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Blockchain in Malaysian Taxation: Unleashing Opportunities for an Effective and Transparent Process

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ABSTRACT

Greater awareness and engagement are needed to ensure high compliance among taxpayers. As such, the tax authority in Malaysia has introduced numerous improvements and enhancements to its systems and technology, ensuring a smooth tax service delivery process for taxpayers. Blockchain technology has the potential to transform the tax system by enhancing transparency, efficiency, and security in tax administration and compliance, but it hasn't yet been implemented in Malaysia. Thus, this study aimed to understand the current practices and challenges in the taxation system and to explore the potential of using blockchain technology in Malaysia. Using a qualitative approach, semi-structured interviews were conducted with 12 respondents: tax officers, tax agents, and a Ministry of Finance (MoF) officer involved in tax policy. Thematic analysis was employed for data analysis. The findings revealed that, although the tax authority is aware of blockchain technology, its implementation will take longer due to the complexity and the need to involve multiple parties. The main findings of this study provide insights for external users and policymakers regarding the potential of blockchain technology within the Malaysian taxation framework. This study contributes to understanding how blockchain can enhance tax transparency by proposing a model for blockchain adoption in the tax system.

1. INTRODUCTION

Taxation, which carries significant weight, can be defined as the funds that citizens must pay to the government, which are then used to provide public services that facilitate their daily lives. In other words, taxes are essential for the government to collect revenue for spending on its citizens and the country's

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betterment (Mahat et al., 2024). This principle remains relevant today, as taxation systems worldwide continue to evolve to meet the demands of modern economies while ensuring fairness and transparency.

However, Malaysia faces challenges similar to those faced by other countries worldwide involved in tax controversies, such as tax evasion and tax fraud. These issues in the tax system have had a negative impact on the country, particularly by reducing government revenue. This situation has prevented the government from adequately catering to citizens' needs as it should. Therefore, some measures must be taken to address the issues mentioned.

The rapid development of technology drives innovation, offering potential for business and market growth. If countries do not adapt rapidly to digital trends, they will experience lag across government sectors, infrastructure, society, and other areas (Setyowati et al., 2020). Therefore, it is necessary to use digital technologies, such as blockchain, to address tax-related issues.

The issues of tax compliance, tax evasion, and tax avoidance are significant challenges for tax authorities, particularly in many countries, such as Malaysia. For instance, some taxpayers in Malaysia have been found to evade tax payments by underreporting their income and failing to submit tax returns (Bernama, 2024). The Inland Revenue Board of Malaysia (IRBM) has faced several challenges, including the fact that information on social media platforms can be either factual or uncertain. Most taxpayers also attempt to retain a larger portion of their earnings and assets. High tax burdens might encourage tax evasion. Therefore, an effective and transparent system must be implemented to address these issues.

The challenge of maintaining tax compliance while embracing technological advancement requires careful examination. While technology offers solutions, its implementation in taxation must consider regulatory frameworks, stakeholder readiness, and system compatibility. This creates a critical need to assess the feasibility of emerging technologies, such as blockchain, within Malaysia's specific tax administration context.

There are several reasons why blockchain technology in taxation warrants exploration in this study. In blockchain systems, data is verified through consensus mechanisms and distributed across multiple nodes in the network, ensuring its transparency and integrity. Blockchain provides data provenance, traceability, and transparency of each transaction.

Furthermore, effective control is assured as access to the networks is limited and defined. Additionally, the digital ledger cannot be changed, altered, or tampered with once the data has been entered. As a result, fraud is less likely to occur and easier to detect. Additionally, it will provide real-time information, as updates are simultaneously reflected for everyone in the network. Addressing this gap, the present study provides empirical insights from tax authorities, policymakers, and practitioners to evaluate the feasibility and challenges of blockchain adoption in Malaysian taxation.

Given these advantages, it is crucial to examine how blockchain has been studied in taxation contexts and identify gaps in existing research. Previous studies have provided an overview of the blockchain technology system in general (Allen & Potdar, 2022). This study addressed a contextual gap, focusing primarily on

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how blockchain can be implemented from the perspective of the Malaysian taxation system and assessing its feasibility.

Despite the growing body of international literature examining blockchain applications in taxation, existing studies remain largely conceptual, technologically oriented, or focused on developed economies, with limited empirical evidence from emerging contexts such as Malaysia. Prior research has either assessed blockchain's general potential or concluded that the technology was previously immature for tax administration, without revisiting its feasibility in light of recent digital reforms and technological advancements (Ramazhamba et al, 2026; Larikaman et al, 2025; Yayman; 2021; Nemade et al, 2019).

Moreover, Malaysian taxation studies have predominantly examined compliance behaviour and administrative challenges in isolation, offering little insight into how emerging technologies could be institutionally and behaviourally integrated into the tax system. This lack of updated, context-specific, and stakeholder-driven evidence creates a critical gap in understanding whether blockchain can realistically enhance transparency, efficiency, and compliance within Malaysia's regulatory and administrative environment.

Unlike previous studies that focused on general blockchain applications, this research specifically examined the feasibility and implementation challenges within the Malaysian regulatory and administrative context. Three research objectives were developed for this study. First, to understand the current practices of the Malaysian tax system; second, to investigate the challenges faced in the Malaysian tax system for efficiency and compliance purposes; and third, to explore the opportunities and possibilities of implementing blockchain technology in the Malaysian taxation environment. A comprehensive understanding of both taxation and blockchain technology is essential for improving the overall effectiveness of the taxation system.

The remainder of this article is organised as follows: Section 2 reviews relevant literature on blockchain technology and its applications in taxation; Section 3 describes the research methodology; Section 4 presents the findings and discussion; and Section 5 concludes with implications and recommendations for future research.

2. LITERATURE REVIEW

2.1 Taxation: Definitions, Concepts and Challenges in Malaysia

Taxation is one of the primary sources of revenue used to finance the government budget, encompassing both operational and development expenditures. In addition, taxes can be referred to as a monetary policy tool that regulates economic activity by encouraging or discouraging certain behaviours (Mardiasmo, 2016). Taxpayers are responsible for registering tax files, reporting annual income, and paying income tax (Abd Hamid et al., 2020; Hashim et al., 2022). The Behavioural Theory provides a relevant framework for understanding tax compliance, as it focuses on how people learn through their interaction with the environment.

