Journal of Italia management

THE LATEST RESEARCH AND MODELS FOR OPTIMIZING UTILITY USAGE IN MULTIFAMILY

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MUST READS

FUTURE-ENABLING APARTMENTS WITH INTERNET

RENT CONTROL: KEEP UTILITIES OUT OF IT

THE BUSINESS CASE FOR SUBMETER UPKEEP





REALWORLD**2019**

connect. discover. exceed.

SPECIAL EDITION

Journal of **Utility**management

utilitysmartpro.com

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Connect. Discover. Exceed.



Welcome to the summer edition of the *Journal* of *Utility Management*, our quarterly magazine designed especially for those considering the operational impact of utilities on their multifamily businesses.

Summer is the season for vacations, picnics, pool time, visits with family and friends and more. It is also the time to implement effective energy and water management measures that allow property managers to save money while enhancing revenue. It just takes a little attention to detail.

The often-misunderstood world of utility management provides for the rare win-win scenario. Attention to utility details saves operational dollars, enhances operational revenue, decreases repair and maintenance expenses, generates conservation and enhances the resident experience through timely and accurate utility billing.

Is it worth the investment and attention to detail?

This edition of JOUM provides the insight needed to decide for yourself. Inside you will find information that will allow you to **connect** relevant facts and ideas about the relationship between water submeters, resident billing, regulatory compliance and the effective impact on bottom-line performance. You will **discover** that mining utility data parlays well into a wholistic approach to expense management and that integration of the data is not only possible, but is a differentiator for topperforming companies.

Finally, the additional details revealed in this issue regarding Building Management Systems (BMS) in multifamily, as well as tips on managing property cable and trash services, will likely **exceed** your expectations by providing actionable advice.

This publication's curators are dedicated professionals who give their best to provide quality support to the multifamily industry. They are an excellent resource for you and your company.

Together we can **connect**, **discover** and **exceed**.



Wes Winterstein
Vice President,
Utility Management Advisory
and Journal Guest Editor

The Golden Spike

In May 1869, the last link in the transcontinental railroad was completed in Promontory Summit, Utah, as the Union Pacific No. 119 and Jupiter locomotives were drawn face-to-face. A golden spike commemorating the event, which was actually delayed two days past the date engraved on the original "golden spike" due to weather and a labor dispute in the West, was specially created.

The event symbolized the connecting of two oceans as two rail lines begun over 3,000 miles apart, met at the heart of the country it joined as one.

It's not much different today. Technology has taken both our nation and our apartment operations by storm. Brilliant innovations, but mostly singular and separate in function and purpose. Many different pieces rather than one cohesive whole, both from the viewpoint of the apartment operator and manager—and, perhaps even more importantly, from the perspective of the resident.

And that my friends, is the next big thing. Connection. Coalescing all of the moving parts that make the whole of property management. Where the two (or many) join together to form a single, seamless operation and an enjoyable resident experience, bringing oceans of innovation together. Things are about to get very interesting.



Jason Lindwall Publisher



What do Americans do online?

As more services are digitized—for both residents and apartment businesses the internet has become all the more necessary. For the first time in 2019, Americans spent more time on their mobile devices than they did watching television.

That meant 3.6 hours on their phones compared to 3.5 hours on TV. Just a decade ago TV watchers averaged 4.4 hours a day while mobile users clocked in just 20 minutes daily.

(2019 INTERNET TRENDS REPORT BY MARY MEEKER, PEW INTERNET, AMERICAN LIFE PROJECT, STATISTA, 2017)

Future-enabling apartments with internet

The World Wide Web has changed everything. Today, those Americans not online have shrunk to less than one-tenth of the nation's total population, from 48 percent in 2000, according to Pew Research. For our residents, the internet is integral to daily functions including communications, purchases, transportation, logistics, and everything else.

For property owners and operators, internet connectivity facilitates smart building operation and many internal functions including transactions and utility monitoring. So what makes a property ready, even hardened, for the future?

The internet has been called the fourth utility, just behind electric and gas, water and sewer, and trash and recycling on apartment properties. Once an optional amenity that gave competitive lift to a property, the convenience of online services and entertainment is compelling, even addictive, and is quickly moving connectivity to a top spot for residents in their list of must-haves.

More adults report being online "almost constantly," according to a recent Pew report. Twenty-six percent of Americans rarely disconnected from the internet in 2018—among the 18-to-29 demographic, that number jumps to 39 percent, according to Pew Research.

