



How generative AI might help tax functions tackle challenges



by **EY Global**

8 minute read

10 Nov 2023

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GenAI can automate tasks, summarize information and provide insights, but it still requires a person's input to optimize the technology.

In brief

- GenAI learns how words are used in different contexts, enabling it to make sense of the mass of unstructured data owned by tax teams.
 - The technology uses data to summarize content, generate new insights and recommend actions.
 - Solutions are being used to help tax professionals automate routine tax and finance processes and elevate the relevance of the tax function.
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The tax function continues to face a series of challenges across multiple fronts, according to the latest **EY Tax and Finance Operations (TFO) survey**, which finds that tax and finance teams still spend nearly three quarters (72%) of their time on routine compliance work, such as data collection and data cleansing, tax return compliance and reconciliation.

Tax functions are also having to balance increasing levels of regulation, complexity and real-time reporting with a downward pressure on budgets and a general need to “do more with less.” **The TFO**

survey reports that 91% of tax leaders plan to freeze or reduce team headcount by an average of 4.4% during the next two years. When teams do recruit, however, they must navigate an industry-wide skills gap.

Despite these challenges, the tax function is increasingly becoming a strategic partner across the business, a transformation which requires the liberation of tax professionals from routine tasks so they can focus on value. According to the latest survey, "most (96%) companies are reallocating tax and finance budget to strategic activities" – from routine activities such as tax compliance to strategic activities such as legislative, planning and controversy.

Generative AI (GenAI) is poised to help liberate tax professionals. GenAI tax assistants, which work alongside tax professionals, are being designed and piloted right now in an effort to empower their coworkers by automating and accelerating routine compliance work and exposing a wealth of structured and unstructured data trapped in organizational silos.

What is GenAI?

In simple terms, GenAI is a category of artificial intelligence (AI) algorithms that create new content based on training data. This content includes text, images, video, audio, computer code, and synthetic data.

Once exposed to the right training data, GenAI can generate human-like responses to queries. The technology achieved widespread adoption in 2022 following the launch of a GenAI-powered chatbot that not only answers questions but also composes natural-language

written content such as articles, social media posts, computer code and emails.

While consumer-facing GenAI platforms are trained using information from the internet, companies are becoming increasingly aware of the significant value that can be generated by exposing the technology to their proprietary data, such as information stored within their ERP systems.

Unlike conventional artificial intelligence, GenAI can also ingest and analyze vast amounts of unstructured data (such as reports, emails, supporting documents, invoices and sales receipts), combining it with structured data to provide tax teams with a wider and significantly richer level of analysis and insight. Companies are unlocking this value by using GenAI to:

- Simplify and automate routine tasks; for example, automatically gathering, cleansing and manipulating data.
- Summarize large amounts of information, identifying and extracting the most important details from large documents and data sets.
- More easily compare revenues across different lines of business to previous years' results.
- Generate new content/insight. This refined information is used to write notes, reports and supporting documentation such as purchasing orders and profitability analysis.
- Recommend the next-best actions – GenAI can then suggest what to do next, based on this wealth of information.

The tax function is not alone
in its efforts to leverage
GenAI. For example, HR
departments are using
GenAI to help build a skills-

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What does the application of generative AI look like in practice?

GenAI's potential is neatly summed up by Lyn Bird, VP Transformation at Microsoft Corp., when she describes how the technology has "transformed the English language into the most powerful programming language on the planet." Equipped with the right GenAI tools, tax professionals are now able to interrogate and manipulate enterprise data first-hand.

"For example, tax teams will soon be able to use simple everyday language to ask an AI bot to search for problematic invoices and alert them when they find one," Bird says. "At that point, a person can take over and assess the situation."

Sophisticated GenAI bots are already able to employ "fuzzy logic" to identify invoices likely to trigger downstream issues, even if the data contained in these invoices is correct, according to Ken Priyadarshi, EY Global Strategy and Transactions Chief Technology Officer.

