

## ADVANCEMENTS IN DIGITAL TRANSFORMATION AMONG MALAYSIAN ZAKAT INSTITUTIONS

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### ABSTRACT

The integration of advanced technology into the management of zakat is significantly transforming the way institutions operate, collect, and effectively distribute zakat funds to those in need. The level of technology adoption among zakat institutions in Malaysia remains varied, with some institutions being more advanced while others still lag behind. This research therefore aims to evaluate

the current state of technology usage among Malaysian Zakat Institutions as of 2025. In detail, this research focusing on the institutions' website technology disclosures, enactment updated, online applications and compares the 14 zakat institutions, highlighting trends, gaps, and best practices in technological transformation. This comprehensive study employs a qualitative, comparative research design methodology to thoroughly analyze the current state of technology adoption across the 14 prominent zakat institutions in Malaysia. The analysis reveals several critical conclusions regarding the evolution of zakat institutions in the digital landscape. Firstly, there has been a universal adoption of online payment systems across all zakat institutions, signifying a broader national transition toward digital transactions that enhance convenience and accessibility for contributors. However, disparities in technological advancement persist, as larger institutions typically lead in digital innovation, whereas smaller organizations struggle with limited resources and expertise, resulting in a fragmented technological landscape. This research significantly contributes to the field by providing an up-to-date, comparative analysis of technology adoption across Malaysian Zakat Institutions, highlighting progress, disparities, and best practices, and offering insights to inform policy and strategic improvements in digital zakat management.

**Keywords:** Zakat Institutions, Malaysia, Digital, Technology, Online Payment

## 1. INTRODUCTION

As one of the five pillars of Islam, zakat is a required almsgiving payment intended to promote social justice and income redistribution in Muslim communities. It is essential for reducing poverty, bolstering social welfare initiatives, and resolving economic disparities. Zakat has become increasingly important worldwide because it aligns with Islamic social finance principles (Bayinah, 2017). Zakat payers must distribute 2.5 percent of their money to eight different beneficiary categories, or *aṣnaf*, according to al-Qaradawi (2011). Although the ultimate goal of zakat is to progressively turn the *aṣnaf* into zakat payers, it also seeks to alleviate poverty.

As a vital part of Malaysia's Islamic financial framework, zakat plays a crucial role in alleviating poverty in the country. Various Islamic organizations manage the state-level collection of zakat, ensuring the process aligns with federal guidelines (Razak, 2020). As an example on the stats, in 2023, the

total amount of Zakat funds collected by Lembaga Zakat Selangor reached up to over RM1 billion, as reported by Bernama. Each individual state has established its own dedicated zakat institution that is tasked with overseeing the entire process. These institutions are fundamentally responsible for ensuring that the collection, management, and disbursement of zakat funds are conducted in strict accordance with Shariah principles as well as local regulations that govern financial transactions (Ridwan et al., 2019). In addition to their primary duties, Malaysian Zakat Institutions are in charge of financial reporting, stakeholder confidence, and public awareness initiatives. Their ability to collect and distribute funds efficiently affects their effectiveness. With platforms for digital payments, real-time tracking, and improved stakeholder communication, technology integration has become a key enabler in accomplishing these objectives (Abdul, 2023).

Throughout the years, technological innovations have transformed financial systems around the world, including Islamic finance and the management of zakat. In Malaysia, zakat institutions have progressively adopted digital transformation to improve their operational efficiency, broaden donor engagement, and enhance service delivery to beneficiaries. Innovations such as online payment platforms, mobile applications, and automated distribution systems have become essential elements of contemporary zakat management. Additionally, technology significantly contributes to boosting transparency and accountability, which are crucial factors that affect public trust and participation with zakat institutions. Despite notable progress in the digital transformation of zakat institutions particularly with the universal adoption of online payment systems there remains a significant disparity in the level of digitalization across institutions in Malaysia. Larger, more established zakat bodies tend to lead in implementing advanced digital tools such as mobile apps, automated application systems, real-time tracking of zakat distribution, and comprehensive online disclosures. These institutions often have better access to funding, skilled personnel, and infrastructure, allowing them to innovate more rapidly.

Conversely, smaller zakat institutions struggle with limited financial resources, inadequate technical expertise, and outdated systems, which hinder their ability to keep pace with digital advancements. This uneven development creates a fragmented digital landscape, where the quality of service delivery, transparency, and user experience can vary widely depending on the institution. Such disparities not only affect the efficiency of zakat management but may also erode public trust and limit the potential of technology to enhance outreach and impact. Differences in governance, funding, and infrastructure at the

state level have resulted in inconsistencies in the adoption of digital solutions (Rosele et al. , 2022). Understanding and addressing these disparities are crucial for ensuring equitable access to zakat services nationwide. This paper therefore is prepared to update the observation on technology adoption among Malaysian Zakat Institutions for the industry and authority awareness on enhancing zakat system in Malaysia.

## 2. EXISTING LITERATURES

In 2020, Che Mohd Salleh and Chowdhury have conducted a seminal study titled “Technological Transformation in Malaysian Zakat Institutions: A Qualitative Analysis.” This research provided a detailed comparative analysis of the technological capabilities of the ten zakat institutions in Malaysia. The study assessed technology adoption through various dimensions, including website functionalities, online applications, and digital payment systems, offering insights into the strengths and weaknesses of each institution (Salleh & Chowdhury, 2020). Key findings of the study included:

- i. A growing reliance on online platforms for zakat collection and donor engagement.
- ii. Significant disparities in technological maturity among institutions, with some demonstrating advanced capabilities while others lagged behind.
- iii. The importance of updating zakat enactments to facilitate and regulate the adoption of new technologies.
- iv. Challenges such as limited budgets, lack of technical expertise, and resistance to change in certain institutions.

