

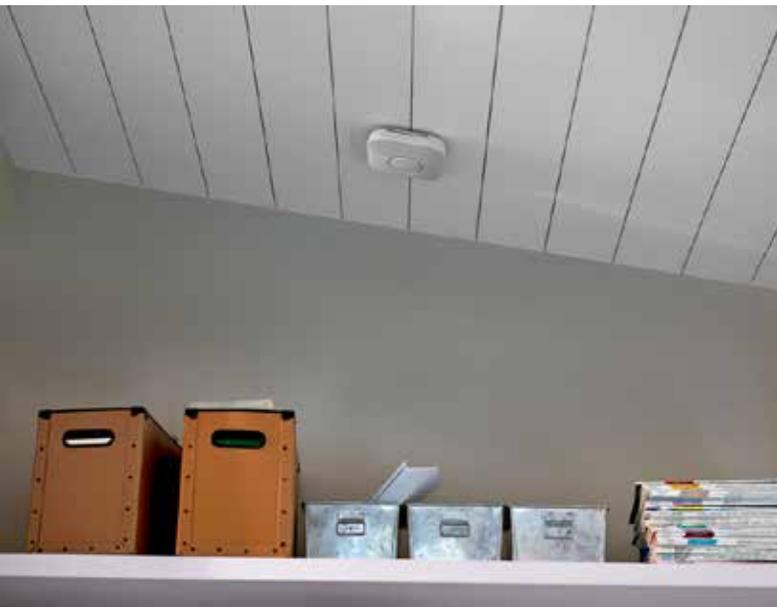
How to Make Home Buyers' Smart Home Dreams a Reality

FROM SECURITY TO LIGHTING CONTROL, DEMAND FOR SMART TECH IS BOOMING. HERE'S HOW NEST MAKES IT EASY.

In just a few short years, home technology has transformed from a high-end extra to a mainstream must-have. Seemingly every product and area of the home has been made “smart.” Not only obvious elements such as controlling and dimming the lights and operating the entertainment center, but even the smallest of tasks like watering the lawn, unlocking the front door, finding a recipe, and turning on the shower have an associated app or central controller.

The reasonings are obvious—such technologies give homeowners more control, added convenience, and peace of mind. No more worrying about whether they closed the garage door.





No more pulling up to a dark house. No more wasting heat when no one's home.

All of this is made possible not just by demand, but by innovation. Today's technology is simple, easy to apply, and much more affordable, paving the way for its proliferation to every sector of daily life.

THEN VS. NOW

Technology has always played a role in American homes, but probably most noticeably in the 2000s, when structured

“Older generations are adopting certain types of smart home technology faster than younger ones. For instance, 40 percent of those over 65 who own smart home products currently have smart temperature products, compared to only 25 percent of Millennials (ages 18 to 34).”

—Coldwell Banker Real Estate Smart Home Marketplace Survey

wiring systems were all the rage and home theaters were a must-have for move-up and custom home buyers. Centralized systems with touchscreens were a precursor to today's smartphone and tablet controls. Lighting controls in particular caught on as a preview of the broader conveniences to come.

Just 10 years later, technology has moved to the masses.

With the proliferation of wireless and Bluetooth, and with the invention of smartphones and tablets, technology is easier to implement, less expensive, and more accessible to everyone, from an apartment dweller to a first-time buyer to an empty nester. Devices such as the Nest Thermostat and Amazon Echo offer an easy entry point into home control as well as a pathway to ever-expansive technology options.

What's most notable about today's systems is that they are almost exclusively plug and play, intuitive to set up and use, and highly customizable. Homeowners can easily pick and choose what they want to control—from lighting to locks—and add on whenever they want long after they've moved in. It's an all-access breakthrough that extends far beyond the home, to Starbucks apps, fitness schedulers, and Uber.

Needless to say, consumers have come to expect nearly every aspect of their life to be accessible through an app on their smartphones—and homes, both new and existing, are no exception.

TECHNOLOGY IN DEMAND

Early in 2016, Coldwell Banker predicted that the year would be an important one for the proliferation of smart-home technology. “The year 2020 has long been a benchmark for when the smart home will finally be mainstream, but according to the results of the ‘Smart Home Marketplace Survey’ from Coldwell Banker Real Estate, that time may come sooner than we originally thought,” the company reported.

The study, which surveyed more than 4,000 American adults in October 2015, found that smart homes are indeed taking off, with nearly half of respondents (45 percent) reporting that they either own smart-home technology or plan to invest in it within the year. Of those who do not currently own smart home technology, 27 percent indicated they planned to incorporate it in 2016.

