



IT Role in a Building

Trends & Technologies



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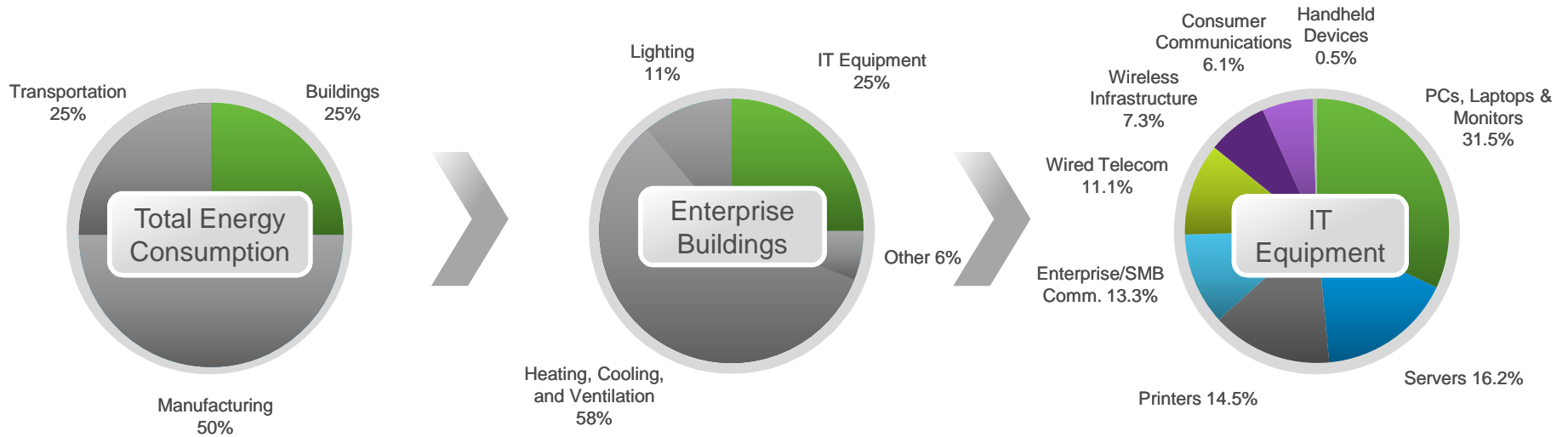
7th November 2012

Agenda

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1. Role of IT in a Building
 2. IT Infrastructure Convergence
 3. Cisco EnergyWise Approach
 4. Summary

Building Energy Costs

Enterprise IT Relevancy



Cost Savings

- Rising energy costs
- IT device proliferation
- Video applications

Sustainability Mandates

- Regulatory compliance
- Government mandates
- Company requirements

Source: BOMA 2006, EIA 2006, AIA 2006

Source: UK Energy Efficiency Best Practice Program; Energy Consumption Guide 19: Energy Use in Offices

Source: Gartner Dataquest, Forecast of IT Hardware Energy Consumption, Worldwide, 2005-2012.

IT Role in a Building

1. IT as a business tool

Traditional IT infrastructure

Information systems supporting the business

Collaboration regardless the geographical location

Access to the Internet

IT is an important energy consumer

2. IT infrastructure as a unifying platform for building technologies

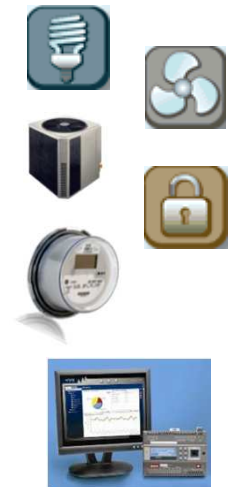
Facility network (often called “Technological network”)

Interconnecting:

Building controllers - HVAC, Lighting, Elevators, Fire sensors

Physical security (Videosurveillance, Access control)

BMS, ...