While Che Mohd Salleh and Chowdhury (2020) provided a snapshot of technological transformation in 2020, it did not account for developments in subsequent years, particularly in response to global challenges such as the COVID-19 pandemic. This underscores the need for a follow-up study to capture the current state of technology adoption and assess the progress made by Malaysian Zakat Institutions over the past four years.

### 2.1 Research Gap

Since the 2020s, the landscape of technology and zakat management has evolved significantly. The global COVID-19 pandemic accelerated

the adoption of digital services across multiple sectors, including Islamic finance. Lockdowns and restrictions necessitated a shift toward online platforms, creating both opportunities and challenges for zakat institutions. These changes have likely influenced the way zakat is collected, managed, and distributed in Malaysia, but there is limited research documenting these developments (Ninglasari & Muhammad, 2021).

Additionally, emerging technologies such as blockchain, artificial intelligence, and big data analytics have started to gain traction in Islamic finance. These tools offer potential solutions to longstanding challenges in zakat management, including ensuring transparency, preventing fraud, and optimizing resource allocation (Chong, 2021). Despite their potential, the extent to which Malaysian Zakat Institutions have embraced these technologies remains unclear.

Furthermore, changes in state-level zakat enactments may have influenced the adoption and regulation of technology within zakat institutions. Updated laws and policies could either facilitate or hinder digital transformation, depending on their design and implementation.

This research seeks to fill these gaps by providing an updated comparative analysis of the fourteen zakat institutions in Malaysia as of 2025. By evaluating their current technological capabilities, this study aims to identify progress made for the period of 5 years, highlight persisting challenges, and offer recommendations for future improvements. It also explores the role of policy changes and emerging technologies in shaping the future of zakat management in Malaysia.

This research aims to:

1. Evaluate the current state of technology usage in Malaysian Zakat Institutions in 2024.
2. Analyze the progress since the 2020 study, focusing on website disclosures, online applications, and updates in zakat enactments.
3. Provide a comparative analysis of all zakat institutions in Malaysia, highlighting trends, gaps, and best practices in technological transformation.

## 2.2 Overview of Technology in Zakat Management

The integration of advanced technology into the management of zakat is significantly transforming the way institutions operate, collect, and effectively distribute zakat funds to those in need. Across the globe, a variety of technological tools are playing a vital role in helping to automate many routine administrative tasks, optimize the allocation of resources, and enhance the overall efficiency of zakat disbursement to beneficiaries who rely on these funds for support (Atif et al., 2021). Online payment systems have rapidly gained popularity as they provide a convenient and accessible way for donors to contribute their zakat, effectively overcoming numerous geographical and logistical barriers that previously hindered contributions. Additionally, mobile applications have greatly expanded the outreach capabilities of zakat institutions, enabling them to engage meaningfully with younger, tech-savvy demographics who are increasingly seeking to participate in charitable giving through innovative and user-friendly platforms (Meerangani et al., 2022).

Transparency is undoubtedly an essential element in the efficient administration of zakat, the charitable contributions mandated by Islamic law. This transparency is considerably improved through the innovative use of technology. Donors now have increased demands for clear and thorough reporting on how their generous donations are utilized, and advanced digital platforms provide effective tools for real-time reporting and complete transaction monitoring. For zakat beneficiaries, technology simplifies the often complex process of applying for and receiving essential zakat support, effectively removing the need for lengthy and intricate bureaucratic procedures that can discourage those in need from obtaining help (Razzak et al., 2024).

Research in the field reveals that the integration of technology within zakat institutions varies considerably across different regions, with this disparity primarily shaped by several factors, including resource availability, the level of technical expertise, and the existing regulatory frameworks that govern these organizations. Generally, institutions situated in developed nations tend to lead in the adoption of cutting-edge technological solutions that improve their operational effectiveness and outreach. In contrast, their counterparts in less developed areas face a range of obstacles, such as inadequate infrastructure and limited funding, which restrict their capacity to implement similar technological advancements (Willya et al., 2023).

### **2.3 Emerging Technologies and Their Applications in Zakat**

Emerging technologies present a wealth of innovative solutions that effectively address long-standing and persistent challenges in the management of zakat. By leveraging advancements such as blockchain, data analytics, and mobile applications, these technologies are revolutionizing the way zakat is collected, distributed, and monitored.

For starters, AI-powered tools have the potential to significantly enhance the process of donor profiling, thereby enabling zakat institutions to more effectively identify and target potential donors who are most likely to contribute. In addition to improve donor engagement, AI can also play a crucial role in fraud detection by meticulously analyzing patterns found in both transactions and applications, which helps to ensure that funds are disbursed exclusively to genuine beneficiaries in need of assistance (Laylo, 2023). Following that, blockchain technology fundamentally ensures transparency by meticulously maintaining a tamper-proof ledger that records all transactions in an immutable manner. This innovative approach can be particularly effective in accurately tracking the distribution of zakat funds and offering real-time updates to donors regarding how their contributions are being utilized (Chong, 2021). Lastly, data analytics tools provide institutions with the capability to effectively process and analyze vast amounts of datasets, enabling them to identify significant trends in both zakat contributions and the evolving needs of beneficiaries. Such insights can inform critical strategic decisions, such as optimizing resource allocation and refining campaign planning to better meet community needs (Paizin, 2021) (Almomani et al., 2024).

While these advanced technologies offer the potential for substantial benefits and enhancements across various sectors, significant challenges, including the high costs associated with implementation, the urgent need for skilled personnel well-versed in these systems, and the common resistance to change among employees and stakeholders, must be effectively addressed to ensure successful adoption and integration into existing frameworks.

