



8 Leading practices for standing up a GenAI program for tax

The energy around generative artificial intelligence (GenAI) in the tax function—and across the broader enterprise—has surpassed any disruptive innovation in recent memory. From making workflows more efficient, to extracting insight from massive volumes of data, to enhancing tax planning and reporting, to shifting how tax professionals work, its potential seems limited only by our collective imaginations.

Like most tax leaders, you are probably deeply invested in harnessing that unmatched energy into real results spanning productivity and performance. In fact, GenAI is already reshaping the tax function as we know it, and its relevant capabilities and applications across tax planning, compliance, and operations continue to evolve very quickly.



According to the 2024 KPMG Chief Tax Officer Outlook Study, 29 percent of tax functions are already deploying GenAI and 26 percent are currently exploring uses.¹



This is a critical juncture. As you get your GenAI program off the ground, making smart strategic and technical decisions will help propel your tax function to the next frontier—a future grounded in optimized processes, profound insight, enriched roles, and broad business value.

Our experience has revealed eight leading practices for standing up a GenAI program for tax. Whether you're just starting to explore GenAI or ready and itching to implement, this guide's tips, tricks, and lessons learned will help you harness the power of GenAI in your own tax department.

Leading practices

- 1 Put strategy first**
- 2 Be an early adopter**
- 3 Get your hands on the keyboard**
- 4 Master prompt engineering**
- 5 Make it real with Retrieval Augmented Generation**
- 6 Develop and deploy responsibly**
- 7 Keep a human in the loop**
- 8 Track the ongoing GenAI evolution**

¹ 2024 KPMG Chief Tax Officer Outlook Study



1. Put strategy first

Thinking about implementing GenAI but unsure where to start? Like any new technology, it's easy to get caught up by big technical questions that can sometimes feel insurmountable.

We recommend taking a step back and realizing that GenAI is fundamentally a business issue. The first key decisions are strategic ones:

- What are my tax department's goals?
- Where is GenAI relevant for the work we do and the challenges we face?
- How does this technology fit into our processes and workflows, and how do we use it to shift how our tax professionals work?



2. Be an early adopter

Similarly, any adoption of new technology can cause anxiety and sometimes even paralysis. This is particularly true for an innovation like GenAI, which we all acknowledge is impacting us in huge ways, but is still incredibly fast-moving in terms of its capabilities and applications. The initial reaction of some in the tax industry when we first became aware of GenAI was not to touch it—at least in the near-time. We think the better approach is to be an early adopter than a fast-follower.

Don't wait for all the answers to all the questions surrounding GenAI. Suspend your hesitation and disbelief and take that first experimental step: Just try it. This technology is quite accessible and your tax team can gain some immediate impact, even before you have a full-fledged program in place.



3. Get your hands on the keyboard

Early adoption of GenAI means to stop talking about using the technology and start communicating with it. The experience and capabilities of GenAI are a bit different than what most of us are familiar with—even for technical professionals who work with computer apps and code every day. In this complex space, knowledge really comes from using it.

Interacting with a GenAI tools will help make the fuzzy science of large language model (LLM) algorithms more clear. You will be able to witness its core pattern recognition capability at work: how the model takes what it is being asked or instructed to do and uses its store of data to recognize patterns in your language and provide an appropriate, accurate response. You will also be able to see why it is so important to be intentional and organized in your communications—especially in the tax space, where patterns aren't as recognizable as other knowledge arenas.



4. Master prompt engineering

And that brings us to perhaps the most valuable skill for getting all you can get out of the box from your GenAI solution: prompt engineering. There is amazing power in how you prompt the LLM, because better questions allow for better pattern recognition. Enhancing your ability to communicate effectively through your prompts will make it easier for the model to recognize the complex patterns you want it to recognize, which tip the odds in your favor for accuracy. And prompt engineering is a technique that can be learned and honed. It starts with providing helpful structure that may have been missing from earlier prompts.

Prompt engineering in action

- A tax professional using a GenAI tool for research may start by asking a simple tax technical question about a transaction:

“If I were to sell \$1 million of software licenses to other companies for future sale to their customers, how much sales tax should apply?”

Based on the model's knowledge store, they are likely to receive a decent answer—e.g., acknowledgment of the wholesale nature of the transaction, and the taxability of the software—but not at the level of detail they need to verify or use the finding in their workflow, such as for tax planning or reporting.

- Next, the tax pro rewrites the prompt. Instead of asking a basic question, they define some parameters so the model can recognize patterns in the question and limit the way it responds.

