



# Smart+Connected Campus

Enabling The Workplace Of The Future



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# Are You Thinking Of A Smart Campus For Your Enterprise?

- A) Yes and very soon
- B) We already have a smart campus
- C) No plans currently
- D) Smart Campus? What is that?

# Workplace Trends

The physical workplace, and how and where people work are being redefined

## Devices



- 15 billion connected devices by 2015 and growing
- 2 networked devices per capita: 2015
- Connecting not just people but machines (2 billion by 2015)

## Collaboration



- Workplace more distributed than ever
- Lots of geographically dispersed teams
- Often have to bridge multiple time zones

## Flexibility



- Younger workforce driving change
- Still need to retain ageing talent
- Higher traffic congestion
- Growing demand for home-office and near-office options

## Consumerization



- Consumerization of IT
- Driving new product innovations
- IT applications and services are more socially aware and user friendly

## Work Life



- Interplay between professional and personal lives
- Balance key to talent attraction and retention

# Posing New Challenges

Transforming the workplace is a cross-functional initiative and not owned by a single department anymore



**How do I**  
collaborate and work  
more effectively?

**How do I**  
attract and  
retain the  
best talent?



**How do I**  
meet internal  
and external  
stakeholder  
expectations?

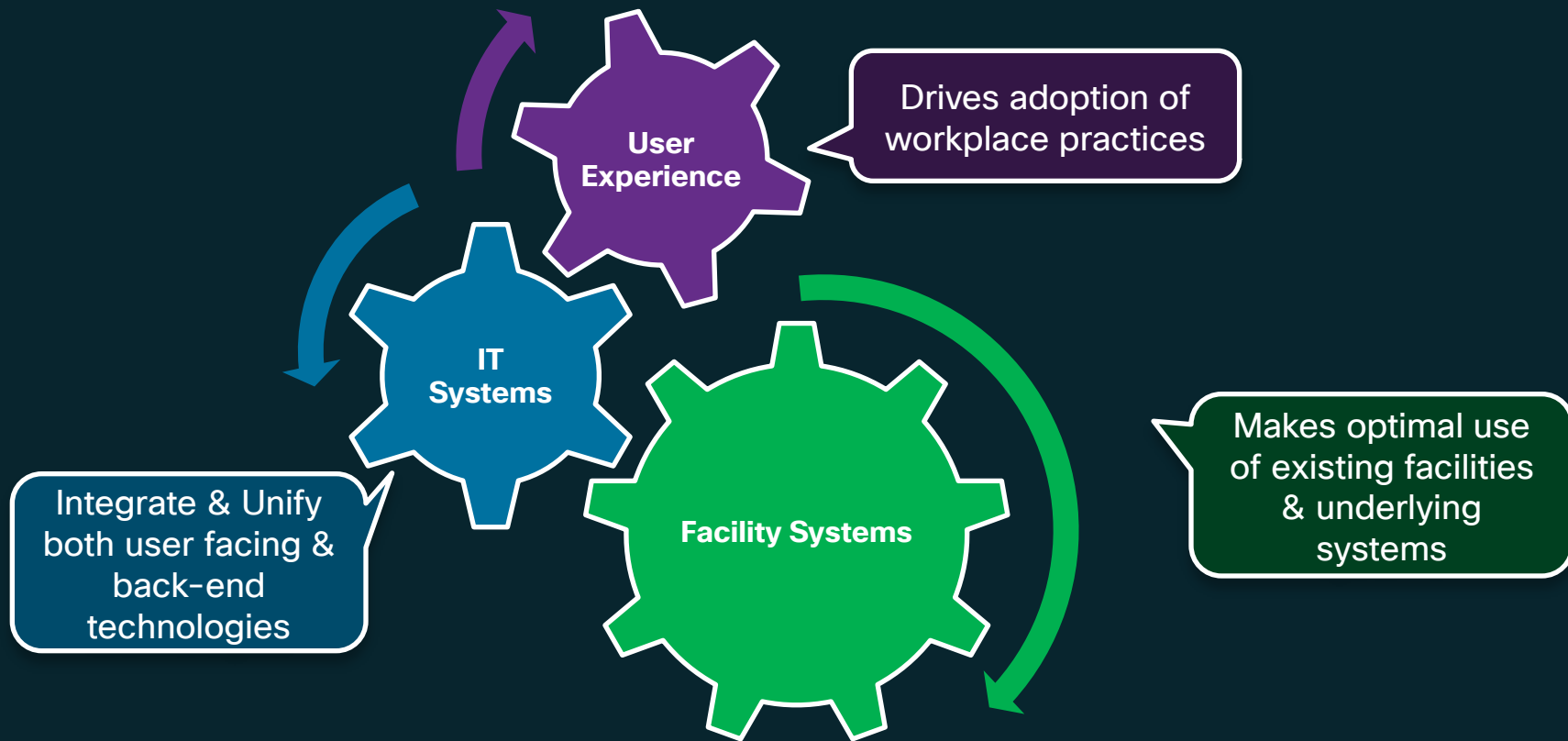


**How do I**  
outsource my  
real estate costs  
and still meet  
business needs?



**How can I**  
implement new  
apps and IT  
innovations with  
minimal disruption?

# In a Smart Campus ...



# Building blocks of a Smart Campus

## Smart+Connected Operations Center

### 1 Smart+Connected Parking



Give citizens live parking availability information to reduce circling and congestion

### 2 Smart+Connected Information kiosk



Monitor and manage traffic incidents to reduce congestion and improve livability

### 3 Smart+Connected Safety & Security



Automatically detect security incidents, shorten response time, and analyze data to

### 4 Smart+Connected Visitor management



Inform the host about the arrival of visitor. Issue entry pass after remote verification by

### 5 Smart+Connected Café management



Manage street lighting to reduce energy and maintenance costs

Converged and centralized management

Shared Infrastructure

# Benefits of a Smart Campus

## User Experience



- Better Flexibility
- Better collaboration
- More “neighbourhood” spaces
