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WiFi Thermostats Are Here to Stay

Wi-Fi Thermostat sales have continued to grow year-after-year. In fact in 2019, 60% of thermostats purchased featured WiFi capability, according to a consumer research company. The Global Smart Thermostat market grew 145% in 2019.

The technology advancement in a very short span of time has been incredible and will continue. This technological advancement is playing a major role in the breakneck growth of this market space. Homeowners' expectations are also changing, which is impacting the direction of the HVAC market and its manufacturers. Industry analysis is expecting the Global Smart Thermostat market to exceed 40 million units by 2022 (that's only 2 years from now).

These electronic devices are responsible for regulating the heating and cooling of residential and commercial market spaces. They are going to constitute the next generation of home automation devices that will play a significant role in a Smart home. These Smart Thermostats have the ability to back up data to the cloud, manage this data and apply analytics to improve the thermostat's performance; some can even achieve self-learning...all of this will drive the Smart thermostat market size.

Of course, some consumers and contractors have expressed concern over this data collection capability. At the end of the day, it's the homeowner/consumer who owns the data. They have the option to share this data

with their contractor who can use the information to see trends or receive alerts through email or texts if something is wrong. The savvy contractor may even use this data-gathering as the basis for a service contract to help monitor the client's home and maintain its integrity.

Despite these concerns, manufacturers and smart contractors know Smart Thermostats can lower energy costs, provide maintenance service contracts and help control the bottom line. The contractors who do not want to participate in this product category are missing out on an opportunity.

Hold my call

Another factor that is driving the market is the proliferation of Smart phones that enable this new energy management solution. Statistics show that at least 65% of adults have Smart phones while 45% have tablets. With all this technology and instant access to anyone and anything, people are acting differently and want to engage in a digital way.

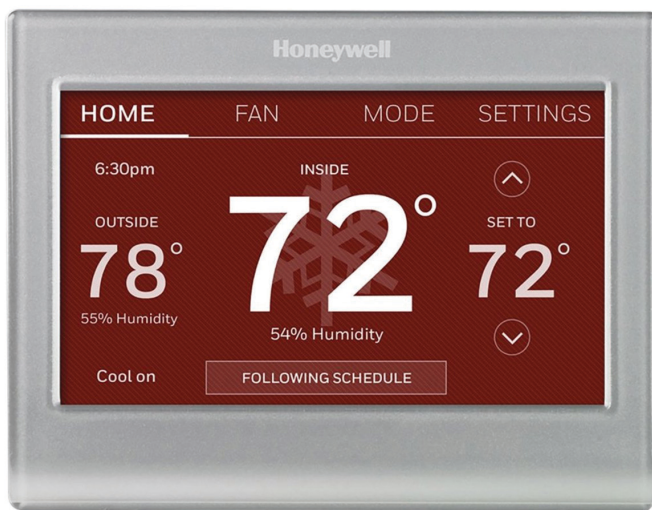
There are some consumer statistical research facts out there on Baby Boomers that claim 65% of them watch TV, text and surf the Internet all at the same time. Remember, Baby Boomers are people who were born during the demographic post-World War II baby boom, approximately 1946–1964. They have spent a large part of their lives without the Internet and yet the majority of this group has embraced this new Smart technology.

Imagine the statistics on people classified as Millennials who are approximately 18–36 in age. This group of individuals grew up on the Internet...they have *always* been online. As they start to participate in home ownership, their expectations will demand the access of *everything* online.

All of these Smart Thermostats come with a mobile app that the homeowners can download to their Smart phone (iPhone or Android) or tablet (iPad or Samsung Galaxy, etc.). Homeowners can now wirelessly control home temperatures and energy savings via the app. They can program and operate various schedules if so inclined. Most of these apps also provide energy reports with system performance data and energy-efficiency tips that the homeowner can implement to maximize savings.

Many of these thermostats provide a feature allowing the installing contractor to input their contact information for the homeowner. If there is a problem, a

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An example of a Smart home thermostat from Honeywell.

text message or email alert is immediately sent to the contractor. This could be an effective way to maintain a service relationship with the client.

As manufacturers continue to add capabilities, consumer expectations will continue to change. Think about it...if you asked someone before they had an iPhone if they needed an iPhone, they would have told you they did not need one. Now they can't live without one. I believe that is going to happen with Smart Thermostats, as well.

Software interfacing

Another element driving the growth of these Smart Thermostats is the provision of open source developer *Application Programming Interfaces (APIs)* that enhance the usability and performance of these devices. It is a library that assists developers in writing code that interfaces with other software. In essence, it defines a way in which a computer program communicates with another computer program.

I realize this is *Indoor Comfort Marketing* magazine and not *JAVA PRO* or *Macworld*, but the significance of all these Smart Thermostats incorporating open source development allows several different devices to operate from one app. This has fueled the growth of Smart Thermostat technology because now the homeowner can operate his/her heating and cooling set points, security cameras, door locks, garage openers and lighting all from one app on their Smart phone or tablet. Home Automation systems, which historically

existed in high-end homes, are quickly becoming accessible to anyone who has the Internet and a router in their home.

I believe the demand for this technology will be supplemented by the growing popularity of Smart home devices and the ubiquity of wireless connectivity. With Amazon's Alexa or Echo and Google's Assistant, Smart home technology is only going to increase and with it all the other technologies, like Smart Thermostats.

The North American Smart Thermostat market is expected to dominate the global industry due to the increasing demand for energy efficiency, and utilities have started to play a role in this emerging technology. As more value is realized by consumers that lower their energy bills, this savings will also help the utilities meet energy efficiency and demand-side management (DSM) requirements.

Just as they have participated in the gas rebate programs for high efficiency condensing boilers and electric rebate programs for high efficiency ECM circulators, utilities will play an active role in providing incentives for these Smart Thermostats.

If you have any questions or comments, e-mail me at gcarey@fiainc.com or call me at 1-800-423-7187 or follow me on Twitter at [@Ask_Gcarey](https://twitter.com/Ask_Gcarey). **ICM**

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