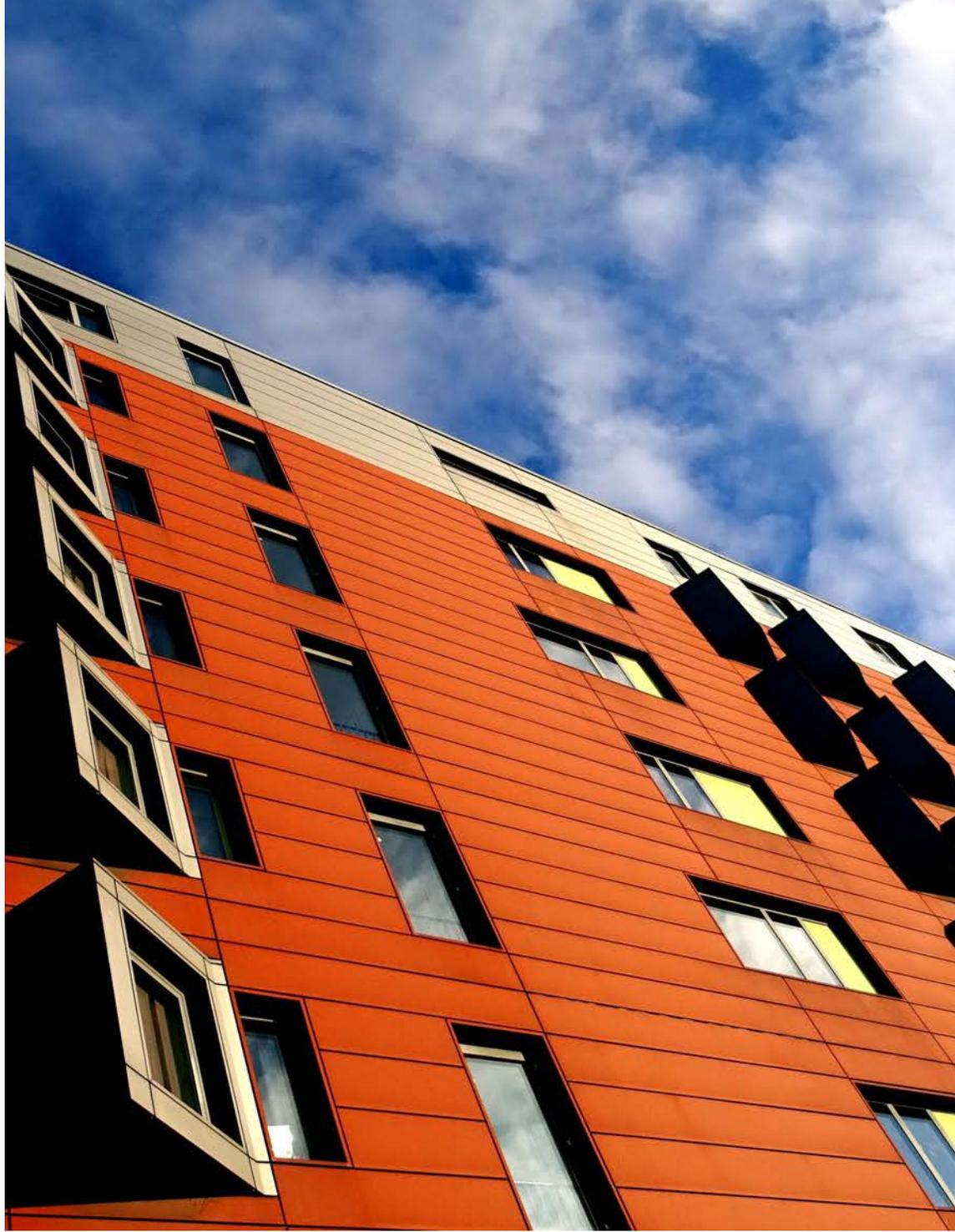# Hubsai

THE BENEFITS OF AN END-TO-END SMART APARTMENT EXPERIENCE FOR PROPERTY MANAGERS & TENANTS

SMART HOME TECHNOLOGY CAN OFFER OPERATIONAL EFFICIENCIES & PEACE OF MIND WHILE DELIVERING ROI FOR MULTIFAMILY PROPERTY OWNERS

"We are seeing Smart Apartment technology hitting its stride among multifamily owners. This is because we see property owners willing to deploy property-wide rollouts as opposed to single-unit deployments based on resident demand.

