



# IHA Smart HOME

The future of Housewares is quickly moving toward the Smart Home. Connectivity is being incorporated into products all around the home – from light bulbs to coffee brewers, from thermostats to ovens – connected products, once only a dream, are fast becoming reality.

## T ECHNOLOGY

IoT Technological Advances and Trends

## C ONSUMER

Smart Home Impacts on Consumer Life

## S ECURITY

Staying Secure in a Connected World

## T RENDS

Emerging Trends in the Smart Home

## D IRECTORY

Smart Home Exhibitors

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housewares  
show** | 2018

**IHA**  
INTERNATIONAL HOUSEWARES ASSOCIATION®  
the home authority

## The Smart Home is Here: What Consumers Want

The U.S. smart home market has entered the mass market phase of consumer adoption, and by some estimates will approach \$40 billion(USD) by 2020. Americans purchased millions of devices this year, looking to save time, money and energy. The future of smart home devices features several emerging trends, including:

**Assisted Cooking**—Products are being embedded with smart sensors that control exact time, temperatures and even the humidity needed to properly cook a meal. Consumers can take a back seat while connected devices use their smarts to help in the kitchen.

**Home Health**—The quality of our indoor air and water, and its ability to impact our health and sleep, is something that consumers are becoming increasingly concerned about. Devices that monitor and correct poor air and water quality are in demand.

**Lighting**—Home lighting plays an important role in our lives throughout the day, whether we're in need of bright whites while we're preparing food in the kitchen or warm hues while we're dining. Bulbs that can adjust to the task at hand are a bright idea that's improving the lives of homeowners.

**Culinary Arts Coming Home**—Culinary accomplishments once relegated to restaurant chefs with fancy equipment are now available in the home. Sous-vide, molecular gastronomy and 3D printed food are some examples.

**Voice Control**—Voice control has exploded in popularity, with many devices now including Amazon's Alexa, Google Assistant and Apple's Siri. The ability to control your home by speaking commands is starting to deliver on the promise that we'll be able to control our devices through sound rather than touch.

**Safety**—60% of buyers say they want smart home products to help them monitor their homes via their smart phone. Cameras, video doorbells. 63% want smart locks and alarms and 56% want carbon monoxide detectors. Safety is definitely on the smart home buyer's mind.

**Convenience**—Imagine being able to connect to your refrigerator camera to allow you to see inside from the grocery store or never having to place a coffee pod order because your connected appliance knows your pantry's "inventory" based on your consumption.

The Internet of Things is on display at the International Home + Housewares Show. The IHA Smart Home pavilion features innovative product suppliers and developers showcasing products that demonstrate fresh ideas and designs. In addition, a strong educational program further showcases trends and technologies surrounding this movement. Don't miss all the housewares industry has to offer.



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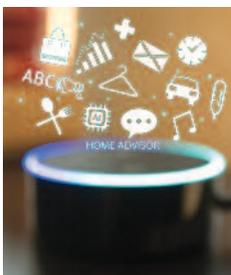
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# Home Smart Home

By Michelle Hespe

Carley Knobloch knows a thing or two about smart homes: She's consulted with HGTV on their annual HGTV Smart Home build for years, and is a regular tech contributor on the Today Show. Her home, a blend of California cool and high tech, was just featured in *Good Housekeeping*. To Carley, "A truly smart home is as beautiful as it is intelligent — the gadgets fade into the background, and come forward only to add convenience, safety or assistance — you just feel like life is easier."

There are four trends in Smart Home innovations that Carley feels are prominent right now and believes they will develop further in 2018.

## Trend 1: Consumer Involvement from the Get-go

It was not long ago that the consumer only became involved in a product when it was released into the market. Once they could buy it, they could rate it, share their experience and offer feedback to the company that created it.

Today, with tools like Kickstarter, Indiegogo and GoFundMe, Carley explains that brands involve consumers with the product from the beginning, when concepts and innovations are being formed and prototypes are being experimented with.

"More and more consumers want to be involved in the development of products, and essentially it means that the end-results are precisely targeted



© Carley Knobloch

to the demographic at which they are aimed," she explains. "This requires that companies be more nimble and open to feedback, but the reward is that consumers are invested in your product before it even hits the shelves. Before this, brands had to cross their fingers that they got it right—now they know what the consumer does and doesn't want."

Carley also says that with prototyping

becoming less expensive, it's easier than ever to test things out before something goes to market. "With things such as 3D printing and virtual reality, customers can send in ideas to brands, and brands can react, prototype and test quickly. Consumers might say to a company, 'I wish your product did this or that', and then companies can either embrace that suggestion or not."



**We speak with Carley Knobloch, a smart home expert and consultant, about four trends that she expects to gain traction in technologically advanced homes during 2018.**

## Trend 2: Subscriptions & Replenishments

The next trend that Carley speaks about is how more and more companies are creating products that have replenishment options; essentially, a consumer subscribes to a brand and product, and connected appliances will re-order associated products when the consumer runs out.

The coffee maker is a perfect example. Once upon time, a consumer would buy a coffee maker and then buy coffee beans or ground coffee to use in their machine. Keurig, Nespresso and others revolutionized the entire industry by creating machines that use unique coffee pods, which are re-ordered by the customer.

“From taco shells to frozen yogurt makers, companies have a new revenue source through replenishment along with the sale of their hardware, and now the machine can actually do

the re-ordering for you,” Carley says. “Your coffee maker will know when you’ve run out of pods and BOOM! They’ll turn up on your doorstep. Auto-replenishment will soon be common; many big brands will bring this convenience to market soon.”

Carley explains that Amazon is the most equipped to move quickly on this, as their personal assistant Alexa is tied to the massive e-commerce store (as compared to Apple’s HomePod or Google Home), and so it is making many alliances and growing rapidly. Carley says it will be interesting to see which brands team up with multiple partners and which ones remain loyal to one brand. For instance, Whirlpool might create dishwashers that only re-order dishwashing tablets from one detergent-maker, or they might create machines that allow you to re-order the detergent of your choice.

## Trend 3: A Mobile Lifestyle

Our phones are with us always, so it’s no surprise that appliance companies are leveraging the power of apps to help us control our appliances, and keep us engaged.

“There are many products on the market that are operated by an app on your phone. An example is a toaster that comes with an app, so that you can operate the toaster from afar. You might think why would I need an app that turns my toaster on and off?”



# Home Smart Home

## continued

Carley laughs. But, if you are busy with a baby in another room and smell the toast burning, it's easy to shut it down without getting up.

"The Vitamix Perfect Blend Smart Food Scale can help you create the perfect smoothie without having to measure ingredients," she explains. "Add bananas and the app will tell you when there's enough. You put ice in, and it tells you when to stop. This kind of smart product can help people have success in the kitchen, which reduces trips for take-out or restaurant food, so it saves time and money."

Carley likes that this new trend is also helping people learn how to cook, and getting people cooking more in general.

"I like to cook if I know I am going to have great results—there's nothing worse than failing in the kitchen and serving a meal you're not proud of," she says. "With the Heston Cue Smart Cookware, Induction Burner and app for instance, you learn as you go. It



**"More and more consumers want to be involved in the development of products, and essentially it means that the end-results are precisely targeted to the demographic at which they are aimed."**

knows how to get the outside of the fish you're cooking crispy, then reduces the heat to cook the interior perfectly. I watch and learn. People who can't cook have a better chance of creating nice meals, so it's a great way to get people in the kitchen. If it gets more people cooking at home, I am all for it!"

### Trend 4: The Power of Voice

It's a trend that is literally booming, voice-activated personal assistant-like products are taking center stage in the Smart Home.

"It's a miracle!" Carley says with awe. "We can talk to our appliances, and they can learn how we like to prepare dinner and replicate results, it's incredible what is happening. Plus, thanks to voice control, anyone in the house can tell the oven what to do, instead of just the one person who had the app installed."

Carley has young children and explains that at first they had no interest in things such as controlling the window shades or lights. "But as soon as they realized that they could talk to the house and it would obey their commands, they were really into it. They now love talking to the house and trying to out-smart it."

Carley is excited about how voice control is already changing how we source recipes. "Say, 'find me a recipe for chocolate chip cookies' to Google Home, for example, and a highly-ranked recipe will come up, setting you up for the best chance at success with minimal search and effort. Then we'll get step-by-step instructions, without having to open a phone. Soon we may be at the point that we can ask, 'Hey Google, do we have all the ingredients we need to make cookies?'" and our kitchen will know. Voice control is bound to change how we do everything in the kitchen—the Jetsons lifestyle isn't too far away." ■

*This story originally appeared in Inspiration 17.2.*



# Cleaning Up: How Robot Vacuums Work and What's Next

By Carley Knobloch



More sensors, more cameras and more artificial intelligence will make these cleaners more powerful and smarter than ever.

In 2002 when they hit the scene, robot vacuums were the stuff of curiosity and silly videos of cats who climb on them and sail around the house. They're not the stuff of viral videos anymore: With major technological advancements, boosted power and prices falling, robot vacuum cleaners are becoming a mainstay in American homes. A recent study, in fact, shows that one-in-five household vacuums is robotic. How these whirring disks work, and how effective they are, is a topic that increasingly interests consumers as they decide if a robot vacuum is right for them.

## How they work

All robot vacuums use either sensors or a combo of sensors and cameras to "map" your floor. Cheaper, camera-free models move in mostly random patterns, bouncing off walls and spiraling across the landscape. Camera-bearing models are pricier, but they make cleaning faster and more

thorough by assessing your room, then figuring out exactly where to go. Many can be programmed to run regularly at the time you prefer, and some come with Wi-Fi so they can be programmed from afar. A "dirt sensor" in certain models electronically locates areas that need repeated sweeps (so it won't ignore a pile of Cheerios underneath the high chair). Many robot vacuums can locate the edge of your steps and stop before sailing over, and will slow down and pivot before they plow into a table leg or cabinet. Better quality vacs can even tell when they're finishing one room and starting another, so a room isn't left half-finished.

## But do they clean well?

Robot vacuums tend to be stronger and more thorough than many first-time users expect, partly because they spend more time vacuuming than a human would. They pick up dust and pet hair with ease, and they're a godsend for asthma and allergy

sufferers who find that vacuuming kicks up allergens in the home, making it hard to breathe. Plus, they're ideal for those who can't physically handle a heavy vacuum. More expensive models tend to have greater suction power, better brushes (which means they'll get into corners more thoroughly), and the ability to ride over the edges of rugs or avoid

cables without getting stuck. They also have larger dustbins, so users don't spend too much time emptying the units, and their batteries hold a charge longer. Many can even dock themselves to charge when they detect their batteries running down. A vacuum that knows when to call it quits means you won't find it konked out in the middle of your living room.

## The Future

As of now, robot vacuums can't move your sofa to clean below it (though if it's low enough, it will scoot right under!), or remove clutter from your floor before starting—that's still work for the consumer. In the future, a robot vacuum might know the difference between a chair leg and a fancy ceramic vase—it would dust one and gingerly dodge the other. Through machine learning, it might also adapt to clean your high-traffic, dirt-intensive areas more intensely, without you having to tell it to do so. Finally, voice

**Cleaning Up**  
continued

**EVOLUTION OF THINGS**



control is a natural extension, where telling your vacuum when to enter a room to clean it up becomes an option. More sensors, more cameras and more artificial intelligence will make these cleaners more powerful and smarter than ever...at some point we might all just let the robots take over the arduous chore of sweeping up.

