

Smart Home Technology for Every Generation

The natural evolution of enabling technology offers new levels of freedom and independence for all ages, with a quickly growing application for active adults who are looking to stay in their homes as they age.

BY SARA GUTTERMAN

HE SMART HOME TECHNOLOGY MARKET, expected to reach \$40 billion by next year, is providing a new level of convenience, efficiency, comfort, independence, and security to homeowners in all walks of life.

According to Alarms.org, "57% of Americans say that having smart products in their house saves them about 30 minutes per day, that's 182.5 hours a year, or roughly a week and a half. The percentage of people with smart products in their house is growing substantially with 47% of Millennials already owning some devices while 70% who already own one product are planning to buy another one."

While connected living technology has advanced exponentially in a short period of time, most smart home systems ask a lot from homeowners. Basic systems require homeowners to cobble together a smattering of devices with separate apps and incongruent functionality, which can be frustrating and time consuming.

More advanced platforms with voice control can now help homeowners connect devices together, offering streamlined integration and enhanced programming (in the form of routines), as well as an improved customer experience.

In the most sophisticated connected home applications, smart technologies are methodically designed and integrated into homes, using comprehensive central hubs such as *Samsung SmartThings* to link devices



with sensors, cameras, lighting, HVAC, water heating, water monitoring, appliances, irrigation and even vehicles.

This type of "Intuitive Home" doesn't just respond to a homeowner's commands and make household tasks easier. Rather, it is programmed to optimize performance, resource use, security, and comfort, increasing the home's sustainability and enhancing the homeowner's wellbeing.

THE COST-BENEFIT OF CONNECTED LIVING

Smart home technologies aren't just for younger generations. With a record 46 million people age 65 and older in the United States today (projected to grow to over 67 million by 2050), technology for active adults that facilitates aging in place is an exploding segment of the market

From a numbers standpoint, the cost-benefit analysis of investing in connected living is substantial: while outfitting a home with technology targeted at active adults who want to age in place may cost thousands of dollars, placing a loved one in an assisted living facility or nursing home can cost tens of thousands of dollars per month.

The functionality of active adult-focused technology is rapidly expanding to offer essential real-time feedback and reminders. For example, motion sensors can track the speed and frequency of movement throughout a home to assess an occupant's mobility; cameras can allow occupants to stay in touch with loved ones for enhanced safety and socialization; and alerts and prompts can be set to remind occupants to take medicine, lock doors, turn on security systems, and check in with their healthcare providers.

Using technology designed for aging in place, homeowners—and their loved ones—can monitor vitals, existing conditions, abnormalities that might indicate complications that come with aging, and even irregular behaviors before they turn into emergency situations, providing instantaneous connectivity to healthcare professionals when needed.

UNOBTRUSIVE SOLUTIONS FOR ENHANCED INDEPENDENCE

The Intuitive Home performs many functions in the background to do things like conserve energy, shut off water when leaks are detected, and turn on ventilation fans when air quality is compromised—chores that residents may not have the mobility or state of mind to handle on their own.

At the same time, these systems can be linked to everyday devices that already exist in homes, such as controls, appliances, TVs, motion sensors, humidity gages, and thermostats.

Software companies such as **Billy** are leveraging sophisticated smart home hubs, including **Samsung** *SmartThings*, to find new ways of correlating data and behavior to provide non-invasive monitoring of seniors.

Take for example, a monitoring situation over a certain period of time (let's say 18 hours): a sleep sensor recognizes that a female occupant hasn't gotten out of bed; the smart refrigerator senses that it hasn't been opened; the water monitoring system recognizes that the sink hasn't been turned on; the TV notices that the occupant hasn't watched the news, which she typically does every day; and the pill dispenser senses that the woman hasn't taken her medication.

These devices send this information to the central *SmartThings* hub and Billy software, which compiles this information, along with other recent activity. Noting abnormal and potentially worrisome behavior, the technology hub sends an alert to the woman's daughter and doctor, so that they can check on the woman and, if necessary, provide immediate care.

While still in a relatively nascent stage, the promise and possibilities of aging in place technology continue to expand, offering unobtrusive solutions for enhanced freedom, safety, security, and awareness for all generations, including active adults and their loved ones.

Perhaps the benefits and conveniences delivered by these enabling technologies can mitigate some of the fear and discomfort associated with aging, making the process of aging in place a positive, peaceful experience. **GB**

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