Amid the digital evolution of property management, tracking and managing utility consumption and cost is long an objective of many apartment operators. To control the once-believed uncontrollable may be the ultimate challenge. Tim Haddon, director of strategic business services for PK Management, LLC headquartered in Greenville, S.C., has spent a career creating scores of pay-back models on apartment retrofits and processes in order to find profitability through greater efficiency. His latest focus—internet infrastructure—speaks to the near complete transformation of the internet from amenity to utility.

"As an industry, we once thought of the internet as an amenity. New technologies have transformed the internet into a musthave, like electricity," said Haddon. "You could live without electricity, but you probably wouldn't like it long term."

"Each community is different. The location, the people are different. What plays in different parts of the country in terms of speed and options varies," said Haddon. "Your community's offering affects your ability to rent units. Sometimes you can just offer one great service, and sometimes you need choice. Additionally, offerings can depend on ownership. Some operators have a standard approach, and some don't."

Building out and including an internet service across a building or property is complex with many moving parts. In certain areas of the country, the construction company or market service providers dictate service type and availability. Haddon suggests that the optimal environment is having the space and infrastructure to offer multiple providers. The caveat is that multiple providers must operate in a given market in order to offer a choice to residents.

Open conduit is the bottom line, said Haddon. This means unused, open for any wiring that comes along. "That way, whatever the new technology, you have space and are ready for installation. For existing buildings, it is always tougher and costlier to change infrastructure," said Haddon.

The internet is the backbone of all this IoT (internet of things). Having a flexible, property-wide infrastructure ready for the next big thing will be critical. "You cannot have the internet of things without internet," he added.

As with any utility, regulations have already begun to emerge. And that's the next chapter in the brave new online world. Author Mary Nitschke

Power couple: Resident billing and invoice processing

Utilities are among property managers' top operating expenses, according to the NAA's most recent Survey of Operating Income and Expenses. Rising utility costs and unforeseen rate hikes coupled with increased utility billing regulations, as well as renter expectations of online payment options, have created a conundrum for multifamily owners who realize they must come up with an equitable way to pass those costs on to their residents.

But many owners are afraid of either losing renters or running afoul of regulators by charging for utility usage. They continue to include utility costs in the rent or charge a low flat fee for utility consumption.

Most industry experts recommend against the decades-old practice of including utility costs in the rent, since chances are high for either over- or undercharging for residents' usage, the latter of which is illegal in some states. Including utilities in the rent also puts a community at a disadvantage in a competitive market and ensures that utility expenses will be much higher than if the residents paid their own utility bills.

To recoup costs, experts suggest property management companies implement either a submetering program or a ratio utility billing system (RUBS)—an allocation formula that divides a community's utility bills among its residents based on floor space, the number of occupants, or some other quantitative measure.

Billing residents for utilities is not a new practice. It began in the late 1990s as a measure of sustainability when REITs noticed that renters reduced their overall consumption when they participated in the actual expenses of the property rather than paying an arbitrary flat fee to cover their consumption.

Passing the cost of utilities on to the residents is a proven way to increase a property's bottom line, but the labor, regulatory liability and time-intensive process of auditing bills, invoicing renters, processing payments, keeping up with collections and generating management report are rife with potential error that can translate to lost income when managers are required to take on the tasks in addition to their apartment management duties. Close to 75 percent of owners with at least 24,001 units chose to outsource to a third-

party provider for their bill-back program.

In addition to the resident bill-back program, there is an opportunity to outsource the management of utility invoice processing to a third party, eliminating the burden of timely payment of the utility bills from the property site teams or corporate accounts payable teams. Leaving these tasks to a dedicated invoice processor takes the onus off the property manager and puts it on the processor, thereby reducing exposure to shut off, late fees and faulty charges.

Hiring a third party that specializes in utility billing solutions is not just for REITs and other top 50 managers and owners. Even smaller apartment owners are leaving the invoicing and bill back of utilities to professionals who focus entirely on the billing process and collection of data, freeing up the site team to focus on leasing units and maintaining the community.

Combination of the two

Resident billing and invoice processing are separate processes that can be accomplished in-house but are best outsourced, according to RealPage VP of Sustainability Mary Nitschke, an industry veteran who served 18 years as director of ancillary services for Prometheus Real Estate Group.

"The power coupling of third-party resident billing and invoice processing is like peanut butter and chocolate. They work great on their own, but together they make the utility management program run effortlessly while taking the burden off the community site team," she said.

