

WHITE PAPER

Insights and strategies for smart home insurance programs

LexisNexis® Risk Solutions Smart Home and
Internet of Things Consumer Research Report

FEBRUARY 2020





Table of Contents

Executive Summary	4
Understanding the implications of smart home device adoption	5
Key findings	6
Discounts and data sharing: What they mean to consumers	6
Discounts offer some motivation to existing smart home device owners to purchase or install devices.....	6
Many smart home device owners are willing to connect to their carriers to receive alerts and help file claims	7
Consumers expect discounts for sharing data to assist with underwriting and policy pricing	9
Privacy concerns about sharing data are not limited to insurance.....	10
The story behind smart home device adoption	11
No single device is driving overall consumer adoption of smart home technologies	11
Safety and security is the top reason respondents provide for owning smart home devices, while cost is a perceived barrier	12
How to engage customers in smart home insurance programs	13
Most consumers are unaware of smart home insurance program incentives or discounts.....	13
Discounts, alerts and event interventions are valuable components of smart home programs	15
Key strategies for boosting smart home program participation	17
LexisNexis analysis: In the market	18
The ultimate question and beyond	18
How LexisNexis Risk Solutions can help carriers leverage big data	19
Appendix: Smart home devices	20
About the author	21

Executive Summary

The Internet of Things (IoT) is reaching into consumers' homes at an accelerating pace. In response, home insurance carriers are looking to create strategies around how to engage customers and use IoT data to unleash new business opportunities.

To help carriers better understand the business implications of smart home devices, LexisNexis® Risk Solutions commissioned a study of 2,500 U.S. consumers. Our survey addressed smart home device adoption, smart home insurance program awareness, program engagement incentives and data sharing.

Key findings include:

- Consumer adoption of smart home devices is notable. Our study focused on nine smart home devices (see the Appendix). Close to half of the respondents own at least one device from one or more of the nine device categories we studied and several own many.
- Most consumers who already own one smart home device are willing to purchase or install additional devices if their carrier offers them a discount on their home insurance policy.
- Smart home devices meet varied consumer household needs, including convenience, energy savings and a desire to have the latest technology. Safety and security was the top motivator for 47% of respondents.
- While smart home device adoption is increasing, consumer awareness of smart home insurance programs is low. Only 22% of respondents were aware that carriers had a program.
- 78% of smart home device owners are open to sharing their data with their insurer. Privacy remains the chief concern among reluctant consumers.

The results also point to specific strategies for addressing each target area: adoption, program awareness and engagement, and data sharing.

By gleaning insights from smart home device data, carriers can offer customers more personalized experiences, products and services while building customer loyalty and trust. These same insights can lead to opportunities to reduce risk, better manage expenses and identify new areas for business growth.

Overall, our results indicate that smart home insurance programs are still in the beginning stages. Carriers that take strategic steps to better understand their policyholders' appetite and adoption of smart devices can respond appropriately and create a competitive advantage.

Understanding the implications of smart home device adoption

Consumers have a soaring appetite for smart devices to help them navigate their daily lives. At home, they're connecting smart home devices to help them conveniently manage their utilities, protect their families, and minimize or avoid damage to their property and possessions.

Smart devices and new technologies have unlocked new business models from startups and incumbents that have a vision for their potential value throughout the insurance customer journey. The devices and the data they generate are also creating opportunities for carriers to develop new strategies for engaging consumers and managing underwriting and claims workflows.

To take a closer look at these opportunities, we surveyed U.S. consumers about smart home device adoption, smart home insurance program awareness, program engagement incentives and data sharing. The results indicate that with the right strategies, consumers and carriers can benefit from timely, actionable, smart home data-driven insights.

Here's what we learned.

About the study

In September 2019, LexisNexis® Risk Solutions commissioned a web-based survey of 2,500 U.S. homeowner insurance policyholders between the ages of 25 and 65, with a household income of at least \$25,000. Key demographics were monitored to ensure the characteristics of respondents match U.S. Census demographic distributions. Participants were asked about their awareness and ownership of nine smart home devices—smart thermostats, lightbulbs, water leak sensors, whole home water leak systems, smoke detectors, door locks, external facing/outdoor security cameras, wireless motion security sensors/alarms and doorbells. For more details about how these smart home devices were described, see the Appendix. Subsequent questions were based on ownership/non-ownership of these smart home devices.



Key findings

Discounts and data sharing: What they mean to consumers

Discounts offer some motivation to existing smart home device owners to purchase or install other devices

Most consumers who already own one smart home device are willing to purchase or install additional devices if their carrier offers them a discount on their home insurance policy. Although their level of interest is similar across all device types, owners are most interested in discounts for installing smart smoke detectors (75%) and smart thermostats (70%). Fewer owners are interested in discounts for water leak systems (57%) and sensors (60%, Figure 1).

