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Exploring the impact of digital accounting and digital zakat on improving business sustainability in the Middle East and Malaysia





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ABSTRACT

This paper seeks to explore the potential of digital accounting and digital zakat in enhancing corporate sustainability. It primarily examines the role of these digital modalities in enhancing philanthropic contributions, improving financial transparency, and achieving sustainability goals. The study explores the synergistic effects of combining digital accounting and digital zakat, and aims to fill the knowledge gap regarding their collective impact on sustainable business practices. The results confirm the primary hypothesis and show a positive correlation with corporate sustainability. Consistent with previous research, digital zakat is identified as a catalyst for stakeholder engagement and a facilitator of sustainable development initiatives. Similarly, digital accounting is associated with increased financial transparency, thereby strengthening corporate sustainability efforts. These findings underscore the need for further exploration and integration into corporate strategies and highlight the prospects of digital technology in strengthening corporate sustainability. The study provides strategic recommendations for businesses, policymakers, and academics to promote sustainable practices and align financial systems with broader sustainability goals. This research is central to deepening the understanding of digital technologies' ability to enhance sustainability in business contexts, and future studies should extend these findings to examine the complex dynamics of how digital solutions can optimize sustainability in different sectors and settings.

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1. Introduction

The fusion of technology, finance, and charity has generated special potential to enhance business sustainability in the contemporary period of fast digital transition (McManus, 2008). Digitalization has radically changed the field of accounting practices, allowing businesses to improve transparency and expedite financial procedures (Manita et al., 2020). At the same time, new opportunities for firms to engage in socially responsible activities have emerged as a result of the digitization of traditional charitable practices,

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notably the Islamic idea of zakat (Rabbani et al., 2021; Allah Pitchay, 2022). However, by examining their possible synergies and effects on contemporary business practices, this study aims to investigate how digital accounting and digital zakat might improve corporate sustainability. Due to the fact that the digital revolution has profoundly changed how firms conduct their financial affairs, a new era of corporate operations has emerged (Abdalla et al., 2022). Financial reporting, auditing, and resource allocation within organizations have been transformed by digital accounting, which is characterized by the use of sophisticated software and technology-driven systems (Bakarich et al., 2021; Bose et al., 2023; Hamour et al., 2023; Zobi et al., 2023; Ababneh et al., 2023). This transition towards digital accounting practices has been motivated by the pursuit of efficiency, accuracy, and transparency in financial operations. Corporations are increasingly recognizing that digital accounting systems not only streamline financial processes but also have the potential to enhance sustainability reporting and practices (Alflaieh, 2022). Simultaneously, the Islamic tradition of zakat, which mandates the provision of alms to support the less fortunate, has found its place in the digital realm (Sari et al., 2019). Digital zakat platforms and technologies have emerged, offering individuals and corporations streamlined methods to fulfill their philanthropic obligations (Al-Zaqeba and Al-Rashdan, 2020). Digital zakat enables seamless contributions, transparent fund allocation, and the efficient disbursement of funds to those in need (Mikai and Onagun, 2020; Ajmal et al., 2023). For corporations, embracing digital zakat aligns their philanthropic endeavors with sustainable development goals and provides an avenue for integrating social responsibility into their business strategies. While digital accounting and digital zakat represent promising tools for enhancing corporate sustainability, there is a notable gap in our understanding of how these digital innovations synergize and impact modern corporate practices (Menne et al., 2022). The effectiveness of digital accounting in bolstering corporate sustainability and the transformative potential of digital zakat integration remain underexplored (Narulitasari et al., 2023). Nevertheless, by investigating the impact of digital accounting and digital zakat on promoting company sustainability, this research aims to fill these knowledge gaps. By doing this, the Authors hope to contribute to the rising conversation on corporate sustainability in the digital age by offering insightful information about how businesses may use digitalization for sustainable development and social responsibility, in addition to promoting business sustainability. It provides insightful information on the possible benefits of implementing digital accounting procedures and digital zakat activities in business sustainability efforts. The results highlight the critical role that zakat, an Islamic form of social financing, and developments in digital accounting systems may play in encouraging sustainable business practices. This study also emphasizes how crucial it is to use technology and moral financial practices to advance sustainability goals, offering a road map for companies looking to improve their environmental, social, and governance (ESG) performance using cutting-edge digital methods.

