



Value Beyond Home Security: Expanding Product Ecosystems





Value Beyond Home Security: Expanding the Experience

The security industry uses the phrase "peace of mind" to highlight a primary emotional benefit of security services, without creating undue fear in the consumer. As the adoption of connected devices rises, manufacturers and integrators have a tremendous opportunity to capitalize on similar emotional benefits, leveraging various ways these product ecosystems can provide new and valuable experiences to consumers.

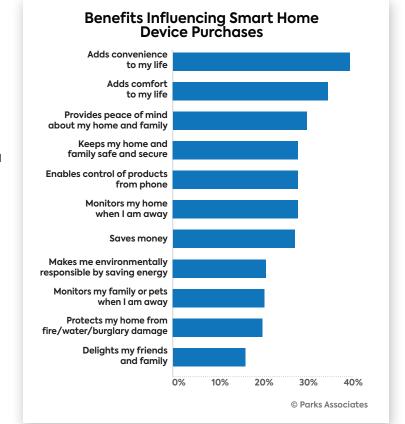
Parks Associates' consumer surveys consistently find that peace of mind ranks in the top three smart home benefits that most influence purchasing, slightly below convenience and comfort. Security service providers can build on consumers' desire for peace of mind and develop other offerings that address this value.

Innovative products that expand peace of mind for home security consumers create new ways to capitalize on the benefits of connectivity. For example, outdoor cellular sensors extend the home security system to the entire property line, while vehicular add-ons integrate location, diagnostics, and driver behavior insights into the security system's alerts and actions.

As product capabilities expand, new monitoring services beyond security are increasing, including

proactive defense through video analytics, personal emergency response systems (PERS) enhancements, energy usage monitoring, and securing valuable assets such as vehicles and yard equipment. Integration between video, access control, and home automation services will continue to grow in the years to come. And an empathetic approach to innovation will help the security industry deliver the benefits consumers value most.

This white paper addresses the expansion of professional services beyond home security—driven by the growth of connected devices, new technology, and unified offerings from professional service providers and DIY solutions.





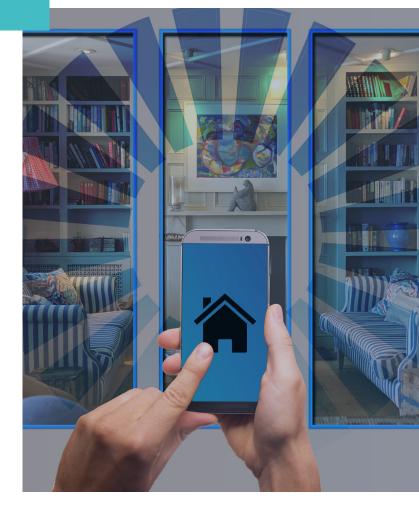


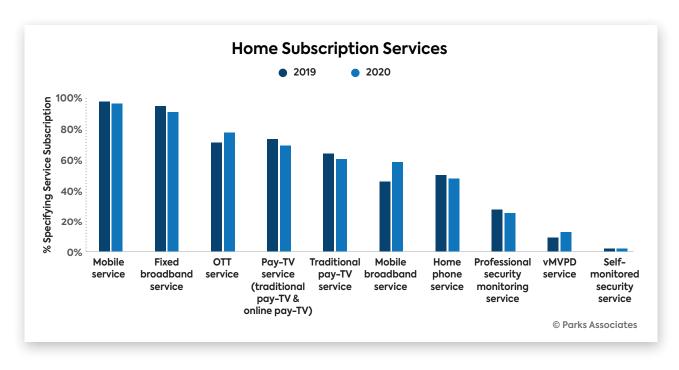
Adoption of Home Services

Consumers continue to adapt to the pandemic, and there has been an increased reliance on various services in the home—many offering significant potential for recurring monthly revenue. Parks Associates' data consistently shows consumers are willing to pay for services that provide clear and tangible value; with the adoption of home services on the rise, the role of broadband services is also growing in importance.

In addition, aggressive efforts are underway in multifamily housing environments to expand bulk broadband services and further enhance the impact of connected devices.

23% of US broadband households reported plans to upgrade their home broadband, driving up broadband service ARPU (average revenue per unit).