### **2.4 Technological Transformation in Malaysian Zakat Institutions**

Malaysia has established itself as a prominent leader in the field of Islamic finance, a position that includes a significant emphasis on its zakat institutions, which play a crucial role in the distribution of wealth

within the Muslim community. These zakat institutions have increasingly recognized the importance of embracing advanced technology to enhance their operations and improve efficiency in their processes (Shaikh et al., 2020). In fact, a comprehensive study conducted in Che Mohd Salleh and Chowdhury (2020) provided a detailed and thorough assessment of the current state of technological adoption across the ten major zakat institutions operating in Malaysia.

The study identified a trend toward digitization, with institutions adopting systems such as:

- Online Platforms: Websites offering detailed information about zakat calculation, payment options, and eligibility criteria.
- Mobile Applications: Apps designed for zakat calculation, payments, and updates on institutional activities.
- Automated Payment Systems: Integration of electronic fund transfers and credit/debit card payments for seamless zakat contributions.

That being said, significant disparities were clearly observable among various institutions engaged in zakat administration. Leading organizations such as Lembaga Zakat Selangor (LZS) and Pusat Pungutan Zakat Wilayah Persekutuan (PPZ-MAIWP) have taken a prominent role in this field, effectively implementing sophisticated digital systems with advanced features aimed at improving efficiency and transparency. Conversely, smaller organizations faced considerable challenges mainly due to financial limitations and infrastructural constraints that obstructed their ability to adopt comparable technological solutions. Additionally, the research highlighted the critical necessity for standardized practices across all entities, as well as the urgent need to modernize zakat regulations to adequately address the swift technological advancements shaping the sector (Salleh & Chowdhury, 2020).

## **2.5 Gaps in Existing Literature**

Although research concerning the integration of technology in zakat management has significantly expanded in recent years, several critical gaps remain that warrant further investigation and attention. Post-COVID-19 studies are notably limited, as there has been insufficient documentation regarding the specific impacts the pandemic has had on the technological

capabilities of zakat institutions and how these capabilities have evolved during and after this global crisis (Abdul, 2023). Additionally, when it comes to emerging technologies, there are very few comprehensive studies that thoroughly explore the practical applications of advanced innovations such as artificial intelligence, blockchain, and big data analytics within the context of zakat management and their potential to enhance operational efficiencies and transparency (Salleh et al., 2022). Furthermore, there exists a significant gap in the understanding of policy impact, as there is an insufficient analysis of how recent updates to zakat enactments and regulations influence the rate and nature of technological adoption amongst various zakat institutions. Lastly, there is minimal focus on the crucial aspect of user experience, as the perspectives of both donors and beneficiaries regarding the usability, accessibility, and overall effectiveness of digital zakat platforms have not been adequately addressed in current research. These identified gaps highlight the pressing need for updated and comprehensive research that builds on previous studies, effectively addressing recent developments and emerging trends pertaining to technology in the field of zakat.

### 3. METHODOLOGY

This research utilizes a qualitative, comparative research design methodology to thoroughly investigate the current landscape of technology adoption among fourteen Malaysian Zakat Institutions. The research framework builds on and refines the foundational model established in the 2020 study by Marhanum Che Mohd Salleh, thereby maintaining a notable level of consistency and comparability between these two important studies. The emphasis is on analyzing publicly accessible data and institutional practices, including website disclosures concerning technological capabilities, the availability and functionality of online zakat applications, and recent updates in state-level zakat legislations regarding technology utilization.

Utilizing a thorough comparative analysis, the research pinpoints the diverse similarities, key distinctions, and evolving patterns related to technology adoption in various sectors. This offers important insights into the considerable advancements achieved since 2020, while also emphasizing particular areas that still need additional enhancement and development.

### 3.1 Data Collection Methods

Data collection focuses on publicly available information, ensuring accessibility and replicability. The key sources of data include:

#### a. Institutional Websites

An extensive evaluation of the official websites belonging to all zakat organizations has been carried out to thoroughly examine the range of technological services they offer to users. The primary components analyzed during this assessment include the existence of effective online payment systems designed to streamline contributions. Moreover, the study looks into the presence and performance of zakat calculation tools that aid users in accurately determining their obligations. Another essential factor in this analysis is the degree of information transparency, which involves the availability of comprehensive financial reports and consistent updates regarding the allocation of funds. Lastly, the design and accessibility features of each website are meticulously reviewed to ensure they adequately serve a diverse user base.

#### b. Online Applications

Online applications created by zakat institutions undergo an extensive evaluation process that thoroughly assesses their various features, overall user-friendliness, and key functionalities. This thorough review includes a meticulous analysis of payment methods and zakat calculation tools designed to streamline the donation process for users. Additionally, effective tracking mechanisms are integrated into these apps to provide users with clear insights into their zakat contributions over time. Furthermore, the applications feature timely notifications and updates, keeping users informed about pertinent events and changes in the zakat landscape. Lastly, the incorporation of multilingual support and accessibility features is essential to accommodate diverse demographics, ensuring a broader reach and understanding of zakat practices among various user groups.

#### c. State-Level Zakat Enactments

Recent modifications to zakat regulations across several states are thoroughly analyzed to enhance the understanding of their considerable effect on the integration of technological innovations. This extensive evaluation includes an in-depth look at the provisions established for the implementation of

digital platforms and various payment methods aimed at streamlining zakat transactions. Moreover, the analysis examines the policies enacted concerning data protection and transparency to ensure that all transactions are executed securely and are accountable to the involved stakeholders. In addition, the assessment takes into account the various incentives or obstacles that affect the adoption of new technologies, emphasizing how these elements can either promote or impede innovation within the zakat system.

