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USE OF ARTIFICIAL INTELLIGENCE IN INCOME TAX COMPLIANCES

Thakkar Miteshkumar Kanaiyalal, Dr R V Raval

Gujarat University

Abstract

In India, Taxation is a key source of revenue for government. Administration of tax system required much efforts. Management of taxation needs such a system which will be less in error and prompt in decision making. The integration of Artificial Intelligence (AI) in income tax compliance has emerged as a transformative tool that enhances the efficiency, accuracy, and scalability of tax systems. This paper explores the role of AI in reorganization of tax filing processes, detecting fraud, improving tax audits, and ensuring better compliance with tax laws.

Keywords: *Artificial Intelligence; Machine Learning; Indian Tax System; Tax assessment*

INTRODUCTION

India's tax system is complex and wise from it's historical changes and geographical aspects. There are mainly two types of taxes i.e. Direct tax and Indirect tax. Direct taxes include things like income tax, capital gain tax, gift tax, and so on; indirect taxes include things like customs duties, VAT, GST, and service taxes. Following independence, every aspect of the Indian tax system was thoroughly reviewed, and every attempt was made to guarantee that the system was just, equitable, and fiscally feasible in addition to producing enough revenue to sustain both economic growth and government operations.

The modern tax landscape has become increasingly multifaceted due to increasing volumes of data, shifting regulatory frameworks, and the growing demand for better governance. Artificial Intelligence (AI) offers prevailing solutions to tackle these challenges by automating processes, providing predictive analytics, and enhancing decision-making in tax administration. AI technologies such as machine learning (ML), natural language processing (NLP), data analytics, and robotic process automation (RPA) can significantly improve the efficiency, accuracy, and speed of tax compliance systems. AI also allowed tax professionals to gain new analytical and statistical tools, providing convenience and educating efficiency.

Government of India had announced the use of Artificial Intelligence and Machine Learning In the year 2019 to use in tax assessment process. The main aim to implement this scheme is to remove the complexity of the tax system, facilitate faceless assessment and faceless appeal to remove corruption and compliance time and implementation of taxpayer charter.

LITERATURE REVIEW

Hicks (1958) analysed Mr. Kadlor's report regarding tax reforms in India and appreciated the recommendations made by him. The report suggested to introduce four new taxes in India for generating more revenue, i.e. (i) a tax on capital gain; (ii) an 30 annual tax on total capital or wealth; (iii) A personal progressive expenditure tax; and (iv) a tax on all gratuitous transfers. The report had also suggested some recommendations to improve the efficiency of Inland Revenue department.

Bird (1993) while commenting on the tax reforms in India, analyzed the report of the Tax Reform Committee headed by **Raja J. Chelliah**, and suggested to lower the tax rates and to broaden the base with respect to both direct and indirect taxes.

Singh and Sharma (2007) analyzed the Tax Professionals' perceptions regarding the income tax system in India using Factor analysis and to incorporate the suggestions of the tax consultants for simplifying the complex tax procedure. The study observed that the majority of the respondents were not satisfied with the present tax system in India. The respondents notified the seven factors, which play an important role in determining the effectiveness of the Indian Tax system, namely, reduction in tax evasion, extension of relief to tax payers, incentives for dependent and honest tax payers, broadening the tax base, e-filing of returns, adequacy of assistance programs.

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Romer & Romer (2010) investigated the impact of tax changes on economic activity. They used the narrative record, such as presidential speeches and Congressional reports, to identify the size, timing, and principal motivation for all major post-war tax policy actions. This analysis allowed them to separate legislated changes into those taken for reasons related to prospective economic conditions and those taken for more exogenous reasons. The behavior of output following these more exogenous changes indicated that tax increases were highly contractionary. The effects were strongly significant, highly robust, and much larger than those obtained using broader measures of tax changes.

Dr. S. M. ALAGAPPAN (2019) In the author's opinion The Indian tax system's poor administrative effectiveness is a vexing flaw. The taxes are not integrated enough to allow for the development of an orderly, well-planned, and coordinated tax system. It is essential to take action to stop tax avoidance and evasion. Periodically, the exemption limit has been increased, but neither the national nor the per capita income levels have increased in line with the increases in the exemption limit. India's long-standing objective of economic liberalization is now closer to reality with the introduction of the Goods and Services Tax.

Ankit Rathi1, Dr. Saurabh Sharma, Dr. Gaurav Lodha, Dr. Manoj Srivastava (2021) Research indicates that in order to boost the government's tax collection in a developing nation like India, significant modifications must be made to the tax structure or system. Through the application of AI and machine learning, it will possible to identify new taxpayers, prevent tax fraud and evasion, and promote an open and transparent tax administration process in India. AI is used today and is expanding daily in many different fields, but in order to succeed in the Indian tax system. To ensure that the machine learns the correct bias or reduces its own, there will be right training data. The taxpayers are prepared for the impending technology shift in the system, but they do not want to stop human intervention. The government needs an artificial intelligence-based system. The public has a strong belief that utilizing an artificial intelligence-based tax system will be comfortable, safe, and secure.

