

# Wireless management systems build bottom lines

By DAVIS WATKINS, VICE PRESIDENT  
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It is certainly not news that the current business environment is tough. But, even in the best economic times, this industry is challenged with growing revenues, increasing profit margins and expanding market share.

Even when business is booming, competition from new operators in your market makes it difficult to survive, let alone thrive.

Most business owners have heard great advice about working smarter, and being more energy efficient. However, few know about the recent advances in wireless network technologies and how these advances offer significant financial growth for their operation.

What is being heralded as a new class of "drop in" energy management systems (EMS) for businesses with small to mid-size facilities has arrived, made possible by the recent advances in wireless technologies.

These affordable, feature-rich wireless EMS products offer energy savings that enhance profitability and a reduced carbon footprint in line with increasing demand for companies to employ green business practices. What's equally exciting about this technology is its operational simplicity and ease-of-use.

Until now, most businesses with small to mid-size commercial buildings have had no affordable option to implement an energy management system of any notable scale. And ironically, a large portion of this building-size segment uses more energy per square foot than any other commercial space.

So how does wireless technology rectify



this situation? In much the same way a wireless network in your home can support multiple devices, like a laptop, desktop, printers, and handheld video games, a wireless network system can now be deployed into a commercial building.

These wireless networks will support multiple controls for that building's main energy using equipment - HVAC and lighting. The system also allows for real-time wireless monitoring of the total electrical consumption

(Kwh) for the entire building. More importantly, it takes the entire process straight to the Internet, enabling remote monitoring and control from a central location.

What makes these wireless EMS systems so attractive is their simplicity, effectiveness and affordability.

Most HVAC contractors can install these systems in just a half-day or less by replacing the existing thermostats in the building with radio equipped wireless thermostats. A factory

accessory will allow wireless control of up to eight other circuits for lights and ventilation. Basically, any equipment that could benefit from having an operation schedule applied can usually be joined to the network.

Next, simple current transformer clamps are slipped around the main electrical feed lines to the building, and they are joined to the network.

Then, a real-time graphic interface touch panel display is installed on the wall in a manager's office.

This panel is actually the new local central control and monitoring point for all HVAC equipment, lighting, refrigeration and other mechanicals. Simply enable the power and Internet connection button on the back of the touch panel, and the building is now saving energy, saving money and controllable remotely via the Web.

In addition, these systems offer users the opportunity to establish a remote "gatekeeper" of each building you upgrade with these wireless EMS products.

From setting schedules through the Web interface, to being the contact that receives and responds to any over temperature alarms, to creating monthly comparative energy consumption reports, full control of a business' energy consumption may be managed remotely.

For the throngs of commercial entities with small to mid-size buildings desperate and clamoring to controlling energy costs, wireless EMS systems offer unprecedented opportunity — a scalable solution that can be affordably deployed.

## Working to attract tomorrow's professionals today

By JACK TERRANOVA  
CASSIDY TURLEY

Due to the downturn in the commercial real estate market, the role of the Property Manager continues to evolve.

Various demands are being placed upon property managers across the country as a result of the changing landscape of the real estate

industry and the economy.

Therefore, the new role of a property manager may also resemble and include responsibilities more typically assigned to that of the asset manager, such as identifying change of use opportunities for a property, understanding of market issues and trends, recommending and implementing a capital improve-

ment program not only to replace aging equipment but to increase rental value, and assist in or create a marketing plan for a property.

To remain competitive in today's marketplace, property managers have been required to adapt to the changing role by obtaining their RPA (Real Property Administrator) certification from Building Owners and Managers Association (BOMA), or CPM (Certified Property Manager), ACOM (Accredited Commercial Manager) and AMO (Accredited Management Organization) from Institute of Real Estate Management (IREM) or a Masters Degree in Real Estate.

The modern day property manager is required to not only be able to respond in an emergency, but to clearly understand their owner's goals and objectives, enhance property value by increasing income, drive down costs and increase net operating income (NOI).

These are the fundamentals



of real estate investment and finance, and require knowledge of both engineering and finance.

Prior to the downturn, properties in Manhattan were being sold for upwards of \$800 per square foot.

Employment was relatively low with buildings trading for cap rates that were highly leveraged and at levels never seen before.

Compared to the role they held in the 1980's, your typical property manager was someone well versed in the technical aspects of the business, gaining "hands on" experience, and working

their way up. At that time, a college degree was a rarity and a professional engineer's license was even harder to come by.

It has increasingly become more difficult to find those candidates qualified and well versed with engineering or finance backgrounds that want to assume the responsibility of operating and managing these highly valued assets.

The minimum qualifications and job requirements for someone to be managing the day to day operations of these highly valued assets are being revised once again — with the bar being raised

higher than ever.

