

The Study about the contribution of Artificial Intelligence in managing the Tax System: With respect to the technical difficulties

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Abstract

With the beginning of the technologically advance era, multiple software has been launched to make the complex tasks simpler. One of the prominent man-made innovations of this time is 'Artificial Intelligence'. It is basically a robotic man-made software which has reduced the red-tapism and the extra hard work of human beings. Now-a days, AI is mostly used to reduce the excessive paperwork, find solution to the complex technical breakdown, and reduce the duration of the completion of a particular task. In this relevance, the AI is playing a magnificent role in the tax management of India. The tax system of India is filled with many challenges. It has become a complex nexus of paperwork and complicated rules and regulations, creating a struggle for the general public and the government officials in terms of maintaining a proper record and filing the tax on time. The current obstructions of the Indian Tax System are: GST implementation, Tax Evasion, Rules & Regulations Complexities, and Technical Glitches. Indian Population is segregated on the basis of language, education, culture, ethnicity, etc. Therefore, it becomes difficult to put all of them under one head. Some of the Population might be technically equipped where as others may not. In this case, the tax filling on the online basis is also not solving the problems for the population which are technically unsound. Overall, the tax filings and the tax monitoring both have become a complicated task at the ground level. However, as the time is evolving people are finding easier paths and solutions to the complex problems. In pursuance of this, AI is the new solution to the complexities of this generation. The introduction of AI into the world of tax has created an absolute remarkable change in its management and monitoring style. It reshaped the tax industry and proved to be a blessing for their future growth. Under this research paper, the primary focus will be on the indulgence of AI in the tax industry and creating an environment which is free from the technical complexities. The paper will be targeting the data generated from the present tax industry based on the secondary research & collected from the relevant news articles, public notes and reviews, Government websites and journals. The graphs will be given to highlight the important information with clarity. The paper will be concluded by highlighting the significance of artificial intelligence in resolving the technical difficulties faced by the officials and the tax payers and also reducing the Red-Tapism.

Keywords: AI, Tax management, Tax payers, Technical Errors.

1. Introduction

“Some people call this artificial intelligence, but the reality is this technology will enhance us. So instead of artificial intelligence, I think we'll augment our intelligence.”

—Ginni Rometty

As the time is growing, humans have developed easier solutions to the complex problems. AI is considered as a man-made solution to many technical complexities. It has enhanced the work culture by removing many challenges which were earlier

considered as a hindrance towards a work process. In relevance to this, the AI has played an important role in managing the tax system of the country. The tax management of India is considered to be a challenging task. It is surrounded with inflexible rules, regulations and Red-Tapism. Although, the digitisation has reduced its complexities but still there is strong requirement of a particular software which can make things a bit simpler and more comfortable for the The introduction of AI in the Indian tax system has re-engineered and re-structured the management of the tax system. From automated tax payments to AI – based chat boxes available on the websites for the guidance of the customers are some benefits which AI has provided to the tax payers [1].

1.1. Smart Transformation of the tax Landscape

- Gen AI technologies can be used by the taxpayers for computing their tax records which can make the process of tax filing easier.
- Automated Tax mechanisms can be used for the tax payment based on the tax amount computed by the tax payers.
- In case of the Direct Tax Reforms, the Income tax department uses the AI technology to streamline & automate it.
- AI natural language processing enables a verification process automatically and also help in cross-referencing of financial records.
- Gen-Ai tools can be used for digital e-invoicing, e-way bills and GST filling.
- Gen- AI tools can be used for the risk assessment and transparency in the e-filing process [2].

1.2. Digitisation of the Tax departments

- AI has reduced the lethargic and taxing paper work and also decreased the huge team of people which were earlier difficult to manage for the officials.
- AI tools are being used by the authorities for the prevention of the non-compliance done by the tax payers.
- The accurate scrutinization of the tax reports and the transparency of the Gen AI tools will

help in the hassle-free accessibility of the tax records and seamless Tax settlement

- The customization of the Indirect taxes according to the earning of the individuals will be achieved with the help of AI tools and the vertical equity will also be gained.
- The AI algorithms will be used to analyze the tax returns, financial transactions and the payment behavior of the tax payers [3].

