
enteli**CLOUD**[®]



Market Trends and Opportunities

enteli**CLOUD**[®]



enteliCLOUD[®] + IOT

What



Value Proposition

Transform your company into a data-driven IoT company with enteliCLOUD. Change one-time equipment sales to recurring revenue, by offering value-add services. Smart, cloud connected equipment, enables visibility, analysis, and savings for you and your customers.

Market TAM = \$641M, CAGR 10%

TAM
10% CAGR -
Growing faster
than controllers
or field devices

Overview; software, hardware, controllers and field devices, USD million, 2017 - 2022

	2017	2018	2019	2020	2021	2022
Software	536	584	641	704	774	851
Hardware	615	620	629	638	647	656
Controllers	3,016	3,100	3,206	3,319	3,434	3,552
Field Devices	2,865	2,956	3,065	3,182	3,309	3,441
Total	7,031	7,260	7,541	7,843	8,164	8,500

Source: BSRIA

Opportunities

Early to market

- Mature, best of breed web based software, can make the jump to cloud/SaaS to capitalize on competitors' weakness – device based software or Windows based software

Recurring revenue - Increase yearly revenue, lessen sawtooth
Data – Direct customer/market data

Target Buyer

Primary target: Small to Medium size sites

- Individual small sites that can't effectively host own eWEB.
 - Churches, light commercial, retail
- Groups of small sites.
 - Retail chains, self storage
- Medium Sites
 - Commercial buildings
 - Property management co's

10 Mega-Trends

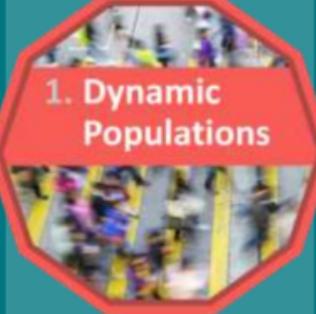
 Growing Population
Urbanization
Megacities

 Increasing
connectedness &
decreasing privacy

 Longer Life &
Unhealthy living

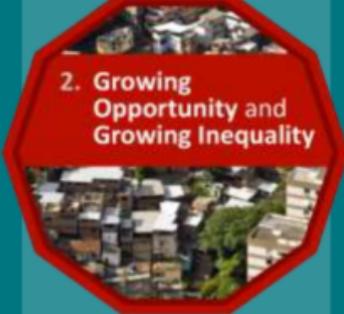
 Rise of Individual
choice & fracturing of
the mass market

1. Dynamic
Populations



Ageing
people?

2. Growing
Opportunity and
Growing Inequality



The left
behind?

3. Megacities



Necessity
not choice?

4. Increasing
connectedness and
decreasing privacy



Changing our
behaviour?

5. Healthier
and sicker



New illnesses,
tired planet?

6. Rise of individual
choice and fracturing of
the mass market



Will we enjoy
the ride?

7. Rise of the individual
and decline of
social cohesion



How safe will
we feel?

8. Cultural
convergence and
increasing extremes



More
tension?

9. Always on versus
off the grid



Work-life
balance?

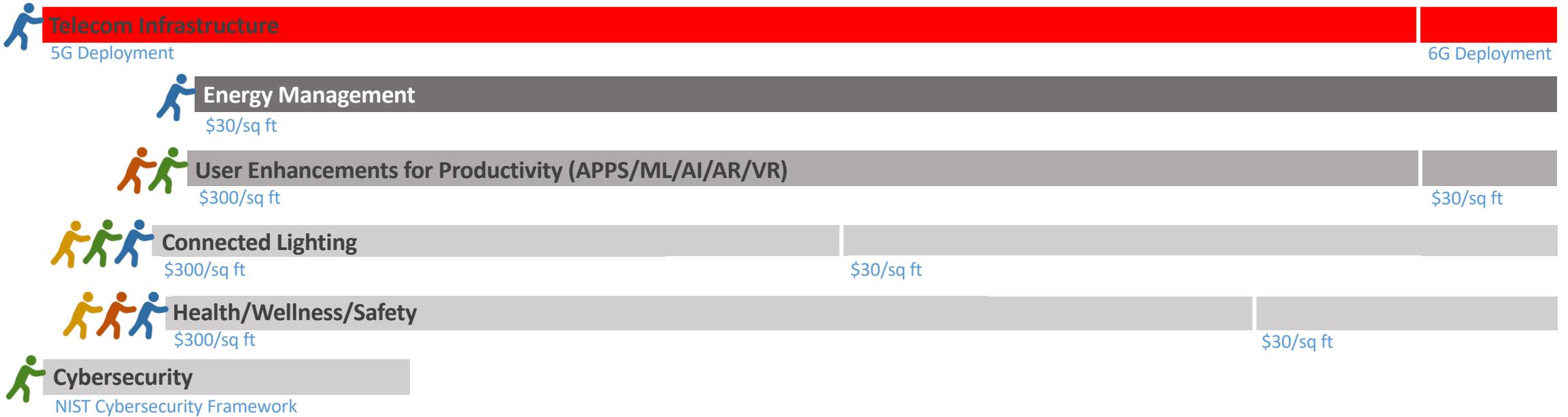
10. Emergence of
public opinion as
revolutionary force



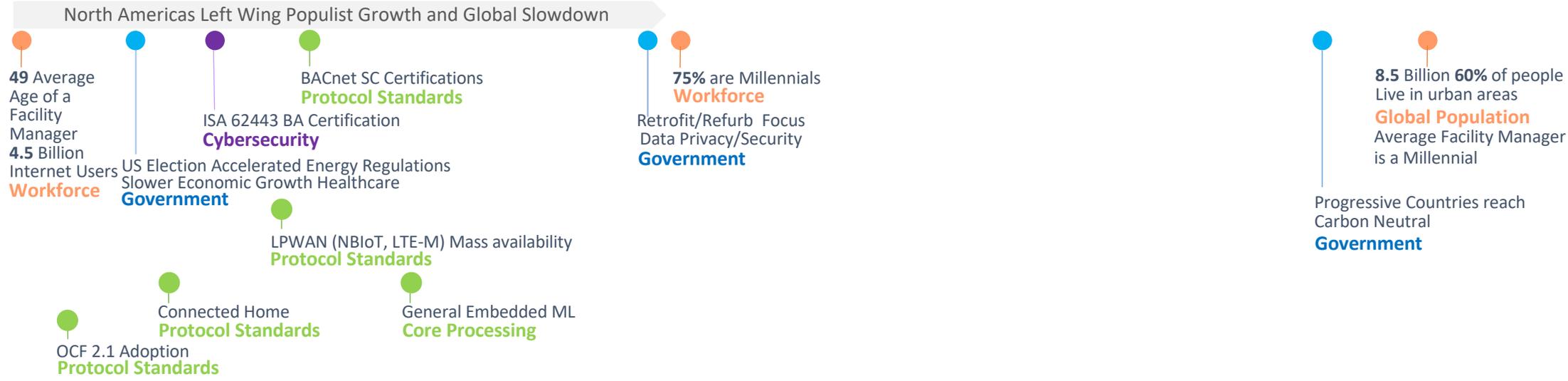
Where are
we heading?