As a psychological viewpoint the Behavioural Theory places more emphasis on the examination of externally observed behaviours than on internally occurring mental states. It focuses on how interactions

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with the environment teach and reinforce certain behaviours. According to Ajzen (2020), the Theory of Planned Behaviour (TPB) has been primarily applied to predict and change behaviour, including behaviour related to the use of technology. This theoretical framework is relevant to understanding taxpayer adoption of blockchain-based tax systems, as acceptance depends on individual perceptions of the technology's usefulness and ease of use.

A lack of knowledge about tax regulations and a lack of awareness of their significance may cause some people to avoid paying their taxes. Furthermore, due to a lack of taxpayer integrity, tax evaders may avoid severe fines through tax evasion, often resulting from inadequate enforcement and auditing procedures. Taxation appears to be a persistent issue with new platform business models, which necessitate a novel type of resolution. Although taxpayers are encouraged to fulfil their tax obligations, tax collection remains crucial for enhancing the country's economy. Malaysian tax authorities face challenges in efficiently enforcing and collecting tax revenue (Shahroni et al., 2022), resulting in collection losses despite the rise in e-commerce activities.

According to Mat Jusoh et al. (2021), taxpayers in Malaysia face difficulties in managing tax complexity, including documentation, ambiguity in taxation, and the perception that taxation items are excessive. Due to the complexity of tax procedures, taxpayers often struggle to manage their tax obligations effectively. The government is expected to utilise tax revenue to subsidise public services and administrative expenses. Meanwhile, many governments fail to collect a significant portion of the tax owed to them, which may lead to financial difficulties (Sanusi et al., 2023). Therefore, tax recovery is a crucial financial requirement for the government. Utilising blockchain in tax collection can enhance the procedure's productivity and efficiency, ensuring that government offices receive payments as expected (Nemade et al., 2019).

Given these persistent compliance challenges and the limitations of conventional tax administration systems, there is a growing need to explore innovative technological solutions to address these issues. Blockchain technology has emerged as a promising tool that could address many of these issues through its inherent characteristics of transparency, security, and immutability.

2.2 Blockchain Technology: Overview and Characteristics

Blockchain is a digital mechanism that enables the network to exchange information and assets directly without intermediaries (Babaei et al., 2025). Blockchain validates and maintains a record of all exchanges, ensuring that all participants have access to the most recent copy, with entries organised into immutable, linked blocks.

The potential of blockchain will change many aspects of our lives, not only in the tax area. The advantages of blockchain, such as transparency, efficiency, data integrity, and security, can benefit tax authorities in multiple ways. For example, the characteristic of decentralisation can improve their efficiency and interaction between various actors by offering a more equitable environment for all stakeholders (Li et al., 2023).

The existing literature suggests that blockchain can provide secure mechanisms for data transmission and storage when properly implemented. It is a constantly growing, distributed database in which records are linked with encrypted elements (Yayman, 2021). Blockchain technology is not limited to financial transactions; it is a ledger of economic and commercial transactions that can be programmed to find

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applications of almost any value. Yet everyone also needs to understand that it remains relatively untested and may pose both familiar and new risks, which will be addressed in this article. Like other anonymity-based technologies, blockchain generation may be used for legitimate and malicious purposes.

2.3 Blockchain in Taxation: Applications, Potential and Empirical Gap

Some articles have explored the potential applications of blockchain technology in tax compliance. However, the only study conducted in 2018-2019 reported that blockchain technology was too immature for adoption, and no further research has been undertaken since (Allen & Potdar, 2022). This gap in recent literature underscored the need for updated research examining the maturity of blockchain and its current applicability to tax systems, particularly in the Malaysian context.

Blockchain's transparency can enhance tax compliance by providing tax authorities with access to transaction data. This may reduce the likelihood of tax evasion and fraud because the transactions are traceable. On the other hand, blockchain is also a technology that will change the relationships between the different sectors of society individuals, companies, and administrations which are supported by, but not controlled by, any state, financial institution, or centralised company (Peláez et al., 2021).

Blockchain plays a crucial role in ensuring the security of each transaction, making tax transactions safe and traceable. It will also help to gain the trust of taxpayers regarding the use of their money in the country's development (Abdul Wahab et al. 2025). The impact is that when people know the records entered into the blockchain will never be changed or erased, they will trust government officials and feel confident in paying their taxes. The literature review indicates that blockchain technology is expected to transform the processes and methods by which tax authorities operate (Larikaman et al., 2025).

However, implementing blockchain in taxation systems requires careful consideration of technical infrastructure, regulatory frameworks, and initial investment costs. These considerations highlight the need for a guiding framework, namely the TPB, to understand how stakeholders might perceive and adopt blockchain in taxation.

The literature on blockchain in taxation has expanded yet remains uneven. Early studies primarily explored conceptual benefits such as fraud reduction, transaction traceability, and automation of tax reporting (Nemade et al., 2019; Yayman, 2021). Allen and Potdar (2022) concluded that blockchain was insufficiently mature for tax adoption at the time, a finding that continues to be cited despite significant technological advancements since then.

More recent studies have reassessed blockchain's applicability, highlighting its potential integration with e-invoicing, real-time reporting, and regulatory technology (RegTech) frameworks (Larikaman et al., 2025; Fu &b Abdul Wahad, 2024; Ramazhamba & Venter, 2026). However, these studies were largely concentrated in developed economies or focus on cryptocurrency taxation, forensic analysis, or technical architectures rather than administrative feasibility. Crucially, there remains a lack of empirical, stakeholder-based research examining how tax authorities, policymakers, and practitioners perceive blockchain adoption within specific regulatory environments.

In the Malaysian context, existing tax studies have focused predominantly on compliance behaviour and administrative reforms, while blockchain research remains largely disconnected from taxation practice. This fragmentation results in a limited understanding of whether blockchain can realistically address Malaysia's tax governance challenges, particularly from a behavioural and institutional perspective.

