Commercial Building Automation Key Points

- System Integration
  - Our company has over 150 years of combined experience in engineering research and development for the Department of Defense, Department of the Navy, Homeland Security, Commercial and residential clients.
- Open Architecture
  - Our company specializes in the integration of multiple systems and protocols. This allows every client to leverage the latest technology to get the best product at the lowest cost.
- No Proprietary Systems
  - Our systems are not based on any proprietary hardware or software which allows for affordable and easy upgrades, modular approach to systems, easy expansion and re-configurability.
- Distributed Automation
  - By distributing intelligence throughout the automation system, the function of the overall system is not dependent on one computer. Multiple computers have to fail before starting to lose partial capabilities of the system.
- Condition Based Maintenance /Intelligent Machinery Health Monitoring
  - Systems can autonomously reconfigure resources based on impending equipment failure. This reduces repair costs by avoiding catastrophic failure while eliminating down time.
  - After automatically reconfiguring, email messages can be sent to maintenance personnel for repair action.
- Automatic Reconfiguration After Damage, Equipment Failure, or Operational Mode Change
  - Any system including electrical, water, communication, fire main, HVAC, lighting, and others can be reconfigured based on inputs from an operator or from the automation system itself.
  - Operational mode change based on normal activity. For instance, arming the alarm system automatically turns off the lights, reduces

thermostat temperatures, turns off hot water heaters and any other non critical electrical loads, etc.

- Web Based Control and Monitoring on Wireless Handheld Devices, Cell Phone, or Internet
  - Single User Interface for All Systems
  - Login Determines User Access Level
- Sensor Fusion
  - Software decisions are based on multiple inputs so that multiple failures have to occur before loss of partial capability
- Building Survivability
  - Distributed auxiliaries are part of a base design to make buildings more reliable and survivable.