Mega-Trends

- Growing Population Urbanization Megacities
- Increasing connectedness & decreasing privacy
- Longer Life & Unhealthy living
- Rise of Individual choice & fracturing of the mass market

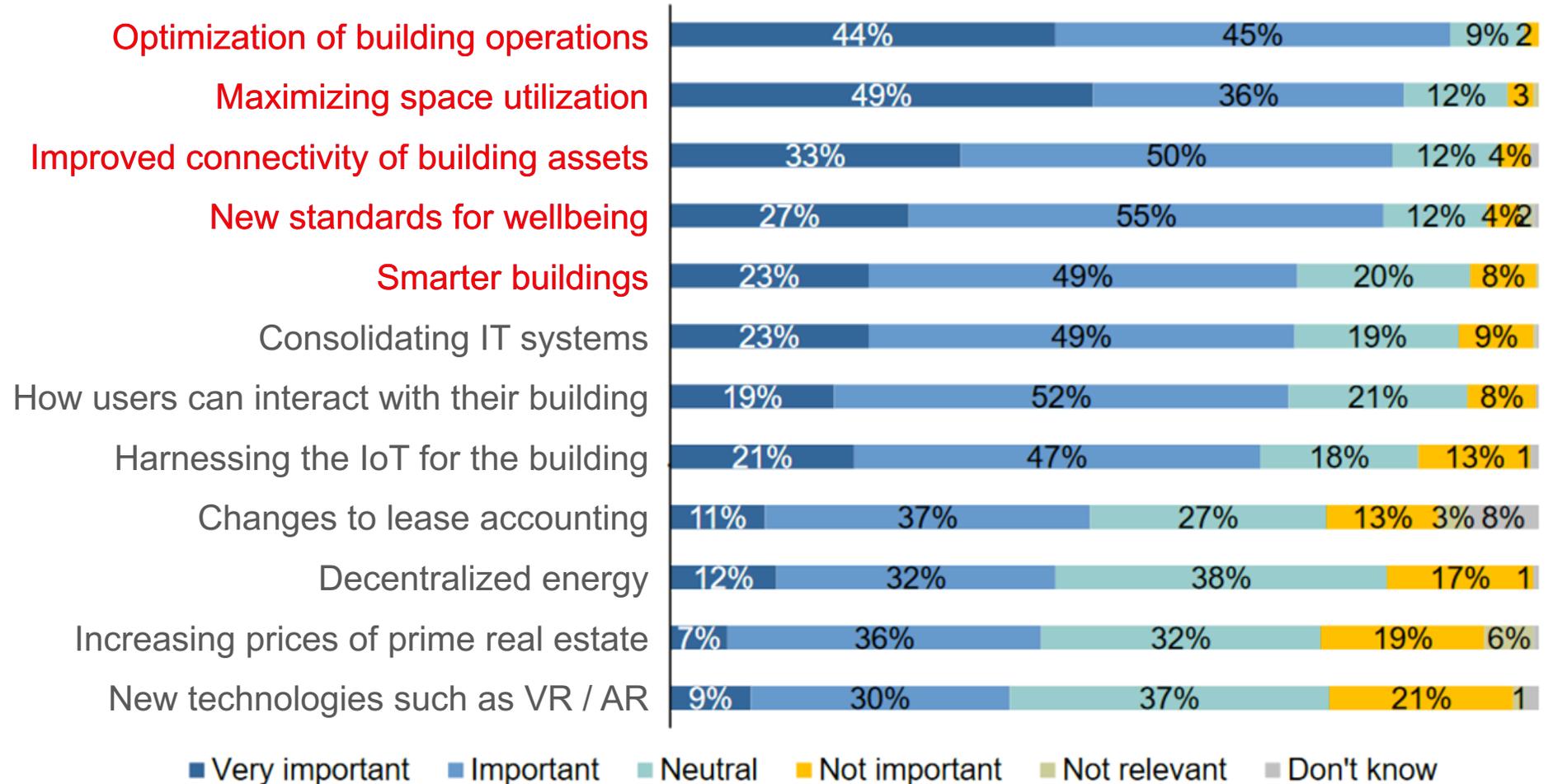


2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030



Verdantix – Real Estate and Facilities Directors Manage a Broad Change Agenda

“How important will the following market trends be in shaping your company’s real estate strategy over the next 3 years?”



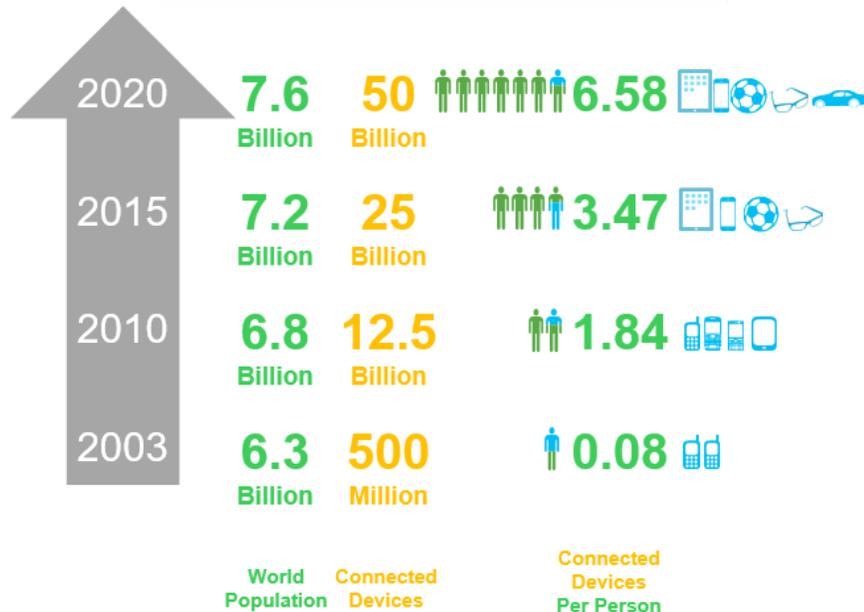
IoT and Cloud is a Main Driver in Building Automation

