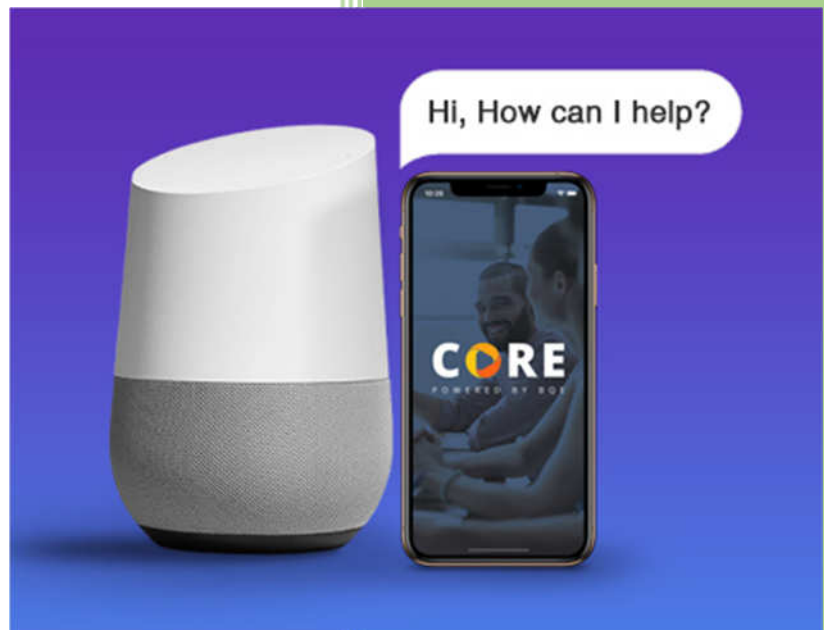


Hey Google, How Profitable is My Business?

Voice-Activated AI Gives Greater Insight into Day-to-Day Accounting and Business Management Functions



Contents

Simplifying Artificial Intelligence.....	1
What AI Means for Accounting Firms	2
Machine Learning.....	2
Natural Language Processing.....	3
AI in the Accounting Firm.....	3
Voice-Activated AI for Accounting Firms is Not Coming, It's Here	4

For the last few years, accounting professionals have been flooded by articles predicting the monumental changes that artificial intelligence will have for the profession. Greater productivity, an end to tedious grunt work, higher profits, and more. And who wouldn't want those things? However, it sometimes seems like it's necessary to have a doctorate in computer science to understand what these visionaries are forecasting.

While the introduction of any new technology has a learning curve, and accounting professionals are certainly intelligent and educated, much of the focus of articles in *Forbes*, the *Journal of Accountancy*, *Accounting Today* and even *CPA Practice Advisor* has been on things like predictive analytics, artificial neural networks, backward propagation, and cluster analysis. Unfortunately, if a concept starts out with such a high threshold for even understanding core functions and benefits, it can slow down the adoption of even the most promising new advances.

Simplifying Artificial Intelligence

Making artificial intelligence easier to understand doesn't mean dumbing it down or creating lower quality AI tools, it just means using more traditional language to explain its benefits and how to use it. For instance, when accounting firms first started going to internet-based programs, terms being used included net-native, web-based, on-demand, cloud-based, online applications, and others. No wonder it took more than 10 years for most firms to grudgingly get on the paperless (or at least "less-paper") bandwagon.

Today, the vast majority of firms use online versions of some or all of their professional software, as well as a variety of apps and online tools that they simply could not do their jobs without. Some programs no longer even exist as "installed programs" anymore, but are only cloud or app-based. Just as with cloud-based programs and the move to less paper, AI will be in your firm, and it will have just as much an impact as adopting cloud-based software programs has had, if not more. But the concept of AI still needs to be demystified.

What AI Means for Accounting Firms

We aren't talking about robots taking over the world. Not yet, anyways. At its most simple, it will just mean an easier way to interact with your software, and being able to do so in more ways, and from anywhere. Think of AI as a personal assistant and business consultant in one, who can not only perform multiple tasks almost instantly, but can dive deep into your firm's accounting and management programs to look at data from every possible perspective, and thereby giving you better insight.

So, on day-to-day functions such as finding out which clients are behind on payments, which clients or staff are most profitable to the firm, which firm payables are due, and other tasks can be performed more quickly, and (with new advances in voice interaction) by simply asking your AI system to tell you that information. As well, it can quickly inform you of related data, such as billing rates, profit margins, when your last communication with a client was, when deadlines or due dates are, what thresholds have been met, or other information on WIPs.

"Think of this tech as being your business analyst or business partner who is extremely knowledgeable about the company file and data," said Shafat Qazi, founder and CEO of BQE Software. The company's Core program is the first business accounting and management system that includes natural language voice-activated AI functionality, and at no extra cost. He added that, when developing the Core AI system, they focused on having the system figure out the intent of what a user is wanting, and then having the AI respond in a more intelligent, and more human-like way.

Machine Learning

But AI is more than just automating reports. Another big step relates to machine learning, where the AI function can use complex algorithms to provide consultative and predictive analysis of data from the accounting firm's software. So now, instead of just being able to automatically give you information on your firm's or a businesses' profitability or productivity, it can instantly compare year-over-year, or other periods, check on payroll issues, run bank reconciliation with live data from bank and credit card accounts, or compare the profitability of different client services, or staff members, or days of the week, or virtually anything else you want to know.

While the dashboards in basic accounting software can provide insight into some key performance indicators (KPIs), the new generation of true artificial intelligence for business accounting and management is much more advanced. The advent of machine learning is at the core of AI, with systems aggregating their acquired knowledge and learning from it, much like a young accounting student grows more proficient in each year of college, and then more expert with each decade of career work.

