

Using AI for an R&D Study?

By Rick Meyer, CPA, MBA, MST

“HAL...do an R&D study...”

Do you remember HAL 9000 or simply HAL? He was the iconic artificial general intelligence character in the 1968 film, *2001: A Space Odyssey*. For young folks, you might think of him as the predecessor to R2-D2, C-3PO, or any other of your favorite Hollywood AI robots. Who would have thought that fiction would find its way to reality in my lifetime?

With the rising popularity of artificial general intelligence (AGI) and its potential for business transformation, there's a significant push for CPAs to leverage AI features to save time and boost profitability. While it's certainly feasible and beneficial to use AI for enhancing operational efficiency and automating routine tasks, claiming that AI can handle complex accounting and tax-related tasks, such as preparing a detailed study, is quite a stretch. Yet, I see numerous "pop-up" shops emerging, boldly asserting that AI can handle 80% or more of an R&D credit study.

Ah...yes...remember those "pop-up" tax providers during the COVID years? They promised clients thousands in ERC refunds but lacked technical and legal proficiency, leading to trouble with the IRS and repayments with interest and penalties.

Now, these pop-ups are back with their slick marketing and grand promises. Your clients might be tempted, but this time, words of caution from their CPAs will go a long way in saving them from a similar fate.

Navigating Complex Tax Matters with AI: Why Caution is Crucial

I recently wrote an article with practical steps for CPAs to start with identifying AI opportunities. After interviewing 200 top CPA firms nationwide, we identified common, routine and non-technical tasks that AI could help with their practice.

An R&D project is anything but common, routine and non-technical. Let me give you a better analogy -

Would you trust AI (or HAL) to do over 80% complex brain surgery on you with an occasional “look-see” from the human brain surgeon?

Would you trust AI (or HAL) to do over 80% estate planning project amongst families with divergent interests?

Would you trust AI (or HAL) to do over 80% of the arguing with your spouse (or significant other) over a heated issue? Preposterous! (although this last one does sound a bit intriguing).

The simple fact is that when it comes to complex tax matters such as with R&D and ERC, AI does not have the necessary human judgement required. For example, in determining whether a taxpayer qualifies for the R&D credit, AI cannot interview employees, determine statistical sampling models, perform on-site visits much less conduct the necessary complex legal analysis.

Don't take my word for it. Even the IRS' independent Taxpayer Advocate recently came out with a sober caution to taxpayers (or tax advisors) who rely on AI.

The IRS's Taxpayer Advocate's statement declares:

"Despite efforts to ensure accuracy, these AI assistants may encounter difficulties interpreting complex tax laws correctly or considering unique circumstances that could impact a taxpayer's return. As a result, taxpayers should not solely rely on AI generated tax advice."

This statement cited an informal review by the Washington Post: *Don't let AI help you do your taxes* March 4, 2024. It highlighted that they "...found that two of the leading tax preparation companies' chatbots provide inaccurate or irrelevant responses up to 50% of the time when initially asked 16 complex tax questions." Yikes!

Yet, these pop-up shops would have you believe that preparing an R&D study is as simple as ordering a Happy Meal from a kiosk. Really!? If you've read the news, even those machines often require a worker standing by to assist.

Scope of Preparing a R&D Credit Study using AI

I understand that these pop-up R&D shops employ software engineers with computer science degrees who can write algorithms to capture technical information, gather facts, and decide which projects qualify for the credit. But do these individuals also hold degrees in law, tax, mechanical engineering, electrical engineering, biological sciences, and all the other fields necessary to collaborate and analyze the facts and laws to make informed decisions on qualifying R&D projects? Are they well-versed in every aspect of the tax code, treasury regulations, and case laws needed to defend their studies?

For these algorithm programmers to be truly effective, they would need over 75 years' worth of college degrees in these specific STEM fields before they could write their first technical R&D algorithm! And let's not forget how quickly they abandoned clients the last time the IRS came after them. Give me a break! Who are they kidding?

Is there any place to use AI in an R&D study? Sure. We use it just for common and routine items and repeatable tasks to streamline the process for clients, remove duplicate content, and flag basic errors in the data.

But, using AI to do over 80% of an R&D study? No way.

With AI on the Rise – Where Does CPAs’ Role and Responsibility Lie

There is no denying that AI is going to impact our lives and work in major ways in the coming years; it has already begun. Even the IRS has started using AI to automate internal processes. Yet, no one from the agency is claiming that it can prepare a complex tax study. You know what else the agency is using AI for – identifying fraudulent claims and tax evaders.

After the ERC turbulence, there is no question that the IRS is highly aware of these problems with AI-generated credits and tax returns, especially for complex matters such as preparing studies to claim tax incentives. We expect the IRS will be focusing its limited audit resources on AI-generated credits and tax returns.

However, before my gloomy predictions turn true, the first voice of reason needs to come from us - CPAs and tax advisors. We need to be aware of the limits of AI given that our clients trust us more than anyone else and it is us who will ultimately be responsible for signing the tax return.

Remember HAL - our Hollywood AI, it started killing off the astronaut crew due to an inconsistent algorithm written into its logic by a human. Certainly, there will be no physical harm by using a “pop-up” R&D provider using AI to do over 80% of the R&D study. However, rest assured, you and your client could be financially killed on the IRS exam.

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