The technology around smart thermostats, locks, moisture sensors and load monitoring has matured to the point where apartment owners and managers are able to underwrite the cost of deploying the technology on an operating and cost savings basis."

John Helm, Partner
Real Estate Technology Ventures

Research and white paper design by Christine Pearsall

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WHY SMART APARTMENT TECHNOLOGY IS RELEVANT TO MULTIFAMILY PROPERTY OWNERS TODAY

The multifamily property vertical is emerging as an attractive market for smart home technology. Today, many property owners are looking for ways to differentiate their properties, generate revenue from higher unit prices, and save on operational costs by investing in smart home technologies. These technologies, which can be offered as a "Smart Apartment", enable property managers to run buildings at optimum efficiency, while providing a better living experience for their tenants.

According to the National Multifamily Housing Council, about 35% of the U.S. population, or over 112 million residents, rent their primary residence. The trend for this population is to reside in urban areas, and the demographics are millennials roughly in the range of 18-35 years old. This age group is most likely to want and expect technology as a rental amenity. The increasing prevalence of smart home technology adoption by renters offers property owners who integrate a smart apartment solution into their listings a marketing advantage, increased tenant satisfaction, and revenue growth.

As of 2018, the multifamily housing sector included 21.4 million apartment units. Of those, approximately 102,000 units or .48% were smart apartments. IHS Markit projects that by 2024 there will be 845,000 units with smart devices installed, or 3.8% of the estimated 22.2 million apartments that will be in the market.

A study by Baily Brand Consulting found 74% of millennials believe that technology makes their lives easier, In the fight to attract and keep renters, property owners will find more and more that their properties are not competitive for this largest target audience if they do not offer a Smart Apartment solution.
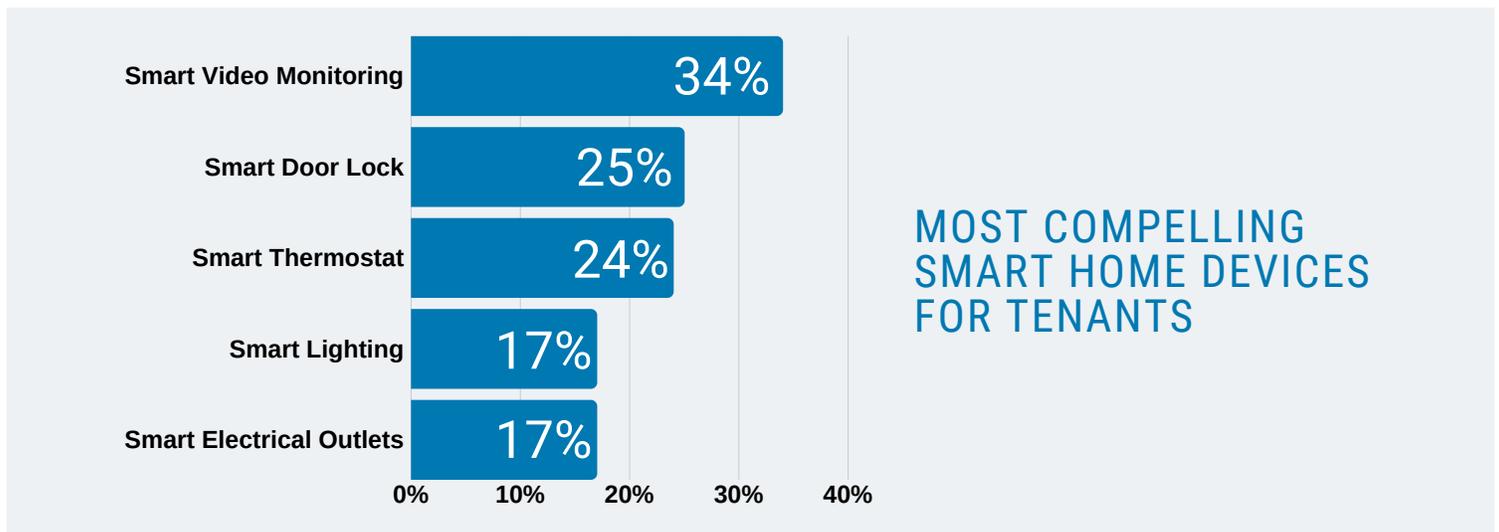
While on the surface making the decision to implement a smart apartment solution would appear to be a no-brainer for property owners, there are challenges hindering more widespread adoption of this technology. The first challenge is the questionable return on investment (ROI) currently perceived by property owners. The second is the technical difficulty in creating a seamless, positive end-to-end experience for both property managers and tenants.

