

Digital Life: Real tech payoff that comes with a (remote)risk

BY SCOTT CANON
scanon@kcstar.com

<https://www.kansascity.com/news/business/technology/article160430799.html>

July 10, 2017 07:00 AM

Updated July 10, 2017 11:31 AM

Let's get you started on a smart home. While we're at it, how 'bout we save you some money? Maybe ease up on the carbon dioxide your house belches into the atmosphere. And we can do this while making the temperature in your castle more regularly comfy.

Now get the power company to pay for the new gadgetry that makes it all possible. Better yet, pocket 50 clams if you knock out the sub-30-minute job of swapping in the hockey puck-sized Nest thermostat for your old model.

You get a nifty gadget in your house worth about \$200 that should cut your gas and electric bills while making it easier to adjust the temperature in your house, including by letting the magic of machine learning do it more efficiently than you would.

If you live in Missouri, Kansas City Power & Light Co. *wants* you to take them up on the offer, *wants* to pay you \$50 for the simplest of wiring jobs.

What's the catch? It's theoretical and probably worth the trade-off. We'll circle back to that.

Why the high-tech giveaway? KCP&L has two chief incentives: complying with a state law on energy efficiency and keeping up with power demands.

Missouri demands that power companies take action to limit power consumption and the pollution it creates. That's partly why utilities are investing in wind turbines and solar panels. Kansas regulators have not approved a similar thermostat giveaway.

The company contends it can save customers and shareholders money if it can keep peak energy demands down. KCP&L reasons use of the Nest, for instance, will help it avoid building another coal- or natural gas-burning plant.

To qualify for the program (try 888-864-3923 or nest.com/kepl), you need central air conditioning and home Wi-Fi.

The Wi-Fi matters because it allows the utility to seize control of the thermostat on the steamiest of days and turn up the temperature three degrees. It did that three times last year. But customers get a warning when it happens, on the Nest thermostat and on their phones if they've installed an app. You can override, chilling yourself as much as you want.

KCP&L has given away about 16,000 smart thermostats in the past 15 months. This year, it expects the Nests planted in homes to cut electricity consumption by 7.4 million kilowatt hours, enough to power more than 6,000 homes for a year.

The wall-mounted wonder was invented by two former Apple engineers and purchased by Google for \$ 3.2 billion. Programmable thermostats have been on the market for decades. They allow users to set a different temperature for the evenings, another for the workday, another for the weekends.

Smart thermostats do that for you, but with more savvy. They check the internet for weather reports and adjust accordingly. They learn your patterns of your life and adapt. If you're too lazy to get up from the couch, you can tweak the heat from your smartphone (although you don't need one for the thermostat to work).

Back to that catch. First, you're sharing data about your lifestyle with Nest, meaning Google. Marketers armed with the patterns of your comings and goings could some day use it as fresh ammunition to tempt you toward their products — likely in ways that you'll be blind to.

Then there's hacker risk. Nest founder Tony Fadell has said the Nest is built with "bank level security" and that the business will fail "if people don't trust it" Yet researchers have said the thing can be cracked by someone who has access to it during delivery or in your home (*cough, ex-boyfriend, cough*).

Once exploited, scientists from the University of Central Florida said, "what was once a learning thermostat has been transformed into a spy" able to get into your Wi-Fi network and everything that connects to it.

Such is the dilemma of virtually everything about the digital era and cool things that come from internet connections. Privacy traded for convenience.

The Nest poses a pretty small risk. Buyer beware, even when something's free.

The most recent "Deep Background" podcast discusses the Nest and whether technology is worth its trade-offs.