

# Digital Buildings

Smart Infrastructure



## LARGEST GLOBAL COMPANIES IN 2018 VS 2008: SEVEN OUT OF TEN ARE NOW BASED ON PLATFORM BUSINESS MODELS

### 2018

RANK	COMPANY	FOUNDED	USBn
1.	 *	1976	890
2.	 *	1998	768
3.	 *	1975	680
4.	 *	1994	592
5.	 *	2004	545
6.	 腾讯 *	1998	526
7.	BERKSHIRE HATHAWAY	1955	496
8.	 *	1999	488
9.		1886	380
10.	J.P.Morgan	1871	375

\* Companies based on the platform model

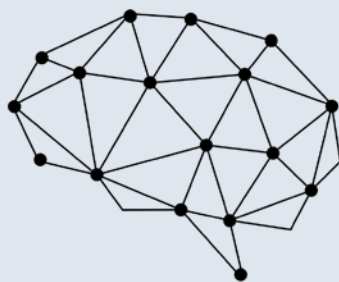
### 2008

RANK	COMPANY	FOUNDED	USBn
1.	 PetroChina	1999	728
2.		1870	492
3.		1892	358
4.	 中国移动 China Mobile	1997	344
5.	 ICBC	1984	336
6.	 GAZPROM	1989	332
7.	 Microsoft	1975	313
8.		1907	266
9.		2000	257
10.	 AT&T	1885	238

Sources: Bloomberg, Google

# World is changing faster than ever





Cambridge  
Analytica



# Siemens Smart Infrastructure



## Operating Companies

### Gas and Power



### Smart Infrastructure



### Digital Industries



## Strategic Companies

### Mobility



**SIEMENS Gamesa**  
RENEWABLE ENERGY



**SIEMENS Healthineers**



## Service Companies

### Financial Services

### Global Business Services

### Real Estate Services

**BIM**

Biga Data

**BloT**

Energy Smart.Data

**BMS**

**IPS**

Remote digital  
service

**nZEB**

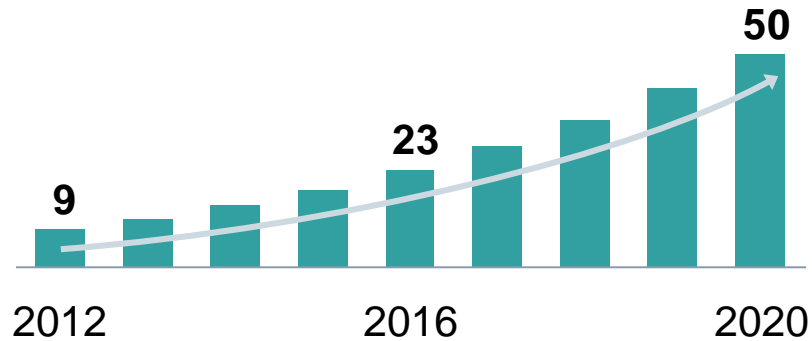


# Internet of things (IoT)

## Digital transformation

Connected devices, in billion

Exponential  
growth of  
connected  
devices...

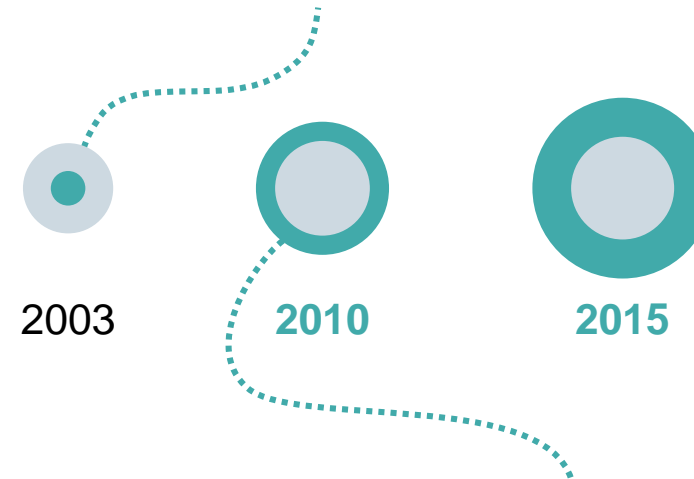


...  
and digital  
data



**ZB** = zettabytes =  $10^9$  terabytes

The year 2008 marked the first time in history that more **devices** were connected to the Internet than there were **humans** on earth