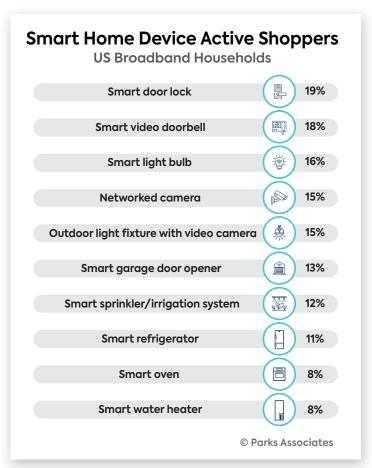
Adoption of Smart Home Devices

Even with the resurgence of COVID concerns and a continuation of supply chain challenges, the smart home industry continues to see slow but steady growth. Over the past two years, major tech companies have continued to expand their product lines and explore new partnerships. The smart home consumer base is largely comprised of groups with incomes and lifestyles adaptable to the pandemic, and despite concerns about privacy and security, the industry continues to expand beyond early adopters.

Overall, purchase rates of smart home devices, especially smart appliances, rose substantially in early 2021. Growth spanned all product categories, as smart home device owners continue to add more products to their home ecosystems; households with smart home devices own eight devices on average.

Most consumers are still very new to smart home products and the extended services that accompany them. As collections of devices continue to grow, interoperability between products is increasingly important, and the industry is responding to that need.

The need for unified control and integration is important to push the market past its current adoption.



Currently, 61% of smart home product owners have one or more apps that control multiple products.

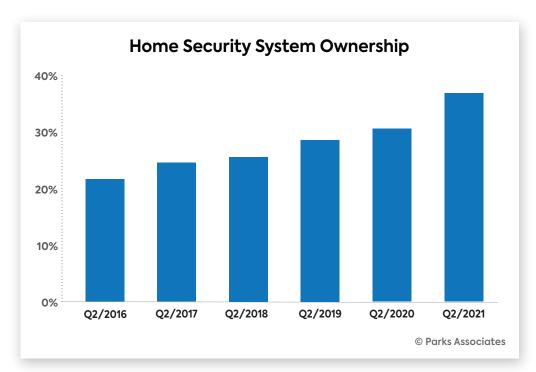




Adoption of Home Security Systems and Services

In recent years, the penetration of home security systems has experienced meaningful growth. Traditional residential security players continue to integrate advanced technologies, especially around AI and video analytics, to create new service offerings, address new customer segments, and integrate with Google and Amazon.

These new advances and innovative products are helping redefine residential security services and expanding them into new areas. Consumer choice regarding installation, device bundles, and monitoring services is a driving force for both professional and DIY solutions. Broadening consumer adoption of smart home products through retail, traditional home security system providers, and ISPs creates an onboarding ramp to the development of new professional services—or added revenue to existing services.



In Q2 2021, 36% of US broadband households owned a home security system, up from 26% in Q2 2018.



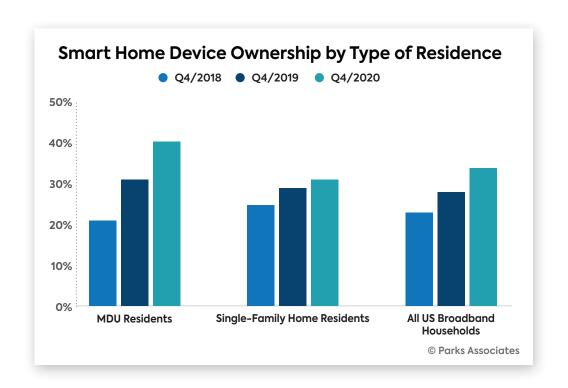




Scaling Up: Multifamily Market Opportunity is Big

Driven by safety, control, and energy management savings, multidwelling-unit (MDU) residents have overtaken single-family residents as top smart home device owners, creating huge opportunities to scale new products and services through software platforms. At 41% adoption, MDU residents are now more likely to own a smart home device than consumers living in single-family homes.

While MDU residents make up a smaller portion of the US market (approximately 33 million MDU households vs. approximately 68 million single-family households), manufacturers and integrators have an opportunity to sell to MDUs at scale and lean on value propositions that appeal to property owners and managers. Builders and building owners have a chance to attract young, tech-savvy, and affluent tenants by featuring smart home tech as an amenity and controlling building operating costs through smart property management.











