



Smart Solutions – Boosting Revenue in Multifamily Properties

IN PARTNERSHIP WITH  **SmartRent**



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Parks Associates research indicates 36% of US broadband households (more than 40 million broadband households) are multidwelling units (MDUs), and among these, 43% own at least one smart home device, a higher rate of adoption than single-family homes. The MDU market—which includes apartments, townhomes, built-to-rent, student housing, and senior living—has expanded rapidly, expanding challenges for owners and management but also opening new service and business opportunities for multiple players, from property owners/managers to service providers and device manufacturers. These players can leverage broadband, Wi-Fi, and smart home technologies to improve MDU operations, expand quality of life for residents, and stay competitive in a crowded market.

MDU managers and owners throughout the United States face unique challenges, including high demand and occupancy rates, high competition for renters, increasing operational costs, and labor shortages. Always-on connectivity and smart home tech offer new ways for property managers to differentiate and add value. The highly competitive rental environment creates a more pressing need to attract and retain residents. With rental rates at a historical high, including in luxury markets, tech and smart home amenities add differentiation and open up opportunities to provide new value through connectivity, safety and security, and energy management solutions.

This whitepaper addresses how connected devices benefit multifamily owners and property managers, from improving business efficiency to driving additional revenues, as well as opportunities in the emerging MDU market for product vendors and service operators. The research includes a snapshot of the current market for smart home solutions in MDUs and key considerations for both vendors and MDU owners and managers.

Smart Home Tech Benefits

Product differentiation

Increase sales price / rental fees

Lower operating costs

Improve property / resident safety and security

The MDU Market

According to the National Apartment Association's recent survey of 3,200 properties containing more than 830,000 units, 2020 was the first decrease in net operating income for multifamily owners since 2010.¹

Parks Associates' recent study, *Smart Home and MDUs: The Property Manager View*, a survey of 300 MDU property managers, finds the majority of MDU owners and managers report increased costs and revenue losses due to the pandemic.

Property owners and managers will continue to have challenges as consumers and businesses grapple with the aftermath of the pandemic. Inflation is high, and increased costs and labor, along with high demand, will continue to drive high rental rates.

- The Reno-Sparks area in Nevada is one overheated rental market, where the average rent has jumped 38% from 2016 to the end of 2020. Vacancy rates are very low, driving up cost for renters, while the eviction moratorium also drove up delinquency percentages—reducing revenue for property managers and owners.²
- At the other end of the spectrum, urban areas—such as Manhattan—have reported an increase in unoccupied units, due in large part to the COVID-19 pandemic. The number of vacant apartments in Manhattan was a record 15,025 in August 2020.³
- Property taxes for apartment owners have nearly doubled since 2009, according to the National Apartment Association.
- An already tight labor market, compounded by the pandemic, is also driving up salaries and personnel expenses.

34% of US broadband households are MDU residents.

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Multidwelling units (MDUs) and multifamily properties are buildings designed to house several different families and contained in a single building or several buildings within one complex. The building typically divides into separate housing units and is owned by one entity.

Categories of MDUs

Apartments/Condominiums – A private residence consisting of five or more units contained within a building.

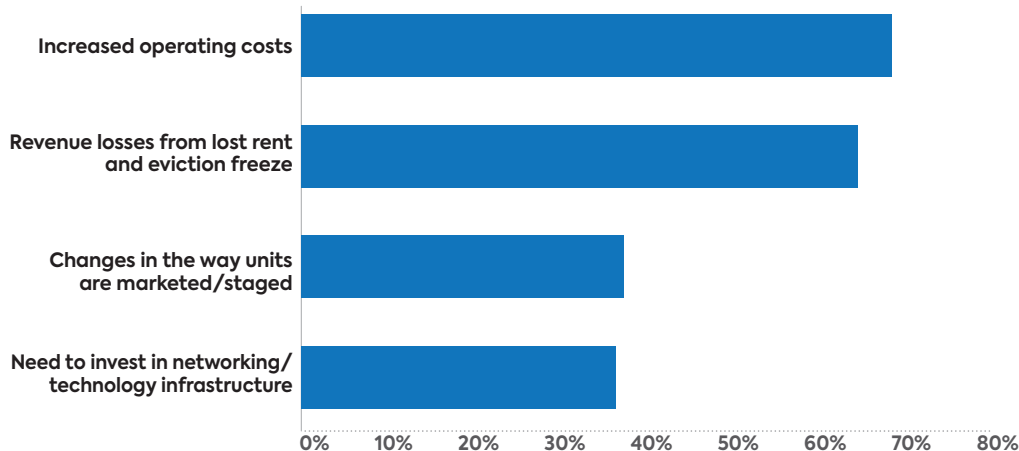
Duplex – Two private homes contained within one freestanding building.