1.3. Gen AI Tools used for the Tax Management

- Gen AI tools will be used for the GST filing such as GSTN system will be automatically detect the tax evasion cases.
- AI chat box like JUDY assists in GST filing and also answers the compliance queries in detail.
- AI compliance monitoring tools which will be used to keep a watch on the missing returns, penalties and errors in the filing process.
- AI based verification process will enhance the security and accuracy of the return filings, penalties and potential frauds for the future.
- AI tools used for the prediction of doubtful behaviour of some tax payers to avoid any form of tax default.
- There are several digital assistants are present for addressing the queries related to the tax filing and data analysis without human intervention is also possible [4].

1.4. Developments Promised by the Artificial Intelligence in the Tax landscape

- Handling the legal and ethical aspects of the tax administration
- Bringing transformation in the tax filing process and maintain the record
- Helping the tax consultants by automating repetitive tasks and focus on the value-added services.
- Detection of the luxury expenditure with the social media scan
- Automatic tax deductions in digital transactions and reducing tax evasions
- It clearly states the tax- payers past filing

record history and also enhances the tax payers tax literacy level.

- It keeps a track on the hi-value transactions, property purchases, foreign remittances and other digital payments.
- Overall, AI is setting a new milestone in the tax management of the country. It has made the tax monitoring and management process advance and simpler and also creating an ambience where the tax payers as well as the as tax officials are able to fix their problem without much hassle and limitations [5].

2. Literature review

(2024), **Joshua, Hamilton, Gonzalez**, has highlighted the prominence of artificial intelligence in handling the tax revenue and customs administration. The authors have emphasized the advantages of AI in the tax management process in terms of informed decision making, use of generative AI for solving the queries and mitigating the risk.

(2023), **Immerse Outlook**, this article primarily talks about the four basic methods which are being used to re-engineer the tax system. Such as: Increasing the compliance of the tax payers, Gen AI for simplifying the role of humans, digitization of the tax departments and bringing the vertical equity in terms of Indirect taxes.

(2025), **Business today**, this magazine writes about the reshaping of the business strategies with the help of AI which will bounce the economic growth and also affect the tax system [6].

(2025), **Cantens and Tourpe**, this article highlighted the potentiality of the new AI generative tools in resolving the tax payer's queries and also their role in building a strong relationship between the tax officials and the tax payers.

(2019), **Deloitte**, this write up promoted by the company has emphasized upon the role of artificial intelligence it is playing in the tax world. The usage of generative AI tools that has changed the dimensions of the tax management.

(2024), **Thomsan Reuters**, this article focuses upon the transformation of the accounting structure due to the advent of the generative AI into the tax management system.

(2024), **Nanavati, Goel and Malik**, this article talks

about the role of GenAI in the taxation. It focused upon the tools used for tax compliance and monitoring and address the challenges it might face in the future.

(2024), **PWC**, this article specifies the effective uses of AI in preventing the discrepancies, and forgeries in the tax administration and also improve the experience of the tax payers [7].

2.1. Need for the Research Study

This research is conducted to highlight the significance of Artificial Intelligence in resolving the technical difficulties faced in the tax management. Under this study, the role of Gen AI in managing the technical errors faced by the tax payers and also its contribution in maintaining the security and accuracy by the officials have been specified in detail.

2.2. Research Scope

This research will accentuate the details about the AI tools which could prove to be a solution to the technical errors faced by the tax officials while maintaining the accuracy, record keeping and vertical equity and also increasing the compliance. Moreover, this study would also specify the contribution of AI in managing the technical difficulties faced by the tax payers while doing their tax filing Process [8].

3. Research Methodology

The overall research will be based on the descriptive and explanatory type of research methods. The data will be collected from the authentic sources; the research data will be taken from the secondary sources. Such as: Newspapers, Articles, Journals, Websites. The accuracy of the research study will be proved with the help of authentic tables and graphs, taken from the relevant sources and they will be thoroughly explained in detail. The results and discussions would be based on the data represented graphically extracted from multiple sources, the research scope and the need are been mentioned to specify the base of this study and finally the research paper has been written by considering the ethical and the moral standards and in the end a brief conclusion will be given to know the researcher's perspective clearly [9].

3.1. Data Analysis

The data will be represented diagrammatically&

graphically, taken from multiple relevant and authentic sources to specify the role of AI in resolving the technical difficulties from the tax

management Shown in Figure 1 Development of AI in Taxation [10].