**Addressing Concerns**

Though consumers are warming to the idea of robot vacuums (annual sales are forecast to rise from \$1.5 billion in 2016 to \$2.5 billion by the end of 2021, according to research by Future Market Insights), there are some concerns. The issue of privacy is one that needs to be addressed, as consumers are increasingly worried that their home is being “mapped” by robot vacuums and that data is being shared with other companies. Imagine if your vacuum was sharing square footage, the relative of your children, presence of pets and even the brands it detects in your home...it would be a windfall for marketers. As consumers get savvier about exactly what these devices are “seeing,” earning their trust will be the key to getting them to bring a device home.

Another concern is the current limitations that a robot vacuum is burdened with. Namely, that it can’t really do all the vacuuming in the house. If you have a sunken living room, a step up to your kitchen or a flight of stairs, you’ll be faced with the reality that your robot vacuum can be a help to you but can’t replace your need to vacuum entirely. Many robot vacuums come with sensors so that they don’t tumble downstairs while cleaning upper floors, but you’ll still have to carry your device from floor to floor if you want it to clean the whole house.

Robot vacuums are a marvel and promise to help you clean your home without having to lift a finger. Yet, as with any new technology, concerns persist and price is always a factor. Education, positive testimonials and radical transparency with consumers about how their home data will be used, are just some of the ways manufacturers can build trust and

boost the popularity of these smart appliances. Their agency and AI is improving year after year, and in the near future, they’ll likely be as powerful as your upright and as thorough as you are at cleaning every corner of your home.

Plus, they’ll still be endlessly amusing to your cats. ■

**Robot works  
You rest**

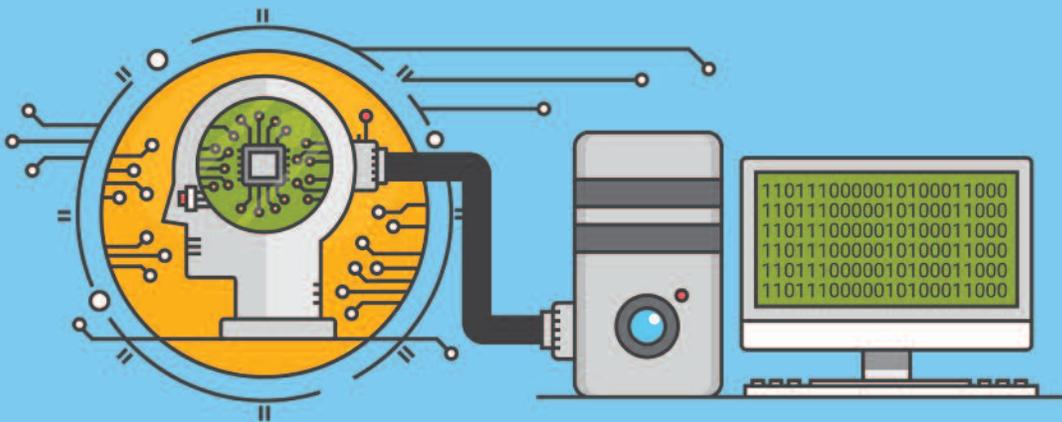


# Housewares Are Becoming Connected. Is Your Company Ready?

By Michael Wolf

Today's kitchen becomes increasingly connected, a resulting combination of new content formats and next-gen interfaces is starting to change consumer behavior.

## MACHINE LEARNING



point of consumption in the home. Consumers are not only transitioning to subscription models and auto-ordering of consumables, but increasingly relying on virtual assistants like Alexa to help them go shopping. Longer term, many will allow appliances to order products through algorithmic purchasing based on preferences, current needs and past behavior.

The housewares industry is changing, but I wouldn't blame you for missing it. That's because industry evolutions happen subtly and slowly and, as a result, it's often easy to miss the big shifts. Most of us, after all, are busy doing our job.

But the old adage "the days are long but the years are short" applies just as much to market evolutions as well as it does to life. If you don't pay attention to the longer arc of change in your industry, chances are you'll miss how e-commerce, cloud computing, Internet of Things, artificial intelligence and data are changing the way business is being done.

How can you prepare for the future? Below are five of the most transformative changes underway in the housewares industry and a couple suggestions on how to future-proof your business and not get left behind.

### Connected Commerce

Through the arrival of embedded smart technology, virtual assistants and connections to online commerce systems, we are seeing the point of sale going from the cash register to the

How does a housewares brand prepare for an era of more connected commerce? If your product uses a consumable, start by finding ways to plug your product into API-powered commerce systems enabled by



# Housewares Are Becoming Connected

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Amazon, Google and Walmart to give your customers more options. Understand how consumers are embracing new interaction paradigms like voice control. Most importantly, work with your consumer packaged good partners to create low-friction ways for consumers to buy their products.

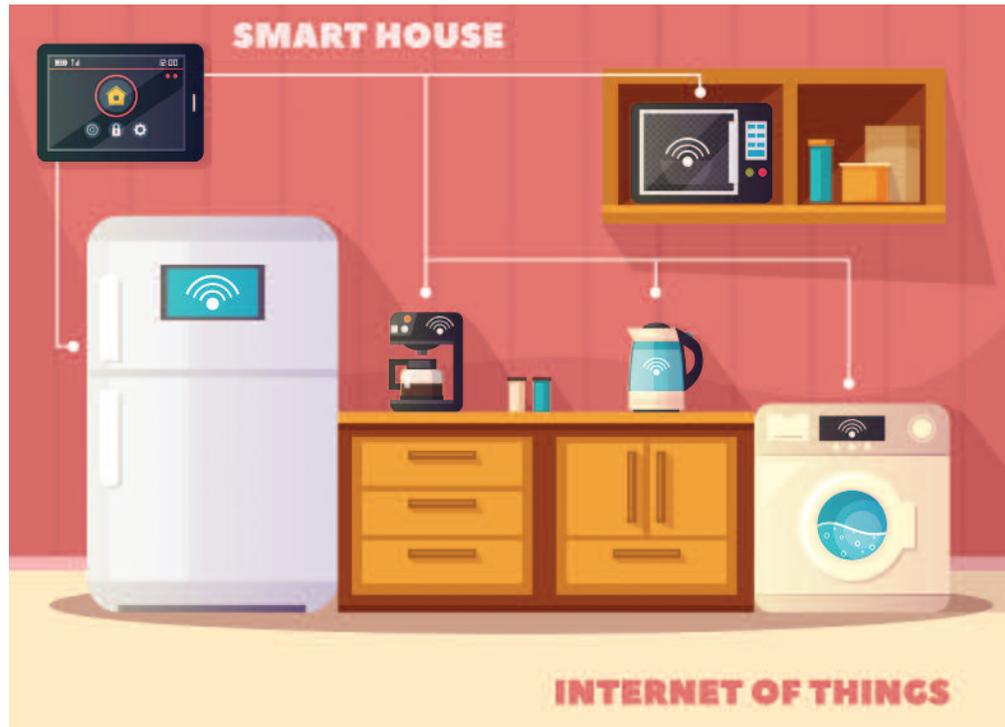
## Connected Content

It used to be that physical product companies didn't need to worry about creating content. As most know, that's changed over the past decade as the Internet has forced companies once focused primarily on hardware to develop content strategies for marketing, community development and thought leadership.

Now, even that may not be enough. That's because as today's kitchen becomes increasingly connected, a resulting combination of new content formats and next-gen interfaces is starting to change consumer behavior. Consumers are using digital discovery formats to learn, shop, cook and manage their lives, and as a result, content is being created specifically for consumption through apps, voice interfaces and on new screens such as the Amazon Echo Show. New market entrants like Tasty are becoming competitors with traditional housewares makers, while big appliance companies like Whirlpool/KitchenAid are investing in companies like Yummly.

## New Business Models

Perhaps the biggest change in the connected housewares industry is the emergence of new business models. Whether that's the ability for appliance makers to enter adjacent categories like food delivery, access consumer usage data or perform remote



diagnostics and upgrades of appliances in the field, more and more modern housewares companies are embracing these changes and considering new business models previously thought impossible.

The good news for retail and channel partners is these new approaches open up exciting opportunities those selling housewares products to the consumer. By becoming the onboarding part for product companies for new subscription services, sharing economy models and more, channel players can also possibly increase their total margins by taking part in ongoing monthly recurring revenues.

## Invest in Software (Or Find a Partner Who Can)

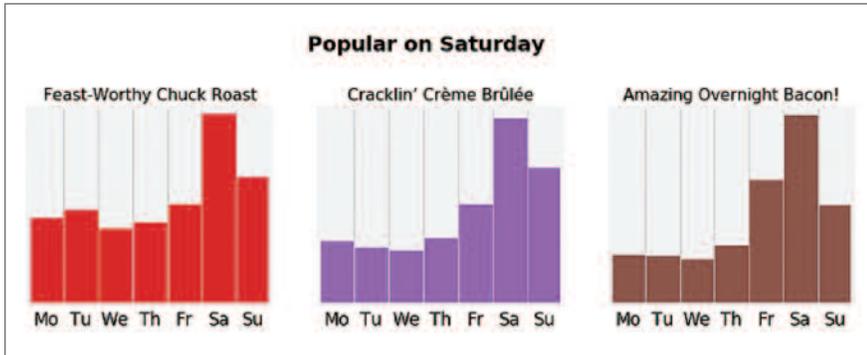
The founder of Netscape, Marc Andreessen, once famously wrote, "software is eating the world." His point, made through an op-ed in *The New York Times*, is that every company will eventually become a software company as computing becomes more

pervasive, devices get more connected, computers sit in everyone's pockets and businesses become required to use software to optimize and compete.

His point, made in 2011, is as true today as ever and, have no doubt, applies to the housewares industry. Products from ovens to refrigerators to washing machines are now being upgraded in the field, adding new features that weren't available when the consumer left the store. But it's not just connected devices. Recipes are going from a set of instructions on a dead piece of paper to dynamic meal guides with built-in shopping capabilities. Food companies such as Campbell's are developing software apps for voice assistants and connected devices to build communities and retain customers. Cookware companies like Hestan are building software platforms to enable their devices to talk to build appliances.

While most housewares companies do not typically have in-house software expertise, it's not too late. Today there

Perhaps the biggest change emerging from a smarter, more connected kitchen and food industry is the arrival of real-time consumer data.



are a variety of solution providers providing technical expertise and turnkey platforms. While companies will need to pay close attention that their efforts promise to bring significant value to their customers, it's important to start building software strategy with partners and eventually internally.

## Embrace the Data

Perhaps the biggest change emerging from a smarter, more connected kitchen and food industry is the arrival

of real-time consumer data.

In the past, housewares and packaged good providers really had no visibility into how consumers used their products once they left the store shelf. Nielsen data provided a rough outline, but like the TV rating system of yesteryear, these types of methodologies are woefully outdated and don't alert us in real time to trends, product issues and consumer sentiment.

That is all changing quickly. From smart countertop electrics to fridges with inventory management systems to connected homes that understand how we live, we will see a flood of highly contextual and up-to-the-minute data that can be harnessed to bring more value to consumers through these products.

One early example of a company utilizing data derived from in-home consumer behavior is ChefSteps. The company is able to aggregate and monitor consumer

usage data for its Joule sous vide appliance. The chart at left shows how the company is able to understand the most commonly cooked meal on, say, Saturday, and monitor how its own advertising and outreach campaigns can impact consumer behavior.

The good news is many housewares brands have in-house data analytics capabilities. However, most predictive analytics center on traditional channel data burnished with survey trend data, but these supposed forward-looking data sets are more of a window into the near distant past rather than a window into how consumers are using products today. By embracing platforms that expand their view into real-time consumer usage, housewares and consumer packaged good companies can understand how consumers are truly using their products today.