Third-party processors receive, audit and pay all utility bills and integrate and reconcile invoice data into property management software (PMS) or accounting systems. Integrating with the PMS for a seamless process between payment receipt and accounting reconciliation results in time savings and increased NOI. Third-party processors proactively reach out to utility providers when invoice irregularities are detected, reducing late fees and increasing vacant-unit expense cost recovery.

Other value-added benefits to using third-party processors include access to analytics. RealPage, for instance, utilizes an analytics backbone that can lead to improvements at the property level by drilling down into usage data, using weather trends and comparing a property against other like communities in the market. In California, where benchmarking for any property with more than 50,000 sq. ft. is required, RealPage can handle the task.

If a property is not performing as well as its competitors, or performance has fallen off from the previous year, the processor can dig into expenses to find out why and recommend upgrades such as new lighting or low-flow sprinklers if, for instance, overspray and breaks are causing higher water bills.

Many of the recommended opportunities for cost savings can have less than a three-year payback. Since communities typically remain in portfolio for longer than that, an owner can expect a positive impact to the bottom line for 10 years, lending evidence that outsourcing utility cost recovery and utility expense management can help owners capture revenue that is being lost.

"But it all starts with the bill," said Nitschke.





In 1985, the Robert Zemeckis' blockbuster success, *Back to the Future*, landed in theaters. The movie thrilled audiences with its nostalgic view of the past (1950s) and its futuristic predictions of the future, like 24-hour-a-day news stations. This might sound twisted, but I love the moment when Biff repeatedly thwaps George McFly on the forehead saying, "Hello McFly!"

It's my battle cry when I'm missing something obvious. I imagine Biff's finger tapping my forehead. It's then that I think about smart apartments, IoT, and ask myself, what we are really missing? Eeh gads! Building maintenance systems (BMS).

Most of us now have a few years experience with smart technology. We know the value—and heartburn—of smart thermostats, locks, lighting and leak detection. We've barked at Google Home and Alexa, begging it to answer a question or turn something on—or at the very least, we know someone who has told us about the experience in detail.

We've been pitched on the potential savings in utilities for both resident and owner, to better control turnover expense. While these are good things, Biff is still tapping my forehead, "Hello Mary, what about the building?"

Consider the most recent round of construction and the focus on sustainability and well-being. In many cases there are expenses that are entirely owner-paid (like house electric), which can comprise approximately 22 percent of total utility spend. If you compare this to the cost of turnover, which is typically less than 5 percent of total utility spend, it looks like we have an opportunity to dream bigger.

Have you looked at your building's systems and fixtures lately? They are commercial-grade systems, yet the apartment industry has yet to integrate the same management controls that

• the commercial real estate industry has been using for over four decades. Yes. BMS has already been around since the 80s.

Think about it. If you have a garage, you have a mechanical ventilation system. If you have interior corridors, clubhouses, leasing offices—you're likely running commercial-grade HVAC to condition those spaces.

What kind of IoT do you use to manage those systems? Does it really make sense to install a highly efficient HVAC system, yet not provide your facilities team with the tools to manage and proactively maintain it?

Fun Fact: 90 percent of buildings waste 20-50 percent of their energy. The age of the building has no correlation to the energy efficiency. It's all about the tools, automation and proactive maintenance. As apartment developers construct more and more high-density product, why are we just thinking smart apartments? Think instead about how sexy your NOI might look if you, instead, considered smart communities.

Think, too, about our maintenance teams and how we've asked them to run 110 hurdles with their shoelaces tied together. In most instances, the systems we install are not connected. If you have a garden-style community with 20 buildings and each building has its own domestic hot water system, do you think your facilities team has the time to check the operational temperature of those systems

daily? Even if there is a remote view of the performance of say, an HVAC system, it's likely separate from the hot water system, garage ventilation system, pool system, and more.

How many different systems does the maintenance team need to monitor? Additionally, how much automation is integrated into those systems.

I chatted with a commercial building engineer regarding his BMS System. He loved it. He could maintain and service a building that was 15 minutes away from his desktop. I inquired what resources he would need if he did not have a BMS system. He indicated that he would need to increase his team size because they would be running around, less efficient and reactive instead of proactive.

He was also concerned that without a BMS automating HVAC temperatures that there would be an increase in events when spaces were uncomfortable and tenants complained.

