USE OF ARTIFICIAL INTELLIGENCE IN SCRUTINY SELECTION OF INCOME TAX RETURNS IN TAX ADMINISTRATION

B.R.Varshini, O.P. Jindal Global University, Sonipat

ABSTRACT

This research focuses on the implementation of artificial intelligence (AI) in the Indian tax department to analyse income tax returns received through the online e-portal. The tax department's use of advanced technical techniques to detect abnormalities and potential tax fraud in digital filings highlights the importance of taxpayers maintaining careful tax compliance. The core focus of this study is the revolutionary influence of AI on tax administration, namely its capacity to rapidly and precisely analyse large volumes of data. Furthermore, the article explores the legal ramifications and sanctions that may result from efforts to evade taxes in the era of artificial intelligence. The Indian tax agency has adopted an innovative strategy by using AI technology into the examination of electronically filed income tax forms. This research examines the complexities of this technological progress and its consequences for Indian taxpayers. It emphasises how crucial it is for taxpayers to exercise caution because AI-powered systems have the ability to quickly identify and look into any suspicious activity contained in tax returns.

The primary effect of AI on tax administration is its ability to improve efficiency and precision. AI systems are designed to process extensive datasets, a task that would be difficult and time-consuming for human agents. Rapid data processing and cross-referencing enhance efficiency in detecting prospective tax evaders. Artificial intelligence is a powerful tool for identifying tax evasion, warning taxpayers against the act of manipulating or hiding their income. AI algorithms are highly proficient at detecting discrepancies in income statements, deductions, and exemptions. Any deviation from precise reporting may result in significant sanctions and legal consequences. AI plays a crucial role in tax inspection by effectively cross-referencing information presented in tax returns with many databases, including banking transactions and property records. This interface allows the tax department to accurately identify discrepancies and effectively detect attempts to underreport revenue.

I.   Introduction

In the dynamic world of modern tax administration, governments throughout the globe are always looking for novel methods to improve revenue collection while making the most use of their limited resources. The scrutiny selection of income tax returns is one of the most important and labour-intensive activities in this field; it is a procedure that requires careful thought and rigorous assessment. Adopting state-of-the-art technologies has become essential in the Indian setting, where tax compliance is essential to the nation's economic growth. Artificial Intelligence (AI) has emerged as a viable instrument for Indian tax authorities to improve and expedite the scrutiny selection process because of its unmatched ability to completely transform conventional practises.[1]

This study examines how AI is revolutionising income tax return examination within the context of Indian tax administration. The study explores the difficulties that India's tax authorities confront, the techniques that are currently used for scrutinising selection, and the enormous advantages that Artificial Intelligence (AI) may provide in terms of effectiveness, precision, and equity. Tax administrators may reduce the burden on taxpayers and minimise the danger of human bias by utilising AI to target non-compliance more efficiently, make more data-driven choices, and eventually raise tax collections.

This paper looks at particular applications of AI technology to streamline the scrutiny selection process, handle privacy and security issues with data, and evaluate the possible effects of AI on the Indian tax environment in the sections that follow. By demonstrating how the incorporation of AI may result in a more effective and equitable system, promote economic growth, and boost public confidence in the taxing process, the study hopes to shed light on the hopeful future for Indian tax administration.

II.   The Role/Benefits of AI in Tax Administration

A. Efficiency and Accuracy

An important turning point in the history of fiscal governance has been the integration of AI into tax administration. Artificial intelligence's remarkable ability to improve operational efficiency and accuracy in this field serves as the foundation for its disruptive impact. AI

---

[1] Nat'l Inst. of Pub. Fin. & Pol'y, Tax Administration Reforms in India (2023), https://www.nipfp.org.in/our-work/policy-support/.

systems are ideally suited to tackle the difficult problem of handling large financial datasets, which tax authorities face. These systems automate data analysis, which speeds up the process of sorting through large datasets and lowers the amount of time and money needed for it. They are distinguished by their computing prowess and quick data processing speeds. The total effectiveness of tax administration is therefore improved by this automation.[2]

Moreover, AI's ability to digest and cross-reference data quickly improves accuracy and efficiency in detecting possible tax evaders. A constant problem, tax evasion is made more complex by the complexity of contemporary financial systems. Because AI can quickly and thoroughly evaluate large datasets, tax authorities may cross-reference taxpayer information with other databases and financial records, quickly identifying abnormalities and inconsistencies that could indicate cases of tax evasion. Unlike human agents, who are prone to mistakes, inefficiencies, and cognitive limits, AI applies a rigorous inspection. Because AI is consistent, it reduces biases and mistakes, resulting in a more fair and unbiased execution of tax rules. As such, artificial intelligence (AI) is a crucial instrument for tax authorities, greatly augmenting their capacity to identify possible tax evaders and thus improving the overall precision of tax enforcement.

