

cooking SMART

The latest technology ensures that everything coming out of your kitchen is good to the last byte

By Jennifer Sergent

It looks like a small TV, similar to those found in most kitchens these days. But the screen in Nadine Gabai-Botero and Luis Botero's Bethesda kitchen is much smarter than the one you'll get with the average cable plan.

Part grocery and menu planner, part television and radio, part Internet and Skype portal, the computer is at the heart of the Boteros' smart home, which also includes preprogrammed lighting and front-door sensors that send an email when a package is delivered.

Luis Botero, who sells Microsoft software systems to large corporations, made sure there was space in their kitchen renovation last year for a touch-screen monitor at the kitchen table.

"It's like having a fifth person sitting here," Luis Botero says of the power-packed screen that helps family members organize their daily activities. Sometimes the couple and their two sons chat on Skype with Luis' mother in Tampa, and then, he adds, there actually "is a fifth person sitting here."

The Boteros are early adopters when it comes to a fully networked kitchen. "Folks asking about [smart technology] already have that kind of background," says Nadia Subaran, the founder and co-owner of Bethesda's Aidan Design who orchestrated the Boteros' renovation.

But beyond LED lighting and touch-activated faucets, smart technology didn't rank among the top trends in the 2013 Style Report by the National Kitchen & Bath Association earlier this year. "It's still far enough out there that people are a little unsure about it," Subaran says. >



STACY ZARIN-GOLDBERG



Nadine Gabai-Botero opens a cabinet where the family's electronic devices are charged, while Sebastian, Gabriel, and Luis Botero sit at the built-in table next to their touch-screen monitor.



Clockwise from top left: The Culinary Center on Jenn-Air's wall ovens sets time and temperature based on your settings; the Café series refrigerator by GE has three hot-water settings; the LG range's smartphone app includes recipes, so you can access the ingredient list from your phone and set the oven from the grocery store; LG's ThinQ technology enables its fridge to self-diagnose problems; the Grohe Blue2 faucet gives you sparkling water.

Even so technology is allowing designers to create kitchens that enable family members to plug in and power up anywhere in the room. "Desk areas have been fading away for a long time," Subaran says. "Having a desk with a chair facing the wall—who would do that?"

Smart kitchens are firmly on the horizon, especially in high-end construction. Developers of The Lauren condominiums in Bethesda have big plans to inject technology into their top-of-the-line kitchens, which they hope will become available in late 2015.

They've already hired the Akseizer Design Group of Alexandria, Va., and Bethesda's Absolute Custom Solutions to install Wi-Fi-powered tablets in the walls and kitchen counters. And an app will allow the kitchen appliances to interact with each unit's home-automation system.

"Today's kitchen is Grand Central station," designer Jeff Akseizer says. Thanks to smart-kitchen technology, it's possible for the family to stay connected without laptops, tablets and day planners taking up counter space.

The monitor that hangs in a niche over the kitchen table certainly is integral to the Boteros' family life. If Nadine runs out of milk, she goes to the Windows 8 touch screen, taps the grocery tab on its OneNote program and checks the appropriate box. The week's accumulated grocery list automatically syncs to her phone, so it's always with her.

The dinner tab stores the week's menu, along with recipes, so if one spouse isn't around, the other knows what to make and how. Yet another tab displays medication schedules, so family members

and baby sitters know who has to take what and when.

“It’s about communication without having to communicate,” Nadine says.

She describes a typical day: In the morning, the couple’s son Gabriel, 12, pulls up the weather so he knows whether he needs a raincoat for his bike ride to school. When he and Sebastian, 8, return from school—Westland Middle and Westbrook Elementary, respectively—they go into Montgomery County’s Edline system to check their homework assignments. Nadine also uses Edline to follow the boys’ progress and grades, and holds weekly meetings with them to keep them on track.

Over dinner one night, one of the boys asks what a caper is. Although there’s a no-screen policy at meals, there are exceptions when a question comes up, and so Nadine quickly pulls up the definition of the briny, Mediterranean flower buds online, sparking further dinner-table conversation.

“The whole point is about the interaction” with the kids, she says.

Although most homeowners go high-tech one device at a time, luxury developers are going all out, integrating home-automation systems into their blueprints before breaking ground. The kitchens in the multimillion-dollar units planned for The Lauren will “set the standard for Bethesda,” says Larry Goodwin, founder of 1788 Holdings, the project’s D.C.-based developer.

Every kitchen will have a TV/computer mounted on the kitchen wall. Akseizer is planning additional custom options, such as a tablet that’s mounted in a counter and operated with a wireless keyboard. Homeowners will be able to use the tablet to check email, pull up a recipe or watch a cooking show while they chop vegetables alongside the show’s chef.

“I can cook along with Rachael Ray in the counter,” Akseizer says of the technology. “When I’m all done, I can wipe the whole thing down and I don’t have a mess on my iPad.”

The screen could be integrated with each unit’s Control4 automation system,

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—designer Jeff Akseizer

which is expected to include applications for ordering groceries and operating the home’s lighting, thermostat, window shades and kitchen appliances.

Plans call for each kitchen’s Sub-Zero and Wolf appliances to be networked into the system through an app with Control4, says Mike Puchajda of Absolute Custom Solutions. That would allow homeowners to be notified via each room’s wall panel when the roast is done, or enable them to preheat the oven remotely before heading home from work.

A “party” mode would signal the kitchen’s icemaker to step up production in preparation for heavier use. And a vacation mode would place the appliances on an energy-saving setting. If someone were to leave the refrigerator door ajar, the app would send the homeowners an email.

With this technology, Akseizer says, “the kitchen of the future has finally arrived.”

Although price tags on home automation vary, Puchajda says the kitchen integration generally adds about \$3,000 to the overall cost of a renovation.

Those who don’t have the stomach—or the budget—for wiring a major kitchen or home automation system can find appliances that come preprogrammed and ready to go.

LG, for example, sells a refrigerator and range with “ThinQ” technology that enables the appliances to communicate through the home’s Wi-Fi network. Pull up a recipe on the fridge’s touch screen and it will relay the required temperature setting to the oven.

One of LG’s smartphone apps lets you check the inventory of your fridge remotely, so you know what to buy at the grocery store. And you can check the oven from afar to see how much longer something needs to cook.

Bethesda kitchen designer Jonas Carnemark is partial to Miele products, which take a lot of the guesswork out of cooking. Its MasterChef Series decides the temperature and cooking time once you tell it what to cook. “You’re able to say, ‘Chicken, 4.3 pounds,’ and it does all the rest,” he says. “It cooks a perfect chicken.”

Similarly, the Culinary Center on Jenn-Air’s wall ovens has a screen with images of prepared dishes, and it walks you through the process. Pizza? Thin crust or pan? Steak? Do you want that medium rare or well?

“You really don’t have to know how to cook,” says Michelle Anderson, who handles residential outside sales for Ferguson Enterprises, a Jenn-Air distributor with showrooms in Rockville and Alexandria. “It’s like *Cooking for Dummies*.”

Technology also powers motion-sensor faucets from Kohler and Moen. Grohe manufactures the Blue2 system, which emits carbonated and “semi-sparkling” water in addition to still. GE’s Café Series refrigerator has a hot-water dispenser with different temperature settings for soup, tea and hot cocoa.

Manufacturers of these high-tech products and automation systems acknowledge that the smart-kitchen trend is still in its nascent stage. But Paul Williams, vice president of security and communications products for Control4, says this kind of trend isn’t driven by consumer demand.

“People didn’t realize they needed an iPhone until the iPhone was there,” he says. Similarly, kitchen technology is “moving from gimmicky to want—and need.” ■

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