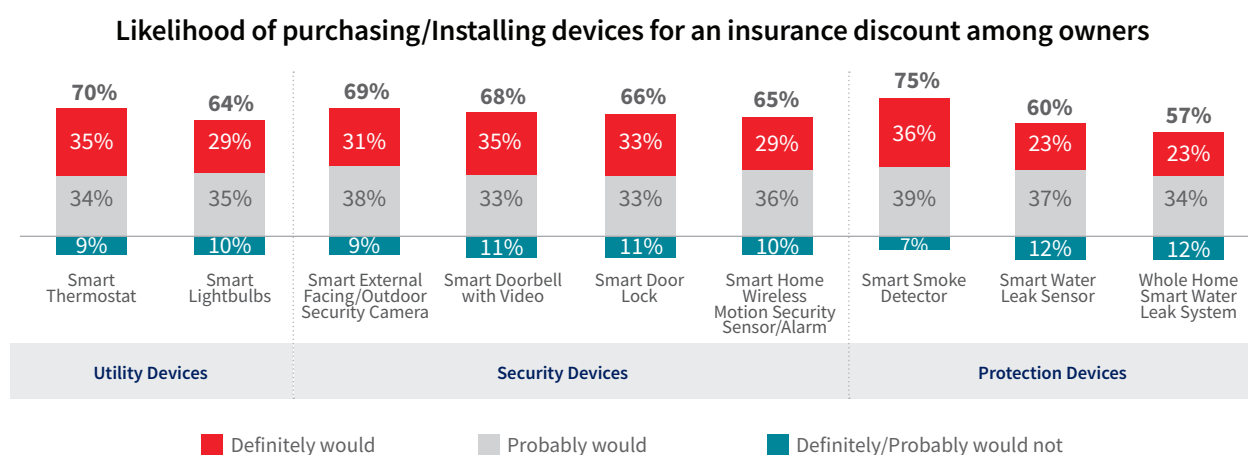


Figure 1. Smart home device owners are most likely to install a smart thermostat or smoke detector if offered a discount on their home insurance.

Generally, a lower percentage of consumers who do not own smart home devices (non-owners) are interested in insurance discounts for installing devices across all categories. However, discounts for the use of smart smoke detectors, doorbells with video and thermostats appear to offer the most potential for motivating non-owners to purchase smart home devices.



Take action

Consumers appear to be willing to purchase new devices if a discount is offered, so as carriers better understand the value of specific devices, they should build marketing campaigns to encourage consumer use. Additionally, carriers should seek partnerships with popular device makers to bolster marketing, discounts and overall adoption.

Many smart home device owners are willing to connect to their carriers to receive alerts and help file claims

The majority of smart home device owners are willing to connect their device to their carrier to provide information to aid claims (79%) and for alerts and event prevention (76%, Figure 2). Notably, very few smart device owners (less than 10%) said they would not share their data.

Willingness to connect smart home devices to an insurance company among owners

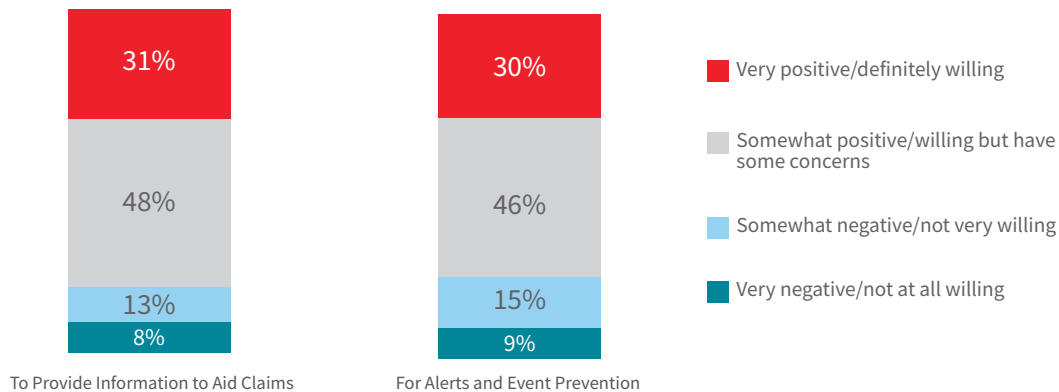


Figure 2. Most smart home device owners are willing to share data with their carriers, but many have concerns.

Willingness to connect smart home devices to carriers is even higher among smart device owners with recent claims. For example, smart device owners who have recently filed a claim are willing to connect their devices in exchange for alerts and event protection (86%) and to provide information to aid claims (86%, Figure 3). In addition, four out of 10 say they are definitely willing to connect to a carrier—representing a significant opportunity for carriers.

Willingness to connect smart home devices to an insurance company among recent claim filers

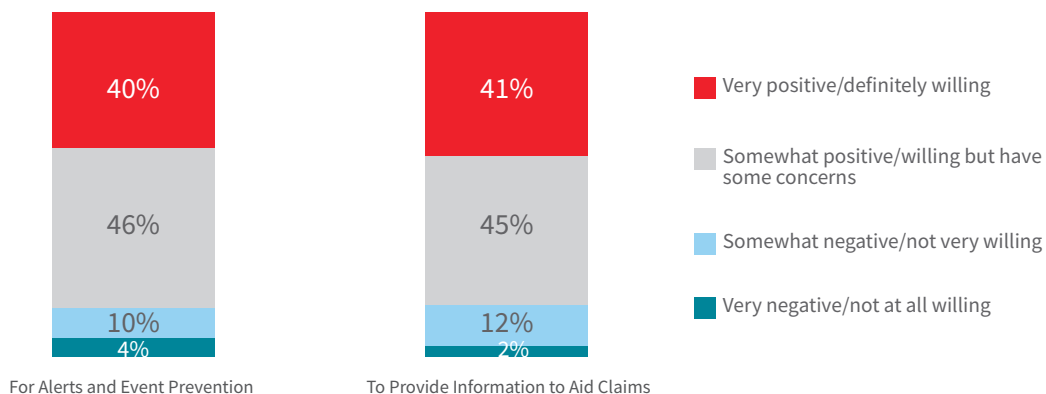


Figure 3. Consumers who have recently filed a claim are more willing to share data with their carrier to receive alerts or get help filing a claim.