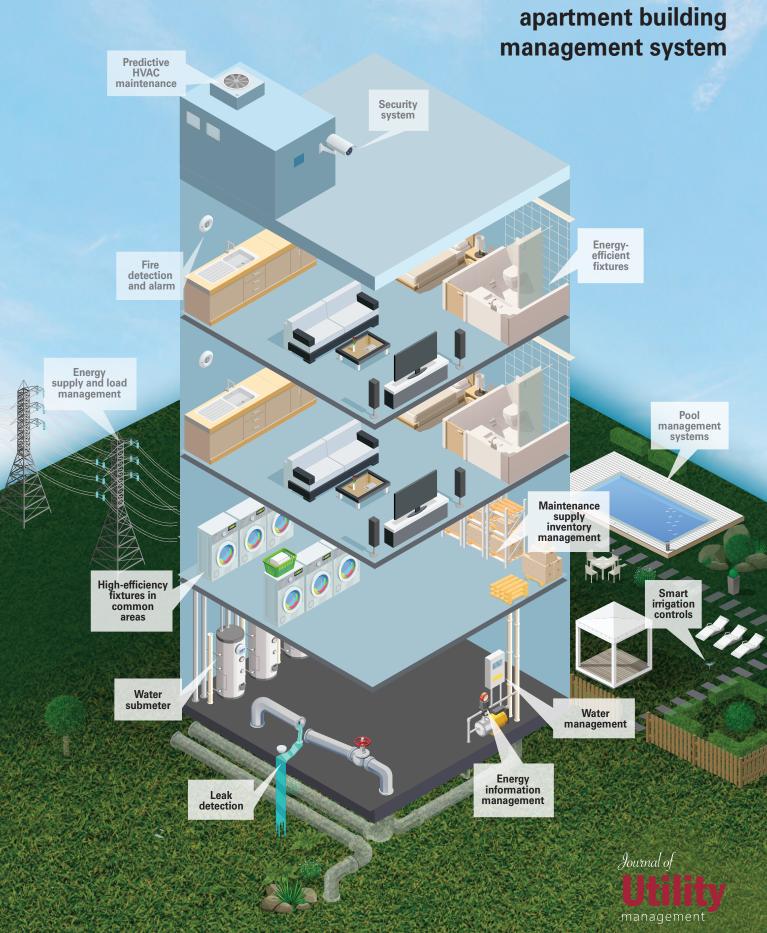
Back to our design. When we are constructing and retrofitting to add smart apartments, we should at least acknowledge the elephant in the room: our communities. They should be smart, too. In many cases BMS can install on an existing asset; those commercial buildings that have installed retroactively saw a 2-3-year payback. If we are not looking at BMS when we are looking at IoT for our communities, we'll ultimately have Biff drumming his finger against our forehead saying "Hello, McFly. BMS."



Mary Nitschke holds an Energy Resource Management Certificate from UC Davis, two BAs from UC Berkeley and was Director of Ancillary Services for Prometheus Real

Estate Group, Inc. for over 18 years. She's now VP of Sustainability with RealPage.

The anatomy of an





The rabbit hole of rent control

Landlords abandon markets. Developers stop building rentals. Apartment inventory drops. Resident mobility grinds to a halt. History, analysts and economists say that rent control will only worsen already bad housing shortages in those places with the greatest need for housing. Apartment owners don't want it. Associations warn of its perils. In 1999, Forbes weighed in when it published, "The Dumbest Ideas of the Century," citing the worst economic ideas of the 20th Century. Rent control was no. 2 just behind profit-taking.

Why, then, did Oregon become the first state in the nation this year to pass statewide rent control? And—after failing at the ballot in 2018 with 60 percent voting against—why did tenants rights groups help introduce two rent control bills in the California legislature, where Gov. Gavin Newsom has promised that the bills will become law? What's a constituency to do?

Rent control refers to laws and ordinances that set artificial price controls on rent regardless of ownership, property profitability or market demand. It restricts the rights of property owners, limiting how they may operate their assets and often limiting

the relief owners may seek from non-paying renters. In addition, rent control reduces the investment return and value of an impacted building, which is, in effect, a partial expropriation of private property.

Still, legislated rent control may be on its way in the Golden State. Demand has outstripped supply for years as California continues to create more jobs than its supply of housing is able to accommodate.

California's renters are paying, on average, more than half of their incomes on housing as the state's housing crisis intensifies. According to the state's Department of Housing and Community Development,

California needs to build 180,000 new homes annually through to 2025 to meet its growing housing demand. It's created less than 80,000 annually in recent years.