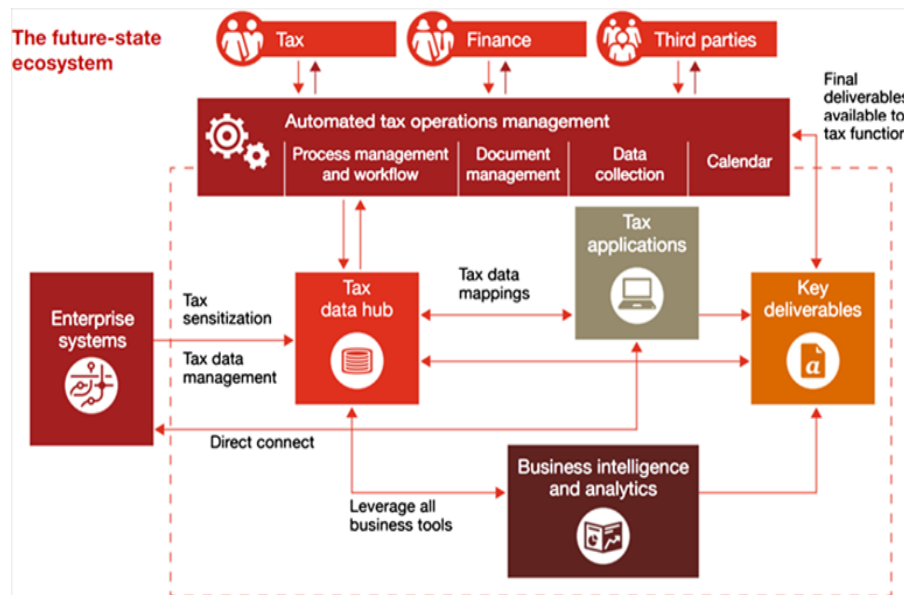


Figure 1 Development of AI in Taxation

3.2. Figure 1 analysis

This diagram represents the future state of AI powered tax system. It depicts the automated tax operations, process management, Data collection and many more operations which an AI can performs and eventually the tax management would be much hassle free and all the functions involved in the tax management process would be completed with ease and flexibility Shown in Figure 2 [11].

daily routine work but the other graph also states that the 44% of people are willing to consider it for their department work. This data clearly states that in the currently AI is not very frequently used in the tax management but in near future people are willing to consider it as an option to solve their daily work hassle Shown in Figure 3 [12].

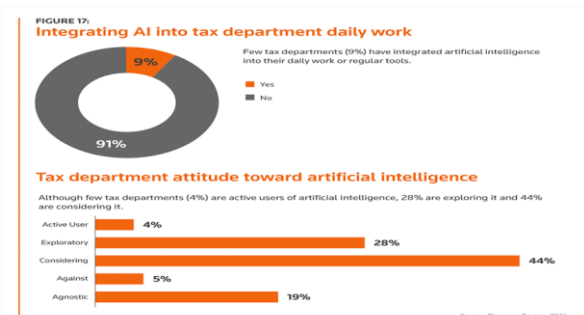


Figure 2 Data taken from Thomsonreuters.com

3.3. Graphical 2 Analysis:

The above-mentioned graph clearly represents that only 9% of tax departments are using AI into their



Figure 3 Pictorial representation taken from Redress Compliance

This pictorial representation clearly states the role of AI in performing multiple functions of the tax

management system. It highlights the reductions of the errors and the automated system would make the functioning of the tax system much simpler and easier [13 - 16].

Conclusion

This research study talks about the future of Artificial Intelligence in the tax management process. The tax management has become a complex task as the usage of AI is still quite less in usage. But the mentioned graphs clearly stated that people are willing to consider this software in future for the resolution of their technical difficulties. The departments where AI is being used has shown remarkable benefits in terms of compliance redress, bringing vertical equity in the indirect taxes, GSTN for filling the GST return by the corporate and resolving the queries with the help of digital assistants and chat box. AI has not just helped the tax officials for maintaining the accuracy and security but also to the tax payers who were earlier burdened with loads of paper work. Overall, this research study has tried to specify the importance of AI in building a flexibility in the process of Tax management.

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