Quadraplex – Four private homes contained within one freestanding building.

Townhomes – Multiple homes that are attached at the side and have separate entrances.

Dormitory – Rooms provided for one or more individuals, typically without a private bath or kitchen.

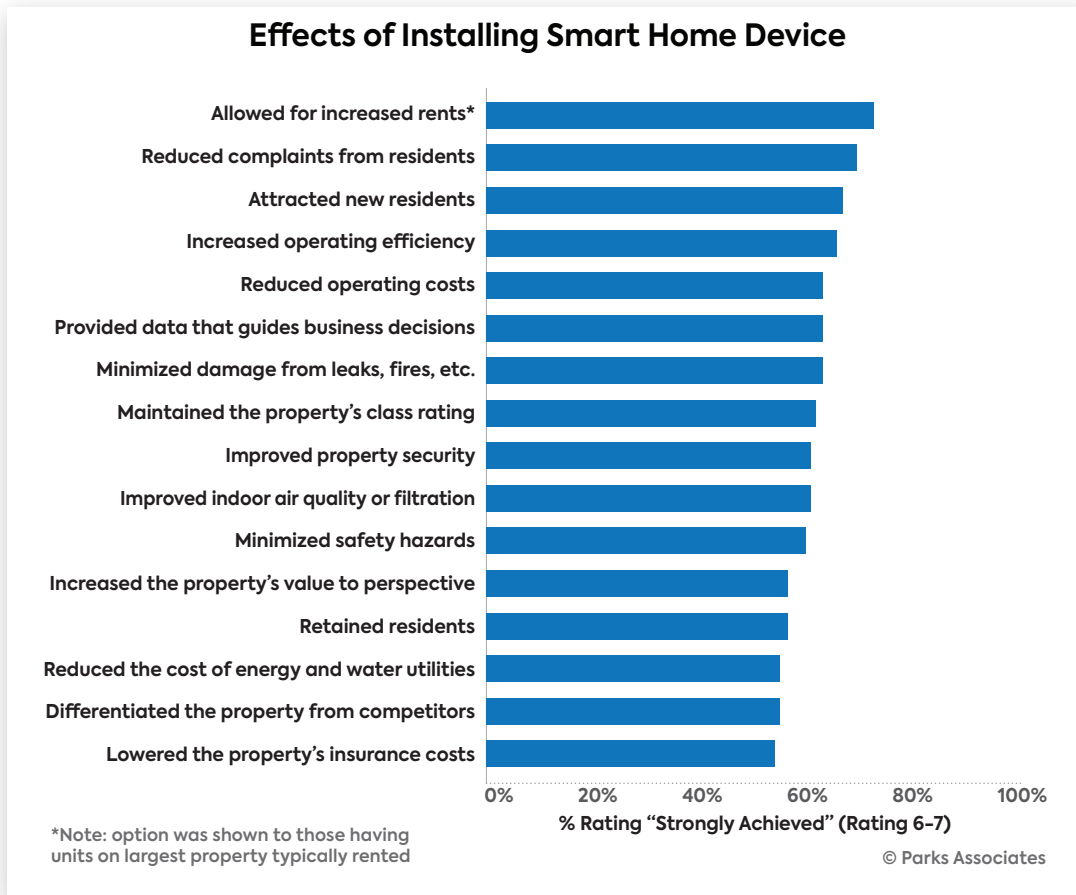
Impact of COVID-19 on Business Among US MDU Property Managers and Owners