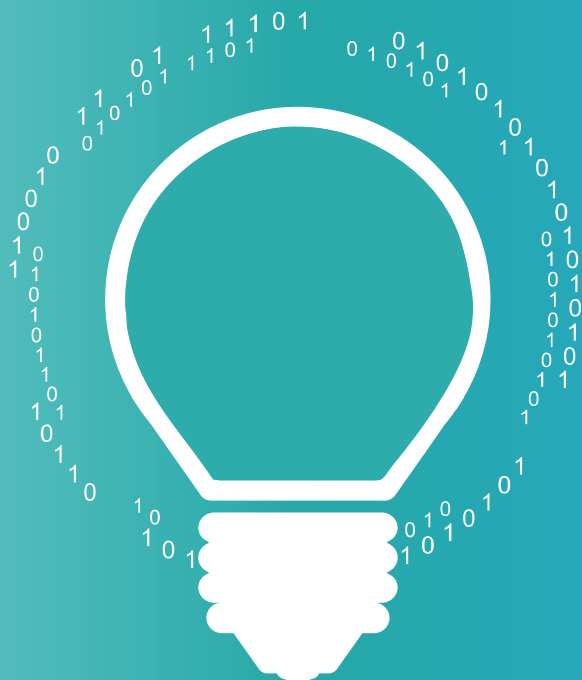
There are **many more devices** connected to the Internet than just smartphones and tablets

There will be  
**50 billion**  
devices  
by **2020**

# Digitalization changes how we work, do business and interact

**SIEMENS**  
*Ingenuity for life*

## Digitalization Innovation Fields



**Data  
analytics**



**Artificial  
Intelligence**



**Simulation  
tools**



**Cloud and platform  
technology**



**Secure  
connectivity**



**Cyber-  
Security**

How to  
create value  
out of it?



# Tech trends 2020

Gartner  
Società di consulenza, ricerca e analisi nel campo dell'Information Technology

## Top 10 Strategic Technology Trends for 2020

### People-centric



Hyperautomation



Multiexperience



Democratization



Human Augmentation



Transparency and Traceability

### Smart spaces



Empowered Edge



Distributed Cloud



Autonomous Things



Practical Blockchain



AI Security

[gartner.com/SmarterWithGartner](https://gartner.com/SmarterWithGartner)

Source: Gartner  
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Gartner.

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# Siemens Value propositions in creating perfect place



## comfortable and safe

- Ensure well-being and protection of people and places
- Optimize room conditions and intuitive operation
- Guarantee LifeCycle performance



## energy and asset efficient

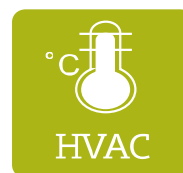
- Enhance business continuity through asset and building efficiency
- Optimize OPEX including energy and maintenance costs
- Enhance public perception through increased sustainability
- Achieve flexibility and resilience with Distributed Energy Systems



## space and user efficient

- Create user centric building experience
- Impact building user productivity and satisfaction
- Increase space efficiency and utilization
- Improve equipment utilization

# Holistic view of Building



analytics for operator and/or  
real estate manager



**Localization Platform**

# What is driving Localization services in buildings?



Spendiamo il  
**90%**  
del nostro tempo  
all'interno di edifici

NHAPS Study, USA



Circa  
**87%**  
dei millennials hanno il  
loro smartphone  
sempre a disposizione

Mitek / Zogby Analytics




Prodotti, applicazioni e  
servizi legati ad  
ambienti di lavoro  
smart cresceranno del  
**16%**  
all'anno fino al 2021

