

# Consumers favor home security over efficiency in smart home technology

January 22 2015, by Ravi Srinivasan

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Credit: AI-generated image ([disclaimer](#))

The message from the yearly CES consumer electronics extravaganza was clear: the list of gadgets that can be connected to the "internet of things" is growing rapidly. These smart-home technologies have the potential to save homeowners energy – but that may not be the primary feature attracting consumers.

Smart home gadgets include gadgets connected to the [home network](#), such as thermostats and [smart meters](#). By connecting with the [electric grid](#), smart meters act upon real-time pricing to change home energy usage patterns, such as adjusting the [air conditioner](#) during times of high prices. By knowing and managing when electricity is being consumed, grid operators can maintain stability and lower energy usage during peak periods.

There is some data to back up the notion that smart-grid technology makes buildings more energy-efficient when used effectively. A US Department of Energy [study](#) showed smart-grid consumers were able to save up to 10% on energy bills.

A home with a comprehensive, centralized automation system has the potential to energy between 17% – 40% of its [energy usage](#), according to a 2011 [study](#) by the Fraunhofer Institute of Building Physics that used a [RWE SmartHome](#). There are also smart refrigerators ([LG ThinQ](#)) and washing machines ([LG Twin Wash](#)).

BI Intelligence [projects](#) the worldwide market for connected-home devices will grow faster than smartphones or tablets and will reach up to US\$490 billion in 2019.



Samsung is among the companies developing a suite of home automation goods, including network-connected appliances. Credit: Samsung, CC BY

### **Is it all about energy?**

The [smart-home](#) concept extends further to include aspects of occupant behavior, which can directly contribute to a higher standard of health and safety. For example, sophisticated security systems with networked cameras allow owners to peer into their homes from anywhere, including for elderly care.

Indeed, energy savings isn't actually the prime reason for owning smart homes, according to 62% of the 2,000 adults surveyed in 2014 by [Lowe's](#). The main reasons were increased security and the ability to remotely monitor homes, according to the survey. So, a true smart home goes beyond controlling energy to controlling home security.

In the future, a building can be equipped with multitudes of sensors and devices that can work in concert. This system is analogous to a healthy human body in that microprocessors embedded in these devices work like nodes in the brain to operate autonomously in pursuit of maximum efficiency.

## What's next?

The whole point of these smart home systems is to have the devices talk to each other. But with big players like Google ([Nest Thermostats; Smoke + CO Monitoring](#)), Samsung ([SmartThings](#)) and Apple ([Homekit](#)) joining the party on their own proprietary terms, interoperability among gadgets is a clear barrier to broader adoption. But the big elephant in the room is cybersecurity.

If you missed seeing *The Interview* last fall, don't blame the N. Korean regime – the fault lies with the vulnerable [ARPANET](#) system, a precursor to the Internet and, of course, Sony's own lacking protocols governing increased cybersecurity.

If [Sony Corp.](#) with US\$24 billion market capitalization could not thwart a cyberattack on its servers that leaked mudslinging emails and *more-than-you-want-to-hear* news, how can a typical smart home owner prevent his or her home being attacked? Theoretically, hackers can disarm, unlock and graciously invite patrons via Craigslist or Twitter to break into homes, unbeknown to homeowners vacationing in a neighboring state or country.

So if a person is looking for ways to save [energy](#), smart-grid technology, such as wireless thermostats, will help them. But a full-on home-automation system—at least for now—may not be the smartest way to go.

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