Connected devices has grown to 50B

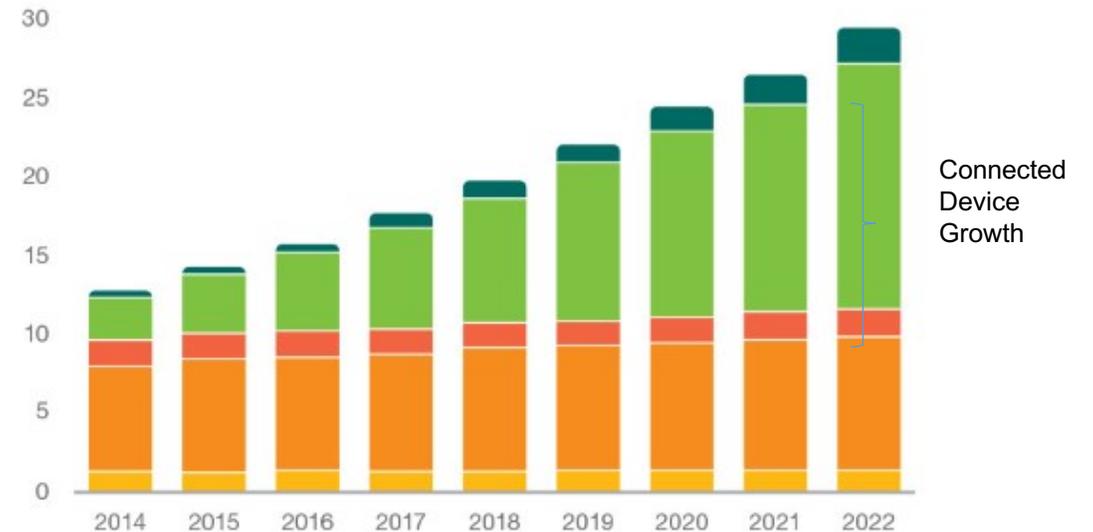


29 billion connected devices by 2022

Ericsson's research projects 29 billion connected devices by 2022, and the majority — 18 billion — of those will be IoT devices for applications like buildings, transportation, and the grid, surpassing consumer phones and laptops.

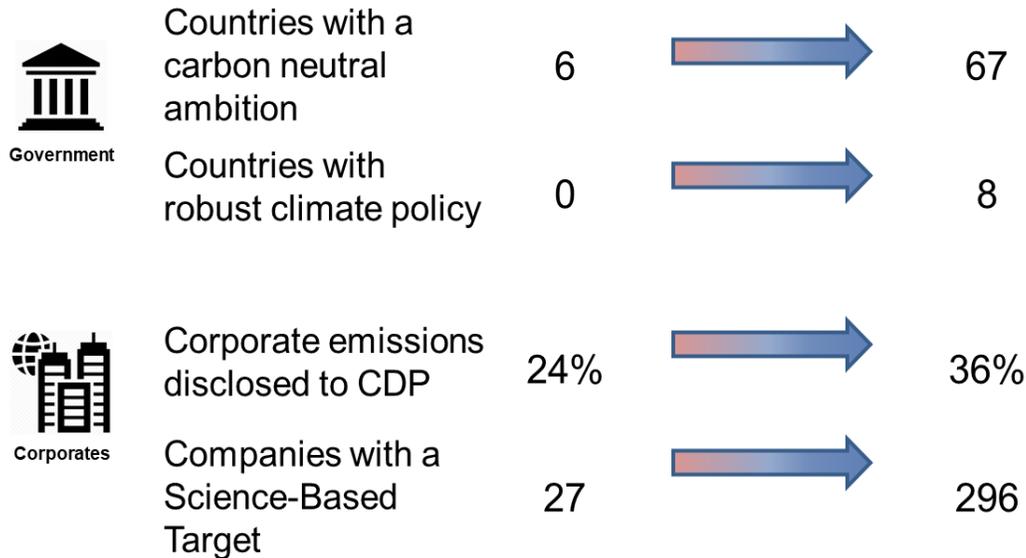


Connected devices (billions)



Cloud & IoT – Enabling Tech for Carbon Reduction

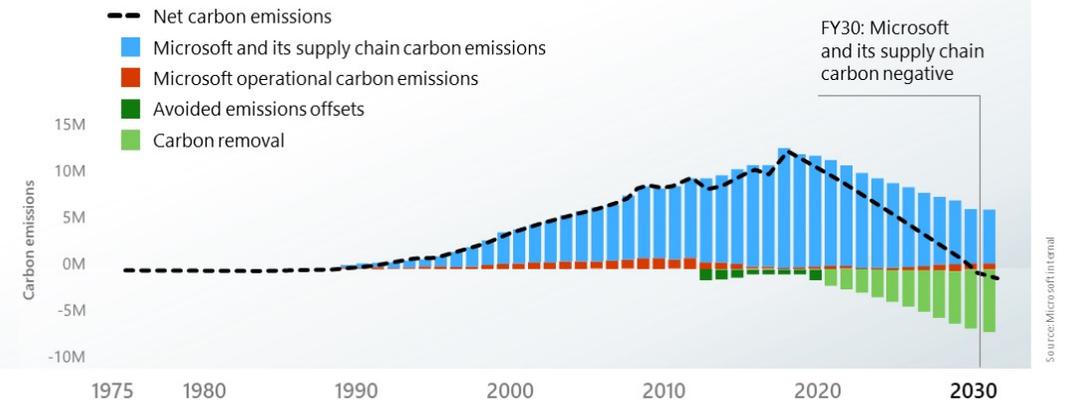
Climate Change & Energy



- Government Regulations
- Formal Reporting

Microsoft's pathway to carbon negative by 2030

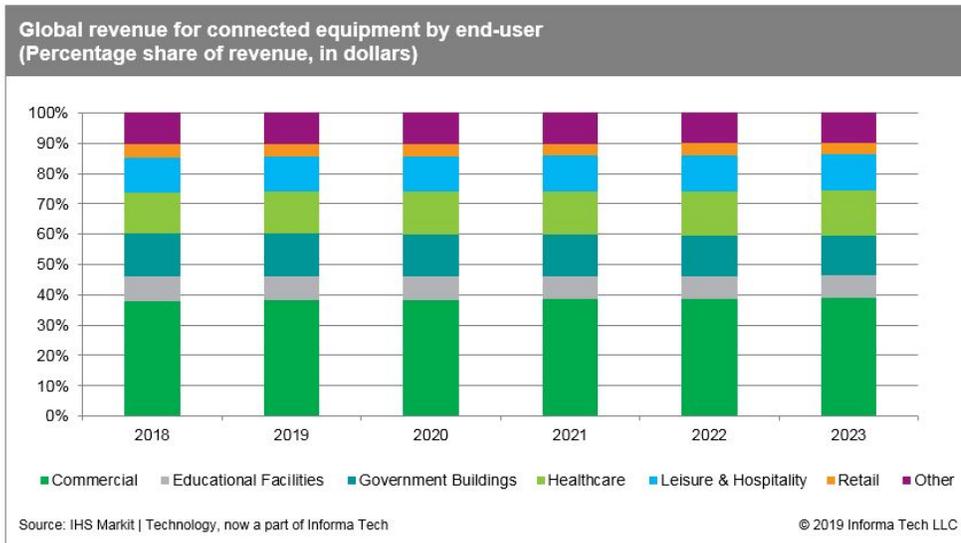
Annual carbon emissions



- Energy Analytics & Prediction
- Anomaly Detection
- Energy Alerts and Actions
- Delta Electronics Synergies
- Self Generated Meters