- Safe and Secure environment

## Operational Efficiency



- Efficient space utilization
- Integrated Operations Centre
- Proactive Alarm & Alert
- Enhanced Preventive maintenance
- Integration to Enterprise ticketing systems

## Energy



- Real Time Energy Management
- Rule based energy consumption
- LEED certification points
- Lab energy usage optimization

## Information Value



- Building performance metrics
- Energy Trending & Reporting
- Facility: Incident, Alarms, and Trend Reports

# Experience of a Smart Campus – Sample Scenario

Mr Kumar works for a company with a Smart Campus , which provides automated service solutions from the time he arrives at the building to when he leaves.



1 • Vehicle with RFID tag enters the parking lot, and is guided to parking space by digital signage.



2 • As soon as the vehicle enters the parking lot, the VIP elevator starts moving down to the basement for Director Hong. His identity is authenticated using a smart card, and the related data will be sent through the DS.



3 • Building information and daily schedules sent to smartphones from the groupware through the FMC.



4 • Smart cards are used for entering/exiting and using elevators.



5 • On Director Hong's arrival, the lighting and the air conditioning are automatically turned on.



6 • Building information, notices, and announcements are displayed on the digital signage machines installed in the office in real time for employees.



7 • When employees leave the office for the day, non-essential items are powered down for saving energy.



8 • IP CCTV installed outside the building provides traffic information.



9 • IPT provides automated services such as lighting, temperature, building information, and projector connection.





# Key Benefits of an IoE-enabled City

## Benefits Maximized when Solutions Combined



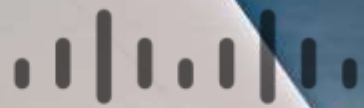
# How Cisco Benefited

Typical floor in San Jose	Legacy environment	Cisco Connected Workplace
Usable area	49,000 sq. ft.	49,000 sq. ft.
Work space	70% individual 30% collaborative	30% individual 70% collaborative
Use pattern	Traditional, Assigned	Flexible, Unassigned
Seat capacity	300	375
Enclosed meeting spaces	16	72
Usable area / employee*	163 sq. ft.	111 sq. ft.
Chargeback per employee	\$5,162 per year	\$2,596 per year
Persons housed	255	400-500*

\*Based on 75% Badge-In Rate

# So Now - Are You Thinking Of A Smart Campus For Your Enterprise?

- A) Yes and very soon
- B) We already have a smart campus
- C) Tell me more!!!
- D) When can we start?



**CISCO**

*TOMORROW starts here.*