B. Detection of Tax Evasion

In the field of tax evasion detection, the use of artificial intelligence (AI) into tax administration represents a significant advancement. The remarkable accuracy with which AI examines financial data acts as a strong disincentive to tax avoidance. Taxpayers are strongly advised against attempting to falsify or conceal income since artificial intelligence (AI) is highly adept at spotting discrepancies in income reports, deductions, and exemptions.

AI has a strong reputation in this field because of its ability to carefully cross-reference taxpayer data with enormous databases of financial records and rules. It gives tax authorities a reliable, impartial tool to find discrepancies that human agents could miss or misunderstand between reported income and related financial transactions. The ramifications are significant as taxpayers who fail to comply may be subject to severe fines and legal action, underscoring the necessity of honesty and correctness in income reporting. Within this scholarly setting,

---

[2] The Dialogue, Leveraging Artificial Intelligence for Efficient Tax Administration in India, EY (2023), https://www.ey.com/en_gl/insights/tax/how-generative-ai-might-help-tax-functions-tackle-challenges.

artificial intelligence is a vital resource that maintains tax laws, protects income, and advances financial openness.[3]

C. Cross-Verification and Data Integration

Artificial Intelligence (AI) is a key component of modern tax inspection, primarily because of its capacity to cross-reference data from tax returns with a wide range of different databases, such as property records, bank transactions, and other financial data sources. The combination of artificial intelligence with tax administration gives tax authorities a unique edge in spotting patterns and successfully detecting attempts to underreport revenue. The importance of this position cannot be emphasised because tax evasion, which frequently involves methods to hide or falsify financial information in order to lower tax obligations, is still a problem. Because AI is so good at cross-referencing taxpayer-provided data with a variety of external sources, tax authorities are able to find anomalies and inconsistencies, which improves the accuracy and equity of the tax collecting process.[4]

AI's exceptional processing capacity and computational ability are what make it useful for cross-verifying tax data. Large datasets may be accessed, analysed, and cross-referenced with ease, and it can quickly spot irregularities and possible tax problems that could otherwise be missed through manual inspection. Artificial intelligence (AI) technologies reduce the possibility of human mistake by automating this process and using complex algorithms. This results in a better degree of accuracy and a more fair implementation of tax laws. As a result, this integration encourages taxpayers to follow the guidelines for truthful and transparent income reporting while also enabling tax authorities to protect the integrity of their tax systems. All things considered, AI's ability to do cross-verification is crucial to modern tax enforcement since it reduces tax evasion and promotes fair budgetary management.

D. Enhanced Compliance and Enforcement

The tax department's enforcement powers have been significantly increased by the integration of AI technology into tax inspection. It achieves this by reducing a number of issues that come with using conventional methods for tax administration. AI, first and foremost, drastically cuts down on the amount of time needed for manual inspection. Due to the massive amounts of

---

[3] Ministry of Fin., Black Money in India: Its Magnitude, Impact and Solutions (2023), https://blog.ipleaders.in/impact-of-black-money-on-indian-economy/.
[4] Press Information Bureau, Income Tax Department Launches 'Project Insight' for Data Analytics (Dec. 22, 2022), https://pib.gov.in/PressReleseDetailm.aspx?PRID=1999327.

financial data that tax authorities frequently receive, manually reviewing every tax return is a difficult and time-consuming task. AI significantly speeds up this process with its quick data processing speeds and capacity to evaluate large datasets. Tax authorities can evaluate more returns in less time thanks to this rapid data analysis, which improves operational effectiveness and makes more wise resource allocation possible.

