



# GenAI and the evolution of indirect tax: Why, where, and how

Indirect tax is complex. With large volumes of data across multiple systems, jurisdictions, and tax types, managing indirect tax can be a challenge for many companies, even before adding in complicating factors such as incomplete data, multijurisdictional footprints, tight compliance timelines, and increasingly aggressive audits.

This growing complexity is a key reason that indirect tax has become the tip of the spear when it comes to embracing new technology like generative artificial intelligence (GenAI).

## Traditionally, we thought of indirect tax as having five key functions:

- 1 Policy, planning, and governance
- 2 Tax calculation systems and technology
- 3 Tax analysis
- 4 Reporting and compliance
- 5 Audit management.

With the progression of technology, the middle three—tax calculation, analytics, and compliance—are converging into a single combined function. We expect to see a continued merging across all five, from policy to audit, into a single seamless indirect tax function.

## Three pillars of GenAI

A powerful GenAI use case has three elements:

- 1 **Prompts.** While there are a lot of different prompt engineering strategies, a good prompt is simply a way of asking the right questions in the right way to get back a useful response.
- 2 **Personas.** Personas tell the AI who it is for the context of the task in order to help narrow it from the broad world of the internet, on which it was originally trained, to a more useful subset—such as adopting the character profile of a “tax professional” in order to provide context-specific responses.
- 3 **Grounding data.** This is your specific company data and context, which will determine the base facts that the model can reference.

## Where does GenAI fit into your technology stack?

As of May 2024, 72 percent of businesses reported using GenAI in their operations.\* It excels at accessing, digesting, and interpreting large data sets based on patterns to create content—and doing so quickly. With GenAI, you can access any public information, feed it data that’s tailored to your organization, define personas to get better answers, and continue to improve the content with new information through an iterative process.

GenAI is efficient, but it’s not a silver bullet. For example, it’s not the best solution for complex financial modeling where we need predictability and transparency into the data, options, and process. That transparency is

necessary—no shareholder would accept “GenAI told us” as a justification for a critical business decision.

Because no single solution will meet all the needs of tax departments, identifying the best fit between technology and business needs is always a critical first step in transformations. Our value matrix (*Image 1*) helps highlight the best value for each technology solution to meet the core indirect tax requirements, from ensuring accurate master data through tax compliance. The last column represents where KPMG sees value today and real results with GenAI.

## Technology value matrix

Indirect tax requirement	Canned software	Custom solutions	RPA	Data analytics	GenAI
Master data	Address cleansing	N/A	Managing customer exemptions	N/A	Products categorization
Tax research	Tax research tool	N/A	N/A	N/A	Tax inquiries and case identification
Tax calculations	Tax engines	Native tax calculations	N/A	N/A	N/A
Tax reporting	Transaction extracts and compliance	Data warehouses	Automated extracts	Data consolidation and translation	N/A
Data QA review	N/A	N/A	N/A	Data validation	Data anomaly detection
Tax compliance	Tax returns solutions	Nonsupported tax returns	N/A	Data imports	Data anomaly detection

● Rare ● Occasionally ● Sometimes ● Often ● Significant

## Let’s take a brief look at each step

**Master data.** Master data requires accurate addresses, exemption certificates, validated VAT/GST numbers, SKU classifications, and more. Focusing on the accuracy of master data is not a fresh concept and there are a number of solutions already available in the market to target these requirements. But, there’s also a meaningful role for GenAI in filling data gaps, identifying anomalies, and assigning appropriate tax categories.

**Tax research.** GenAI can combine publicly available tax information with your tailored business data, such as direct pay permits, R&D exemption certificates, or manufacturing certificates based on location or use. It can help direct your customers or vendors to point them to the right exemption certificates. In addition, its complex algorithms and pattern identification processes can be used to spot anomalies in your sales and use tax data which can limit future exposures.

**Tax calculations and reporting.** Tax engines remain the solution of choice for integrating with your core ERPs and business systems to calculate and report indirect taxes. While we don’t currently see a fit here for GenAI, we do see other solutions such as robotic process automation (RPA) to automate data extractions from various business systems to better automate the compliance process.

**Data review.** GenAI can review transactions based on the line description and potentially fix upstream data errors that came from procurement or accounts payable solutions such as identifying misclassified purchases.

**Tax compliance.** Canned software is still a popular way to create tax returns, along with custom solutions when needed, and data analytics tools to obtain, consolidate, and validate data. But, as with data review, GenAI is excellent at acting as a second set of eyes that doesn’t think like a human in order to seek out compliance anomalies.

\*Source: <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai/>

## Connectivity across people and platforms

Unlike previous technological advances, which were largely computation engines and management tools, GenAI is a knowledge engine. That makes it qualitatively different in two ways:

- 1. GenAI is a skill set.** GenAI requires building a new skill set, raising fundamental questions about what it means for your people, from the C-suite down to staff.
- 2. GenAI needs connectivity.** As a knowledge system, GenAI needs to plug into your data, platform, and strategy to function.

These differences make platform strategy a crucial consideration: What data do you need? How are you going to get it? Can you map it to a common data model, so it can operate at a higher level of efficiency?

With the right skills, connectivity, and a clear platform strategy that integrates seamlessly with your data and application layers, a knowledge engine like GenAI can be transformative at a far more fundamental level than previous computational or management advances.

KPMG is already seeing significant business value in helping clients use GenAI in scenarios such as notice tracking, exemption certificates, and attribute enrichment. Contact us today to see a demo of these in action.

## GenAI is already essential

The complexity and volume of data in indirect tax make it a natural starting point for GenAI integration. And while GenAI is already adding significant value, the use cases are evolving, the technology is advancing, and the accuracy is improving at such a fast pace that we consider it essential for tax departments to adjust, pivot, and take advantage of this technology now.

Once it's integrated across your data and application layers, GenAI can read, process, and create content at scale. It can identify data anomalies and fill data gaps. It can feed enriched data downstream as needed into tax calculations, compliance, controversy, and more. It is not just a passenger, but a navigator for your indirect tax team, enhancing their knowledge, offering directions, and significantly improving their efficiency. At the risk of becoming obsolete—from the individual level to entire practice groups to the enterprise as a whole—it's critical to start building a deep proficiency in GenAI.



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