

Smart Home Technology: Many Express Interest, But Cost and Privacy Concerns Slow Adoption



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Executive Summary

Hardly a week goes by without the introduction of a new personal device or system designed to connect with home wireless networks and the internet to instantly provide users with a new or an enhanced service or convenience. With smart home technology, for example, individuals can monitor the security of their homes or the status of their heating or plumbing systems. Using applications installed on smartphones and other mobile devices, one can adjust a thermostat and turn lights on or off, among other things. There appears to be no end to the variety of activities and tasks for which a smart home device or system can be designed to accomplish or make easier than before.

Although designed primarily to benefit households, some smart home devices and systems have also attracted the attention of insurance companies interested in helping policyholders eliminate or reduce risks in the home. Examples include sensors or devices that can alert homeowners when:

- A washing machine water supply hose has burst.
- A clothes dryer vent needs to be cleaned.
- An intruder has entered a home.
- A door or window has been left unlocked.

By reducing risk for homeowners and renters, smart home devices may reduce insurance claim payouts and help control insurance coverage costs. Several insurance companies have encouraged policyholders to install specific devices and systems in their homes. In some instances, insurers may even subsidize purchase and installation costs or offer premium discounts to policyholders who install a device or system. Some smart home devices and systems may transmit information directly to a homeowner's insurance company. The insurer may then use the information to provide policyholders with recommendations on how they might reduce or eliminate certain risks or simply better manage certain aspects of home ownership, such as energy use and conservation.

The emergence of smart home technology has raised concerns about the security of home networks and the personal information contained therein. Reports of massive data breaches and the hacking of corporate information systems resulting in the release of protected personal and financial information have made consumers especially sensitive to the risks associated with sharing personal information. Whether such concerns are likely to affect the adoption of smart home technology and consumer participation in insurer-sponsored programs is the topic of this survey report.

To explore public interest in smart home technology, the Insurance Research Council (IRC) commissioned an online survey of 2,000 United States adults countrywide. The objectives of the survey were to:

- Assess the degree to which homeowners and renters are receptive to smart home technology and, in particular, devices and systems offered or promoted by insurers
- Determine the characteristics and benefits of smart home technology that homeowners and renters value most
- Identify benefits and concerns that encourage or discourage participation in insurer-sponsored systems

To be included in the survey, a respondent had to report having a home wireless network with an internet connection. Otherwise, the survey sample was representative of the U.S. general population with respect to age, gender, education, income, region, and ethnicity. Sixty-seven percent of all respondents reported owning their home, with 33 percent reporting that they rented. The survey was conducted by Survey Sampling International, LLC (SSI) during the third week of June 2017. The complete survey with responses is provided in the Appendix.

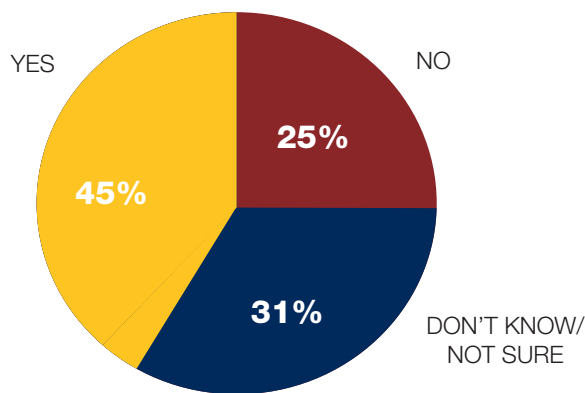
Key Findings

- Homeowners and renters with home wireless networks are generally well aware of the smart home technology products that are available to them, but the adoption rate is relatively low—only 1 in 4 actually had such a device or system in their home at the time of the survey. Despite the low adoption rate to date, two-thirds of those who have not yet adopted a device or system said they would consider doing so.
- As found in other surveys, openness to adopting smart home technology is associated with age. Older homeowners and renters were much less likely to express an interest in smart home technology, with openness declining significantly after age 45.
- Networked security cameras, gas detection sensors, and door locks attract the greatest attention, with water-leak sensors and appliance sensors attracting less interest.
- Only 1 in 14 reported having been contacted by their homeowners/renters insurance company to install a networked device or system. Of those reporting having been contacted, more than two-thirds (69 percent) said they were offered a premium discount on their insurance coverage if they installed the device and participated in the insurer's program. A little more than half (55 percent) of those contacted by their insurer agreed to install a device or system. Four in ten did not accept their insurer's offer or invitation and were most likely to point to the cost of the device or system as the primary reason.

