

IT Infrastructures & Edge Solutions in 5G Era

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APC by Schneider Electric

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Our technologies ensure that
everywhere, for everyone and at every moment.

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Schneider Electric is leading the digital transformation of energy management and automation

Key figures for 2019

5%

of revenues devoted to R&D

€27 bn

2018 revenues

42%

of revenues in new economies

137,000+

employees in over 100 countries

A well-balanced global presence (2019 revenues breakdown)

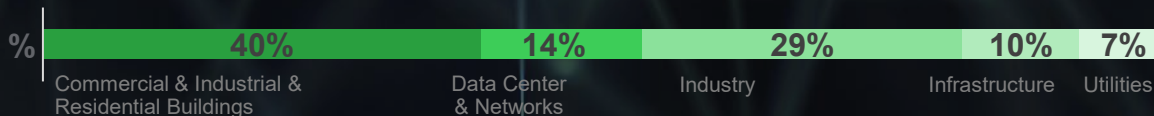
28%
North
America

27%
Europe

16%
Rest of
the world

29%
Asia
Pacific

Four end markets:



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Walking the talk – 2018 ~2020 out standing recognition

Sustainability commitment



People commitment



Innovation commitment



Schneider Electric Greece & Cyprus



Schneider Electric in Greece

- History: 50 years of presence
- 2 Entities: Commercial
- Employees: ~ **100** (Com: 85)
- 2 sales offices: Athens, Thessaloniki

Partnerships:

- ET Distribution: 93 1st level & 120 2nd level POS
- IT Channel: 4 Distributors, 2 Elite Certified Partners, 2.000 2nd level
- Panel Builders Licences: 11 LV (Prisma, 1 Okken), 2 MV (SM6)
- EcoXperts: 2 BMS, 6 Connected P. (Certified)
- Several Invensys partners
- Assets Under Management: 586 (23 WW ranking)

Schneider Electric in Cyprus

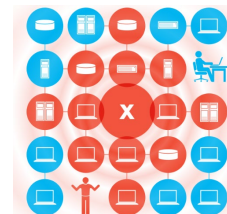
- History: 18 years of presence
- 1 Commercial Entity: in SEE since 2017
- Employees: 2
- 1 sales office: Larnaca

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Market trends

1. Limitation of cloud computing is driving need for resiliency of local edge
2. Growth of IOT & critical applications are redefining IT availability and performance in the cloud and at the edge
3. Converged and hyper converged IT technologies are moving to the Edge
4. With 5G new radio (NR) introduction and expansion, potential users can experience never-before-possible, latency-free applications like autonomous driving and holographic communications.

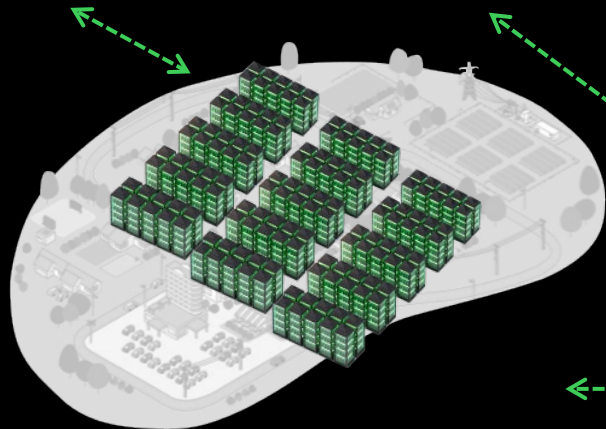


Computing architectures continue to evolve into multi-site, hybrid systems of centralized and edge



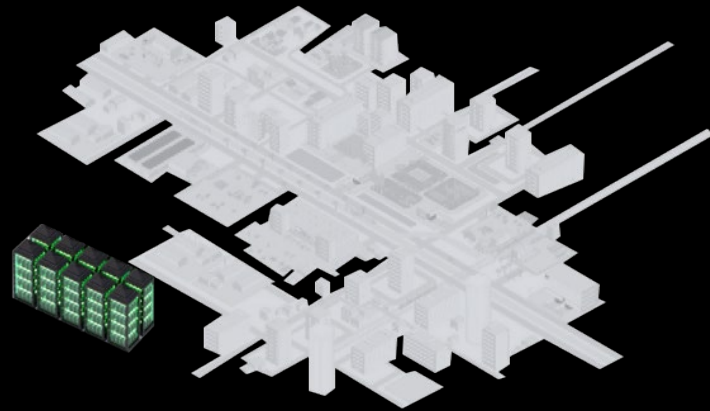
CENTRALIZED CLOUD

Massive compute and storage located in remote areas



REGIONAL EDGE

Large compute and storage located closer to the user (urban areas)



