Our Take

Unlocking opportunities in tax using GenAI

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Tax functions of today are increasingly open to embracing new technologies to drive efficiency and effectiveness. Chartered Accountant **Vishal Nanavati, Aman Goel** and **Rajnil Mallik** explain why GenAI is a strategic imperative in the data-rich landscape of tax, and underline the need for businesses to build trust in the technology's design to unlock its true potential.

Advantage GenAI

Moving beyond compliance to quantifiable value addition, the tax function has undergone significant transformation. It is now linked to organisational strategy with implications on structure, business model and, most importantly, reputation. The Government's push towards digitisation in tax compliance and monitoring, along with the adoption of new technologies such as AI across the board, has also played an important role in redefining the tax function.

AI is transforming ways of working in a variety of processes such as front-end customer interactions, content creation in marketing, generation and testing of code in the technology sector, claim validations in banking, financial services and insurance (BFSI), and management of unstructured data-related actions in the finance and tax functions. While the use of AI in businesses is hardly new – banks have long used AI to detect fraud and money laundering, and e-commerce companies have used AI for suggestions and predictive need identification – it is GenAI which is emerging as a truly disruptive force due to its ease of use, wide variety of applications, and large language models (LLMs) that are easily accessible to one and all.

Unlike traditional AI, GenAI not only processes data but also drafts documents, reports and complex legal briefs. At its core, it consists of neural network (NN) models that consume vast amounts of training data, analyse it for correlations and patterns, and use these patterns to make predictions about future states.[1]

1. PwC. Breaking creative boundaries: GenAI and its applications

GenAI is a game changer

Before: Expert systems, machine learning (ML) and deep learning systems and tools were primarily used by data scientists

Deep learning (DL): A type of ML technique based on artificial neural networks in which multiple layers of processing are used to extract progressively higher level features from data

ML: A subfield of AI focused on building systems that automatically improve their performance over time and through experience

Expert systems: Early AI systems that relied on rule-based programming to mimic the decision-making process of human experts. They have limited ability to handle complex and ambiguous situations

Now: GenAI is being used by developers and end users alike

GenAI uses a large amount of data and large pre-trained models to generate content

Written: Text, code **Visual:** Images, videos **Auditory:** Audio

Source: PwC analysis

Business leaders are upbeat about the transformative potential of GenAI. According to PwC's 27th Annual Global CEO Survey: India perspective, launched in January 2024, India CEOs anticipate that GenAI will deliver significant top- and bottom-line benefits.[2] Further, 57% of India CEOs contend that technological changes such as GenAI have changed the way their company creates, delivers and captures value to a large/very large extent. Around 71% of India CEOs expect GenAI to increase employee efficiency over the next 12 months, while 70% believe it will improve their own performance. They also believe it is likely to increase revenue (48%) and profitability (46%).

This buzz around GenAI comes at a time when winning, building and retaining stakeholder trust is imperative. Demands of regulators on aspects of transparency, speed and participation in the tax base are on the rise. Governments across the world are pushing major digital changes such as faceless assessments, digital compliance and e-invoicing to enable a connected view of a taxpayer's profile as well as holistic tax assessment.