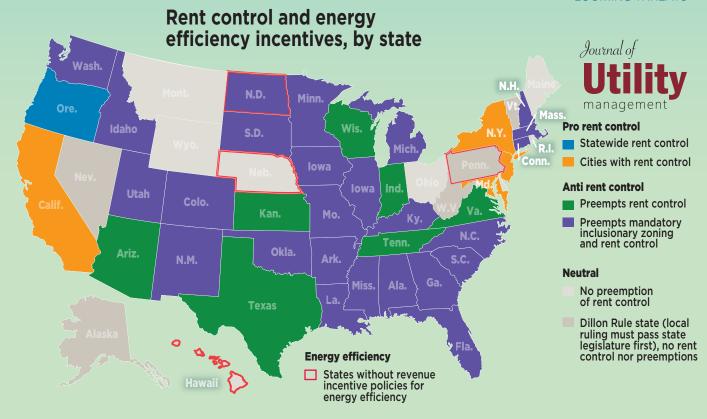
For residents, the short supply of housing is felt in rising rents and rising taxes that span property, sales, gas and other taxes in order to fund programs to reduce homelessness. At the same time, construction of new shelters meets significant opposition.

The Golden State is home to 12 percent of the nation's population, and nearly half of the country's unsheltered homeless. As homelessness rises, along with its accompanying health and logistical concerns, California legislators are looking for a quick fix. Maybe any quick fix to provide relief.

Landlords and developers are the first to advocate for building more housing. This would increase supply and naturally bring rents down. But apartment developers are faced with onerous building regulations, high land-use fees and municipalities that resist higher density and new building altogether.

Unintended consequences

California landlords may soon be faced with rent control, but also with related laws that reverse even the smallest progress toward conservation programs, like utility cost recovery programs and submetering, at a time when conservation of resources is most needed.



Utility cost recovery allows landlords to pass through utility charges to residents according to the residents' consumption. The utilities potentially affected by RUBS (ratio utility billing) include electricity, natural gas, water, sewer, and waste management services. Utility cost recovery is effective in creating awareness of residents' utility consumption, and historically results in a reduction in utility use. Conservation, transparency, reassigning control of consumption back to the residents—it was a brief, albeit important, win. However, RUBS is now becoming the latest casualty in a quest to solve the housing crisis by reassigning costs to landlords.

San Jose prohibits RUBS in rent-controlled units

For years, tenants' groups have fought at the California state level to ban RUBS and associated fees. Such a statewide ban was avoided in 2013.

However, last year when opponents of RUBS argued that its use created a financial hardship on the residents of San Jose, Calif. due to fluctuations in utility costs, the city council responded by enacting an ordinance prohibiting property owners from using RUBS. The ordinance was retroactive and voided existing RUBS agreements as of June 2018, although units built in San Jose after September 1979 are exempt.

The same ordinance limits other fees charged to residents, such as key replacement fees, NSF fees, late fees and application screening fees.

Reversing the progress made in reducing the split incentive, where residents consume utilities but landlords pay for them, and decreasing consciousness among residents around conservation seems counter-intuitive in a pro-environment state such as California. Financial relief for residents may come at a high long-term price for the drought-prone state.

The longest look back: NYC

New York City is the granddaddy of rent control, having had some form of the law since 1947. Nearly a million of the city's units are rent-regulated, falling into one of two classifications: rent-controlled or rent-stabilized.

Built before 1947, rent-controlled apartments are occupied by residents who have likely had the unit passed down to the resident by family members since 1971. The landlords of these generational residents may charge no more than maximum base rent—a number that includes utility costs, property taxes, maintenance fees and return on investment. Landlords may raise rents every two years by no more than 7.5 percent. However, rent increases are subject to lengthy legal challenges by tenants.

New York City's rent stabilization differs in that it impacts buildings of six or more units built between 1947 and 1974. In addition, landlords may opt into the rent stabilization program in exchange for tax benefits. Under this program, annual rent increases are set by New York's Rent Guidelines Board, usually at between 1 and 3 percent.

In June, New York Governor, Andrew Cuomo, signed a new and tougher rent control bill that shocked the real estate industry and made rent control permanent. New York building owners had removed over 300,000 apartments from rent regulation since 1994 through previous exceptions in the law. Nearly all exceptions have now been drastically limited or removed under the new legislation.