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Accordingly, there was a clear need for context-specific, qualitative evidence that bridges taxation, technology, and behavioural theory, an objective that this study sought to fulfil. A comparison of past studies and this article is highlighted in Table 1.

Table 1: Literature Comparison Studies

Author(s)	Context	Focus	Key Findings	Limitations
Nemade et al. (2019)	Conceptual / Global	Blockchain in taxation	Identified fraud-reduction potential	Technology is immature; no empirical data
Yayman (2021)	Conceptual	Blockchain & tax systems	Transparency and security benefits	Lacks implementation context
Allen & Potdar (2022)	Australia	Blockchain & taxpayer engagement	Blockchain improves engagement	Concluded premature adoption
Shahroni et al. (2022)	Malaysia	Digital economy & compliance	Digital platforms increase compliance risk	No technological solution proposed
Chen et al. (2024)	Global	Blockchain governance	Governance and regulatory challenges	Not tax-specific
Larikaman et al. (2025)	Global	Blockchain in tax systems	Opportunities with regulatory constraints	Limited stakeholder perspectives
Khairi et al. (2025)	Malaysia (Public sector)	Blockchain workflows	Incremental adoption feasible	Not taxation-focused
Ramazhamba & Venter (2026)	South Africa	Blockchain & crypto tax compliance	RegTech potential	Focus on crypto taxation only
This study	Malaysia	Blockchain feasibility in taxation	Stakeholder-driven feasibility analysis	Qualitative scope

2.4 Theoretical Framework: Behavioural Theory and Technology Adoption

This study focused on current practices and challenges in the Malaysian tax system, as well as opportunities for implementing blockchain technology. An overview and views from relevant parties on the potential of blockchain technology can provide an idea of whether it is feasible. Specifically, while international studies have examined blockchain applications in taxation, the Malaysian context presents unique regulatory, infrastructural, and cultural considerations that warrant dedicated investigation. This study addressed the gap by examining the feasibility of blockchain through the perspectives of Malaysian tax administrators, policymakers, and practitioners.

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As previously discussed,the Behavioural Theory, particularly TPB, provides a valuable lens for examining technology adoption in tax administration. Specifically, TPB delivers a framework for examining how tax authorities' attitudes, subjective norms, and perceived behavioural control influence their willingness to adopt blockchain technology in tax administration. In the taxation context, attitudes may reflect perceptions of blockchain's benefits, such as transparency; subjective norms may involve peer or societal expectations to comply with tax laws; and perceived behavioural control may relate to taxpayers' or officers' confidence in using digital systems.

This theoretical foundation guided the current study's exploration of stakeholder perceptions regarding blockchain implementation in the Malaysian taxation system, recognising that successful technology adoption depends not only on technical capabilities but also on the behavioural intentions and attitudes of key actors within the tax ecosystem.

3. METHODOLOGY

This study employed a qualitative approach to provide a comprehensive picture and explore information that would answer the research questions about the factors to be considered when implementing blockchain technology in the Malaysian taxation system. Given the nascent stage of blockchain adoption in Malaysian taxation, a qualitative inquiry could provide the necessary depth to understand stakeholder perspectives and implementation barriers.

This approach enabled rich, interpretive insights aligned with the study's research objectives and theoretical framing based on the T P B.

The sampling technique employed for this study was snowball sampling. This technique was particularly appropriate as tax experts, MoF officers, and IRBM officials constituted a specialised and hard-to-access population due to their professional positions and limited availability. While acknowledging the limitations of snowball sampling in terms of representativeness, the method was consistent with qualitative research objectives that prioritised depth, relevance, and contextual insight over statistical generalisation. Participants were selected based on their direct involvement in taxation administration, policy formulation, or professional advisory roles, ensuring alignment with the study's analytical focus.

Ethical considerations were carefully addressed throughout the study. Prior to participation, all respondents were provided with an information sheet explaining the purpose of the study, their voluntary participation, and their right to withdraw at any time without consequence. Informed consent was obtained from all participants before conducting the interviews. To protect confidentiality and anonymity, participants were assigned pseudonyms (e.g., Resp 1, Resp 2), and no identifying personal or institutional information was disclosed in the reporting of findings. All interview data were securely stored and used solely for academic research purposes.

Interviews were conducted either face-to-face or online, depending on participants' availability, and were audio-recorded with permission. Each interview lasted approximately 45 to 60 minutes. Data collection continued until theoretical saturation was achieved, that is, when additional interviews no longer yielded new themes or substantive insights relevant to the research questions. Saturation was determined through

ongoing analysis and comparison of interview data, ensuring that key patterns and perspectives were sufficiently explored.

Data triangulation was achieved by collecting perspectives from multiple stakeholder groups, including IRBM officials, Ministry of Finance officers, and tax practitioners, enabling cross-validation of themes across institutional roles. This approach reduced reliance on single-source interpretations and strengthened the robustness of the findings.

3.1 Sampling Selection

The targeted respondents for this research study comprised tax experts, MoF officers, and IRBM officers. These respondents were selected based on their expertise and direct involvement in tax policy formulation, administration, and compliance matters, ensuring that the data collected would be rich and relevant to the research objectives. A semi-structured interview was conducted to collect data and to obtain an overview aligned with this study's research questions. In this study, twelve respondents, selected from among tax experts, MOF and IRBM officers, were interviewed. The interviews continued until the saturation level was achieved.

3.2 Data Analysis Method

Thematic Analysis (TA) was employed to yield results comprising themes, accompanied by a discussion that linked the analysis to the literature review. The choice of TA was appropriate for this study as it allowed for flexibility in identifying, analysing, and reporting patterns within qualitative data, while maintaining rigour in the analytical process. Table 2 presents the topic guide used in the semi-structured interviews. Interviews were conducted through an online platform (Microsoft Teams) and at the interviewees' workplaces. Each interview session lasted between 60 and 90 minutes and was audio-recorded and transcribed.