Take action

Consumers are willing to let their insurer see and use their data for insurance purposes. However, they also expect companies to keep their data safe. Carriers need to address consumer privacy concerns openly and directly. Best practices include explaining how customer data is collected, protected and used, and complete transparency about what data is shared, with whom and when. For more than 20 years, insurance carriers have trusted LexisNexis Risk Solutions as a steward of consumer data—and a trusted partner to safeguard, protect and use consumer data within regulatory requirements.



“Data breaches are becoming more and more common. While it may not be the initial intent, the data could be used to penalize (raise premium rate outside of any initial reduced cost incentive) homeowners for behaviors, occurrences or other data type the company does not agree with.”

- Concerned Consumer



Consumers expect discounts for sharing data to assist with underwriting and policy pricing

While many consumers are positive about sharing data with their carrier to receive discounts and alerts, the majority of smart home device owners (65%) say they would require a discount to share smart home device data for policy pricing purposes (Figure 4). Notably, 13% of owners would be willing to share data with their carrier, even without a discount or incentive.

Willingness to share data with an insurance company for a discount or incentive

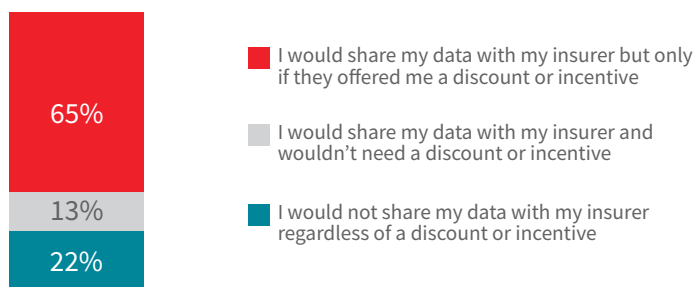


Figure 4. Many smart home device owners are willing to share data with their carrier to assist with underwriting and policy pricing, but only if offered a discount.

Among all respondents, those who have filed a claim within the past five years are more willing to share their data than those who haven't or who have never filed a claim (Figure 5).

Willingness to share data with an insurance company among claim filers

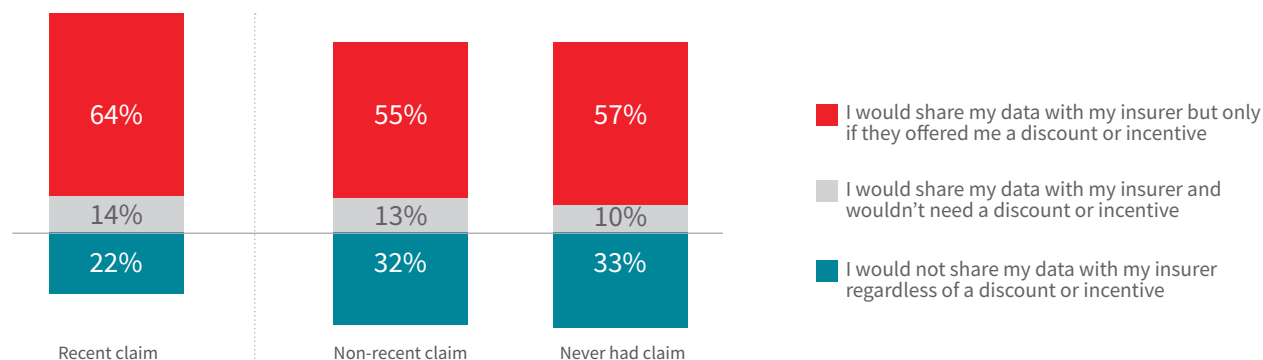


Figure 5. Consumers who have recently filed a claim are more willing to share data with their carrier to assist with underwriting and policy pricing.



Take action

If carriers want customers to share their data for underwriting and policy pricing purposes, offering a discount is a strong requirement. However, to avoid a “race to the bottom,” carriers should also adopt complementary strategies, such as emphasizing how data sharing could save consumers money by preventing catastrophic leaks and flooding.

Privacy concerns about sharing data are not limited to insurance

Many smart home device owners are concerned about the privacy of their personal information. However, that concern is not unique to the insurance industry. Respondents expressed concerns about privacy across industries (Figure 6). In fact, concerns are even greater for other categories such as social media and banking—which many consumers interact with on a daily basis. Still, it’s an issue that carriers must address in their smart home insurance programs.