This Hubsai white paper will discuss how, by focusing on creating meaningful benefits that meet the needs of property managers and tenants, property owners can achieve a tangible ROI on their smart home technology investments.

WHAT IS A SMART APARTMENT SOLUTION?

A renter survey conducted by Software Advice in 2019 found that improved safety and energy savings are the most compelling property offerings for potential renters. Ideally, to be a compelling rental benefit, today a smart apartment solution should include smart devices that offer peace of mind plus energy and monetary savings.

The Software Advice study weighted the most compelling Smart Home technology for tenants as:

Device	Percentage
Smart Video Monitoring	34%
Smart Door Lock	25%
Smart Thermostat	24%
Smart Lighting	17%
Smart Electrical Outlets	17%

0% 10% 20% 30% 40%

MOST COMPELLING SMART HOME DEVICES FOR TENANTS

Software Advice.

In fact, according to some industry observers residents now rank smart home technology as more important than traditional amenities such as pools or covered parking.

So what would a Smart Apartment solution that benefits both tenants and property managers look like? The best value Smart Apartment package should include:

- Smart video cameras
- Smart door locks
- Smart thermostats
- Smart lighting
- Water leak sensors
- System integration hub
- Mobile app
- Dashboard

WHAT ARE THE UPFRONT & ONGOING COSTS?

Most of the smart apartment vendors charge property owners for initial installation of hardware and an ongoing subscription to support the dashboard and app for property managers and tenants.

Some vendors are quoting upfront costs between $650 and $800 per unit for a basic hardware package of smart thermostats, lights and locks. Others offer a premium package that adds video cameras, sensors, and a secure integration hub costing in the range of $950 to $1,200 per unit. Monthly subscription rates run from $10 to $30. Typically, property managers can charge a technology fee in the range of $20 to $75 per month for units with smart apartment features.

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THE SMART APARTMENT EXPERIENCE FOR PROPERTY MANAGERS

A property manager has three main operational functions which are typically time and cost intensive: Dealing with tenant turnover; managing maintenance and asset damage control; and scheduling viewing and refurbishment for unoccupied units. The right smart apartment technology can greatly reduce the manpower, cost and liability for these responsibilities. Property managers don't need to collect keys when renters vacate their apartment. With a few clicks on their smartphone, they can simply change access to the empty unit.

On any given day, a property manager may be involved in all of these operational functions. Below is a sample day in the life illustrating how his or her tasks can be streamlined with the introduction of Smart Apartment technology.

A Property Manager's Day in the Life Using Smart Apartment Technology

Early morning: Tenant turnover
First order of the day is dealing with the turnover tasks for an outgoing tenant. Traditionally, this would require re-keying and management of physical keys. When a smart lock is in place, turnover is as simple as re-coding the access code, which can be done from a mobile dashboard quickly and easily. At the same time, all unit smart devices (lights, video cameras, etc.) can be transferred from the outgoing tenant's control to the property manager. Likewise, when a new tenant moves in, the process is a streamlined, key-less handover involving a simple reassignment of the unit smart devices and the recoding of the smart lock.