Table 2: Interview Topic Guide

Topic Area	Main Questions	Supporting Questions
Tax Awareness	What is your assessment of taxpayer engagement and awareness levels in Malaysia? Can you provide specific examples?	What are the primary challenges in managing taxation-related responsibilities? How significant is the Tax Act in ensuring compliance and administration? How has this changed over recent years? What factors contribute to these challenges?
Current Tax Processes and Practices	What strategies are employed to encourage taxpayer engagement? Which strategies have been most effective?	What programmes have been implemented to enhance awareness? What is your observation of young people's engagement with taxation? What measures could improve tax collection in Malaysia? What barriers exist to implementation?

Topic Area	Main Questions	Supporting Questions
Blockchain Technology in Malaysian Taxation	What is your opinion on implementing blockchain technology in Malaysian taxation?	To what extent is blockchain suitable for Malaysian tax administration?
		Could blockchain potentially increase tax engagement and collection?
	What specific applications do you envision?	What are the main barriers to implementation?
		What infrastructure changes would be required?
		What are the potential risks or concerns?

4. RESULTS AND DISCUSSION

4.1 Profile of Respondents

The respondents' diverse backgrounds were evident during interviews with 12 participants. The details of each respondent are presented in Table 3.

Table 3: Background of Respondents

Respondents	Organisation	Years of Experience	Area of Expertise
Resp 1	Tax Firm	> 30 years	Taxation
Resp 2	Tax Firm	27 years	Taxation
Resp 3	MoF	10 years	Policy
Resp 4	IRBM	> 20 years	Strategic Education
Resp 5	IRBM	> 20 years	Strategic Education
Resp 6	IRBM	20 years	Research & Strategic
Resp 7	IRBM	25 years	Corporate Services
Resp 8	IRBM	18 years	Operation
Resp 9	IRBM	22 years	Operation
Resp 10	IRBM	17 years	Tax Collection
Resp 11	IRBM	17 years	Tax Collection
Resp 12	IRBM	20 years	Tax Services

Table 4 shows the four major themes identified during the analysis stage.

Table 4: Major Themes

No	Themes
1	Public Overview Overview of the Current and New Tax System, Public Awareness, and Incentives to the Public
2	Tax Activities IRBM Perspective, MoF Perspective, Tax Agent Perspective
3	Views of Taxation in Malaysia Act in Taxation, Impact on Economic Income, Awareness, and Tax Experience
4	Tax System Overview of Blockchain Technology

4.2 Searching for Themes

By the end of this phase, the research themes were clearly defined. The themes, along with their initial codes and descriptions, are listed in Table 5.

Table 5: Naming Themes with the Initial Codes and Description

No	Main Theme	Initial Codes	Key Point/Description
1.	Public Overview	Public Awareness	Information related to taxation for public awareness
		Incentives to the Public	Advantages to the general public
2.	Tax Activities	IRBM Perspective	The roles and activities carried out by the IRBM in taxation
			Incentives by IRBM
			Problems faced by IRBM
			Opportunities for improvement by IRBM
		MoF Perspective	The roles and activities carried out by the MoF in taxation
		Tax Agent Perspective	The roles and activities carried out by tax agents in taxation
3.	Views of Malaysian Taxation	Act in Taxation	The aspects that need to be understood in the taxation act
		Economic Income	The perspective on economic income in relation to taxation activities

No	Main Theme	Initial Codes	Key Point/Description
		Awareness	The level of taxpayers' awareness in Malaysia
		Tax Experience	Difficult experiences in taxation
		Data Gathered	Taxation data and information obtained
4.	Tax System	Overview of Blockchain Technology	The possibility of the implementation of blockchain technology in the taxation system

4.3 Producing the Report

This section presents the findings organised according to four major themes that emerged from the thematic analysis: (1) Public Overview, (2) Tax Activities, (3) Views of Malaysian Taxation, and (4) Tax System. Each theme was supported by direct quotations from the interview transcripts and discussed in relation to existing literature and the research objectives. The findings were subsequently interpreted through the theoretical lens of the TPB.

4.3.1 Public Overview

Various benefits can be derived from the information gathered for society, as evidenced by the current taxation system.

"General information on taxation can be found in portals and social media such as TikTok, Instagram, and Facebook. The Young generation prefers this way." (Resp 7)

"The level of taxpayer involvement in public society is increasing. Many taxpayers are now more active in obtaining information and managing their taxation accurately." (Resp 4)

The statements above illustrated that IRBM was responsible for attracting taxpayers to pay taxes. IRBM had also conducted numerous awareness programmes. These findings aligned with the research objective regarding current practices of the Malaysian taxation system and also the TPB theory being used which on the attitude of the taxpayers. These observations aligned with the findings of Faizal et al. (2021), who noted that tax authorities had employed various instruments to enhance tax awareness among taxpayers, including tax promotions, tax audits and fines, tax incentives, and tax service reports (Sanusi et al., 2021).

This multi-pronged approach to taxpayer engagement was further supported by Handoko et al. (2020), who argued that tax knowledge could be acquired through self-learning, as well as formal and informal education. They argued that tax authorities should diversify their educational strategies to reach different segments of the taxpaying population. These findings also showed subjective norms (which come under the TPB theory), particularly the influence of social media and awareness initiatives, shape taxpayers' engagement with the system.

4.3.2 Tax Activities

Building on the public overview, the second theme examined the operational dimension of taxation in Malaysia, focusing on the diverse roles and responsibilities of various stakeholders within the tax

ecosystem. The respondents commented that many job scopes and activities related to taxation have been carried out. The purpose was to enhance tax engagement and compliance, as well as increase tax collection in the country. Some of the tax activities managed by the IRBM were as follows:

"Taxation programmes such as awareness programmes, early engagement with tax-related students (Sahabat Hasil) that focus on student activities to monitor and improve taxation information." (Resp 5)

"We have given briefings to companies and consumers. The aim is to provide early information to the public by July 2025 for the framework, achievement, and full implementation." (Resp 12)

At the same time, tax agents also played a role in handling their clients' tax activities to ensure everything was in order:

"As a tax agent, I advise clients on tax laws and regulations and ensure that all tax documents and returns comply with applicable tax laws and regulations." (Resp 2)

The statements above demonstrated that each respondent had the necessary responsibilities and expertise to perform their work tasks in the taxation field. Although the respondents worked in different sectors, their objectives were the same: to provide high-quality tax services. These findings were also consistent with the research objective regarding current practices in the Malaysian taxation system. These findings were consistent with Handoko et al. (2020), who emphasised that tax knowledge was not dependent solely on tax authorities but can be developed through self-learning and formal and informal education, thereby highlighting a multi-faceted approach to tax capacity building in Malaysia.