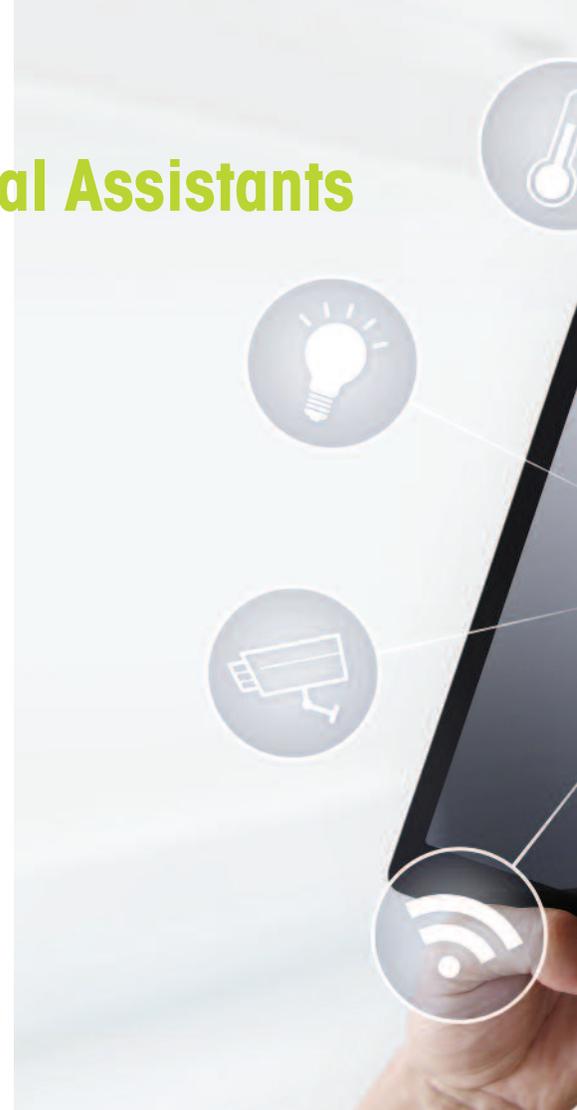
In summary, while today's housewares executives are aware that large scale shifts are coming their way, many have yet to transform their businesses. By beginning to think through strategies outlined here and starting the process of outlining your strategy, you can help ensure that your company will be ready for what will be a drastically different marketplace in five to 10 years. ■

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# Speak, Swipe, Smile: How Virtual Assistants Are No Longer Just About Voice

By Chris Albrecht



Amazon's Alexa plays a central role in my family's morning routine: she tells us the weather, plays the radio and sets timers so we can catch the bus. Alexa is great for simple tasks, but she and other smart speakers stumble when it comes to more complicated requests. That's just a limitation of having only a voice and speaker interface.

But the way we interact with Alexa and Google Home is about to undergo a dramatic shift as those devices add screens and cameras. In doing so, we'll move from talking and listening to our virtual assistants to looking, touching and smiling to get what we want.

Smart speakers like Amazon Alexa and Google Home are quickly crossing over into the mainstream. Amazon touted that it sold "tens of millions" of Alexa devices this past holiday season, while rival Google said it sold "tens of

millions" of its Home devices throughout last year. According to a recent study by NPR and Edison research, roughly 39 million people (18 and older) in America own a smart speaker, and 65 percent of those surveyed "wouldn't want to go back to life without their smart speaker."

But in a room like a kitchen, voice assistance only gets you so far. Think about trying to put together a recipe by just listening. Sure you can do it, but listening to a set of instructions is not the best way to make a meal. Enter the kitchen screen, which is fast becoming a big trend this year with LG and Samsung building them into their fridges, and GE unveiling its giant monitor that's meant to hang over your oven.

Screens will add a much needed visual component to smart speakers, turning them into smart displays. Instead of

just a voice walking you through a recipe, you can see accompanying photos and videos to demonstrate technique and what the end product should look like. Since all of these screens have touch capabilities, they will make more general tasks like swiping through music and news much easier and faster than saying "next" every time you want to skip ahead.

Both Amazon and Google already recognize this and are adding screens to their smart speakers. Amazon released its Echo Show last year, and the smaller Echo Spot in time for the holidays. Instead of making its own device (for now, anyway), Google is being built into new smart displays from JBL, Lenovo, LG and Sony.

These smart displays will also come with a built-in camera for things like video calling, but eventually, these cameras will do more. Touchscreens



According to a recent study by NPR and Edison research, roughly 39 million people (18 and older) in America own a smart speaker, and 65 percent of those surveyed “wouldn’t want to go back to life without their smart speaker.”

are good for displaying information, but the “touch” part becomes a little harder in the kitchen when your hands are greasy or covered in cookie dough. The smart display camera then could become a motion sensor. Rather than touching the screen you wave your hand to go back a page, swipe through a list of ingredients or scrub a video to the exact part you want.

In addition to gesture control, the camera could also be used for facial recognition. As each member of the family looks into the smart display, a personalized view of news, messages, reminders and more will appear on the screen.

But these cameras wouldn’t just look at our faces; they will also see the contents of our kitchens. Already LG and Samsung fridges come with internal cameras to show what food you have and help you label it. Machine

learning, RFID tags and scent sensors will work in unison to automatically recognize and inventory food in our fridge and pantries. These cameras will all tie into our virtual assistant of choice to let us know when we’re running out of items, order replacements and make recipe recommendations.

The interface, in this more extreme case, becomes invisible and just predicts and presents us with the

information and items that we want, with no interaction with us at all. And that will definitely be something to smile about. ■

*Chris Albrecht writes about startups and foodtech for The Spoon. He also is the Master of Ceremonies for Smart Kitchen Summit. In previous roles he has been Creative Director for Gigaom and Editor and Staff Writer at Gigaom.*



# Technological Advancements in IoT Transforming the Way Consumers Interact With Their Products

By Dina Abdelrazik

**D**ina Abdelrazik, research analyst at Parks Associates, recently sat down with *Research and Markets* to discuss technological advancements in the Internet of Things (IoT) and how they're transforming the way consumers interact with their products.

## THE CONNECTED LIFESTYLE

*How have technological advancements affected the adoption, usage and retention of the smart home?*

Technological advancements in IoT continue to improve the connected lifestyle. As a result, adoption of smart home products and services continue to grow. As of Q4 2016, 26 percent of households reported they had a smart home device. IoT connectivity and intelligence enables consumers to

constantly be aware of the world around them. The ability to remotely monitor and check on the status of events in the home leads to higher engagement rates and a stickier consumer.

Advances in technologies such as voice-based assistants and voice-first devices have flattened the user interface and improved the user experience. The way in which it simplifies the user experience by providing a convenient and familiar interface across products helps to increase retention rates among the accompanying smart home ecosystem. The data derived from such interactions are an important facet.

Data analytics serve as a key enabler to improving the user experience. The more long-term promise of smart devices is that they can draw on data analytics and machine learning

algorithms to better understand the user's context, learn consumer patterns and preferences, anticipate consumer needs, incorporate big data analytics across larger ecosystems and proactively take action on behalf of the user. Companies are constantly looking for new ways to leverage data from connected devices to revolutionize the user experience. TiVo, for instance, allows pay-TV operators to leverage their conversational services to deliver a personalized connected entertainment experience. By utilizing knowledge graphs built on metadata from the consumer's viewing behavior, it is able to provide true recommendations and anticipate patterns to streamline content discovery.

Recent developments from companies like Google with the Nest camera and Alarm.com's acquisition of



**Assisted sales at the storefront to educate, inform and drive the value propositions of smart home devices to the consumer will greatly influence adoption.**

ObjectVideo, a video analytics provider, illustrate how video analytics can radically change the user experience. A camera that is able to learn faces has the potential to change the way we live by working with smart door locks to automatically unlock/lock doors. Biometric security and data analytics can work together to provide a seamless user experience by minimizing disruptions such as false alarms.

The collection of real-time data across various IoT verticals provides the basis for data-driven applications that can deliver the higher promise of the IoT and connected lifestyle.

## CONSUMER AWARENESS

*What are the three biggest challenges facing the IoT market? How will these changes influence the industry and how will market players respond?*

Low familiarity, solutions lacking clear value propositions to entice consumers and high upfront costs continue to plague the IoT market. Service providers and device manufacturers must address these barriers in order to grow the industry. The lack of consumer awareness is a great barrier that must be addressed through effective consumer education and appropriate sales channels. Companies are finding unique ways to address these issues with new business

models, pricing strategies and distribution channels. Vivint, for instance, launched Flex Pay, a financing option that unbundles hardware costs from service subscriptions. Bundling initial hardware costs with a smart home or security service subscription has served as a primary business model for the industry; by breaking away from the traditional pricing model, Flex Pay offers an option to consumers that alleviates the upfront cost burden by enabling consumers to finance their hardware separate from their service subscription.

Another key move by Vivint that addresses the challenge in low consumer awareness is their recent partnership with Best Buy. Their partnership will bring Vivint's products and staff to the retailer's locations nationwide, placing at least one employee from Vivint at each of the participating stores to help inform consumers' purchasing decisions. Assisted sales at the storefront to educate, inform and drive the value propositions of smart home devices to the consumer will greatly influence adoption.

Companies like Vivint serve as a role model for innovation. The success and efforts of these companies will help educate consumers on smart home services and devices, which will ultimately expand the consumer IoT

segment. If these emerging models prove successful, market players may respond by following suit. ■

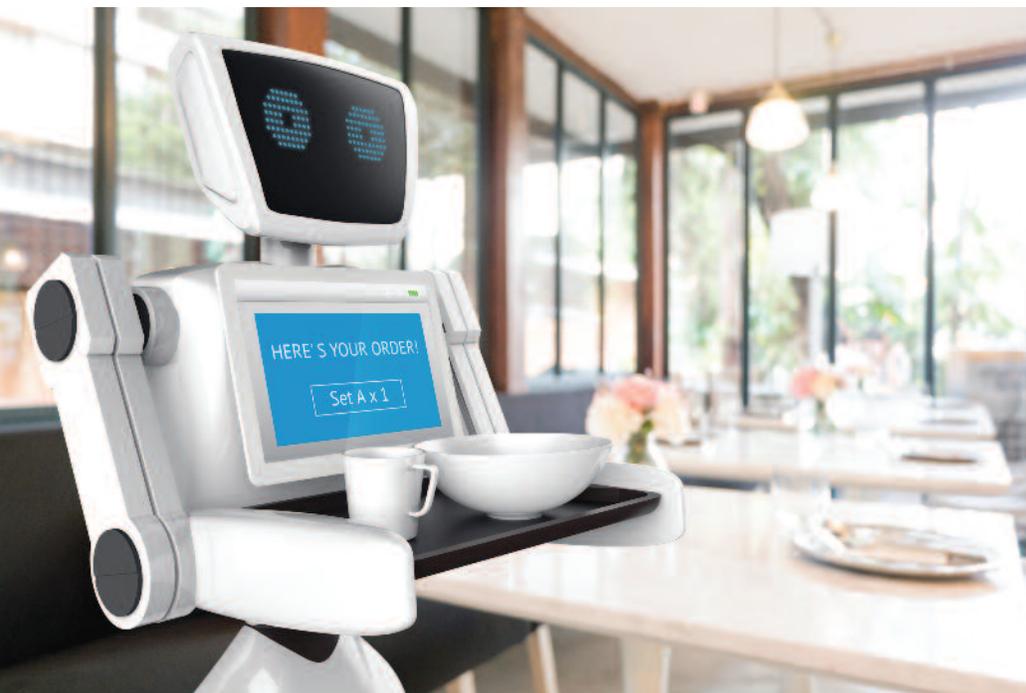
*This story originally appeared in Research and Markets.*

*Dina Abdelrazik is a Research Analyst for Parks Associates. She has participated in numerous smart home projects and has authored reports on voice assistant technologies, smart home strategies, home security, and the SMB markets for Parks Associates, a leading market research and consulting firm.*



# Being Smarter About Smart Home

by Joe Derochowski, The NPD Group



In the first 11 months of 2017, U.S. dollar sales of home automation products increased 40 percent, with strong growth across all device types<sup>1</sup>, according to The NPD Group’s Retail Tracking Service. Home automation products were among the fastest selling items during the 2017 holiday season – over Thanksgiving week and Cyber Week, home automation sales almost doubled from the same two weeks in 2016.

