



TECHNICAL COLUMNS

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Originally appeared in the **November 2005** issue of *Communications Technology*.

SELF INSTALLS: NECESSARY EVIL OR UNNECESSARY EVIL?

By **RON HRANAC**

A few months ago, I was among the speakers at a Society of Cable Telecommunications Engineers-sponsored training seminar at one of a major cable operator's systems. The subject of high-speed data self installs came up, and I expressed one of my typically blunt opinions: "I think the idea of self installs is crap." The attendees broke into cheers and a round of applause. Poor Marv Nelson, SCTE's VP of professional development, was probably ready to crawl under a table, considering that he's the one who invited me to speak at this particular training session.

Seriously, though, whenever I bring up self installs among a group of outside plant personnel, the reaction is usually a negative one. Those on the front lines tend to think of self installs as a cause of increased service calls and degraded signal quality. I'm inclined to agree.

Looks good on paper ...

But I have to admit that I understand—at least philosophically—why the management side of the industry likes the concept of self installs. The idea, of course, is that by having at least some subscribers install and connect their own cable modems, the company will save costly truck rolls.

Considering that each truck roll costs anywhere from a low of about \$50 (rural markets) to \$100 or more, it's easy to see why management likes the idea of self installs as a way to keep high-speed data installation costs down. After all, each subscriber that installs his or her own modem saves the cable company from having to send someone to do the job. Here's the scenario: An existing cable subscriber buys a modem and self-installation kit at retail or perhaps from the cable company. The subscriber takes the cable modem and self-installation kit home, does the install, and assuming no problems, the high-speed data service is up and running. The cable company just saved a costly truck roll. That goes right to the bottom line.

The big `if' here is whether the subscriber installs the modem correctly. If the modem connection is done incorrectly, the result may be a service call to fix one or more loose connections, a splitter installed backwards, ingress and other interference from the home, the need to remove a high-pass filter that may still be out at the tap, or tweak the computer to get things working. If any of this happens, the self install cost savings are impacted. Multiple truck rolls to fix things are even more costly, stretching payback for the affected sub out many years.

Good idea or not?

So, are self installs are a good or bad idea?

It depends.

Some of the self installs will be done correctly and will indeed save the company money. Some will be done incorrectly and will cost the company money. If the company saves more money on correctly done self



installs than it spends to fix poorly done self installs, then one could argue that self installs are a good idea. If the company spends more money fixing bad self installs, well, that suggests that self installs may not be such a good idea.

One could track monthly service call percentage over time and see if there is a downward or upward trend after implementing a self install program. Flat or down is desired, while an increasing monthly service call percentage indicates one or more problems contributing to an increased amount of demand maintenance. The formula for monthly service call percentage is:

$$SC\% = (N/S) * 100$$

where

SC% is the monthly service call percentage

N is the number of service calls in a given month

S is the average number of subscribers in that same month

For example, if a 10,000 subscriber system has 300 service calls in one month, the service call percentage is $(300/10,000) * 100 = 3$ percent. The service call figure 'N' should include all service calls that result in a truck roll, even "not at homes."

Even if the monthly service call percentage is increasing after implementing self installs, that increase may or may not be related to self installs. It's important to not only track service call percentage, but also the types and numbers of service calls relative to the number of self installs. Look for a direct correlation—don't just assume that all self installs are problem-free or, at the other extreme, all are causing problems.

What the numbers mean

If you find that service call percentage is headed up, and further find that the some or all of the increased number of service calls is directly related to self installs, the next step is to look more closely at the numbers. How many self installs were there in a given period of time? How many service calls to fix poorly done self installs were in that same period of time? If there were 50 self installs in, say, one month, but only 10 resulted in a service call, then self installs are clearly justified. The 50 self installs yield a gross savings based on \$100 per truck roll of \$5,000. The 10 service calls cost \$1,000, so the net savings was \$4,000.

But what if 30 of the 50 self installs resulted in service calls? Is the company losing money on the deal? The gross savings is again \$5,000, but the 30 service calls cost \$3,000. The company's net savings is \$2,000. It appears that the company spent \$3,000 to pocket \$2,000.

On the surface that sounds bad, but consider a scenario in which there is no self install program. The 50 hypothetical cable modem installations would have cost \$5,000 for 50 truck rolls. So even with 30 service calls out of 50 self installs, the cable company still saves \$2,000 compared to having had to roll trucks for all 50 vs. just the 30 service calls. That is, the company effectively ended up spending \$3,000 for the 50 modem installations with a self install program instead of \$5,000 had there not been a self install program.

Are self installs a good or bad idea? As you can see, it depends. But I still don't like them.

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