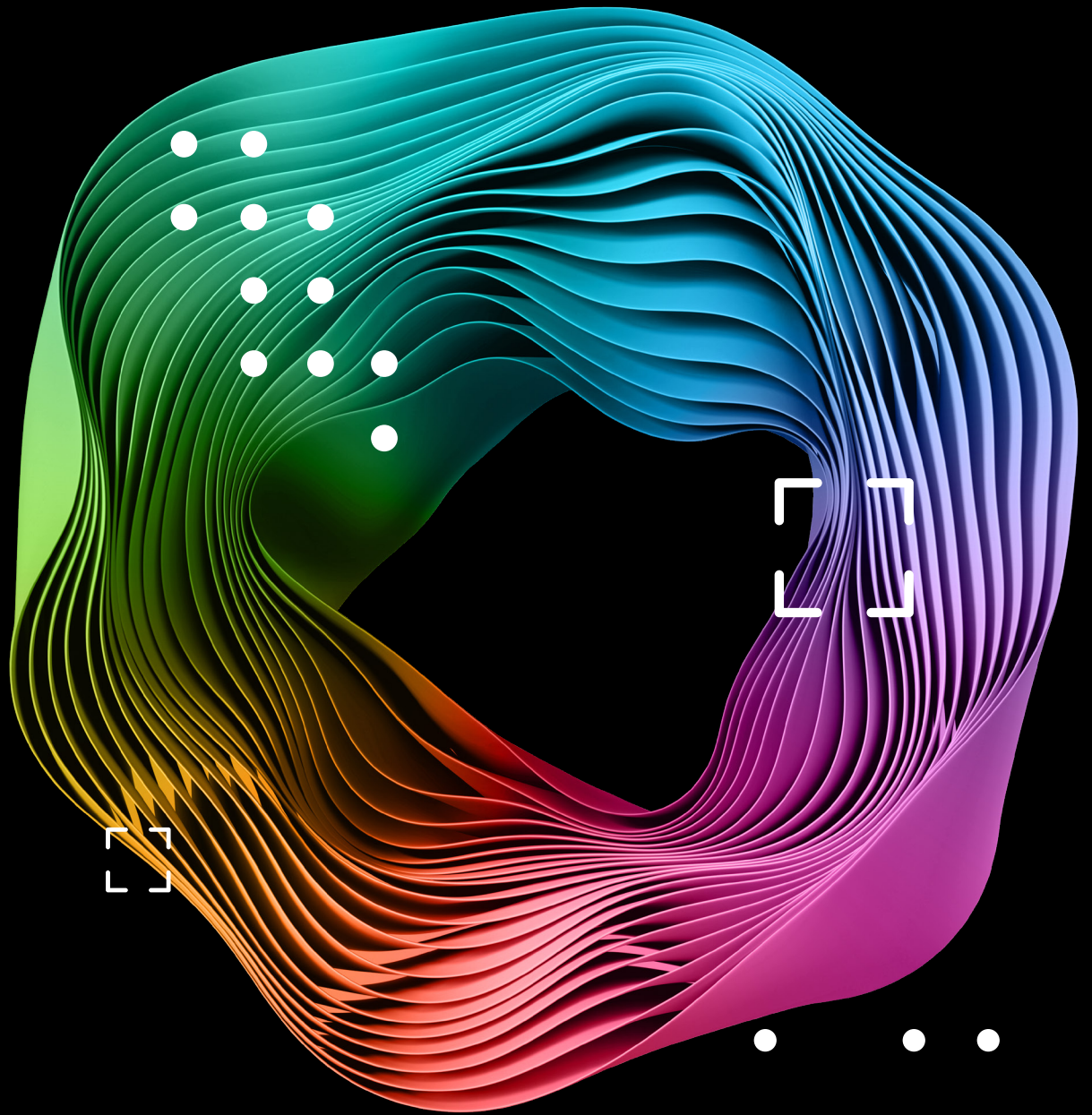# Deloitte.

GOT A TAX CHALLENGE?

There may be a GenAI solution.