### 3.2 Data Analysis

The collected data is analyzed using a tabular comparison approach, similar to the methodology employed in the 2020 study. The analysis is structured as follows:

#### a. Comparative Tables

A detailed and comprehensive table is created to enable a nuanced comparison of the technological capabilities of each institution across several dimensions. The first dimension for this evaluation is website features, which includes the availability of advanced functionalities such as payment gateways, interactive calculators, donor dashboards, and other relevant tools aimed at enhancing user engagement. Another crucial dimension is online app functionalities, which covers vital features such as payment processing, real-time notifications, tracking systems, and an overall experience that is intuitive and user-friendly. Furthermore, updates on zakat implementation is analyzed, focusing on any significant policy changes that either promote or regulate the integration of new technology within these institutions. Lastly, a thorough review of the progress made since 2020 is undertaken to assess advancements or possible stagnation in the technological capabilities of these institutions over recent years.

#### b. Thematic Analysis

Qualitative thematic analysis is performed to recognize and emphasize the prevalent trends, ongoing challenges, and new opportunities that exist within various institutions. The primary themes that have emerged include degrees of digital maturity, which indicate the diverse levels of technological progress among these institutions. Furthermore, significant obstacles to technology adoption are evident, including inadequate funding

and a shortage of essential expertise in the area. Finally, the analysis reveals remarkable innovations and effective practices that have been successfully adopted across these institutions.

#### 4. FINDINGS

This section presents a comprehensive analysis of the technological capabilities of all zakat institutions in Malaysia as of 2025. The findings are structured across three primary dimensions: institutional website functionalities, online application features, and updates in state-level zakat enactments. The analysis also highlights progress since the 2020 study, identifying emerging trends, persistent challenges, and best practices. Table 1 below provides a comparison of all the ten zakat institutions.

**Table 1: Current Updates Among Zakat Institutions on Technology Adoption**

No.	Zakat Institutions	Enactment on Zakat	Disclosure on Related Information at Website	Zakat Online Application (as of 2025)	Zakat Online Application (as of 2020)
1.	Pusat Zakat Melaka Zakat Melaka (PZM)	Enakmen Pentadbiran Agama Islam (Melaka) 2002 section 75 (1)	<ul style="list-style-type: none"> <li>• Informative website on Zakat compare to the previous 5 years</li> <li>• Disclosure on amount zakat collection and distribution is via e-Bulletin since 2024</li> <li>• No online zakat calculation</li> <li>• Live chatbox using Whatsapp</li> </ul>	<p>There is online payment gateway for zakat payment (www.izakat.com)</p> <ul style="list-style-type: none"> <li>• Smartphone application not present</li> <li>• Zakat application is done manually (form)</li> <li>• No zakat dashboard</li> </ul>	*No zakat apps yet or any online system built to ease zakat payment and distribution

No.	Zakat Institutions	Enactment on Zakat	Disclosure on Related Information at Website	Zakat Online Application (as of 2025)	Zakat Online Application (as of 2020)
2.	Majlis Agama Islam Negeri Johor (Zakat Department)	Zakat & Fitrah Rules Year 1962	<ul style="list-style-type: none"> <li>• Website is not that informative and attractive</li> <li>• Zakat calculation tool present</li> <li>• No disclosure on amount zakat collection and distribution</li> </ul>	<ul style="list-style-type: none"> <li>• There is online payment gateway for zakat payment called eMAIJ</li> <li>• Smartphone application not present</li> <li>• No live chatbox</li> <li>• No zakat dashboard</li> </ul>	<p>*There is option to pay zakat via online transfer</p> <p>*No online application specific for zakat</p>
3.	Negeri Sembilan Baitulmal Body	Enakmen Pentadbiran Agama Islam (Negeri Sembilan) 2003  (Enakmen No. 10 2003).	<ul style="list-style-type: none"> <li>• Website is up to date, informative and attractive</li> <li>• Zakat calculation tool present</li> <li>• Disclosure on amount zakat collection and distribution live on the website</li> <li>• Disclosure of community service activities</li> </ul>	<ul style="list-style-type: none"> <li>• There is online payment gateway for zakat payment</li> <li>• Mobile Apps for zakat payment (Zakat N9)</li> <li>• Online zakat assistance application</li> <li>• No live chatbox</li> </ul>	<p>*Online system for zakat calculation, payment system</p> <p>*Mobile Apps for zakat payment (Zakat N9)</p>

No.	Zakat Institutions	Enactment on Zakat	Disclosure on Related Information at Website	Zakat Online Application (as of 2025)	Zakat Online Application (as of 2020)
4.	Majlis Agama Islam Wilayah Persekutuan (Zakat Collection Centre- PPZ)	Article 3 (5) of the Federal Constitution Section 4 (1), Act 505 Section 31, Act 505	<ul style="list-style-type: none"> <li>• Zakat calculation tool in MAIWP Pocket</li> <li>• Disclosure of zakat collection and distribution via MAIWP Pocket</li> </ul>	<ul style="list-style-type: none"> <li>• There is online payment gateway for zakat payment</li> <li>• Mobile application for Asnaf tracing (MoJA)</li> <li>• Implementation of SoftPOS</li> <li>• MAIWP Pocket application for zakat activities (back to school assistance, zero hunger, Luqatah, Kaffarah, and others)</li> <li>• No live chatbox</li> </ul>	<p>*Online system for zakat (calculation, payment, statement)</p> <p>*Online payment system (salary deduction, direct transfer FPX, credit card, internet banking)</p> <p>* No mobile apps</p>
5.	Lembaga Zakat Selangor	Trusty Act 1952	<ul style="list-style-type: none"> <li>• Zakat calculation tool present</li> <li>• No disclosure on amount zakat collection and distribution on website</li> <li>• Informative website</li> <li>• Active in social media</li> </ul>	<ul style="list-style-type: none"> <li>• Online payment gateway present</li> <li>• Smartphone application present</li> <li>• MDEC Digital Collaboration</li> <li>• Live chatbox using Whatsapp</li> </ul>	<p>*Comprehensive online system for zakat payment, collection, and distribution</p> <p>e-zakat pay</p> <p>e-zakat online</p> <p>e-majikan</p> <p>e-ejen</p> <p>e-spg (salary deduction)</p>