What lies ahead

Utility costs are among the most critical, albeit volatile, expenses for landlords and residents. Limited distributers and federal, state and local regulations only add to the complexity and cost of utility management and distribution.

Still, landlords remain the single largest distributors of utilities in the country. While an operational burden to landlords, utility management remains an attractive opportunity to increase conservation and also to control costs in the long run.



The next big thing in tech: CX (customer experience)

The industry has generated, analyzed and applied massive amounts of data to build successful apartment operations across the country. Data is used to calculate asking rents, track utility rates, find leaks, and just about everything else. The next horizon in this brave, new digital age: weaving all functions together to create a beautifully simple renter experience.

We now have smart apartments with remote-controlled locks, security cameras, smart lights, environmental controls, and more. Great stuff. Most residents welcome the convenience. Yet the truth is that all this hardware has yet to be connected in a significant, whole property, whole experience way. Disparate systems are not yet joined under a single purpose: to enhance the resident's life in one unified, seamless experience.

We can play music and rain sounds on our smart speaker, but the day has yet to come when we can ask Alexa to fix a leaky toilet, pay our rent or report a broken sprinkler head that we noticed on our evening walk.

The connection is not yet there. But it soon will be. Consider the progress we've made so far.

In the beginning there was data

Once there was big data. Unstructured, but massive and full of potential—or so we believed. We began to find ways to structure and analyze the data into points of knowledge, and then to use software to process the data in a way that delivered commercial value. Physical objects were low-hanging fruit in the process and allowed engineers to analyze data to better understand the past.

Case in point. Software analyzes water consumption on our property and alerts us to data anomalies. A sudden and irregular spike in consumption could mean a ruptured pipe, or just a popular time to run the dishwasher. We've made great strides in analyzing inanimate objects, processes and systems. The next great leap is a little more complicated

and requires behavioral science: meshing data against human behavior in order to create a simpler at-home experience for residents.

While analysis of user data has become a point of contention in the public arena, given that social media sites and others have used its predictive powers for ill, there are many industries that use data to provide unquestionable social good such as in health care, medicine and life sciences.

For apartment operators, the next, and bigger, step means connecting data with humanity in a way that is useful, simple and intuitive.

Lest we forget, residents have more powerful tech than apartment operators. Today's prospect and resident own the process. They dictate what they want, and apartment operators are in the business of accommodation. This consumerization of technology has essentially flipped the way business is conducted. Closely following the resident's preferences will forge a blending of human behavior and preference, enabled by tech.

Notable trends

Four notable trends for the future are the sharing economy, blockchain, augmented intelligence and the internet of things. All will impact the business of apartments, but none as much as IoT.

The two biggest challenges will be to truly connect not just an apartment, but a community, internally and to the world. Fully integrating maintenance systems, security, accounting and every other function creating the resident's experience, according his convenience and need.

The second challenge is that apartment operations are not built and structured to react in real time. Technology, on the other hand, is built to respond to users in the moment of their need. Connecting such responsive systems will require an operational shift and may be the industry's next disruption.

The truest indicator of tomorrow's best business practices will not be having the latest tech, but rather in exhibiting the behavioral changes that it enables.

Tomorrow's communities will have less to do with the property, and everything to do with the experience. No one knows that it's not about brick and mortar better than apartment operators.

The next big thing in rental prop tech will be the merging of many disparate systems and fragmented experiences into a single, simple, unified whole.

For apartment operators the latest tech will be all about creating simplicity at every opportunity.



PERSONALIZE DON'T MERCHANDISE

IT'S TEMPTING TO AUTOMATE FOR SPEED AND PROFITABILITY. RESIDENT X MUST BE REIMAGINED FOR A PERSONALIZED EXPERIENCE.

FOLLOW- THROUGH IS MISSION CRITICAL

POOR CUSTOMER FEEDBACK PROGRAMS (THOSE THAT DON'T PRIORITIZE FOLLOW- THROUGH) CAN MAKE PROBLEMS EXPONENTIALLY WORSE.

FOCUS ON THE HUMAN

AUTOMATING THE WRONG PROCESS CAN NEGATIVELY IMPACT RESIDENT X BY CREATING A ROBOTIC SERVICE THAT HINDERS, NOT HELPS.