NPD’s Connected Intelligence data shows that nearly one in five U.S. internet households currently own a home automation device, up from just 12 percent a year ago\*. This trend hasn’t hit the home-products industry to the degree it has hit the tech space with things like security and monitoring products, which account for the largest share of category dollar sales. Only 3 percent of U.S. households have smart devices in their kitchen, but just over a quarter of people are interested in them – this is most prevalent among people who think they are “accomplished

chefs” or “very good cooks,” according to NPD’s 2017 Kitchen Audit.

What does this tell us about the future of “Smart” as it relates to the home industry?

Given the increase in the number of people interested in and comfortable with a variety of smart devices, combined with the population shifts that support an increase in people developing their cooking skills, “smart” is poised to grow. The key to fueling this growth will lie in just how smart we are as an industry when we think about, develop and present “smart” home products to consumers.

## What’s the “ER”?

The first thing we need to do is shift our focus from the technology behind the product. In our haste to launch a smart home product, we often skip over the step of understanding and addressing the consumer need we are trying to solve with the product. These products are going to be replacing a consumer

behavior, or another product in their homes, so they need an “ER” – they will have to be better, faster, cheaper, easier or healthier than the product or the behavior they are replacing.

The reality is consumers rarely want technology for the sake of technology. There are many opportunities for smart products to add convenience to meal planning, shopping, preparation, cooking, entertaining, eating, clean-up and storage, and that is just related to our food. Whether a product lets us know when food is cooked to the perfect temperature, how many allergens are in the air or allows us to come home to a clean home by controlling the vacuum while traveling, there are many in-home needs ripe for smart technology solutions. Ultimately, it comes down to addressing the “I wish,” “I hate” and “I love” thoughts related to our daily home activities.

## Value & Price

Pricing fundamentals still apply to smart products, and the cost still needs to fit into the consumer’s budget. Popular home automation products display the power of price – video doorbells<sup>2</sup>, home automation kits<sup>1</sup> and smart lighting<sup>1</sup> are quickly growing segments within the home automation category, and they are generally accessibly priced. When the price aligns more closely with the cost the consumer associates with the product or behavior, the value becomes a much clearer concept. Typical category price bands will play a role in the decision-making process and therefore need to be part of the price-setting discussion. A smart product’s benefits relative to the product or behavior should be taken into account in order to understand the value for the consumer, not the value relative to other smart devices.



One in five U.S. internet households currently own a home automation device, up from just 12 percent a year ago.\*

## Think beyond the app

Today, every smart product has an app – how many apps do we have space for in our lives or on our devices? Yes, having an app tied to our products is helpful, but we need to think broader. We usually use more than one appliance or tool when preparing a meal, so how does your product communicate with others? Imagine a world where a recipe app is designed to communicate with each appliance and coordinate the prep and cook time of multiple dishes so they are ready at the same time. Or, think about how nice it would be to scan your refrigerator and pantry from the office to see if you have the items needed for a recipe and then ordering them for delivery in minutes.

Smart technology can bring these kinds of ideas closer to reality for today’s consumers, making everyday tasks much easier. One way of doing this is integrating the ability to work with voice-controlled platforms like the Amazon Echo and Google Home. As of early October 2017, these products have already been welcomed into 15 percent of U.S. internet households, according to information from NPD’s Connected Intelligence. Voice-control makes smart applications easier for even the not-so-tech-savvy consumer.

The more linked our products are to one another, the more information we can gather on the consumer and their usage of the products, as well as monitor how well the products and technology are performing. The smarter we are about developing “smart” products for the home, the smarter we can become about how to make improvements and become more integrated in the consumer’s life.

“Smart” is the future for the home industry, but we must be smart and remember that marketing fundamentals still apply. ■



<sup>1</sup> Source: The NPD Group/Retail Tracking Service, Home Automation, Jan.- Nov. 2017

<sup>2</sup> Source: The NPD Group/Retail Tracking Service, Smart Entry, Video Doorbells, Jan.- Nov. 2017

\* Includes the core of the home automation category - IP cameras, smart lighting, sensors, power, thermostats, and entry products.

# How to Succeed in the Kitchen Without Really Trying: The Joys (and concerns) Over Assisted Cooking

By Carley Knobloch



It's 6:30 p.m., and I'm pulling a juicy roast beef from the oven. The roast is perfectly crusted with rosemary and ringed by caramelized onions and golden potato wedges. I slice into the buttery-soft meat and practically swoon—this dinner deserves a Michelin star. Ambitious for a weeknight dinner? Not if you have the power of assisted cooking technology. Thanks to artificial intelligence baked into your cooking appliances, you can now program your oven to go into auto-pilot like you do your car, then lean back as it “senses” your dinner, then sears, bakes, roasts and warms it to perfection.

Roast beef aside, the path to universal acceptance of assisted cooking in kitchens everywhere won't be easy. Consumers are excited, but with a healthy dash of concern. Below, I've outlined some of the joys and concerns about assisted cooking, along with

ways to win consumers' hearts.

**It will give me back time!** With a family, a job and all the regular demands of life, I often barely have enough time or energy to get a simple meal on the table. Letting my appliances do the lion's share of the “thinking” about dinner would afford me a few more minutes to help the kids with homework, or to put those last emails out into the universe before dinner's ready. The instant the roast is done, I'll get an alert on my app, without having to check and recheck it? I'm interested...

**You'll be more adventurous in the kitchen!** Admission: I've never actually cooked a rack of lamb (it seems daunting and too expensive to mess up). I'd be more inclined to give it a try, however, if all I had to do was place it into an oven that identified it for me, add a temperature-monitoring probe

and go work on a side salad or sauce, knowing the smart oven would take it from there. Look out—I'd be more of a risk-taker in the kitchen.

**You'll use up all that food about to go bad!** If my refrigerator knows what's lying around, or my oven could dial up and execute a brilliant recipe based on what's in the vegetable bin, that would help me make use of that broccoli I bought earlier this week or that tofu that was hiding behind the miso paste. Help not wasting food would be incredibly valuable to my conscience (and wallet).

On paper, this all sounds great to consumers, but those I've talked to also feel a bit threatened—like technology is asking them to step aside while it takes the reins (and the credit) for putting dinner on the table. Sure, on any given day I might be mopping my brow and complaining



Thanks to artificial intelligence baked into your cooking appliances, you can now program your oven to go into auto-pilot like you do your car, then lean back as it “senses” your dinner, then sears, bakes, roasts and warms it to perfection.

about the grind of getting dinner on the table (like so many of us do). But I’ve been honing my cooking skills since I was a teen and do love the art of it. There is something wonderful about flipping over a perfectly caramelized steak in a cast iron skillet or feeling a handful of fresh herbs give way to your chef’s knife. I don’t want to entirely give that experience up, nor the feeling you get when you place a you-cooked meal on the table and watch your family tear into it.

Here are some more concerns I’m hearing about the connected kitchen, and what manufacturers can do to alleviate the consumers’ kitchen nightmares:

**Is it crazy expensive?** Technology doesn’t come cheap. But when you’re asking people to give up what they’re comfortable with, the tools they’ve used for years to feed themselves three times a day? Affordability helps.

**Will it make things more complicated?** Putting bread in a toaster and pushing down a tab shouldn’t require an app. Ditto for using complicated scales to measure a teaspoon of this and a pinch of that. The brilliant engineers behind all this machine learning deserve lots of kudos for their innovations, but if it makes the

quodidian practices of cooking complex, people won’t buy in.

**Will it restrict my options?** Many assisted cooking gadgets require you to use their recipes (which can carry a separate charge, even after you buy their hardware!), their subscription meals or their cooking tools. That’s a tall order for consumers, who may not be anxious to part with their current set-up. Manufacturers will need to be sensitive to a consumer’s reluctance to take a full leap of faith into their ecosystem—offering lots of free functionality, risk-free trial periods and lots of education, support and good moves.

**Will it take away tradition?** How will a smart oven help me make my aunt’s famous meatballs or my Bubby’s chicken patties? Sometimes food isn’t just about eating, it’s about history, nostalgia and tradition. A robot doesn’t understand these intangibles, but the humans who are buying them do. Allowing consumers to capitalize on AI with their own recipes will make assisted cooking tools infinitely more accessible to the average cook.

I want help in the kitchen for sure—who doesn’t? And the technology they promise is miraculous and will save you not only time and money, but the

frustration of another overcooked side dish or burnt entrée. But assisted cooking devices have a long way to go before consumers adopt them en masse. They’ll have to provide just the right amount of assistance, for the right price, to make it irresistible. ■



# Mass-Market Adoption of the Smart Home: Are We There Yet?

By Lou Lenzi, FIDSA

The Consumer Technology Association predicts significant growth in the sales of smart home technologies, forecasting 29 million units shipped into the channel in 2017, an impressive 63 percent increase over last year. Revenue forecasts are equally robust at \$3.5 billion, a 57 percent increase over last year.

Such dramatic growth forecasts have met with skepticism. Anyone even casually familiar with the category knows that smart home technologies have been with us for decades, with periodic industry attempts to drag the market from the hobbyist to the masses. This is not the first time a technology platform refused to go away while striving for broad commercial acceptance. Artificial intelligence and virtual reality come to mind. After a grand entrance decades ago, they both labored on in obscurity, recently enjoying a red-carpet style comeback through advancements in their supporting technologies.

So, is the Smart Home feeling like a real consumer business, or will it experience a flameout similar to 3D TV of a few years a back? Let's start with that old and familiar mass-market requirement checklist, "the right product at the right price at the right place at the right time" and go from there.

**The right product(s):** check the box. There is a wealth of elegant, well-designed products in the mass market today. Regardless of the product type, from connected appliances and HVAC-related products, to lighting and security components, the industry has made huge investments in industrial design, engineering and manufacturing-quality to create a broad portfolio of clever hardware products



that would be the envy of any market.

**The right price:** a qualified check in the box. This is a subjective call. On one hand, the underlying technology and product offer is an amazing value, but watch your neighbor's face when presented with a \$49.99 price tag on an A19 smart light bulb. Clearly, the price curve is heading in the right direction and accelerating, but this piece of the equation is a half-check.

**The right place:** a big, bold check. The average consumer does not have to hunt for smart home tech. It's everywhere, from prominent end-cap displays at all of the big-box retailers and DIY centers, to home improvement and office supply stores and online shopping sites.

**The right time:** check the box. The consumer readily identifies with the benefits of smart home technology, with sustainability, safety and security, and convenience the clear winners in consumer research. Couple this

interest with a resurgent housing market and homeowners investing in home improvement, and the outlook for smart home tech acceptance is encouraging.

With all of these boxes checked – readily available well-designed products, continually declining prices with recognizable consumer benefits – the category is poised for double-digit growth and mass-market acceptance. Perhaps. An argument can be made that smart home tech will only take hold when it delivers a comprehensive, connected experience that integrates all of the above consumer benefits seamlessly, effortlessly and economically.

