

# The Scope of AI Applications to Tax Evasion in Enhancing Tax Enforcement Capabilities

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## ABSTRACT

This study explores the expansive scope of artificial intelligence (AI) applications in enhancing tax enforcement capabilities, specifically targeting tax evasion. Through a survey using Smart PLS version (4) to analyze the data. The study highlights how the scope of AI, which is an Exploration of new AI technologies (ENT), Integration with existing systems AI (IES), The overall scope of AI applications (OSA), Perceived scalability AI (PS), can significantly improve the detection and prevention of tax evasion. Findings demonstrate that AI can identify complex patterns of fraudulent activity and predict potential risks more accurately and efficiently than traditional methods. The study also found no statistically significant relationship between integration with existing systems AI and tax evasion in tax enforcement capabilities.

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## 1. Introduction

Here introduces the paper, and put a nomenclature if necessary, in a box with the same font size as the rest of the paper. The paragraphs continue from here and are only separated by headings, subheadings, images and formulae. Recent years have seen a considerable increase in interest in the field of artificial intelligence (AI) and tax evasion detection, which is indicative of a growing understanding of the potential benefits of cutting-edge technology for improving tax compliance efforts. For governments throughout the world, tax evasion is a serious problem as it reduces income and jeopardizes the integrity of fiscal institutions (Almatarneh, 2023). To address this ongoing problem, tax authorities are relying more and more on artificial intelligence (AI) technology to support their efforts in identifying and stopping tax evasion.

The convergence of the scope of artificial intelligence and tax evasion detection offers a viable approach to augment enforcement capacities and tackle the intricacies involved in detecting fraudulent activity (Badran, 2023, Zaqeaba, & Iskandar, 2020). Artificial intelligence scope, which is the exploration of new

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AI technologies, Integration with existing systems AI, the overall scope of AI applications, perceived scalability of AI, and highlighting of possible cases of evasion more accurately and effectively than they could with conventional techniques. Furthermore, the scope of artificial intelligence helps tax authorities to adjust to changing evasion techniques (Jebril, et al, 2023). This ability to adapt is especially important when dealing with increasingly complex evasion tactics, which frequently take advantage of gaps and weaknesses in the current enforcement frameworks (Jarrah, et, al 2023). However, the use of AI in tax evasion detection also brings up significant issues with accountability, transparency, and privacy. Since AI systems require large amounts of data, especially sensitive taxpayer information, data privacy and protection have become critical issues (Zaqeeba, et al, 2024a). Additionally, it is difficult to guarantee justice and equity in enforcement outcomes due to the opaque nature of AI algorithms and the possibility of algorithmic bias (Yalamati, 2023, Jebril, et al. 2024). Despite these challenges, the potential benefits of the scope of AI in combating tax evasion are substantial. By leveraging advanced data analytics and machine learning techniques, tax authorities can enhance their capacity to identify noncompliance, deter fraudulent activities, and ultimately strengthen the integrity of fiscal systems (Zaqeeba, et al, 2024b).

This paper aims to clarify the potential benefits and drawbacks of using AI technology to improve tax enforcement by conducting a thorough analysis of the range of applications in tax evasion detection. This review attempts to give a comprehensive perspective of the revolutionary potential of AI in transforming the landscape of tax compliance and enforcement in the digital era by combining ideas from previous research and scholarly publications.

## 2. Literature Review and development of hypotheses

Since the introduction of the scope of AI technology, the field of tax evasion detection has undergone a radical transformation, by analyzing key publications in the field. Wang and Wang (2020) provided a new approach to managing personal tax collection that uses artificial intelligence (AI) to improve tax compliance, especially for middle-class taxpayers. Their research demonstrates how AI may be used practically to target particular taxpayer groups, underscoring the technology's potential to increase the efficacy and efficiency of tax administration. Furthermore, Popovič and Sábo (2022) explore the complexities of taxing AI and robotics, addressing the difficulties of classifying and characterizing AI-driven assets for taxes. Their work sheds light on larger socio-economic ramifications by highlighting the legal and regulatory issues surrounding the incorporation of AI in tax policy. However, Kamil's (2022) investigation of the technology's effects on e-filing and digital service tax administration provides insights into the impact of AI scope on tax compliance. Kamil shows how the exploration of new AI technologies may improve taxpayer engagement, expedite tax administration procedures, and increase tax compliance through empirical study. An extensive examination of AI-driven tax automation is given by Rouane (2024), who also offers a thorough study of its prospective applications and ramifications. Rouane explains the revolutionary potential of Integration with existing systems AI in altering tax enforcement paradigms and promoting fiscal integrity through a thorough analysis of the literature and case studies already in existence. Moreover, in their investigation on the use of AI chatbots for income tax prediction in India, Singh and Aggarwal (2023) demonstrate the promise of the overall scope of AI applications for tax administration. Their research highlights the importance of artificial intelligence (AI) technology in raising the precision and efficacy of tax prediction models, opening the door to improved revenue collection and compliance. Savić and colleagues (2022) investigate the application of a hybrid unsupervised outlier detection technique for managing the risk of tax evasion. Their study highlights how AI-based detection systems, which can handle massive amounts of transaction data from several countries at once, have scaling potential. The perceived scalability AI methodology helps tax authorities effectively expand their detection efforts by integrating cutting-edge perceived scalability AI.

By synthesizing insights from these diverse scholarly contributions, this literature review seeks to provide a nuanced understanding of the multifaceted landscape of AI applications in tax evasion detection. Through an Exploration of new AI technologies, Integration with existing systems AI, The overall scope of AI applications, and Perceived scalability of AI of tax enforcement. Based on the above, the following hypotheses will be assumed:

- H1:** Exploration of new AI technologies in tax evasion detection significantly enhances tax enforcement capabilities
- H2:** Integration with existing systems in tax evasion detection significantly enhances tax enforcement capabilities.
- H3:** The overall scope of AI applications in tax evasion detection significantly enhances tax enforcement capabilities.
- H4:** Perceived scalability of AI technologies in tax evasion detection significantly enhances tax enforcement capabilities.

