Four ways AI can re-engineer the tax function

From automated tax payments to taxpayers enjoying one-touch access to all their financials, from AI-based chatbots which can function as smart assistants to holographs acting as tax advisors – the tax landscape is all set to undergo a smart transformation.

Rapid technological adoption is transforming the tax function. Advanced technologies such as GenAI are increasingly helping tax professionals uncover new ways of mining data, thereby transforming industries, reinventing systems and reshaping the tax ecosystem. While this convergence of technology and data is set to form the bedrock of compliance and transformation in the taxation world GenAI's potential for scalability holds promise. A GenAI model designed to extract insights from tax notices could be fine-tuned to identify issues in due diligence, or analyse and predict trends in tax controversies.[1]

With a growing demand for a more personalised approach to tax,[2] data is crucial for individual tax matters too. A data- and technology-driven future for tax can offer several benefits to the taxpayers, ranging from pre-filled tax filings that boost compliance to automated tax payments. For tax consultants, AI tax chatbots could act as smart assistants and it is not too long before their holographic virtual selves will be disseminating tax advice to people and organisations. This article discusses the opportunities that AI could open up for the tax function of the future, however, challenges related to ethical use of AI and privacy concerns would need to be simultaneously addressed to ensure that the transformation is seamless. This article explores four ways in which technologies such as data analytics and artificial intelligence (AI) can redefine the tax function to make it more efficient, transparent and responsive by:

1. easing compliance for taxpayers
2. digitising the tax department
3. enabling tax consultants to focus on value-added services
4. reshaping judicial proceedings.

1 PwC, Generative AI in tax: 5 essential insights for leaders

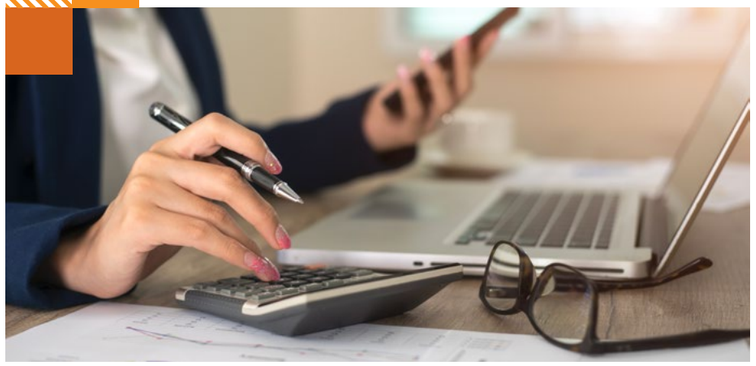
2 PwC, How blockchain technology could improve the tax system

1. Easing compliance for taxpayers

The future of the tax function will be defined by greater automation and transparency in tax reporting and enforcement. Digital technologies which allow tax-related information to be pre-filled are simplifying compliance for taxpayers. At present, the government collects data from various sources – including domestic and international – to ensure tax compliance. These include:

- bilateral and multilateral exchange of information
- withholding taxes
- information reporting by institutions such as banks and insurance companies
- filings with other authorities, such as the Goods and Services Tax (GST) authority
- banking transactions and digital payments.

These sources are already providing much of the information that is required for an individual taxpayer to compute their taxes and complete their tax filings. Digital technologies can help bridge gaps so that taxpayers can easily access information related to their income which is gathered by the revenue department from various sources such as employers and financial institutions at the click of a button. For instance, GenAI and similar tools can be trained to use data to compute the tax filing of an individual while also factoring in the taxes withheld. Once the tax filing is ready, a taxpayer can review it and proceed with the payment. Additionally, an automated payment mechanism can also be set up which allows auto debiting of a taxpayer's bank account based on the tax computation generated by the GenAI tool. Thus, the tax payment and filing process can become easier and transparent for individual taxpayers.