4.3.3 Views of Malaysian Taxation

While the previous theme focused on the activities and processes within the tax system, this theme examined the perceptions, experiences, and challenges encountered by various stakeholders in the Malaysian taxation landscape. Several aspects needed to be understood regarding the taxation system in Malaysia:

"Based on my experience, a company is not ready when it needs to be audited. This is because the relevant documents are not available properly. It also becomes difficult when the company is a sole proprietorship because the same person holds various positions." (Resp 1)

"When we make a call out, especially when the taxpayer has a payment problem, we will try to contact the taxpayer by calling. But we have to compete with scammers because they have also disguised themselves as LHDN (IRBM). So, when he receives a call, "We are from LHDN," he will not accept the call or get angry with us. They say we are scammers, even though we can distinguish between scammers and non-scammers. If it's a scammer, they will use a mobile number, but LHDN uses a hotline. So, most of the time, he will reject us. So, this situation is difficult for us to convey information, or we ask to make payment because he does not believe that it is the real IRB who made the call." (Resp 7)

"There is one more challenge for us. We are forced to deal with influencers who give negative feedback to LHDN. There are several names that supposedly fight for groups that are persecuted by the IRB, such as those that are audited without cause and others. So, they provide inaccurate facts to the public. He doesn't know the exact facts, so he describes us as tyrannising taxpayers who impose excessively high penalties, unethical in terms of religion. They said extortion is against religion. So, these influencers undermine the public's trust in us, and it is quite difficult because their followers are quite large. Of course,

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people believe more in negative influencers." (Resp 7)

These accounts revealed that the respondents provided scenarios of the Malaysian taxation system. From an overall perspective, the taxation system was sound; however, there were areas that required refinement to better align with the current environment. These findings addressed the research objective regarding the challenges faced in the Malaysian taxation system. These challenges reflected unfavourable attitudes toward IRBM among some taxpayers and limited perceived behavioural control by officers when confronting scams or misinformation. Simultaneously, the current tax system was much easier for taxpayers to understand when undertaking their tax activities. IRBM had taken the initiative to establish a one-stop centre through MyTax and to generate a Tax Identification Number (TIN) once people reach 18 years old. This simplified taxpayers' processes. Examples of some quotes from the respondents were as follows:

"IRBM has implemented an information system where people aged 18 and above have a TIN number, and it can be checked on the MyTax system (for public users and end-users)." (Resp 6)

These accounts demonstrated that the Malaysian taxation system was continually improving. IRBM played a crucial role in maintaining a high level of tax compliance in the public sector. This situation also ensured that Malaysia had an effective tax system aligned with current technological advancements. These findings related to the research objective of providing an overview of the effectiveness and compliance of the Malaysian taxation system in addressing the challenges highlighted earlier. These findings were consistent with those of Oladele et al. (2020), who had also explored the effectiveness of tax enforcement tools in improving tax compliance. Their findings suggested that tools such as tax audits and penalties were positively and significantly associated with tax compliance.

Overall, these findings demonstrated that perceived norms, as one of the TPB elements constructed through public discourse, peer influence, and digital media, played a critical role in shaping tax compliance behaviour in Malaysia. While enforcement tools such as audits and penalties remained effective, as supported by Oladele et al. (2020), their impact may be moderated by the prevailing social norms surrounding trust, legitimacy, and institutional credibility. This underscored the importance of addressing normative perceptions alongside technological and regulatory reforms to enhance voluntary tax compliance.

4.3.4 Tax System

The final theme transitions from current practices and challenges to future possibilities, specifically examining stakeholder perspectives on the potential integration of blockchain technology into Malaysian taxation infrastructure (Adznan et al, 2024). This section focused on the potential application of blockchain technology in the Malaysian taxation system. Respondents provided opinions and an overview regarding the implementation of blockchain technology:

"From the IRBM tax education perspective, most systems are for reporting use only. Also, at the moment, we do not have any details about the operation of the system on the part of the taxpayer. Our focus is to introduce e-Invoicing and processing details, which is under the Tax Operations Department." (Resp 4)

"From a tax agent perspective, the implementation of blockchain technology will increase tax involvement and collection in Malaysia because it facilitates access to information. Businesses can easily access their transaction records and ensure they comply with tax regulations." (Resp 2)

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The statements above indicated that limited perspectives have been received regarding the implementation of blockchain technology in the Malaysian taxation system. These findings addressed the research objective regarding the opportunities and possibilities of using blockchain technology for the Malaysian taxation system. Respondents' cautious stance reflected attitudes shaped by perceived risks, subjective norms influenced by international benchmarking, and low perceived behavioural control due to limited expertise.

This cautious stance among respondents mirrored the academic discourse on blockchain adoption in taxation. Ali et al. (2021) also identified that blockchain technology was still new and that its adoption and the realisation of its benefits were not easy to achieve. The cases suggested that blockchain can be easily applied by capitalising on the maturity and uniformity of the data. However, careful application of this approach was needed for several reasons. In a similar vein, Chen et al. (2024) also noted that the adoption and implementation of blockchain technology were in an unstable phase, suffering from numerous obstacles. Some of the highlights from the respondents were as follows:

"If we want to audit information in blockchain, we also need expertise because it is not the kind of thing we can see through documents. Maybe we can transfer it into a hard copy, but for employees who are not experts with the system, they will face problems." (Resp 7)

"For me, blockchain technology is suitable if we implement it in-house without involving a third party, because it needs to be shared. If our counterparts use the same technology, it will run smoothly. If you run it in-house, it is good for the organisation; it will add efficiency. But if it involves external parties, it needs to involve the whole system; it requires a fairly broad policy change." (Resp 6)

However, recent research by Khairi et al (2025) suggested that blockchain implementation did not necessarily require changes to the whole system. Certain processes and data sharing can be identified, especially among parties involved in daily operations, within the department. Blockchain is incorporated into the system to enhance efficiency. Therefore, blockchain implementation is only a part of the existing system extension and does not require significant changes for the department, suggesting a more pragmatic and incremental approach to technological integration.