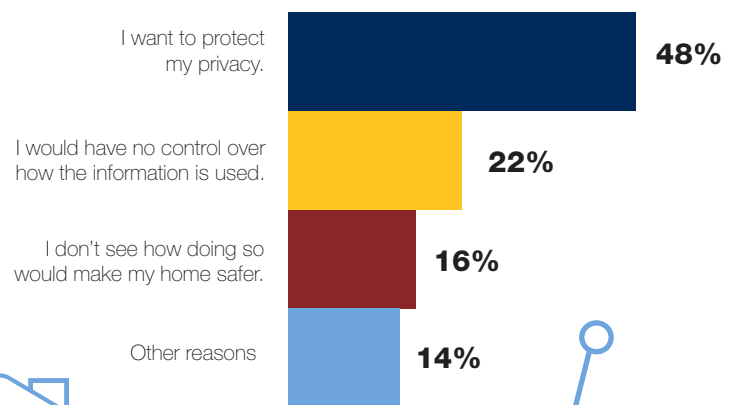
- Fewer than half (45 percent) of all those surveyed said they would consider allowing their insurer to receive information on the status of their home through a networked device. Another 3 in 10 said they didn't know or were not sure whether they would consider doing so, with 1 in 4 saying no. IRC interprets these findings as suggesting that approximately 3 in 4 homeowners/renters are open to considering allowing their insurer to receive information through a networked device. Wanting to protect their privacy was the primary reason why a homeowner/renter was not open to allowing his or her insurer to receive information through a networked device.
- The survey explored program features and circumstances that might move those open to allowing their insurer to receive information in the direction of agreement and what features and circumstances might move them away from agreement.
 - Receiving a premium discount for participation, receiving a premium credit for the cost of the device or system, the ability to discontinue participation without penalty, and the ability to control how the information collected was used were features viewed most often as enhancing the likelihood of participation.
 - Concluding that their privacy could not be protected, discovering that their insurance costs might go up, and realizing that their home network might be hacked and their personal information stolen were most likely to be viewed as leading to a decision not to participate.

SMART HOME TECHNOLOGY

Today, would you consider allowing your insurer to receive information about the status of your home through a networked device?

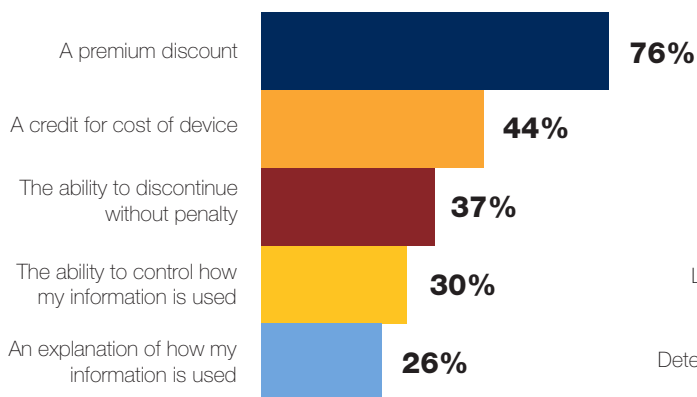


Primary reason why some would not consider allowing their insurer to receive home information through a networked device:



If you were considering allowing your insurer to receive information about your home through a networked device,...

which of the following would likely move you closer to **deciding to participate**:



which of the following would likely move you closer to **deciding not to participate**:

