# **EcoStruxure IT**

### Enabling Resilient, Secure and Sustainable IT infrastructure in AI era

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# Artificial intelligence is as disruptive as the PC (1980s) and the Internet (1990s).

Life Is 🕛

## Al is already everywhere

Movie recommendations

#### Healthcare Insurance Gaming Virtual assistants Emai Banking Art generation Education Security Autonomous driving Transportation **E-commerce**



and many more... often performing better than humans!





# Everyone will 2. have a part in Al 3. deployments 4.

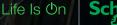
1.

Internet Giants: Google Cloud, Meta, Microsoft Azure, etc.

**Colos** are building "Al Ready" data centers or cages

Enterprise companies running dedicated inference operations

Al startups building and training their own Al models



# Digital Transformation Drives Data Centers

# **90%** Internet Users

In 2030 7.5 Billion people (Arcserve)

>100B IoT Devices

In 2050 vs around 25 Billion in 2022((IBM))

61% Yearly Big Data Growth

stored data from 50 ZBs 2022 to 175 ZBs by 2025 (\*ID

\$300B From Al

by 2026, worldwide revenue for AI at \$154 billion in 2023



Al growth - Data Center growth

#### **SE Estimate**

Total Installed Capacity for Data Center Loads & Phys. Inf.

AI, % of Total

Al Installed Capacity for Al Workloads & Phys. Inf.

Al Workload, Central vs. Edge 2023

8%

54 GW

4.3 GW

95%

2028 **90 GW** 15 - 20% 13.5 - 18 GW 50% 50% **Central Edge** 

Today, AI is mostly in x-large centralized data centers... but over time will be in most data centers!

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Source: Schneider Electric™ Internal Analysis

**Central Edge** 

5%



## Digital transformation is accelerating and Data Centers are the heart of it



### Schneider Electric is well positioned to help on your AI journey...



#### Edge & core data centers

with high density power and cooling to address the specific needs of Al inference and training **Fast** fully integrated All Electric and All Digital

#### **Integrated systems**

design tools, digital and field services to lowers risks, simplifies design and reduces deployment time



Services and tools EcoStruxure<sup>™</sup> for visibility, data driven insights & recommendations to drive highest Sustainability, Efficiency and Availability





# Digital + Electric = Sustainable

For Efficiency

For Decarbonization

Green and Smart Energy

# We deliver Data Center with a unique integrated approach

#### Strategize

MEASURE enterprise baseline CREATE decarbonization roadmap STRUCTURE program & governance ENGAGE ecosystem COMMUNICATE commitment



#### Decarbonize

**REPLACE** energy source

**ELECTRIFY** operations

**REDUCE** energy use

#### Digitize

MONITOR resource usage & emissions IDENTIFY saving opportunities REPORT and benchmark progress



#### Sustainable Data Centers : Carbon Negative, Zero Waste, Water Optimized

Sustainable solutions across all domains

**M** 

#### Building

High efficiency, Eco-Design with digital control

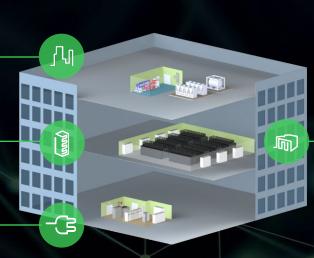


Green Premium & Circularity

#### Power

SF6 Free Switchgear and Dispatchable UPS





#### **Sustainability Services**

Carbon strategy consulting, renewable energy sourcing, resource & energy efficiency, waste management, carbon efficient supply chain consulting, battery recycling.