Like their predecessor offerings, many of today's product offers address each consumer benefit in a piecemeal fashion or with a building-block metaphor – think "starter kits" in order to persuade skeptical consumers. Some companies deploy connected

technologies to optimize a certain function, independent of the larger possibilities. For example, some manufacturers are leaning heavily into connectivity for product maintenance, with remote diagnostics and over-the-air firmware updates to reduce service costs. Other manufacturers are installing connected sensors to monitor and replenish consumables through a built-in backend fulfillment function. Others focus on energy consumption by actively monitoring energy usage patterns and automatically making adjustments based on these patterns. In some cases, remote appliance control capabilities enable the local utility company to balance peak power demand on the grid. Still others envision a machine-to-machine network, allowing devices and other end-points on the home network the ability to communicate and control functionality between machines. One appliance manufacturer for example links their connected cooking products

to a smart smoke detector, enabling it to turn the oven off in case it detects excessive smoke.

These are all wonderful and useful examples of smart connected products. However, a smart home ecosystem that elegantly integrates all of the functions of home automation and control, whole-home monitoring, device diagnostics and maintenance, machine-to-machine connectivity, energy management, automated goods fulfillment and even health and wellness, will lead to mass market acceptance and unlock its economic rewards.

While we understand the consumer's desired outcomes – sustainability, safety and security and convenience – what is needed to deliver those benefits is a multi-networked, multi-device ecosystem built on a comprehensive human-machine interface (HMI) strategy and related design system. By beginning with an

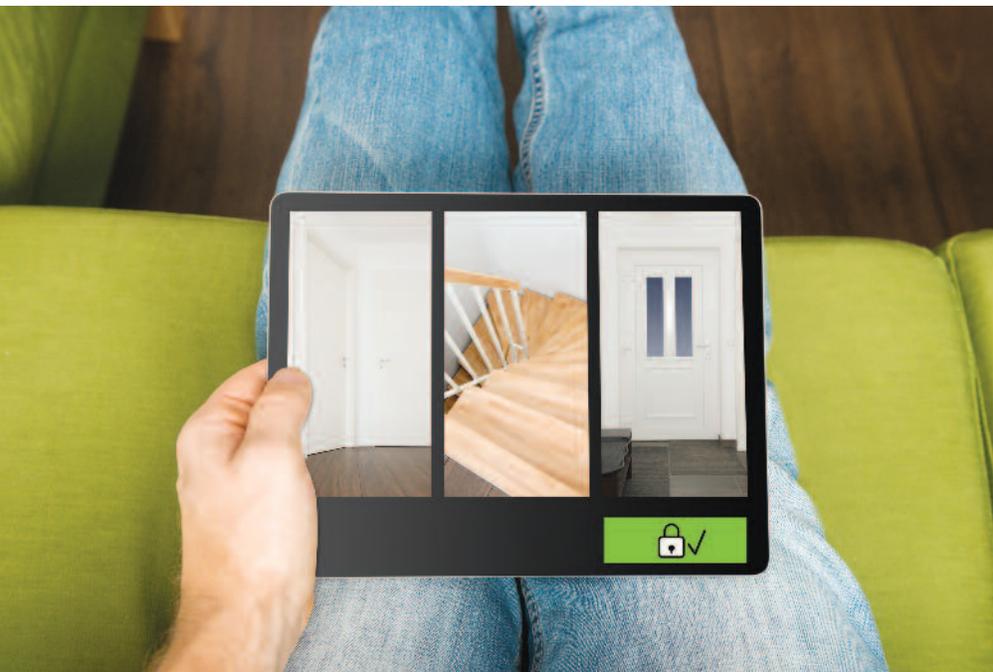
**A smart home ecosystem that elegantly integrates all of the functions of home automation and control will lead to mass market acceptance and unlock its economic rewards.**

understanding of the end user's behaviors and attitudes towards home technology and network integration, innovative design solutions based on this behavioral view of the smart home will emerge. This may include a mix of user interface technologies including voice, gestural and haptic controls, along with prescriptive and predictive data analytics, peer-to-peer machine learning techniques and new information services integrated into the home network. The potential for new and unimagined business opportunities and business models will also emerge from this process.

By employing these human-centered design principles in the development of smart home technologies and services, we will not only ensure broad homeowner acceptance of the overall system and its economic benefits, we will arrive at our final destination, mass adoption of the smart home. ■

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## Advancements in Smart Security Creating a Safer Smart Home for Consumers

By Brad Russell

Recent advances in smart security and safety devices offer consumers new and expanded solutions to help them trade in worry for peace of mind. Companies invested in IoT technologies are leading that effort by producing smart, connected products and services that promise to make the smart home safer than ever.

Home security is the most influential market driver for purchase of these devices to date. Parks Associates research shows more than one-fourth of U.S. broadband households currently own a smart home device of some kind, and half of all security system households report ownership of a smart home device.

Historically, intrusion prevention, detection of safety threats and redress for theft, damage or injury have served

as the leading motivators for security device or system ownership. Interestingly, property crimes per 1,000 residents in the U.S. have actually declined for 25 years after a high in 1991. Still, security service providers often experience spikes of interest when neighborhood crime makes homeowners uneasy. Regardless of personal experience, consumer attitudes about the safety and security of property and loved ones understandably drive adoption.

While consumers are motivated by crime and safety concerns, adoption of a security system can often be triggered by a move to a new home or a change in life stage. More than 60 percent of security system adopters report buying a home or moving from one owned home to another as their

adoption trigger. Consequently, security companies have focused marketing efforts on new and existing home purchasers, home builders, contractors and vacation homeowners rather than on renters. Although it is difficult to draw direct cause and effect relationships, the recent uptick in housing stats and home sales has contributed to renewed growth in the home security sector.

Another factor driving adoption of smart security and safety devices relates to the number of installed legacy security systems that are ripe for an upgrade to new smart security platforms with home control options. Older legacy security systems have controllers that cannot be upgraded to include interactive services or home controls, meaning they do not offer



Of the 73 percent of households with no active security system, an increasing number are adopting smart home devices with security benefits.

wireless connectivity, remote access and control, or the attachment of smart home devices. Owners of these legacy security systems and subscribers to their related monitoring services are prime prospects for upgrades to more feature-rich interactive security systems with home controls. Those that upgrade often add smart devices in the process, especially because security companies incentivize upgrades by bundling popular smart devices with their offers.

According to Vivint, 80 percent of all current home security households have a legacy system. ADT reported in September 2015 that 75 percent of new customers served by its employee dealers (including upgrades and replacements) are adopting Pulse, its interactive security and home control platform. Meanwhile, Vivint reports that 85 percent of its new customers choose security with a minimum of two smart home devices.

Of the 73 percent of households with no active security system, an increasing number are adopting smart home devices with security benefits, such as smart smoke detectors, water leak detectors and networked cameras that can be integrated with a home control system or operate as standalone devices. Increasing adoption of these self-installable security devices is expanding the

market beyond professionally monitored households by approximately 10 percent. It remains to be seen if self-installable and self-monitored devices will evolve into demand for more professional services in the future or if self-monitored devices are adequate for consumers.

The entry of broadband providers and utilities into the professional security space increases competition in the residential security ecosystem. AT&T Digital Life and Comcast Xfinity Secure entered the market in 2013 with monitored security offerings with smart home options. Both companies continue to expand their list of device partners as they seek to capitalize on their substantial subscriber bases.

Additionally, Lowe's is making its own play with a portfolio of interoperable devices for the Lowe's Iris platform. Tech giants — Amazon, Apple, Google and Samsung — have made major moves in developing smart home applications, devices and platforms that include smart security and safety devices. Finally, device makers such as Nest, August and Ring have brought to market innovative smart security



devices that are generating consumer buzz. For many consumers, standalone devices with clear use cases will be the entry point to the smart home. These entries have created an increasingly complex residential security ecosystem that offers providers both competition and opportunities for collaboration.

In summary, the evolution of IoT products, including key advancements, will continue to drive adoption of smart security devices. ■

*This story originally appeared on IoT Agenda.*

*Brad Russell is Research Director, Connected Home for Parks Associates. Brad explores leading-edge issues in connected consumer electronics, smart home devices and platforms, IoT data privacy and security, and data-driven applications for Parks Associates, a leading market research and consulting firm.*

# Ten Kitchen Tech Trends to Watch for in 2018

By Michael Wolf

Each year at the International Home + Housewares Show, new and interesting gadgets that promise to make our lives easier debut in Chicago. And while many of these products represent incremental improvements over years past, few actually reinvent how we buy, store, cook and consume our food.

However, technologies such as artificial intelligence, cloud computing and the Internet of Things are beginning to slowly emerge and catalyze a transformation of the kitchen. In fact, by 2028 these disruptive technologies will completely change many of the product categories currently represented at the Show.

And here's the good news: We don't have to wait a decade to see a glimpse of this future because some of these technologies are showing up in products available to consumers today. Here are 10 technology trends to keep an eye on in 2018 to help us better understand where the next decade will take us.



## Digital Recipe at the Center of the Action

While some believe the recipe is dead, I'd argue it's anything but. If anything, the recipe is becoming increasingly important in the digital kitchen as it becomes both our digital shopping list and instruction set for our appliances, jumping off the page with dynamic and personalized content that factors in our preferences and the context of our current day, meal plans and food inventory.

I expect all of this to continue in 2018 and even accelerate as recipes become shoppable, connected to cooking guidance systems and fuse with new interfaces such as voice assistants and chatbots to help with the cooking process.



## New Cooking Boxes

While "cooking box" isn't exactly a standard industry term, it's an apt way to describe the wide variety of exciting products coming to market that allow consumers new ways to prepare food.

Last year we started to see new takes on steam ovens like the Tovala, the first consumer market RF cooking appliance announced in Miele's Dialog, and even combo devices that combine fast-cooking with flash-freezing like the Frigondas. In 2018, I expect to see lots more innovation with built-in and countertop products as old-school appliance manufacturers and housewares brands realize there's opportunity in deviating from the same-old cooking appliances and offering consumers new options when it comes to preparing food.



## Smart Grow Systems Move Towards Mass Market

While home grow systems have been around for years, adoption has remained fairly narrow. That will start to change in 2018 as the idea of using technology to grow and create our food at home enters the mainstream consciousness. Driving this trend will be the ever-increasing consumer desire to source food locally. After all, what's more local than our own homes?

The great thing about this space is there's already a wide gamut of interesting options available for consumers today. Whether it's low-cost offerings like seed quilts, to the growing number of soil-less home grow systems like those from AeroGarden, to

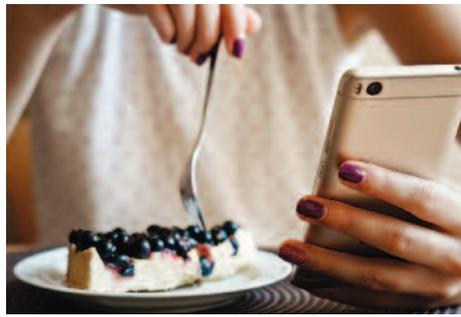
crazy backyard farm robots like those from Farmbot, I think we'll see more innovative products – and greater consumer adoption – in 2018.



## Home Fermentation

There's no doubt one of the most interesting trends we've seen in consumer food over the past couple years is the embrace of interesting fermented products like kombucha, and I think this interest will start to generate more interest in consumers fermenting their food at home.

We've already seen companies like Panasonic show off fermented food cookers, and beer appliance startup PicoBrew is starting to offer Kombucha as an option. With interest in fermented products likely to increase, I expect more innovators will look to make creating these products at home easier.



