

# Artificial Intelligence and Tax Compliance

Tax compliance refers to the adherence of individuals, businesses and organizations to tax laws, regulations and reporting requirements set by the government. Technology and AI are transforming tax compliance and revenue collection in several ways, not only by reducing tax obligations but also by streamlining processes and improving efficiency. The Article elaborates on the ways in which AI is reshaping the future of tax administration in India.



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## INTRODUCTION

As India sets its vision for 'Viksit Bharat @2047,' tax compliance stands as a critical pillar in achieving sustainable economic growth. A robust and efficient taxation system ensures government revenues are maximized, fostering infrastructure development, social welfare, and national progress. Artificial Intelligence (AI) emerges as a transformative force capable of simplifying tax processes, reducing compliance costs, and ensuring transparency, thereby contributing to a sustainable future.

## TAX COMPLIANCE – THE RELEVANCE

Tax compliance refers to the adherence of individuals, businesses, and organizations to tax laws, regulations and reporting requirements set by the government. It involves timely and accurate filing of tax returns, payment of tax liabilities, maintaining proper records and following regulatory guidelines to avoid legal consequences.

Tax compliance ensures that the government has a steady flow of revenue, which is essential for funding public services such as infrastructure, healthcare, and education. It also promotes economic stability and investor confidence by creating a transparent and predictable tax environment.

There are two types of tax compliance:

1. **Voluntary Compliance:** When taxpayers fulfil their obligations willingly without enforcement measures.
2. **Enforced Compliance:** When tax authorities intervene through audits, penalties or legal actions to ensure compliance.

In India, tax compliance covers multiple forms of taxation, including direct taxes (such as Income Tax) and Indirect taxes (such as Goods and Service Tax). Ensuring compliance with these tax laws requires significant effort from both taxpayers and government authorities.

Technology and AI are transforming tax compliance and revenue collection in several ways, not by reducing tax obligations but by streamlining processes and improving efficiency. Here's how:

1. **Automated Compliance & Reporting** – AI-powered tools can automatically track, analyze and report tax liabilities in real time, reducing errors and ensuring timely compliance.
2. **Advanced Data Analytics** – Tax authorities can use AI-driven analytics to detect discrepancies, identify potential fraud and enhance audit effectiveness, leading to better enforcement and higher revenue collection.
3. **Seamless Integration with Digital Systems** – Businesses can integrate AI-based tax solutions with their accounting and ERP systems, ensuring accurate tax calculations, filings and regulatory adherence with minimal manual intervention.
4. **AI-Powered Tax Assistance** – Chatbots and AI-driven advisory tools can provide real-time guidance to businesses and individuals on tax regulations, helping them navigate complex tax structures more effectively.
5. **Predictive Tax Modelling** – AI can assess historical data and predict future tax liabilities, helping governments optimize tax policies and businesses plan their finances better.

By reducing inefficiencies, preventing leakages, and fostering transparency, AI and technology can create a win-win situation—ensuring better compliance for taxpayers and optimized revenue collection for authorities.

## HOW AI CAN REVOLUTIONISE TAX COMPLIANCE

AI-driven solutions can bridge the gap between tax administration and taxpayers, making compliance seamless. Here's how:

### 1. Automated Tax Filing & Processing

AI-powered chatbots and virtual assistants are revolutionizing tax compliance by offering real-time, intuitive guidance to taxpayers, ensuring seamless and error-free filing experiences. These intelligent systems can walk individuals and businesses through intricate tax processes, addressing queries, pre-empting common mistakes and guaranteeing timely submissions. Meanwhile, advancements in Natural Language Processing (NLP) are demystifying the complexities of tax regulations, transforming convoluted legal jargon into comprehensible, actionable insights. By bridging the gap between technical tax provisions and practical application, AI not only enhances compliance but also empowers taxpayers with clarity and confidence, ultimately fostering a more efficient and transparent tax ecosystem.