For corporate taxpayers too, most transactions are recorded digitally through processes like GST, e-invoicing and e-way bills and the data collected from the same is accessible to tax authorities. These, coupled with other sources of data discussed earlier, could provide a fairly accurate picture of the income of corporate taxpayers. The government may seek limited access to taxpayers' financial systems through application programming interface (API) linkages and cross reference this data with official records. The data can then be made available to taxpayers to either accept the calculations or make edits with reasoning. The edits can be scanned by an AI tool for acceptability and based on a risk assessment system, taxpayers can be selected for scrutiny.

Technology-based risk assessment is already being deployed by tax authorities in India with 44 lakh emails sent to taxpayers in December 2023 for mismatches between their declared income and financial transactions.[3] Further, as per the e-verification scheme of the tax department, the taxpayers were furnished with details of their interest income available with the Government, and they have been asked to validate the same.[4]

Thus, a future-fit tax function will allow taxpayers a better understanding of their tax obligations and boost cooperative compliance while fostering trust between taxpayers and the authorities. The system can also assign scores to taxpayers based on various parameters such as track record in disputes and taxes paid versus headline tax rates (over time to consider the timing differences). Therefore, high scorers or compliant taxpayers will face lesser scrutiny from the government.

3 https://indianexpress.com/article/technology/tech-news-technology/use-of-tech-ai-aiding-direct-tax-compliance-says-cbdt-chairman-9144258/

4 https://pib.gov.in/PressReleasePage.aspx?PRID=2009208

2. Digitising the tax department

In the near future, seamless access to data and greater transparency in tax reporting and enforcement will leave much of the tax scrutiny limited to legal interpretation, which could be run by GenAI-powered bots. These bots will be able to analyse laws and judicial history. Based on pre-determined parameters, they could even offer settlements to taxpayers. In case of no settlement, the analysis and recommendations by the bots could be handed over to tax officers for their review to either raise a dispute or concede. These audits could also include a review of the tax systems of taxpayers to understand the behaviour of such systems.

Extensive use of data and analytics with minimal government engagement would also mean a highly punitive enforcement regime, where non-compliance will result in disproportionately large fines and penalties. Taxation authorities, such as the Internal Revenue Service (IRS), are exploring the possible uses of AI to shift to forward-looking compliance. Authorities are using AI to prevent non-compliance by intervening in the earlier stages of the taxpayer processes, rather than discovering it after tax returns have been filed.[5] Machine learning, a subfield of AI, can go through complex partnership structures and predict which entities are more likely to be non-compliant and underpay taxes.[6]

In the Organisation for Economic Cooperation and Development's (OECD) Tax Administration 2023 report:

95%

of tax administrations admitted to using data science and analytical tools to guide their compliance work.[7]

60%

of administrations said they offered digital assistants to help respond to taxpayer enquiries to help taxpayers understand their obligations better.

80%

of tax administrations reported that they are either using or are in the process of implementing techniques that allow for data analysis without human intervention.[8]

As technology becomes the mainstay of tax administration, the tax department will also start changing with larger in-house/outsourced teams on the technology side, and a small team for policy development and enforcement.

Furthermore, data and digitisation could also address the lack of vertical equity in indirect taxes, which is a major concern with tax policy in India. Indirect taxes which apply to goods should ideally be tailored to the economic strata of an individual. This has been partially addressed in the past through reducing indirect tax rates on mass consumption items and keeping higher rates for luxury goods. Data and digitisation could help achieve this vertical equity by customising indirect taxes for each individual based on their income levels. If the transaction trails are perfected, either at the point of purchase or subsequently, based on the income profile of the buyer, indirect taxes could be customised.

Moreover, intermediaries along the lines of GST Suvidha Providers (GSPs) could be introduced to further streamline tax compliance processes and build a taxpayer-friendly administrative system. GSPs are authorised intermediaries that help taxpayers comply with GST law provisions through apps and APIs.

