## **Appliances Strengthen Smart Home Connections at CES**

LAS VEGAS—Amidst all of the robot kittens, video gaming accessories, home surveillance systems and flying taxis debuting at last week's Consumer Electronics Show (CES) here, manufacturers featured a plethora of products specifically designed to strengthen the connection between smart home appliances and consumer lifestyle needs, including exciting developments in the kitchen, personal care, wellness and cleaning categories.

The smart home segment at CES at continues to draw forward-thinking suppliers and retailers looking to establish a stronger bond with the consumer and thereby drive sales of connected appliances. Small appliance product highlights at CES included many items focusing on helping consumers achieve a healthier lifestyle, including smart appliances designed to help consumers improve cooking speed and accuracy in the kitchen; make informed choices in meal preparation; enhance personal grooming and wellness; and simplify cleaning chores.

Appliance executives agree that just introducing a smart application doesn't guarantee success—indeed, there are plenty of examples of smart products that have never gained any traction with consumers. The key to making the correlation between small appliances and connectivity lies in presenting a smart product that actually addresses and solves an existing consumer need.

"We believe it is important to meet consumer needs in terms of integration with other smart home connected products, in order to enhance the customer experience," explained Chris Jones, chief technology officer for iRobot, which showcased its Roomba and iSeries robotic vacuums and the Braava jet m6 robotic mop at CES. "Products are not just connected, but integrated in a meaningful way with other connected products in the home to add value to the consumer within the broader smart home ecosystem."

To achieve this objective, iRobot unveiled a new partnership with IFTTT, an integration and discovery platform, to enable consumers to integrate various products and services, including smart thermostats, lighting and home security, directly within the iRobot Home app. Jones explained that the consumer can now use voice commands or a smart phone to control the company's robotic vacuums and mop, and even direct the units to clean precise rooms, such as the kitchen. Through the new partnership with IFTTT, the process can be taken several steps further, establishing rules and routines to govern the robot cleaning behavior.

"You can set up a rule, for example, that when I shut the connected garage door after leaving the house, that is the Roomba's cue that it is time to start cleaning," Jones said. "Or, you can establish a rule that when the connected doorbell rings, the robot pauses vacuuming. We are making our product more personalized and contextually aware, and leveraging insights into the activity of the home to allow consumers to create a personal and specific way to do what they want, when they want."

Other industry experts also cited the importance of addressing specific consumer needs. "The consumer isn't necessarily interested in 'smart'" pointed out Joe Derochowski, home industry advisor for The NPD Group, a leading market research company. "Smart isn't a benefit...but smart *can* be a benefit if it solves a consumer need. So, in order to succeed, a smart appliance has to be better, faster, healthier, safer – it has to offer some attribute that improves on an existing behavior and addresses a consumer need.

"For example, in appliances, a smart device might help solve the consumer question 'what's for dinner tonight?'"
Derochowski continued. "There are more products being introduced that take this approach, which makes the smart home category poised for takeoff. There are so many consumer needs that are not being met, so smart appliances definitely are on the precipice. I believe 10 years from now, only products that serve a real consumer need will survive, and most of those will have some sort of smart component to them."

Some of the most widely-accepted applications for smart appliances are in the personal care, health and wellness categories, where consumers have already shown great acceptance of fitness trackers and other products designed to promote a healthier lifestyle and heighted awareness.

Pretika Corporation, for instance, showcased its SonicLift Facial Toning Device and its SonicDermabrasion Facial Brush, both utilizing Connected Skin Care Technology, at CES. Both appliances allow users to see actual real-time results by taking before and after photos of the facial treatment area; those photos can be shared with a dermatologist or other skin care professional. The products feature a built-in, high-resolution digital camera with API/APP technology for IOS and Android devices. The API (application programming interface) communicates via the Cloud (WiFi), allowing the images to be stored and shared. Additionally, the apps user experience provides skin care treatment tips, how-to-use videos and beauty advice.

"Our Connected Skin Care Technology is all about real time information and results," explained Pretika president Thomas Nichols. "The consumer can see in real time the true performance of the product and the treatment; they can share that information with their health care professional, share tips and information with their friends and even upload images to social media. Our software can analyze and evaluate the results and provide recommendations. We are on the leading edge of connectivity.

"Smart is only going to grow, and has great applications for all different types of home products," Nichols continued. "Whether you realize it or not, we're all becoming app-based in so many areas of our daily lives. The consumer is predisposed to interact with the brand through an app, this is becoming a vital part of the brand experience."