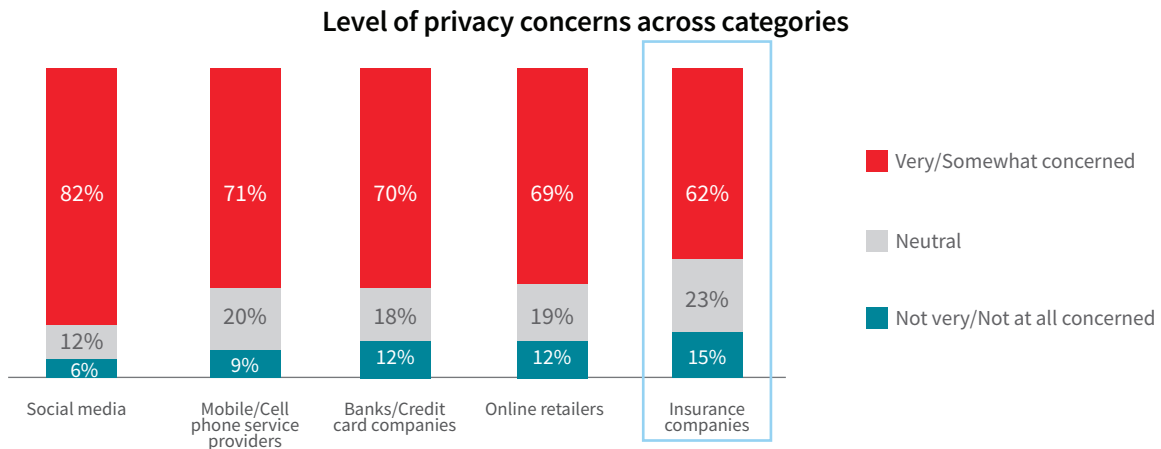


Figure 6. Many smart home device owners have privacy concerns about sharing data with their carrier.

Video capabilities affect how concerned consumers are about privacy violations (Figure 7). Among smart home device owners, privacy concerns are significantly higher for devices with video (71%) than for those without video (60%).

Level of privacy concerns for video-enabled devices

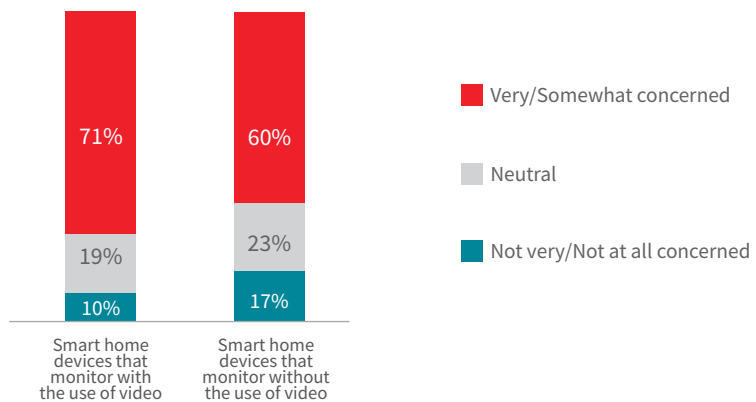


Figure 7. Privacy concerns are significantly higher for smart home devices with video included.

Privacy concerns are the main barrier to consumers’ willingness to share smart home data with their carrier, even if offered a discount. Their main concerns are privacy of their personal information and concerns about how the information will be used.



Take action

For many consumers, a discount is not enough to entice them to share data. Carriers need to bake consumer privacy into smart home initiatives. In addition, given consumer concerns over video, carriers may consider initiating customer engagement efforts with smart home devices that lack video capabilities.

The story behind smart home device adoption

No single device is driving overall consumer adoption of smart home technologies

Overall consumer adoption of smart home devices is notable. Almost half of the respondents (46%) have one of the nine devices we asked about in their household—and that doesn't include consumers who own other smart devices, such as smart speakers, which are big sellers. Further, consumers who own one device often own multiple devices. However, of the devices we surveyed, no single device is leading the way.

Utility devices such as smart thermostats and lightbulbs are a popular choice, allowing consumers to control the heating and lighting of their homes remotely using their laptops or smartphone apps (Figure 8). Many consumers own smart security devices (59%), including security cameras, wireless motion sensors and doorbells with videos, which can also be controlled with smartphone apps and, in some cases, virtual assistants such as Alexa and Google Assistant. A smaller number of owners have installed protection devices to alert them to smoke and water leaks.

In nearly all cases (89% or more), owners use these devices as “smart” devices, meaning they access and control the devices remotely from apps or websites, particularly the device's app.