LOCAL EDGE

Compute and storage near to where data is consumed

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Edge Segments & Applications



Retail

- Server/Network Closet (Small)
- Retail Floor
- Wall Mounted
- Office Floor



Healthcare

- Server/Network Closet
- Hospital Floor
- Office Floor



Telco

- Remote Location
- Cell Tower



Industry

- Remote Location
- Server/Network

Closet

- Manufacturing Floor
- Office Floor



Finance

- Server/Network Closet
- Branch Office Floor



Education

- Server/Network Closet
- Wall Mounted
- Office Floor



Transportation

- Remote Location
- Airport Terminal Area
- Subway/Train Terminal
- Wall Mounted



Government

- Military
- Federal Branch

Office

- Remote Location

Typical Edge Application Considerations

Remote Area

- No quick access to physical unit (service)
- Controlled from central point in another area

Employee/Public Area

- Noise concerns (OSHA)
- Heat Generation
- Aesthetics

Space Constrained / Doorways

- Small Closet or room
- Must fit through normal office doorways
- Not much room for large racks with multiple pieces of infrastructure

No Building/Dedicated Cooling

- Heat Generation, Rejection
- Need for active cooling

Power availability

- May only have 1 power source
- No redundancy, low power (1Ph)

Retrofit/Existing Space

Industrial Atmosphere

- Vibration, Particulate, Forklifts/Moving objects, uncontrolled ambient (humidity, outdoor, temp swings), vermin/animals, security, water resistant/outdoor rated

Server Room Buildout

- Multiple vendors involved, complicated
- Timely and costly

Low Security

- Building/space may not have security as top priority
- Not built like a traditional white space DC

Service

- Require global service support
- On-site repair
- Ability to self-service



INNOVATION

EcoStruxure IT

... Ecostruxure IT Architecture



IoT & Data Aggregation



On-Premise “Edge” Cloud
(Compute, Storage, Networking)
+
Micro Datacenter



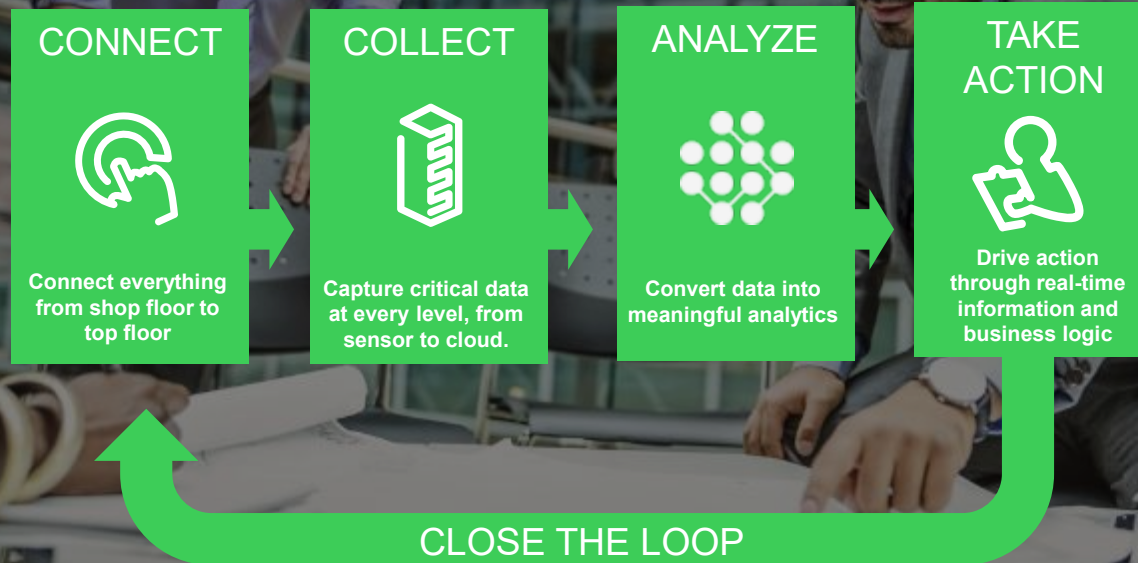
Analytics, Storage & Monitoring

Integrated Rack Systems – Power, Connectivity & Base Building block to the Edge



The EcoStruxure Architecture maximizes the value of data

Translating data into actionable intelligence and better business decisions



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EcoStruxure IT...