2. 27th Annual Global CEO Survey: India perspective

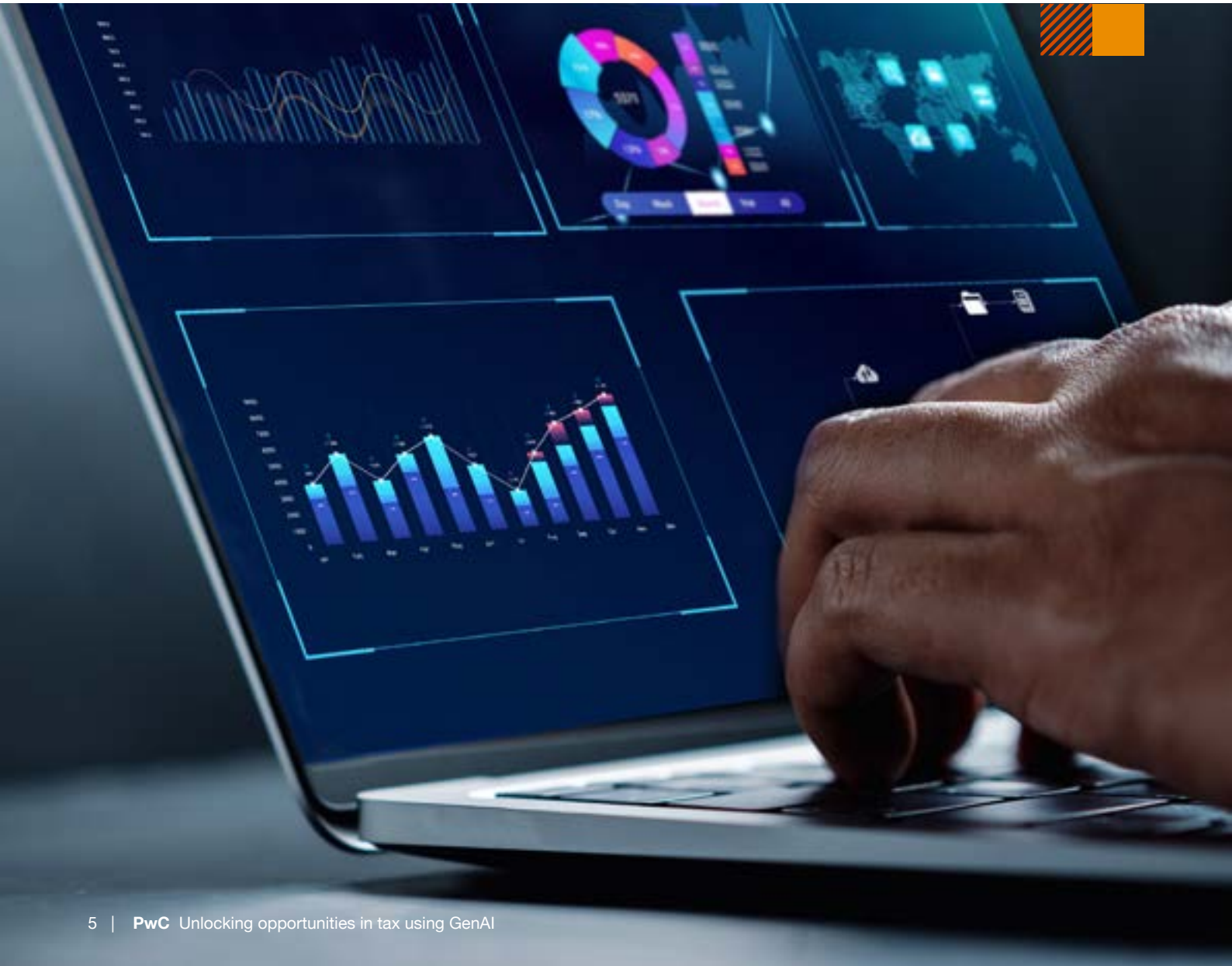
In this scenario, GenAI can act as a catalyst to fast-track much-needed improvements to ensure greater alignment between written policies and transaction data, better integration in transaction processing, summarisation and faster analysis. These moves can advance trust between stakeholders. On the flip side, misapplications without a considered view could significantly erode gains that technology has made in this otherwise historically tech-averse environment. For instance, GenAI hallucinations on judicial pronouncements can have far-reaching negative consequences.