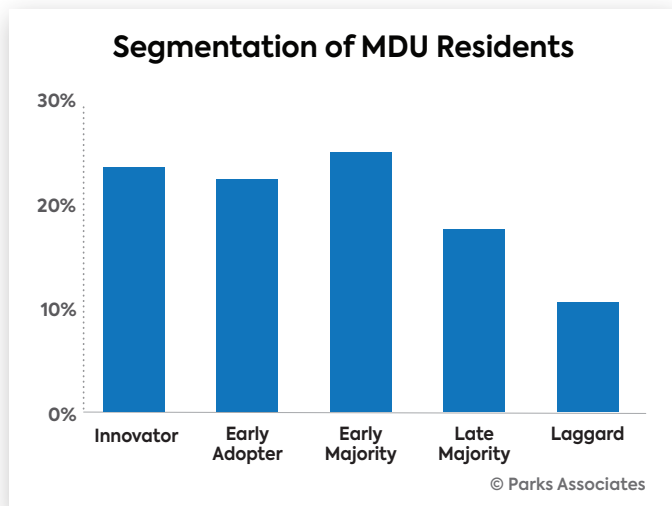
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Connectivity – Driving Value for Property Owners

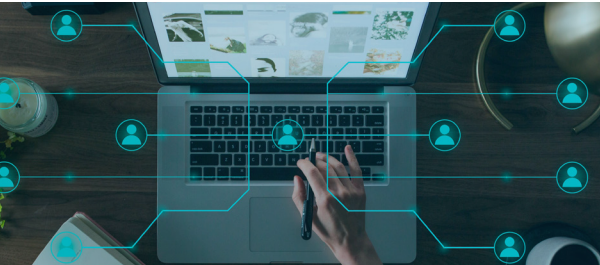
Smart tech is driving new revenue increases for MDUs and attracting residents through added amenities. The most significant benefit of installing smart home devices in MDUs is rental rate increases. Other benefits include reduced complaints from current residents and a boost in attracting new ones, along with many others.



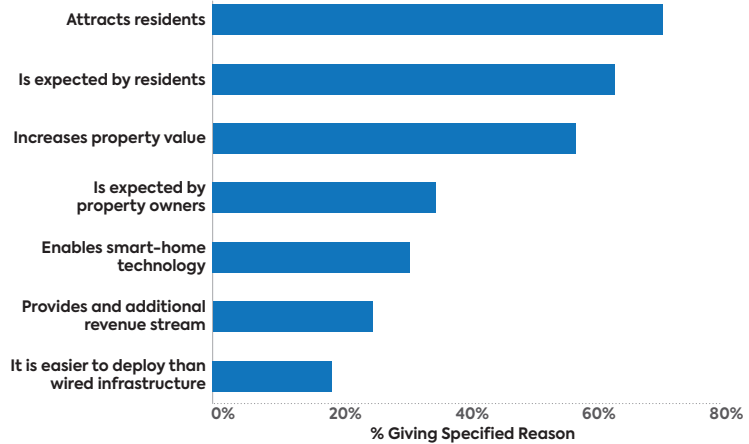
Consumers have a growing expectation for smart home technology and these new devices help differentiate with modern lifestyle marketing and practical benefits. Consumers living in apartments are more likely to be technology adopters than those living in all broadband households; currently, 43% of MDU residents report using smart home devices.



While the MDU market for proptech is relatively new, Wi-Fi access and bulk internet are already widespread—88% of MDU renters in the United States report having access to Wi-Fi through their property, either in-unit or in a common area.



Reason for Offering Resident Wi-Fi Access



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High-speed internet access is also important because it provides connectivity for current and future proptech deployments, specifically smart home solutions. The vast majority of properties that do not offer Wi-Fi access services plan to do so in the next 12 months. Connected home devices and solutions installed in MDUs are similar to those in single-family homes, including smart locks, networked cameras, smart thermostats, and smart speakers.

Three Key Benefits of Smart Tech Installation

Improvements in operating efficiencies

Increased rental revenues

Increased ability to attract and retain residents








Multiple Stakeholders: Driving New Partnerships

The MDU market is unique for its multiple stakeholders, bulk deployments, and multiple locations for installations. End-user residents, MDU property managers, and building owners benefit directly from proptech. Other ecosystem players are also in a position to capitalize on new demand and value, including smart home solution vendors, ISPs, insurance agencies, security providers, and installers.

MDUs may have hundreds of units on one property, which leads to bulk device purchases and installations. Bulk sales are attractive to smart-home device vendors, but deployment and integrations must be carefully managed for successful outcomes. Property managers and owners often partner with service providers or vendors with the resources and expertise to work within this unique environment.