3. Enabling tax consultants to focus on value-added services

Apart from the obvious benefits of automation and new technologies like increased efficiency and productivity, it can also reimagine the role of tax consultants. By automating repetitive tasks, technology can help these consultants in focusing more on strategic planning, advising and offering value-added services.

Tax consultants can rely on the strength of GenAI tools for legal interpretation and recommendations. These tools will be fed massive case histories, past advisories, and data from the experience of tax consultants. Large investments will be made to develop the most sophisticated tools to aid in tax advisory. These tools will be one of the key differentiating elements to create a competitive edge in the market for tax advisory. By leveraging AI insights, tax consultants will be able to approach clients with a more targeted and tailored value proposition. This will render the traditionally formal and paperwork-driven tax consultations more engaging.

Tax professionals can also have numerous opportunities for professional development in a technology-first world. This will be critical given that a key competitive driver will be a deep understanding of newer business models and offerings, and the tax overlay on the same. Consider, for example, the case of metaverse. Metaverse assets and offerings have created new sales tax. However, there are certain tax challenges with uncertainties around basic questions of jurisdiction, tax base, the identity of the seller and the nature of what was sold.[9] GenAI tools which often rely on past data and trends may not have the ability to analyse such a new model and advise on its tax implications. Accordingly, tax consultants will also have to double down on such business expertise to ensure the accuracy of the output of AI-enabled tools.

Technologies like GenAI can also equip tax consultants to offer business advisory support. With vast amounts of data available to them, sophisticated GenAI-based tools can analyse trends, industry benchmarks, best practices, areas of inefficiencies, and empower tax consultants to help clients navigate business challenges. Tax professionals can further leverage GenAI to classify and analyse data to spot tax-saving opportunities and predict future liabilities. GenAI-enabled tools can be valuable for controversy trend analysis by monitoring evolving tax controversies such as tax disputes. They can also potentially analyse historical data to predict which jurisdictions or industries may be more at risk of tax controversies.

4. Reshaping judicial proceedings

Technology can also transform the judiciary and its functioning. Judicial bodies can develop and employ legal bots to support their functioning. These bots would be thoroughly trained on judicial precedents and armed with the power of predictive analytics. The evidence and submissions filed by the taxpayers would be digitally analysed by machines and a proposed pronouncement would be available to the judges based on the analysis of legal and factual data. The findings in order would be supplemented by data collected from various sources such as bank statements, social media accounts, and property transactions.

Furthermore, the tax department can streamline pending litigation by using predictive analytics to pursue cases which score high on chances of success based on the jurisprudence of similar matters. Tax authorities could also use GenAI to challenge their own arguments and gauge chances of success for their contentions. However, when deploying technologies for judicial matters, utmost caution needs to be exercised with human oversight and review as an integral component of the process to ensure accuracy and a higher degree of comprehension.

5 OECD (2023) Tax Administration 2023: Comparative Information on OECD and other Advanced and Emerging Economies, OECD Publishing, Paris, https://doi.org/10.1787/900b6382-en.

6 AI can help IRS catch wealthy tax cheats

7 OECD (2023) Tax Administration 2023: Comparative Information on OECD and other Advanced and Emerging Economies, OECD Publishing, Paris, https://doi.org/10.1787/900b6382-en.

8 Ibid.

9 PwC, Sales and use tax implications of the metaverse

The reimagined tax function

Technology can help achieve the unimaginable, let alone what is transformative. Therefore, the new order of the tax world will have technology at its heart which will ensure a high level of transformation, transparency and in turn, trust. But for technology to enable trust, it must be combined with human oversight for accuracy.

As AI-enabled tools gain popularity, there will be a race to create the best and most sophisticated tools to gain competitive advantage and minimise the discrepancies in data and data processing. Planning, administration and policy-making could be customised as per requirement, with data and analytics opening up a world of possibilities once the preliminary issues related to digital transformation have been overcome.

Subject matter expert **Amit Rana** has contributed to this article.

Supported by **Rohit Arora**