The most appealing technology to respondents for new-home buying was security and temperature. Less in-demand applications were smart appliances and entertainment.

And it's not just new construction and new-home sales. The “2016 U.S. Houzz Smart Home Trends Survey”, conducted in collaboration with CEDIA, surveyed homeowners who are conducting, are planning to conduct, or have recently completed a remodel and found that nearly half are incorporating technology that can be controlled via a smartphone, tablet, or computer.



Among the top technologies homeowners said they are installing were security/safety (25 percent), entertainment (18 percent), climate control (14 percent), and lighting (12 percent).

FULFILLING BUYERS' WISH LISTS

Even with plug-and-play systems, incorporating technology and understanding everything that's out there can be overwhelming to builders, particularly considering there are hundreds of other materials in the structure to worry about.

That's where Nest comes in.

Nest's mission is to create a home that's thoughtful—one that takes care of itself and the people inside it. The company accomplishes this through simple and beautiful hardware, software, and services, which today comprise the Nest Learning Thermostat, Nest Protect smoke and carbon monoxide (CO) alarm, Nest Cam Indoor, Nest Cam Outdoor, and Nest app. Each component works seamlessly alone or together, as well as with hundreds of other connected products. This provides builders with flexibility to make homes smart-ready for all buyers, then allow those buyers to expand and add on per their own tastes and desires.

Nest Learning Thermostat

The Nest Thermostat was Nest's first product to market, revolutionizing the climate control industry in both design and functionality. It's ability to learn and program itself delivers energy and cost savings. The thermostat is motion-sensing and self-programming, learning from occupant behavior to build a personalized climate-control schedule. In fact, independent studies like those by Energy Trust of Oregon and Vectren Energy Delivery calculated average savings of \$130 to \$145 per year.

Nest at Work: Quadrant Homes

In the Seattle suburbs, premium builder Quadrant Homes is incorporating Nest products into its technology and sustainability features. "Our purpose as a company is to 'Inspire positive change in people's lives one Quadrant home at a time,'" says president Ken Krivanec. "We believe that through our interactions and our approach to thoughtful design that people will have a positive experience."

As part of this mission, Quadrant builds sustainably with Living Smart®, a comprehensive approach to responsible development, high-performing homes, and cost savings that encompasses four components—HealthSmart™, EnergySmart™, WaterSmart™, and EarthSmart™.

Embracing technology is a key method for accomplishing those goals, and it is a must-have for attracting Quadrant's target buyer. The builder delivers on many levels, from keyless entry and automated garage door openers to integrated home automation to CAT 6 wiring and drop zones with USB ports. "Buyers expect to walk in and have a smart house," Krivanec says. "Whether that's Sonos, Savant, Lutron, or Nest—anything you can do from your phone, homeowners expect that."

Part of Nest's appeal to Quadrant is its learning capabilities and opportunities for customization. "Every family is different. At Quadrant, you can choose from a variety of sites and plans and personalize them to your liking, and Nest provides that type of flexibility as well," Krivanec says. "Nest works across interfaces, platforms, and apps; it allows customers to choose the way they want to live. In fact, one of the things we're most excited about is what we don't know about Nest. What will they bring before people even expect it?"

Quadrant recently opened a Design Studio in Bellevue, Wash., an innovative selection center that includes an interactive tech wall showcasing its smart-home offerings and how they work together. "Nest fits right in with this ability to offer consumers a way to futureproof their life," Krivanec says.

Nest Protect

According to the National Fire Protection Association, from 2009 to 2013, three of every five home fire deaths occurred in homes without smoke alarms or with non-working smoke alarms. What's more, modern construction materials have increased the speed of flame spread, giving homeowners less

“Americans with a household income of \$50k to \$75k and those with a household income of \$75k to \$100k are adopting smart home technology at nearly identical paces: 25 percent adoption for those in the \$50k to \$75k range and 26 percent adoption for those in the \$75k to \$100k [bracket]. The same is true for people with only some college education and people who graduated from college: 26 percent versus 27 percent.”

—Coldwell Banker Real Estate Smart Home Marketplace Survey

time to get out. Nest Protect uses a split-spectrum sensor to help keep occupants safe with features that also eliminate some of the hassles associated with traditional devices. Nest Protect self-checks its batteries and sensors and alerts homeowners to replacement needs with a green glow rather than an annoying chirp. The alert system uses a voice system first, allowing homeowners to turn off false alarms, and identifies in which room smoke was detected. An app provides updates to the users' phone when they're home or away.

