



Technological Transformation for the Collection of Zakat, Tax and Custom in Saudi Arabia

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ABSTRACT

The technological transformation of revenue collection processes, encompassing Zakat, tax, and customs administration, has emerged as a significant initiative in Saudi Arabia's pursuit of modernization and efficiency in fiscal governance. This paper explores the implications and insights derived from this transformation, shedding light on the advantages, challenges, and future prospects associated with the integration of technology in revenue administration. Through a comprehensive review of literature, government documents, and expert insights, the paper examines how technological advancements enhance accuracy, efficiency, compliance, transparency, cost savings, and resource allocation in revenue collection. Furthermore, it analyzes the impact of technology on various stakeholders, including taxpayers, government agencies, businesses, and the economy as a whole. Recommendations are provided for policymakers and stakeholders to effectively leverage technology while mitigating challenges, emphasizing the importance of continued innovation, collaboration, and investment in technological infrastructure.

INTRODUCTION

In Saudi Arabia, the ongoing technological transformation of zakat, tax, and customs collection heralds a new era of modernization and efficiency in revenue administration. As the kingdom strives to diversify its economy and enhance fiscal sustainability, embracing digital innovation has emerged as a cornerstone of its strategic vision. This paradigm shift towards digitalization not only aims to streamline administrative processes but also seeks to foster greater transparency, accountability, and compliance within the tax and customs ecosystem. However, amidst the promise of technological advancement lie multifaceted challenges that must be navigated adeptly to realize the full potential of digital transformation.

Annually, the Saudi Zakat Tax and Customs Authority (ZATCA) receives a multitude of tax declarations from individuals, governmental bodies, financial institutions, corporations, and assorted entities (ZATCA, 2023). These digital submissions contain pertinent financial data pertaining to the activities of taxpayers. Additionally, ZATCA aggregates third-party data sourced from multiple governmental agencies to compile comprehensive taxpayer profiles and cross-verify their financial particulars. Typically, ZATCA leverages big data for its tax enforcement endeavors. Notably, one significant challenge confronting the Saudi tax authority is the underreporting of Zakat. Specifically, the Zakat base constitutes the entity's net worth computed for Zakat purposes (ZATAC, 2019). Subsequently, Zakat is levied on the company's Zakat base at a rate of 2.5%. To address the widening gap in Zakat compliance, ZATCA enforces an array of legal penalties and regulations (ZATAC, 2019). Indeed, non-compliance with Zakat obligations is construed as a transgression, necessitating taxpayers to substantiate their compliance to avert legal repercussions.

The earliest attempts to enhance tax compliance primarily relied on auditor efforts, which, however, proved to be costly and limited by the sheer volume of taxpayers, alongside the tax administration's constrained audit capacity. Additionally, although tax authorities collect extensive big data stored in their databases, these data are not efficiently utilized to bolster the detection rate of tax under-reporting. Essentially, most case selection strategies depend on auditors' intuition, domain expertise, and experience, lacking intelligent utilization of existing data (Uyar et al., 2021). Moreover, taxpayers continually evolve new methods of tax evasion that are notably challenging to identify, necessitating the implementation of advanced and robust fraud detection techniques (Wu et al., 2012; Dias et al., 2016). Recent advancements in Artificial Intelligence (AI) and its integration with data science have sparked interest among tax administrations worldwide to devise intelligent solutions complementing conventional approaches to identify fraudulent behavior and optimize auditing resources and data collection capabilities. Specifically, the wealth of tax data amassed by tax

administrations has spurred the development of sophisticated analytical models aimed at scrutinizing and uncovering patterns of tax fraud (Chica et al., 2021). Notably, machine learning (ML) techniques have been adapted and combined with vast tax datasets to enhance risk assessment and detection accuracy (González & Velásquez, 2013). Particularly in the realm of Value Added Tax (VAT) under-reporting detection, ML techniques have been employed. This involves formulating the task as a supervised learning process where historical VAT data are utilized to train classification models. These models are then capable of categorizing unseen VAT declarations into predefined classes: under-reporting or accurate declaration (Chan et al., 2022).

