Smarter Buildings

SmarterCities

Canais de Tradução

Translation Headset Channels

Canal de Traducción

Canal 1: Português

Channel 2: English

Canal 3: Español

Smarter Buildings

SmarterCities

David Bartlett
Vice President, Industry Solutions, *IBM*

Smarter Buildings
Building Blocks to a Smarter City

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The Need for Progress Is Clear

42 percent

Worldwide, buildings consume 42% of all electricity – up to 50% of which is wasted

1

Buildings are the number 1 contributor to global Co2 emissions

2/3

65% of building occupants are willing to help redesign their workplace to make it more environmentally responsible

1/2

Buildings lose as much as 1/2 of the water that flows into them

30 percent

Energy costs alone represent about 30% of an office building's total operating costs

2025

By 2025, buildings worldwide will become the top energy consumers

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The Benefits are Real

40% savings

Smarter buildings can reduce energy usage by 40% and reduce building maintenance cost 10-30%

30% less water

Also save up to 30% of water usage along with lower energy costs resulting from reductions in the amount of energy used to pump and heat water

91% occupancy rate

LEED and Energy Star green buildings have consistently higher occupancy rates with reduced churn, quicker lease up, and higher re-up rates

Up to 18% productivity

A variety of studies have demonstrated productivity benefits in commercial settings. Office worker productivity increased up to 18% on average in smarter buildings

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What *Is* a Smarter Building?

Smarter Buildings are well managed, integrated physical and digital infrastructures that provide optimal occupancy services in a reliable, cost effective, and sustainable manner

Smarter Buildings…

- Are more cost effective by reducing energy and operating costs
- Use active and designed-in techniques to achieve efficiency and environmental responsibility
- Have the ability to interact with occupants inside them as well as the environment around them
- Maintain a safer and more secure workplace
- Communicate in real-time to the supporting infrastructure (i.e. smart grid, broadband, etc.)

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What Kinds of Buildings Can Be Made Smarter?

Smarter Hospital

Sensor instrumentation used in real-time for asset location and patient location, with automated workflows such as medical equipment maintenance and patient safety management. Enhance operational efficiency and client/patient experience

Smarter Campus

Intelligent infrastructure platform and tools to manage plug-in electric vehicle stations, buildings, badging, central utility plant

Smarter Hotel

Integration of all the guest subsystems of hotel that welcome guest according to their preferences and adds to convenience during stay

Smarter Data Center

Integrated facilities and IT insight to energy efficiency of datacenter and the correlation of IT and facilities information

Plus airports, office complexes, stadiums, new construction, older buildings – and more

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What are You Listening to: Data Storms or Actionable Insight?

Smarter Buildings represent a very real and present opportunity

Smarter Buildings…

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Our Buildings are Talking to Us
Now Is the Time to Listen and Act

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Tulane School of Architecture
Sustainable Strategies

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Construções Mais Inteligentes

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Smarter Buildings Panel Discussion

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Por favor dirija-se ao 5º andar para a sessão de encerramento

Please make your way to the 5th floor for the closing session

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