2. Literature review

A compelling area of research in contemporary scholarship is the intersection of digital accounting, digital zakat, and corporate sustainability, which sheds light on the transformative potential of technology-driven financial practices in encouraging sustainable corporate behavior (Patel et al., 2022). Corporate sustainability has evolved into a crucial area of attention for businesses everywhere. In recent years, digital zakat (Islamic almsgiving) and digital accounting integration have emerged as possible methods for fostering sustainability. The purpose of this literature study is to investigate how these digital technologies affect business sustainability. We may learn more about how digital accounting and digital zakat can help firms achieve their larger sustainability goals by looking at pertinent research and conclusions.

2.1. Digital accounting and corporate sustainability

Financial processes inside organizations have undergone a transformation thanks to the integration of digital accounting systems, which promises improved efficiency and transparency (Al-Zaqeba et al., 2022). Zhou and Wang (2020) provided evidence that the use of digital accounting technology is closely related to increased accuracy and transparency in sustainability reporting. Digital accounting enables businesses to collect, examine, and report financial data related to sustainability, enabling a thorough and open assessment of their sustainability programs. The use of digital accounting systems, according to Shubailat et al. (2024), also helps to raise operational effectiveness and reduce costs, which eventually improves sustainability performance. Their research provided insight into how digitalization improves resource allotment, simplifies processes, and helps organizations achieve their sustainability goals. Moreover, the use of digital accounting not only improves productivity but also makes it easier to report financial and sustainability data accurately and on time (Lutfi et al., 2022; Spilnyk et al., 2022). This is essential in the current corporate environment, where stakeholders, such as investors, customers, and regulatory agencies, are calling for greater responsibility and transparency in relation to sustainability activities (Al-Okaily et al., 2023). Digital accounting has made it feasible for firms to accurately and easily access sustainability data, enabling them to connect their financial and sustainability goals and demonstrate а comprehensive approach to corporate sustainability. Additionally, the effective use of resources and cost reductions made possible by digital accounting are consistent with sustainability principles since they help ensure the ethical and sustainable use of organizational resources. However, Corporate sustainability and digital accounting work together to improve efficiency, accuracy, and transparency inside organizations. Businesses may streamline processes, more effectively manage resources, and ultimately advance their sustainability goals by utilizing digital accounting solutions. Digital accounting and corporate sustainability go hand in hand, demonstrating the significant influence technology can have on promoting ethical and sustainable company practices in the current day.

2.1.1. Efficiency and accuracy

The effectiveness and accuracy of financial reporting are crucial factors that have a big impact

on how an organization operates and makes decisions. According to Ali et al. (2023), it has been proven that using digital accounting systems improves financial reporting efficiency and accuracy. Data input, reconciliation, and financial analysis are just a few of the numerous financial processes that these sophisticated systems are intended to automate (Thakker and Japee, 2023).

Automation speeds up the reporting process and reduces the chance of mistakes, producing more accurate and trustworthy financial data.Financial experts may concentrate on more challenging analytical work and strategic planning thanks to automation, which facilitates data management (Mosteanu and Faccia, 2020). This results in increased efficiency, allowing for quicker reactions to shifting financial environments and offering insightful data for wiser decision-making. Organizational efficiency is further increased by the decreased manual effort and time spent on repetitive operations, which also helps to cut operational costs. Moreover, the facilitation of accurate financial reporting by digital accounting systems has a beneficial ripple effect (Spilnyk et al., 2022). An organization's resource allocation may be improved with the use of accurate financial data. By minimizing waste and wasteful spending, effective resource allocation maximizes the utilization of both financial and non-financial assets. According to Alsagri et al. (2018), this ideal resource management not only boosts financial performance but also corresponds with environmental sustainability goals. Organizations may lessen their environmental effect and support sustainability goals by cutting waste and making sure resources are used wisely (Cherrafi et al., 2017). Improved financial reporting accuracy encourages educated choices and directs financial expenditures to eco-friendly methods and equipment. For firms looking to strike a balance between economic development and ecological responsibility, this linkage of financial accountability with sustainability goals is essential.

2.1.2. Transparency and accountability

The introduction of digital accounting systems has considerably improved the financial reporting principles of transparency and accountability. According to Arens et al. (2012), digital accounting fosters transparency by giving users immediate access to financial data. A thorough knowledge of an organization's financial performance and health is made possible by this real-time accessibility, which enables stakeholders, internal as well as external, to examine and analyze financial information right away.

