A Surprising Response

Perry Daneshgari, owner of MCA Inc.

By Andrew P. McCoy and Fred Sargent

JUST FOR KICKS, two years ago we employed the online chatbot ChatGPT to write our column (see "A Special Guest" in the March 2023 issue of **ELECTRICAL CONTRACTOR**). We did that to tease electrical service and maintenance contractors into paying attention to the spectacular rise of artificial intelligence.

We were not prepared to go into specifics on the subject. But we were incredibly confident that A.I. would soon enter electrical construction.

In the past two years, worldwide news about the spread of A.I. across a range of industries has continued to break. With scattered reports on where A.I. was beginning to show up in electrical contracting, we decided it was time for a follow-up.

This month, we consulted Perry Daneshgari, owner of MCA Inc., Grand Blanc, Mich., and a well-known construction industry expert who has often been first to identify emerging trends. We asked him for his perspectives on the present and potential application of A.I. to electrical service and maintenance. We were more than a little surprised by what he told us, beginning with our first question:

A.I. has powered a paradigm shift in other industries outside of construction. It has led us to envision how it could be engaged by electrical service and maintenance contractors to address the daily challenges in matching their resources to their customers' needs. A.I. should enable them to schedule and dispatch service electricians and specialized equipment more effectively.
While that may be entirely true, in the effort to implement A.I. in the daily operations of the electrical contractors who we work with, we have always begun by drilling down into the droves of accumulated data that belongs to their company.

In other words, you are not proposing to start by rolling out a new A.I. computer to take over the many vexing problems that contractors encounter daily as they juggle with the ups and downs of their service and maintenance operations.
That's correct. A.I. can be used to answer the phone, generate proposals, schedule service calls and do many clever things. But those mundane applications hardly justify putting artificial intelligence to work in a service and maintenance business. A far better reason would be to use A.I. to give service contractors a competitive advantage in growing their business.

The idea of having A.I. create a competitive advantage for an electrical service and maintenance contractor is quite apart from what most have been eagerly envisioning. In our observation, most contractors are imagining that, if they were to implement it, A.I. would transform their operations into the kind of style they see, for example, in major online consumer-based industries.
Sure, they could have A.I. engage with customers on the phone or via a computer. But none of that activity would substantially improve the service and maintenance contractors' competitive position in their market.

So, what's the secret to using A.I. to increase a contractor's competitive advantage?
It can be summed up in one little word: data. In this case, we're referring to the contractor's own historical data. It might be handwritten on hundreds of sheets of paper collected over many years. But because it's the contractor's own data, it will be the best source of predicting future results. Feed it into A.I. analysis and you'll be taking the first step towards gaining a competitive edge.

In other words, every company has a lot of data that they don't even know they have.
Precisely. In a hypothetical example, digging into their own data, a contractor might discover that, although most of their original estimates have always anticipated they would need a certain quantity of a certain kind of material, in reality they have consistently used only two-thirds as much. Based on that confirmed experience, they can gain a competitive edge the next time around.

It may seem as though A.I. first leapt onto the world stage with the introduction of ChatGPT. But the designation "artificial intelligence" has been around for nearly 70 years. John McCarthy, a mathematics professor at Dartmouth College, gets credit for having named it in the title of a research project in 1956. Since then, A.I. has endured a decades-long series of ups and downs in institutional support and research funding.
This time, things are different. A.I. is here to stay. And the critical success factor for electrical contractors hoping to employ it productively will be in the utilization of their own company data. ⚡

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