### 3. Methodology

This study's purpose is to evaluate the scope of AI applications to tax evasion in enhancing tax enforcement capabilities. The technique entails a methodical approach to data collecting, focusing on pertinent stakeholders to get information on the prospects, problems, and present practices related to the deployment of AI in tax payment monitoring.

Survey design creates a structured survey tool to gather in-depth data about the scope of AI applications to tax evasion in enhancing tax enforcement capabilities. Questions on the overall scope of AI applications, integration with existing systems, exploration of new AI technologies, perceived scalability, and the overall effect on tax payment monitoring were all included in the survey.

The sample is people working in the tax department which consists of tax officials and AI experts. In Jordan, the tax department consists of 30 sections, it was distributed 5 questionnaires for each branch. 142 questionnaires were approved, and 8 questionnaires were excluded out of 150.

The quantitative analysis the collected survey data using the smart pls4 program. This analysis included descriptive statistics to provide an overview of the general trends and patterns in the scope of AI applications in tax evasion.

Based on earlier research on the study's topic, a questionnaire was created. three sections offset the given questionnaire, which was designed with the subject of the current study in mind. The demographic information about the employees—including their gender, age, education, experience, and employees—is included in the first section. The second section comprises 28 independent variables, or scope of AI applications components, each represented by four variables: Seven OSA items ranging from OSA1 to OSA7, six IES items ranging from IES1 to IES6, Seven ENT items ranging from ENT1 to ENT7, and eight PS items ranging from PS1 to PS8. Furthermore, seven questions measuring the TE from TE1 to TE7 are included in the third portion. The first stage looks at the validity and reliability of the variables, and the second stage evaluates hypotheses. Table 1 illustrates this.

Table 1: Demographic characteristics

<b>Gender</b>	Male	97
	Female	45
<b>Age</b>	22 years and younger	12
	23-34 years	59
	35-45 years	55
	46-55 years	13
	More than 56 years	3
<b>Education</b>	Intermediate diploma	19
	Bachelor's degree	102
	Master	13
	Doctorate	6
	less of Intermediate diploma	2
<b>Experience</b>	Less than one year	12

	From 1 to 5 years	25
	From 6 to 10 years	61
	From 11 to 15 years	32
	More than 15 years	12
<b>Employees</b>	Auditor	16
	Tax accountant	112
	Directorate Director	14

Drawing from the literature review mentioned above, the researchers created the study model seen in Figure 1.