However, while GenAI adoption will evidently be federated, the tax function will no longer remain outside its sphere of influence. In a recent survey, nearly three-quarters of tax professionals agreed that GenAI can be applied to tax, accounting and audit work — and about half said it should be.[3] Embracing AI can empower tax professionals to streamline operations, detect errors, classify transactions, and offer clients tailored tax solutions. But finance professionals still view the technology with some scepticism. Many are 'open-minded but cautious' about its use.[4]

While it is advisable to err on the side of caution, GenAI is set to unlock new opportunities for the tax function in organisations. This article therefore has a three-pronged objective:

- Outline what a GenAI-driven future for tax will look like.
- Throw light on the advantages it will bring to the organisation's tax function.
- Highlight the need for crafting a responsible AI governance structure.

3. Thomson Reuters Institute. ChatGPT and GenAI within accounting firms and corporate tax departments
4. Ibid.



Our take

GenAI's role in a future-fit tax function

Today, the tax function in any organisation broadly covers the following activities:

A	B	C	D	E
Tax compliances	Research on tax regulations and case laws	Resolution of disputes	Management of tax costs	Stakeholder engagement and transparency

Given GenAI's transformative potential, no aspect will remain unimpacted and fundamentally, each of the activities outlined above will undergo a significant shift towards simplification with quantitative benefits in terms of speed, efficiency and outcomes.

A. Tax compliances

The general erosion of trust and complexities in the macro-economic environment have led to granular data tracking and preventive controls. As a consequence, each year the compliance requirements of an organisation become more detailed and therefore more difficult to execute.

At present, there is usually a time gap between the specific regulatory requirements and readiness of an organisation to be able to correctly furnish large amounts of data at the outset. With GenAI, managing complex tax compliances can become easier with:

- **Always-on tracking of the latest regulations and case laws:** GenAI can help organisations continuously monitor the landscape for the latest laws and regulations. It will also allow them to keep track of important judgements in high courts and the Supreme Court.
- **Understanding and contextualising regulations for the organisation:** Deciphering compliance requirements and understanding how they impact an organisation is of utmost importance to plan and prepare for execution. GenAI compliance interpreter solutions can now help teams understand, query and co-relate with the business context and other compliances. This will ease the process and make compliances less onerous.

- **Ensuring transaction execution in systems is validated:** Compliance data originates from the transactions carried out in systems. With complex classification rules, at times, it becomes difficult to correctly tag transactions the first time. For example, a harmonised system of nomenclature (HSN) code identification, goods and services tax (GST) rate and tax deducted at source (TDS) rate identification depending on suppliers, contracts and services in purchase orders make the decision of appropriate tagging difficult. With GenAI, these decisions will be made faster and more accurately.
- **Post facto validation of outputs with compliance requirements:** Enterprise resource planning (ERP) or surround systems will need to be upgraded to align with the GenAI adoption curve; in the interim, manual data entry in compliance filings is likely to continue. GenAI, however, is capable of enhancing the quality of data by validating documentation.

B. Research on tax regulations and case laws

Tax regulatory compliances depend heavily on interpretation, which in turn is governed by the context, sector and/or situation. Therefore, how organisations plan for tax tends to vary based on their interpretation of the tax law in those specific circumstances.

GenAI is beneficial for tax research, the continuum of which involves the following aspects:

- **Understanding research aspects:** When the LLM is specifically trained on tax-related data with contextual knowledge, it can easily get to the underlying issue and its complexity, and identify which aspects must be researched. For example, while researching a question about whether a customer list qualifies as an intangible asset, a contextually trained AI engine would be able to comprehend the inherent complexities of the issue, its nuances and its dependence on facts of the transactions.
- **Coverage of the law and case laws:** Effectiveness of research also depends on the extent to which a researcher is able to scan through the precedents and references in a fixed time frame. Embedded with a country-level case law database and its own information base, a trained LLM would be adequately equipped to deliver in such cases.
- **References and summarisation:** Research and data context is not useful until it is summarised well in line with the issue at hand and the arguments are supported with appropriate citations. Providing references in a reply is of key importance. This is one area where poorly thought through GenAI solutions struggle due to ‘hallucinations’. In such cases, owing to their inability to access information that is behind a firewall or requires entry of a captcha, LLMs may generate incorrect results. However, with a properly trained GenAI agent, references to case laws and actual laws become easily available, making the responses more reliable.