Late morning: Managing maintenance and asset damage control
Imagine the potential cost savings if catastrophic events in rented or unoccupied units can be prevented. Monitoring sensors such as for water leaks can greatly reduce the damage caused by mechanical failures, or tenant negligence. On this morning our property manager, although smart devices in occupied units are controlled and only accessible by the tenant, receives notification from the sensor under the tenant's sink that a leak has been detected. This allows him to quickly coordinate with the tenant, whether they are home or not, to gain access to investigate and remedy the problem before extensive damage occurs.

Afternoon: Marketing unoccupied units
Providing convenient access and creating an appealing environment is key for showings to attract prospective tenants and minimize vacancy duration. For properties with 20 or more units, these tasks could prove to be a drain on the property manager's time and may even require adding staff to accommodate the demands of listing agents or flow of perspective tenants. While a unit is unoccupied, smart devices are assigned under control of the property manager's dashboard. Having this control enables property staff to set up temporary access codes and setting a smart thermostat schedule to establish an ambient temperature and turning on lights for viewing appointments. The preset schedule also defines when to automatically turn off the smart thermostat and lights and re-code the lock after a showing. This allows for a greater number of agent tours or self-guided tours, without increasing the effort required from property staff.

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THE SMART APARTMENT EXPERIENCE FOR TENANTS

For residents, smart technologies offer an obvious upside, from the peace of mind that comes with smart locks, to the cost savings of smart thermostats and lighting.

Smart devices can allow tenants to know exactly what's going on in their apartment home so they never walk in to something unexpected.

A Tenant's Day in the Life of Using Smart Apartment Technology

Starting the Day
Through a smartphone, a tenant can create a preset schedule to control their smart devices. At wakeup time, the smart thermostat automatically adjusts to the desired temperature and lights turn on in designated rooms.

Leaving Home
When leaving home for work or for a weekend trip, the tenant can turn off the smart thermostat, lights, and lock doors all from their smartphone. Video cameras and sensors can be set to "away", enabling monitoring capabilities.

During the Day
During the workday or from a holiday destination, video monitoring is accessible on a smartphone, allowing the tenant to check in on kids or pets, or even on the cleaner that is remotely given access via the smart lock. If a package arrives via UPS or FedEx, it can be securely accepted by remotely unlocking the door for the driver, and through the real-time video feed the tenant can verify that the package is in place. Children returning from school can input a keycode into the smart lock for entry, which in turn sends the tenant notification.

Heading Home
Wouldn't it be nice to come home to a warm and inviting home at the end of the day? Before heading home from work or the trip away, the smart thermostat can be fired up and lights switched on so there's no fumbling in the dark, into a hot or frigid apartment.

Bedtime
When retiring for the night, lights can be turned off and doors can be locked automatically. The lighting system can also be tuned to a warm hue to establish a cozy, sleepy mood.

Bottom Line for Tenants
- Peace of mind—no worrying about the state of the apartment while away
- A decrease of heating/cooling/power costs of 5-20%
- Increased security—video cameras track activity/motion; lights can be on when arriving in darkness
- Increased convenience—access codes for dog walkers, cleaners, caregivers can be managed

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SMART APARTMENT ROI FOR PROPERTY OWNERS

While many brand-new properties in the last several years are chock-full of shiny smart devices to wow prospects, installing smart apartment technology at existing multifamily properties can help owners keep up in the tech race while achieving an impressive ROI without overspending. If proper technologies and procedures are implemented, smart apartment technology has the capability of fulfilling owner expectations of increased revenue, cost savings, data collection, and enhanced resident experiences.

A Summary of ROI Contributions

Operational Efficiencies Translate to Cost Savings

Access management is the number one area where owners are seeing a quick ROI, typically in under three years. Smart locks eliminate the cost of rekeying units during turnover. Rather than spending $20 to $50 to rekey a door, smart locks allow managers to implement a new code for each resident. Reducing the number of keys staff are required to carry also holds several advantages: 1. For liability, there is an audit trail of who entered the unit; 2. This reduces the need for master keys which can be costly to replace if lost or stolen; and 3. Smart locks can be beneficial for showings by providing temporary access for unaccompanied tours.