Meanwhile, leading software companies have decided to embed GenAI in their existing desktop tools, such as Excel and PowerPoint, enabling tax professionals to use a chat window to interrogate and improve their

spreadsheets. They will also be able to create their own GenAI algorithms to automate tasks and generate insights thanks to low-code/no-code functionality built into these widely-used apps.

Bespoke GenAI solutions are also being created to alleviate other well-known tax team pain points. For example, panelists at EY Tax.Tech 2023 event revealed EY is piloting a virtual sales-and-use tax assistant that sits alongside tax teams, analyzing both structured and unstructured data, advising and guiding team members as they allocate transactions to tax buckets. The solution has successfully reduced the audit cycle from four years to one month for pilot participants. Its designers now hope to shorten that cycle even further.

Another EY pilot discussed during Tax.Tech 2023 involves a GenAI solution capable of parsing thousands of pages of product data to build a case for research and development (R&D) tax incentives. The solution does this by identifying and isolating specific word patterns used in previous successful R&D tax incentive applications.

Tax law is also proving to be fertile ground for GenAI. According to Priyadarshi, his team is working on a GenAI solution that is capable of producing a detailed mergers and acquisitions (M&A) due diligence report based on responses to a series of template questions.

Augmenting people potential

The potential of GenAI may be great, but Bird argues that humans will remain central to the technology's success. She contends that in virtually every scenario, a human/machine partnership significantly outperforms a person or a machine working in isolation.

“We need to approach GenAI with a ‘person at the center’ design mindset,” Bird says. “The combination of the person and the machine is very powerful, especially in tax, because of the technical know-how and depth of knowledge that practitioners can bring to that partnership. When you put an ethical and compliant person at the center, they can guide and validate the work being carried out by GenAI at specific points during a process.”

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Lyn Bird

VP Transformation at Microsoft Corp.

We are already familiar with this person/machine relationship in our personal lives, according to Bird. Motorists, for example, rarely follow satellite navigation directions without questioning and validating the instructions being offered. GenAI chatbot users will also be familiar with the need to issue unambiguous prompts, while repeating and refining these commands to gradually improve the platform’s answers. Bird stresses that it is now time to increase the focus on this person-centric approach as GenAI is embedded into the world of tax.

Empowering tax professionals and bridging the skills gap

Rather than replacing tax practitioners, GenAI promises to empower and elevate teammates, enabling them to use their skills and expertise in the most effective ways possible.

Suzi Russell-Gilford, EY Global Microsoft Alliance Leader for Tax, explains that GenAI can improve tax team efficiency and productivity

by identifying processes that can be automated. She envisions a time in the near future when tax practitioners will have a virtual assistant running on their computer designed to identify regularly repeated tasks and ask the user if they would like them to be automated. Such tasks could include ERP data identification, extraction and cleansing, for example.

GenAI can also help tax teams better prioritize the allocation of their resources, reducing overall risk, according to Russell-Gilford. “Tax departments have huge amounts of data to sort and process, so they can’t always immediately isolate higher-risk activities from more routine transactions,” she says. “Without more sophisticated technology, we often find that significant effort is spent working through a high volume of routine issues, without being able to dedicate sufficient time to more anomalous transactions which pop-up later in the review process, closer to filing deadlines.”

With the right GenAI-powered solution, it would be possible to automatically process the low-level issues, as well as identify and conduct a first pass on that high-risk transaction, with human experts guiding and correcting the AI before drilling down further where necessary. “It’s about generating insights that enable tax practitioners to assess risk levels up-front and apportion the correct resources on a case-by-case basis,” Russell-Gilford says.

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EY Global Microsoft Alliance Leader for Tax

Democratizing tech and disrupting knowledge ownership

While knowledge has traditionally cascaded down through the hierarchical corporate structure, it is likely that employees with lower seniority will soon have access to greater insights and richer data-driven recommendations than their C-suite colleagues.