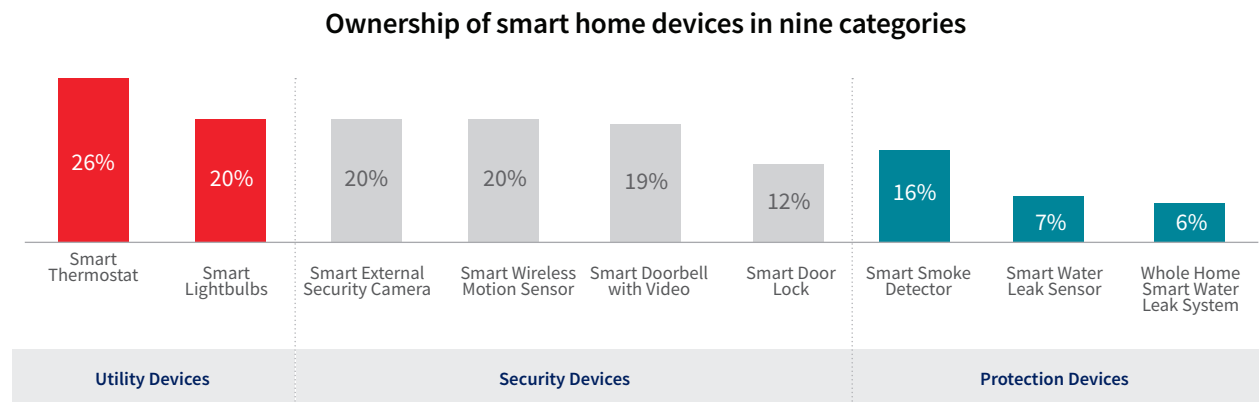


Figure 8. Homeowners use a wide variety of smart home devices, with no clear frontrunner.



Take action

Knowing which devices their customers own can help carriers design the right programs and incentives. Given the wide range of devices in use, we recommend carriers work with a trusted partner to gain actionable insights from these connected devices—freeing them up to focus on their core business, selecting and underwriting risk, and managing claims.

Safety and security is the top reason respondents provide for owning smart home devices, while cost is a perceived barrier

When asked for the main reasons why they have a smart home system/device, almost half of the respondents (47%) revealed they are motivated by safety and security (Figure 9). Other reasons include the convenience of being able to manage devices remotely (31%) and the opportunity to reduce energy bills or save money (25%).

Some respondents reported being curious about how smart home technology works (24%) or wanting to have the most up-to-date systems in their homes (17%).

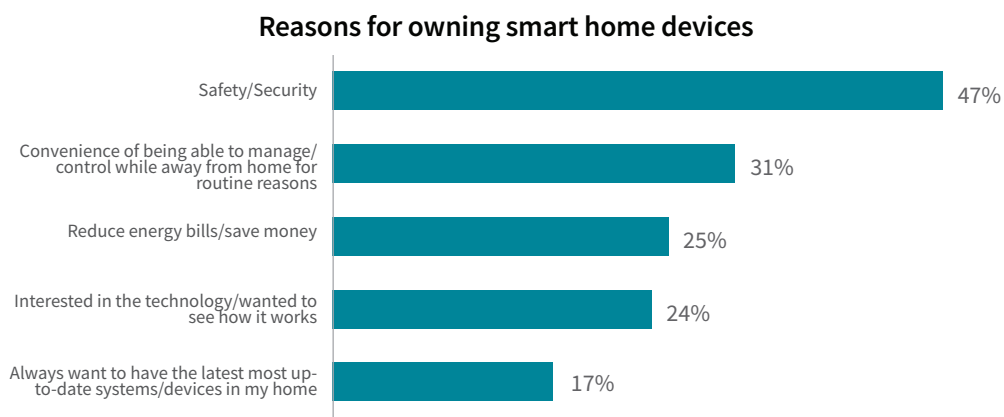


Figure 9. Safety, security and convenience are the reasons provided most often for owning smart home devices.

Consumers who do not own a smart home device are deterred by the cost of devices (58%), by already having traditional systems that meet their needs (42%) or privacy concerns (26%, Figure 10).

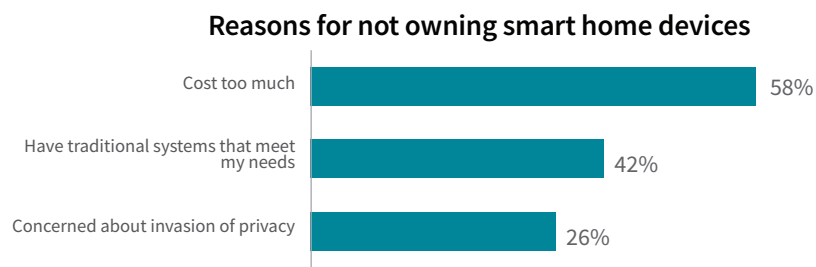


Figure 10. Cost is the highest barrier to owning smart home devices.



Take action

While carriers don't have control over the cost of smart devices, they could use this information to build programs around specific types of devices that consumers are already buying. They could also encourage more widespread adoption by highlighting the core benefits of owning certain smart home devices. This includes personal and property safety and energy savings, all three of which have a cost factor.

How to engage customers in smart home insurance programs

Most consumers are unaware of smart home insurance program incentives or discounts

Consumer awareness of smart home insurance programs is low. More than three-quarters (78%) of respondents were unaware of incentives or discounts for installing smart home devices or weren't sure if they knew about them (Figure 11).

Overall awareness of smart home insurance programs

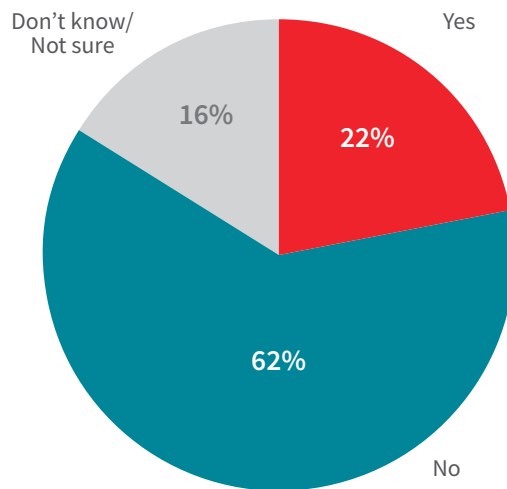


Figure 11. Awareness of smart home insurance programs and discounts among respondents is low.