Cloud & IoT – Already used for LEED, now WELL

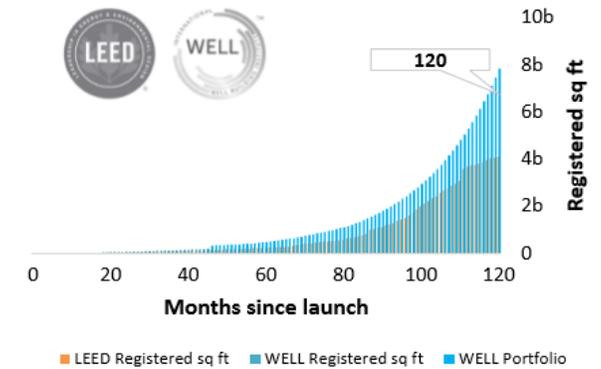
Healthcare & Wellness



WELL vs LEED Adoption To Date



WELL vs LEED Adoption 10 Year Outlook



- 13.9% CAGR for IoT in the Healthcare sector

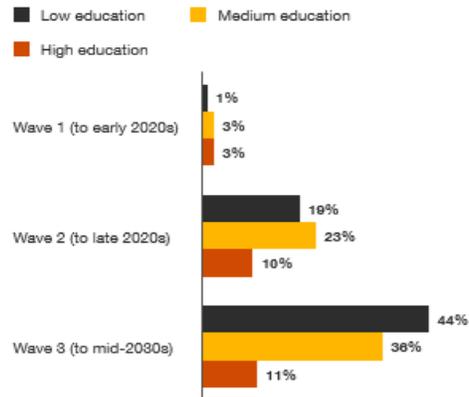
- WELL standard growth beyond LEED
- More Data connectivity
- More touchless products

Cloud & IoT – Needed to Compensate for Skilled Labor Shortage

Skilled Labour Shortage

1. Increasing job automation

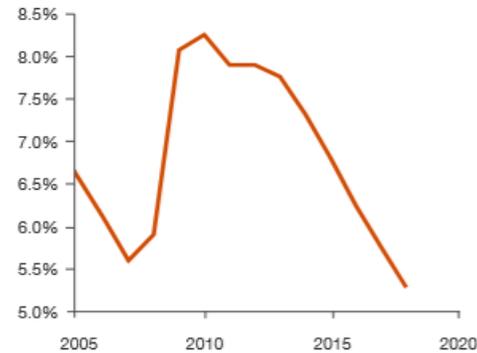
Percentage of existing jobs at potential risk of automation by education level across waves



Source: PwC, Will robots really steal our jobs? An international analysis of the potential long term-impact of automation

2. Decreasing talent availability

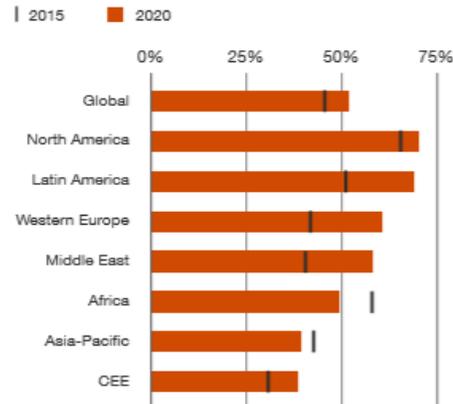
OECD unemployment rate (% of total labour force)



Source: OECD

3. Decreasing mobility of skilled labour

Is cooperation among gov'ts and businesses leading to greater movement of skilled labour between markets? (showing only 'no')



Source: PwC, 23rd Annual Global CEO Survey
Base: Global respondents (2020=1,581; 2015=1,322)

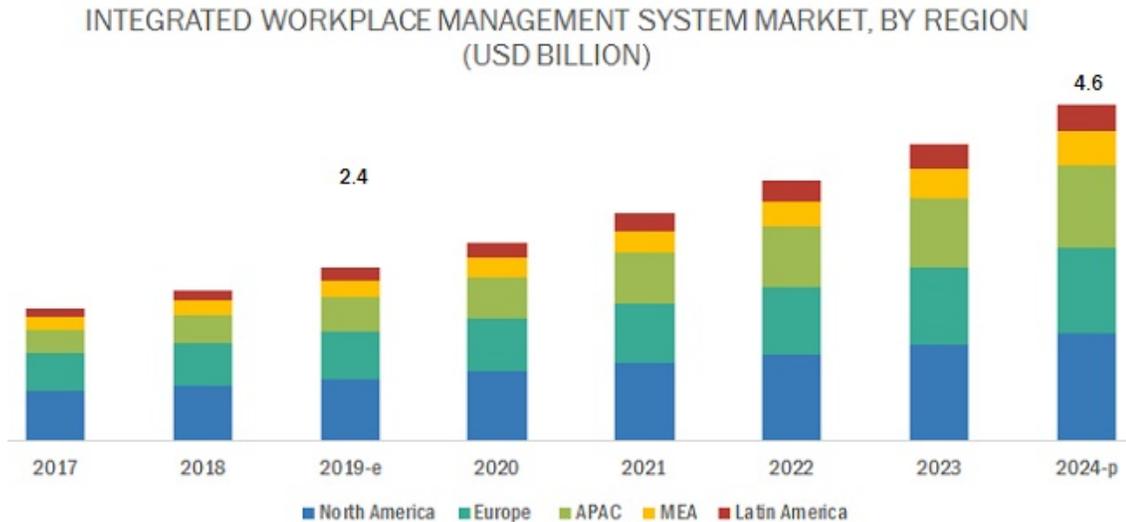
Sectors with the Highest Turnover Rates		
1.	Technology (Software)	13.2%
2.	Retail & Consumer Products	13.0%
3.	Media & Entertainment	11.4%
4.	Professional Services	11.4%
5.	Government/Edu/Non-Profit	11.2%
6.	Financial Services & Insurance	10.8%
7.	Telecommunications	10.8%
8.	Oil & Energy	9.7%
9.	Aero/Auto/Transport	9.6%
10.	Healthcare & Pharmaceutical	9.4%

- Expect this to continue in the software discipline
- Focus on accommodating newer workforce expectations
- Do more with less

- Collaborative Tools
- Integration to Changing Business Processes
- Empowerment Tools

Cloud & IoT – Flex Workspace Needs Flexible Tech

Productivity



- IWMS CAGR 14.2%
- Adapting to a Changing Workforce
- Flexibility
- Mobility

WORKPLACE TRENDS

MAKING SPACE USE MORE EFFICIENT

50-60%
Time that employees are not at their desk. Studies repeatedly show this.