Building Management Trends

Convergence of IT and Facility Networks

IT Services and Technologies

IP-Based

High-Speed Internet

Wireless

VPN

IP Telephony

Audio and Video Conferencing

Visitor Management

Interactive Media

Digital Signage



Network Is the Platform

Building Services and Technologies

Typically Non-IP

Lighting

Elevators

24/7 Monitoring

HVAC-Sensors

Fire

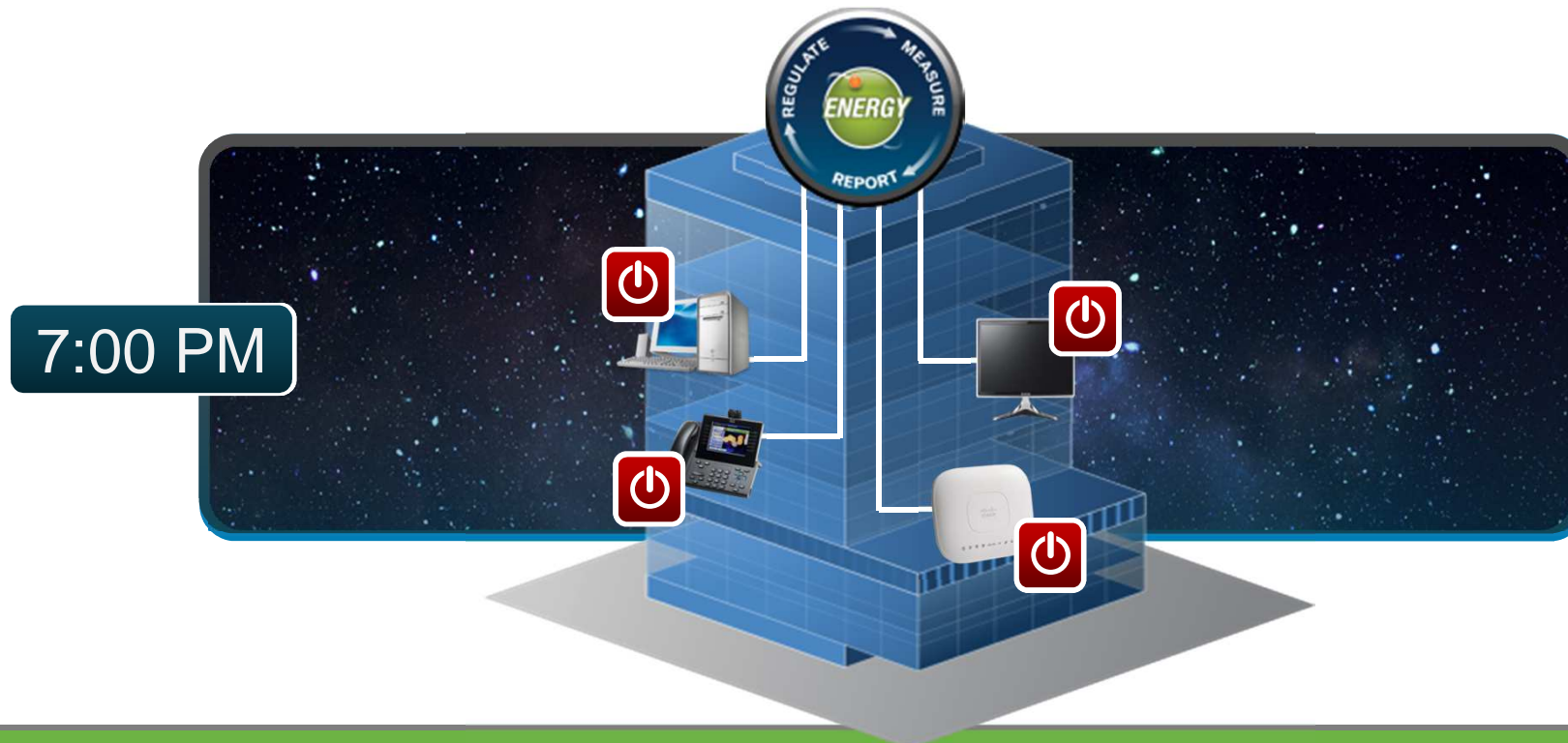
Video Surveillance

Access

Energy

Cisco EnergyWise

The Central Nervous System for Energy Intelligence



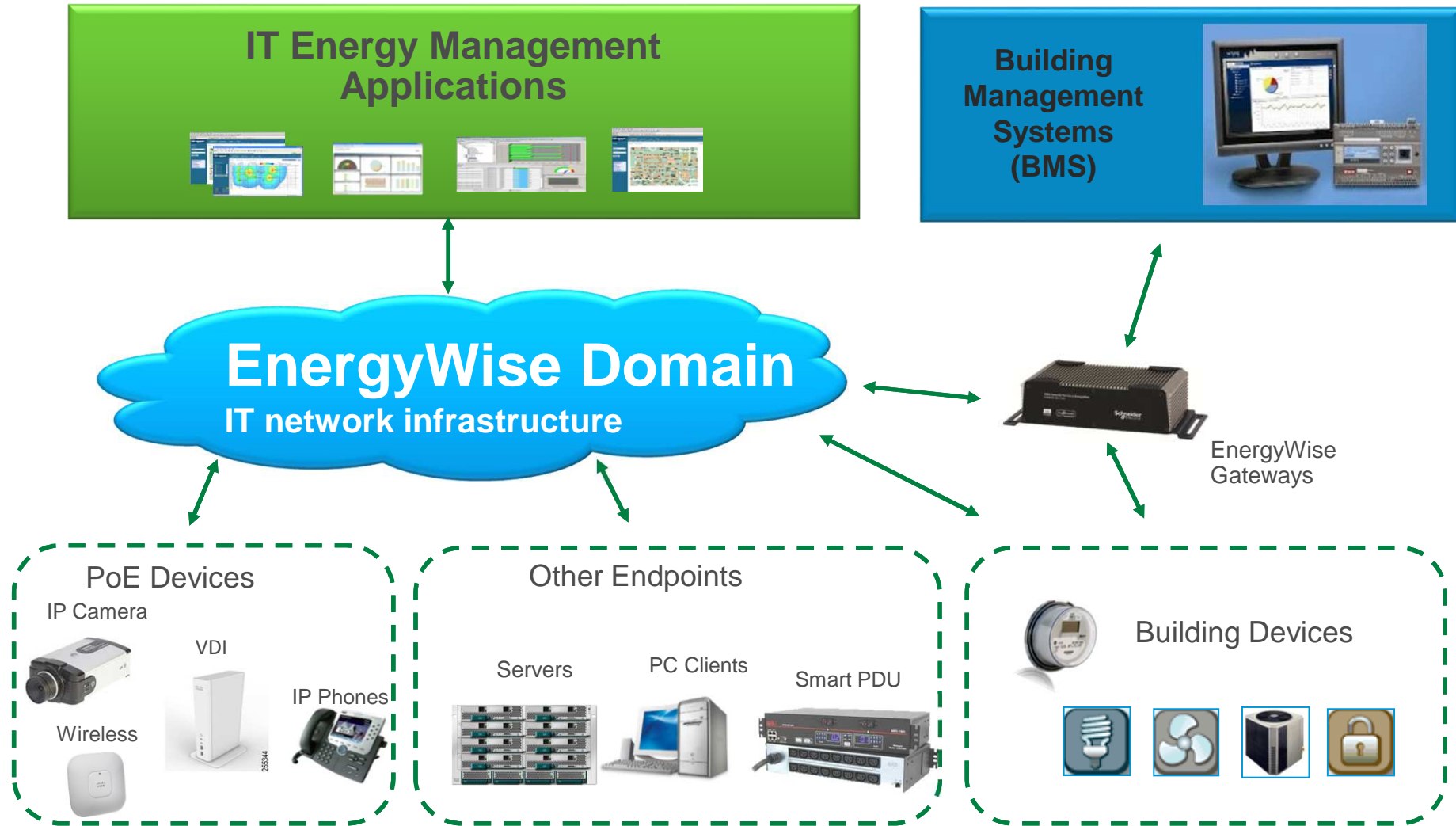
SOLUTION DESCRIPTION

- Policy based energy management via the network
- Delivers both monitoring and control
- Broad adoption across
 - Cisco enterprise platforms
 - Partner applications and devices

CUSTOMER BENEFITS

- Energy and operational cost savings
- Greater visibility into energy usage
- Energy mandate compliance

Cisco EnergyWise Architecture



Summary

IT infrastructure

An important energy **consumer** within buildings

An underlying and **unifying platform** for other building technologies

Convergence of IT and facility infrastructure is a big trend

Enables **new functionalities** leading to **energy savings**

One converged infrastructure is **cheaper** to build and operate

When designing a building:

Don't consider IT as a separate world

Design all the building technology pieces together (IT + BMS + HVAC + lighting)

Use **smart & efficient** IT infrastructure

Supports energy measurement and control, eg. **EnergyWise**

Can deeply interoperate with building management systems

Děkujeme.
Thank you.