Increased Tenant Convenience Translates Into Higher Rents

Although some surveys have indicated that millennials are willing to pay up to 20% more for smart apartment rentals, assuming conservatively that properties can charge at least an additional $50 a month in rent, a smart apartment investment could pay off handsomely within three years:

Smart apartment investment: $1,000 per unit
Additional rent over 3 years: $50 x 36 months = $1,800, ROI = 80%
Annualized ROI = $(1+.80)^{1/3}-1$ = **21.6%**

Smart Apartment Technology Investments Translate Into Increased Property Valuations

Buildings with smart apartments can have an increased valuation when compared to non-smart buildings. Studies show that integrating smart home technology can increase the value of a property by 1-5%. In the previous contribution example where rent increased by $50 per month, for a 10-unit property in an area with a 5% cap rate, that could result in a 1.5% or $30,000 property value increase.

Automated Asset Monitoring Translates Into a Reduction of Liability and Insurance Premiums

Property owners are increasingly interested in smart thermostats and water leak detection to avoid expensive insurance claims. If there is a water incident in one apartment, chances are that it will also impact several other units in the property. For even minor water leak damage in a 8' x 10' bathroom, repairs can cost over $1,800 on average. Commercial insurance brokers are seeing premium discounts of up to 10% for properties with sensors and smart technology. Having smart thermostats and sensors can allow owners to write temperature ranges into lease agreements to avoid freezing pipes or mold, which property managers can monitor for occupied or unoccupied units, providing peace of mind for both tenants and property owners.

Millennial-Desired Technology Translates Into Improved Marketability

Smart apartment technology also delivers a "wow" factor that creates a unique leasing tour experience that can differentiate your property from competitors, helping to keep vacancy rates low.

> "An $84,000 investment in smart technology produced a 30% return on capital improvement over 5 years. We saw a 4% increase in rent, reduction of maintenance turnaround time of 5%, and utility bills decreased by 15%."
>
> *Mackenzie Sanders, Director of Operations*
> *AC Lewis Management, 1,749 units, 11 Communities*

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READY TO INVEST IN SMART APARTMENT TECHNOLOGY?

Key considerations to optimize your investment

When assessing smart apartment platforms and vendors, there are many features you should look for that will not only enhance the experience of property managers and tenants, but will also optimize your smart technology investment.

Property Manager Experience Assessment Features

- **Access control capabilities to ensure smooth transitions between occupied and unoccupied units**

  When a resident leaves and takes their Internet router with them, the smart apartment solution selected should allow for control transfer of unit devices to the property manager's dashboard and likewise, the easy transfer to a new tenant.

- **Professional services for installation and support**

  Most smart devices speak a different language from one another (Bluetooth, Z-Wave, Zigbee, Wi-Fi), so integrating numerous devices into one platform is difficult. A smart apartment solution that offers an integration hub will address this challenge, however, installation and maintenance can require a high degree of technical skill. By selecting a vendor that provides professional services for installation and ongoing support, property staff will not need to wrestle with technology to ensure service continuity.

- **Single dashboard and single sign-on**

  One of the biggest pain points with the smart apartment concept is that each smart device comes with its own website or app. With so many discrete applications to control across common and tenant areas, this can become a difficult hurdle for property managers and tenants alike to overcome. The key to addressing this is implementing a solution that offers an app and platform that can integrate access control across devices as well as common areas and tenant units.

- **Avoid community Wi-Fi degradation**

  If your smart apartment platform requires that all devices, building-wide be connected to the property's community Wi-Fi, that service would most likely experience performance degradation. Installing many devices in a consolidated, dense environment like an apartment community introduces a lot of convergent signals going back and forth. This can be avoided by implementing a solution that connects to the tenant's own Wi-Fi router when a unit is occupied, but allows for the transfer of devices to the property or community Wi-Fi router when a unit is unoccupied.