Transparency in financial reporting has a good effect on corporate responsibility and governance, which is one of its main advantages (Salehi et al., 2022). Stakeholders are more likely to have faith and confidence in financial information when it is readily available and presented in a straightforward and comprehensible way (Yeo et al., 2023). Since they

can readily track financial activity and evaluate risks and possibilities, stakeholders and investors are more likely to have faith in a company that practices open financial reporting. Furthermore, by drawing in socially conscious investors, financial reporting openness supports sustainability objectives. The ethical and environmental effects of investing are becoming more and more important to modern investors. They look for businesses that are dedicated to sustainability and transparency. Investors' decisions to invest in socially responsible enterprises are influenced by the information that transparent financial reporting gives them to assess a company's sustainability initiatives and ethical practices.

2.1.3. Cost reduction

The adoption of digital accounting systems has greatly sped up organizational cost reduction. According to Kan and Serin (2022), these technologies enable quicker financial processes, paper decrease consumption, and lower administrative overhead, all of which lead to considerable cost savings. Digital accounting eliminates repetitive procedures, increases overall efficiency, and simplifies numerous financial duties, allowing businesses to cut costs while increasing production. Process streamlining is among the most noticeable ways to cut costs.

The time and effort needed to finish numerous processes, such as data input, reconciliation, and reporting, are greatly reduced by automation and digitalization of financial operations. As a consequence, the staff becomes leaner and more effective, which eventually lowers labor costs and boosts operational efficiency. In addition, cutting back on paper directly reduces costs. The printing, storing, and physical distribution of papers are expensive aspects of traditional paper-based accounting systems. By switching to digital accounting, these costs are significantly reduced, resulting in cost savings and compliance with ecofriendly practices.

Moreover, lower administrative costs are yet another important area of cost-cutting. Digital accounting systems automate routine administrative chores, enabling businesses to use their human resources more effectively. Having less administrative work to do results in cost savings since managing normal financial processes requires fewer resources. By carefully investing the cost savings from the adoption of digital accounting into sustainability activities, systems the organization may further its commitment to environmental and social responsibility. This money can be used to support sustainability activities like the adoption of renewable energy, waste reduction programs, or other eco-friendly projects, as mentioned by Alattass (2023). This reinvestment serves as an example of a comprehensive strategy where cost reduction helps the organization both monetarily and in terms of sustainability and CSR.

2.2. Digital zakat and corporate sustainability

Digital zakat platforms have emerged as a conduit for corporations to integrate philanthropic practices with sustainability goals. Hasan (2020) found that corporations actively integrating zakat into their sustainability initiatives demonstrated a more substantial positive impact on their overall sustainability performance. This research highlights the potential synergy between corporate philanthropy, particularly zakat, and sustainable development efforts. Additionally, Yusuf et al. (2022) emphasized that the integration of digital zakat platforms fosters community engagement, strengthening corporate ties with local stakeholders. Participation by businesses in programs aiming at enhancing the social, economic, and environmental facets of regional communities is referred to as sustainable community development. By combining environmental, social, and governance (ESG) factors into company operations and plans, these initiatives are in line with the sustainability principles. By initiatives, businesses part in such taking demonstrate their dedication to enhancing social well-being and reducing their ecological impact, supporting their efforts to be more sustainable (Yáñez-Valdés and Guerrero, 2023). This participation promotes trust and goodwill among stakeholders by demonstrating social responsibility and a commitment to the welfare of the communities in which they operate (Adomako and Tran, 2023). Initiatives for sustainable community development also offer a forum for interaction with a variety of stakeholders, boosting satisfaction and enhancing the reputation of the brand (Ajina et al., 2020). These initiatives also place a strong emphasis on creating long-term value, avoiding short-term benefits in favor of helping to build a stable, successful society that will eventually be advantageous to the company's future prospects. In addition, integrating sustainability into community development initiatives reduces the likelihood of regulatory noncompliance and reputational harm, demonstrating a dedication to moral behavior. Furthermore, because top talent increasingly seeks out purpose-driven work settings, it helps recruit and keep that talent. An environment of continual development and forward-thinking company practices is promoted through the creativity and learning that result from teamwork on sustainable initiatives.