Why is it so difficult to attract the professional engineers or CPA's to this side of the business? Is it the salary or the 24/7 requirement of the position?

It seems difficult to even find those with bachelor degrees to apply for these positions today.

In order to attract and retain young engineering and accounting students in the commercial real estate field, the industry must look outside the box and recruit the qualified candidates and not limit to those who hold Bachelor degrees only.

## A few degrees that add up to some big savings

By BENJAMIN SCHWARTZ,  
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Most building owners and property managers know that little steps can make a big difference. As a property manager, I try to take advantage of every possible way to reduce fuel use and save money. Here are some small changes that will yield big savings for your properties.

**ANALYZE:** The first

hourly, primarily keeping it at cooler temperatures and raising it to prevent short cycling during peak periods. With a well-maintained coil, the temperature can be lowered to minimum boiler spec operating temperatures during non-peak periods and raised during peak periods.

**MONITOR:** The third step is to monitor your boiler runtime. Using USE Manager, which integrates information from the USE Controller EMS and The Verifier, you can track the decrease in boiler runtime and compare this data to other buildings in your portfolio. By viewing historical reports, you can track how the changes in water temperature directly impact the efficiency of the boiler.

**CALCULATE:** Next, calculate your savings. The changes were small, but the cumulative savings will be thousands. If you calculate the savings across your entire portfolio within an entire year, it adds up to tens of thousands. My clients really appreciate it.

**EVALUATE:** Finally, evaluate how this small change throughout your entire portfolio has helped you reduce boiler runtime and save money. Have you continued to keep the boiler water temperature low during non-peak periods? How much have you saved over a designated period of time for one building and for your entire portfolio?

For example, I took these steps in a building I manage at 116-40 170th Street recently and I found a savings of \$5/day in fuel consumption, adding up to almost \$2,000 over the course of a year. While the modifications might be small, the cumulative savings is large.

Consider how much I can save if I take these steps in each of the buildings I manage and keep it going throughout the year.



step is to analyze the temperature of your boiler water. Remember that at 180 degrees, the water temperature drops quickly, which extends the runtime of the boiler. However, if the water temperature is 170 degrees, the water does not lose heat as quickly. Essentially, the hotter the water temperature, the quicker it loses heat and the more fuel it takes to maintain the temperature. This extends the runtime of the boiler, causes more electricity and fuel to be used, and creates more pollution.

**ADJUST:** Next, adjust the boiler temperature. In many cases, it can be lowered, which will reduce runtime while also keeping the system running well. Make the adjustment using your energy management system, such as the USE Controller EMS. You can even adjust the boiler water

## New Yorkers are sleeping with the enemy

By BEN WEISEL  
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New York has been invaded by hungry, skin-piercing, bloodsucking pests called bed bugs, and this is an epidemic of historic proportions.

In February 2009, the City Council held an open hearing to discuss some possible solutions, and in March 2009, they enacted legislation creating a Bed Bug Advisory Board.

In a bill filed December 31, 2009, it appears the Council is moving toward requiring better sanitation of reconditioned mattresses, rather than banning their sale outright. In order to stop the proliferation of bed bugs in New York, we must ban the sale of reconditioned mattresses in

their entirety.

In the early 1900's bed bugs were commonplace — they were everywhere in New York and once the population got out of control, it was impossible to rein it in. They almost disappeared in the mid-century, as washing machines, vacuums, increased attention to cleanliness and more sophisticated extermination methods made them practically obsolete. That is until recently.

For example, the Department of Housing Preservation and Development cites that there were very few complaints filed in fiscal year 2003, but by the end of 2006, the department received over 4,638 complaints (a conservative number since many infestations go unreported).

Additionally, calls to 311 about bed bugs doubled between 2006 and 2008 to more than 22,000, according to city records.

When the City Council Committee on Health, Sanitation and Solid Waste Management and Consumer Affairs held an open forum in February 2009, they discussed three different options: a ban on the sale of reconditioned mattresses, the creation of a DOHMH training program on proper bed bug elimination techniques, and requirements to label mattresses prior to disposal.

On December 31, 2009, however, the City Council filed legislation to "promulgate standards and rules concerning the sanitization of mattresses that include requirements sufficient to eradicate bed bugs in reconditioned mattresses before their sale."

This legislation does not go far enough — we must immediately ban the sale of reconditioned mattresses to prevent the proliferation of bed bugs.

In April 2008, Dateline NBC conducted an investigation into the process through which reconditioned mattresses are sanitized and found that bed bugs are not completely eradicated even after the mattresses are disinfected.

Furthermore, they found new mattresses stacked against old and rebuilt mattresses, which is concerning as bed bugs can move from one to another.

Creating committees, increasing training, and requiring specific types of disposal are all useful steps; but we need to ban the sale of reconditioned mattresses if we want to truly address the bed bug problem in New York.



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