^

FUTURE TECH: BUILDING

Resident X

(EXPERIENCE)

OF MARKETING TEAMS INVEST IN DIGITAL EXPERIENCES

IN ORDER TO FOSTER LONG-TERM LOYALTY AND BUILD STRONGER CUSTOMER RELATIONSHIPS



OF MARKETING TEAMS PRIORITIZE

UNSTANDING CUSTOMER BEHAVIOR

Journal of

Utility

<u>ma</u>nagement



Implementing a utility management program is an important step on the road to controlling the expenses on your multifamily property, but its only a step.

The technologies that make utility management systems function—using sensors to monitor utility consumption, collecting that information in a connected system and processing the data to provide meaningful operational intelligence—can be leveraged to create other cost-saving opportunities.

An obvious and oft-discussed extension to your utility management system is to use anomalies identified in utility usage patterns to identify maintenance issues. While there is value to being able to generate a work

order to fix a problem before the resident is even aware of its existence, this capability only scratches the surface of what is possible with an intelligent, connected expense management system.

Procurement management

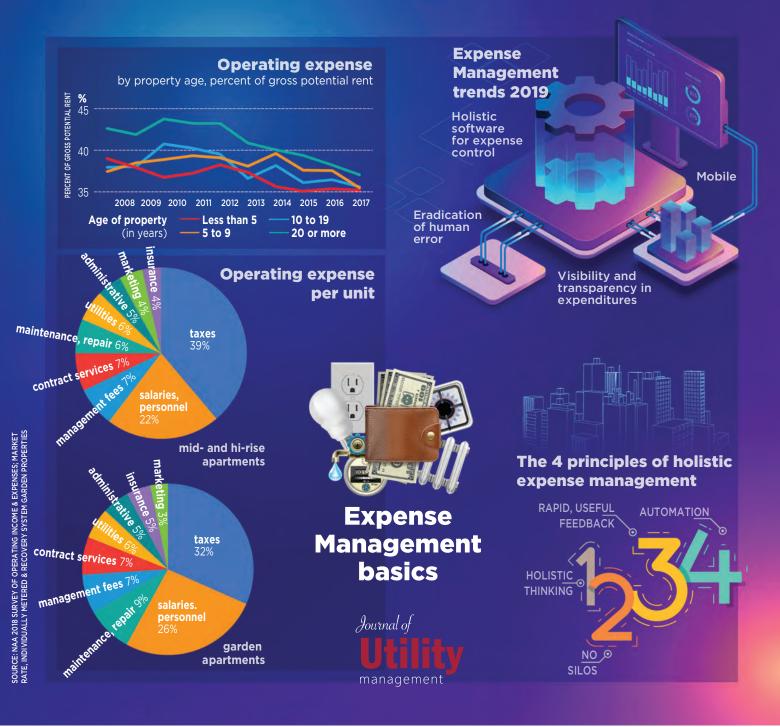
Suppose that your maintenance technician finds that he needs to replace a leaky shut-off valve. Your expense management system can provide him with a list of approved parts from approved sources.

The system can place the order electronically while handling the vendor's invoice electronically, eliminating paper from the parts-procurement process.

Vendor management: what to consider

A note regarding vendors—your expense management system should put this list under your control, allowing you to funnel your business to the most cost-competitive suppliers. Thus, your expense management system can allow you to save money on the cost of parts on the front end even as it saves you money on invoice processing on the back end.

Larger vendors of expense management systems may have marketplaces of vendors which they have accredited and that they can leverage to further reduce your spending on maintenance.



Energy management

With the right vendor, the data collected by your utility management system can also be leveraged to create an energy efficiency benchmark for your property. This benchmark can be used for your internal purposes, such as to compare the operations of similar properties in your portfolio, or it may be compared to an industry standard such as EPA's EnergyStar rating system.

Given the increasing importance of living sustainably for today's residents, having an EnergyStar rating on your property may allow you to command a price premium for your units, boosting your NOI. It may also allow you to qualify for reduced cost "green"

loans from Fannie Mae and Freddie Mac, reducing your cost of capital.

Expense management

While we have discussed the data that the provider of your expense management system collects *on* your operation, a modern, connected expense management system also allows the system supplier to collect and provide data *for* your operation.

This data may be on things such as current utility rate schedules by time of day, which allow you to fine-tune your operation to minimize your utility costs, or it may be information on pending regulatory changes. Regulations currently being imposed on mul-

tifamily housing providers by some jurisdictions include mandatory submetering (p. 14) and mandatory benchmarking and reporting of the consumption of utilities. Knowing the changing rules of the road allows you to mitigate your regulatory compliance risk.