Program awareness among smart home device owners is higher than among non-owners (Figure 12). More than one-third (34%) of smart home device owners are aware of programs offered by insurance companies that include incentives or discounts for having the device, whereas only 12% of non-owners are aware carriers offer similar incentives.

Awareness of smart home insurance programs among owners and non-owners

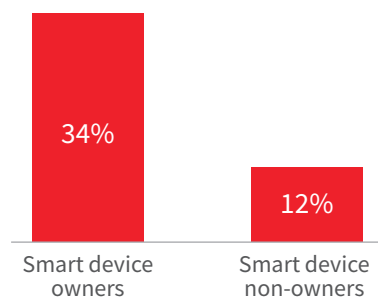


Figure 12. Awareness of smart home insurance programs and discounts is significantly higher among smart home device owners.

In addition, program awareness is higher among smart home device owners who've filed a home insurance claim within the past five years. Almost one-third (31%) of recent claims filers know carriers offer smart home incentives and discounts (Figure 13). Those who have not recently filed a claim or who have never filed a claim (22% and 18%, respectively) have much lower awareness levels.

Awareness of smart home insurance programs among claim filers

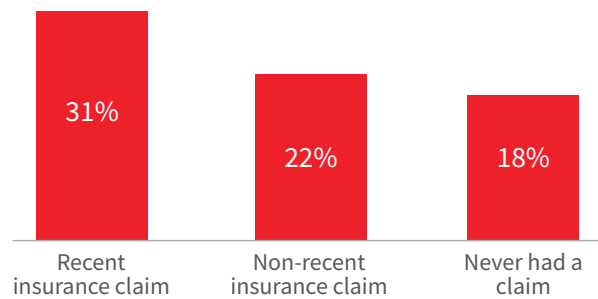


Figure 13. Awareness of smart home insurance programs and discounts is higher among smart home device owners who have recently made a home insurance claim.



Take action

The first step to increasing adoption is to make sure customers know about smart home insurance programs and incentives. As a starting point, carriers should be documenting at point of quote, claim and renewal whether policyholders have smart home devices. Newsletters, marketing campaigns and personal consultations are all ways to inform customers of the advantages of smart home devices.



Discounts, alerts and event interventions are valuable components of smart home programs

When it comes to the specific components of smart home programs, the majority of smart home device owners (81%) value discounts/alerts (Figure 14). However, many consumers find other interactions similarly valuable, including their carrier:

- Alerting them when sensors detect water leaks (76%)
- Contacting authorities if a person is detected outside or inside their home (75%)
- Alerting them when sensors detect someone outside or inside their home (74%)
- Automatically receiving incident-related information to speed up claims processing (73%)

Perceived value of components in a smart home insurance program

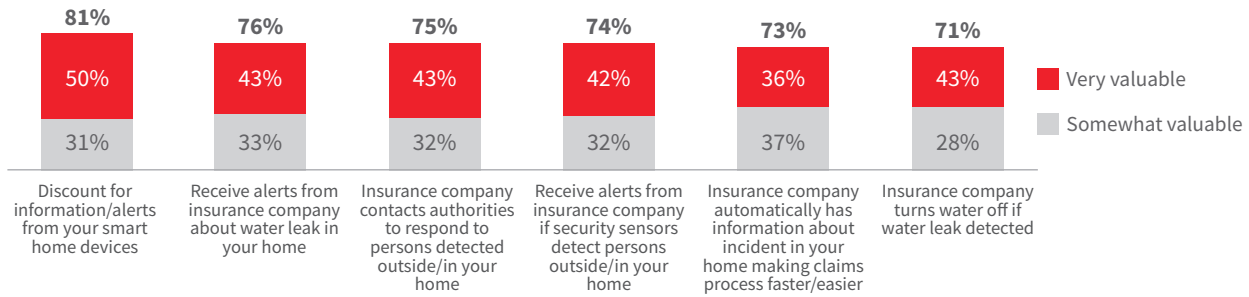


Figure 14. Discounts and alerts are seen as the most valuable, but other smart home insurance program components aren't far behind.

While smart home device owners are more receptive to discounts, interactions and other insurance value delivered through their devices than non-owners, that's not to say non-owners don't see the value. More than two-thirds of non-owners are interested in discounts on their homeowners policy (compared to 81% of owners), 64% would like to receive alerts about water leaks (76% of owners) and 62% would like their carrier to take action if there's an intruder (75% of owners, Figure 15).