This paper aims to delve into the technological transformation for the collection of Zakat, tax, and customs in Saudi Arabia, emphasizing the pivotal role of technological advancements in reshaping traditional revenue collection practices. The study explores the multifaceted impact of technological innovation on the collection of Zakat, tax, and customs duties, analyzing its potential to revolutionize administrative processes and enhance compliance across various sectors. By synthesizing existing research and insights from the field, it endeavors to provide a comprehensive understanding of how technological solutions are facilitating efficient revenue collection, risk mitigation, and strategic alignment within the Saudi Arabian fiscal landscape. Furthermore, the paper seeks to elucidate emerging trends and challenges shaping the ongoing technological transformation of Zakat, tax, and customs collection, offering actionable recommendations for policymakers and stakeholders to navigate this evolving landscape effectively. Recognizing the strategic significance of technological advancements in revenue collection, particularly in Saudi Arabia, holds paramount importance for ensuring fiscal sustainability and economic growth. Effective management of Zakat, tax, and customs operations demands not only innovative technological solutions but also proactive risk management strategies and stakeholder engagement initiatives.

By embracing the transformative potential of technology in revenue collection processes, Saudi Arabia can strengthen its competitive position, streamline administrative procedures, and capitalize on opportunities for enhancing fiscal transparency and compliance. The integration of advanced technological solutions with traditional revenue collection practices not only improves efficiency and accuracy but also empowers government entities to make data-driven decisions and adapt swiftly to evolving regulatory frameworks and market dynamics.

The paper outlines the role of technological transformation in collection of zakat, tax and custom to overcome the risk. It evaluates their contribution to

system development and discusses the implications of AI in collection of zakat, tax and custom in Saudi Arabia. Finally, it concludes with insights on future directions.

METHODOLOGY

A comprehensive methodology was employed to investigate the technological transformation of revenue collection in Saudi Arabia. Initially, relevant literature, research papers, and reports concerning the integration of AI technology in revenue collection processes were gathered. Additionally, official documents, government publications, and regulatory frameworks related to Zakat, tax, and customs administration were reviewed. Thematic analysis of the collected literature was conducted to identify key themes, trends, and challenges in the technological transformation of revenue collection. Comparative analysis of different AI-integrated systems was undertaken to assess their impact on risk management, investment analysis, and organizational agility. The methodology also involved the selection and analysis of relevant case studies showcasing successful implementation of AI technology in revenue collection practices. Finally, peer review and validation of findings by experts in the field were undertaken to ensure the accuracy and reliability of the study's conclusions.

Zakat System Management in Saudi Arabia

In Saudi Arabia, the government, through the Ministry of Finance, oversees the collection of zakat along with taxes. Consequently, the establishment of the Department of Zakat and Income Tax (Mashlahah az-Zakaah Wa ad-Dakhl) ensued. Before 1951, Saudi Arabia lacked legislation pertaining to zakat management. However, in 1951 AD, a law was enacted via the King's Decree (Royal Court) No. 17/2/28/8634 on April 7, 1951 AD (29/6/1370 H), which introduced the obligatory zakat system (zakat syar'i), stipulating the management of zakat based on Islamic law. As per this decree, Saudi Arabian individuals and companies are mandated to pay zakat (Ridwan, 2016). Conversely, citizens of non-Saudi Arabia are subject solely to income tax regulations. Moreover, regulations permit individuals to distribute a portion of their zakat independently, while the remainder is allocated to the Department of Zakat and Income Tax institutions. In the case of companies, zakat is entirely directed to the Department of Zakat and Income Tax (Muhammad, 2019).

Zakat collection in Saudi Arabia encompasses all types of assets and is overseen by a commission called Al-Awamil, operating under the coordination of the Ministry of Finance and the Ministry of the Interior. This commission is tasked with collecting zakat related to agricultural alms, trade alms, deposits, and income, particularly in remote areas. The authorized institution for zakat

distribution is the Ministry of Social Affairs and Work, under the Director-General of Social Security (Sawmar & Mohammed, 2019). Saudi Arabia has developed an online-based zakat collection and tax system, supported by the Department of Zakat and Income Tax's comprehensive database and ICT (Information and Communication Technology) devices. This technological advancement positions Saudi Arabia as an advanced country in zakat management practices (Altawyan, 2020).