SimpleHuman spotlighted its Hi-Fi Sensor Mirror featuring a proprietary tru-lux light system, which closely simulates natural sunlight, shedding enhanced visibility on the subtle variations in makeup color. The mirror also features a finely-tuned optimum-acoustics speaker that delivers crystal-clear, high-fidelity sound via a custom Danish-designed 2.5-inch acoustic driver; the mirror's Amazon Alexa interface allows users to gain access to weather, news and other information while applying makeup.

In the health and wellness category, Philips expanded its assortment with new data-driven personalized connected care solutions for oral health, sleep, and mother and child care. "Digitally savvy health-conscious consumers are demanding intelligent solutions that adapt to their unique needs and lifestyles," stated Roy Jakobs, chief business leader personal health businesses at Philips. "By integrating smart devices, software applications and services with cloud-based artificial intelligence, Philips is delivering evidence-based personal health solutions that adapt to a user's goals, preferences and behaviors, making them more personalized and meaningful than ever before."

Shannon Jenest, Philips director, brand communication and transformation, explained, "Consumers have long been collecting data about themselves and their own health. There are now improved ways of interpreting it and effectively using it to 'triage' individual health status. Supported by the right knowledge and clinical advice, assisted by technology, consumers can now make sense of the data they collect and gather meaningful insights to qualify their own health, lifestyle and care needs. This in turn helps an individual to make healthier lifestyle choices and find better ways to manage issues with sleep, allergies, obesity and oral care."

Philips is collaborating with Delta Dental of California on a new BrushSmart program that is designed to connect athome brushing behaviors with professional dental care to better understand, motivate and drive improvements in oral health and overall wellness. Under the program, members who agree to collect and share real-time oral care brushing data from their Sonicare connected toothbrush will benefit from exclusive oral care product and service offerings, including the Sonicare ExpertClean toothbrush and free brush heads when they brush regularly.

Similarly, Philips expanded its SmartSleep suite of solutions at CES, adding the SmartSleep Deep Sleep Headband 2. Developed by sleep specialists and physicians, the SmartSleep Analyzer lets users quickly assess their sleep habits, provides personalized feedback and recommends which solutions will help them best. "Through our sleep solutions, we're helping people understand and address their sleep issues at home, from snoring and insomnia to simply not getting enough sleep," Jenest noted. "It's really about creating a connected ecosystem that links proactive personal health engagement with easy access to professional coaching and advice.

A number of appliance firms showcased kitchen products at CES that are designed to make the cooking process easier, more convenient, faster, and more accurate. For instance, Whirlpool Corp.'s Yummly Smart Thermometer combines a dual-temperature thermometer with a recipe app offering more than 2 million recipes and a subscription service with access to video lessons by top chefs. Yummly users can track the cooking process remotely on a smart phone and get alerts in real-time when the food is cooked to the proper temperature. Later this year, an additional feature will allow the wireless thermometer to interface with Whirlpool's connected ovens, so temperatures can be adjusted to achieve best results.

Hamilton Beach highlighted both smart slow cookers and smart coffee makers at the show. The Hamilton Beach Connected Slow Cooker gives consumers the option to cook with integrated probe technology and adjust cooking from the HB Connected App, allowing them to use a mobile device to set and adjust cooking time; real-time alerts allow the cooking process to be monitored and adjusted remotely. The company also spotlighted Hamilton Beach Smart 12-Cup Coffee Maker, which allows consumers can use Alexa voice commands to manually prepare coffee, to switch between regular or bold brew strength, to turn off the coffee maker remotely, and to program the coffee maker to start at a specific time. The clock automatically keeps correct time by syncing wirelessly.

GE Appliances integrates artificial intelligence (AI) in its Kitchen Hub that includes a 1.9-cubic foot combination microwave and ventilation system, along with a 27-inch smart touch screen protected from heat, steam and grease by a patent-pending air curtain. The Kitchen Hub allows users to access more than 5,000 recipes with step-by-step instructions in the Flavorly app powered by SideChef.

And for grilling aficionados, the Weber Connect Smart Grilling Hub turns any grill into a smart grill, sending notifications directly to a smart phone on everything from the grill temperature, to a food readiness countdown with estimated completion time, to when it's time to flip and serve.

Many industry executives pointed to communication and integration as the key factors that will drive sales of smart home products going forward. "The software needs to advance to the point where devices can talk to each other, and where updates are seamlessly handled by the devices," commented NPD's Derochowski. "No one wants to need an IT person to run their home."