As the world is becoming an increasingly digital place, several sophisticated technologies are poised to transform the accounting profession significantly. Few are having, and will continue to have, a more significant impact for today's accountants than artificial intelligence.

If you're confused about exactly what AI is, you're not alone. The following provides a simple overview of AI and how it functions, basic steps for effectively incorporating AI into your accounting practice, and AI options for those without dedicated technical resources.

AI: An Overview

There are many misperceptions out there about AI and what it involves, thanks in large part to the Hollywood rise-of-the-machines scenarios that have dominated the big and small screens for the past few decades. In reality, we're a long way from

machines taking over the world – or even our jobs.

create inferences and outputs.

Simply put, AI will help accelerate accounting from record-keeping to advisory services and guidance. It will detect hidden insights, identify new opportunities through pattern recognition, and amplify accountants' ability to apply creative problem-solving and social intelligence to business challenges.

Firms taking steps to implement AI will find they have a critical competitive advantage. Here's how they can get started.

The Six Steps to Implementing AI

While AI may sound attractive in the abstract, it's important to understand how to implement it in a way that will be useful in the everyday life of your practice. This knowledge will help you manage and work with the technology resources handling your AI implementation. By following these six steps, you'll be well on your way to seeing AI enhance your work in a meaningful way.

1. Pick an AI Platform. The first step a tech team will begin with is bringing an AI platform. One option is to build your own (or have someone build it for you), but these days it's easy to rent an AI platform in the cloud through major providers like Amazon, Google, or Microsoft. Your technology team will need to pick the coding language. Python is one popular choice. Several open-source libraries provide pre-built machine learning models that do most of the heavy lifting and statistical analysis, meaning that your platform will only need about 20 lines of code to get up and running – something very easy for a person familiar with coding to accomplish.

2. Add Data. The most challenging part of implementing AI is collecting together the data needed to train machine learning models. In some cases, firms are sitting on a large volume of data they've amassed through years of practice. Others might have less. Ultimately, what matters most is not the size of your data pool, but whether it's

capable of yielding results. What you want is a data set that includes several factors

4. Apply the Algorithm. In order to apply the algorithm, you'll also must work with your tech resources to determine what type of machine learning model is being used. By focusing on feature data parameters, your team can do a regression fit to see which model best predicts the outputs you're hoping to achieve. Data scientists and machine learning engineers are integral to building and implementing the right AI model to run your algorithm.

5. Train Your AI. Once data, an algorithm, and a model are set, it's time to train the AI. Introducing an entire universe of data all at once will be too much at the outset. Instead, your tech resources should reduce the data set to an adequate sample and develop some hypotheses about which parameters are relevant and what outputs they will yield. First, your team must run a sample through the model and record the output. Next, they will run other data through the model to see how good of a job the model did at predicting the output. Training AI is an iterative process, and you may realize that you initially developed incorrect hypotheses or had wrong assumptions built into your model. This is the opportunity to get the model right before it is deployed into production.

6. Deploy the Data Model. You and your technology experts have taught the mode. Now it's time to put it to the test with new, real-life data. By putting the data model into production, it will analyze new incoming data and enhance work going forward. In some cases, the model may never need to be tweaked again. However, it may need to be fine-tuned to account for real-world factors that change on a regular basis, like market conditions and interest rates.

Easy Ways to Start with AI

Not every accounting firm has the budget and engineering team to implement AI according to the six steps above. Small and midsize firms that want to benefit from AI have opportunities to do so in a more approachable manner.

Various software-as-a-service products already have AI built in and technology

integrating with your databases and back-office systems or stitching together multiple applications.

The Takeaway

Implementing AI is not a one-size-fits-all process for accounting firms. Some firms may have technology teams capable of building AI platforms and solutions from the ground up, but most will likely turn to software providers and SaaS solutions to make their investment effective.

AI is not designed to replace accounting jobs, but rather to help accountants get more out of the data they currently have. AI allows accounting firms to position themselves as trusted advisors for their clients and provide the kinds of insights that keep current clients happy and attract new business.

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