- **Alerts and notifications from occupied as well as unoccupied units**

  Property managers must receive alerts and notifications from both occupied and unoccupied units to ensure that asset monitoring to thwart property damage is building-wide. A smart apartment solution can achieve this by triggering notifications from a private tenant router for occupied units or from unoccupied units connected to the property or community router.

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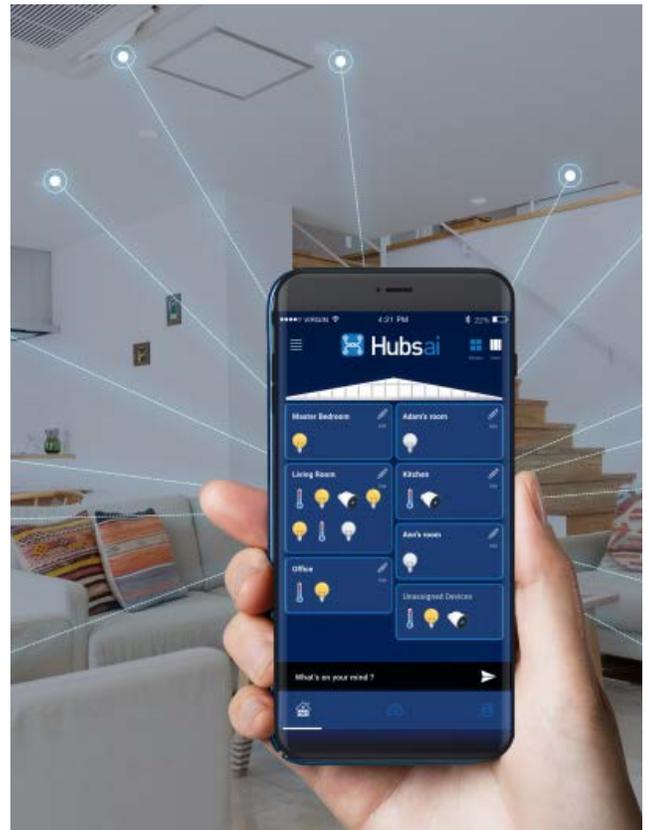
According to property management software vendor Entrada, 57% of multifamily residents surveyed said they would pay more rent to have smart home technology in their apartments, with security cameras, key-less entry, and smart thermostats ranking as top amenities. Satisfying tenants, however, may not be as easy as offering a few smart devices in their unit. Below are some tenant features which can address deeper needs while minimizing friction for the property owner when offering a smart apartment solution.

Tenant Experience Assessment Features

- **Flexible platform opt-in/opt-out**

  Recently, there has been a lot of press about tenants pushing back on mandated property-wide smart apartment deployments. Some tenants have even taken legal action against property owners who are forcing them to accept and/or pay for smart devices they don't want, and in some cases, are not renewing leases if the tenant demands to opt-out. If the platform you are considering can't easily accommodate tenant opt-outs, you may want to find one that can in order to avoid tenant push-back, and potential bad press and expense from potential legal action.

 - **Absolute privacy and data protection**

    This is perhaps the biggest pain point for tenants with respect to smart technology. To alleviate concerns, make sure your smart apartment vendor does not use or sell tenant data to third parties. Although unfortunately, this is fairly common there are vendors that offer a non-cloud-based platform solution which ensures that user data cannot be retrieved by the software provider. Tenants also have concerns about property managers "spying" on them via smart devices. If you choose a solution that connects to the tenant's own router in occupied units, you can assure them that property management staff do not have access to their data or to their devices in order to monitor their activities.

- **Single dashboard and single sign-on**

  Like the ease of use required for property managers, tenants will not find a smart apartment offering convenient that requires so many discrete applications to control their smart devices. Implementing a platform with a single dashboard and single sign-on for all the connected devices in their unit will ensure the ultimate convenience and experience.