Additionally, the inclusion of AI improves the precision of detecting possible tax evaders. Conventional tax examination techniques might overlook inconsistencies due to prejudice, human mistake, or oversights. Artificial intelligence (AI) functions with consistency and meticulousness, surpassing cognitive limits and allowing for the discovery of small abnormalities in revenue reporting. This increased accuracy is necessary to protect tax revenue and guarantee that all taxpayers receive equal treatment under the law.

The role that AI plays in encouraging a tax compliance culture is another essential aspect of its application in tax inspection. The tax department's dedication to equitable and comprehensive tax enforcement is demonstrated by the increased efficiency and precision brought about by AI technology. Taxpayers are more likely to honestly disclose their income and comply with tax laws when they believe that the tax administration is using sophisticated technologies to detect irregularities. By lowering the incidence of tax evasion and raising the general efficacy of revenue collection, this proactive strategy promotes voluntary compliance, which benefits tax authorities.

E. Improved Risk Assessment

Artificial Intelligence (AI) models have the potential to revolutionise tax administration through their ability to continuously learn from and adapt to new data. AI technologies' dynamic and developing nature enables them to improve their capacity for risk assessment and the detection of possible non-compliance. This capacity is essential to keeping tax authorities abreast of the ever-changing tactics used by tax evaders, who are always changing to elude discovery and punishment.

AI models are unique in that they can quickly find patterns, anomalies, and trends by processing large volumes of data. This skill is especially important in the field of tax administration since the financial environment there is dynamic and complicated. Artificial intelligence (AI) systems get a more sophisticated knowledge of taxpayer behaviour and financial transactions as they evaluate a variety of data sources. They are able to discriminate between legitimate

financial transactions and those that might be indicative of tax evasion, such understated income, fictitious deductions, or other irregularities.

Most importantly, AI's ability to learn continuously makes these systems get better over time. They improve their algorithms and models continuously to become more skilled at spotting new escape strategies by learning from their own assessments. Tax authorities may remain ahead of tax evaders who might otherwise become used to typical audit techniques thanks to this iterative procedure.

Moreover, since AI systems operate in real-time, tax authorities can react quickly to changing tax evasion tactics. Artificial Intelligence (AI) is a very dynamic and proactive weapon in the battle against non-compliance since it adjusts to new plans and tactics rather than depending on static regulations.

III.   Taxpayer Responsibilities

A. Accurate and Comprehensive Reporting

In the world of taxes, taxpayers have several duties, and precise and thorough reporting is one of the most important ones. It is the taxpayer's duty to provide accurate and comprehensive information when submitting their tax returns electronically. This obligation goes beyond simple adherence to regulations; it is a fundamental prerequisite supporting the integrity of tax collection and the larger fiscal system.

The dynamics of tax reporting and enforcement have undergone a significant transformation with the incorporation of artificial intelligence (AI) technologies in this era of technological growth. Now that artificial intelligence (AI) technologies have become the watchful guardians of fiscal transparency, taxpayers are advised against attempting to falsify or conceal income information.

There are serious and wide-ranging consequences for not adhering to the reporting standard of accuracy and thoroughness. Artificial intelligence (AI) has strengthened tax authorities' ability to quickly identify inequalities or anomalies in reported revenue. As a result, the repercussions for non-compliance go beyond simple monetary fines and may involve the possibility of judicial action. This emphasises how crucial honesty, integrity, and financial responsibility are when it comes to taxes. An important breakthrough in this regard is the incorporation of AI

technology, which promotes a more equitable, transparent, and fiscally honest financial environment. It accomplishes the dual goals of fostering a fair and cooperative taxpayer base and protecting the tax resources that are vital to government operations. In the end, it emphasises the value of being truthful in reporting and the part technology plays in maintaining the standards of precise and thorough tax reporting.

B. Record Keeping

In the world of taxes, taxpayers are accountable for more than just filing their forms; they also have a duty to maintain accurate records. It is recommended that taxpayers keep thorough records and documentation that validate the facts they report on their tax returns. This procedure is an essential aspect of being fiscally responsible since it protects against possible inconsistencies and tax department audits.

Essentially, having accurate records is essential to preserving the integrity and openness of the tax system. It gives taxpayers the ability to methodically record all of their financial transactions, including sources of income, spending, and other pertinent financial activity, as well as deductions. These documents might include bank statements, invoices, contracts for employment, investment records, and any other financial papers that are relevant to their tax status. Taxpayers can prove the authenticity and correctness of the data they disclose on their tax returns by keeping an extensive and well-organized set of documents.