155 ft²
per employee

Down 15% from 225ft² per employee in 2010.

USING LESS PRIVATE AREAS & MORE FLEXIBILITY

90% of 40 Knoll global study participant companies that are actively delivering distributed work programs in some capacity

30-80%
Amount that companies are spending on Ancillary furniture (for common areas) as proportion of total spend

WHAT THE WORKFORCE WANTS

>80%
of millennials say workplace tech would have an influence when deciding to take a job

TOP 3

Where Millennials consistently rank the importance of flexible work arrangements when evaluating a job.

- Space Utilization
- Comfort (Lighting, HVAC, Audio/Video)
- Adaptive Systems
- Virtual Assistants

More on Productivity and IoT Trends

Commercial Expectations Driven from Residential IoT

A successful approach to addressing this has much in common with Smart Homes drivers:

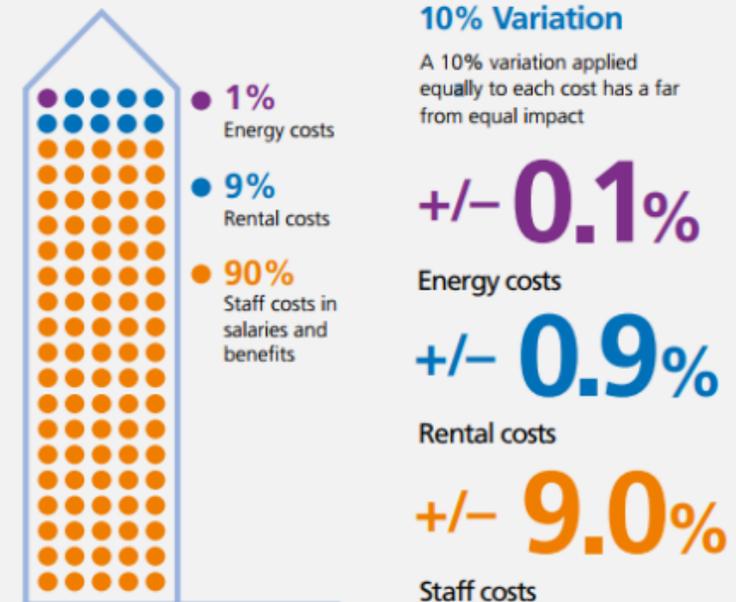
- Personalisation - each person's comfort criteria and need are different
- Flexibility and control – through interaction with mobile and wearable smart devices

We can make our home responsive to our needs from a smartphone or tablet -

Why not our office workstation?

Productivity – 1 – 9 - 90

Typical business operating costs¹



Source: World Green Building Council

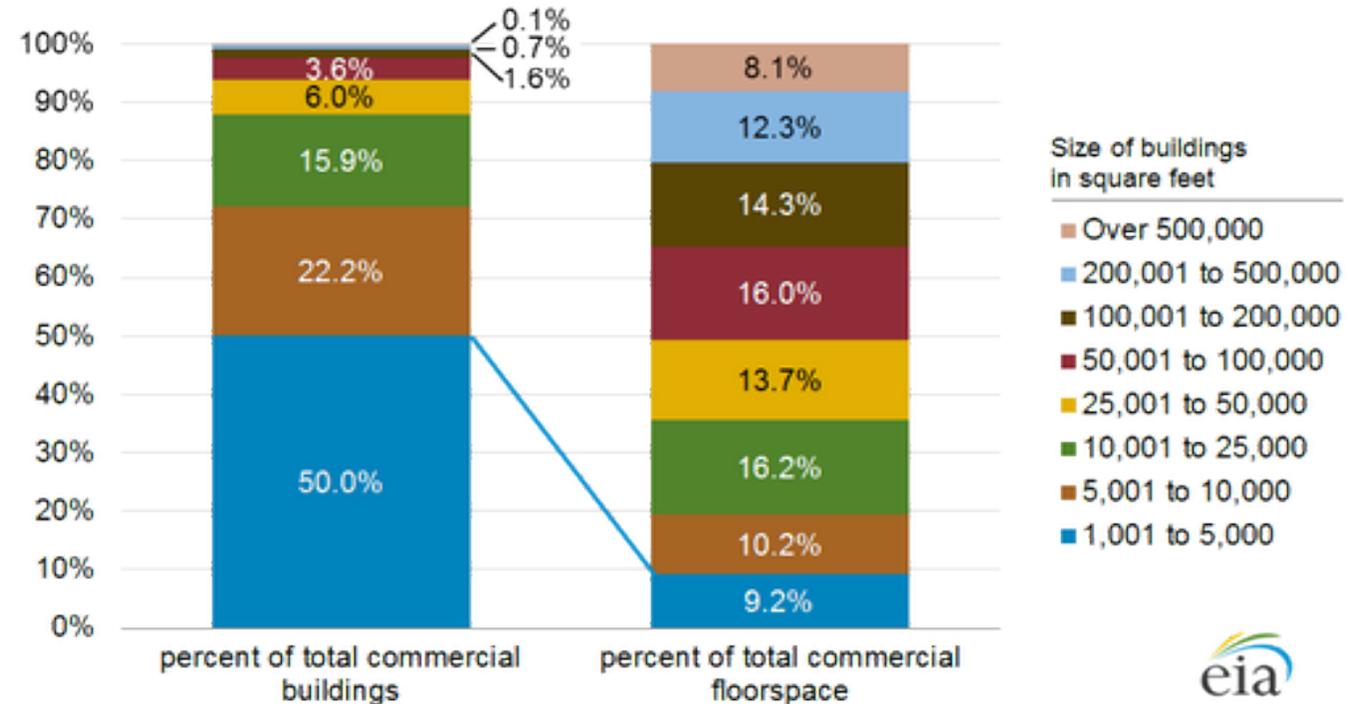
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Market by Floorspace

Size of Buildings

Figure 2. About half of all commercial buildings make up less than 10% of total floorspace

- Small buildings < 100,000 sq ft account for 65.3% of total commercial building floor space
- Buildings between 100,000 and 500,000 sq ft account for 26.3% of total sq ft.
- Large buildings account for just 8.1% of total sq ft.