## Desserts Meet Tech

Like most, I love myself a good dessert, and I expect we will see an increasing number of interesting ways to fuse technology with sweets in the coming year. Some of these innovations will focus on convenience, but some will enable consumers to create hard-to-make sweets like chocolate, ice cream and other types of desserts that are normally time and knowledge intensive. Expect to see some interesting announcements in this space in the next 12 months.



## Sensing Kitchen

When the *Wall Street Journal's* Wilson Rothman got on stage at the Smart Kitchen Summit with startup creators of digital food-sensing tech and demoed live in front of a huge audience, you could hear the audience murmur as Wilson and crew smelled cheese with a digital nose or tried out the Scio infrared spectrometer. This technology that has long been gestating for commercial and supply chain applications is finally making its way into the home, and I expect that to continue in 2018, particularly as some find new ways to apply AI to better prediction and understanding around flavors and food characteristics.

**Michael Wolf is founder of the Smart Kitchen Summit, the leading event focused on the future of food, cooking and the kitchen, and publisher of The Spoon ([www.thespoon.tech](http://www.thespoon.tech)). You can find out more about the Smart Kitchen Summit at [www.smartkitchensummit.com](http://www.smartkitchensummit.com)**



## Meal Services and Connected Hardware

One of the trends we've been watching for a while is the pairing of meal kits with connected hardware. That trend accelerated in 2017 as Tovala shipped product, Nomiku created their sous-vide-ready meals and Innit hinted at new products powered by Chef'd as we ended the year.

It makes sense. Recurring revenue has long been the mantra of venture capitalists (just ask Tovala, which just got a \$9.2 million series A), and in the connected cooking space, the way to get recurring revenue is offer food. I also expect meal kit companies to increasingly look for ways to partner with kitchen tech innovators (much like Chef'd has with Innit) as they search for ways to raise adoption and retention for consumers.

Speaking of food delivery...



## Automated, Smart Grocery Delivery

With the acquisition of Whole Foods in 2017, Amazon stopped dabbling around the edges with lab experiments like Amazon Go, Amazon Dash and Amazon Fresh, and made its intentions clear: It wants to take a big bite out of the \$700 billion grocery business in the U.S. And while the company has had mixed success with efforts like its Fresh delivery business, these long-gestating experiments have given them a potentially huge advantage as they start to set up central hubs and physical points of presence for the grocery business post-Whole Foods.

And now, Amazon and others see the opportunity to fuse home delivery with smart home access control and automatically deliver groceries all the way to the fridge. Combine that with the ability of fridges to actually tell us when food needs a refresh, and you can unlock some interesting scenarios.

## New Interfaces

While this past year saw the continued march forward of popular voice interfaces like Alexa, I think we're only at the beginning of a large-scale change in the control layer for how we buy, prepare and cook our food. Sure, we'll see more and more Alexa skills for cooking gadgets in 2018, but also expect more manufacturers to embrace chatbots and projection interfaces as ways to interact with our cooking equipment this year.

## Cooking Robots

Cooking robots are popular and, while many are fun and likely never to see wide adoption over the next decade, there are a variety of interesting cooking bots that might have real applications for specific use cases. Some are simple food automation devices. Others are more social robots. And, in some cases, companies are working on human-like robots that could be intriguing additions to the kitchen of the future. ■



[www.smartkitchensummit.com](http://www.smartkitchensummit.com)



Adoption depends on clear and compelling value propositions that appeal to the masses when they seek a solution for a personal use case.

## Continued Innovation Crucial to Smart Home Device Adoption

By Brad Russell

Continued innovation and messaging are crucial for smart safety and security device manufacturers that want to capitalize on new opportunities in the emerging Internet of Things.

Early adopters of smart devices are often drawn to the innovative design and technological gadgetry. However, mass market adoption depends on clear and compelling value propositions that appeal to the masses when they seek a solution for a personal use case.

### Connecting Outlier and Everyday Use Cases

Several challenges exist to meet those demands, and new use case options will impact the smart security and safety segment in 2018 and beyond. One key challenge for security and safety devices is to apply the value of the devices to specific, existing needs recognized by homeowners. For instance, what are the everyday challenges they can address, while also providing protection for the outlier

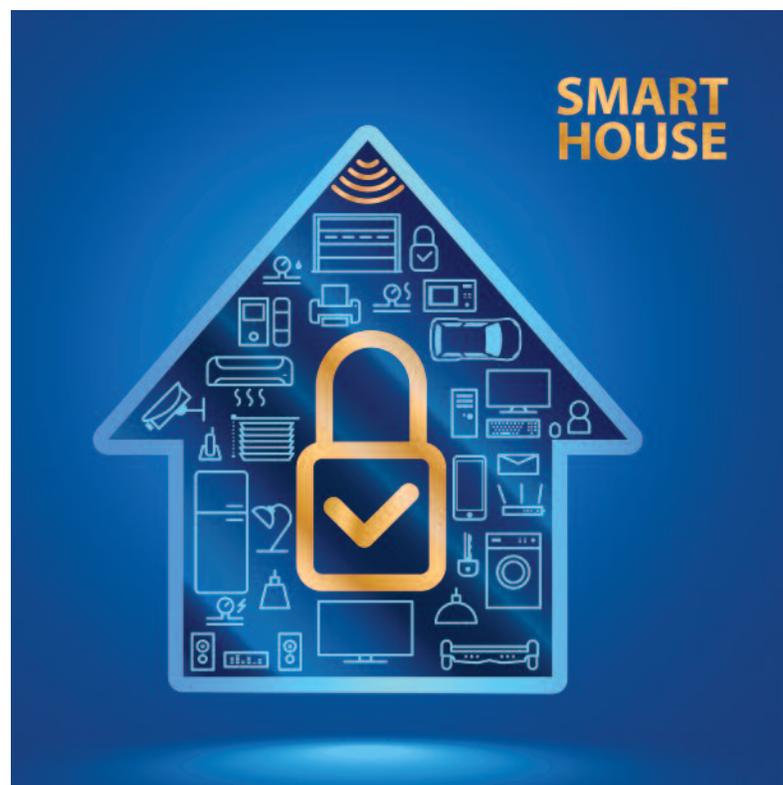
possibilities of burglary or fire?

Video doorbells, for example, serve as entry-point security to ward off potential burglars, but they also identify when the kids come home or if a package has been delivered. Smart door locks not only protect against stolen or lost keys, but also provide remote access to guests and neighbors or automated lock/unlock functions based on owner proximity.

Motion sensors can be triggered in the rare occasion that an intruder threatens property, and they also can be embedded with sensors that help improve a home's air quality every day.

What these examples suggest is that peace of mind is derived less from

security-specific uses than from safety or welfare use cases that free owners from worry by keeping them informed about the status of their homes and loved ones. Value propositions for safety and security devices will be strengthened when consumers perceive everyday connections.



## Personalized Use Cases and Segmentation

In addition to finding universal value propositions, the beauty of the smart home is that it can provide solutions to personal and unique use cases.

The multiplicity of use cases for smart home devices suggests companies must carefully mesh marketing messages to specific segments, such as young renters, families with young children, families with teens, aging adults and their caretakers, urban and suburban locations and consumers undergoing life transitions (birth, marriage, divorce, death).

Also, the segmentation may not be so much demographic as it is a common concern shared by a group of consumers. Enabling device and system personalization is one way to address a variety of use cases. The more consumers can uniquely configure their security devices and services to fulfill their needs, the stronger the value proposition.

## Consumer Expectations on the Rise

In addition to self-installation convenience, consumers increasingly want simple, easy-to-use smart security devices and applications. Elevated product designs and clean user interfaces challenge traditional security system providers to improve their offerings' appearance and ease of use.

While consumer understanding of device intelligence is nascent, some new connected devices, such as the Nest Cam, are raising the bar for the minimally acceptable product by integrating such cloud-supported capabilities as machine learning and security-oriented algorithms.

## Strong Ecosystems Emerge

In addition to self-installable solutions, strong ecosystems organized around interoperability protocols, product developer platforms, professional services and big tech brands have emerged in the smart security marketplace.

Ecosystems are well established around brands like Z-Wave or ZigBee, but there is increasing interest in achieving interoperability at the application layer. The development of WiFi devices and combination Bluetooth low energy/IP-compatible devices creates new ecosystems that achieve automation through cloud-to-cloud communication by way of application program interfaces. This circumvents the need for a gateway hub.

Several interoperability initiatives are making strides in providing interoperability across a range of industry verticals. To that point, the partnership announced by ZigBee and Thread in early 2016 exemplifies the commitment to integrate a legacy radio frequency protocol with a newer IP protocol to reduce interoperability fragmentation. Still, the various protocol ecosystems are not expected to converge for several more years—if ever.

Ecosystems are also emerging around language processing. Apple HomeKit and Amazon Echo each have strong ecosystem plays around natural language processing and voice control through these proprietary devices.

Google has created an IoT operating system, Brillo, and a cross-platform communication protocol, Weave, to enable easy integration with the



Android ecosystem. These various ecosystems define and differentiate the value of smart security devices for some consumers, though for others they are understood simply through the lens of “which device works with another.”

The strategic move of tech giants Amazon, Apple and Google into the smart home space promises an intense layer of competition already shared by hardware, security, broadband and utility companies. This fragmentation of ecosystems is likely to persist, and device makers will be challenged to bet on one ecosystem with a sizable shared audience, develop device models for various ecosystems and embed multiple compatibilities within a single device.

An integral part of the product value for these devices is the user experience through apps and voice control. As consumers increasingly engage with connected home devices and services through apps via alternative devices—smartphones, tablets, computers, smart TVs, streaming media devices, connected cars, wearables and speakers—the user experience accompanying these apps becomes a vital extension of the security device’s or system’s value.

Home security and smart home platforms, as well as hero standalone devices, seek to differentiate themselves through a superior UX. The user’s interaction must be as frictionless as possible at all stages — from installation and setup to daily operation.

The introduction of voice control—with Amazon Echo and Alexa technology and the slower-to-market Apple HomeKit certified products—signals a new era in device interfaces. The ease of engaging with Alexa or Siri by calling their names and then issuing a command

provides a natural, human-like interaction, one with which consumers are becoming increasingly familiar.

Many smart home device makers, without the capacity or interest in developing their own natural language processing interface, welcome Alexa integration. As of Q4 2015, almost 52 percent of iPhone owners had engaged with Siri and almost 32 percent of Android smartphone owners had used Google Now.

Alexa’s natural language processing technology already has been integrated with SmartThings, Vivint, Insteon, Wink, Philips Hue and Ecobee platforms, among others.

Growth in voice control usage may ultimately provide the frictionless interface needed to help drive mass adoption of smart home devices. A major beneficiary of that mass adoption would be the smart security market, with the increasing integration of smart home control with professional security services creating a climate for partnership development. Those partnerships will lead to more

**Peace of mind is derived less from security-specific uses than from safety or welfare use cases that free owners from worry by keeping them informed about the status of their homes and loved ones.**

proprietary development or acquisition by the major security players. ■

*Brad Russell is Research Director, Connected Home for Parks Associates. Brad explores leading-edge issues in connected consumer electronics, smart home devices and platforms, IoT data privacy and security, and data-driven applications for Parks Associates, a leading market research and consulting firm.*



# What's Ahead for the Smart Home in 2018 (and Why It Matters for Your Brand)

By Ashley Daigneault



A few years ago, we were talking about the concept of a “smart” home and integrating connected devices into living rooms, kitchens and bedrooms to make everyday life safer, easier and more convenient. But most of the chatter was happening inside the tech and surrounding industries, and the phrase “smart home” had almost no visibility in actual consumer homes.

