Raise your home's IQ: smart gadgets take center stage at CES (Update)
5 January 2015, by Anick Jesdanun

Imagine a world in which your garage door opens automatically as you pull into the driveway. The living room lights and heater turn on—perhaps the oven starts warming up, too. In the so-called "smart home," cars, appliances and other devices all have sensors and Internet connectivity to think and act for themselves, and make your life easier.

We're not there just yet, but we're getting closer.

The smart-home concept is known in tech circles as the Internet of Things. Current iterations primarily include our ability to control gadgets such as lights and security alarms or view data remotely through a smartphone app. At the International CES gadget show in Las Vegas this week, manufacturers will promote more devices and functionality. Some gadgets will be able to talk directly with one another, not just to an app. The four-day show opens to the public Tuesday.

That garage door? Mercedes-Benz would like people to imagine their luxury car of the future pulling in all by itself, without a driver behind the wheel, to bring its passengers home.

The carmaker unveiled the sleek concept car that it is calling F 015 Monday night when it turned a stage inside The Cosmopolitan on the Strip in Las Vegas into a scene usually reserved for annual car shows, attracting a swell of people on stage afterward wanting a closer look.

The car's futuristic look belies some historic inspiration in its design. Dieter Zetsche, head of Mercedes-Benz, said the wheels were pushed to the outer edges much like a horse carriage, giving ample room inside for seating rather than wheel wells—in this case four modern swivel chairs that can face each other.

And much like those horse carriages, the passengers inside the car of the future can chat, read a newspaper, or even take a nap while their car would ferry them home.
"Mankind has been dreaming of autonomous cars since the 1950s," Zeetsche said. He said his company has been working to make it a reality, albeit still a concept and not in production yet, since the 1990s.

"It's basically a revolution," he said of the car.

The Internet of Things could mean big business for gadget makers. The Consumer Electronics Association projects U.S. sales of smart energy and security systems alone will total $574 million this year, a 23 percent increase from 2014. Although that pales by comparison to the $18 billion spent on TVs and displays, growth has been swift. In terms of people smartening up their homes in earnest, though, it will probably be another two years before devices are cheap and widespread enough for the typical consumer, says Eduardo Pinheiro, CEO of Muzzley, which makes a hub that allows devices to talk to each other.

For now, the smart home is more about possibilities than practice. Many companies exhibiting at CES are laying the foundation for what a smart-home system will eventually do, hoping to entice consumers to start thinking about upgrading to smart gadgets. It's not always an easy sell.

Consider wearable devices that track fitness and other activities. In many cases, the novelty wears off quickly, and devices end up in drawers. But what if a wearable device that tracks sleep could tell the coffeemaker to start brewing as soon as you awoke? When the coffee's done, what if the sprinklers on the front lawn automatically turned off so you didn't get wet walking out the front door to work?

"It's these great benefits that we need to explain," says BK Yoon, Samsung's CEO and chief of consumer electronics. "We can't just talk about the Internet of Things because it's so impersonal like a bedtime story for robots. We have to show what's in it for them."

That includes freeing people from chores to spend more time with family, pursue more hobbies and, in his case, spend "quality time on the putting green," he says.

Some examples: Lucis Technologies will soon ship a smart-lighting device called NuBryte that can learn your behavior, such as what time you tend to come home. Sensors can turn on the night light if you wake up to use the bathroom but switch on brighter lights during the day. A coffeemaker from Smarter will soon use data from fitness trackers such as Fitbit. If you had a bad night of sleep, the coffeemaker will know to make the java stronger that morning. Other products focus on better notifications: a battery for a smoke detector to alert you on your phone when the alarm goes off, or a bracelet that vibrates when the baby cries in its crib. (Moms rejoice: the bracelet is even smart enough to alternate which parent it alerts to get up.)

"It's got to be something people are seeing it can do and want it to do," says Chris Penrose, AT&T's senior vice president for the Internet of Things. "It's got to make their lives better and be incredibly easy to use."
"True consumer value will come when devices work in concert with one another and in many cases across manufacturers," adds Brett Dibkey, a Whirlpool Corp. vice president. "The home adapts to the way consumers live rather than the other way around."

At CES, Whirlpool will showcase dryers that can run at a slower, energy-saving cycle if you aren't home and thus aren't in a rush. The dryer integrates with Google Inc.'s Nest smart thermostat, which has sensors to figure out that no one's home and then lowers the heat automatically. Meanwhile, a smart-home hub called DigitalStrom plans to take cues from Nest. If Nest is trying to cool down the house, for instance, DigitalStrom will lower automated window shades to block out sunlight.

These are the building blocks for an eventual automated home. Once those building blocks are in place, services can better predict what you want. For example, Netflix is already good about recommending movies to watch based on your preferences, but it might suggest something different if it could read data from a wearable device or camera and tell that you're with friends, or stressed out, says Shawn Dubravac, senior director of research with the Consumer Electronics Association.
snowboard bindings at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. The bindings have pressure sensors to analyze your snowboarding technique. (AP Photo/John Locher)

The Liquid Image EGO LS-800 wearable and mountable 4G enabled camera is on display at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. (AP Photo/John Locher)

The XYZprinting da Vinci Jr. 3-D printer is on display at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. (AP Photo/John Locher)

Jerome Bouvard demonstrates the Parrot Pot at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. The pot is linked to mobile devices and will automatically water your plant. (AP Photo/John Locher)

The XYZprinting 3D Food Printer displays a design in chocolate on a piece of bread at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. (AP Photo/John Locher)
The Parrot Pot is on display at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. The pot is linked to mobile devices and will automatically water your plant. (AP Photo/John Locher)

The Vigilant Rainbow smart toothbrush is on display at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. The toothbrush connects to a smartphone to keep records on brushing and allow for interactive games. (AP Photo/John Locher)

The Axxess CE Air2 is on display at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. The bluetooth speaker levitates over its base. (AP Photo/John Locher)

The Vigilant LilyPad Wi-Fi pool thermometer & UV sensor is on display at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. (AP Photo/John Locher)

The Vigilant Rainbow smart toothbrush is on display at
The Baby Giga by Slow Control is on display at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. The device holds a baby bottle and can record how fast and how much a baby is drinking and it can send that information to a mobile device. (AP Photo/John Locher)

A man demonstrates the messaging capabilities of the Invoxia Triby at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. The device can make phone calls, receive digital messages and play music. (AP Photo/John Locher)
The Smarter iKettle is on display at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. The kettle can be controlled by a smartphone or tablet. (AP Photo/John Locher)

The Rollkers transportation device prototype is shown at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. The device attaches to the bottom of your shoes and allows for faster transportation based on walking. (AP Photo/John Locher)

A man demonstrates the eGeeTouch Smart Luggage Lock by Digi-Pas at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. The device allows you to unlock luggage with a smart tag or mobile device. (AP Photo/John Locher)

A man demonstrates the Parrot RNB 6 in-vehicle infotainment system at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. (AP Photo/John Locher)

The Rollkers transportation device prototype is on display at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. The device attaches to the bottom of your shoes and allows for faster transportation based on walking. (AP
BeeWi wirelessly controlled lights are on display at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. (AP Photo/John Locher)

The Zepp sensor and application are on display at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. The device uses 3D and video analysis features to analyze and improve aspects of your swing. (AP Photo/John Locher)

The Alarm.com smart thermostat and application are on display at CES Unveiled, a media preview event for CES International, Sunday, Jan. 4, 2015, in Las Vegas. (AP Photo/John Locher)

© 2015 The Associated Press. All rights reserved.