Impact of Emerging Technologies
A QSR View

May 15, 2011
10:00AM – 12:30PM
DECENTRALIZED – over 32,000 “small businesses”

GLOBAL – operating in over 110 countries
EMERGING TRENDS
ENABLING TECHNOLOGY

Mobility
Smartphones, Tablets
Mobile Broadband
Location-based Services
Product Scanning
In-Vehicle Ordering
Mobile Wallet

Connected Cloud
Virtualization
IPv6
Smart Equipment
Externalization
“Anything-as-a-Service “
(software, platform, infrastructure)
Event-driven Architecture
Awareness Platforms

2010
2015
& BEYOND

Context-based Information
A WWII ERA BOMBER REQUIRED 5-6 CREW JUST TO FLY THE AIRCRAFT
AN AIRBUS A380 REQUIRES TWO
Event Driven Architecture

Restaurants will use dashboards that monitor restaurant cleanliness and automatically alert a crew member to empty garbage cans before overflow.

Kitchen Equipment will alert staff and service providers when problems occur or when preventative maintenance is required.

Awareness Platforms

Restaurants will use exterior and interior cameras to monitor traffic patterns in-store and outside the store and will be able to automatically drop more fries when a bus pulls into the parking lot.

Proactive recommendations to optimize energy will be made based on historical consumption, current weather, kitchen usage and even Smart Grid input.
Brandon Tinianov, Ph.D., P.E.
Chief Technology Officer
Serious Materials, Inc.

May 11, 2011
1:00PM – 2:00PM
Advanced Innovation – Buildings for the Future

- Cloud based
- Open source
- Easy to deploy
- Integrated
- Scaleable
- Real-time
- Empowerment

The Finance Team

The Facilities Team

The Sustainability Team (kW, CO²)
Relevant Data – Real Results

On demand data for real-time monitoring and action driving energy savings.

Building out of square

Repairs made

Track energy drift
Living Buildings: Efficient – Productive – Connected

- Pulse of the building
  - Energy Usage
  - Environment
  - Productivity
- New dialogue with tenants and building managers
  - FaceBook
  - Twitter
- Most expensive assets on the floor: people
  - Comfort
  - Health
Improve the Building Beyond Controls

- Find the weakest link in the building and fix it
- Thermal comfort drives productivity
- Increased productivity drives and multiplies ROI
Baseline vs. Envelope / Glass retrofit

- SeriousEnergy Manager’s Efficiency Analyzer measures energy savings impact of an envelope retrofit, lighting measure or DR strategy.
- Real-time information, not data
- Useful views for all user levels
- Buildings are productivity engines
- Efficiency decisions and based on productivity and deep efficiency
The Impact of Emerging Technologies on Facilities

May 15, 2011
10:00AM – 12:30PM
Cloud Computing

“Building in” Building Redundancy in the Cloud

Data center computing meets low cost infrastructure
“Mesh Computing” and relational data sharing from multiple sources
HEM (Honeywell Energy Manager)
BOS (Building Optimization Services)
VERA (Variable Energy Resource Allocator)

Wireless Networking

“Meshing” with Wireless Networks

What does wireless have to do with the price of copper in China?
When everywhere is the “last mile”
The Security elephant in the room
Smart Grid and BIM

Smart Grid and Open ADR
Standards, Turf Battles, and “Glue”
LonWorks and LonMark opportunities
After the standards……

BIM (Building Information Modeling)
Engineering Joins The Real World
Beyond “Collisions” and “BIM Storms”
Understanding through 3 Dimensional Modeling
Real time relational 3 D viewing
Lowering installation and replacement costs
Thank You