Role of Technology and Video Analytics

Improving Context, Notifications, and Control: AI and Unified Apps

Consumers have a variety of options for home control: self-installed DIY systems like SmartThings or Wink; proinstalled systems offered by security services like ADT Pulse or Brinks, with Alarm.com technology; or custom whole-home systems like Control4 or Crestron. Consumers can also create smart home control through individual devices with cloud-to-cloud integrations that do not rely on traditional hardware controllers, like Amazon Alexa, Google Home, Works with Nest, and various API integrations. As smart home control continues to evolve, consumers can anticipate that new capabilities will emerge:

- Predictive analytics and machine learning could help create better experiences in the smart home by learning family habits, household patterns, and individual preferences—and using that intelligence to create automation sequences.
- Machine learning will be able to adjust personal settings as the occupant's behavior changes over time or other
 contextual factors come into play, such as time of year, day of the week, presence of others in the home, or
 weather conditions.
- Push notifications—information-based suggestions—could lead to nudges (action-based suggestions derived from previous behaviors), leading to true automation after the user has affirmed certain courses of action or preferences.
- One unified app could offer critical consumer control, with 86% of smart home device owners wanting a single unified app to control all smart home devices.

Video Analytics

Video analytics play a significant role in residential security video surveillance technology and require greater bandwidth, lower latency, and 24/7 connectivity. The induction of video analytics in modern video surveillance solutions can help detect and deter potential criminal activity, reduce false alarms, and accommodate touchless solutions. There is an excellent opportunity for security providers to build on their core offerings by extending security all the way from inside the home to the perimeter of a property.

A key benefit of video analytics in the security space is providing a more personalized user experience with more intelligent alerts. False alerts caused by simple motion detection can frustrate users by generating a high volume of notifications due to harmless triggers, such as wind or shadows, leading users to disable or ignore alerts. Many advanced AI applications deployed for commercial security services, including video analytics and machine learning, are trickling down to residential customers and helping to address these frustrations.

Leveraged by network camera manufacturers, video analytics can have major service implications, including home delivery, in-store shopping, authentication, and more. This growing technology can identify people, objects, animals, packages, license plates, and other subjects of interest visible in video camera feeds to interpret the meaning and context of their presence near or in the home.





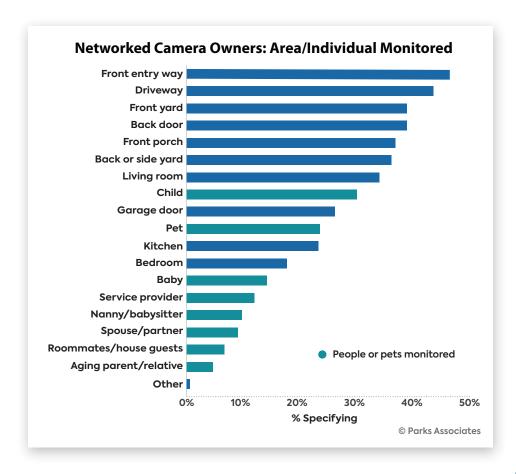
Automated notifications reduce delays, while advanced sensors can provide more accurate and comprehensive data to first responders. Recent data provided by Parks Associates demonstrates that this is a growing interest among home security service subscribers. 25% of home security system owners or purchase intenders in US broadband households ranked video verification to reduce false alerts and expedite first responder dispatch among their top three desired security system features, a slight increase from 23% in 2020.

48% of US security system owners with broadband internet at home agree that their home security system triggers too many false alarms, and 39% strongly agree.

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On average, security system owners report experiencing more than three false alarms in a year, commonly caused by pets triggering a motion sensor, a smoke detector activating, and low or dead batteries in the system or an attached device. False alarms can also result in fees for security owners ranging from \$25–250 per incident, and responses to false alarms have been estimated to cost local police departments billions annually. Both system owners and monitoring stations can benefit from video analytics by using the provided visual information to aid their assessment of whether the alarm requires an emergency response—reducing response for false alarms and promoting more rapid response for verified alarms.

Sales of networked cameras, video doorbells, and smart speakers/smart displays will reach 250 million units in 2024.







Monitoring: Peace of Mind, Extended

Professional monitoring operators leverage their strengths by being always-on and available to communicate with their user to demonstrate the value they add beyond traditional monitoring solutions. Connected devices in the home add new capabilities, particularly around monitoring services.



Energy Management

Smart thermostats, along with additional smart energy devices like smart meters, smart light bulbs, and various distributed energy resources, provide high-value insights to consumers about their energy usage. These devices provide consumers with energy usage insights and can be integrated into a monitoring or automation service to create additional efficiencies and peace of mind for consumers and business owners. For example, when a connected sensor indicates a window has been opened, a smart thermostat can trigger an energy-saving mode, then return to normal temperature control when the sensor indicates the window is closed again. Energy usage can be monitored and managed through smart schedules for energy devices, and consumers can see exactly how much energy their devices use and when they are used most.