SmartRent

*as of Dec. 31, 2021

-  Year-over-year revenue increase of 111%, to \$110.6 million
-  Deployed 167,743 units, an increase of 101% year over year
-  Units Booked grew to 218,106, up 94% year over year
-  Grew Committed Units to 736,461
-  Total aggregate Deployed and Committed Units increased to 1,059,309
-  Acquired iQueue, a smart home company with 16,637 Deployed Units and 5,968 Committed Units
-  On March 22, 2022, acquired SightPlan for \$135 million, enhancing SmartRent's overall platform offering and customer value proposition



MC Residential Communities partnered with **SmartRent** for a self-touring platform and created an additional 8-12 tours per week at a single property.⁴



Kass Management, a Chicago-based property association, partnered with Comcast's Xfinity Communities to deploy the Smart Communities platform at two of its rental properties. This deployment included 50 units that received smart devices like smart thermostats and smart lighting, allowing the managers to control the entire platform via a portal.⁵



Traditional MDU technology vendors, like **RealPage** and **PointCentral**, are making investments to expand their service offerings. This expansion opens up opportunities for partnerships and technological integrations. In this new market, device vendors have to understand the need for dedicated connectivity networks, integration with property management software, and how security and privacy concerns impact properties' willingness to implement smart solutions.



PropTech Solutions Provide Unique Value to Residents and Property Owners

The market for smart technology solutions in MDUs has lagged behind the single-family housing market, but it is quickly catching up, especially as demand for high-end rental properties has accelerated.

MDUs can deploy proptech and smart home solutions outside the units, in public spaces, and inside the units for residents' use. While public WiFi is the most common tech in public areas, 51% of MDU managers with at least one smart home-enabled property have smart cameras installed in MDU common areas. Parks Associates data consistently finds that security/safety use cases resonate among all US broadband households, and we anticipate seeing networked cameras added to more properties.

Smart cameras are the most prevalent smart home devices installed in common areas, but smart light bulbs/lighting are popular both in units and common areas, highlighting the strength of the security and safety value proposition.

Resident requests are a key motivator for property managers and owners in deploying smart home solutions. The top five most requested features are automated lighting, smart appliances, increased levels of security in common areas, increased broadband speed and remote access to residential units. MDU property managers and owners can stay competitive in this tight rental market by adding smart features to their properties, while device manufacturers and service providers can increase revenues by partnering to provide these solutions to MDUs.

34% of property managers have internet-connected/ smart home devices installed in at least one property they manage.

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Smart Home Solutions Reduce Operating Costs

Use cases that reduce OPEX include access management and control, energy management and automated risk mitigation. These solutions can improve operations and add new layers of safety, security, and convenience.

For a property with annual revenues of \$600,000 per year (OPEX (~50%) = ~\$300,000)

10% savings on annual OPEX is \$30,000

20% savings on annual OPEX is \$60,000

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Access Control

Access control use cases typically involve smart home solutions installed in common and public areas, including smart locks, smart garage door openers, and smart video doorbells.