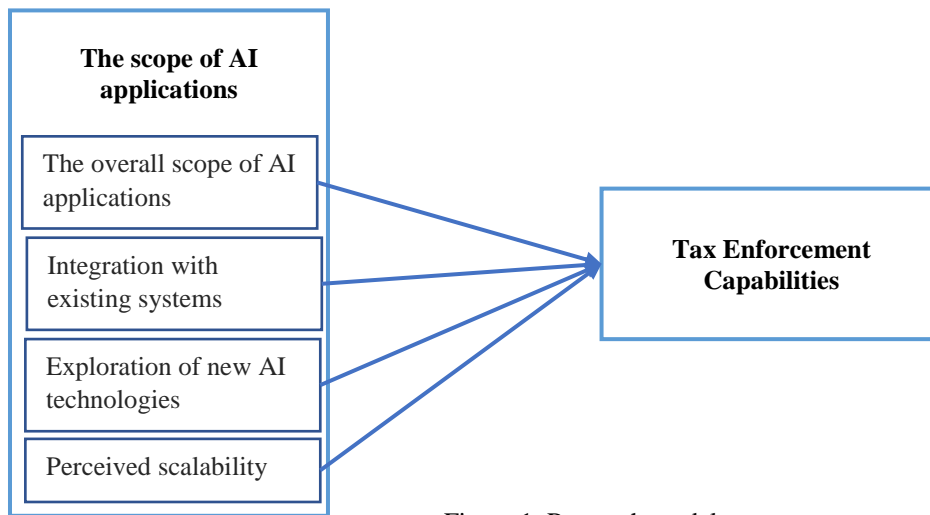


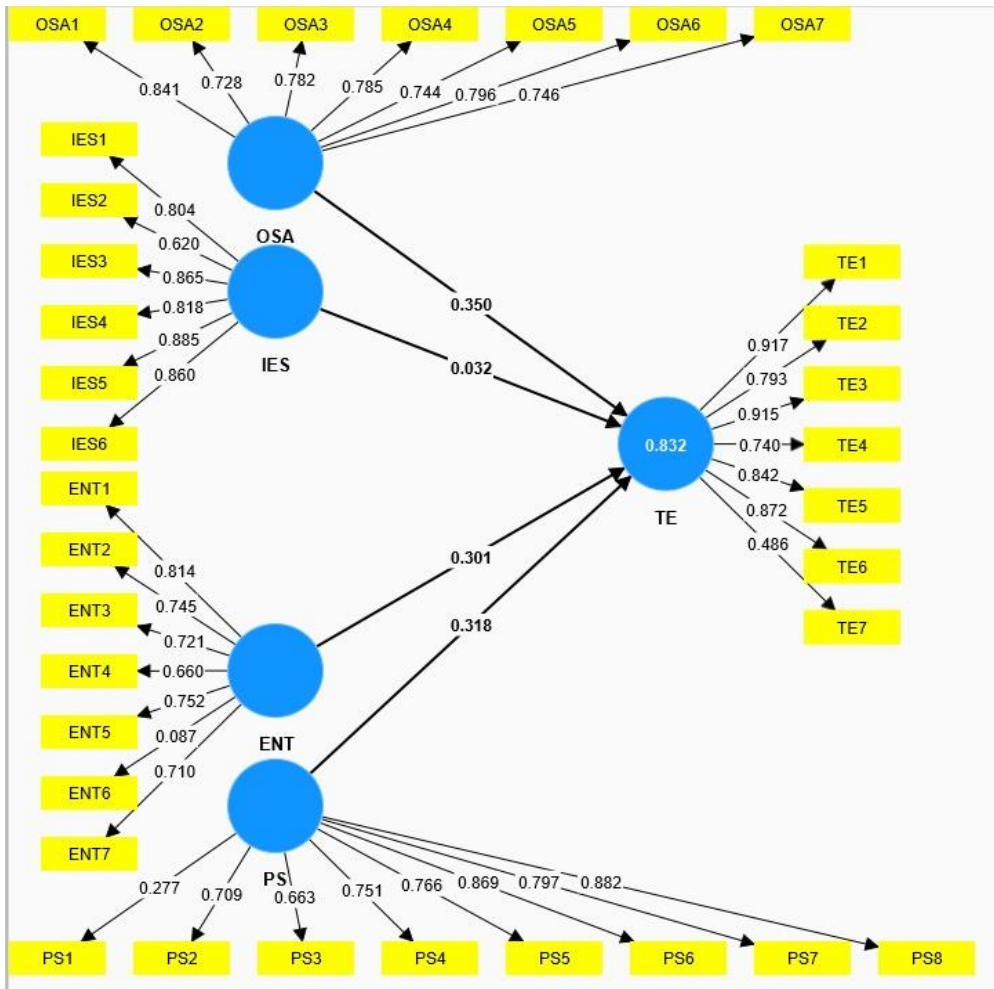
Figure 1. Research model

#### 4. Data Analysis

In this study, two applications of the partial least-squares (SEM-PLS4) approach were made (Anderson and Gerbing 1988). The first step involved determining the validity and consistency of the variables, while the second stage involved evaluating the hypotheses.

##### 4.1 The Standards of Measurement

First, the route loadings are displayed in Figure 2. Furthermore, the factor can be employed for analysis if the factor loading for each element is equal to or higher than 0.70, (Sarstedt, et al, 2021).



Note: Exploration of new AI technologies (ENT), Integration with existing systems AI (IES), The overall scope of AI applications (OSA), Perceived scalability AI (PS).

Figure 2: Factor loadings for the suggested model.

Table 2 shows that factor loadings for all items were higher than the required value of 0.70, except for items (IES2, ENT4, ENT6, PS3, and TE7) that were removed from the scale because of improper loadings.

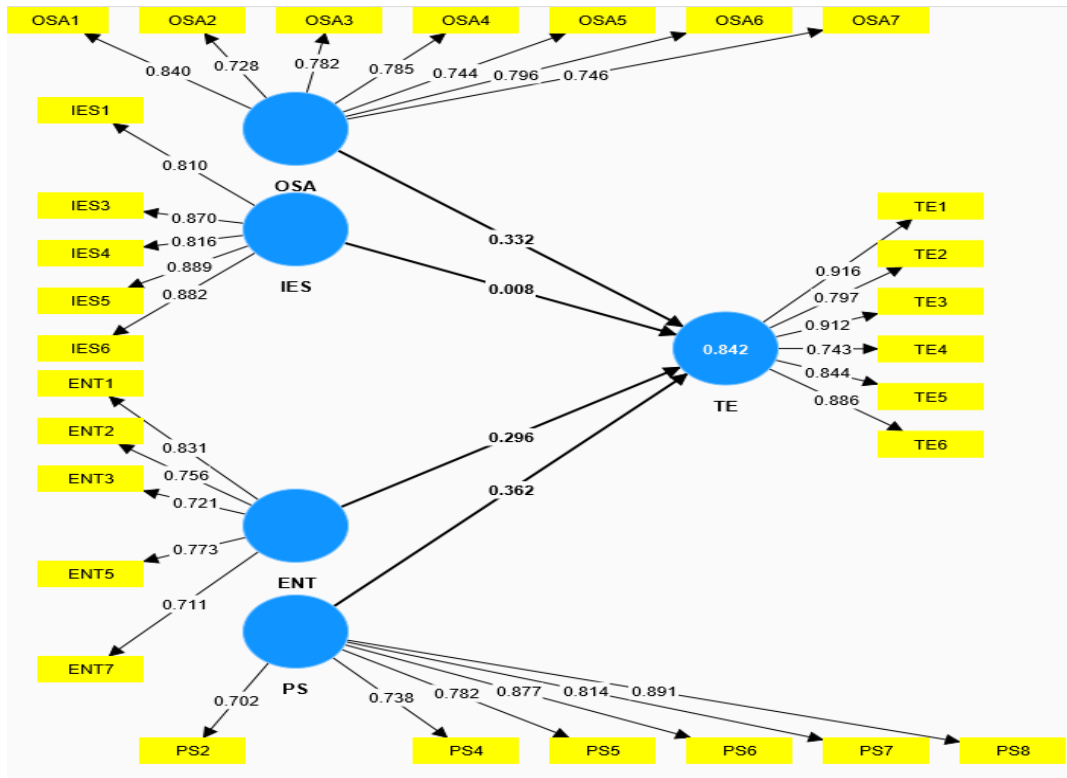
Table 2:

construct	Item	loading (>0.7)	Result
Exploration of new AI technologies (ENT)	ENT1	0.814	Accept
	ENT2	0.745	Accept
	ENT3	0.721	Accept
	ENT4	0.66	Rejected
	ENT5	0.752	Accept
	ENT6	0.087	Accept
	ENT7	0.71	Accept
Integration with existing systems (IES)	IES1	0.804	Accept
	IES2	0.62	Rejected
	IES3	0.865	Accept
	IES4	0.818	Accept

	IES5	0.885	Accept
	IES6	0.86	Accept
<b>The overall scope of AI applications (OSA)</b>	OSA1	0.841	Accept
	OSA2	0.728	Accept
	OSA3	0.782	Accept
	OSA4	0.785	Accept
	OSA5	0.744	Accept
	OSA6	0.796	Accept
	OSA7	0.746	Accept
<b>Perceived scalability (PS)</b>	PS1	0.277	Rejected
	PS2	0.709	Accept
	PS3	0.663	Rejected
	PS4	0.751	Accept
	PS5	0.766	Accept
	PS6	0.869	Accept
	PS7	0.797	Accept
	PS8	0.882	Accept
<b>Tax enforcement capabilities (TE)</b>	TE1	0.917	Accept
	TE2	0.793	Accept
	TE3	0.915	Accept
	TE4	0.74	Accept
	TE5	0.842	Accept
	TE6	0.872	Accept
	TE7	0.486	Rejected

Exploration of new AI technologies (ENT), Integration with existing systems AI (IES), The overall scope of AI applications (OSA), Perceived scalability AI (PS), Tax enforcement capabilities (TE).

