

New Emerson products aim for home energy efficiency as Google, Apple move on market

December 4 2014, by Jacob Barker, St. Louis Post-Dispatch

With Silicon Valley tech companies moving in on home energy management with chic devices and user-friendly apps, multinational manufacturer Emerson is pivoting to defend its turf.

Long a leading maker of home heating and cooling controls and equipment, Emerson is adding consumer-facing products and services it hopes will tap into two fast-growing currents: energy efficiency and the connected home.

Those trends, the head of Emerson Climate Technologies reckons, could attract hundreds of billions of dollars from consumers over the years. The smart thermostat market alone is expected to grow from \$146.9 million in revenue this year to \$2.3 billion by 2023, according to a report from Chicago-based consulting and research firm Navigant.

The challenge for Emerson, a manufacturing company that doesn't always deal directly with consumers, is that it is eyeing a piece of the residential energy management market just as consumer heartthrobs Apple and Google move in.

To capture a piece of the growing market and hold it, the company will have to sharpen its consumer-facing services, Ed Purvis, CEO of Emerson Climate Technologies, acknowledged.

"There's a lot of business model development that has to happen, but it's extremely doable," Purvis said in an interview from Emerson's Ferguson,

Mo., headquarters. "A lot of our challenges are less technical than they are cultural."

In February, Google paid \$3.2 billion for Nest, the maker of a \$250 thermostat that promises to "learn" your temperature preferences and adjust heaters and air conditioners for savings and comfort.

Apple is preparing to launch its "Apple HomeKit," which would give customers a universal remote for their appliances. Apple's HomeKit manufacturing partner, thermostat market-leader Honeywell, released the Lyric thermostat this summer to compete with the Nest. And in November, General Electric and its partner, invention-maker Quirky, launched their own line of connected home products, including a thermostat and sensors for windows and garage doors.

Not to be left out of the growing market for what is commonly called "the Internet of Things," Emerson quietly released its Sensi Wi-Fi thermostat on May 12.

Like a growing number of products, the Sensi lets users control their temperature settings through a smartphone app. At \$130, it's cheaper than the Lyric or the Nest, and while it doesn't learn like the higher-end thermostats, Emerson touts it as a quality brand that's simple, user-friendly and easy to install.

The lower price-point could be a plus as smarter thermostats become more widely used, said Neil Strother, a principal research analyst with Navigant.

"They're behind the curve in terms of the intelligent (thermostat) model, but if they're trying to come up through the bottom and try to provide a more affordable thermostat, there's a market there," Strother said.

Two days after announcing the Sensi, Emerson announced a limited rollout of monitoring service ComfortGuard in a few select markets. Customers pay a contractor to install sensors throughout their heating and cooling system (it works on most systems), and then they pay Emerson a monthly subscription fee starting at \$9.99.

Through a smartphone app, ComfortGuard tells homeowners or their service provider when their system is about to fail, whether it's running efficiently and when it's time to change the filter.

"You know when you take your car into the shop and it stops making that noise?" said Travis Seeger, whose company Chesterfield Service Inc. is one of the contractors installing ComfortGuard in St. Louis. "It's kind of like having a mechanic with you all the time."

Emerson charges \$129.99 to set up the service, and installer fees vary. Seeger said his company rolls the installation fee into the monthly payment. John Sigman, president of Sigman Heating and Air Conditioning in Belleville, said installing the sensors ranges from \$300 to \$500 depending on the system. The trick is selling customers on the longer-term savings in pre-emptive maintenance and efficiency, he said.

It's also unique, Sigman said. Wi-Fi thermostats can alert you when the temperature moves out of a predetermined range, indicating there's a problem, but they can't diagnose mechanical issues. "It really can save a customer a lot of money," he said.

The service borrows from Emerson Climate Technologies' experience with commercial customers. Its Retail Solutions service, launched about 10 years ago, monitors commercial refrigeration and heating and cooling systems. Emerson alerts customers if a refrigerator is about to fail, if a door is left open or whether the [air conditioning](#) is running properly.

Purvis admits that was a bit of a culture shift for a company known for building hardware. But he thinks Emerson can translate what it learned about real-time service to the residential space.

"We're dramatically, dramatically ahead of the power curve of where we were 10 years ago," Purvis said.

As electricity costs rise and concern about climate change mounts, consumers, utilities and governments are likely to become more interested in efficiency products.

Governments will probably continue to tell companies to build more efficient air conditioners, but they don't do a good job of making sure they stay efficient, Purvis said. By Emerson's count, one-third of residential air conditioners aren't running as efficiently as they can.

That means opportunity for ComfortGuard, but Purvis acknowledges there's plenty of work to do to sharpen its consumer service.

Already, the company is building a customer service and technology team. Emerson says it has added 50 jobs in the St. Louis area over the last two years to develop, market and run the customer service operations for Sensi and ComfortGuard. While the hardware is built overseas, Emerson says it expects to double Sensi and ComfortGuard service and development jobs in the area over the next 18 months.

It's bringing in people from outside Emerson who are more familiar with consumer-facing services, Purvis said, and it's in discussions with yet-unnamed technology partners.

"We're talking with some pretty big names right now who would be in the same category as a Google or an Apple on front-end recognition," Purvis said.

COMPETITIVE ADVANTAGE

Purvis admits Emerson won't "out-Google Google or out-Apple Apple." Emerson's advantage lies in its knowledge of the whole system, he said.

It has been making thermostats for years through its White-Rodgers brand, and it makes air conditioning components such as compressors under its Copeland Scroll brand. Purvis maintains that gives it an understanding of heating and cooling equipment that the tech companies lack.

"The Googles and the Apples and the Nests of the world have spent hundreds of millions of dollars raising the ecosystem of the home into the awareness of consumers," Purvis said. But "they don't have the technical back end to dramatically improve efficiency."

New energy efficiency standards and restrictions on refrigerants are being phased in for air conditioners (new efficiency minimums for air conditioner manufacturers take effect Jan. 1). Already, Purvis said, some Scroll compressors are being re-engineered to use carbon dioxide as a refrigerant instead of more environmentally damaging compounds.

Air conditioners using carbon dioxide refrigerant and associated electronic controls will be "dramatically expanded" in 2015, the company announced in September. Sensi and ComfortGuard will evolve with the hardware, Purvis said.

Sensi "is not the endgame," he said. "The endgame is because we make compressors and controls, there's going to be new versions of Sensi."

Sigman, the Belleville contractor, would tend to agree. The industry hasn't stopped changing during his decades installing heating and cooling systems, and he expects new rules and equipment to keep coming. He

has a little more faith that a company versed in that world - rather than a computer company - will be able to take advantage of a shifting market.

"When you have a company like Emerson, that's what they do," he said.
"They make controls for the HVAC industry."

©2014 St. Louis Post-Dispatch
Distributed by Tribune Content Agency, LLC

Citation: New Emerson products aim for home energy efficiency as Google, Apple move on market (2014, December 4) retrieved 10 May 2024 from <https://phys.org/news/2014-12-emerson-products-aim-home-energy.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.