No.	Zakat Institutions	Enactment on Zakat	Disclosure on Related Information at Website	Zakat Online Application (as of 2025)	Zakat Online Application (as of 2020)
6.	Pusat Kutipan Zakat Pahang	Enakmen Pentadbiran Undang-Undang Islam 1991	<ul style="list-style-type: none"> <li>• Zakat calculation tool present</li> <li>• Disclosure on live amount zakat collection and distribution in the website</li> <li>• Very informative and user friendly website</li> <li>• All zakat activities is disclosed in website</li> <li>• Active in social media (Youtube, Tiktok, instagram, Facebok, X)</li> </ul>	<ul style="list-style-type: none"> <li>*Zakat online payment (FPX)</li> <li>*Mobile apps (Zakat Klik)</li> <li>*BizZakat</li> <li>*Chat box is prepared via Whatsapp and handphone no.</li> </ul>	<ul style="list-style-type: none"> <li>*Zakat online payment (FPX)</li> <li>*Mobile apps (Zakat Klik)</li> <li>*Artificial intelligent usage</li> <li>*BizZakat</li> </ul>
7.	Majlis Agama Islam Kelantan	Enactment 4 1994 Section 51	<ul style="list-style-type: none"> <li>• Zakat calculation tool present</li> <li>• Live disclosure on amount zakat collection and distribution via MAIK Dashboard <a href="https://dashboard.e-maik.my">https:// dashboard. e-maik.my</a>)</li> <li>• Very informative website</li> </ul>	<ul style="list-style-type: none"> <li>*Online zakat payment system and assistance (monthly salary deduction, jompay, fpx, migs)</li> <li>*Mobile apps (MyMAIK e-zakat payment)</li> </ul>	<ul style="list-style-type: none"> <li>*Online zakat payment system and assistance (monthly salary deduction, JomPAY, FPX, MiGS)</li> <li>*Mobile apps (MyMAIK e-zakat payment)</li> </ul>

No.	Zakat Institutions	Enactment on Zakat	Disclosure on Related Information at Website	Zakat Online Application (as of 2025)	Zakat Online Application (as of 2020)
8.	Majlis Agama dan Adat Resam Terengganu	Enakmen Pentadbiran Hal Ehwal Agama Islam (Terengganu) 2001 (En. 2/01) Section 70	<ul style="list-style-type: none"> <li>• Zakat calculation tool present via online application</li> <li>• Disclosure on live amount of zakat collection and distribution in the website</li> <li>• Simple and straightforward website design</li> <li>• Not active in social media</li> </ul>	<p>*Online system to apply zakat and for zakat payment</p> <p>*Mobile Apps (Sahabat MAIDAM)</p> <p>*No chatbox</p> <p>*No zakat dashboard</p>	<p>*Online system to apply zakat and for zakat payment</p> <p>*No mobile apps</p>
9.	Lembaga Zakat Negeri Kedah	Enakmen Lembaga Zakat Negeri Kedah Darul Aman (LZNK) 2015	<ul style="list-style-type: none"> <li>• Zakat calculation tool present via online application</li> <li>• Disclosure on live amount zakat collection and distribution in the website</li> <li>• Attractive and informative website design and user friendly</li> <li>• Active in social media</li> </ul>	<p>*Mobile Apps (Zakat on touch)-quite comprehensive which not only on zakat payment</p> <p>*List of online application including JOM Zakat (payment, zakat calculation), Agihan Zakat Guru Agama, Asnaf Care, Agihan Pelajar Pondok, Portal Agihan, and many more</p>	<p>*Online zakat calculation and payment</p> <p>*Mobile Apps (Zakat on touch)-quite comprehensive which not only on zakat payment</p>

No.	Zakat Institutions	Enactment on Zakat	Disclosure on Related Information at Website	Zakat Online Application (as of 2025)	Zakat Online Application (as of 2020)
10.	Majlis Agama Islam dan Adat Istiadat Melayu Perlis	Enakmen Pentadbiran Agama Islam Negeri Perlis 2006	<ul style="list-style-type: none"> <li>• Zakat calculation tool present</li> <li>• No disclosure on amount zakat collection and distribution</li> <li>• No disclosure on annual report</li> <li>• Have social media account, but it's on general activities</li> </ul>	<ul style="list-style-type: none"> <li>• Online payment gateway present for zakat payment and calculation</li> <li>• No smartphone application</li> <li>• No Zakat dashboard</li> <li>• No online system for zakat assistance application</li> </ul>	<p>*Limited online system for Zakat payment</p> <p>*No mobile apps</p> <p>*No online system for zakat assistance</p>
11.	Majlis Agama Islam dan Adat Melayu Perak	Enakmen Pentadbiran Agama Islam (Perak) 2004 (Enakmen Bil. 4 Tahun 2004)/Islamic Religious Administration (Perak) Enactment 2004 (Enactment No. 4 of 2004).	<ul style="list-style-type: none"> <li>• Zakat calculation tool present</li> <li>• Disclosure on live amount zakat collection and distribution on website</li> <li>• Provide zakat assistance form via online application/portal</li> <li>• List of professional amil</li> <li>• No financial report</li> <li>• Informative website, but no chatbox offered</li> <li>• Simple and straightforward website design</li> <li>• Sometimes website temporarily down</li> </ul>	<ul style="list-style-type: none"> <li>• Zakat payment system via FPX</li> <li>• Zakat payment system via infaq</li> <li>• Zakat scheduled deduction system</li> <li>• Smartphone application present</li> </ul>	<p>Not covered by the previous study by Che Mohd Salleh and Chowdhury (2020)</p>