### 2. Advanced Tax Analytics & Fraud Detection

AI is reshaping the landscape of tax enforcement and policy optimization by harnessing the power of data-driven intelligence. With the ability to analyze vast datasets in real-time, AI can uncover intricate patterns of tax evasion and fraudulent activities that might otherwise go undetected. Machine Learning (ML) models take this a step further by proactively identifying potential discrepancies, flagging suspicious transactions even before audits are conducted, thereby fortifying the integrity of the tax system. Meanwhile, the government can leverage predictive analytics to forecast tax revenues with remarkable precision, enabling policymakers to make informed adjustments that enhance fiscal planning and economic stability. By embedding AI into the very fabric of tax administration, authorities can not only safeguard revenues but also cultivate a more transparent, accountable, and future-ready taxation ecosystem.

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### 3. Real-Time Compliance Monitoring

AI-driven tools are revolutionizing tax compliance by automating intricate reconciliation processes, ensuring businesses remain aligned with regulatory mandates in real time. These intelligent systems meticulously validate transactions, cross-check records and flag inconsistencies before they escalate into disputes, fostering a seamless and dispute-free compliance environment. Taking this transformation, a step further, the integration of blockchain with AI is redefining the very foundation of tax administration. By creating tamper-proof, decentralized ledgers, this fusion fortifies data integrity, eliminates vulnerabilities to manipulation, and significantly curtails tax fraud. The result is an era of unparalleled transparency and trust, where both businesses and tax authorities operate within a framework of absolute

accountability. Through this synergy of AI and blockchain, the future of taxation is not just efficient—it is incorruptible.

### 4. AI for Dispute Resolution & Litigation Management

AI is ushering in a new era of precision and efficiency in tax dispute resolution by harnessing the power of data-driven foresight. By meticulously analyzing past judgments, case laws and legal precedents, AI can offer predictive insights that empower businesses and tax professionals to anticipate outcomes with remarkable accuracy, enabling them to craft well-informed strategies. Furthermore, the advent of virtual AI-based arbitration systems is revolutionizing the settlement process, drastically reducing prolonged litigations and case backlogs. These intelligent platforms facilitate faster, unbiased, and data-backed resolutions, ensuring that disputes are settled with unparalleled speed and fairness. As AI continues to refine the contours of tax litigation, it is paving the way for a more agile, transparent, and efficient justice system—one where complexity no longer stands as a barrier to resolution.

### 5. Personalized Taxpayer Assistance & Predictive Compliance

AI is redefining the future of tax planning by delivering personalized, data-driven recommendations that empower individuals and businesses to optimize their financial strategies while ensuring seamless regulatory adherence. By meticulously analyzing financial patterns, industry trends and evolving tax laws, AI-driven systems can tailor tax-saving insights with unparalleled precision, transforming compliance from a mere obligation into a strategic advantage. Beyond individualized guidance, AI-driven simulations are revolutionizing policymaking by assessing the far-reaching impact of tax reforms across various sectors. These intelligent models can predict economic ripple effects, enabling governments and corporations to make well-informed, forward-thinking decisions. In this era of digital transformation, AI is not merely a tool—it is the architect of a smarter, more adaptive, and future-proof taxation ecosystem.

Some real-life instances of how Artificial Intelligence (AI) is transforming tax compliance in India, making the system more efficient, transparent, and fraud resistant:

1. **GST Reconciliation through AI-driven Portals:** There are platforms that leverage AI to automate GST reconciliation by matching purchase and sales invoices, identifying discrepancies, and ensuring businesses claim the correct Input Tax Credit (ITC). This minimizes errors and reduces the chances of scrutiny by tax authorities.