These findings suggested that while blockchain technology held promise for enhancing transparency and efficiency in the Malaysian taxation system, its implementation requires careful consideration of confidentiality requirements, technical expertise, and system compatibility. The gradual approach mentioned by respondents, learning from other countries and conducting pilot studies, aligned with the cautious adoption strategy recommended in the literature.

Having presented the empirical findings across the four themes, it is valuable to interpret these results through the theoretical framework, TPB, that guided this study. The positive responses about increased taxpayer engagement and the benefits of the MyTax system reflected favourable attitudes that were likely to influence compliance behaviour. Conversely, cautious perspectives on blockchain technology implementation suggested that attitudes were still forming, influenced by concerns about confidentiality, technical expertise, and system compatibility.

The concern about negative influencers undermining trust in IRBM illustrated how social norms and peer influence can significantly affect taxpayer behaviour. Similarly, the emphasis on awareness programmes and educational initiatives reflected an understanding that social norms around tax compliance needed to be actively shaped through consistent messaging and community engagement.

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The challenges described by participants, such as taxpayers' lack of preparation for audits, difficulties with scammers impersonating IRBM officials, and the technical expertise required for blockchain systems, all related to perceived behavioural control. When taxpayers feel they lack the knowledge, resources, or confidence to comply effectively, their compliance behaviour was negatively affected. The success of initiatives such as the MyTax system and TIN suggested that reducing barriers and increasing accessibility enhances perceived behavioural control, thereby promoting compliance.

A proposed model illustrating blockchain integration in taxation is shown in Figure 1 below:

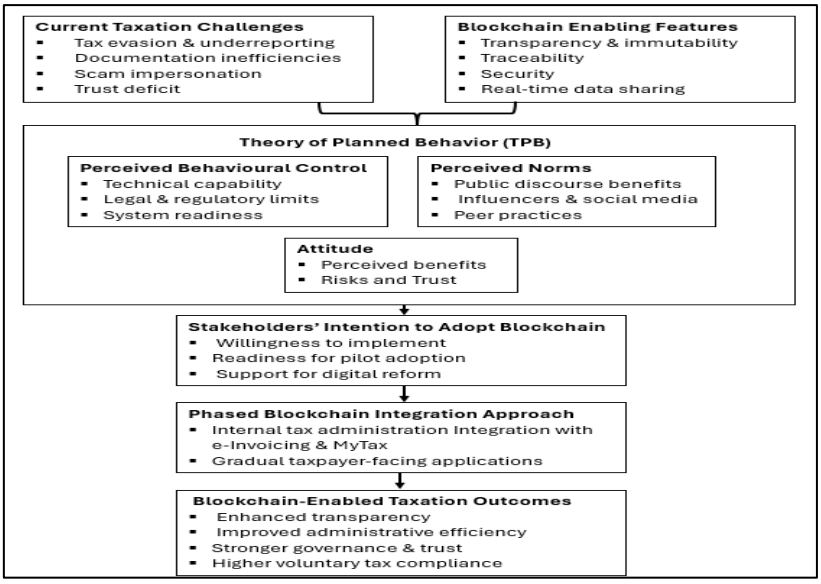

Figure 1. Conceptual framework illustrating blockchain integration in the Malaysian taxation system based on the Theory of Planned Behaviour.

5. CONCLUSION

This study examined current practices, challenges, and the potential of blockchain technology within the Malaysian taxation system through a qualitative inquiry involving 12 stakeholders from the IRBM, MoF, and tax practitioners. The findings revealed that the Malaysian taxation system had demonstrated continuous improvement through digital initiatives, such as MyTax, e-filing, and TIN implementation. However, challenges persist, including gaps in taxpayer awareness, scammer impersonation that affects trust, influencer misinformation, and issues with documentation preparedness. While respondents acknowledged these challenges, they also noted positive trends in compliance rates and taxpayer engagement, supported by diverse awareness programmes and multi-stakeholder collaboration.

Regarding the implementation of blockchain technology, respondents expressed cautious optimism. Stakeholders recognised potential applications, particularly in relation to e-invoicing systems, and acknowledged that blockchain could enhance transparency and data accessibility. However, they emphasised that implementation requires careful planning due to limited understanding of blockchain processes, confidentiality requirements under Section 138, and the need for comprehensive stakeholder

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education. Respondents advocated for a phased approach, beginning with internal applications before expanding to taxpayer-facing systems. These findings aligned with the TPB , demonstrating that technology adoption depended not only on technical feasibility but also on stakeholder attitudes, social norms, and perceived behavioural control.

While blockchain technology presents promising opportunities for enhancing transparency, efficiency, and compliance in the Malaysian taxation system, its successful implementation requires careful planning, effective stakeholder engagement, and a phased approach to integration. This study provides a foundational basis for informed decision-making by tax authorities and policymakers, highlighting both the potential benefits and practical challenges of blockchain adoption. As Malaysia continues to pursue its digital transformation agenda, the insights from this research contribute to the ongoing discourse on leveraging emerging technologies to strengthen tax administration and improve taxpayer engagement.

This study makes several contributions to the academic and practical understanding of taxation and technology adoption in Malaysia. First, it provides empirical evidence of stakeholder perspectives on blockchain feasibility within a developing economy context, addressing a significant gap in the literature. Second, it applies TPB to technology adoption in tax administration, demonstrating the framework's utility beyond traditional compliance studies. Third, it offers a comprehensive assessment of the Malaysian taxation landscape, documenting both achievements and ongoing challenges. Ultimately, it lays the groundwork for future research on blockchain integration in public sector financial systems.

This study contributes to the growing body of literature on technology adoption in tax administration by applying the TPB to understand stakeholder perspectives on blockchain implementation. The findings demonstrated that while tax authorities recognise the potential benefits of blockchain technology, practical implementation faced significant barriers related to technical complexity, stakeholder readiness, and institutional capacity.