C. Resolution of tax disputes

Resolution of tax disputes is an important tax function and its effectiveness depends on how much tax professionals can plan and manage for the inevitable. In a scenario where a taxpayer goes through an assessment, GenAI can serve as a smart assistant by helping the taxpayer to understand the data requirements, validate the data prepared and present it in a manner required by the revenue department.

Similarly, in preparing for litigation, GenAI can help sift and consider facts, laws, case laws/jurisprudence and counsel opinions. This brings in speed and efficiency while simultaneously adding to the effectiveness of responses.

D. Management of tax costs

As tax functions acquire a more strategic role, adopting efficient tax structures and aligning the entity footprint with key government incentives have become priorities. This complex agenda demands the coming together of multiple factors such as type of business, right selection of incentives, closeness to business markets, optimisation of logistics, production costs and labour costs. Modelling of all these scenarios to be able to identify the right location or compute the tax impact is an iterative process. GenAI, with relevant simulation techniques, could help ease the process with appropriate outcomes.

E. Stakeholder engagement and transparency

A responsible tax function needs to engage well with stakeholders and participate in the consultation process while also ensuring transparency. One of the key developments in this space is the publication of tax transparency reports by more and more organisations to meet stakeholder expectations. For a new organisation, the level of detail to be captured, data to be added in the reports and implications for the future are crucial. With the help of GenAI, businesses can

- compare the transparency reports released in the industry
- identify data whose disclosure is mandatory and ensure transparency is maintained
- include text that covers aspects such as procedures, policies and governance mechanism that the organisation follows
- add salient differentiators to gain an edge over competitors and leverage these reports to create a positive image with stakeholders.

Potential use cases of GenAI in the tax function

Tax transparency report
- Content standardisation and language improvements

Indirect tax
- Tax rate determination
- Litigation research

Direct tax
- TDS section determination
- Advisory research
- Counsel opinion preparations
- Mapping of cost of acquisition (COA) and accounting information

Tax M&A
- Analysis of various situations in multi-country arrangements

Transfer pricing
- Economic analysis in transfer pricing study
- Advisory research
- Arm's length price comparison, what-if scenarios

Contract review and compliance monitoring
- Contract abstraction
- Contract analysis
- Contract insights
- Horizon scanning
- Compliance insights

Allaying concerns and weaving in the trust quotient

While the results observed in real-life case studies across functions, and various aspects of tax compliance and tax assessments are reassuring, many tax professionals opine that the technology isn't developed enough to trust just yet, and that it may be more appropriate for non-tax, administrative work.[5] Some have concerns about the risks of using GenAI for client or corporate work. The most common concerns are around accuracy, privacy, confidentiality and security.[6] Among business and technology leaders too, there is an increasing concern over the rise of GenAI as it relates to cybersecurity.[7]

- **Data privacy concerns:** There is a concern that LLMs may not give a company control over how its data and intellectual property are being used.[8] Information entered in an LLM is visible to its developers and is often used to train the model. This is particularly significant for tax advisors who are privy to sensitive data.
- **Ethical use and elimination of bias:** Tax is a subjective matter which relates strongly to the application of the law. Hence, it is important to understand the inherent bias in the technology that is used. With GenAI, one of the areas of caution is related to identifying seeded bias and overcoming the same as it relates to a country or organisation.
- **Inaccuracy and lack of accountability:** GenAI tools are known to hallucinate and provide inaccurate information. A specially trained model uniquely designed for tax expertise that relies on authoritative sources can help overcome this. Developers need to build in capacity that allows the technology to remove obsolete information and enable automatic updates.
- **Talent pool erosion:** While GenAI has the potential to augment human intelligence, it has also sparked fears that it may hamper critical thinking and creativity. Tax professionals, some claim, may become more focused on quick searches than on gaining a deep understanding of case laws.