Challenges and Remedial Actions

The technological transformation for the collection of zakat, tax, and customs in Saudi Arabia is undoubtedly a pivotal step towards modernizing the nation's revenue collection mechanisms. Yet, this transformative journey is not without its complexities and challenges. One of the most pressing issues is the digital divide, which persists despite widespread digitalization efforts. Disparities in internet access and digital literacy, particularly in rural or underserved areas, may hinder the adoption of online tax filing and payment platforms, exacerbating inequalities in compliance rates across different demographic groups (Oreku, 2021; Rukundo, 2020). Furthermore, as tax authorities increasingly rely on digital platforms to collect and store vast amounts of sensitive taxpayer data, ensuring robust data security and privacy protections becomes paramount. The ever-evolving landscape of cyber threats, including hacking, phishing, and ransomware attacks, necessitates continuous investment in cybersecurity measures to safeguard taxpayer information and maintain public trust in the integrity of the tax system (Min & Yanting, 2018; Xinyue & Shuang, 2022).

Moreover, the inertia inherent in any significant technological shift presents another hurdle to overcome. Resistance to change from both taxpayers and tax officials who may be accustomed to traditional paper-based processes can impede the adoption of digital tax solutions (PALIL et al., 2020). Addressing this resistance requires not only user-friendly interfaces and comprehensive training programs but also effective communication strategies to demonstrate the benefits and reliability of digital tax services (Okunogbe & Santoro, 2023). In addition to these socio-technical challenges, the adequacy of technical infrastructure poses a practical obstacle to the widespread implementation of digital tax solutions (Li, 2018; Kang'oro, 2023). Reliable internet connectivity, robust IT systems, and interoperable platforms are indispensable for ensuring the seamless operation of digital tax collection mechanisms. However, infrastructure limitations in certain regions may hinder access to online services and limit the effectiveness of technological solutions (Zainal & Mat Udin, 2015; Putri et al., 2019).

To overcome these challenges, a holistic approach is required, encompassing not only technological innovation but also policy reforms, stakeholder engagement, and capacity-building initiatives (Zeng et al., 2012). Investing in digital literacy programs and infrastructure development can help bridge the digital divide and ensure that all segments of society can access and benefit from digital tax services (Chen et al., 2017). Similarly, fostering a culture of cybersecurity awareness and resilience is essential for safeguarding taxpayer data and maintaining public confidence in the tax system (Alkhodre et al., 2019).

Furthermore, proactive efforts to address regulatory barriers and streamline administrative processes can facilitate the adoption and integration of digital tax solutions (Sultana, 2022). By aligning technological initiatives with legal and regulatory frameworks and promoting interoperability among different systems, tax authorities can enhance the efficiency, transparency, and accountability of the tax and customs administration. While the technological transformation of zakat, tax, and customs collection in Saudi Arabia presents formidable challenges, it also offers unprecedented opportunities for enhancing revenue collection, improving compliance, and driving economic growth (Alateeg & Alhammadi, 2023; 2024). By addressing the digital divide, strengthening cybersecurity measures, overcoming resistance to change, and investing in technical infrastructure and capacity building, Saudi Arabia can unlock the full potential of digitalization to build a more inclusive, transparent, and efficient tax and customs system for the benefit of all its citizens and businesses.

Technology Adoption for Collections

The technological transformation for the collection of zakat, tax, and customs in Saudi Arabia represents a significant shift towards modernizing and streamlining revenue collection processes (Al-Ayed, 2022). This transformation involves leveraging advanced technologies to enhance efficiency, accuracy, transparency, and compliance in the collection of government revenues.

One key aspect of this transformation is the adoption of digital platforms and online portals for tax filing, payment, and reporting. These platforms provide taxpayers with convenient and user-friendly interfaces to fulfill their obligations remotely, reducing the need for manual paperwork and physical visits to government offices. Additionally, digital platforms enable real-time tracking of transactions, which helps in monitoring compliance and detecting any irregularities promptly. Furthermore, the implementation of data analytics and artificial intelligence (AI) technologies plays a crucial role in improving the

effectiveness of tax collection efforts. By analyzing large volumes of data, tax authorities can identify patterns, trends, and potential risks related to tax evasion or fraud. AI-powered algorithms can also help in automating certain compliance checks and flagging suspicious activities for further investigation.