#### All Digital Sustainability software across all phases

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#### Design Digital twin & simulation etap

Build Intelligent construction & procurement

MTWO

#### **Operate & Maintain**

Energy & resource optimization

AVEVA

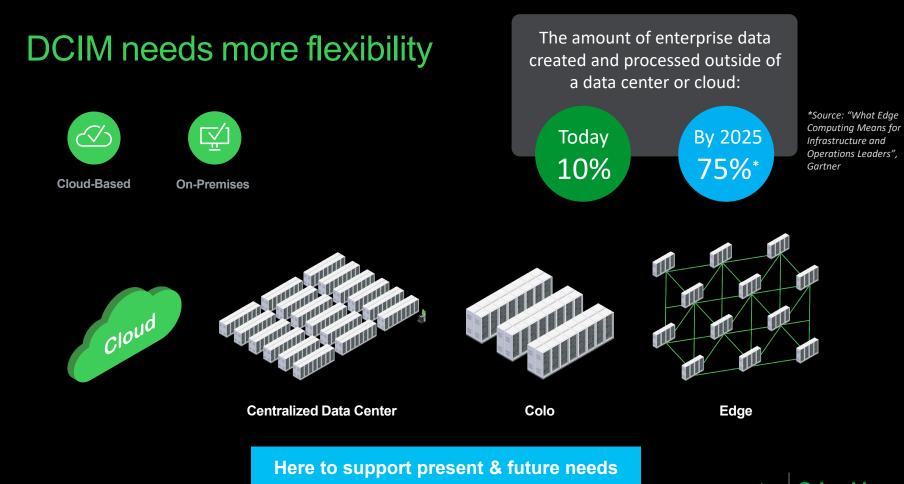
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## How do we achieve DCIM 3.0? Our approach – a comprehensive DCIM portfolio



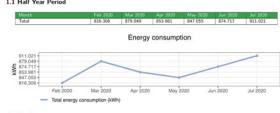


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# DCIM to consolidate data into custom reports and dashboards to manage & optimize energy consumption





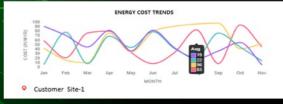


#### 1.2 Each room

Room			Apr 2020			
room 1	427.142	447.99	425.526	426.862	412.95	441.851
room 2	389.164	431.059	428.455	420.193	461.767	469.17
Total	816.306	879.049	853.981	847.055	874.717	911.021









Load PUE

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## EcoStruxure IT addresses the challenges of DCIM 3.0

to enable resilient, secure and sustainable IT data centers

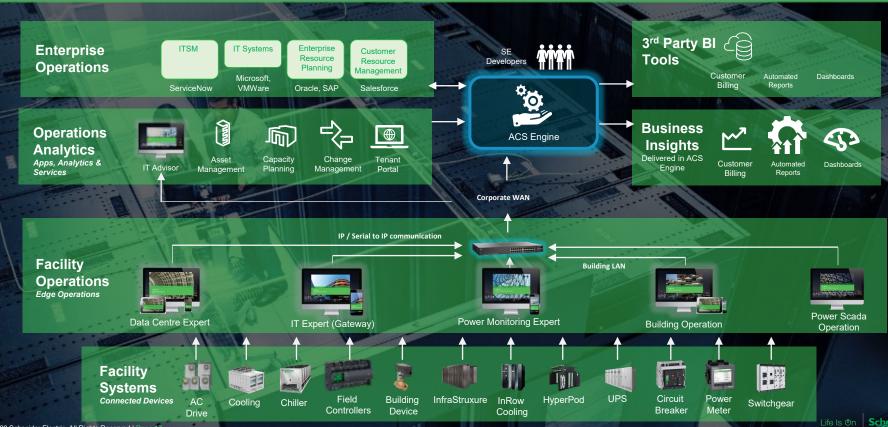


Schneider Electric's comprehensive DCIM solution, EcoStruxure IT, ensures business continuity by enabling secure monitoring, management, insights, planning, and modeling whether from a single IT rack to hyperscale IT, on premises, in the cloud, and at the edge.





### **EcoStruxure System Architecture**



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# *"IDC views the EcoStruxure family as a transformative platform that changes the core way that data centers are monitored and managed."*

Jennifer Cooke, Research Director for Data Center Trends and Strategies IDC



## We will help you establish a vision and build your data center of the future

# Thank you