The necessity of maintaining accurate records is made even more clear when one takes into account the possibility of tax audits or problems that can surface during a tax assessment. Tax authorities may ask for a thorough review of a taxpayer's financial records during an audit to make sure that the information disclosed matches the supporting documentation. When this happens, not having enough documentation can lead to more thorough examinations, longer processing times, and even legal repercussions if discrepancies are found.[5]

In this case, maintaining records is an essential component of appropriate tax compliance, not just a recommendation. Maintaining meticulous and orderly documentation puts taxpayers in a better position to fulfil their duties truthfully and openly. This procedure helps to maintain the general fairness and integrity of the tax system in addition to protecting taxpayers from the possible consequences of inconsistencies. By guaranteeing that tax assessments are founded on

---

[5] Income Tax Dep't, Circular No. 07/2020: Income Tax (Records) Rules, 2017 (July 01, 2020), https://www.incometax.gov.in/iec/foportal/.

accurate and thoroughly recorded information, it benefits the government as well as taxpayers by fostering an environment of compliance, trust, and equity.[6]

IV.   Disadvantages Of AI In Tax Administration

A. Algorithm Bias

Despite their extraordinary capabilities, AI algorithms are not impervious to the risks connected with historical data. Large datasets are usually used to train these algorithms, which may unintentionally include biases or old patterns from previous tax enforcement procedures. AI models have the capacity to reinforce these biases if they are not carefully created and closely observed. This might result in biassed scrutiny selection and jeopardise the values of equality, justice, and openness in tax administration. Thus, it is essential that the use of AI be accompanied with strict monitoring and preemptive steps to minimise and correct any biases that could have unintentionally been incorporated in these systems. This methodology guarantees that artificial intelligence (AI) maintains the highest standards of impartiality and justice in tax enforcement while simultaneously improving efficiency.

B. Overreliance on AI

Even though AI technology can significantly increase tax scrutiny, it's important to maintain balance and not rely too much on its results. If judgements are just based on AI, opportunities for careful examination may be lost and complex, context-specific aspects may go unnoticed. Furthermore, even though AI models are highly accurate, they are not perfect and can occasionally produce inaccurate evaluations. Consequently, human judgement and experience continue to play a crucial part in the examination process. With the help of their contextual knowledge, interpretive skills, and nuanced judgement, tax specialists enable a thorough and all-encompassing assessment of each situation. The combination of artificial intelligence (AI) and human knowledge guarantees that technological advantages are fully utilised while maintaining the necessary components of human judgement, which eventually results in a more comprehensive and fair tax review procedure.

C. Data Privacy Concerns

Even while using AI for scrutinising selection has several advantages, there are good reasons

---

[6] Income Tax Act, 1961, § 271A

to be concerned about data security and privacy. Tax authorities have to work extremely hard to make sure that the financial and personal information that taxpayers provide is managed securely and used appropriately. Strong data security measures are therefore required to prevent breaches and unwanted access, ina addition to stringent compliance with data protection laws and regulations. It is critical that taxpayer data handling procedures are transparent and include well-defined policies and procedures to ensure that private data is not abused or improperly exposed. Achieving a balance between the benefits of AI-driven oversight and a dedication to data privacy and protection is essential for upholding public confidence and guaranteeing the moral and legitimate utilisation of taxpayer data.

V.   Conclusion

In conclusion, India's fiscal governance is entering a transformational age with the use of AI in tax administration. It offers hitherto unheard-of benefits, such as increased fairness, precision, and efficiency in the tax inspection procedure. Taxpayers' dedication to precise reporting and careful record-keeping is still crucial as they negotiate this changing environment. However, in order to guarantee the ethical and responsible application of AI in tax administration, it is imperative to address issues like algorithm biases, overreliance on AI, and data privacy. India can lead the way in developing a more equal, efficient, and technologically sophisticated fiscal system by finding the correct balance.

The introduction of AI signifies a significant change in the tax environment in India, highlighting the significance of both technology advancement and taxpayer accountability. In order to fully utilise AI while upholding the fundamental values of openness, justice, and fiscal integrity in India's tax system, cooperation between tax authorities, taxpayers, and technology specialists is required as the country's tax administration continues to adjust to this changing paradigm.