<https://www.eia.gov/consumption/commercial/reports/2012/buildstock/>

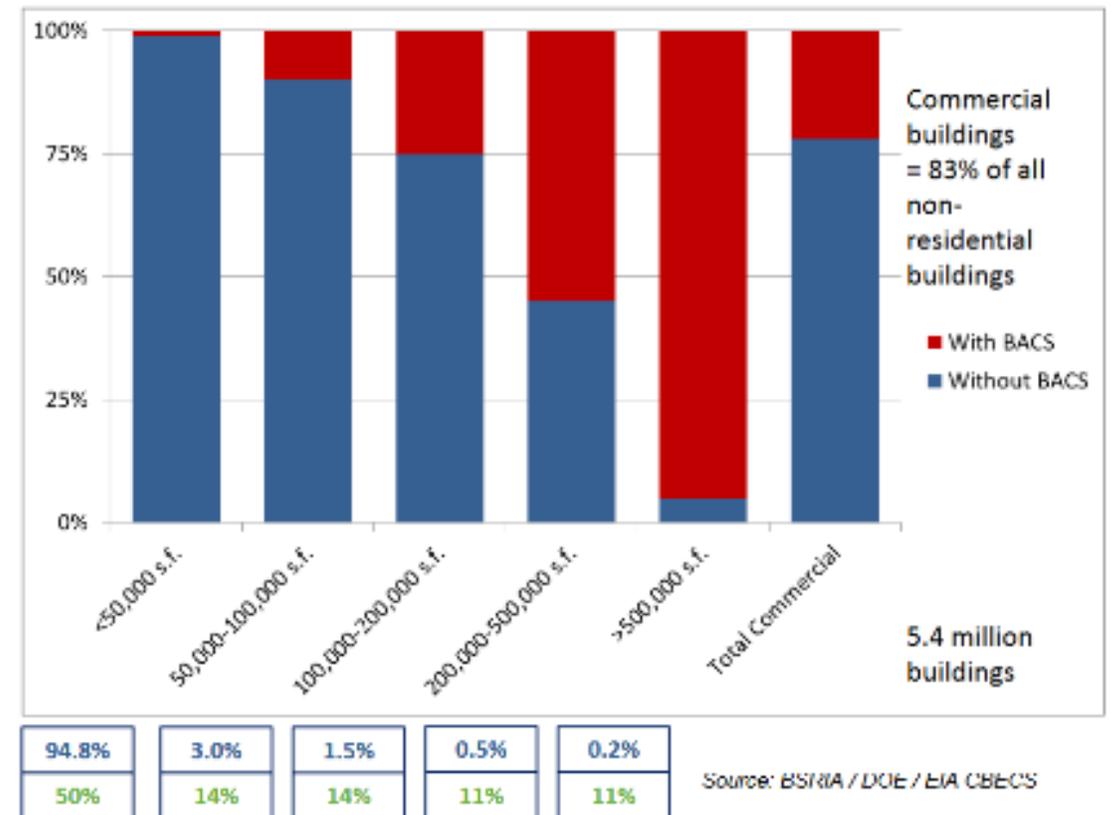
Source: U.S. Energy Information Administration, 2012 Commercial Buildings Energy Consumption Survey

Small Buildings – Underserved Market

Small Building IoT

- Outdated/inefficient technologies
- Only 1/5 buildings have BACS
- BACS comparatively rare in US Buildings under 100k sq ft
- Fewer have BEMS
- Therefore, a solution that provides benefits to the small building market will have a significantly larger retrofit base.
- Most buildings under 100,000 sq ft have no lighting control systems
- New code requirements will likely drive into this market segment
- A solution offering LED fixture replacements for this space combined with simple, easy to install LCS has large potential.

Many older medium sized buildings require renovation



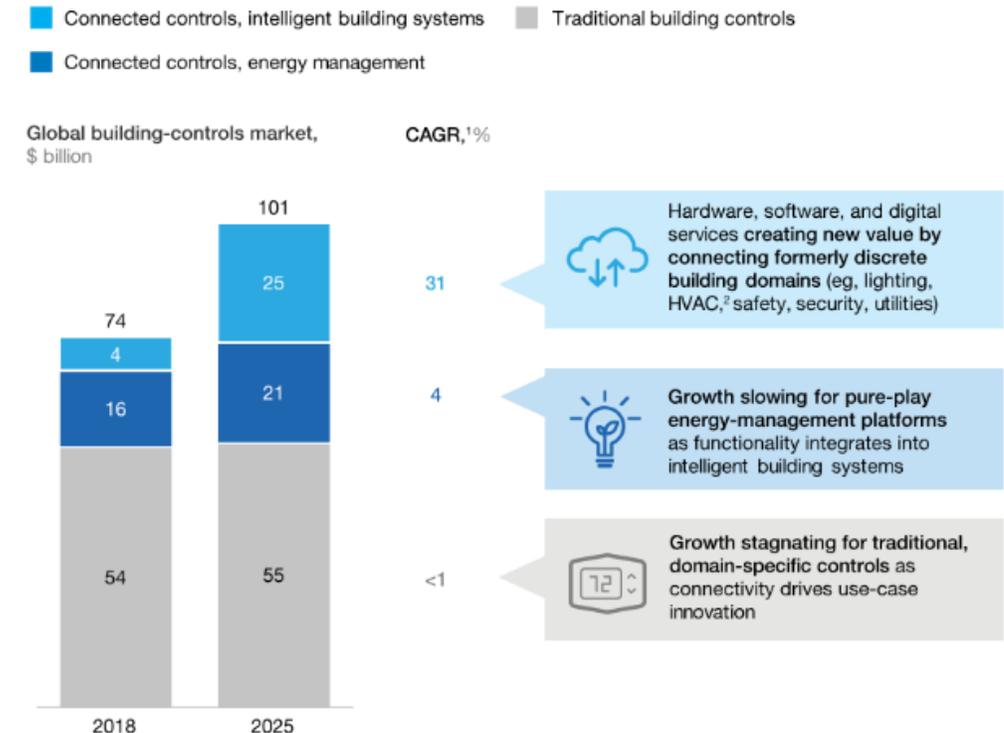
Integrated BAS / Convergence Will Win

Connectivity Not Just IoT But Between Systems

Integrated BAS mean Interoperable Controls

- Critical elements for growth:
 - Device connectivity
 - Digital services
 - Software
- McKinsey predicts controls companies that connect HVAC, lighting, security etc. with software and digital services will experience rapid growth, while traditional controls vendors will stagnate.
- Global TAM growing to \$25B in Connectivity space with 31% CAGR (2108 to 2025)

Connectivity is driving the next growth wave for building controls.