- **Service transferability**

  If a smart apartment offering attracts new tenants and keeps existing ones happy, it's more than likely that they would want to take that service with them when they move. Also, with more vendors introducing AI functions, moving tenants may want to take their accumulated data with them to maintain or keep improving their home automation capabilities. Check with your vendor to see what transfer options they can offer for your moving tenants.

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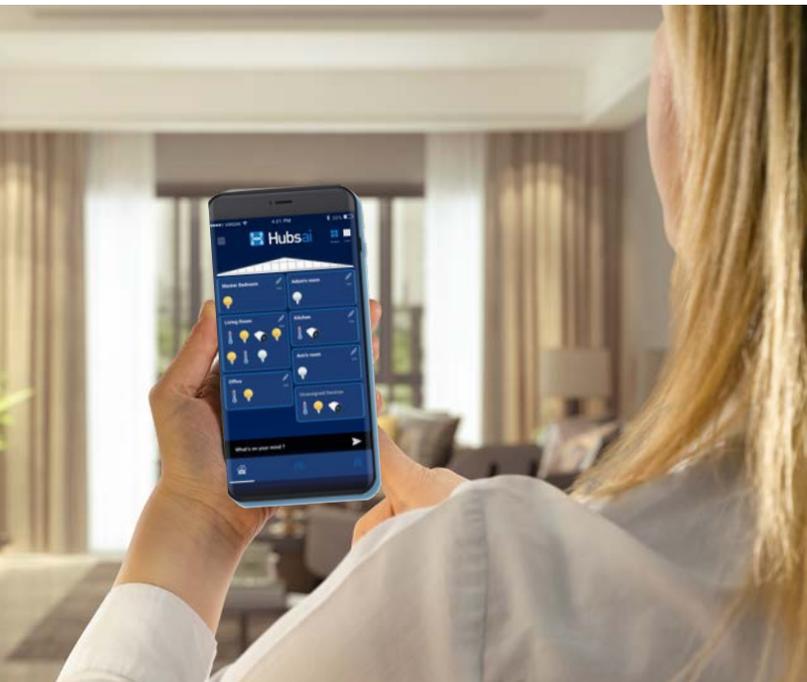
FINAL THOUGHTS FOR PROPERTY OWNERS CONSIDERING SMART APARTMENT TECHNOLOGY

Apartment living is a growing trend that shows no sign of slowing down. As more people choose to rent, they expect their apartments to do more. It's not enough to save money and provide shelter, however. Apartments should offer features that enhance the lives of tenants.

Smart apartments can magnify the benefits of ordinary apartments and add unique advantages of their own. For a relatively inexpensive investment, you can outfit your multifamily properties with smart technology options which will lead to less turnover, less vacancies, higher rent, and increased tenant satisfaction.

Many solutions available today have a great user interface, but on the back end, the smart device integration capability isn't always fully developed to seamlessly support the smart apartment package you want to offer your tenants. For the smart apartment benefits discussed in this white paper to be realized, all the smart devices you wish to install must connect and be accessible through a single point of control, regardless of what companies manufacture the product or which have business relationships with each other. The Hubsai platform was built from the ground up to simply and smartly connect smart devices through a single mobile app, regardless of manufacturer or communication protocol.

There are many competitors vying for the smart apartment market, but only a few can offer a true seamless, end-to-end experience for both the tenant and the property manager, and do so while delivering an attractive ROI for owners. Hubsai delivers a simple, secure and affordable smart apartment solution that uniquely delights tenants and property owners and managers.

About Hubsai

SMART HOMES, SIMPLIFIED

We believe that achieving greater peace of mind, convenience, and energy efficiency in the home with smart technology should be simple, easy-to-use, and affordable without compromising privacy or security. Hubsai is the only non-cloud based smart technology platform that creates a secure, private and seamless smart home experience for homeowners, property managers, and tenants.

Core to our solution is the Hubsai Hub which enables secure integration across disparate third-party smart devices and locations by supporting all connectivity protocols: Wifi, Bluetooth, Z-Wave, and Zigbee. With Hubsai, remote smart home control and real-time monitoring on a smartphone are made easy through a patented, intuitive, and customizable user dashboard and home map.

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