When considering providers of utility management systems, owners and managers of multifamily properties should look beyond simple utility expense management to management of all related expenses. By selecting a system supplier with the product breadth and depth to improve your maintenance operations, streamline your vendor relations and alert you to imminent pitfalls, you can reduce your operating expenses and increased NOI.



The business case for submeter upkeep

Submeter maintenance means potentially avoiding unnecessary expenses and regulatory headaches.

In Massachusetts, landlords must "retain an affirmative obligation" to maintain submeters and any other water conservation devices. They must also respond in a timely manner if a resident complains about an overcharge, and the resident shall have "all rights and remedies provided under law for such overcharges or such violations."

The same goes for Texas, where the rental property owner is responsible for installing, maintaining and testing all submeters or point-of-use submeters. If a resident asks in writing for a meter test, the owner must prove the meter was calibrated or tested and shown to be accurate within the preceding 24 months.

In both states, the onus is clearly on the property owner or manager to ensure that submeters for water, electricity and gas are working accurately and recording the correct usage.

Massachusetts and Texas are just two of 22 U.S. markets that have protocols and regulations that require apartments to maintain good meter health long after the installation is complete. Submeters must be periodically inspected for compliance and verified that they are in good working order. If they are not and a resident complains about an unusually high bill or problem, regulatory officials are likely to get involved and landlords could be held responsible for overcharges and repairs, even fines.

Some markets permit the landlord to estimate usage for only one month. After that, charges must tie to exact meter readings.

The growing use of submeters in multifamily and other housing and commercial spaces is a result of the desire of property owners to encourage conservation and mandates from city and state agencies to require monitoring

of resident usage for water, electricity and gas.

In the past, landlords could estimate usage and pass along costs to the resident. Now with greater focus on energy conservation, some markets are prohibiting estimation and requiring operators to charge based solely on submeter readings.

The electric submeter industry has subsequently caught fire.

According to Research Nester, a market research and consulting firm, the electric submeter market will have a compound annual growth rate of 12 percent through 2027. In its report, "Electric Submeter Market: Global Demand Analysis & Opportunity Outlook 2027," energy conservation is coupling with rising demand for monitoring electric energy, which "is expected to boost the market growth of the electric submeter market across the globe."

Also, "Global Electric Submeter Industry 2019," released in June by Market.us, projects consistent revenue growth for the electric submeter market over the next nine years.

Submetering installation is only half the battle, though. With more meters in the marketplace, the focus is shifting to compliance and maintenance, says RealPage Senior Director of Submeter Operations Jay Mitchell.

"In the past it might have been a focus for the key competitive states," he said. "Now we've had a huge increase in general awareness. Some markets may have had regulations and didn't enforce them but they are now."

Regulations and enforcement are evolving and vary by market but in most cases the landlord can be responsible for paying excess energy or water consumption charges if the submeter is found to be faulty. In California, where a multifamily submeter mandate went into effect Jan. 1, 2018, and caused a ripple in the apartment industry, a landlord can be forced to absorb volumetric usage charges after 180 days if a problem has been investigated but not corrected.

Typically, regulators only get involved when

a resident complains about higher than normal charges or an obvious problem, such as a leaking faucet or toilet that is sure to impact meter readings.

Submeter mandates have been frowned upon throughout the multifamily industry but it's important, Mitchell says, that landlords comply and maintain their meters to avoid the possibility of a resident complaint that gets local and state regulatory officials involved.

"In North Carolina, if you have a resident who believes they are under-billed or overbilled they can file a complaint with the North Carolina Utilities Commission," Mitchell said. "If you have too many complaints, it could be a huge deterrent. You could have some fines and penalties. And in some states, if you don't correct it, you are no longer able to cover that utility expense."

Mitchell recommends that meters be periodically inspected for signs of wear, including corrosion. The useful life of a meter is typically 10 years but one that goes unmaintained may not last as long. A new meter can run \$65-\$150 but absorbing usage charges and an unhappy resident can cost as much or more.

Sporadic and haphazard meter readings are a sign that something is wrong inside and outside the unit. Regular submeter maintenance can eliminate unnecessary headaches.

"Residents must have confidence that their meter is effective and accurate, and operators need confidence that it's effective and accurate," Mitchell said. "Submeters are an excellent way to encourage conservation. Like any hardware, they require maintenance and upkeep, and perform best when maintained."

Author Tim Blackwell





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