For example, they tell the tool that they are a sales tax analyst, from Washington State. With further direction, they also give it a specific task: They not only want its conclusion, but also want it to include its steps for reasoning, issues to be verified, and all judgments grounding those.

This yields a very different response which is substantially higher quality, in terms of level of detail, accuracy, and auditability. And importantly, the conversation shouldn't end there, though: As the tax pro keeps asking follow-up questions—defining patterns and parameters—accuracy will continue to increase.



5. Make it real with Retrieval Augmented Generation

Believe it or not, you can get an even more robust answer from your GenAI solution than the example above. How? By pointing it to your data, documents, and other sources of knowledge.

In the world of GenAI, this sort of data injection is known as retrieval augmented generation (RAG). It enables the LLM to access the vast knowledge store built into its algorithms plus your own company's "ground truth." This could be any data set in your enterprise resource planning system, such as your fixed assets repository, or internal library, such as live case law documents. From this, you get the value of context, which is immensely important in any business.

RAG can come from simply copying and pasting additional company data into your prompt or, for huge or evolving data set, require intricate systems engineering. Regardless, there is immense potential to connect your own ground truth data with your LLM. Behind the scenes, RAG allows your GenAI chat interface to access, search, and pull relevant information from your databases (and even across multiple systems, if needed), feed that information back into the LLM to augment its knowledge, and generate the output back in the user interface.



6. Develop and deploy responsibly

We've written a lot about moving quickly to put GenAI to work in your tax practice. But that's not to say you don't need to proceed with proper care and caution.

As you would when you introduce any new technology into your enterprise and processes, it is essential to take a responsible and thoughtful approach to the way you design, develop, and deploy GenAI—perhaps even more so, given how GenAI uses your most valuable business asset: your data.

The good news is that data trust and security is in the wheelhouse of things most technology adopters have dealt with before. Although GenAI may be new and different, the same concepts apply—from authentication to network controls to firewalls. Making protocols and guidelines for how to protect data, IP, and business value core to your approach will help you start harnessing the power of GenAI safely and responsibly.

For more information about the KPMG commitment to Trusted AI, - visit <https://kpmg.com/us/en/careers-and-culture/trusted-ai.html>.



7. Keep a human in the loop

As GenAI moves from hype to real applications, the human element is increasingly relevant and important. There is tremendous value to be gained from using GenAI outputs in your core tax operations, but you can't take everything that comes from your GenAI solution as gospel, nor can you recheck everything.

Trust and confidence require a GenAI approach that is human-centric. Of course, you shouldn't hesitate to use GenAI capabilities to full advantage by making the model's thought process as visible as possible (e.g., requiring rationale, citation, and lineage of how it arrived at an answer). But bottom line: Always have a human in the loop working with your models. They can bring the kind of critical thinking and analysis skills to review and verify that—for now at least—only humans can do.



8. Track the ongoing GenAI evolution

Though in many ways GenAI's power already feels mind-blowing, we are still in the early stage in the forefront of this technology revolution. Knowing where it is headed will help your tax department be ready to seize the latest and greatest opportunities.

The truth is that right now GenAI is still in its infancy stage. The way we experience GenAI as a user will only get better as big technology companies continue to develop smarter, faster chat interfaces and mature their LLMs. Its capability will only grow as they feed and train the LLMs that power those interfaces. And that's not all: Lots of venture capital investment dollars are flocking to innovative start-ups building a whole new infrastructure layer for GenAI as well as rewiring apps to tap in. It won't be long until we start to see GenAI capabilities embedded into most enterprise applications.



KPMG can help you stay ahead of the future of tax

With industry experience in tax and technology, we can help your tax function design, build, and deploy a responsible GenAI program:

- **Strategic consulting services:** Provide guidance and training to align your GenAI aspirations with your business objectives, including use case identification, GenAI power user training, and prompt engineering support.
- **Build GenAI solutions in your environment:** Develop and deploy secure GenAI solutions into your environment, including knowledge stores, “work with your documents,” and “work with your data” solutions.
- **Leverage our technology assets:** We invest in leading technologies, including GenAI capabilities, so you don’t have to. With our advanced technology, you can access our continually evolving solutions with ease.

Innovating together with leading technology partners

KPMG Tax is leading the revolution of GenAI for tax through our investment in cloud technologies, machine learning, and data analytics, coupled with our alliances with Microsoft, Google, and IBM. Already, we have launched GenAI tools across our entire tax practice, extended access to many tax clients, and worked closely with organizations like yours to create joint solutions.

Let's start the conversation

Connect with our team to learn how you can harness the power of GenAI for tax.

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