Mind Commerce



**400** Milioni  
Beacon Bluetooth  
installati entro il 2020

ABI Research



Il mercato della  
localizzazione indoor  
varrà **23** Miliardi  
EUR nel 2021

Markets & Markets



# Space Efficiency Analytics



Movement



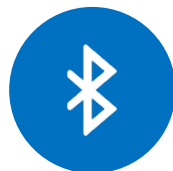
Brightness



Power

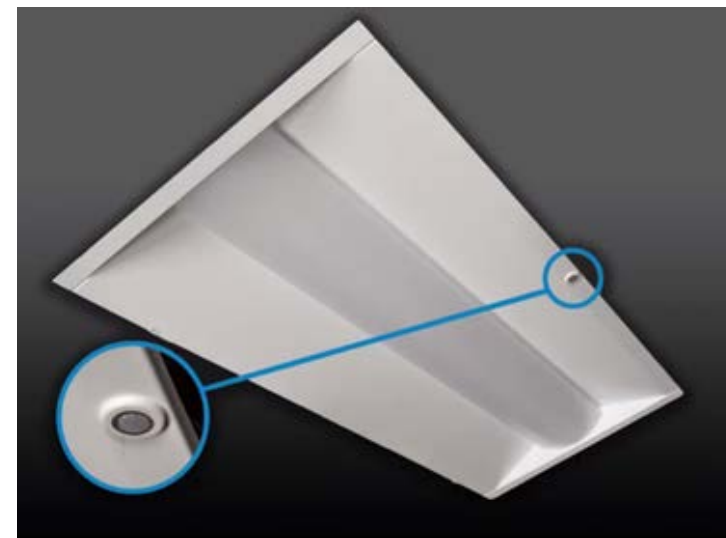


Temperature



Bluetooth

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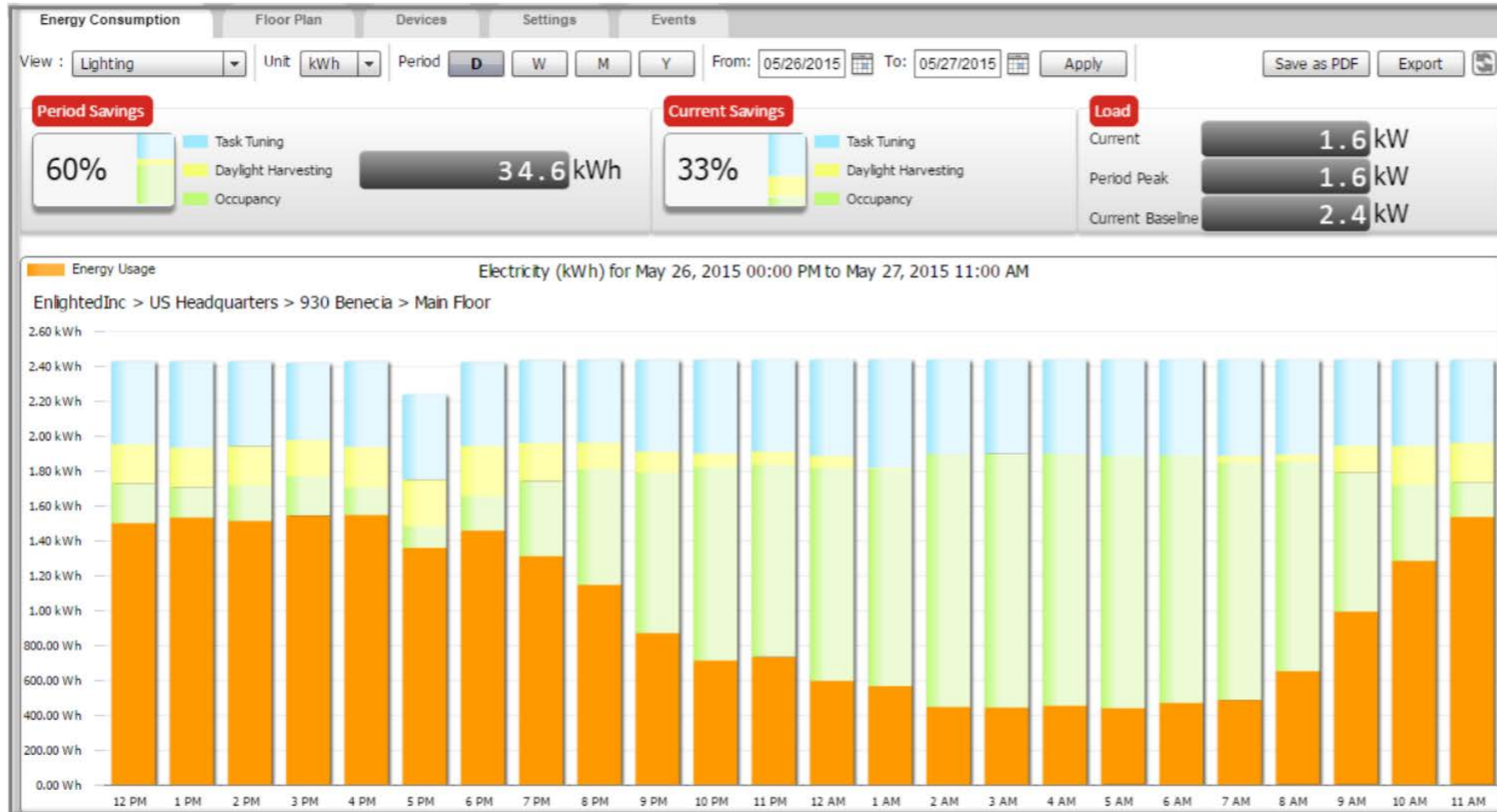