¹Compound annual growth rate.
²Heating, ventilation, and air conditioning.

McKinsey&Company | Source: Expert interviews; Navigant; Technavio; McKinsey analysis

Real Estate Portfolio and Operational Management, Space and Workplace Services

The Connected Building

‘Software for real estate, facility management, maintenance and energy combined with **smart building technologies** and related **consulting and implementation services** that enable building owners and managed service providers to enhance the **performance** of individual facilities, improve worker **productivity** and optimize the **financial management** of a portfolio of buildings’



The sector is undergoing rapid change with multiple drivers at play

Real estate trends



Sustainability



Co-working



Wellbeing



Decentralised Energy

Technology trends



Costs per worker



Facility optimization



Office design



New Entrants

IoT Ecosystem



IoT

Mobile applications



Mobile applications

AI



AI

Digitalization



Digitalization

Tech-driven business models



Tech-driven business models

5G To Transform Lives



5G To Transform Lives

Edge Intelligence



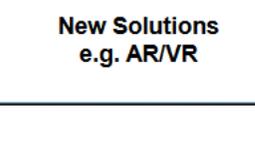
Edge Intelligence

Mobile Connectivity



Mobile Connectivity

New Solutions e.g. AR/VR

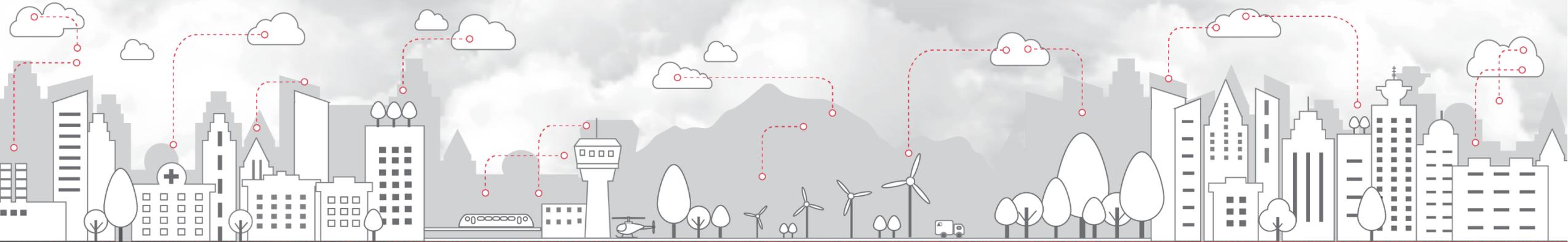


New Solutions e.g. AR/VR

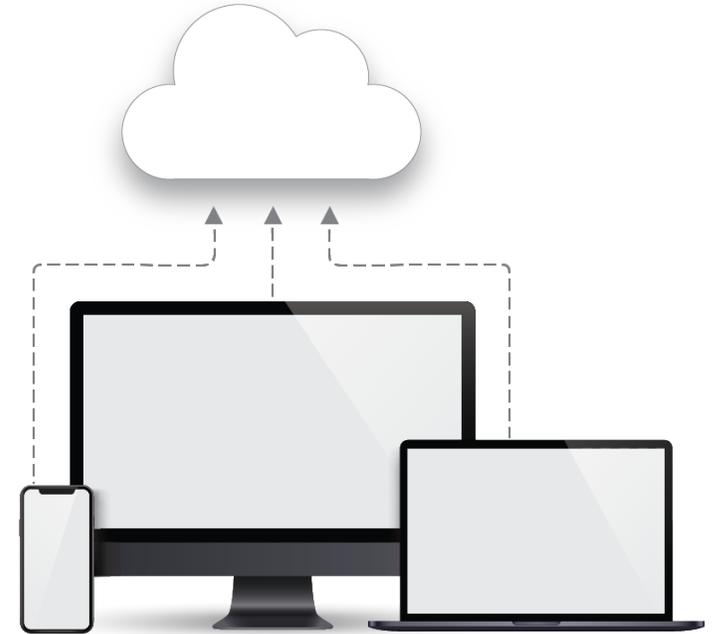
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Cloud Based BMS

enteli**CLOUD**[®]



enteliCLOUD is a web-based SaaS (Software-as-a-service) engineering and management tool that connects all your equipment and facilities, and gives facility managers and engineers convenient access to building management operations and energy analytics through a web browser.



Cloud eWEB Portal
entelicloud.com

Partner A

Partner B

Multiple Customers
PartnerA.entelicloud.com

School District
sdmc.entelicloud.com

Multiple Customers
PartnerB.entelicloud.com

Owner Access

Internet

Owner Access

Internet

BACnet/SC
Controller
Site 1

BACnet/SC
Controller
Site n

BACnet/SC
Controller
Site 1

BACnet/SC
Controller
Site n

BACnet/SC
Controller
Site 1

BACnet/SC
Controller
Site n

Sell sites to different owners and provide access or monitoring/operation services.

Sell multiple sites to the same owner. Owner can operate entire portfolio of sites.

Features

- Self Service – create enteliCLOUD instances yourself
 - No email/call to Delta
 - Adjust them as sites grow
- Passport integrated
- Automated monthly billing



Unique Selling Points (USPs)

- Streamline installation – enteliCLOUD.com installs and configures instances of eWEB automatically – work goes from a couple of hours to minutes.
- Work on the go – cloud access from anywhere, any device
- No need to upgrade – Delta automatically upgrades eWEB for you 3 times per year
- Reduced deployment variations – always the most up to date version
- Enhance security – BACnet/SC and HTTPS
- Increase revenue – monthly recurring revenue for partners

Unique Selling Points (USPs)

- Cloud based BMS/EMS with encrypted site connections using BACnet/SC*
- No special** hardware needed on site
- No up front licensing costs
- Only pay for what you use
- No installation / licensing / upgrades
- No ongoing server maintenance
- Geolocation
 - US West, US East, Europe, Asia, Australia

* What is BACnet/SC you ask? See <https://support.deltacontrols.com/Support/Webinar/BacnetSecureConnect>

** You will need a Delta device capable of BACnet/SC (eBUS-2 or O3 with 4.9+ firmware)

enteliCLOUD + eWEB USPs for Owners

Operational Excellence

- Reduce costly emergency service technician visits by pre-diagnosing problems and fixing them remotely
- Unburden your IT and Facility Management team from maintaining servers and software.
- Monitor, operate and control your portfolio of buildings across a geographies in a single pane of glass
- Deliver a consistently exceptional employee and customer environment that leads to higher productivity and revenue.

Property Value

- Increase the value of your portfolio by leveraging aggregate data on building performance and employee and customer satisfaction scores
- Make better business decisions on individual properties in your portfolio based on building performance data
- Remotely monitor and control buildings from home, the office, or on the go, without requiring on-site staff.