2. **AI-Powered E-Assessment by Income Tax Department:** The Indian Income Tax Department has implemented Faceless E-Assessments, where AI and data analytics are used to scrutinize tax filings, detect mismatches and reduce human intervention, making the process faster and more objective. This initiative eliminates the need for physical interaction, reducing corruption and streamlining tax assessments.
3. **Fraud Detection and Prevention by GSTN:** The GST Network (GSTN) employs AI-driven anomaly detection systems to track suspicious transactions, detect tax evasion and flag entities involved in fake invoicing or circular trading. In recent years, this AI-powered monitoring has helped authorities identify and cancel thousands of fraudulent GST registrations.
4. **Chatbots for Taxpayer Assistance:** The Income Tax Department's virtual assistant 'Judy' and private platforms use AI and Natural Language Processing (NLP) to answer taxpayer queries, provide filing assistance and help navigate complex tax laws in real time, improving compliance rates and reducing the burden on tax professionals.
5. **AI-Based Litigation Management Systems:** With thousands of pending tax cases, AI-powered litigation management tools help tax professionals and authorities analyze past case laws, legal precedents, and court judgments to predict case outcomes and provide strategic recommendations for dispute resolution. This is helping reduce case backlog and expedite settlements.
6. **Predictive Analytics for Tax Revenue Forecasting:** The Central Board of Direct Taxes (CBDT) and CBIC are leveraging predictive analytics to forecast tax revenues, identify sectors with compliance gaps, and optimize tax collection strategies. This helps policymakers take data-driven decisions to enhance tax compliance without imposing unnecessary burdens on businesses.
7. **Blockchain and AI for Tamper-Proof E-Invoicing:** The introduction of e-invoicing under GST, coupled with AI-powered verification mechanisms, ensures that invoices are authenticated in real-time before being used for tax filing. This reduces fraudulent claims and enhances transparency in B2B transactions.

By integrating AI into tax compliance frameworks, India is making its taxation system more efficient, fraud-resistant and business-friendly, ultimately boosting revenue collection while reducing taxpayer hassles.

## THE ROAD TO SUSTAINABLE TAX COMPLIANCE & 'VIKSIT BHARAT@2047'

As India envisions a prosperous, self-reliant and globally competitive economy by 2047, the foundation of its fiscal system must be built upon efficiency, transparency,

and trust. A truly futuristic tax compliance framework should not merely mandate adherence through penalties but rather cultivate a culture of voluntary and seamless compliance—empowering businesses and individuals alike.

At its core, the system must be technology-driven, leveraging the immense potential of Artificial Intelligence (AI), blockchain and automation to ensure real-time compliance. A user-friendly approach is paramount, where taxpayers navigate simplified procedures with ease, free from excessive manual interventions. Furthermore, the hallmark of a progressive taxation system is transparency—data-driven policymaking should foster trust between the government and taxpayers, ensuring that compliance is seen as a responsibility, not a burden.

Above all, efficiency must be prioritized—AI-powered automation, predictive analytics and digital integrations should drastically reduce compliance time and costs, enabling businesses to focus on innovation and economic growth rather than drowning in regulatory complexities. The vision for 'Viksit Bharat@2047' demands a taxation ecosystem that is not just smart and robust, but fair and sustainable—one that rewards compliance, encourages proactive participation, and transforms taxation into a seamless, value-driven experience rather than a punitive obligation. AI will be the catalyst in this transformation, ensuring that India's fiscal future is not just well-regulated but truly empowered, progressive, and future ready.

## THE STRATEGIC ROLE OF COMPANY SECRETARY IN AI-DRIVEN TAX COMPLIANCE

In the era of Artificial Intelligence driven tax compliance, the role of Company Secretaries becomes more indispensable than ever. While AI offers unprecedented efficiency, automation and predictive accuracy, it is the strategic insight, ethical governance, and regulatory expertise of a Company Secretary that ensures this transformation remains compliant, risk-free, and aligned with legal frameworks. AI, despite its capabilities, lacks the human intuition and contextual judgment required to interpret the nuances of tax laws, regulatory amendments, and corporate governance obligations—gaps that only a Company Secretary can bridge.

The Company Secretary, as a corporate sentinel, not only ensures seamless AI integration within tax structures but also mitigates risks such as data privacy breaches, algorithmic biases, and compliance loopholes that may arise from excessive reliance on technology. Furthermore, as tax laws evolve, AI models must be continuously refined—an oversight that demands the expertise of a Company Secretary, who possesses the foresight to anticipate regulatory changes and steer compliance strategies accordingly. It is only through the harmonious synergy



between AI-driven automation and the interpretative acumen of a Company Secretary that India's tax ecosystem can achieve the perfect balance—maximizing efficiency without compromising on regulatory integrity. Company Secretaries are not just enablers of AI-powered tax compliance; they are its guardians—ensuring that technology serves as a catalyst for governance, rather than a disruptor.