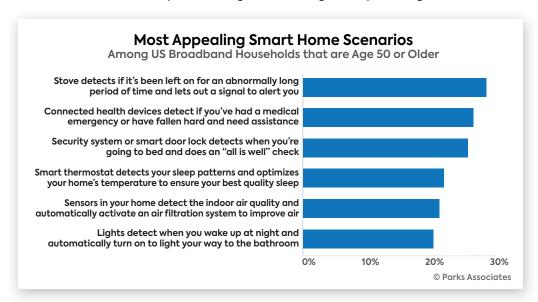
Independent Living

The emergence of connected health products and monitoring services opens a new opportunity to serve consumers at home. The industry is undergoing a shift as seniors who have become accustomed to using new technologies expect to use them as part of their health routines in their homes. Service providers, professional security monitoring, and PERS monitoring companies are exploring their potential role in consumer wellness, remote patient monitoring, and aging with independence. Providing solutions for aging consumers and their caregivers is a natural first step.

In the same way that security providers offer home monitoring services in case of intrusion, there is an opportunity to leverage this same technology to provide monitoring services for individuals in the home in case of medical-related emergencies.

78% of caregivers who are interested in a professionally installed, sensor-based independent living solution for an aging loved one would be willing to pay \$40/month for the service; 94% would pay \$10/month.

Safety and security are the core values for home services and are key drivers for security and connected health solutions alike. Security providers can diversify their consumer base by providing security-related packages with connected health and independent living solutions designed for protecting loved ones.









Vehicle Monitoring

Car security is the next leading concern after protection of the physical home and safety of loved ones. 69% of home security system owners are interested in vehicle monitoring as an add-on for home security systems, up from 39% in 2018. The most desired capabilities are tracking a stolen vehicle and receiving alerts for possible break-ins. In addition, a major concern for households with children is teen safety, especially among new drivers.

Vehicle monitoring increases peace of mind for parents by monitoring the car itself with vehicle diagnostic alerts, as well as their children's driving behavior alerting them in case of speeding, sudden acceleration, hard braking, or a collision.

There is a valuable opportunity here for security providers to integrate vehicle monitoring services with the rest of their smart security offerings. For example, outdoor cameras with video analytics can monitor specific drivers, such as teenagers or the elderly, and alert users when they leave and return home. Some systems can use vehicles as geo-location devices to trigger convenient automations, like turning on lights or HVAC, when a car enters a designated area. As residential security companies look to extend protection beyond the home, vehicle monitoring services provide a new opportunity to build upon their core capabilities and capture additional revenue.

Protecting Personal Property

Standard homeowner insurance policies provide limited coverage amounts for high-value personal property. Consumers note that the most important high-value personal property they want to monitor is electronics, followed by firearms, art collections (antiques and collectibles), and sporting equipment. Products like rugged, battery-powered contact sensors that operate over LTE can offer protection for such items throughout the entire property, by securing outbuildings, sheds, and other structures that may not have Wi-Fi coverage or an electrical supply. Rising consumer interest in smart tracking devices can also create a new opportunity for residential security providers to serve consumers and build new revenue streams.

51% of self-monitoring security system owners are interested in adding a smart tag tracking solution to their system, up from just 38% in 2020.





Extending to the Perimeter of the Property

Parks Associates' research finds that 23% of home security system owners want to extend their system to protect their yard and outdoor items. While consumers are most interested in preventing home intrusion, trespassing, or vehicle damage, protecting the outside of a home (as well as the yard, extended property, outbuildings, and equipment) is a natural extension of a security system. Outdoor security can also achieve what smart tags cannot: providing awareness and insight throughout the entire property, and allowing consumers to take immediate action.

Outdoor cameras and video doorbells have generated significant consumer interest in addressing these exterior conditions. Security system-equipped households are the most likely to have networked cameras and smart video doorbells, the first step to deterrence. An additional step



is the proactive use of smart outdoor cameras that deliver LED and audio warnings when their analytics detect unwanted activity. To further build on outdoor security protection, battery-powered LTE contact sensors integrate with the home security system—expanding awareness, insight, and action to access points and assets on the entire property.

Monitoring Vacation or Rental Property

Parks Associates' data shows that 15% of US broadband households, or 16 million households, own a second home or property, and protecting these properties is important for those that own or plan to acquire a security system. Parks Associates' research reveals that almost a third of broadband households that own another property report increased interest in solutions that monitor a vacation home or rental property.