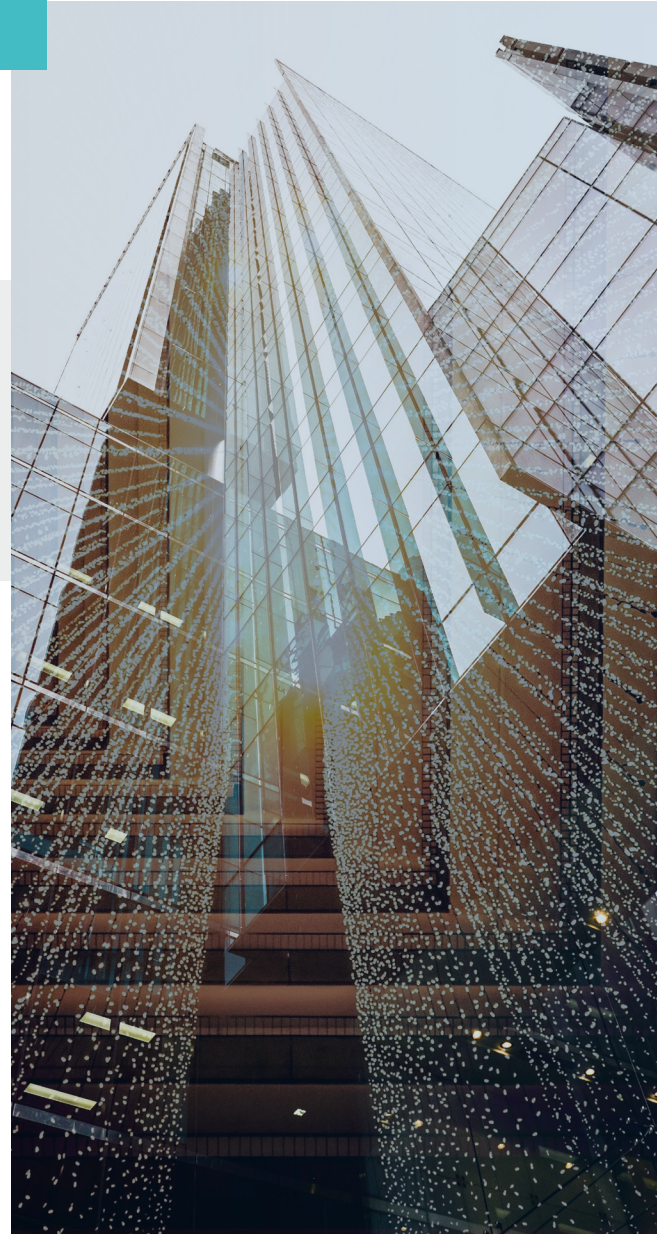
For MDU owners and managers, the highest valued use case is the ability, via networked smart cameras, to monitor the safety and security of residents in public areas. Improvements in access management through smart access solutions enable multiple benefits:

- Self-guided tours, which can be enhanced to offer a unique experience for prospective residents
- Reset locks for units with no extensive or in-person rekeying needed
- Monitor of contractor labor time
- Improved maintenance processes

Smart Parking

Over one-third of MDU owners/managers with at least one property that has smart home devices also have smart parking sensors.⁶ This is a popular use case among adoptees—82% use these tools to facilitate rental of parking spaces. According to Apartment Guide Amenities Survey 2021, 15% of renters rate parking as a top amenity they wish they had. Smart parking technology helps to enforce assigned parking, leverage underutilized space, and manage inventory. These products represent an emerging opportunity for MDUs to improve safety and improve resident experiences.

As technology continues to be added, AI-based parking could become a fundamental part of the experience. Dynamic messaging can be incorporated to help improve the experience. As EV adoption continues to grow, consumers will also look to apartments to provide charging stations and property developers will turn to sensor-based technologies to help manage the experience.⁷



Risk Mitigation

New tech solutions can reduce risks from theft and losses or damage from inclement weather or malfunctioning equipment. The extent of these use cases depends on the equipment and levels of integration, but they offer a variety of opportunities to secure the property. While the main benefit is mitigation from loss, some insurance companies are starting to offer discounts for smart solutions, notably in the single-family housing sector.

- Smart cameras and door locks monitor the property for unauthorized access and improve the security of residents and the building.
- Smart water leak detectors and smart appliances can detect malfunctioning equipment and send alerts to maintenance teams before any significant damage occurs.
- Smart outlets provide remote access to electrical outlets to save energy and stop current shortages.
- Smart HVAC systems send alerts about impending equipment failures.
- Smart solutions also receive alerts about upcoming freeze and flood conditions or other inclement weather and adjust operations accordingly.



Energy Management

Energy management savings are a huge driver for consumers and property owners. These solutions include smart thermostats, as well as smart outlets, smart lights, and connected HVAC systems. These solutions resonated with MDU owners and managers as their top concerns include residents wasting resources.

This top value proposition offers an important benefit to reduce OPEX—smart lighting and energy management solutions allow managers to remotely adjust lighting and temperatures in unoccupied units. Owners and managers don't want to pay to light and cool/heat empty apartments, and energy management products offer an easy, cost-saving solution. An integrated system further allows automation of these settings, with the ability to make adjustments ahead of tours or showings.

Nearly **75%** of property managers and owners are very concerned about residents wasting energy.

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26% of property managers and owners have an energy management/monitoring system.

64% of property managers and owners who have at least one property with smart devices installed expect OPEX savings of between **10%** and **20%**.