# What we can do

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# Energy Management



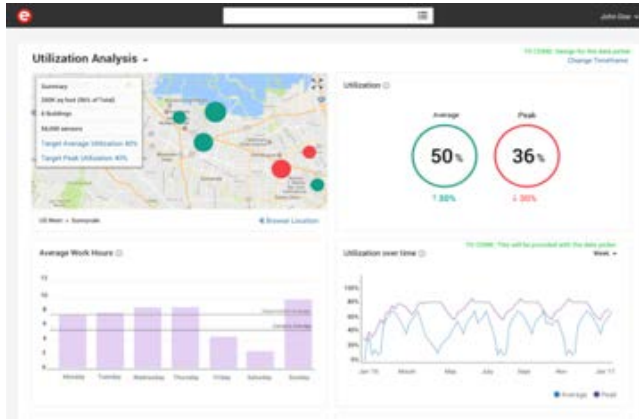
Realtime consumption monitoring

History data per area

Energy Savings per category

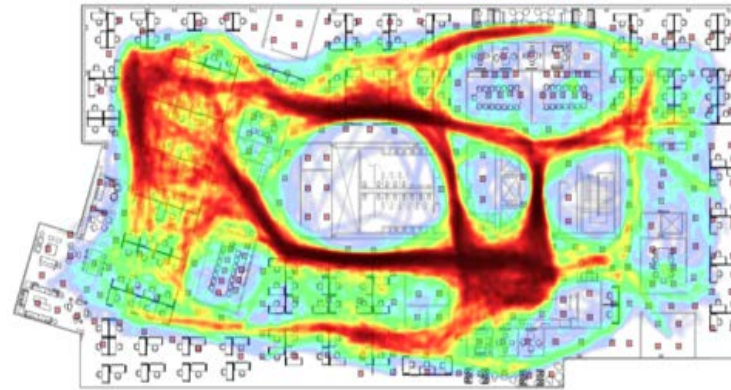
# Space usage optimization

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## Dashboard

Highlight KPIs for sites, buildings and managed floors



## Data Analytics

Intuitive analysis of the use of spaces, movements, occupation by area/floor and reporting of data