The findings offer several practical insights for policymakers and tax administrators. First, the successful integration of blockchain technology requires comprehensive stakeholder education and training programmes to address knowledge gaps. Second, a phased implementation approach, beginning with internal applications before expanding to taxpayer-facing systems, may facilitate smoother adoption. Third, the potential linkage between blockchain and e-invoicing presents a practical entry point for introducing this technology within the Malaysian taxation ecosystem. The IRBM should establish a blockchain task force to conduct feasibility studies and pilot projects, regulatory frameworks should be developed to govern blockchain applications in taxation, capacity-building initiatives should be prioritised to enhance technical expertise among tax personnel, and public awareness campaigns should be launched to improve taxpayers' understanding of blockchain-enabled tax systems.

This study acknowledges several limitations. First, some potential respondents declined to participate in interviews due to scheduling constraints and organisational policies, limiting the sample diversity. Second, respondents demonstrated varying levels of familiarity with blockchain technology. While this variation provided insights into differing levels of technological readiness, it also constrained the depth of discussion on advanced technical and architectural aspects of blockchain implementation. As a result, the findings primarily reflected perceived feasibility and governance considerations rather than detailed system design

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or technical optimisation, which should be addressed through future interdisciplinary research involving information systems specialists. Third, confidentiality requirements under the taxation act restricted respondents' ability to disclose certain operational and policy information, thereby limiting the comprehensiveness of insights regarding internal processes. These limitations, although notable, did not diminish the validity of the findings but rather highlight areas that require attention in future research.

Future research should expand the sample to include additional stakeholders in the taxation field, such as taxpayers, technology vendors, and international tax experts, to capture diverse perspectives through interviews and mixed methods approaches. This is because opinions and overviews from other respondents with tax expertise are needed. Future researchers should also conduct their studies after the full implementation of IRBM's e-Invoicing system to better understand the process outcomes and whether this implementation can be linked with blockchain technology. Additionally, future studies could employ mixed-methods approaches, incorporating quantitative surveys alongside qualitative interviews to capture a broader range of stakeholder perspectives. Comparative studies examining the implementation of blockchain in other countries' tax systems could also provide valuable insights for the Malaysian context.

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7. CONFLICT OF INTEREST STATEMENT

The authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts and declare the absence of conflicting interests with the funders.

8. AUTHORS' CONTRIBUTIONS

Muhammad Shazarizul Haikal Mohd Samsuri: Conceptualisation, methodology, formal analysis, investigation and writing-original draft; **Soliha Sanusi**: Conceptualisation, supervision, methodology, investigation and formal analysis; **Siti Fatimah Abdul Rashid:** Investigation and validation; **Aziatul Waznah Ghazali**: editing, and validation**; Nik Herda Nik Abdullah**: editing, and validation.

9. DECLARATION OF GENERATIVE AI IN THE WRITING PROCESS

During the preparation of this work, the author(s) used Chat GPT in order to improve the readability and language quality of the work. After using this service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

10. DATA AVAILABILITY/SUPPLEMENTARY MATERIALS

i. **Available upon request:**

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

ii. **Data included in the article:**

All data generated or analysed during this study are included in this published article.

11. ETHICS STATEMENT

All procedures involving human participants/animal subjects complied with the ethical standards of the 1964 Helsinki Declaration. Informed consent was obtained from all participants, and data anonymity was strictly maintained throughout the study.

12. REFERENCES

Abd Hamid, N., Othman, R. D., Arshad, R., Sanusi, S., & Rashid, N. (2020). A comparison of wakalah zakah monitoring by Lembaga Zakat Selangor (LZS) and Pusat Zakat Melaka (PZM). *Journal of Critical Reviews, 7*(11), 318–325.

Abd Hamid, N., Rasit, Z. A., Ishak, A. I. B., Abd Hamid, R. B., Abdullah, F. A. B., & Sanusi, S. (2020). Determinants of tax compliance among GrabCar in Malaysia. *International Journal of Innovation, Creativity and Change, 10*(11).

Abdul Wahab, N., Mustapha, M. Z., & Md Rahin, N. (2025). Trust in the government and regulation: do they play a part in CSR decoupling-tax relationship? *Asia-Pacific Journal of Accounting & Economics, 32*(4), 678-704. 10.1080/16081625.2024.2342371

Adznan, S., Sanusi, S., Zaki, H. O., Raheem, M. M., & Smolo, E. (2024). Islamic banking and the fourth industrial revolution: The current application, adoption, and future challenges of artificial intelligence.

Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies, 2*(4), 314–324. https://doi.org/10.1002/hbe2.195

Ali, M. H., Chung, L., Kumar, A., Zailani, S., & Tan, K. H. (2021). A sustainable blockchain framework for the halal food supply chain: Lessons from Malaysia. *Technological Forecasting and Social Change, 170*, 120870. https://doi.org/10.1016/j.techfore.2021.120870

Allen, C., & Potdar, V. (2022). Blockchain to the rescue: Improving taxpayer engagement with blockchain. *Australian Tax Review, 50*, 211–220.

Babaei, A., Tirkolaee, E. B., & Ali, S. S. (2025). Assessing the viability of blockchain technology in renewable energy supply chains: A consolidation framework. *Renewable and Sustainable Energy Reviews, 212*, 115444. https://doi.org/10.1016/j.rser.2025.115444

Bernama. (2024, November 22). LHDN komited tingkat pematuhan cukai menerusi audit dan siasatan. *Astro Awani*. https://www.astroawani.com/berita-malaysia/lhdn-komited-tingkat-pematuhan-cukai-menerusi-audit-dan-siasatan-497394

Braun, V., & Clarke, V. (2012). *Thematic analysis*. American Psychological Association.

Chen, Y., Lu, Y., Bulysheva, L., & Kataev, M. Y. (2024). Applications of blockchain in Industry 4.0: A review.

Information Systems Frontiers, 26(5), 1715–1729. https://doi.org/10.1007/s10796-022-10248-7

Faizal, S. M., Zaini, R. M., & Somasundaram, N. R. (2021). Tax awareness and tax knowledge of students at the secondary school level in Malaysia. *International Business Education Journal, 14*(1), 65–70.