Energy Savings

- Reduce energy usage with a portfolio-wide strategy
- Manage renewable energy sources in conjunction with energy consumption



eWEB On-Prem Server vs eCLOUD Comparison

	eWEB On-Prem installation	eCloud
Installation process	Tech operator follows all steps in the installation guide, IT set up, licensing, server set up	Intuitive (user-friendly) Does not require additional access certificates, or licensing
Server Hardware Cost	\$650 - \$5500 (Small to Large sites)	\$0
Server Lifespan	~5 years	Unlimited
Installation Duration	4-16 hours/yr (Partner @ \$125/hr) 4-16 hours/yr (Customer IT dept @\$65 Hr)	5 - 10 minutes (Partner @\$125/hr) 0 hours (Customer IT dept @65/hr)
Maintenance effort	8-40 hours/yr (Partner @ \$125/hr) 2-16 hours/yr (Customer IT dept @\$65 Hr)	0 hours (Partner) 0 hours (Customer IT dept)
Upgrades	User initiated, optional, can choose to work with outdated versions	Auto initiated, scheduled updates, access to latest versions at all times with new features, bug fixes, and security patches
Convenience	Installation on site	Installation from anywhere with an internet connection, on any device, and at any time (outside office hours)

Risk Reduction as a USP

- Security, Security, Security
- Service Agreement
- Disaster Recovery

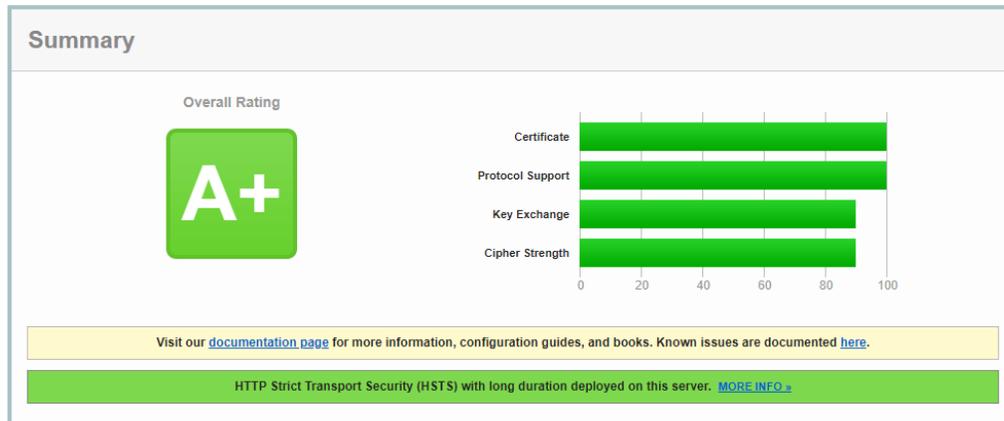
- Security as part of development process
 - Security Threat Risk Assessment (STRA)
 - Two Factor Authentication for all services
 - All instances secured by HTTPS
 - BACnet Secure Connect for all site connections
- eCLOUD users can enable 2FA for portal

eCLOUD

SSL Report: bci.entelicloud.com (35.231.255.249)

Assessed on: Wed, 27 May 2020 21:59:13 UTC | [Hide](#) | [Clear cache](#)

[Scan Another »](#)

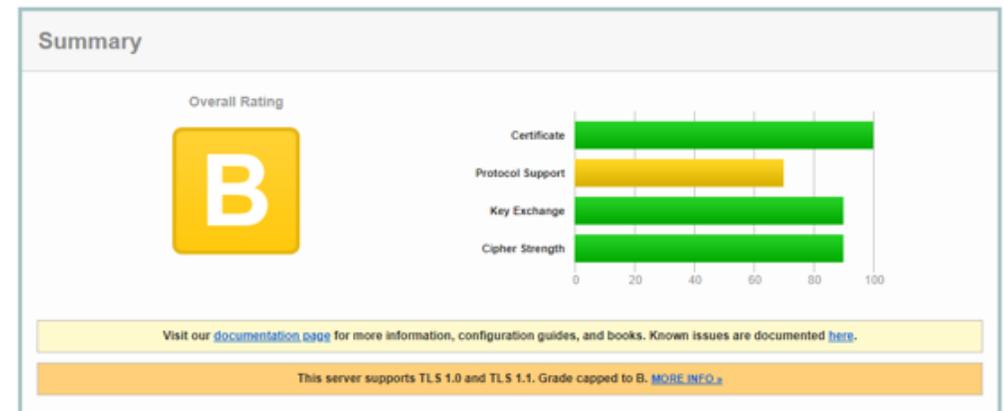


Partner Installation

SSL Report:

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Service Level Agreement

- 98.0% uptime guarantee
 - Credit for any time we fail to meet the commitment
 - Measured quarterly
- Excludes scheduled downtime
 - 48 hours notice
 - Up to 10 hours per year
- Effective Feb 1, 2020
 - Subject to change

Documentation

[Release Notes](#) 

[Service Level Agreement](#) 

[FAQ](#) 

[Related Products](#) [enteliWEB](#)



Disaster Recovery

- Nightly backup in cloud
- Off-site tertiary backup by Ops team

Pricing

enteli**CLOUD**[®]



- Monthly charge per instance
 - Cost based on I/O per site
 - Add-on O3 access doors per site
 - Add-on energy to instance
 - Add-on API to instance
- Minimum charge
- PO set per instance

Sites and I/O Points

+ Add Site

Site Name	I/O Points	Access Doors	Device Name	Device Number
Downtown Office	5,000	50	enteliCLOUD	88
Retail Outlet	200	0	enteliCLOUD	196652
Campus Center	1,000	0	enteliCLOUD Server	896

Select Add-On Features ¹

enteliVIZ ²

Energy Management

enteliCLOUD API

¹ Features will be added to all sites and price will be updated

² Feature included

Small Site Pricing – Retail, Light Commercial

- Not the normal partner market
 - This is a good thing!
- eCLOUD and Delta hardware is a good fit
- eCLOUD pricing for small sites is based on volume
 - Competition is very low cost: Non comm t-stat, Nest, Pelican etc

- Invoices generated on 22nd
- Prorated for created/deleted dates

January 2020

SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15 Created	16	17	18
19	20	21	22 Generate invoice	23	24	25
26	27	28	29	30	31	

February 2020

SUN	MON	TUE	WED	THU	FRI	SAT
						1
2	3	4	5	6	7	8
9	10 Deleted	11	12	13	14	15
16	17	18	19	20	21	22 Generate invoice
23	24	25	26	27	28	29