No.	Zakat Institutions	Enactment on Zakat	Disclosure on Related Information at Website	Zakat Online Application (as of 2025)	Zakat Online Application (as of 2020)
12.	Zakat Pulau Pinang (ZPP)	Akta Syarikat 1965	<ul style="list-style-type: none"> <li>• Zakat calculation tools</li> <li>• Disclosure on live amount zakat collection and distribution on website</li> <li>• Provide zakat annual report</li> <li>• Simple and straightforward website design</li> </ul>	<ul style="list-style-type: none"> <li>• Zakat payment via JomPAY</li> <li>• Zakat payment via GoPayz</li> <li>• Zakat payment through portal zakatpenang2u.com</li> <li>• Smartphone application not present</li> </ul>	Not covered by the previous study by Che Mohd Salleh and Chowdhury (2020)
13.	Tabung Baitulmal Sarawak (TBS)	Ordinan Majlis Islam Sarawak (Pemerbadanan) (Pindaan) 1984	<ul style="list-style-type: none"> <li>• Zakat calculation tools</li> <li>• Disclose in zakat information system on the amount zakat collection and distribution (refer to FAQ) – no live disclosure</li> <li>• No financial report</li> <li>• Simple and straightforward website design</li> </ul>	<ul style="list-style-type: none"> <li>• Zakat payment through portal Baitul kamek</li> <li>• Smartphone application present</li> <li>• No live chatbox</li> <li>• No zakat dashboard</li> </ul>	Not covered by the previous study by Che Mohd Salleh and Chowdhury (2020)
14.	Majlis Ugama Islam Sabah (MUIS)	Enakmen Zakat dan Fitrah Negeri Sabah No.6 Tahun 1993	<ul style="list-style-type: none"> <li>• Zakat calculation tools</li> <li>• Disclosure on live amount of zakat collection and distribution</li> <li>• No financial report</li> <li>• Simple and straightforward website design</li> </ul>	<ul style="list-style-type: none"> <li>• Zakat payment via banks</li> <li>• Zakat payment via myEG</li> <li>• Zakat payment via JomPAY</li> <li>• Zakat payment via SnapnPay</li> <li>• Smartphone application not present</li> <li>• No live chatbox</li> </ul>	Not covered by the previous study by Che Mohd Salleh and Chowdhury (2020)

#### 4.1 Finding: Technological Adoption in Institutional Websites

Institutional websites are a critical touchpoint for donors and beneficiaries, serving as the primary interface for zakat-related information and services. The study found varying levels of functionality across the ten zakat institutions.

##### a. Online Payment Gateways

Based on website observation, compared to the previous findings in year 2020, all zakat institutions have shown strong adoption on online payment gateways for zakat collection to allow their users to make payments easily on their devices. Furthermore, each of the zakat institution's websites feature a direct and obvious link to the respective payment systems via various methods (direct payment, salary deduction, or others). Internet banking is also available for all fourteen (14) zakat institutions, giving options for zakat payers based on their preferences.

##### b. Zakat Calculation Tools

In terms of zakat calculation tools, majority of the institutions have provided online tool that allow their users to easily calculate the required amount for zakat payments in their respective state. On top of that, the amount of nisab was also updated by majority of the institutions for the reference of the users. However, it is observed that the approach adopted by the institutions are varies whereby some of the institutions disclose the tool directly in the website which easily access and a few of them disclosed it via the respective portal where the users need to sign up to access the tool. On that note, Jabatan Wakaf, Zakat dan Haji's (JAWHAR) website compiles all the states zakat calculators into one easily navigable page, allowing the user to simply pick their state's calculator with ease.

##### c. Financial Transparency

Out of the 14 zakat institution's websites, majority of the institutions have started to disclose the amount of daily zakat collection and distribution (up to date) on their websites. However, two of them were not disclosed the amount of zakat collection and distribution in their websites which are Majlis Agama Islam Negeri Johor (Zakat Department) and Lembaga Zakat Selangor (LZS). Even though LZS was seen to be among the advance institutions in terms of technology adoption where it is proven via their online zakat system and

informative website, they are yet to adopt zakat dashboard which would give the user an advantage of updating the zakat amount lively.

#### d. Accessibility and User Experience

Browsing through all 14 different websites, the user experience can be said to be consistently positive throughout each website. Compared to the previous five years, there are a lot of improvement shown by all the Islamic Religious Council in their website either information/knowledge disclosure or financial disclosure. Most of the websites are informative and user friendly in terms of navigability and possess all the required information that is expected. Its including websites by Pusat Zakat Melaka Zakat Melaka (PZM), Majlis Agama Islam Negeri Johor (Zakat Department), Negeri Sembilan Baitulmal Body, Lembaga Zakat Selangor, Pusat Kutipan Zakat Pahang, Majlis Agama Islam Kelantan and the rest as mentioned in Table 1. Hence, only a few of them were offered chat boxes (for example, PZM and LZS) to assist users even though it was not based on artificial intelligence technology.

## 4.2 Finding: Online Application Functionalities

Online application functionalities are important in allowing muzakki to make the necessary zakat payments. Since 2020, there have been several technological innovations made within certain states of Malaysia to ease the payment and management of Zakat.