OCTOBER 2024

GenAI is transforming business. Here's what it's doing for Tax.

In the rapidly evolving world of business, GenAI is not just a buzzword but a game-changer, especially in the tax domain. From streamlining compliance to automating complex data analysis, AI is redefining how tax challenges are approached and resolved.

CHALLENGE

You're interested in deploying GenAI models, but you have concerns about reliability and accuracy, such as biases in data, plus potential inaccuracies and hallucinations in generated outputs.

SOLUTION

The keys are having quality data, in large enough datasets to validate expected outcomes, alongside fine-tuning and prompt engineering. Enhancing the model's alignment with company fact patterns helps mitigate bias and hallucination. By enriching the dataset with relevant information, you can help ensure the created content is appropriate. Think of it as a connect-the-dots picture: each piece of information fed into the model is like an additional dot. The more dots provided, the clearer and more specific the picture gets. Making a GenAI model operational in a tax function involves understanding and defining the necessary dots to see the picture as clearly as possible.

"Embrace what the technologists can bring to the table. They're the ones that are going to get in here and really figure out how to drive change for you."

— RJ LITTLETON

CHALLENGE

Developing a proprietary large language model (LLM) from scratch can be prohibitively expensive.

SOLUTION

Most companies choose to adopt existing LLMs and integrate them into their internal environments, fine-tuning them based on their own fact patterns. Using prompt engineering and Retrieval-augmented generation (RAG) approach along with implementing token size limits can help manage costs, particularly in relation to the complexity of questions posed to the GenAI model.
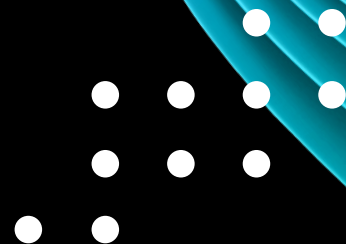
CHALLENGE

You spend a lot of time on data management tasks, like data reconciliation and forensic accounting, detracting from value generation. How can you enhance efficiencies while also ensuring data trustworthiness and output reliability with GenAI?

SOLUTION

GenAI enhances process efficiency by integrating system data with business logic to detect anomalies, analyze data patterns, and review historical outcomes, offering insights into future expenditures. This optimization allows professionals to concentrate on strategic planning and other high value activities, maximizing the value derived from their time and resources.

Similar to other automation processes, validation through human oversight, and extensive testing is imperative. While GenAI supplements decision-making processes, it does not replace human intervention or analysis entirely.

CHALLENGE

It's hard to spot anomalies in data.

SOLUTION

Employing AI for real-time monitoring enables the detection of anomalies in incoming data, with GenAI capable of not only flagging anomalies but also suggesting appropriate corrective actions. This approach transforms preparers into first-step reviewers, focusing on validating and approving suggested corrections rather than devoting significant time to identifying anomalies.

CHALLENGE

There's uncertainty about how GenAI will impact the role of tax professionals.

SOLUTION

GenAI could revolutionize the way tax professionals operate, shifting towards a first-review mentality rather than spending excessive time on data collection and preparation. Additionally, it will facilitate faster interactions between preparers and data — though it may also prompt increased scrutiny from tax regulatory authorities.

"Understand what the business problems are because GenAI doesn't solve everything."

— RJ LITTLETON

The integration of GenAI into the tax domain represents a transformative shift in how tax professionals approach their work.

By addressing key challenges such as data reliability, cost management, efficiency, anomaly detection, and role evolution, GenAI offers robust solutions that streamline compliance, automate complex data analysis, and enhance overall operational efficiency. While deploying GenAI models requires careful consideration of data quality, fine-tuning, and prompt engineering to mitigate biases and inaccuracies, the benefits are substantial. Companies can leverage existing large language models, optimize data management tasks, and explore real-time anomaly detection, allowing tax professionals to focus on higher-value strategic activities. Ultimately, GenAI enhances decision-making processes without replacing the need for human oversight and analysis, allowing for tax professionals' roles to evolve as they leverage their expertise and value in an increasingly automated landscape.

Meet the team

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