Secondly, the variables (a1, b5, b6, c1, d7, d8, d9, e1, e2, e4, e5, and e8) were eliminated from the route loadings for the updated model at the beginning since their values were less than 0.70. Refer to Figure 3.



Note: Exploration of new AI technologies (ENT), Integration with existing systems AI (IES), The overall scope of AI applications (OSA), Perceived scalability AI (PS), Tax enforcement capabilities (TE).

Figure 3. Factor loadings in the adjusted framework

This investigation looks at the route loadings for the altered model that is displayed in Table 2. Once a route loading exceeds 0.70, it is considered acceptable. Thirdly: the p-value of (0) indicates that accept the result of the Jarque-Bera test, which was performed to verify this assumption in Table 3. The conclusion is that the data is regularly distributed as a result of the acceptance of the alternative hypothesis that the data is normally distributed. Additionally, two of the most popular methods for describing the distribution or forms of the data are skewness and kurtosis. Kim (2013) suggests that the normal value for Kurtosis is less than absolute 7, and skewness is less than absolute 2. Table 3 shows the normality analysis of the variables.

Table 3: Normality analysis

Item	Excess kurtosis<7	Skewness<2	Number of observations used	Cramér-von Mises test statistic	Cramér-von Mises p value
ENT	4.528	-2.032	142	1.435	0.000
IES	3.403	-1.895	142	2.022	0.000
OSA	3.161	-1.811	142	1.687	0.000
PS	3.577	-2.023	142	2.587	0.000
TE	4.83	-2.39	142	3.614	0.000

Note: Exploration of new AI technologies (ENT), Integration with existing systems AI (IES), The overall scope of AI applications (OSA), Perceived scalability AI (PS), Tax enforcement capabilities (TE).

Table 3 shows that the kurtosis of the variables is less than absolute 7, and skewness of the variables are less than absolute 2. Because the kurtosis and skewness values are smaller than absolute 2 and 7 respectively, it is evident that the data are regularly distributed.

Fourthly: Table 4 demonstrates how the Fornell–Larcker criterion was used in this work to examine discriminant validity.

Table 4: By using the Fornell-Larcker Criterion, discriminant validity

	ENT	IES	OSA	PS	TE
ENT	0.76				
IES	0.587	0.854			
OSA	0.716	0.413	0.775		
PS	0.758	0.436	0.737	0.804	
TE	0.816	0.477	0.75	0.77	0.852

Note: Exploration of new AI technologies (ENT), Integration with existing systems AI (IES), The overall scope of AI applications (OSA), Perceived scalability AI (PS), Tax enforcement capabilities (TE).

Table 4 shows a correlation between exogenous constructs is excellent if it is less than 0.90 and less than 0.85 (Hair et al. 2017). This leads to the achievement of the discriminant validity of complete notions.

The analysis results also showed the R-squared value is 0.842, meaning that the independent variables in this investigation can account for 842% of the variation in the TE.

## 5. Hypothesis Test

Table 5 presents the results of the hypothesis testing for H1, H2, H3, and H4.

Table 5: The structural path analysis result

Path	Sample mean (M)	Standard deviation (STDEV)	T- value	P values	Effect Beta	Result
ENT -> TE	0.293	0.063	4.704	0.000	0.296	Supported
IES -> TE	0.015	0.053	0.159	0.873	0.008	Not Supported
OSA -> TE	0.331	0.078	4.275	0.000	0.332	Supported
PS -> TE	0.36	0.086	4.192	0.000	0.362	Supported

Note: Exploration of new AI technologies (ENT), Integration with existing systems AI (IES), The overall scope of AI applications (OSA), Perceived scalability AI (PS), Tax enforcement capabilities (TE).

According to Hair et al. (2017), there is a T-value greater than 1.96 between ENT and TE, it is 4.704 in Table 5, which means that it is statistically significant.

A t-value of 0.159 between IES and TE, is less than 1.96 (Hair et al. 2017) in Table 5, which means it is not statistically significant.

A t-value of 4.275 between OSA and TE, is greater than 1.96 (Hair et al. 2017) in Table 5, which means it is statistically significant.

A t-value of 4.192 between PS and TE, is greater than 1.96 (Hair et al. 2017) in Table 5, which means it is statistically significant.

Moreover, the effect beta result is 0.296, indicating that a single change in the ENT produces a 0.296 change in EP.

The effect beta result is 0.008, indicating that a single change in the IES produces a 0.008 change in EP.

The effect beta result is 0.332, indicating that a single change in the OSA produces a 0.332 change in EP.

The effect beta result is 0.362, indicating that a single change in the PS produces a 0.362 change in EP.

## 6. Discussion

The scope of artificial intelligence (AI) in identifying tax enforcement capabilities has attracted considerable attention due to its capacity to augment the effectiveness and efficiency of tax evasion procedures. The exploration of new artificial intelligence (AI) technologies in tax evasion detection has opened up innovative pathways for enhancing tax compliance and modernizing tax administration systems. This result was consistent with a study by Yalamati (2023), the investigation of the Exploration of new AI technologies, in particular machine learning techniques, may greatly enhance the detection of fraudulent activity by looking for patterns and abnormalities in large datasets that conventional approaches could miss. Additionally, Saragih et al. (2023) the broader applicability of the exploration of new AI technologies in tax



enforcement capabilities beyond mere fraud detection, contributing to overall system efficiency and modernization. Moreover, Adelekan et al. (2024) that the exploration of new AI technologies in data analysis and fraud detection, blockchain's strength lies in creating an unalterable record of transactions, thereby preventing manipulation and enhancing trust in the tax system.