Perceived value of components in a smart home insurance program

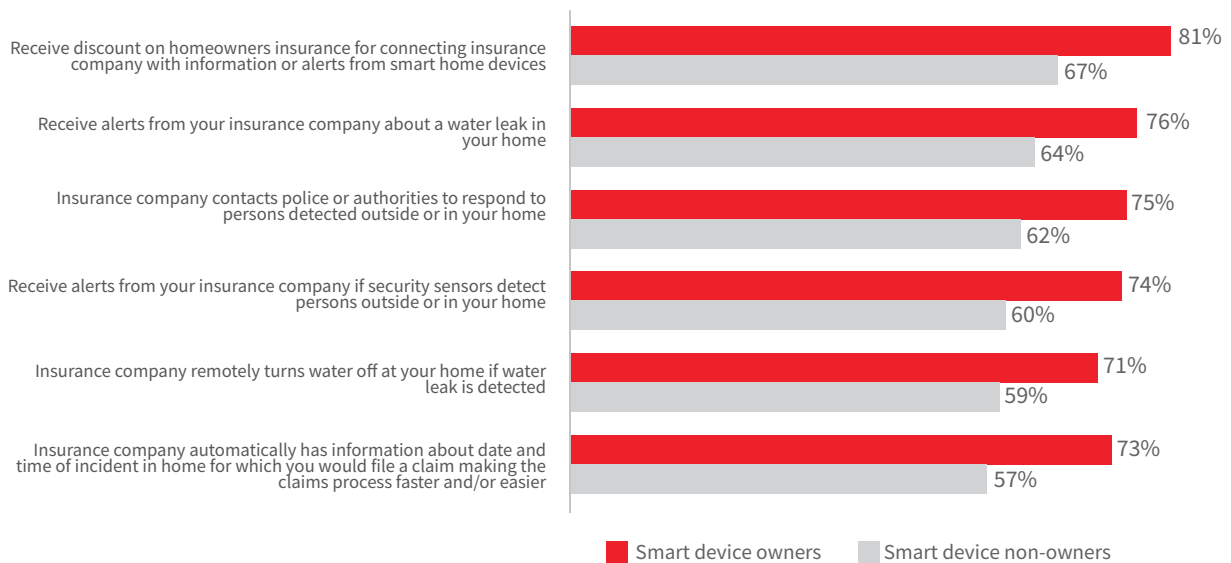


Figure 15. Smart home device owners see value in a variety of smart home insurance program components.



Take action

Carriers can expect their communications to be well-received by smart device owners—but communications about savings or extended coverage are likely to have the biggest impact. They should also experiment with other approaches, such as tips, alerts and customized reminders, to identify the most desired messages and their frequency.

Did you know that LexisNexis®
Current Carrier® Property includes
a field to contribute information
on smart home devices?

Current Carrier Property helps you quote and
underwrite more effectively by identifying key
household data, including the use of smart
home devices, and specific risk factors.



Key strategies for boosting smart home program participation

Consumer awareness of smart home insurance programs is low, but smart home device adoption is growing. That creates an opportunity for carriers to educate and inform the market to further boost adoption, provide valuable benefits to customers and drive engagement, loyalty and retention. Increasing marketing efforts around existing programs can help drive participation—particularly among those consumers who already own a smart home device.

Here are some things you can do to get started:



Talk to customers.

Begin asking about smart home devices at time of quote, service and renewal. Our research uncovered a small group of carriers that are already asking about the presence of smart home devices, and many are offering discounts. Carriers that gather data about the devices policyholders own, even in an anecdotal way, can gain insights they can use to develop loss trends and target customers who might be interested in specific programs or initiatives. In addition, given that smart home device programs are still in the beginning stages, even small investments in smart marketing campaigns can help carriers create a competitive advantage.



Offer meaningful incentives.

Many smart home device owners appear willing to purchase additional devices if they're offered an insurance discount. In fact, when asked about connecting their smart home devices with carriers and sharing their data, many respondents said they would do so—for the right incentive. We recommend testing a range of incentives, such as gift cards, discounts and deductible forgiveness.

However, discounts alone may not be enough to persuade non-owners to purchase a smart home device. For these consumers, you should fully demonstrate the benefits of the devices and offer other insurance program incentives to get them on board.



Educate yourself on the value of smart devices.

When your organization has a better understanding of the value of specific smart home devices, you have a clear opportunity to design marketing campaigns that appeal to consumers.

LexisNexis analysis: In the market

Beyond our research, we're encouraged to see the following market trends:

Carriers are actively involved in smart home device pilots.

As part of these pilots, they're testing affiliate device bundling strategies, primarily with a focus on loyalty and engagement.

Carriers are eyeing IoT platforms to help them optimize customer engagement.

They're also interested in aligning smart home initiatives with consumer buying preferences around security, energy management and entertainment.

Carriers are gathering data about smart home devices.

They're asking customers at the time of quote if they own a smart home device—a good starting point. The next step is to talk about devices with customers at every touchpoint.

The ultimate question and beyond

Our research uncovers the good news and bad news around how insurance policyholders are adopting smart home devices. The bad news: consumer awareness of existing smart home insurance programs is low. The good news: That means putting marketing effort toward programs that are already in place can help drive participation.

Our research also shows that consumers are willing to share data for the right incentive. Carriers should experiment with different ideas, from gift cards to discounts, deductible forgiveness to “gifts” of incentives to purchase new smart home devices. Consumers also appear to be willing to purchase new devices if discounts are offered—and existing device owners appear to be more open to purchasing additional devices. In other words, the right marketing message could help carriers foster ongoing relationships with smart home device owners.