## Data-driven optimization

Improves space utilization, flow design and area management

# People and assets localization



Find people and devices



Asset Management



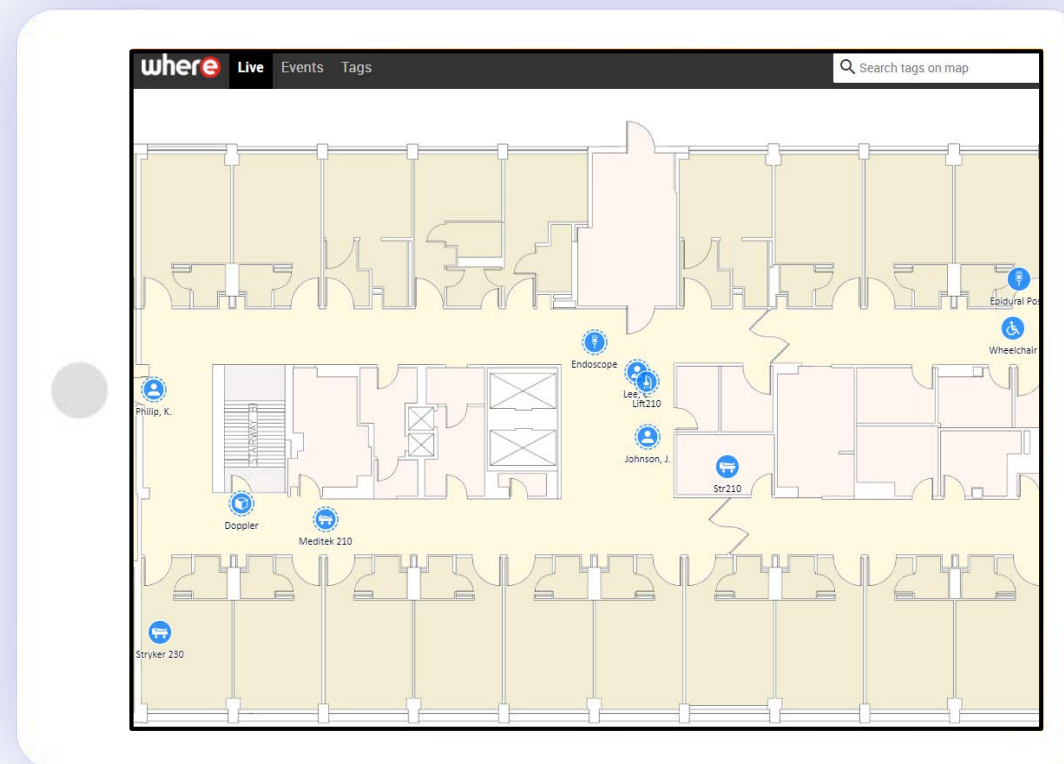
Safety



Process Optimization



Visitors control





## Assets Usage

Lower CAPEX or rent cost thanks to increased usage

## Process optimization

Analyzes patient, staff and assets paths and response times

## Patient Mgmt

Improves pathways and waiting time for optimal patient management

## Sicurezza

Create and configure virtual constraints and alerts related to assets or people





# 01

## Warehouses

### Asset Localization

Lower CAPEX or rent cost thanks to increased usage

### Process Optimization

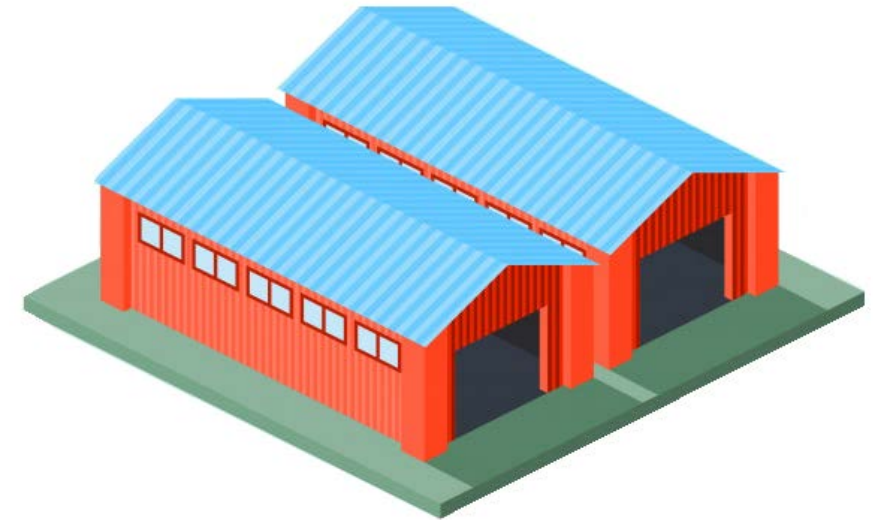
Analyzes asset movements and paths

### Energy Savings

Lighting management can significantly reduce energy consumption

### Safety & Security

Analyzes the presence of people or things in motion in all areas



## Spaces

Reconfigure meeting rooms and common areas to optimize their use

## Smart Work

Allows you to create a truly Smart office that adapts to your needs

## Flows

Analyzes flows and bottlenecks to handle high-density points of people

## Cleaning

Track frequently used areas to optimize time and resources





# The labour market is changing

## PEOPLE

Workers today expect more choice on how, where and when to work

## SPACES

Real Estate prices are very high - while office space is not fully exploited

## TECHNOLOGIES

Office technology must be intuitive and part of a holistic vision

# Siemens in Italy

Active in the country from 1899

FY 2017



≈ 2

revenue in  
billion of €



1

Technological and  
Application Center



6

global competence  
centers



2

factories



>3,200

employees in  
Italy



2,400

Smart Workers\*



46

average age



25%

women

## SIEMENS

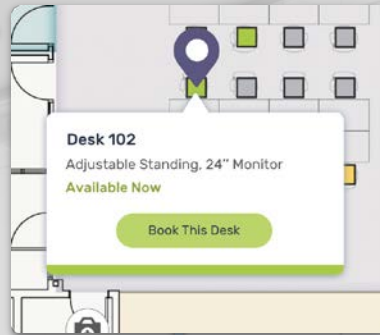
*Ingenuity for life*



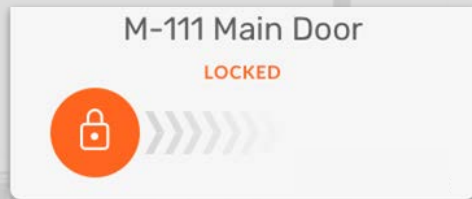
# A day with



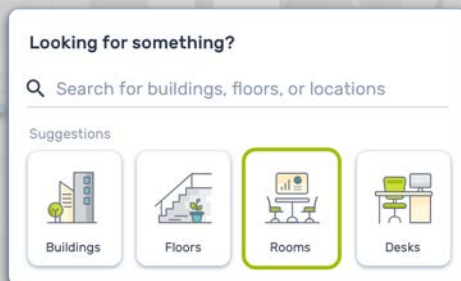
Book a desk while  
you're moving to  
the office



