L'ambiente rappresentato dal quadro verrà ricostruito in 3D, anche nelle parti non visibili, per consentire al visitatore, una volta indossato il visore, di immergersi nella tela, interagendo con gli elementi del quadro stesso.

La scelta del quadro sarà fondamentale, nel rispetto del budget di spesa, seguendo una dettagliata valutazione tra elementi da rendere dinamici, avatar umani e animali da modellare, grandezza complessiva degli ambienti.

Tale attività prevede un lavoro in piena sinergia tra refenti storiche e filologici del museo e staff tecnico di programmazione e modellazione.







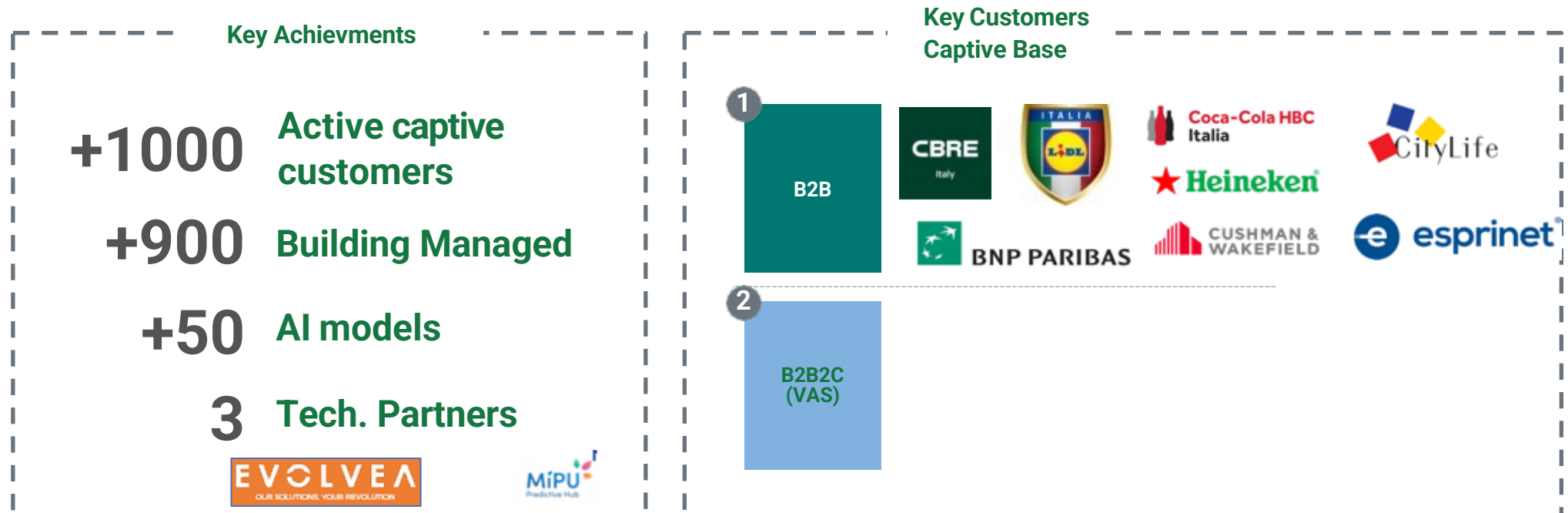
# L'offerta e la Customer Base

CONSULTANCY	IMPLEMENTATION	ACADEMY	MANAGED SERVICES		MULTIMEDIA SERVICES	
Strategy & Planning	Infrastructure / Application Set-up	Platform Training	Platform Operations	help desk first and second level	METaverse	GAMING EVENTS
Discovery	Go Live Support		Process Operations	Cloud	RESELLER VR/AR	INTEGRATED WEB SYSTEMS
Optimization	Change Request		Monitoring	Outsourcing on demand	WEB DESIGN	GRAPHIC DESIGN
Scaling			Operations Outsourcing		VIDEO PRODUCTION / MAPPING	MOTION GRAPHIC ANIMATIONS
Change Management					VR SCRIPTING	MUSEUM SERVICES and SENSORS
FEAMS®					EX LD M.	



# ed un consistente FEAM Captive Customer Base

N ITALIA PART



# OmniReal has some remarkable Customer Base from META

N ITALIA PART

## Key Achievements

- +100 Active captive customers
- +100 Web Sites
- +50 VR renting
- 2 Tech. Partners