The Nest Thermostat and Nest Protect can automatically work together: If Nest Protect detects CO, it can tell the Nest Thermostat to turn off the furnace to help keep the danger from spreading.

Nest Cam Indoor

Ideal for the growing number of consumers turning to smart technology for safety and security, the Nest Cam Indoor allows homeowners to look in on their houses and families. The camera broadcasts in 1080p HD, records and saves video for

up to 30 days in the cloud, and features a built-in speaker and mic that allow viewers to hear what's happening and potentially scare away intruders. It can also alert the homeowner if conspicuous motion or noise occurs.

Nest Cam Outdoor

Like Nest Cam Indoor, weatherproof Nest Cam Outdoor provides 24/7 monitoring and alerts. If a homeowner spots something fishy, he or she can speak into the app to scare off an intruder. It provides 24/7 live streaming, can save up to 30 days of footage, and features night vision and 1080p HD with 8-times zoom. Homeowners can receive motion alerts to their phone.

Nest App

Bringing everything together is the Nest app, which makes all Nest technologies available anywhere, anytime.

When the Nest Thermostat came onto the market, its design and simplicity of operation caught the attention of the indus-

Nest at Work: Champion Homes

Champion Homes, a modular builder with offerings ranging from a simple park model to high-end custom homes and even apartments and hotels, recently added Nest as a smart-tech option for many of the 13,000 homes it sells annually. A base package includes a Nest Thermostat, the Lutron Caseta lighting control kit, and SnapPower outlets with nightlight. The Plus package adds a Nest Cam Indoor, Nest Protect, and SnapPower outlets with nightlight and USB port.

“What's exciting about this is that a mix of our customers already want it, are familiar with it, and have seen it in action,” says Dan Grant, director of strategy. “But in a lot of cases, we're the ambassadors for what this technology can do. Nest as an example of a simple technology with a friendly user interface. It doesn't take a hefty learning curve to interact with the product.”

Champion serves buyers around the country from its 18 facto-

ries, so flexibility in managing demographics and geography is essential. “There are over 1,000 products you can integrate Nest and Lutron with,” Grant notes. “It was really about giving customers the ability to grow smart-home technology in a way that works best for them. They're not limited to what comes in a pre-built package. Nest is the staple and gateway to understanding the value and appreciating what smart-home technology does.”

Smart-home applications also offer peace of mind to one of Champion's key customer groups: second-home buyers. “[Offering Nest] is really helpful with Millennials who are comfortable with technology, but it's the Baby Boomers ... who appreciate the convenience, value, energy savings, and security and comfort they get from these controls,” Grant notes. “They're really excited about this too, so they're an audience where this package is going to be a big win for us.”



“Renovated homes are more than twice as likely to include a smart system or device than before the renovation. Homeowners report greater levels of satisfaction with their upgraded smart features than their non-smart features.”

—“2016 U.S. Houzz Smart Home Trends Survey”

try and has been inspiring it ever since. Nest was named one of the most influential gadgets of all time by Time magazine and offers tremendous brand recognition: In a Google survey, homeowners were asked, “When you think of ‘smart or connected home’ brands, which come to mind?” Nest beat out all other brands, including behemoths Apple and Samsung.

WORKS WITH NEST

Along with the features that the Nest suite offers on its own, there are endless possibilities for extending their operations to the rest of the home through integrations with hundreds of other technology products—from lights to appliances to cars. Among the brands that work with Nest are Whirlpool, Mercedes Benz, GE, Logitech, and Lutron.

In keeping with consumer expectations of simple-to-use connectivity, integration between systems is simple; no technical skill required—the devices connect to each other through

their apps.

For example, homeowners can adjust the Nest Thermostat by speaking through Google Home or Amazon Echo. The Misfit fitness tracker will work with Nest to track sleep and help the consumer wake to his or her ideal temperature. The iHome Connector works with Nest’s Home and Away states to turn lights off and on. When integrated with a Haiku Fan, the Nest Thermostat can tell the fan to go into Winter mode and redirect hot air downward. If Nest Protect detects smoke, the Rachio Smart Sprinkler can start cycling through sprinkler zones. And the options and possibilities go on.

The result is a smart home that accommodates each homeowner’s specific lifestyle preferences without giving them things they don’t want or need. Just as important, the systems are easy and affordable to set up, add on to, and operate.

“To be a differentiator you have to differentiate,” says Ken Krivanec, president of Quadrant Homes near Seattle. “Nest houses do that.”