Fu, Z., & Wahab, N. A. (2024). Optimizing ESG Management in Enterprises Using'Internet+'and Big Data Technologies. *National Journal of Antennas and Propagation*, *6*(3), 43-52. DOI: 10.31838/NJAP/06.03.06

Handoko, Y., Toni, N., & Simorangkir, E. N. (2020, September). The effect of tax knowledge and tax sanctions on taxpayers' compliance at the Tax Office (KPP) Pratama, Medan Timur, through tax awareness as an intervening variable. *International Journal of Research and Review, 7*(9), 294–302.

Hashim, N. H., Abd Hamid, N., Sanusi, S., & Mohammed, N. (2022). The impact of e-filing usage on the job performance of tax agents in Malaysia. *International Journal of Business and Emerging Markets, 14*(1), 63–85. https://doi.org/10.1504/IJBEM.2022.119427

Khairi, K. F., Saadan, N., & Ayedh, A. M. A. (2025). Blockchain technology suitability in inter-organisational workflows: A thematic review of e-payment process in the Malaysian public sector. *The Journal of Muamalat and Islamic Finance Research*, 39–67. https://doi.org/10.33102/jmifr.647

Kurniawan, D. (2020). The influence of tax education during higher education on tax knowledge and its effect on personal tax compliance. *Journal of Indonesian Economy and Business,* 35, 57–72.

Larikaman, M., Salehi, M., & Yaghubi, N. M. (2025). The impact of applying blockchain technology in the tax system: Opportunities and challenges. *Journal of Financial Reporting and Accounting, 23*(2), 639–659. https://doi.org/10.1108/JFRA-10-2023-0407

Lembaga Hasil Dalam Negeri Malaysia. (2022). *Rangka kerja audit cukai*. https://www.hasil.gov.my/perundangan/rangka-kerja/

Li, S., Aman, A. B., Fernandez, D., Sanusi, S., Dong, S., Fan, Y., & Liao, Z. (2024). Value identification and its creation mechanism of digital transformation at enterprises. *IEEE Access, 12*, 55976–55997. DOI**:** 10.1109/ACCESS.2024.3388290

Li, T., Zahari, A. A., & Sanusi, S. (2023). The sustainability of technological innovation in China: From the perspective of network relationships. *Sustainability, 15*(5), 1–26. https://doi.org/10.3390/su15054242

Mahat, F., Sanusi, S., Saedon, R., & Ghazali, A. W. (2024). Hubungan moral cukai, peranan pihak berkuasa cukai dan audit ke atas pematuhan cukai dalam kalangan pelajar sambilan di institusi pengajian tinggi. *Asian Journal of Accounting and Governance, 22*, 69–81. http://dx.doi.org/10.17576/AJAG-2024-22-5

Mardiasmo, M. B. A. (2016). *Perpajakan (Edisi terbaru)*. Penerbit Andi.

Mat Jusoh, Y. H., Mansor, F. A., Abd Razak, S. N. A., & Wan Mohamad Noor, W. N. B. (2021). The effects of tax knowledge, tax complexity and tax morale towards tax compliance behavior among the salaried group in Malaysia. *Advances in Business Research International Journal, 7*(2), 250–266.

Mohamad, F., & Sanusi, S. (2020). Quality of governance and tax revenue generation in West Africa: A political process theory perspective. *Management & Accounting Review, 19*(1), 213–231.

Nemade, A. E., Kadam, S. S., Choudhary, R. N., Fegade, S. S., & Agarwal, K. (2019, March). Blockchain technology used in taxation. In *2019 International Conference on Vision Towards Emerging Trends in Communication and Networking* (pp. 1–4). IEEE DOI: 10.1109/ViTECoN.2019.8899652

Oladele, R., Aribaba, F. O., Adekunle, A. R., & Babatunde, A. D. (2020). E-tax administration and tax compliance

among corporate taxpayers in Nigeria. *Accounting and Taxation Review, 4*(3), 93–101.

Peláez-Repiso, A., Sánchez-Núñez, P., & García Calvente, Y. (2021). Tax regulation on blockchain and cryptocurrency: The implications for open innovation. *Journal of Open Innovation: Technology, Market, and Complexity, 7*(1), 98. https://doi.org/10.3390/joitmc7010098

Ramazhamba, P. T., & Venter, H. (2026). Blockchain forensics and regulatory technology for crypto tax compliance: A state-of-the-art review and emerging directions in the South African context. *Applied Sciences, 16*(2), 799. https://doi.org/10.3390/app16020799

Sanusi, S., Abd Hamid, N., Norizan, S., Urus, S. T., & Lestari, E. D. (2023). Determinants of a business resilience framework for small businesses: Moderating effects of financial literacy. *Review of Economics and Finance, 21*, 55–65.

Sanusi, S., Mohd Zaini Makhtar, M., & Ghazali, A. W. (2023). Microbial fuel cell (MFC) innovation in wastewater treatment plant: From economic perspective. In *Microbial fuel cell (MFC) applications for sludge valorization* (pp. 199–209). Springer Nature Singapore.

Sanusi, S., Nik Abdullah, N. H., Lim, T., Rastam, F., & Rozzaini, N. (2021). Tax awareness among students from higher learning institutions in Malaysia: Education area as a moderator. *International Journal of Economics and Management, 15*(1), 89–102.

Setyowati, M. S., Utami, N. D., Saragih, A. H., & Hendrawan, A. (2020). Blockchain technology application for value-added tax systems. *Journal of Open Innovation: Technology, Market, and Complexity, 6*(4), 156. https://doi.org/10.3390/joitmc6040156

Shahroni, N. A. H., Jusoh, Y. H. M., Mohamed, W. M. F. W., Salleh, M. S. M., & Mustafa, W. M. W. (2022). Post-COVID-19 and e-commerce in Malaysia: Tax compliance evidence among YouTubers, Instafamous, and Facebookers. *Asian Journal of Accounting and Finance, 4*(1), 26–42. https://doi.org/10.55057/ajafin.2022.4.1.3

Yayman, D. (2021). Blockchain in taxation. *Journal of Accounting and Finance, 21*(4), 140–155