...simplifies local edge and distributed IT monitoring with EcoStruxure IT Expert



Centralized
monitoring



Vendor
agnostic



Benchmarking



Assessments



Alarm
consolidation



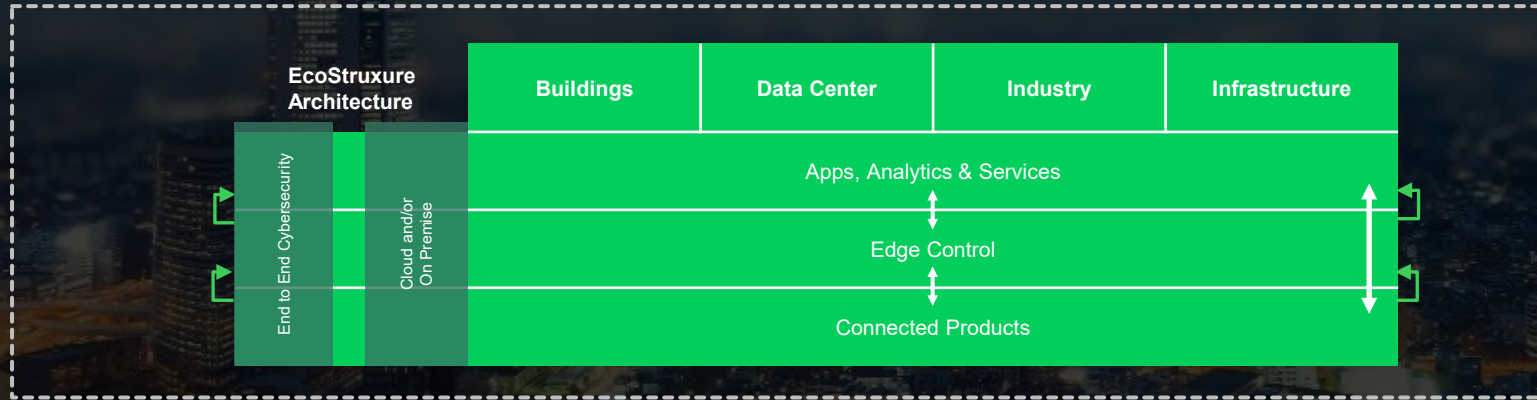
Data remains secure and private
at every step of the user journey

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Powering the **DIGITAL** economy with
one IoT-enabled architecture