In April 2023, the Zakat Collection Centre under the Federal Territories Islamic Religious Council (PPZ-MAIWP) piloted a Software-based Point of Sale (SoftPOS) system called Fasstap. This technology enables authorized zakat collectors to accept contactless payments directly via NFC-enabled Android devices, facilitating convenient and secure transactions for contributors using MyDebit ATM cards. The pilot was conducted at selected locations, including the PPZ-MAIWP Head Office and prominent mosques in Kuala Lumpur. Following its success, there are plans to extend this system to other types of zakat, such as income and savings zakat.

**Digital Collaboration:** In December 2023, Lembaga Zakat Selangor (LZS) partnered with the Malaysia Digital Economy Corporation (MDEC) to integrate innovative digital solutions into its ecosystem. The collaboration focuses on enhancing the efficiency of zakat distributions by leveraging technologies such as dashboards, blockchain, and artificial intelligence.

This initiative aims to improve service delivery and ensure timely assistance to beneficiaries.

Digital Performance Evaluation: The Kedah State Zakat Board (LZNK) has implemented a digital performance evaluation system to enhance efficiency, transparency, and service delivery. This system streamlines the assessment of organizational performance, ensuring effective distribution of zakat funds to eligible beneficiaries.

Penang and Sabah, that in March 2024, TNG Digital, the operator of Touch 'n Go eWallet, expanded its services to include zakat payments for users in Penang and Sabah. This integration allows Muslims in these states to fulfill their zakat obligations conveniently through the eWallet platform, covering various types of zakat, including zakat fitrah. The service is also available in other states, including Selangor, Pahang, Negeri Sembilan, and Kedah. Beyond that, other states within Malaysia have implemented a basic online zakat system, but are not as advanced as some of the previously mentioned states.

### **4.3 Finding: Updates in State-Level Zakat Enactments**

State-level zakat enactments influence the extent to which institutions can adopt and implement technological innovations. The study reviewed recent changes to these regulations. It can be noted that since 2020, there have been no new enactments nor have there been amendments to existing enactments with regards to zakat management. Out of the 14 different zakat institutions studied, all of the zakat institutions follow the same enactment to zakat as they did back in 2020. These were namely the Enakmen Pentadbiran Agama Islam (Melaka) 2002 section 75 (1) for Melaka, Zakat & Fitrah Rules Year 1962 for Johor, Enakmen Pentadbiran Agama Islam (Negeri Sembilan) 2003 (Enakmen No. 10 2003) for Negeri Sembilan, Article 3 (5) of the Federal Constitution Section 4 (1), Act 505 Section 31, Act 505 for Wilayah Persekutuan, Trusty Act 1952 for Selangor, Enakmen Pentadbiran Undang-Undang Islam 1991 for Pahang, Enactment 4 1994 Section 51 for Kelantan, Enakmen Pentadbiran Hal Ehwal Agama Islam (Terengganu) 2001 (En. 2/01) Section 70 for Terengganu, Enakmen Lembaga Zakat Negeri Kedah Darul Aman (LZNK) 2015 for Kedah and Enakmen Pentadbiran Agama Islam Negeri Perlis 2006 for Perlis. These enactments have been maintained as the standing guidance for the management of Zakat within each state of Malaysia.

The findings reveal a mixed landscape of technological adoption in Malaysian Zakat Institutions. While significant progress has been made in expanding digital payment systems and transparency tools, disparities in resource availability, regulatory support, and technical expertise continue to limit the full potential of technology in zakat management. Institutions such as LZS and PPZ-MAIWP stand out for their comprehensive digital ecosystems, demonstrating the benefits of investing in user-friendly platforms, real-time tracking systems, and transparency mechanisms. Their experiences provide a model for other institutions seeking to enhance their technological capabilities.

## 5. DISCUSSION

The results highlight significant advancements in the adoption of technology by Malaysian Zakat Institutions since the last study conducted in 2020. One of the most notable improvements is the complete implementation of online payment systems; by 2024, all Malaysian Zakat Institutions have successfully incorporated online payment gateways, signifying a thorough shift towards cashless transactions. Furthermore, there has been a marked expansion of zakat calculation tools, with the launch of interactive resources designed to boost user engagement and streamline the zakat calculation process for donors. Enhancements in transparency are also apparent, as the increase in financial reporting on institutional websites shows a greater commitment to accountability and trust-building within the community. Altogether, these developments reflect an increasing awareness among zakat institutions of the essential role that digital transformation plays in meeting donor expectations and improving operational efficiency in today's philanthropic environment.

### 5.1 Disparities Among Institutions

Despite the evident advancements in technology across various sectors, the gaps in technological capabilities among institutions remain a significant and persistent challenge that must be addressed. Larger organizations, such as Lembaga Zakat Selangor (LZS) and Pusat Pungutan Zakat Wilayah Persekutuan (PPZ-MAIWP), continue to spearhead digital innovation largely due to their access to superior funding and advanced infrastructure that facilitate these efforts. In contrast, smaller organizations often face obstacles stemming from limited financial resources and a shortage of technical expertise, hindering

their ability to match the progress of their larger peers. Furthermore, while some institutions have started to delve into the adoption of innovative technologies like blockchain and the establishment of real-time tracking systems, these advanced features are not consistently implemented across the board, resulting in a disjointed technological landscape. This situation underscores a pressing need for focused support and resources, especially for smaller institutions, to guarantee equitable access to technological tools and opportunities that promote development and enhancement.