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Smart Home Tech: Creating Value

The varied interests and use cases for smart home products among property managers open up many new opportunities. Consumers seek value from connected devices, integration, monitoring, and always-on services, and property owners need ways to differentiate and add value to drive higher rental rates. At the same time, many service providers are struggling to redefine the service bundle as households abandon traditional cable TV packages in favor of OTT services. They are exploring security and other smart home solutions as new offerings to bundle with broadband services, and the MDU sector is a prime market to introduce to a broad swath of people to these value propositions—and ultimately create lifelong customers.



Increased Rental Fees and Achieving ROI

OPEX savings are significant, but MDU property managers and owners ultimately install smart home and proptech solutions to increase revenue, which comes through higher rents. Demand for smart home solutions is strong among renters. A recent survey by the National Apartment Association (NAA) finds 84% of apartment residents who lack smart home technology would like to see it deployed across their communities.⁸

For a property with \$600,000/year in rental revenue:

20% increase = \$120,000 (average)

10% increase = \$60,000 (low end)

30% increase = \$180,000 (high end)

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More than **80%** of property managers intend to install internet-connected devices in the next 12 months, and they have a narrow timeframe to achieve ROI.

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As these technologies become more commonplace, consumers expect certain amenities and are fine with the cost. Renters show a willingness to pay 10-30% higher rents when smart home devices are available in the property. This is similar to what these managers and owners expect to recoup for the addition of the technology—**85% report the devices increase rent by between 10% and 30%**. These new rental rates can result in substantial new revenues for managers and owners, as value for consumers.

As noted in a 2020 study by the Joint Center for Housing Studies of Harvard University, while the total number of renters in the United States is starting to plateau, the number of high-income renters continues to climb, with much of the new construction targeting the high end of this market.⁹ Smart home solutions are key amenities for high-end MDUs, and many areas and residents are willing to pay a premium for these smart-enabled apartments.

In-Unit Smart Home Solutions Attract and Retain Residents

MDU managers and owners who opt to install smart home solutions can leverage their investments to promote their properties and attract new residents, and providing these in-unit devices to residents can increase occupancy and justify higher rents per unit.

Access and Control

The benefits for in-unit products have easy value propositions for consumers to understand.

Smart door locks

- Residents can access their unit without keys.
- They can provide temporary access to guests and even open the door remotely.

Smart thermostats

- Residents can remotely control their thermostats.
- They can create preset temperature schedules to reduce their energy usage and save on their bills.
- They can preheat or precool their unit ahead of their return home.

Smart speakers

- Residents can control devices within the unit using their voices.
- They can access the smart speaker virtual assistant skills, which can be used to demonstrate or troubleshoot the usage of other smart home devices on the property.

Energy management solutions and ESG principles

Energy management solutions identify and reduce sources of energy waste, and this type of “green amenity” is increasingly attractive to consumers. In general, environmental concerns are slowly gaining traction. For example, 21% of US broadband households report the ability to reduce their home’s contribution to air pollution and overall carbon footprint would increase their likelihood of investing in a solar panel.

Environmental Social and Governance (ESG) originated in the financial sector as a set of criteria that socially conscious investors can use to judge potential investments. The concept has steadily expanded to include principles used to measure businesses,¹⁰ and an MDU can position itself as a good steward of the environment with energy management solutions in place.

78% of properties with in-unit smart home devices allow residents some control of the devices.

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A Market Ripe with Opportunity and Future Support Needs

As competition increases, after-sale support is an important offering and differentiator. Currently, 80% of MDU owners and managers with at least one smart home property report their vendor provides after-sale technical support, with the majority at no extra cost.

As connected devices increase, greater centralized control is required, especially if the devices use different communications technologies (e.g., Z-Wave, Zigbee) beyond WiFi. Already, 73% of MDUs with smart home devices installed inside residential units report using a hub, and this will become an even stronger benefit as more MDUs tap into the smart home ecosystem.

Market conditions, combined with increases in the number and capabilities of smart home solutions, make the smart home play attractive for MDU managers and owners. These operators are looking for vendors and partnership opportunities to bring these benefits to their properties, where service providers and device makers can open new markets for their solutions.

The smart home market for MDUs is still in its early stages, though, so owners and managers are looking for vendors with strong and established reputations, in addition to cost and integration considerations. But in a sign of early-market volatility, 58% of property managers and owners with a smart home-enabled property are “very likely” to switch vendors in the next six months. This finding is surprising since these owners/managers are overall very satisfied with the smart home devices currently installed on their properties.

