

IoT

THE INTERNET OF THINGS



Hidden assets. You can't always tell at first glance, but a kitchen like this one can be extremely smart and connected.

COURTESY OF SAMSUNG'S CHEF COLLECTION

SMART APPLIANCES COME OF AGE: Selling Timesaving Tech to Busy Buyers

Connected home technology, used properly, can save time for what really matters.

BY MATT POWER

CONNECTED APPLIANCES HAVE MATURED in recent years. No longer pitched as simply a way to control your oven on your way home from work, their value as potential time and labor reducers has entered the conversation. That's smart. Saving time is the Holy Grail of almost any new technology today. But to convincingly make the argument that technology will save time, you have to factor in human behavior and include that variable as part of the consumer's education. Tech can take on common chores, yes, but only if used thoughtfully—a fact that many [fail to acknowledge](#).

For example, just because an automobile moves us from Point A to Point B faster doesn't mean it is "saving" us time. Chances are, if we had to ride in a horse and buggy the same distance, we would make the commute a lot less frequently, and spend fewer hours overall on the road. The same is true of washing clothes. If we're repeatedly loading and unloading washers and dryers all week, our Victorian ancestors who washed only on Tuesdays have us beat.

Key, then, is putting our connected devices in their proper place in our lives. For example, [an intuitive washer that alerts a user by smartphone](#) when a load of wash is sitting damp in the machine saves the time of running another load later than planned.

The real "quantum shift" in smart home tech is underway—a move from the foreground to the background of our lives. As connected tech in the home evolves from novelty to invisible helper, the brands and products that flourish will genuinely free up time for things people actually care about.

MINUTES TO SPARE

What do most Americans do all day? The data doesn't tend to vary much from a 2016 *Wall Street Journal* survey on the topic. Those who are employed work about eight hours a day, sleep about nine hours a day, **watch TV for seven hours and 50 minutes daily**, and squeeze in housework, childcare and other household activities around that "big three."

Presumably, they're doing all of those things with the TV, or YouTube, or Netflix blaring in the background. If you doubt that TV-watching statistic, keep in mind that most North Americans spend an astounding **90 percent of their lives indoors**.

So where does connected living enter this picture? In the background, naturally.

To illustrate, let's look at time management in a connected kitchen. Kitchens are home to three time-consuming tasks: meal planning, grocery shopping and meal preparation/cooking. But the right technology can shave precious minutes from these mundane tasks, better used to buy back time for playing with children, calling a distant parent, meditating or going for bike ride. Here's how:

MEAL PLANNING. Americans eat the fastest of most industrial nations, and studies have shown that the less time they spend on meal planning, the more **fast food and low-quality food they consume**. But does it have to be this way? Not necessarily. Many timesaving apps, such as **Mealime** and **Big Oven**, offer a free assist for planning and purchasing meals. The better ones also account for vegetarian, vegan and other special diets.

Of course, another impromptu phase of meal planning involves leftovers. Dealing with partially consumed dishes also matters in the big picture. It's key to reducing the **huge food-waste footprint**



Stocked. A key timesaver in the kitchen is the ability to re-order via connected appliances like this Samsung fridge, and to make more-efficient use of leftovers.

of Americans. This is where connected appliances enter the picture. For example, some smart refrigerators **now contain recipe planners** that take into account what's actually inside the fridge, including age and expiration dates. Some even offer recipe suggestions. Food saved. Time saved. Money saved.

ONLINE SHOPPING. Surveys show that most Americans dislike grocery shopping. It's a necessary evil, not a fun outing. And most people spend a lot of time doing it. For example, **the Time Use Institute**

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COURTESY OF WALMART

Breaking and Delivering?

Walmart recently launched a new service where it sends an employee to personally restock your refrigerator, even while you're away. Workers access the house via electronic locks. The verdict on whether people will feel comfortable with this level of interaction remains to be seen.

notes that the average shopping trip takes 41 minutes. If you multiply that by the 1.5-trip-per-week average, that's more than 53 hours per year you're spending in the grocery store. To put that in perspective, [studies](#) suggest that American families only spend about 37 minutes of "quality time" together per day. So when they do shop, they spend more time at the store than they do with family on a typical day.

