



Connected Equipment

A Johnson Controls Perspective

By
Jed Bentz

**Johnson
Controls**





Characterizing Connected Equipment (JCI-Residential)

Vision



How do we get there



Smart Systems

Serial / other communications

Remote Connectivity

Data Collection
Data Availability

Data Analysis

Analyzing and organizing the data
Developing acute knowledge of end users

Sharing Knowledge

Quick solutions for end users
Find areas of innovation and monetization
Make changes

Integrate

Find ways to connect devices to obtain larger value

--- Communication (2 way)

Power

Radio Antenna

Johnson Controls





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Challenges



Perception



Can I see it on my phone? Then yes, it is “smart”.

Mobile Access: Baby Steps

- **Convenience**
 - Not Intelligence
- **Education**
 - Visibility to otherwise invisible systems
- **Data Collection**
 - Value that could be
 - Test / Case Study



Energy MGMT: Home

- **Focused around the thermostat**
 - Marketing
 - Homeowner focused
 - Features focused on education / convenience
 - Home integration
 - Happens in the “cloud”

Honeywell



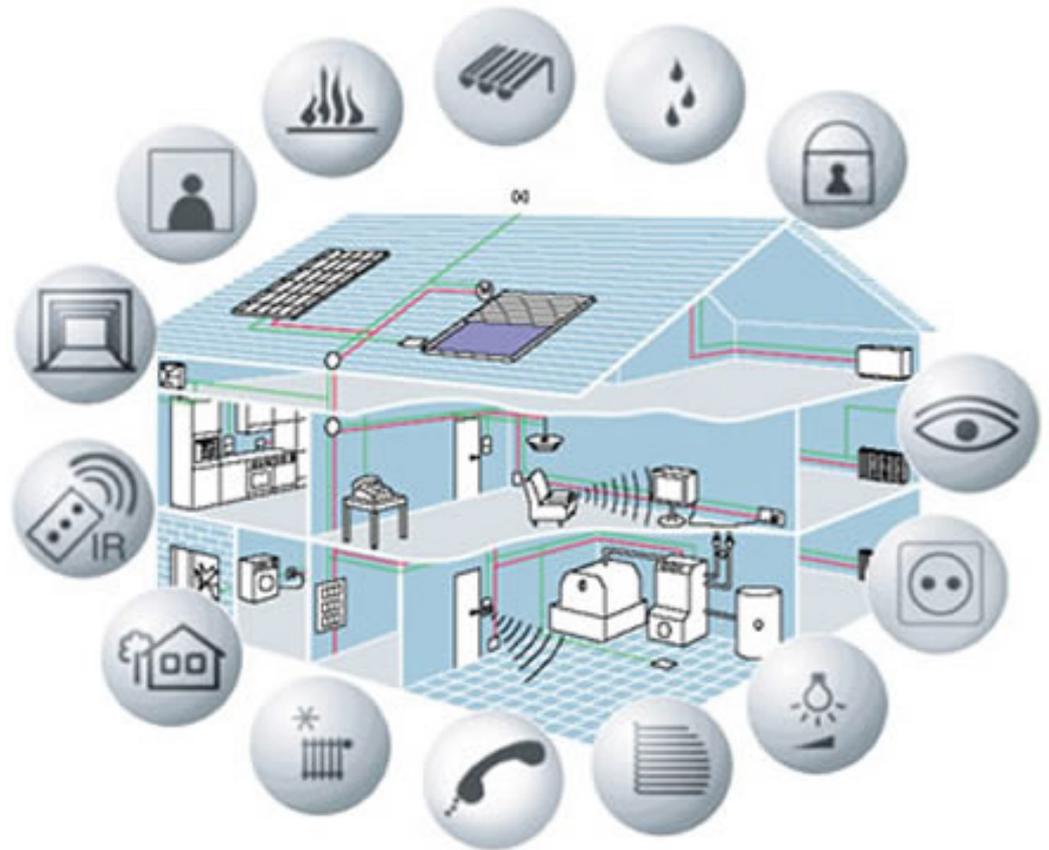
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Where does DOE fit?



“Smart”?

- **Knows better**
 - Data-based
- **Automated**
 - Makes decisions
 - “Learns”
- **Adds Value**
 - Saves Money
 - Saves the environment



Right Now

- **Collect Rich Data**
 - Take advantage of your core-competency connectivity
- **Make Human Connections First**
 - Focus on bridging the gap between end users and equipment manufacturers
- **Identify potential partners**
 - Check you market fringes for collaboration opportunities

Collaboration is Key

- Stay in your core-competency
 - Innovate faster

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