Security providers have a strong opportunity to offer add-on services and devices, such as video analytics, Al capabilities, smart lighting, smart sensors, and smart



sirens. Adding analytics also keeps consumers connected to their home security system; findings from an Alarm.com study reveal that video analytics rules increased engagement with the system by 29% within five days after setting a new rule. When folded into a security package, the addition of outside security can be a differentiator—and a refreshing new opportunity for consumers.





Role of Support and Training

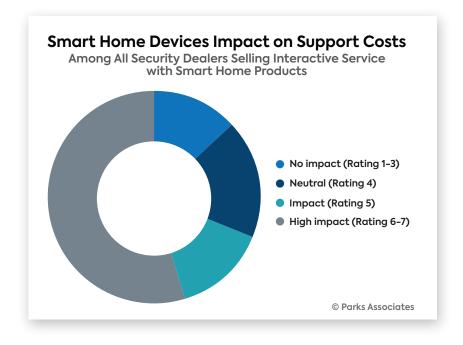
As the technology used in smart homes and security systems grows in complexity, consumers opting for professionally installed and monitored systems rely on their providers' expertise for configuration and support. This requirement is a growing concern for smaller integrators who fear that support costs will increase dramatically by including home controls with their installations. But while dealers report smart home devices have a high impact on support costs, the interactive services of these devices increases monthly revenue.

Additionally, more training resources have become available as newer, more complex products appear on the market. With specialized product certifications, webinars, and online resources, such as technical documents and video tutorials, along with mobile apps designed for remote troubleshooting, install, and support, dealers can reduce the number of truck rolls and subsequent support costs. The right education and training can prevent the development of trouble conditions on a customer account or other system issues, often increasing customer engagement and overall lifetime value.

Comprehensive training programs, when executed intentionally, can help technicians efficiently sell, install, and support smart home technology. Training is a meaningful investment for dealers of any size: by arming teams with the right educational tools, dealers can save time and money with more consistently successful installations.



Currently, only 5% of smart home device owners report having a support subscription service, so this valuable offering has plenty of room to expand.







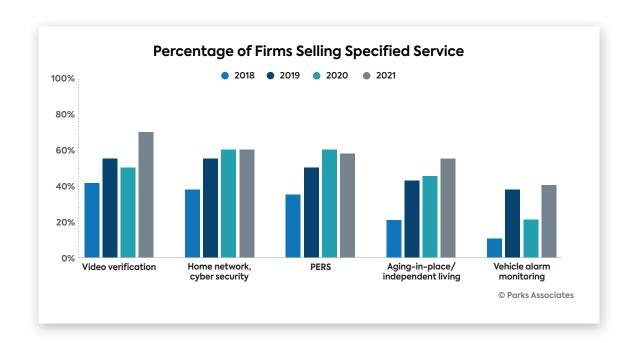
A Future of Personalized, Predictive, and Proactive Experiences

The progress made by connectivity, artificial intelligence, video analytics, and integration among products increases the applications, services, and overall value of smart home solutions for consumers. The capabilities are expanding beyond the traditional access points, opening new opportunities to help transform the smart home into an increasingly more personalized, predictive, and proactive experience.



Consumers' expectations for their devices and

household services will continue to expand in parallel with their capabilities, opening more doors to integrate new monitoring services into the home. The future is bright for those companies that recognize the value of choice and the opportunities to create additional stickiness and engagement through new services to consumers.





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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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.

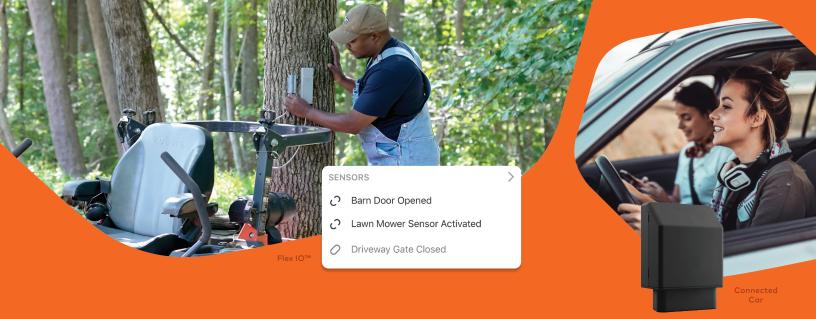
Jennifer earned her PhD in religion, politics, and society and an MA in churchstate studies from Baylor University. She earned her BA in politics from the Catholic University of America in Washington, DC.

ATTRIBUTION

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