Generative AI's ability to enable anyone to interrogate foundational data sets in this way promises to disintermediate and democratize enterprise data – not just for the tax function but across the global economy. Low-code and no-code technology also has the power to turn tax professionals into citizen developers, enabling them to solve their own data challenges without the help of “traditional IT”.

Meanwhile, GenAI's chat function is likely to lead to tax teams consuming data in totally new and exciting ways, giving birth to innovative, as-yet-unimagined roles, products and value streams. The ability to interrogate data at source and predict outcomes, is also likely to dramatically transform the way spreadsheets are used. Rather than feeling disorientated by this shift, Russell-Gilford says tax leaders have told her they feel energized and ready to capitalize on a new era of grassroots innovation.

Tax practitioners at all levels of seniority will need to be disciplined, however. GenAI will only deliver the promised benefits if users learn how to talk to AI – for example, prompt engineering will be a foundational skill.

Tax as the custodian of the CFO's foundational data set

While GenAI has the potential to democratize data and empower tax practitioners, it is also poised to elevate the wider tax function, giving it the role of the custodian of the CFO's foundational data set.

Tax routinely gathers huge amounts of transaction-level data and is obliged to retain that information for many years to satisfy regulatory audit requirements. This fact has been recognized by technologists who are now intent on using this information to activate GenAI across the business. The ultimate goal is to transform the function's data lakes into a single, unified data fabric capable of feeding requirements as diverse as annual Environmental, social and governance (ESG) reporting, base erosion and profit shifting (BEPS) compliance, supply chain analysis and CFO insights.

"Until recently, the tax function didn't have the technology or awareness that this mass of data could service multiple business functions," Russell-Gilford says. "Tax practitioners would operate in a silo and feel rather frustrated that they had all this data at their fingertips, but nobody knew how to efficiently leverage it elsewhere. GenAI is about to change all that."

The exact level of disruption generative AI will trigger remains to be seen. Priyadarshi points out a startling discrepancy between the expectations of tax teams and industry analysts. On one hand, 85% of **TFO respondents** claim AI will not have a huge impact on the tax industry over the next three years. On the other hand, IT research consultancy Gartner predicts an impending era of "autonomous

finance” in which more than 40% of finance roles will be new or significantly reshaped by 2025.

The reality, Priyadarshi concludes, will most likely be somewhere between these two extremes – a new operating model based on teams of bots customizing and curating data, generating insights and offering recommendations, with human tax professionals firmly positioned at the center.

Summary

Generative AI has the potential to alleviate many of the data processing challenges facing the tax function.

Tax leaders who encourage their teams to harness the power of Generative AI will not only be better placed to deal with complexity, pressure on budgets and headcount, they will also have an opportunity to elevate the tax function to become an agent of transformation and strategic insight.

Rather than reducing headcount, this technology is likely to augment the talent of tax professionals and create new AI-powered roles within the tax function, with practitioners capable of achieving outputs faster and more accurately.

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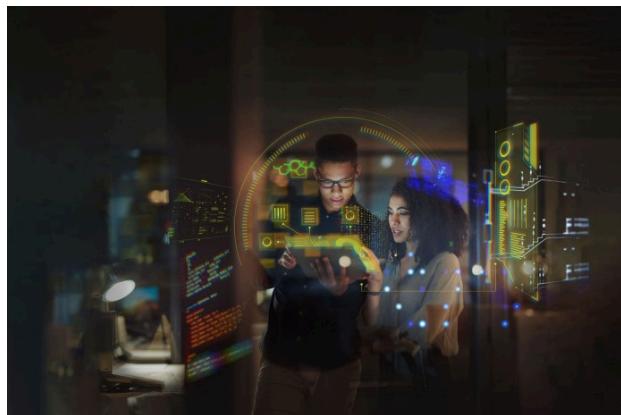


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