It's no wonder that, after several years on the decline, online shopping for groceries is coming back, albeit selectively. It's a market with clear appeal to those short on time. As [Supermarket News reports](#), "services like Peapod, Instacart, Shipt and AmazonFresh that cut out the trip to the grocery store appeal mainly to those short on time: parents with children younger than age 18, and employed adults." The article also notes that higher-income Americans are bigger adopters of grocery delivery, either because higher income means they can afford more groceries, or they have greater access to mobile technology—such as smartphones and tablets—that make ordering online easier.

TIME SAVER. Into this growing market come connected devices—especially refrigerators—with built-in barcode scanners, smart screens, interior cameras and more. These appliances streamline the shopping process saving time driving, shopping and re-filling regularly used items.

COOKING WITH SPEED

Americans spend about 37 minutes daily preparing and cooking meals, not including shopping. We all know that certain devices, such as microwaves, can quickly warm up food or liquids. But no one wants to eat every meal out of a microwave. When it comes to cooking family meals, how do you take back minutes, yet still cook delicious, healthy meals?

For cooktops, an easy way to do this is with induction technology. I've cooked on an induction top for years. It's lightning fast for basic tasks, such as boiling water or simmering a stir-fry, and creates a hot griddle almost instantly with cast iron. Why spend 10 minutes waiting for water to boil or an egg to fry when you can do it in two?

Ovens can also be a big-time bottleneck. If the cook has to wait for one oven dish to complete before cooking a second one in a single oven, that's too slow.

One way to address this is with double ovens. But new technology allows you to cook multiple smaller dishes within a single oven. For example, [one Samsung model](#) has two separate oven compartments in one, each of which can operate at a different temperature, saving up to 45 minutes in total meal prep time.

THE FIX IS IN (THE BACKGROUND)

Another quiet, often unsung innovation in connected equipment is self-diagnosis. Consider that the new normal for troubleshooting household appliances is to purchase an extended care plan. But for appliances, the value of these plans depends largely on the ability to remotely diagnose a piece of equipment. Appliances typically are heavy, and repairing them off site could mean a major headache. Scheduling a home visit with a repair expert makes more sense,

but even the best service eats away valuable minutes of the day. Scheduling the visit takes time, as does the actual repair. By knowing what parts and labor will be needed before arriving, technicians can streamline their work. For example, [one Samsung model](#) comes with an app that helps you understand and translate an error reading, so you can tell a repair person what's wrong.

TIMELY TAKEAWAY

When you add up (or deduct) some of the time saved with the innovative and connected appliances described earlier, you can see how the right technology can earn its keep in modern homes, especially in the kitchen. Even if the dividend is just a couple of hours each working week, that's 24 minutes per day that homeowners can spend with family, pursuing a hobby or just staring into space (new parents, you can appreciate that last one). Many companies offer complete suites of connected products. It's now possible to leave some of the heavy lifting in the background, while saving water, power and time. What's not to like? **GB**

Privacy Plateau?

As home technology becomes normalized, buyer expectations about privacy have also adjusted.

R ESEARCH SHOWS THAT perceptions of privacy, across all demographic groups, are not as simple as headlines paint them. That's because most technology-minded consumers make many assumptions. They assume that basic levels of privacy will be maintained, and they accept that using technology will incur certain privacy risks. This varies somewhat by age cohort, of course.

Younger generations naturally feel the most at ease with almost any degree of data sharing. They've grown up with it. This is why millennials and "Generation Z" are often seen as the easiest upsell for every new technology.

But older generations, with their high levels of discretionary income, should not be written off. They're far from "anti" technology. In an interesting twist on the privacy discussion, [research from the Pew Research Center](#) found that trust in technology may be low, even declining, but that does not mean it will be rejected. People have reached a plateau where they may simply accept that there are certain privacy and security risks inherent with technology—a "cost of doing business," if you will.

What does this mean to manufacturers? Simply that they may have a little breathing room to tighten their privacy protocols now, without having to backpedal too much on product releases. As long as consumers trust that privacy is improving across the board, they're less likely to throw up their hands and reject connected technology outright.