But that’s all changed – at the start of 2018, Statista pegged household adoption of smart home at 32 percent - just about one-third of all U.S. households. Thanks to a convergence of forces – including the push around smart speakers as well as a resurgence of home security and the growing connectivity of appliances – the words “smart” and “home” are no longer alien

to mainstream consumers.

As more consumers are embracing connected living, innovation within the smart home space is also evolving. Early days in the space were focused on basic connectivity and control – the ability to access your home remotely and use an app to monitor activity when you’re not there. Even early connected appliances gave consumers rudimentary functionality; a smart oven with its companion app might allow a user to turn the device on to preheat before they arrived home from work. Now we see more and deeper integrations between devices and smart appliances, creating more of a holistic ecosystem.

So what should housewares brands

pay attention to as the smart home market grows in 2018?

1. No one brand or product is going to “win” the market. Tech giants like Amazon, Apple and Google are throwing their weight around and growing their ecosystems with support for a variety of platforms and devices. Amazon’s Alexa voice platform may have taken an early lead with driving adoption, but Google is playing catch up with a host of integrations announced at the Consumer Electronics Show this year. Apple continues to add to its HomeKit ecosystem, making sure device security is a top priority and sticking to a very consumer-friendly user interface.



**At the start of 2018, Statista pegged household adoption of smart home at 32 percent - just about one-third of all U.S. households.**

2. Traditional smart home products (connected thermostats, smart lighting or smart locks) are making nice with more traditional appliances and kitchen brands. Expect to see more integrations where your oven talks to your smoke detector and shuts off if a fire is detected in your kitchen. The trend is smart appliances are moving toward a world of “invisible” technology where device cooperation along with machine learning is helping consumer homes to act, make decisions and help them with everyday tasks like cooking and laundry without much user input.
3. Smart kitchen as a service is a trend that won't quit; more and more appliances – from refrigerators and microwaves to countertop ovens and blenders – are participating in the direct-to-fridge grocery delivery movement. Over the last year, smart home providers have gotten

involved too – services like Amazon Key work with HD cameras, cloud platforms and connected locks to let package delivery professionals into the home. August Home, a popular smart lock provider, has launched a similar initiative with Deliv.

4. Voice assistants will be in everything – smoke alarms, TVs, speakers, routers and more. And while consumers won't need (or want) a voice interface inside every product they buy for their home, the introduction to voice control will happen outside the purchase of a standalone smart speaker. With more everyday products on the market with voice built-in, we will likely see even more AI assistants in homes by the end of 2018.

It's clear that the smart

home is here to stay. Smart home and kitchen integrations, big players like Google, Amazon and Apple, smart home as a service model and voice assistants are going to have a huge impact on the future of the space. With over half of Americans predicted to have adopted smart home in just four years, it's time for all consumer brands to start paying close attention to the influence connected tech is having on the home. ■

*Ashley Daigneault writes for The Spoon ([www.thespoon.tech](http://www.thespoon.tech)) and helps produce the Smart Kitchen Summit ([www.smartkitchensummit.com](http://www.smartkitchensummit.com))*



# Pavilion Exhibitors

## Behmor, Inc.

### Behmor Connected



The Behmor Connected is the world's first Specialty Coffee Association of America-certified smart brewer. This unique coffee brewer enables the user to bring out a coffee's true flavors via brew settings not found on any other coffee maker and controlled easily via a mobile phone app. The Behmor app allows you to adjust the brewing temperature, pre-soak time, or select a favorite brew profile and start brewing. The brewer is engineered for optimum coffee extraction and flavor with pulsed water flow from an oversized showerhead onto a flat bottom grounds basket that will fully saturate the coffee grounds.

## BoxLock Home

### BoxLock

BoxLock is a smart padlock designed to protect deliveries from porch pirates and package thieves.



## Chefman

### Chefman Precision Cooker Sous Vide App

At Chefman, we're all about enhancing the cooking experience with meals that speak to you. Beginning with The Chefman Precision Cooker Sous Vide App and continuing into 2018 with a full suite of interactive, connected, Guided Cooking-enabled small appliances, Chefman is easing the pains of the everyday home chef and helping them achieve spectacular results.



## Chime

### Chime

Chime is the world's first of its kind authentic chai brewer. It uses custom-designed chai caps that are packed close to the source in India and contain premium Assam black tea and natural spices. It makes brewing an authentic cup of chai a breeze and produces a fresh cup of chai customized to your taste every time at the push of a button.



## Chipolo

### Chipolo



Chipolo offers Bluetooth tracking devices, including the new Chipolo Classic 2.0 and Chipolo Card. With the best features and functionality, you'll never lose anything again! The tiny sizes allow you to slide, drop or attach Chipolo products to virtually anything, and utilize our easy-to-use app to make it ring or see the last place you had it. If it's your phone you're looking for, simply double press your Chipolo to make your phone ring – even if it's on silent. Chipolo makes for a great impulse and gift purchase for your customers.

## ECOVACS Robotics, Inc.

### DEEBOT 900

With ECOVACS' third generation navigation technology, the DEEBOT 900 brings intelligent, affordable laser mapping functionality to consumers. Working with Amazon Alexa and Google Assistant, this robotic vacuum is a powerful addition to your Smart Home. And the app comes with our first-to-market virtual boundaries, scheduling and focused cleaning. Smart Navi, laser-based navigation, scans and maps cleaning areas so the DEEBOT 900 learns and constantly adapts to your home, enabling efficient cleaning. It is equipped with an interchangeable suction option and selective cleaning modes that ensure your DEEBOT always cleans hairs, dirt and debris effectively and efficiently.



## Ember Technologies, Inc.

### Travel Mug & Ceramic Mug



Ember is a design-led temperature control brand whose mission is to revolutionize the way people eat and drink. Founded by inventor and serial entrepreneur Clay Alexander, Ember creates, designs and develops household products that offer consumers complete customization of their food and beverage temperature. Ember's Travel Mug and Ceramic Mug are the most advanced coffee mugs on the market, allowing individuals to set and maintain their preferred drinking temperature for hot beverages.

## Fellow

### Stagg EKG+

Fellow aims to deliver beautifully functional products for coffee lovers. Rooted in thoughtful user-centered design, Fellow is creating a portfolio of products that make it easy for anyone to brew a ridiculously good cup of coffee. Fellow's most recent product, the Stagg EKG+ Electric Pour-over Kettle raised \$500,000 on Kickstarter in 2017 and is now available to purchase in the U.S. Stagg EKG+ has become the new electric kettle of choice for the industry's best baristas and serious at-home brewers: variable temperature control within 0.25 degrees Celsius, a weighted counterbalanced handle, Bluetooth app connectivity and a stunning minimalist design.



# Pavilion Exhibitors

## Gourmia

### GCM3350

Gourmia's GCM3350 is the world's first automatic pour-over coffee maker that can be integrated with both Google Home (Google Assistant) and Amazon Alexa. It's Wi-Fi enabled and controlled by the Gourmia app, which can also manage other countertop appliances in your kitchen. The GCM3350 is also a finalist in the prestigious Red Dot Design Awards. The GCM3350 features precise temperature control, a built-in scale and adjustable water/coffee ratio based on coffee types - customers have the freedom to create a single cup of coffee exactly the way they want it.



## Growgreen Limited

### Aspara

Aspara is a smart veggie grower and an Internet of Agriculture (IoA) for homes, with built-in smart sensors for environmental monitoring and unique settings that replicate nature. Its programmable LED grow light control, innovative water-flow system and 10 environmental sensors allow Aspara to know the optimal times to provide the most suitable environment for plant growth. The mobile app allows users to learn more about their plants, find recipes and inspiration for healthy lifestyles, and share their growing experiences. It's not just a growing device, Aspara embodies a healthier lifestyle.



## HD Genius

### Internet Photo Frames



HD Genius is a leader in smart home technologies. This week we are featuring our line of Internet photo frames, our Internet clock and smart home visual doorbell. With three sizes of Internet photo frames to choose from, all supported by Wi-Fi connectivity and our smart phone app, you can send photos from anywhere in the world. Invite family and friends to send photos directly to your frame. Come by our booth to learn more about why HD Genius products will make your home smarter and more enjoyable.

## Hestan Cue

### Hestan Cue



Hestan Cue takes the guesswork out of cooking. Our smart cookware, induction burner and recipe app work together to automatically control the temperature and timing of each recipe step. Choose from hundreds of video-guided recipes, each with proven tips and techniques from our Michelin-star chefs. You'll learn new skills each time you cook while enjoying delicious dishes that you've always wanted to make at home.

## Hidrate Spark

### Hidrate Spark

Sometimes drinking more water is all we need to feel energized and brighten our mood. Hidrate Spark is an innovative solution to tracking and increasing water intake! The Hidrate Spark water bottle, using a built-in sensor, records your water intake and syncs with smart phones, smart watches and the Hidrate app via Bluetooth to help you meet your daily hydration goals. Its ergonomic design, eye-catching frosted colors and glow reminders make drinking water fun and stylish. There's no better time than the present to start living healthier. Why not do it in style?



## iCuisine

### iCuisine™



With iCuisine™, cooking is simpler, healthier and smarter! iCuisine™ offers various smart kitchen tools and gadgets working with an intuitive app for smartphones and tablets. Using different types of sensors integrated in the products, measure precisely the weight or temperature of your food. Search, make and share delicious recipes. Follow your daily intake and decide if a dietary goal adapted to your profile. Working with the Wi-Key technology, each tool offers the commodity of a daily use and can become smart within 2 seconds!

## igloohome Pte. Ltd.

### Smart Keybox

igloohome introduces an industry first technology that enables devices to remain offline. No internet/WiFi required to operate the locks and yet through your free igloohome



app you can remotely create and control PIN codes and Bluetooth keys to these devices in real time. Currently available is a Smart Lockbox, Smart Deadbolt and Smart Mortise Lock. We've partnered with Airbnb for an in-app function that syncs Airbnb Host calendars and creates codes for guests that work only for the duration of their stay. These products are perfect for vacation rentals, as well as real estate groups and home automation enthusiasts alike!

## Innohome Oy

### Stove Guard SGK430



Stove Guard SGK430 is every kitchen's safety device. It protects your home's most fire-prone area and intelligently adapts to your cooking habits. It also supports independent living when range use becomes higher risk due to old age, illness or learning difficulties. Thanks to SGK430's intelligent, self-adjusting technology, the range is turned off before toxic gases can be produced and before a fire can start.

# Pavilion Exhibitors

## La Crosse Technology

### La Crosse Weather Station & View App



In today's world of smart homes, it's important to stay connected. This innovative connected weather station with built-in Wi-Fi and paired with the La Crosse View App, will help you monitor your home's indoor and outdoor conditions right from the palm of your hand, keeping you connected to the world around your home, wherever you are. Connecting you anytime, anywhere. [www.lacrossetechnology.com](http://www.lacrossetechnology.com).

## LauraStar SA

### Laurastar Smart



An ironing system that thinks for you means knowing your clothes will turn out perfect, effortlessly. Who doesn't long for an ironing assistant to make your hectic life that little bit easier? Laurastar Smart is an expert that makes ironing easy and perfect. Because your time is as precious as your wardrobe, the « Sensteam » technology senses the movements you make with the iron and activates the steam automatically. Your ironing system uses Bluetooth technology to connect to the mobile app and acts as your coach to beautify your clothes. It's easy, fun and effective!

## Merkury Innovations

### Geeni



You got a Google Home or Amazon Echo device. Now what? Meet Geeni, a full range of incredible smart bulbs, plugs, cameras, surge protectors, appliances and more all running off a single, easy to use app and compatible with Google Assistant, Amazon Alexa and Microsoft Cortana. A smart home should feel magical, familiar and accessible, not intimidating, scary and expensive. It should let you check in on what's important, alert you if something's happening at home and give you peace of mind and convenience.