5. Thomson Reuters Institute. ChatGPT and GenAI within accounting firms and corporate tax departments
6. Ibid.
7. PwC 2024 Global Digital Trust Insights
8. PwC. GenAI in tax: 5 essential insights for leaders

Roadmap to GenAI adoption

Business leaders who would like to roll out GenAI in their tax function must begin by asking themselves the following questions:

- How will GenAI be an enabler to my tax function?
- At which stage/s in the tax process will GenAI be required?
- How can I ensure a responsible GenAI governance structure?
- How can I prepare my workforce to address the tectonic shift to GenAI?
- Do I have the right technology, infrastructure and data to jumpstart the GenAI journey?

Businesses embarking on their GenAI journey need to start by considering the following recommendations:

- **Build a well-defined GenAI strategy:** Organisational policies must clearly define roles and responsibilities for GenAI implementation, monitoring and testing. Policies for data use must be clearly outlined to ensure only verified data is shared with the GenAI tool. Human oversight will be a critical component of AI use, which will serve more as an enabler or co-pilot. To make effective use of GenAI, accounting firms would need to start, in case they haven't already, the process of training their employees to ensure familiarity with such tools. Such training will need to be made mandatory in the learning and development calendar.
- **Incorporate a responsible GenAI framework:** A responsible GenAI framework is a critical part of the GenAI strategy. Following a GenAI readiness assessment, it is imperative to deliver trust-by-design throughout the GenAI life cycle with frameworks and templates.[9] Ethical use of data and an appropriate framework can provide guidance to organisations on developing and governing GenAI and data solutions. The framework includes applying ethical principles and identifying key ethical risks.[10]
- **Ensure regulatory compliance:** Several countries are rolling out regulatory provisions for GenAI, such as transparency and accountability regulations, data privacy requirements and compliance policies that may impact its use in tax-related applications. The European Union has proposed an Artificial Intelligence Act which would classify AI systems by risk and mandate various development and use requirements.[11] The US also has a set of guidelines to encourage companies to use AI responsibly.[12] India, too, plans to impose AI regulations.[13] Companies must anticipate future compliance to stay ahead of the curve.

In summary, a GenAI platform that uses natural language processing, ML and data analytics will certainly enhance various aspects of a tax function for any large organisation. It can help generate relevant insights, provide recommendations and predictions based on large volumes of data, enabling tax functional experts to deliver in the most agile manner to their internal and external stakeholders. In parallel, the organisations will need to frame their governance and responsible GenAI usage policies to help deliver trust to the wide network of stakeholders they deal with – be it customers, regulators, vendors, board members, independent directors, investors, employees and society at large.

Tax transformation in today's era is about moving from a culture of 'recording, reporting and then analysing' to a new paradigm of 'understanding, contextualising and reporting'. Accurate processing the first time itself leads to touch-less compliance, full transparency and stakeholder trust, without compromising on the speed of recording transactions.

Tax functions continue to be challenged by various internal and external stakeholders to do more with less. They are expected to operate with greater efficiency and be capable of generating actionable insights, simultaneously managing new reporting and compliance requirements, including the Pillar 2 related assessments around a global minimum Effective Tax Rate. Given these circumstances, GenAI can serve as an enabler, where context, law and processes can be combined simultaneously. This shift will empower organisations to embrace a new operating model in which significant time for tax professionals could be invested in strategic value addition activities.

(Benefits of GenAI for tax discussed in this report are only a few instances and its potential across boundaries is enormous. The more training data – both structured and unstructured – the models are fed, the better will be the outcomes accessed through smart prompt engineering skills.)

9. PwC. What is responsible AI
10. PwC's responsible AI
11. European Union's Artificial Intelligence Act
12. AI bill of rights
13. India will impose AI regulations: Union min

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