One key to maintaining the account is for MDU smart home vendors to establish confidence in their ability to protect the privacy and data security for the management, as well as all the residents. Given that MDU residents are likely to have varying attitudes on privacy, ranging in severity, vendors will need to cater toward the strongest possible policies.

These are key factors as companies work to capture the smart home opportunity in MDUs. This market offers significant revenue potential with benefits for multiple players, including MDU owners and their staff and residents. With careful consideration to connectivity networks, integration with property management software, resident security and privacy, and training and support, vendors can offer a comprehensive solution that meets the needs of the different stakeholders and will tap into the full revenue-generating potential of this market.

Top 5 Reasons for Switching Vendors

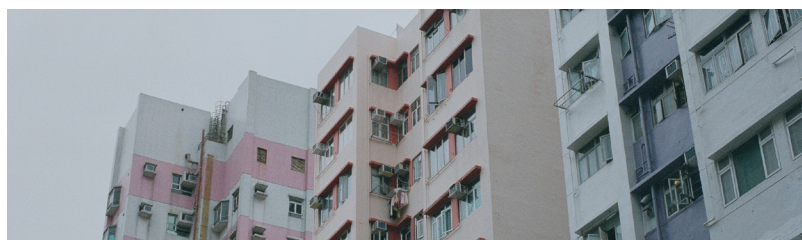
Alternative vendors offer better prices

Another vendor offers bulk internet

Vendor has inadequate data security practices

Vendors' products/services not innovative

The vendor is unable to service all the company's needs



Endnotes

¹ <https://www.naahq.org/news-publications/national-apartment-association-2021-survey-operating-income-expenses-rental>

² <https://www.rgj.com/story/news/money/business/2020/11/10/average-apartment-rent-reno-nevada-sets-record/6226198002>

³ <https://www.cnn.com/2020/09/10/success/manhattan-rental-apartment-vacancy-rate/index.html>

⁴ https://go.smartrent.com/rs/254-CGZ-341/images/sr_2021_MC_case_study%20_Final.pdf

⁵ <https://www.broadbandtechreport.com/in-the-home/article/14037123/comcast-expands-smart-mdu-deployments>

⁶ <https://www.apartmentguide.com/blog/apartment-amenities-survey/?amp>

⁷ <https://www.israelhayom.com/2021/12/16/robots-to-build-smart-homes>

⁸ https://issuu.com/csdesignworks/docs/naa_smart_homes

⁹ “America’s Rental Housing 2020,” Joint Center for Housing Studies of Harvard University

¹⁰ <https://marketbusinessnews.com/financial-glossary/esg-definition-meaning>

About Parks Associates

Parks Associates, a woman-founded and certified business, is an internationally recognized market research and consulting company specializing in emerging consumer technology products and services. Founded in 1986, Parks Associates creates research capital for companies ranging from Fortune 500 to small start-ups through market reports, primary studies, consumer research, custom research, workshops, executive conferences, and annual service subscriptions.

The company's expertise includes new media, digital entertainment and gaming, home networks, internet and television services, digital health, mobile applications and services, consumer apps, advanced advertising, consumer electronics, energy management, and home control systems and security. www.parksassociates.com



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About SmartRent



Founded in 2017, SmartRent (\$SMRT) is an enterprise smart home building technology platform for real estate owners, managers and residents. SmartRent's solutions provide seamless visibility and control over assets while delivering additional revenue opportunities through all-in-one home control offerings for residents. Our proprietary software integrates with third-party hardware and other software vendors to provide users with one centralized platform. www.smartrent.com

About the Author



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Jennifer manages the research department and Parks Associates' process for producing high-quality, relevant, and meaningful research. Jennifer also leads and advises on syndicated and custom research projects across all connected consumer verticals and guides questionnaire development for Parks Associates' extensive consumer analytics survey program. Jennifer is a certified focus group moderator, with training from the Burke Institute.

Jennifer earned her PhD in religion, politics, and society and an MA in church-state studies from Baylor University. She earned her BA in politics from the Catholic University of America in Washington, DC.

ATTRIBUTION

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RESEARCH & ANALYSIS

for Emerging Consumer Technologies

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Smart Home Devices and Platforms



Digital Media and Platforms



Home Networks



Digital Health



Support Services



Entertainment & Video Services



Consumer Electronics



Energy Management



Home Control Systems



Home Security