## Key Customers Captive Base

B2B

JUVENTUS



Clementoni



1<sup>re</sup> GROTTA DI  
FRASASSI

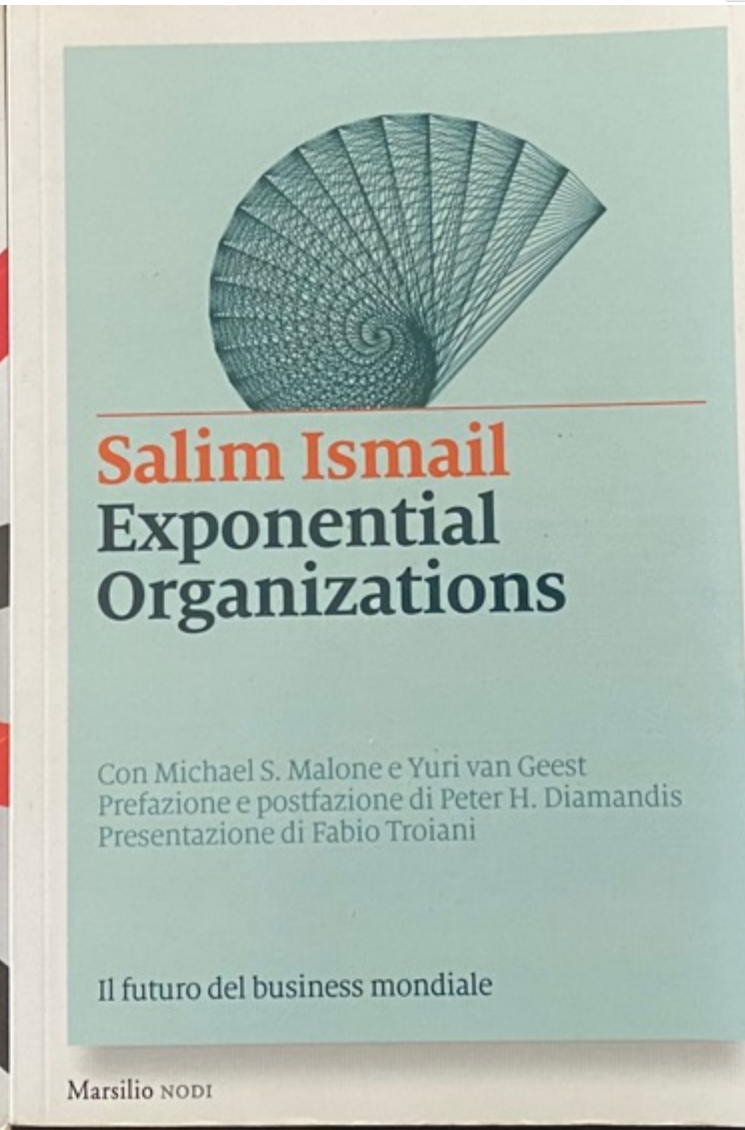
50<sup>th</sup> 1971  
2021



Cartier



# Letture per casa...





# Conclusioni

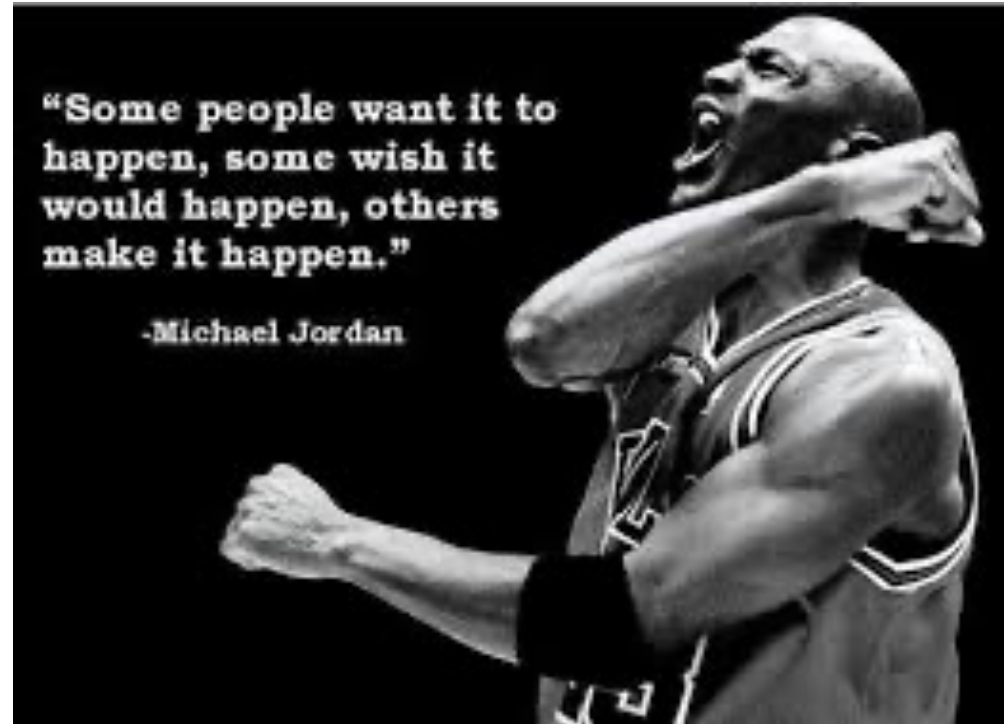
## Bahaviour



*“It always seems impossible until it’s done”*  
*«It is not important how many time you fall but how many time you rise»*

*Nelson Mandela*

## Mindset





# THANKS

Andrea Roero - Chief Digital & Innovation  
Officer Fervo Group

[andrea.roero@fervo.net](mailto:andrea.roero@fervo.net)