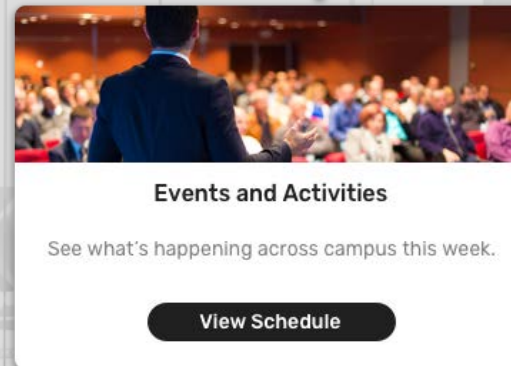
Enter in the office  
with a swipe



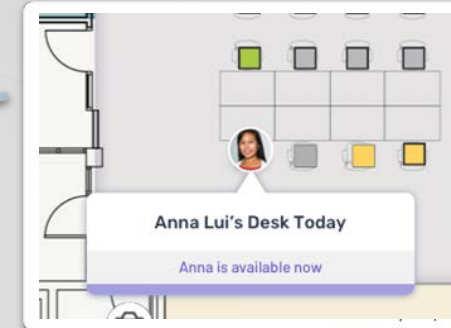
Find a free  
meeting room



Stay up to  
date with  
the latest  
company  
news



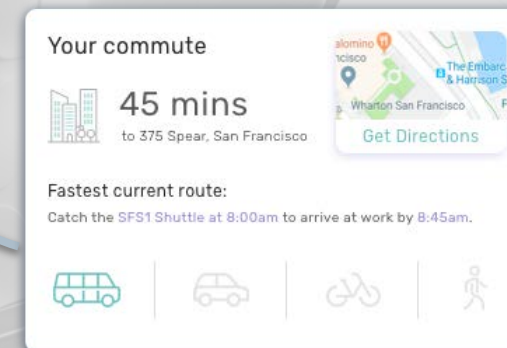
Find a colleague  
on the map



Navigate to  
next meeting



Check your  
way home at  
the end of the  
day







## Available Rooms

Headquarters East Building

Rooms near:

📍 Desk C1260, Floor 3, Headquarters East Building



Meeting Room 500  
Floor 3

Available now: 90 mins



Conference Room D  
Floor 3

Available now: 90 mins



Meeting Room  
Floor 3

Available now: 90 mins



## Available Parking

Headquarters East Building

Parking near:

📍 Meeting Room 446, Headquarters East building

Lot A

23

Open spots

[Directions](#)

Lot B

11

Spots left

[Directions](#)

Lot D

5

Spots left

[Directions](#)



## Company News

### State of the Business 2020

Oct. 25th, 10:00am - Building B Auditorium

As 2020 draws near, let's take a look at our company's vision for the future. Join our CEO for the State of the Business address.

[Read more](#)

## Your weather

In San Francisco, CA

53°  
F

Cloudy / Rainy  
Feels like 50°



55°

Rainy

12pm

53°

Cloudy

5pm

48°

Showers

9pm

[More details](#)

## Your commute



45 mins

to 375 Spear, San Francisco



[Get Directions](#)

Fastest current route:

Catch the [SFS1 Shuttle](#) at 8:00am to arrive at work by 8:45am.