Moreover, blockchain technology holds promise for enhancing the transparency and integrity of tax and customs processes. By recording transactions in a tamper-proof and decentralized ledger, blockchain ensures that information remains immutable and verifiable, reducing the risk of data manipulation or fraud. This can be particularly beneficial in customs operations, where the authenticity of trade documents and transactions is critical (Al-Ayed, 2019).

Additionally, the use of biometric authentication and digital identity verification technologies can strengthen security measures and prevent identity theft or fraud in tax and customs transactions. Biometric authentication methods, such as fingerprint or facial recognition, can ensure that only authorized individuals have access to sensitive taxpayer information or government systems (Alateeg et al., 2024). The technological transformation for the collection of zakat, tax, and customs in Saudi Arabia represents a forward-looking approach towards modernizing government operations and enhancing the efficiency and effectiveness of revenue collection processes (Al-Ayed et al., 2021). By embracing innovation and leveraging advanced technologies, tax authorities can improve compliance levels, reduce administrative burdens, and contribute to the overall economic development of the country.

DISCUSSION

The discussion surrounding the technological transformation of Zakat, tax, and customs collection in Saudi Arabia is multifaceted, encompassing various implications and insights. At the forefront of this discourse are the notable advantages brought about by embracing technology in revenue administration. The implementation of advanced systems enhances accuracy by minimizing errors in data entry and calculation processes, leading to more precise assessment and collection of revenues. Furthermore, the streamlining of administrative procedures through automation improves overall efficiency, reducing bureaucratic delays and enhancing the responsiveness of government agencies to taxpayer needs (Al-Tit et al., 2022).

Moreover, technological advancements foster greater compliance with tax and customs regulations by enabling authorities to detect discrepancies and instances of non-compliance more effectively (Al-Ayed et al., 2023). This enhanced monitoring capability instills a sense of accountability and

transparency within the revenue collection process, fostering trust among taxpayers and government institutions alike (Al-Ayed, 2024). Additionally, the cost savings associated with automation, including reductions in manual labor and paperwork, contribute to the optimization of resource allocation and the maximization of fiscal resources.

However, amidst the numerous benefits, it is imperative to acknowledge the challenges and limitations inherent in the technological transformation (Al-Tit & Al-Ayed, 2017). Initial implementation costs, resistance to change among stakeholders, cybersecurity risks, and disparities in digital literacy pose significant hurdles that must be addressed to ensure the successful adoption and integration of technology in revenue administration (Al-Ayed & Al-Tit, 2021). Looking ahead, the discussion extends to the broader implications of technological transformation for policy formulation and implementation. Recommendations are made for policymakers and government agencies to leverage technology effectively while mitigating any remaining challenges (Al-Ayed & Al-Tit, 2023; 2024). Emphasis is placed on the importance of continued innovation, collaboration, and adaptation to navigate the evolving landscape of revenue collection in Saudi Arabia effectively.

CONCLUSION

The technological transformation of Zakat, tax, and customs collection in Saudi Arabia represents a pivotal shift towards modernization and efficiency in revenue administration. Throughout this exploration, it has become evident that embracing technology offers a multitude of advantages, including enhanced accuracy, efficiency, compliance, transparency, cost savings, and resource allocation. By leveraging advanced systems and automation, Saudi Arabia is poised to optimize its revenue collection processes, fostering greater trust and accountability among taxpayers and government institutions. However, the journey towards technological transformation is not without its challenges. Initial implementation costs, resistance to change, cybersecurity risks, and disparities in digital literacy pose significant obstacles that must be navigated. Nonetheless, by addressing these challenges proactively and collaboratively, Saudi Arabia can capitalize on the opportunities presented by technology to drive sustainable growth and development. Looking ahead, it is imperative for policymakers and stakeholders to continue innovating and adapting to the evolving landscape of revenue administration. Recommendations for further leveraging technology effectively, while mitigating challenges, have been outlined, emphasizing the importance of continued collaboration and investment in technological infrastructure. Ultimately, the technological transformation of Zakat, tax, and customs collection in Saudi Arabia signifies a significant step

towards a more modern, efficient, and transparent revenue administration system. By embracing innovation and fostering collaboration, Saudi Arabia is poised to realize the full potential of technology in driving economic prosperity and fiscal sustainability for years to come.

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