



## **What is a Next Generation / Intelligent Building?**

- Design
  - Energy efficient design (LEED)
  - Complete building modeling
  - Focus on building circulation and Feng Shui
  - Common spaces for networking
  - Integration with transportation and surrounding community
- Construction
  - Sustainable construction practices
  - Electronic project documentation
  - Modeling extended into construction
- General
  - Tenant amenities
    - Concierge
    - Shopping
    - Restaurants
    - Lodging
  - Optimized vertical transport
  - Personal comfort control
    - Temperature
    - Humidity
    - IAQ
    - Lighting
    - Acoustic
- Networking / Telecom
  - Common network infrastructure
  - Structured – maintainable cabling
  - Wifi
  - VOIP
  - Digital signage
- Security / Life Safety
  - Digital video monitoring
  - Access control and monitoring
  - Automatic fire suppression
  - Fire detection and alarm
  - Egress support (lighting, signage, smoke control, etc.)
  - Contaminant monitoring and containment
  - Proximate security / guard services
- Mechanical
  - Energy efficient equipment
  - Thermal storage

- Combined heat and power
  - Controls optimization
    - Extensive sensing
    - Energy efficiency
    - Indoor air quality
    - Comfort monitoring
    - Internet enabled controls
    - Enterprise integration
    - Water and gas metering / sub-metering
- Electrical
  - Energy efficient lighting
  - Lighting control
  - Distributed generation
  - Dual power feeds / emergency power
  - Power quality monitoring
  - Sub-metering / billing
- Operational
  - Integration of all systems
  - Remote operations and optimization
  - Tenant portals
  - After hours operation
  - Maintenance management and dispatch
  - Energy information and management systems
  - Real time energy response
  - Continuous comfort monitoring and feedback