## Spear St. Cafe

375 Spear, 6th Floor

Open

Very busy now

Today's menu

[View full menu](#)



Organic  
Edamame



DIY Ramen Cart



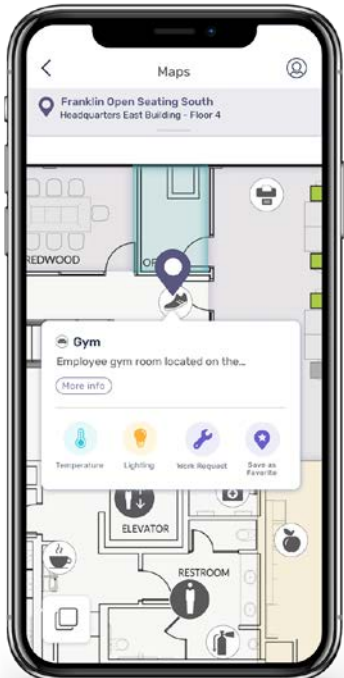
Boba Soy  
Milk Tea Bar

# Comfy features

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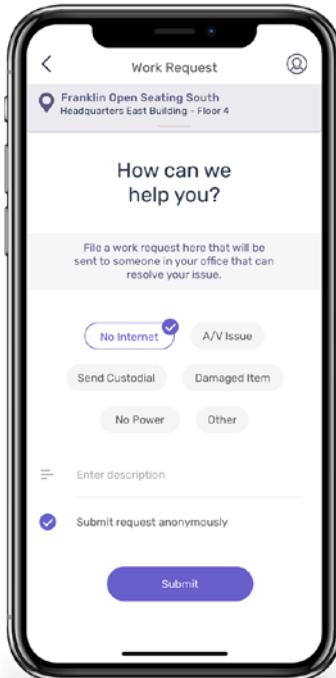
## Services

Find POI around you



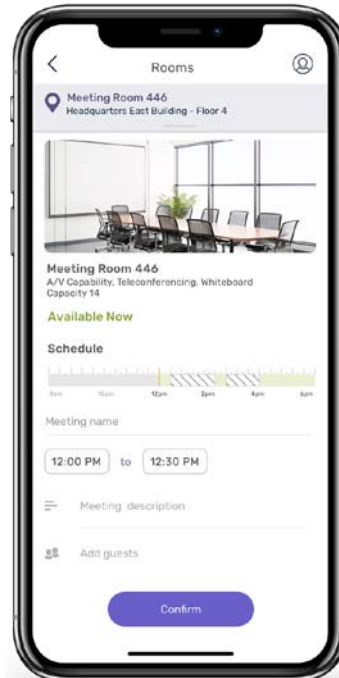
## Requests

Insert a Maintenance Service request



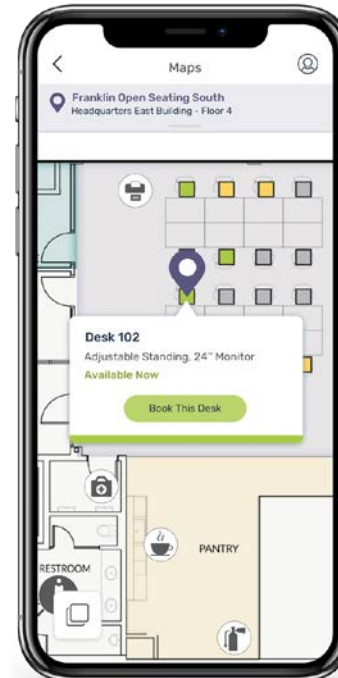
## Rooms

Book your meeting room



## Desks

Find and book available desks



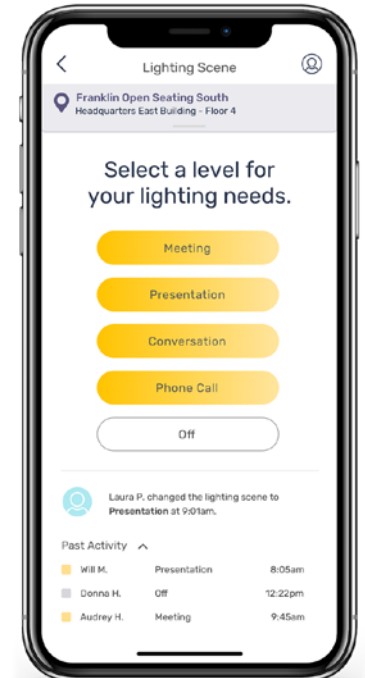
## Temperature

Warm or cool you workplace/desk



## Lights

Light Management



# Comfy Insights

Comfy combines data from people, locations and systems to provide greater transparency about:

Building performance

Use of spaces

Interactions between employees and the workplace





# The journey to

## self-adaptive buildings



Cave



Traditional building

- Sub-systems working in silos



Automated building

- Fully integrated
  - Connected IoT devices
  - Centralized control
- >> diagnostic <<



Cyber-physical building

- Smart, combining the digital & physical world
  - Starting point for AI
- >> predictive <<