One important area for improving the efficacy and efficiency of tax enforcement capabilities is the integration of artificial intelligence (AI) with current systems for the identification of tax evasion. However, the current study did not find Integration with existing systems of AI in the Jordanian Tax Department. This is due to the difficulties in integrating artificial intelligence (AI) with current tax systems, especially in ensuring that AI tools are interoperable with legacy systems and do not worsen already-existing disparities in tax enforcement (Alm, 2021). Moreover, the organizational and technological difficulties in integrating such hybrid systems, such as the requirement for a strong data infrastructure and the retraining of staff members in properly using AI technologies (Savić et al. 2022). Similarly, Hassan, and Andriansyah (2023) how important it is to handle data security and privacy issues because these are crucial when working with sensitive financial data, with the Integration of existing systems AI

Zaqeeba, et al, (2024a) study was consistent with the results of this study, where the tax authorities' surveillance skills can be greatly improved by the whole overall scope of AI applications (OSA), which makes it possible to discover tax enforcement capabilities schemes with greater accuracy. Artificial intelligence (AI) systems may detect trends and anomalies suggestive of tax enforcement capabilities by utilizing machine learning algorithms and data analytics, this can enhance compliance and minimize the tax gap (Yalamati, 2024). This demonstrates how AI has the ability to revolutionize the tax enforcement industry by enhancing conventional approaches with cutting-edge technology solutions. The overall scope of AI applications poses questions regarding data privacy and the protection of taxpayers' rights, even if it can improve the efficacy and efficiency of tax administrations (Faúndez-Ugalde, et al, 2020). So a well-rounded strategy that guarantees the use of the overall scope of AI applications in tax enforcement does not violate people's rights, pointing out that strong legal frameworks are necessary to prevent abuses. Furthermore, the overall scope of AI applications can help design more complex tax compliance tactics by producing insights from massive databases (Zaqeeba, et al, 2024b). Tax authorities can keep ahead of skilled tax evaders by using AI-driven knowledge generation to predict and resist new evasion strategies. AI-backed proactive strategy improves tax administrations' strategic capacities and helps create more adaptable and dynamic tax systems.

One important element affecting the uptake and efficacy of artificial intelligence (AI) scope in tax enforcement capabilities detection is its perceived scalability. This result was consistent with a study by Savić et al. (2022) By integrating cutting-edge machine learning algorithms with conventional audit procedures, the hybrid methodology helps tax authorities effectively expand their detection efforts. According to Gaozhao, et al, (2024), there are worries over AI's scalability in terms of preserving the quality and customization of services, even if it is thought to be capable of managing massive data processing and producing consistent results. artificial intelligence (AI) to be effective in detecting tax enforcement capabilities, needs to be connected with systems that guarantee accountability, transparency, and user trust all of which are essential for gaining the public's approval and cooperation. Füller et al, (2022) their conclusions are pertinent to tax enforcement capabilities because they highlight how crucial it is to create AI systems that are both technically scalable and flexible enough to adjust to shifting operational requirements and regulatory contexts. To ensure long-term sustainability and efficacy, scalable AI systems for tax evasion detection must be adaptable enough to take into account new data sources, adjust to changing tax evasion strategies, and adhere to legal changes (Zaqeeba, & Iskandar, 2020). Large volumes of data can be handled with improved security through the integration of various technologies, which helps solve some of the scaling issues that standalone AI systems have (Faccia, & Mosteanu, 2019).

## **7. Implications and Limitations and Future Research**

The incorporation of artificial intelligence (AI) in the identification and prosecution of tax evasion carries significant ramifications for tax authorities worldwide. Tax administrations may greatly increase their enforcement powers, raise compliance rates, and close the tax gap by utilizing cutting-edge AI technology.

Nevertheless, there are a number of restrictions and difficulties with using AI in this field that must be resolved. Large volumes of data may be processed and analyzed by AI technology much faster and with greater accuracy than by human auditors. By identifying trends and abnormalities that traditional approaches can overlook, artificial intelligence (AI) can detect fraudulent actions in tax. Furthermore, predictive analytics powered by AI can predict possible tax evasion based on past performance and behavioural trends. Additionally, modernizing tax administration procedures is possible with the incorporation of AI into tax systems. Moreover, AI systems are scalable and able to manage growing data volumes and change to accommodate new strategies for tax evasion.

(Al Obaidy et al., 2024; Aloqaily & Al-Zaqeaba, 2024; Al-Zaqeaba et al., 2024D; Jebriil et al., 2024; Shubailat et al., 2024; Al-Zaqeaba and Basheti, 2024a; Jarah et al., 2024; Ahmad et al., 2024; Ababneh et al., 2024; Razzak et al., 2024; Al-Zaqeaba and Basheti, 2024; Al-Taani et al., 2024; Shubailat et al., 2024C; Al-Zaqeaba and Basheti, 2024). However, there are serious privacy and security issues when using AI for tax enforcement. Besides, some tax administrations might not have the necessary technology infrastructure or experience to implement AI technologies. Further, because biased data can produce biased results, AI systems are only as good as the data they are trained on. Additionally, regulations governing the use of AI in tax enforcement must strike a balance between practicality and morality.