Objects
1) To know the impact of AI on the direct tax administration reform.
2) To understand benefit of artificial intelligence in Indian taxation system
3) To know about the awareness of taxpayers towards adoption of Artificial Intelligence based tax system.

RESEARCH METHODOLOGY

Research Methodology plays a vital role in any research. Research is just a search for knowledge. It can also be defined as a scientific and systematic search for specific information regarding any particular topic. Research is searching from known to unknown. Our instinct always motivates us to explore unknown facts whenever we encounter strange things.

The nature of this research is descriptive. Regarding historical perspective, tax policy and its structure, current situation, and worldwide comparison, the study will be grounded in secondary data.

This research paper relies on secondary data collection from various sources, including:
Secondary Data: Reviewing existing academic literature, government reports, and case studies on AI applications in tax administration.
Case Studies: Analyzing case studies from countries that have integrated AI into their tax compliance systems, with a focus on India's efforts in implementing AI tools.What is artificial intelligence?
According to the father of Artificial Intelligence, John McCarthy, it is —The science and engineering of making intelligent machines, especially intelligent computer programs. Artificial Intelligence is a way of making a computer, a computer-controlled robot, or a software think intelligently, in the similar manner the intelligent humans think.

Applications of AI in Income Tax Compliance

AI applications in income tax compliance can be categorized as following:
a) Automating Tax Filing and Documentation
AI-based tools automate the preparation and filing of tax returns, allowing taxpayers to upload their financial data, which AI systems process and use to generate accurate tax returns.

b) AI for Fraud Detection and Risk Profiling
AI plays a critical role in identifying fraudulent tax filings and potential tax evasion activities. By analysing taxpayer data, AI systems can detect anomalies such as underreporting of income, excessive deductions, and

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mismatched declarations.

- **Anomaly Detection**: Using unsupervised machine learning, AI can detect outliers in tax returns, which could indicate fraudulent behaviour or errors.
- **Predictive Analytics**: AI tools can predict the likelihood of non-compliance based on data patterns, helping tax authorities focus on high-risk taxpayers.

c) Tax Audits and Compliance Monitoring

AI tools assist tax authorities in performing more efficient and targeted audits by analysing tax returns in real-time. The AI system can flag potentially suspicious returns, reducing the need for a full audit and streamlining the process for authorities.

- **Automated Audits**: AI systems can automatically assess whether a taxpayer's return is in compliance with tax laws by cross-referencing data from multiple sources (e.g., GST returns, banking records).
- **Cross-Verification**: AI can cross-check income tax returns with other financial databases to detect discrepancies or underreported income.

d) Customer Service and Assistance

AI-powered chatbots and virtual assistants are used by tax authorities to offer support to taxpayers. These AI systems can answer queries, provide filing guidance, and inform taxpayers about deadlines and due dates.

- **AI Chatbots**: Chatbots equipped with natural language processing (NLP) capabilities help taxpayers navigate the complexities of tax filing.
- **Self-Help Systems**: AI systems assist in answering common questions regarding deductions, exemptions, and filing procedures.

Benefits of AI in Tax Compliance

The use of AI in income tax compliance provides numerous advantages:

1) Efficiency and Speed

AI reduces the time required for tax filing, processing, and auditing, significantly speeding up the entire tax compliance process. Automation eliminates the need for manual data entry, reducing operational delays.

2) Cost Reduction

By automating repetitive tasks such as data entry, document verification, and tax calculation, AI reduces administrative costs for tax authorities and taxpayers.

3) Accuracy

AI systems are less prone to human errors, leading to more accurate tax filings, calculations, and audit results.

4) Better Compliance

By simplifying the tax filing process and providing automated assistance, AI improves taxpayer compliance by making the process more accessible and user-friendly.

Challenges in AI Integration for Tax Compliance

There are challenges associated with integrating AI into tax systems:

1) Data Privacy and Security

The use of AI requires access to vast amounts of taxpayer data, raising concerns about data security, privacy, and the risk of misuse. Proper safeguards and regulations must be in place to protect sensitive financial information.

2) Technical and Infrastructural Barriers

The integration of AI into existing tax systems can be challenging, especially in countries with outdated infrastructure or limited access to technology. Additionally, many tax systems still rely on manual processes, which makes AI adoption more difficult.

CONCLUSION

AI is revolutionizing income tax compliance by automating tax filing processes, improving fraud detection, streamlining audits, and enhancing customer service. While there are challenges such as data privacy concerns and infrastructural limitations, the benefits of AI in tax administration far outweigh the drawbacks. Governments worldwide, including India, are increasingly recognizing the potential of AI to improve tax compliance systems. The future of income tax compliance lies in further integration of AI technologies, combined with comprehensive regulations to ensure data privacy, fairness, and transparency.

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