## Noon Home, Inc.

### Smart Light Switches

Noon Home smart light switches revolutionize the experience in your home by automatically coordinating your existing bulbs and fixtures at a fraction of the cost. Simply click to turn all your lights on and off, or swipe to set a scene for your favorite activity. You can also control from anywhere using the Noon Home app on any iOS or Android device. Noon Home offers 3 products: Room Director, Extension Switches and Wall Plates in up to 4 switch options. We believe truly smart lighting begins and ends at the switch, not the bulb.



## PantryChic, a division of Nik of Time

### PantryChic™ Store & Dispense System™



The PantryChic™ Store & Dispense System™ reinvents ingredient storage, recipe preparation and pantry organization.

With its sleek design and “smart technology,” the system simplifies recipe preparation by automatically dispensing the perfect amount of each ingredient directly from SmartCanisters™. The system can be used by itself or with the PantryChic™ Recipe App that allows you to discover and prepare recipes from your smart device, track your pantry and order ingredients. This convenient solution will replace traditional ingredient storage canisters, measuring utensils and scales to allow bakers and foodies at every skill level to perfect recipes in less time with less mess.

## PLOTT

### Cubit



Cubit is your partner in creativity. Cubit takes the real-world and puts it into the virtual so you can design with actual dimensional context and scale. Then it helps you take your finished design back to the real world with dimensional guidance. Design using virtual reality and AR in our easy drag and drop app, then Cubit acts as a GPS, giving turn-by-turn directions that take you to the exact spot in reality to make the changes. You don't have to do any math or calculations, or stress about how to get the project done.

## Ready for Sky LLP

### SkyCooker

A dream cooker with state-of-the-art smart technology features and 21 automatic programs that replace over 20 common cooking appliances. You can make sous-vide and slow cook at the same time, and by the exact time in two bowls or just reheat or sauté in one bowl. SkyCooker operates manually with a joystick and multi-language digital interface or remotely with 1 tap on a recipe in the mobile app cookbook. Spend your time with your family and friends and let the SkyCooker take care of automatic cooking. Compact and energy-efficient, SkyCooker can also play FM radio.



## SproutsIO Inc.

### SproutsIO

With SproutsIO, you can grow indoors, year-round, soil-free, controlling the entire process from your mobile device. By utilizing high performance technology and machine learning software, SproutsIO cultivates personal produce, fruits and vegetables grown to your taste according to settings you customize.

This automated and transparent growing process is highly efficient, requiring only 2% of the water of conventional growing and half the power of an incandescent light bulb. Fresh, flavorful produce is now possible any time, any place - whether you live in a tiny urban apartment or run a world-class restaurant kitchen.



# Pavilion Exhibitors

## TasteTro, Inc.

### TasteTro



Introducing the TasteTro Spice System, an innovative kitchen companion that delivers mouthwatering spices and blends at the touch of a button. Incorporating both RFID and Bluetooth technologies, TasteTro is your portal to a world of flavor exploration directly from your kitchen counter. The Spice System comes loaded with 50 pre-programmed blends and 20 spice pods. All blends are paired with delicious and easy-to-prepare recipes providing a quick & convenient meal solution. Bluetooth connectivity provides updates for spices, the addition of new blends and UI enhancements.

## Thermomix

### Thermomix

The powerful, German-engineered Thermomix combines 12 functions in one digitally enabled countertop appliance to make cooking interactive, simple and fun. Using the touch screen display for our innovative Guided Cooking, even novice home cooks can weigh, chop, mix, blend, whip, knead, sauté, cook and steam to wow family and friends with restaurant-quality meals. With our revolutionary WiFi-enabled Cook-Key attachment, you can download more than 30,000 recipes from our global Cookidoo recipe platform directly to your Thermomix. Solving the dinnertime dilemma has never been easier -- or more delicious!



## WINIX America

### WINIX HR 1000 Air Purifier

The WINIX HR1000 Air Purifier combines advanced air cleaning technologies with user-centric elegant design to create an elite member of the Winix family; best used in any area of the home. Sporting a 5-Stage air purification system with Washable Pre-Filter, Coated Deodorization (CD) Carbon Filter, Anti-microbial True HEPA Filter and WINIX PlasmaWave Technology. The HR1000 is one of our premier Wi-Fi enabled products and compatible with the WINIX SMART app.



## Wynd Technologies, Inc.

### Wynd

Our mission is to help people breathe healthy clean air anywhere, so we created Wynd - the smartest air purifier for your personal space. Wynd is portable so you can take it with you wherever you go - on the plane, in the hotel room, in the car, anywhere. It consists of 3 parts: Tracker, Purifier and App. The Air Quality Tracker monitors pollutants in the air around you, and the Purifier removes those pollutants. These devices work seamlessly with each other and the Wynd mobile app to provide insights and a healthy environment everywhere you go.



## Smart Home Exhibitors (companies and booths)

### CLEAN + CONTAIN

SeedSheet .....	N6653
Simplehuman .....	N7735
Toymail .....	N6659
Value Max Products .....	N6764

### COOK + BAKEWARE

Hestan Smart Cooking, Inc. ....	\$2910
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### DESIGN DEBUT

AvaGrows .....	N8724
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### DISCOVER DESIGN

GIR: Get It Right .....	N8312
THE FOUNDATION .....	N8315

### SMART HOME

Behmor, Inc. ....	L14000
BoxLock Home .....	L14000
Chefman .....	L14000
Chime .....	L14000
Chipolo .....	L14000
ECOVACS Robotics, Inc. ....	L14000
Ember Technologies, Inc. ....	L14000
Fellow .....	L14000
Gourmia .....	L14000
Growgreen Limited .....	L14000
Hestan Cue .....	L14000
Hidrate Spark .....	L14000
HD Genius .....	L14000
iCuisine .....	L14000
igloohome Pte. Ltd. ....	L14000
Innohome Oy .....	L14000
La Crosse Technology .....	L14000
LauraStar SA .....	L14000
Merkury Innovations .....	L14000
PantryChic, a division of Nik of Time, Inc. ....	L14000

PLOTT .....	L14000
Ready for Sky LLP .....	L14000
SproutsIO Inc. ....	L14000
TasteTro Inc. ....	L14000
Thermomix .....	L14000
Winix America .....	L14000
WYND Technologies, Inc. ....	L14000

### TABLETOP, KITCHEN ESSENTIALS + ACCENTS

Companion Group .....	\$1971
Cupanion .....	\$2272
Escali, LLC .....	\$443
Flyvalue .....	\$249

### WIRED + WELL

Bartesian .....	L11926
Bibo Barmaid, LLC .....	L11143
Blueair North America .....	L11915
BluZen .....	L11045
Bradley Smoker USA Inc. ....	L11052
Brentwood Appliances, Inc. ....	L11151
CE North America LLC .....	L12308
Coravin .....	L11159
Coway Co., Ltd. ....	L12327
Crane USA, Inc. ....	L12020
Cuchen Co., Ltd. ....	L13263
Curtis International Ltd. ....	L13115
Dr. Heater USA / TLM International, Inc. ....	L11048
Dualit .....	L11929
ECOVACS Robotics, Inc. ....	L11947
ETEKCITY .....	L11747
Galanz (North America) Inc. ....	L12747
Gourmia .....	L11344
Green Energy Nano Technology Co., Ltd. ....	L13357

iFAVINE .....	L11715
Jem Accessories/Xtreme Cables .....	L11750
Kalorik .....	L11726
Kuvings (NUC Group) .....	L12539
La Crosse Technology .....	L13307
LauraStar SA .....	L11311
Marutaka Co., Ltd. ....	L13259
Merkury Innovations .....	L11157
Mill International AS .....	L13144
Miro .....	L12010
NY Yeasincere Corp. ....	L11953
Perfect Company .....	L12024
Philips North America .....	L11336
PicoBrew .....	L12156
Ready for Sky .....	L12008
Sansaire .....	L12022
Shanghai Nailove Elec. Tech. Co., Ltd. ....	L12957
Shenzhen Champion Industry Co., Ltd. ....	L13262
SIA Green Trace .....	L13342
Simpro .....	L13061
SousVide Supreme .....	L12937
Spectrum Brands, Inc. ....	L11315
Supercase Electronics Limited .....	L13341
Taurus Group .....	L11013
TCL Home Appliances (North America) Co., Ltd. ....	L12763
Vesta .....	L12162
Vitamix Corporation .....	L12147
Vivitar Sakar International, Inc. ....	L12931
Water Stream LLC .....	L11950
Wiltron Corporation .....	L13245
Winix America .....	L12125
Zadro Products, Inc. ....	L11131

MAKE A  
**Smart**  
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Register for the 2019 Show

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**IT'S Smart**  
www.housewares.org

Pre-register for the 2019 Show by scanning your badge at any of the on-site locations including registration areas, restaurant cafés, Buyers Clubs, Hotel Accommodation Desk and near Gate 3.5 in the South Building or visit [www.housewares.org/show/register-plan](http://www.housewares.org/show/register-plan)

# Learn More at the Show

## Keynote

### THE FUTURE KITCHEN: BUILDING SMART, NEW AND SUSTAINABLE BUSINESS MODELS

**Moderator:** Mike Wolf – creator of the Smart Kitchen Summit, host of the Smart Kitchen Show podcast, publisher of The Spoon ([www.thespoon.tech](http://www.thespoon.tech)) and founder of NextMarket Insights, a research and advisory firm focused on the connected home.

**Sunday, March 11 • Noon – 1 p.m.**  
**Room S100, South Building**

The smart home is creating opportunities for product manufacturers who will create the kitchen of the future. Mike Wolf will moderate a panel of thought leaders, who will discuss how the housewares buyers and sellers can build smart, new and sustainable business models to succeed in the kitchen of the future

#### Panelists:

**Mike Wallace**, co-founder and CEO of Perfect Company, a company positioned to change the way people prepare food and drinks using smart recipes.

**David Rabie**, CEO of Tovola, working to bring clean food cooked fresh to homes across the country.

**Jon Jenkins**, director of Engineering, Hestan Smart Cooking. Working to bring the concept of guided cooking to home cooks.

## Smart Talks

The new IHA Smart Home pavilion is a key attraction at the International Home + Housewares Show. Along with seeing the latest in smart and connected products from exhibitors, visitors will meet industry thought leaders and learn about the future of the Smart Home. The Smart Talks speakers will share their views in panel discussions and conversations on a small format stage providing an opportunity for audience dialogue and education.

**For more information and a schedule of presentations, visit [www.housewares.org/show/smart-talks](http://www.housewares.org/show/smart-talks) or download the Show's mobile app at [m.housewares.org](http://m.housewares.org)**

## Innovation Theater Presentations • Room E350

### Saturday, March 10

2:30 - 3:20 pm

**Lou Lenzi, Indiana University School of Informatics**  
*Smart Home Mass-Market Adoption: Are We There Yet?*

3:30 - 4:20 pm

**Mike Wolf, Smart Kitchen Summit**  
*The State of the Connected Kitchen*

### Sunday, March 11

2:30 - 3:20 pm

**Carley Knobloch, Smart Home**  
*Do I Even Need to be Here? A Human's Role in the Smart Kitchen*

3:30 - 4:20 pm

**Moderator: Paul Hatch, TEAMS Design; Rajat Shail, Honeywell; Richard Hughes, Whirlpool; John Kennelly, b8ta**  
*Connecting the Smart Home to the Homeowner*

### Tuesday, March 13

9:30 - 10:20 am

**Kevin Young, Continuum**  
*The Shift (aka Trends) That Will Impact the Future of the Connected Home*



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