'Living', self-adaptive building

- Acts as a living organism
  - Anticipates needs
- >> prescriptive <<

### Reaching the vision:

$\Sigma$  Data +  $\Sigma$  Data Scientists → Self-adaptive buildings

Siemens today

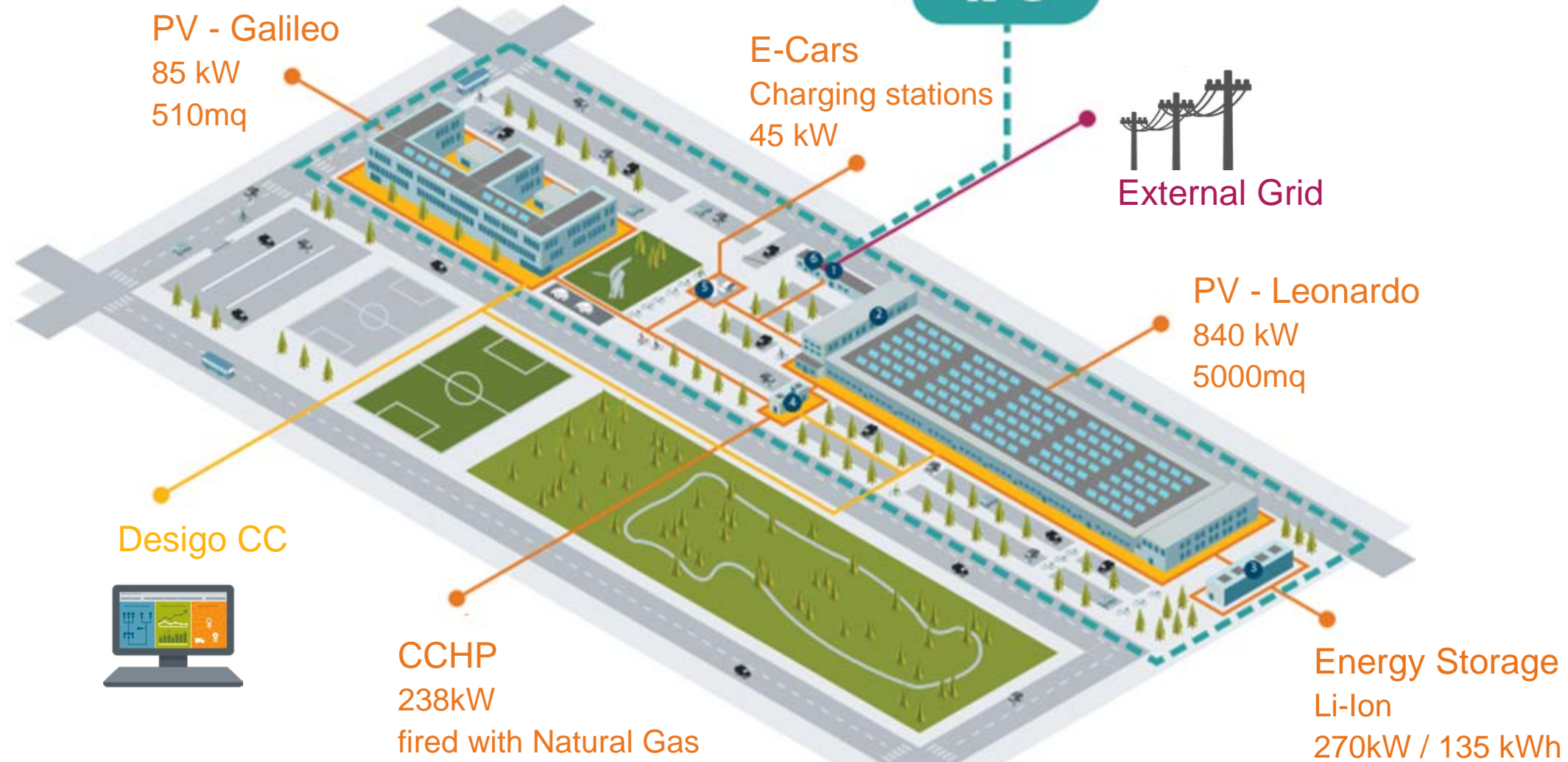


Siemens tomorrow

#CASASIEMENS

EnergyIP DEOP  
NAVIGATOR

**SIEMENS**  
*Ingenuity for life*







“

*We cannot solve our  
problems with the same  
thinking we used when  
we created them.*

”

*Albert Einstein*