EcoStruxure
Building

EcoStruxure
Power

EcoStruxure
IT

EcoStruxure
Machine

EcoStruxure
Plant

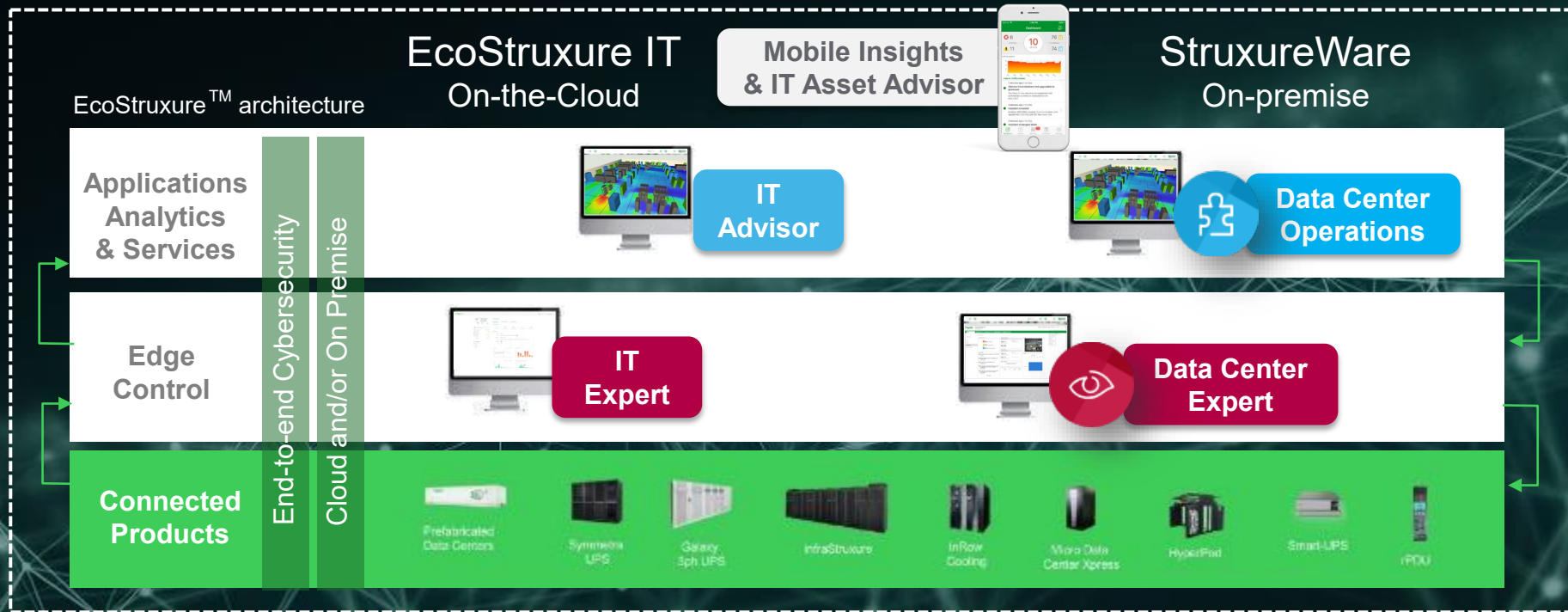
EcoStruxure
Grid

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EcoStruxure IT & StruxureWare – Solution Portfolio

A connected architecture – growing with YOUR needs – On-the-Cloud OR On-premise



A black and white photograph of three office professionals (two women and one man) sitting around a desk, engaged in a collaborative discussion. One woman is holding a tablet, and the others are looking at it. The word "CONNECTED" is overlaid in large, bold, green capital letters across the center of the image.

CONNECTED

Success Stories

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REI – Network Closet Sporting Goods, US

Taking partnership to the next level



Customer Challenge

- Bringing IT capacity on-premise securely

Solution

- SmartBunker CX Micro Data Center

Customer Benefits

- Security
- Standardization
- Reliability

BEFORE



AFTER



Retif – Retail, France

Taking partnership to the next level

Partner

- DELL


Shop configurations

- Netshelter CX 12U + 3 years Warranty
- Racks accessories like shelves, mounting rails
- UPS 1,5kVA Rackmount
- Dell IT equipment
- UPS 900VA & 700VA to protect each shop POS & Computers.

Project scope:

- 103 shops in Europe





Taking partnership to the next level

Customer Challenge

- Texmark Chemicals in Houston, TX wanted to deploy an Edge IT solution to perform predictive maintenance, advanced video analytics, as well as increase safety and security.

Solution

- Netshelter FX Industrial MicroDC was used to house the IT assets required to make the solution come to life in such a harsh environment. It provides a high level of robustness and security as well as a completely sealed environment with optimal conditions for converged IT.

"We're building a refinery of the future that combs through data and reveals how the entire plant is interconnected. It becomes like a living, breathing organic plant that knows how it should operate; if any part falls out of line, it flags for intervention."



Disaster Recovery - Factory

Customer Challenge

- Customer in USA wanted a disaster recovery solution for their factory. The factory did not have pre-allocated space for a purpose built datacenter room and needed something with the flexibility to move if necessary.

Solution

- Netshelter FX Industrial MicroDC provided a sealed environment with high security, custom emergency operation logic, and a conditioned space for the fail-over IT assets. Also, the removable rack feature provided a way to do a future “IT refresh” by allowing a new, pre-integrated rack to be rolled into the enclosure, minimizing downtime.



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