Beyond the realm of compliance, Company Secretaries assume a proactive stance in risk mitigation, ensuring that AI-driven tax systems remain robust, transparent, and adaptive to the ever-evolving regulatory landscape. Their ability to foresee regulatory changes, interpret policy shifts, and align AI models with new compliance requirements sets them apart as architects of corporate resilience. Unlike static AI models, which require continuous refinements and recalibrations to remain effective, a Company Secretary possesses the foresight to anticipate legal amendments, judicial precedents, and evolving tax jurisprudence, ensuring that organizations remain ahead of compliance risks rather than reacting to them belatedly.

While AI can highlight potential discrepancies in tax filings, it is the Company Secretary who applies a nuanced understanding of tax laws, corporate structures, and legal doctrines to determine the legitimacy of AI-generated outcomes. Without this critical oversight, businesses risk falling into the trap of over-reliance on automated compliance tools, which, despite their efficiency, cannot replicate the strategic judgment required to navigate grey areas in tax legislation.

## AI AND COMPANY SECRETARY: A SYMBIOTIC PARTNERSHIP FOR FUTURE-READY TAX GOVERNANCE

The integration of AI into tax compliance is not only about replacing human expertise but also about enhancing governance through a symbiotic partnership between technology and regulatory acumen. Company Secretaries stand at the forefront of this paradigm shift, ensuring that AI-driven tax compliance transcends mere automation to embody a framework of accountability, ethical governance, and legal sustainability. They are the gatekeepers who safeguard against blind adherence to AI-generated recommendations, ensuring that organizations do not merely comply with tax laws but do so with strategic foresight and legal prudence.

As AI-powered taxation continues to evolve, the role of Company Secretaries will become even more pronounced. Their ability to bridge the gap between automated compliance and interpretative acumen will define the success of AI-driven tax ecosystems. By ensuring that tax automation aligns seamlessly with regulatory mandates, Company Secretary professionals will uphold the delicate balance between efficiency and governance, ensuring that

technology serves as an enabler rather than a disruptor of due process.

Ultimately, the true power of AI in taxation lies not in its ability to replace human oversight but in its capacity to elevate compliance standards to unprecedented levels of accuracy, transparency, and ethical integrity. At the heart of this transformation stands the Company Secretary—a guardian of regulatory compliance, a steward of ethical AI governance, and an architect of future-ready tax systems that are not just efficient, but legally sustainable and ethically sound.

In a world where AI continues to redefine the boundaries of automation, the role of Company Secretaries remains resolute—ensuring that technology serves the cause of governance, not as an alternative to human judgment, but as its most powerful ally.

As the guardians of corporate governance, Company Secretaries must embrace this AI-driven revolution, not with apprehension, but with the vision to shape it into a future where compliance is not just automated but elevated to an unprecedented standard of excellence.

## CONCLUSION

The integration of Artificial Intelligence (AI) in tax compliance is not merely a tool for reducing administrative burden—it is a transformative force that has the potential to redefine India's tax ecosystem, aligning it seamlessly with the nation's ambitious vision of 'Viksit Bharat 2047'. As India marches towards becoming a global economic powerhouse. A well-structured, AI-driven tax system holds the promise of unparalleled efficiency, eliminating redundancies, enhancing accuracy, and significantly reducing the scope for human errors or deliberate evasions.

By harnessing the power of AI, machine learning, and blockchain, India can establish a self-sustaining, technology-driven compliance framework that not only maximizes tax revenues but also fosters a climate of trust, ease and proactive participation. This shift will empower businesses and individuals, ensuring that compliance is not perceived as an obligation, but rather an intuitive, seamless process that supports economic expansion. Smart taxation is the future—transparent, automated and AI-powered—ushering in an era of fiscal governance that is fair, efficient, and future-ready. The time has come for India to embrace this transformation with conviction, paving the way for a progressive, resilient, and globally competitive tax regime that will fuel the country's journey towards a truly developed and self-reliant Bharat.

## Disclaimer:

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