Supplementary, to provide comprehensive methods for the identification and compliance of tax evasion, future research should carry out more explorations into the integration of AI with other new technologies, such as blockchain. Empirical research on the long-term effects of AI deployment on taxpayer behavior and tax compliance rates will also be essential. Future research must also prioritize understanding the ethical ramifications and protecting data privacy when deploying AI technology in tax administration. Furthermore, to ensure compatibility and interoperability, future research should concentrate on creating standardized protocols for AI integration with older tax systems. Empirical research is also required to determine how AI integration affects tax compliance and enforcement efficiency over the long run. Gaining the public's trust and assuring the long-term usage of AI in tax administration would require addressing ethical concerns and data protection issues. Subsequent investigations ought to centre on tackling these moral and legal quandaries, delving into the creation of all-encompassing regulatory structures that harmonize the advantages of artificial intelligence with the defence of personal liberties. Empirical research is also required to assess the long-term effects of AI on tax compliance and to improve the fairness and efficacy of AI models. The full potential of AI in tax evasion detection may be achieved by tackling these issues, which will help create more reliable and just tax systems. Future work should concentrate on creating AI frameworks that strike a compromise between scalability and these crucial elements to guarantee that AI systems can manage massive data processing while upholding strict criteria for accuracy, transparency, and compliance. To evaluate these frameworks and inform policy decisions, empirical research on the long-term scalability of AI solutions in various tax administration contexts is important.

## 8. Conclusion

The scope of AI applications in enhancing tax enforcement capabilities is both vast and promising. Artificial Intelligence (AI) has the potential to revolutionize tax administration by enhancing the identification and mitigation of tax evasion. Artificial intelligence (AI) can improve the scalability, accuracy, and efficiency of tax enforcement procedures through automation, machine learning, and sophisticated data analytics. The exploration of new AI technologies can effectively identify and prevent tax evasion in real time, and how these technologies can completely transform tax compliance operations by providing more accurate and quick fraud detection capabilities. Tax evolution systems may be updated and made more responsive and efficient by investigating new AI technologies. Additionally, blockchain technology and AI together can provide a complete answer to problems with tax compliance. When correctly connected with current frameworks, the benefits of integrating AI with existing systems outweigh any possible obstacles. legal compliance and strong data management are crucial for the integration of AI. The perceived scalability of AI in tax evasion detection is influenced by several factors, including computational capacity, integration with existing systems, public trust, and regulatory compliance.

## References

- Ababneh, A.M., Jarah, B.A.F., Al-Kharabsheh, A., Al-Zaqeaba, M.A.A., Basheti, I. 2024. The role of human resources management in the development of total quality management in the public and private sectors in Jordan. *Humanities and Social Sciences Letters*, 12(2), pp. 319–330
- Adelekan, O. A., Adisa, O., Ilugbusi, B. S., Obi, O. C., Awonuga, K. F., Asuzu, O. F., & Ndubuisi, N. L. (2024). Evolving Tax Compliance In The Digital Era: A Comparative Analysis Of Ai-Driven Models And Blockchain Technology In Us Tax Administration. *Computer Science & It Research Journal*, 5(2), 311-335.
- Ahmad Moh'D Ababneh & Baker Akram Falah Jarah & Abdulrahman Al-Kharabsheh & Murad Ali Ahmad Al-Zaqeaba & Iman Basheti, 2024. "The role of human resources management in the development of total quality management in the public and private sectors in Jordan," *Humanities and Social Sciences Letters*, *Conscientia Beam*, vol. 12(2), pages 319-330.
- Al Obaidy, A. L. A., Ping, T. A., Ganesan, Y., & Alzaqeba, M. A. A. (2024). Defining Inheritance Risk Management as A New Concept Towards Sustainability of Family Businesses. *The Journal of Muamalat and Islamic Finance Research*, 139-161.
- Al Rousan, S. R. (2024). Green Human Resource Management Towards Digital Transformation In Municipalities In Irbid Governorate. *International Journal of Digital Accounting and Fintech Sustainability*, 1 (1), 2-12. <https://tanmeah.com/wp-content/uploads/2024/08/PAPER-3-TBP.pdf>
- Alm, J. (2021). Tax evasion, technology, and inequality. *Economics of Governance*, 22(4), 321-343.
- Almatarneh, Z., Zaqeaba, N., Jebri, I., & Jarah, B. A. F. (2023). The role of financial accounting technology in improving customer relationship management in Jordanian banks. *Asian Economic and Financial Review*, 13(12), 1008-1019.
- Aloqaily, A. N., & Al-Zaqeaba, M. A. A. (2024, April). The Impact of Green Human Resource Management Practices on Engagement of Employee and Organizational Creativity Towards the Green Environment. In *International Conference on Business and Technology* (pp. 265-276). Cham: Springer Nature Switzerland.
- Al-Taani, A. H. M., Al-Zaqeaba, M. A. A., Maabreh, H. M. A., & Jarah, B. A. F. (2024). Exploring the impact of digital accounting and digital zakat on improving business sustainability in the Middle East and Malaysia. *International Journal of Advanced and Applied Sciences*, 11(1), 56-67.
- Al-Zaqeaba, M. A. A., & Basheti, I. A. 2024. Measurement Problems in Interest-Free Financial Instruments. *Pak. j. life soc. Sci.*, 22(1): 5558-5575. [https://www.pjlss.edu.pk/pdf\\_files/2024\\_1/5558-5575.pdf](https://www.pjlss.edu.pk/pdf_files/2024_1/5558-5575.pdf)
- Al-Zaqeaba, M. A. A., & Basheti, I. A. 2024a. Evaluating the effects of customs policy on supply chain performance. *Afr.J.Bio.Sc.*6(13)(2024).3386-3403. <https://doi.org/10.48047/AFJBS.6.13.2024.3386-3403>
- Al-Zaqeaba, M. A. A., & Basheti, I. A. Measurement Problems in Interest-Free Financial Instruments. *Pakistan Journal of Life and Social Sciences*. <https://doi.org/10.57239/PJLSS-2024-22.1.00410>
- Al-Zaqeaba, M. A. A., Alshehadeh, A. R., Al-Khawaja, H. A., Basheti, I. A., & Lootah, R. E. S. A. (2024D). The role of inheritance risk management in family enterprises to achieve family businesses sustainability in the middle east. *Humanities and Social Sciences Letters*, 12(3), 639-658.
- Badran, A. (2023). Artificial Intelligence between Government and Self-Regulation Policies: A Theoretical Approach. *Hikama*, 4(7).
- Faccia, A., & Mosteanu, N. R. (2019). Tax evasion, information systems and blockchain. *Journal of Information Systems & Operations Management*, 13(1), 65-74.
- Faúndez-Ugalde, A., Mellado-Silva, R., & Aldunate-Lizana, E. (2020). Use of artificial intelligence by tax administrations: An analysis regarding taxpayers' rights in Latin American countries. *Computer Law & Security Review*, 38, 105441.