Imagine that you had the ability to instantly remember every accounting textbook, research, white paper, webcast, tax court ruling, conversation and everything else you've read or seen over your career, and then instantly apply it to your firm or client accounting and business data, as well as client conversations and histories. That is what AI does with machine learning, and when added to your practice it will become an immensely valuable tool for analysis, forecasting and consultative advice. And once it knows the right way to do these things, the AI system can automatically perform many recurring tasks, such as bank reconciliations, invoicing and client reminders.

Now, imagine that you didn't have to be anywhere near your computer to have access to all of that valuable information and insight. Wherever you are, you can simply ask your phone or other device.

Natural Language Processing

To provide the most benefit to users, and for the machine learning component to be most effective, AI must be easy to use, and speech is the most natural method of human communication. Although we've grown accustomed and proficient at the use of keyboards and mice and other input devices, we have done so through need, not natural use. Therefore, speech should also be the most effective way to engage with an AI system, while also allowing other methods, including keyboard.

These are still the early days of artificial intelligence for accounting firms. Thus far, most attempts by the top bookkeeping software makers have been focused on using AI for basic tasks, such as using speech to perform search functions. Unfortunately, most of these software makers are simply converting speech into text (speech recognition), which is technology more than a decade old. Why is this the wrong way? Because it requires the user to learn how to talk to the computer. Instead, the artificial intelligence component of a system should learn how to understand the user.

There is more than a semantic difference here. If your words are simply changed to text and entered into the system, the computer still may not know what your meaning is. Asking it, "How much money did I make last year" may not make sense if the programmer did not enter that specific parameter into the system. If the user is instead forced to say, "How much gross revenue did my company ABC Trucking earn between Jan. 1 and Dec. 31, 2018," it become tedious chore that will be less adopted by users.

This, then, is the difference between speech-to-text, and "natural language processing." In the first decade of the internet, search engines like Google, Yahoo! and even AOL were certainly a great advance over pre-internet searching, but users had to know specialized search techniques. Eventually, however, the technologies advanced so that they could understand or better guess what a user was searching for. These advances are similar to the current transition from speech-to-text based searches to natural language searches.

Thanks to this natural language processing, Americans are growing more and more comfortable interacting with their personal technology in more parts of their lives, from asking Google Home or Amazon Echo to answer general questions, to adjusting home thermostats, turning on the lights or your coffee machine, playing your tv or music, checking traffic or weather conditions, ordering food delivery, getting a ride share, and many other functions. Likewise, most accountants and tax professionals will grow more comfortable interacting with their professional technology, when that technology is capable of performing productively.

AI in the Accounting Firm

The first accounting software maker to really get it right on the natural language interaction side is BQE with their Core business management system, and they are including it at no additional charge. Let's say you wanted to figure out how profitable your firm or your clients are. With a traditional accounting system, you would likely need to open your invoicing program and look at your aging reports, then look at payment histories, gross revenues and even employee time spent on projects.

"The key is having a natural conversation, in the same way you would speak to a staff member or a financial advisor, in a natural way, and not having to learn specific phraseology," said Qazi. "And then having the system respond with intelligent answers, without feeling like you're talking to a machine. Once you learn to trust that the AI system truly knows what it is doing, you will use it more, and truly experience even more benefits from the deep analysis of the data."

With the AI built into the new BQE Core system, however, you can simply ask, “Core, tell me which client is the most profitable.” Or, “tell me which clients are best at paying on time.” Or, “which of my employees is most productive.” Or, “what is employee Smith’s effective billing rate?”

Yes, you have access to that data already when you’re in the office, or perhaps while you have time to check a variety of apps, but how about when you’re busy, or even driving? Speaking of driving, you can even use it to automatically enter mileage, expenses or create time entries. This means less time spent performing mundane tasks or slaving over Excel spreadsheets and pivot tables, especially when performing tasks that you only do periodically, and have to remember how to do every month. Instead, the Core system responds, “Client ABC has a net profit of XXX% this year, and Client XYZ has a net profit of \$XXX million dollars this year. What else would you like to know?”

“Whether an accounting firm with multiple business clients, or a small business owner, you can ask Core a question about what liabilities you have, how are you doing in this quarter versus last quarter, what your current AP and AR statuses are, or virtually anything else,” Qazi added. “Things that you wouldn’t easily figure out, it can figure them out for you, instead of you having to get into the software and run reports or check out various dashboards. It’s just a quicker way to get the information you need to make the decisions you need to make.”

These AI, machine learning and natural language processing technologies are benefiting not only accounting firms, but also businesses of all sizes. Yes, even small businesses, who can either utilize it directly, or through their outside accountant. Many firms are now employing the AI through a phone extension option that allows clients to self-serve on functions such as asking for prior year tax returns, asking about payables and billing, and reviewing their financials.

Voice-Activated AI for Accounting Firms is Not Coming, It’s Here

This new ability to interact with your accounting and business management systems using natural language will continue the trend that mobility has had in further allowing professionals to step away from their computers and be more engaged with clients, with running their businesses, or with their personal lives.

Imagine being able to ask your car’s smart feature (Google Assistant) to check on business or client information while you’re on the road, or being able to ask deeper questions, analyze data across multiple perspectives, and make more informed business decisions based on that information. There’s no longer a need to imagine those abilities: BQE Core Intelligence brings real voice-enabled AI to life to meet the day-to-day needs of real accounting firms and their clients.

Visit <https://bqe.com/core-ai> to learn more about BQE’s powerful, easy-to-use business management solutions and the industry’s first firm-focused AI platform.