Similarly, consumers indicate that they're open to receiving communications of all kinds through smart home devices. Carriers should be researching and testing different messages, frequencies and approaches, as well as different channels—whether smart home device apps or their own.

Finally, carriers should be asking about smart home devices at time of quote, service and renewal. Even anecdotal evidence about adoption or the types of devices being used can help them develop loss trends and target customers for discounts, benefits and cross-promotion.

How LexisNexis Risk Solutions can help carriers leverage big data

The massive amount of data contained in this new ecosystem can be overwhelming for carriers focused on the core business of insuring risk. It's hard to know what questions to ask and where the value lies. That's why, in the near-term we intend to apply our tried and true platform skills to tap into the wealth of data from connected devices—and to deliver insights from that data to our customers.










Using our resources, we'll identify which data from these devices is most predictive so that insurers can decide where and how to incorporate it into their existing workflows and transactions. We're currently working with device makers to conduct loss performance studies of common devices pre- and post-installation, and will publish some of those results in 2020.

To understand how smart home engagement drives insurance shopping behavior and loyalty, and which devices matter most to loss prevention, we'll carry out further research. And of course, we'll continue to act as a trusted steward of consumer data—something our business is built on, so that our customers can execute their strategies with confidence, and their customers can know their private data is safe.

Smart home and IoT device adoption is a win for both consumers and insurance carriers. As the technologies evolve, consumers will enjoy more streamlined and useful interactions with their carriers, as well as enhanced personal and property safety and security. In return, carriers that can leverage digital assets will establish a more complete view of their customers, enabling them to offer more personalized products and services, reduce risk, better manage expenses and identify new areas for profitable business growth.

Appendix: Smart home devices

Our research focused on nine smart home devices:

Utility devices		Smart thermostats	Function like programmable thermostats in controlling a home's temperature throughout the day but have Wi-Fi connectivity. Can be controlled remotely using an Internet-connected device such as a smartphone or laptop.
		Smart lightbulbs	Provide control of lighting from a centralized location via an Internet-connected hub or remotely using a smartphone or laptop.
Security devices		Smart external facing/outdoor security cameras	Allow video to be transmitted and stored on a built-in storage device or cloud storage. Can be controlled remotely by smartphone apps or virtual assistants such as Alexa or Google Assistant.
		Smart home wireless motion security sensors/alarms	Operate like traditional security alarm systems, but are wireless and can be armed, alarmed and managed from a companion smartphone app.
		Smart doorbells	Capture video and notify a homeowner's smartphone or other electronic device when a visitor arrives at the door. Activate when the visitor presses the button of the doorbell or when the doorbell senses a visitor with its built-in motion sensors.
Protection devices		Smart door locks	Allow access to a home using a smartphone or key fob to verify wirelessly and mechanically unlock the door without requiring a traditional key.
		Smart smoke detectors	Connect to a home's wireless network and can send notifications to a smartphone when the alarm is triggered, when the battery gets low or if there is a problem with the sensors in the unit.
		Smart water leak sensors	Credit card-sized, Internet-connected sensors placed near high-risk leak areas to alert a homeowner of water leaks quickly. Can be programmed to send a text message or push notification when water is detected.
		Whole home smart water leak systems	Connect directly to a water pipe to measure flow rate, temperature and water pressure. Some systems can shut off water before major leaks occur.

About the author



Dan Davis

Director, IoT and Emerging Markets, LexisNexis Risk Solutions

Dan Davis serves as Director, Vertical Markets (IoT), Insurance. Dan has been with LexisNexis Risk Solutions since 2016, where he leads the creation of the value proposition, strategy and positioning for the LexisNexis IoT platform across Life, Home and Commercial. His insurance experience includes leadership roles in claims, business development and strategic technology initiatives in the P&C market. Dan has also served LexisNexis through strategic partnership management in the emerging markets and software platform space. Dan has a bachelor's degree in Business from Louisiana State University.



LexisNexis can help carriers derive value from smart home insurance programs

Want to leverage smart home technology to enhance your customer experience, sharpen business intelligence and improve loss performance? We will use our platform skills to validate the presence of smart home devices in a household in real time, so you truly understand the end-to-end impact of smart home devices.

At LexisNexis Risk Solutions, we're putting the power of our platform behind data from smart home technologies. We are conducting loss correlation studies to identify claims trends before and after smart home devices are installed. And we overlay research like this with our own property characteristic data to help you better understand the profiles of consumers, households and properties adopting these devices.

How can we help you?

For more information, call 800.458.9197 or email insurance.sales@lexisnexisrisk.com



About LexisNexis Risk Solutions

LexisNexis® Risk Solutions harnesses the power of data and advanced analytics to provide insights that help businesses and governmental entities reduce risk and improve decisions to benefit people around the globe. We provide data and technology solutions for a wide range of industries including insurance, financial services, healthcare and government. Headquartered in metro Atlanta, Georgia, we have offices throughout the world and are part of RELX (LSE: REL/NYSE: RELX), a global provider of information-based analytics and decision tools for professional and business customers. For more information, please visit www.risk.lexisnexis.com and www.relx.com.