- Füller, J., Hutter, K., Wahl, J., Bilgram, V., & Tekic, Z. (2022). How AI revolutionizes innovation management—Perceptions and implementation preferences of AI-based innovators. *Technological Forecasting and Social Change*, 178, 121598.
- Gaozhao, D., Wright, J. E., & Gainey, M. K. (2024). Bureaucrat or artificial intelligence: people's preferences and perceptions of government service. *Public Management Review*, 26(6), 1498-1525.
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial management & data systems*, 117(3), 442-458.
- Hassan, M., Aziz, L. A. R., & Andriansyah, Y. (2023). The role artificial intelligence in modern banking: an exploration of AI-driven approaches for enhanced fraud prevention, risk management, and regulatory compliance. *Reviews of Contemporary Business Analytics*, 6(1), 110-132.
- Jarah, B. A. F., Alghadi, M. Y., Al-Zaqeeba, M. A. A., Mugableh, M. I., & Zaqaibeh, B. (2024). The influence of financial technology on profitability in Jordanian commercial banks. *Humanities and Social Sciences Letters*, 12(2), 176-188.
- Jarah, B. A. F., Zaqeeba, N., Al-Jarrah, M. F. M., Al Badarin, A. M., & Almatarneh, Z. (2023). The mediating effect of the internal control system on the relationship between the accounting information system and employee performance in Jordan Islamic banks. *Economies*, 11(3), 77.
- Jebril, I., Almaslmani, R., Jarah, B., Mugableh, M., & Zaqeeba, N. (2023). The impact of strategic intelligence and asset management on enhancing competitive advantage: The mediating role of cybersecurity. *Uncertain Supply Chain Management*, 11(3), 1041-1046.
- Jebril, I., Al-Zaqeeba, M., Al-Khawaja, H., Obaidy, A., & Marashdah, O. (2024). Enhancing estate governance using blockchain technology through risk management in estate governance of business sustainability. *International Journal of Data and Network Science*, 8(3), 1649-1658.
- Jebril, I., Al-Zaqeeba, M., Al-Khawaja, H., Obaidy, A., & Marashdah, O. (2024). Enhancing estate governance using blockchain technology through risk management in estate governance of business sustainability. *International Journal of Data and Network Science*, 8(3), 1649-1658.
- Kamil, I. (2022). Influence Artificial Intelligence Technology For E-filing and Digital Service Tax (DST) in Tax Administration on Tax Compliance. *International Journal of Management Studies and Social Science Research*, 4(1), 144-156.
- Kim, Hae-Young. "Statistical notes for clinical researchers: assessing normal distribution (2) using skewness and kurtosis." *Restorative dentistry & endodontics* 38, no. 1 (2013): 52.
- Lootah, R.E.A. (2024). The Impact of Blockchain Technology on Financial Reporting Practices in UAE. *International Journal of Digital Accounting and Fintech Sustainability*, 1 (1), 2-12. <https://tanmeah.com/wp-content/uploads/2024/07/PAPER-1-TBP-1.pdf>
- Maabreh, H. M. A. (2024). The Role of Financial Technology (Fintech) in Promoting Financial Inclusion A Literature Review. *International Journal of Digital Accounting and Fintech Sustainability*, 1 (1), 2-12. <https://tanmeah.com/wp-content/uploads/2024/08/PAPER-2-TBP.pdf>
- Popovič, A., & Sábo, J. (2022). Taxation of Robots and AI—Problem of Definition. *Financial Law Review*, (25 (1)), 1-16.
- Razzak, A., Ahmad, M. A., Awad, G., & Mohammad, N. (2024). The effect of digital zakat and accounting on corporate sustainability through financial transparency. *Asian Economic and Financial Review*, 14(3), 228-249.
- Rouane, R. (2024). AI-driven Tax Automation: An In-depth Review. 51-31 ,(2)12.
- Saragih, A. H., Reyhani, Q., Setyowati, M. S., & Hendrawan, A. (2023). The potential of an artificial intelligence (AI) application for the tax administration system's modernization: the case of Indonesia. *Artificial Intelligence and Law*, 31(3), 491-514.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In *Handbook of market research* (pp. 587-632). Cham: Springer International Publishing.