## **5.2 Emerging Technologies and Their Potential**

The adoption of emerging technologies, while still somewhat limited, offers numerous exciting opportunities for innovation across different sectors. Early adopters of blockchain technology, notably organizations like LZS, have effectively showcased its vast potential to enhance both transparency and traceability in zakat transactions, fostering a more reliable system. Widespread implementation of blockchain in a wider array of institutions could significantly mitigate issues related to fraud and mismanagement that have affected traditional practices. Furthermore, although AI is not yet broadly utilized in this area, its capabilities could transform zakat management by optimizing donor profiling, automating laborious administrative tasks, and detecting complex patterns that may indicate fraudulent behavior. Additionally, organizations with access to extensive and diverse datasets can utilize advanced analytics to accurately predict emerging trends, improve targeting of potential donors, and enhance resource allocation in a more effective way. To fully capitalize on these substantial advantages and innovations, institutions must first navigate considerable challenges, including high implementation costs, a shortage of the required expertise in their teams, and the ongoing uncertainties regarding regulatory frameworks.

## **5.3 Role of Policy and Regulation**

State-level zakat regulations are crucial in influencing the rate and extent of technological adoption across different sectors and regions. Recent research indicates that states with well-developed policies for digital platforms, robust data protection measures, and attractive financial incentives are substantially better equipped to facilitate significant technological transformation and advancement. Additionally, the existence of inconsistent policies between states impedes the possibility of standardization and results

in considerable disparities in technological capacities, which can obstruct overall development. To effectively tackle these pressing issues, establishing a consistent regulatory framework could promote enhanced collaboration, encourage the exchange of best practices, and simplify the adoption of emerging technologies across the entire region.

## **5.4 Challenges and Barriers**

Numerous significant obstacles continue to obstruct the successful digital transformation of zakat institutions, which are vital for improving their operational efficiency and outreach. To begin with, smaller institutions frequently find it challenging to obtain sufficient funding for advanced technologies, which greatly restricts their capacity to compete with larger organizations that have more extensive financial resources. Additionally, the limited awareness and digital literacy among certain donor and beneficiary groups pose substantial hurdles to the adoption of digital platforms, which are critical for streamlining zakat processes. Furthermore, organizational inertia and a natural resistance to embracing new systems can considerably impede the overall speed of transformation, slowing down progress toward modernization. These ongoing challenges highlight the urgent need for comprehensive capacity-building efforts, including targeted training initiatives, financial assistance programs, and awareness campaigns, to effectively promote sustainable technological adoption and integration within these organizations.

## **5.5 Best Practices and Lessons Learned**

The experiences and successful approaches of prominent organizations like LZS and PPZ-MAIWP offer critical insights into effective practices that could greatly assist other entities in the sector. To begin with, the adoption of all-encompassing digital platforms that integrate websites, mobile applications, and efficient payment systems not only elevates user experience but also significantly boosts operational efficiency for both organizations and their stakeholders. Additionally, the release of comprehensive and transparent financial reports, paired with the strategic implementation of blockchain technology, is vital in fostering donor confidence and promoting generous community contributions. Finally, the incorporation of mobile optimization, the availability of multilingual support, and the creation of intuitive user interfaces collectively expand the reach and accessibility of zakat organizations, enabling them to

connect with a more varied audience. These outstanding practices can act as excellent blueprints for smaller institutions aiming to improve their technological capabilities and overall impact.

## 6. CONCLUSIONS AND RECOMMENDATIONS

The research aimed to assess the state of technological adoption across Malaysian Zakat Institutions in 2025, building on the findings of the study by Che Mohd Salleh and Chowdhury. The analysis highlights significant advancements, persistent disparities, and emerging opportunities within the sector.

The analysis discovers several important insights concerning the development of zakat institutions within the digital realm. There has been a widespread adoption of online payment systems among all zakat institutions, highlighting a broader national shift towards digital transactions that improve convenience and accessibility for contributors. Additionally, advancements in zakat calculation tools and enhanced transparency have resulted in notable increases in user engagement and institutional accountability, primarily facilitated through interactive tools and comprehensive financial reporting. However, variations in technological sophistication remain, with larger institutions often leading in digital innovation, while smaller organizations face challenges due to limited resources and expertise, leading to a fragmented technological environment. The potential effects of emerging technologies such as blockchain, artificial intelligence, and big data analytics are significant, yet their application is still in its infancy and requires further investigation to fully utilize their potential. Lastly, state-level policy influence is crucial; the establishment of supportive and standardized zakat regulations is vital for creating an environment that promotes technological advancement, ultimately leading to a more equitable evolution across all zakat institutions. While progress since 2020 is evident, challenges such as financial constraints, regulatory gaps, and digital literacy issues must be addressed to ensure equitable access to technological advancements across all institutions.

To tackle the identified disparities and challenges in this study, several focused recommendations are suggested. On the policy front, harmonizing zakat regulations at the state level while offering financial incentives, such as grants and tax benefits, can facilitate fair technological integration across institutions. Additionally, reinforcing data privacy regulations and promoting collaboration between states will improve transparency and operational efficiency. At the

institutional level, smaller organizations should focus on investing in cutting-edge technologies like blockchain and artificial intelligence, utilizing shared resources and expertise by forming partnerships with larger, more established institutions. Improving the accessibility of digital platforms, which includes mobile optimization and multilingual options, will ensure that services can reach a wider audience, especially in rural and underserved communities.

Moreover, capacity-building initiatives are essential for sustainable change. These encompass employee training programs to enhance technical skills, digital literacy efforts aimed at donors and beneficiaries, and outreach activities to boost public awareness of digital zakat services. By executing these strategies, zakat institutions in Malaysia can attain a more inclusive, efficient, and transparent management of zakat, establishing a standard for the integration of technology in Islamic finance worldwide.

This research provides significant contribution both to the respective literatures on zakat and technology as well as to the zakat industry especially in the Malaysian context. Findings from this research can be an important input to the zakat institutions in the globe in enhancing efforts to increase efficiency of zakat management system. This would enhance the public trust and confident towards the zakat institutions to be at par with other financial institutions in the market.

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