- Savić, M., Atanasijević, J., Jakovetić, D., & Krejić, N. (2022). Tax evasion risk management using a Hybrid Unsupervised Outlier Detection method. *Expert Systems with Applications*, 193, 116409.
- Shboul, T., Hazaimah, Z. K., Ajlouni, B. A. M. (2024). The moderating role of digital leadership between digital transformation and performance of vocational education teachers in public schools. *International Journal of Digital Accounting and Fintech Sustainability*, 1 (1), 2-12. <https://tanmeah.com/wp-content/uploads/2024/08/PAPER-4-TBP.pdf>
- Shubailat, O. M., Al-Zaqeaba, M. A. A., Madi, A., & Hamid, S. A. (2024C, April). The Effect of Customs Strategies on Environmental and Sustainable Responsibility of Jordanian Supply Chain Management. In *International Conference on Business and Technology* (pp. 309-322). Cham: Springer Nature Switzerland.
- Shubailat, O., Al-Zaqeaba, M., Madi, A., & Alheet, A. (2024). Analyzing the improvement of estate governance and management in Jordan using blockchain. *International Journal of Data and Network Science*, 8(2), 1059-1072.
- Singh, I., & Aggarwal, N. (2023). Role of AI chatbot in income tax prediction in India. *Vision: Journal of Indian Taxation*, 10(2), 87-117.
- Wang, Y., & Wang, P. (2020, June). New personal tax collection management system based on artificial intelligence and its application in the middle class. In *Journal of Physics: Conference Series* (Vol. 1574, No. 1, p. 012105). IOP Publishing.
- Yalamati, S. (2023). Identify fraud detection in corporate tax using Artificial Intelligence advancements. *International Journal of Machine Learning for Sustainable Development*, 5(2), 1-15.
- Yalamati, S. (2024). Impact of Artificial Intelligence in supervision of enterprises reduce tax avoidance. *Transactions on Latest Trends in Artificial Intelligence*, 5(5).
- Zaqeaba, N., & Iskandar, T. M. (2020). Mediating effect of tax management on the relationship between board of directors characteristics and firm performance. *Journal of Information & Knowledge Management*, 19(01), 2040022.
- Zaqeaba, N., Alqudah, H., Alshirah, A., Lutfi, A., Almaiah, M., & Alrawad, M. (2024a). The impact of using types of artificial intelligence technology in monitoring tax payments. *International Journal of Data and Network Science*, 8(3), 1577-1586.
- Zaqeaba, N., Alqudah, H., Rawashdeh, B. S., Lutfi, A., Alrawad, M., & Almaiah, M. A. (2024b). The Measurement of Blockchain Technology in Financial Reports in Commercial Banks. *HighTech and Innovation Journal*, 5(2), 420-430.

## Appendix

1. Sex : 1. male , & 2. female
2. Age:
  - 1 22 years and younger ( )
  2. 23-34 years ( )
  3. 35-45 years ( )
  4. 46-55 years ( )
  5. More than 56 years ( )
3. Education:
  1. Intermediate diploma ( )
  2. Bachelor's degree ( )
  3. Master ( )
  4. Doctorate ( )
  5. less of Intermediate diploma ( )

4. Experience:

1. Less than one year ( )
2. From 1 to 5 years ( )
3. From 6 to 10 years ( )
4. From 11 to 15 years ( )
5. More than 15 years ( )

5. Employees:

1. Auditor ( )
2. Tax accountant ( )
3. Directorate Director ( )

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>The overall scope of AI Applications (OSA)</b>						
1	To what extent do you think AI technologies can trans?					
2	How much do you believe AI can help with the problems brought?					
3	How much faith do you have in AI's capacity to change with the regulatory environment?					
4	To what extent do you think AI-driven methods can effectively detect?					
5	To what extent do you find the current use of AI technology?					
6	How much are the ethical ramifications of employing AI?					
7	To what extent do you think artificial intelligence may help create a more equitable and open tax system?					
<b>Integration with Existing Systems (IES)</b>						
8	To what extent do you believe that the infrastructure already in place for tax administration can be integrated with AI applications?					
9	To what extent do you believe that tax enforcement organizations may simplify their procedures through the seamless integration of AI?					
10	How worried are you about any difficulties or hiccups that can occur when integrating AI technology with the way taxes are now administered?					
11	To what extent do you think the accuracy of tax evasion detection can be improved by combining AI with current					

	systems?					
12	How much do you believe integration of AI will enable data exchange and cooperation between various tax authorities?					
13	To what extent do you believe that tax enforcement operations may save money by incorporating AI into their present systems?					
<b>Exploration of New AI Technologies (ENT)</b>						
14	To what extent do you believe that keeping up with the latest developments in tax management techniques requires funding research into emerging artificial intelligence technologies?					
15	To what degree do you perceive exploring new AI technologies as crucial for maintaining competitiveness?					
16	How concerned are you about potential risks or uncertainties associated with adopting cutting-edge AI solutions?					
17	How much do you believe that embracing new AI technologies can lead to more accurate and reliable identification?					
18	How likely do you think it is for the exploration of new AI technologies to result in novel approaches?					
19	How much do you agree that investing in the exploration of new AI technologies can enhance effectiveness and efficiency?					
20	To what extent do you find the resources and assistance provided for developing and applying new artificial intelligence technologies?					
<b>Perceived Scalability (PS)</b>						
21	To what extent do you believe AI applications can scale to accommodate increasing volumes of data?					
22	How confident are you in the scalability of AI-driven approaches?					
23	How much do you agree that scalability is a critical factor in the successful implementation of AI technologies?					
24	How satisfied are you with the scalability of existing AI solutions within your jurisdiction?					
25	How concerned are you about potential limitations or bottlenecks in scaling AI technologies for widespread					

	adoption?					
26	How much do you believe in scalable AI solutions?					
27	How likely do you think it is for scalable AI applications to facilitate collaboration and information sharing?					
28	How satisfied are you with the level of scalability planning and implementation in the deployment?					
<b>Tax evasion in enhancing tax enforcement capabilities (TE)</b>						
29	To what extent do you believe that the scope of AI technologies can enhance tax enforcement capabilities to combat tax evasion?					
30	How confident are you in the ability of AI-driven systems to detect and prevent tax evasion compared to traditional methods?					
31	To what degree do you think that implementing AI technologies with diverse applications can improve the effectiveness of tax enforcement in identifying and addressing tax evasion?					
32	How satisfied are you with the current breadth of AI technologies integrated into tax enforcement efforts to combat tax evasion?					
33	How likely are you to support increased investment in a wide range of AI-driven solutions for tax enforcement to address tax evasion effectively?					
34	How effective do you believe AI technologies with comprehensive capabilities are in predicting and mitigating potential instances of tax evasion?					
35	How concerned are you about the potential limitations or challenges associated with implementing AI technologies with extensive scopes in tax enforcement efforts to combat tax evasion?					