2.3. Innovations in sustainability reporting

In today's business context, innovations in sustainability reporting are crucial, and the incorporation of digital accounting plays a crucial role in developing this subject. Alsharari and Ikem (2023) indicated that the implementation of digital accounting systems helps organizations to easily include sustainability criteria in their financial reporting procedures. The capacity of the organization to evaluate and effectively convey its sustainability performance is improved by this integration, which helps it harmonize its financial and sustainability goals (Gunarathne et al., 2021). Historically, financial reporting and sustainability reporting were frequently viewed as distinct entities (Wachira et al., 2020). However, with the introduction of digital accounting, sustainability data can be easily incorporated into financial reporting, providing stakeholders with a thorough perspective of an organization's financial and sustainability performance in a unified manner. This novel strategy helps to show how sustainable practices and financial stability are interdependent. It also increases transparency.

As mentioned by Pham and Thu Ho (2022), another opportunity for innovation in sustainability reporting is the incorporation of zakat, an Islamic form of almsgiving, into digital accounting systems. A novel method of CSR and sustainability reporting is the incorporation of zakat into financial systems, especially for businesses operating in areas where zakat is a common practice (Al-Malkawi and Javaid, 2018). The recording and reporting of zakat donations and associated actions can be aided by this integration, demonstrating an organization's dedication to social and ethical duties. In addition, integrating zakat through digital accounting accelerates the procedure and increases accessibility and transparency. Automated zakat contribution tracking and reporting not only complement sustainability initiatives within an organization but also demonstrate a broader commitment to social welfare and community development, which resonates with various stakeholders and may improve the organization's reputation and brand image (Listiana and Edriyanti, 2023). However, Significant developments in sustainability reporting may be seen in the creative integration of zakat and the incorporation of sustainability parameters into financial reporting via digital accounting. By bridging the gap between financial and sustainability goals, these technologies make it possible to analyze and communicate sustainability performance more effectively. Nevertheless, zakat integration also exemplifies how technology may be used to automate and improve reporting on social and ethical duties, displaying a thorough approach to sustainability reporting in the contemporary corporate environment.

2.4. The synergy of digital accounting and digital zakat

An important development in the areas of financial transparency, corporate accountability, and sustainable practices is the merging of digital accounting and digital zakat. Alam et al. (2023) pointed out that by providing a transparent and accountable record of zakat contributions, this integration improves the openness and traceability of charitable gifts. Building confidence among stakeholders, such as shareholders, investors, and the general public, is largely dependent on this level of openness. It enhances the organization's reputation and promotes wholesome interactions by demonstrating its commitment to both fiscal honesty and social responsibility.

According to Al-Zageba et al. (2023), digital accounting paired with zakat integration enables organizations to monitor how zakat donations affect sustainability parameters. Businesses may learn a lot about the success of their sustainability initiatives by using digital tools to track and evaluate the results of zakat-funded projects. With the help of this datadriven methodology, organizations may more precisely assess how zakat funds are advancing sustainability objectives and, as a result, make wise decisions and improve their sustainability strategy. Moreover, having a better knowledge of how zakatfunded initiatives affect sustainability measures helps organizations adjust their plans and deploy their resources more wisely (Nabi et al., 2021). Companies may reroute their zakat payments to programs that more closely match their goals by sustainability identifying successful programs and opportunities for improvement. The beneficial ripple effects of zakat on social and environmental sustainability are maximized by companies using this iterative method, which also benefits the community. However, a potent mechanism that improves financial transparency, social responsibility, and sustainability practices inside organizations is the interaction between digital accounting and digital zakat. It increases stakeholder confidence, emphasizes the dedication to fiscal responsibility and social welfare, and offers insightful information about how zakat donations affect sustainability measures. Through this connection, businesses may improve their sustainability strategy, use zakat funding wisely, and affect real, long-lasting change in the communities they serve.

3. Research model and hypothesis development

Adding to the prior studies, it is clear that developing a thorough conceptual model that incorporates digital accounting and digital zakat has significant potential to improve business sustainability (Alzaqebah and Abdullah, 2015; Malkawi et al., 2019; Alzagebah et al., 2020; 2021). The corpus of literature highlights the significant benefits of digital accounting, demonstrating gains in financial efficiency, transparency, and accountability, all crucial components directly influencing an organization's sustainability goals. Additionally, the combination of digital accounting with zakat enhances these advantages by offering a methodical way to monitor and assess how zakat donations affect sustainability measures (Al-Zageba et al., 2023). This integration improves social responsibility and financial transparency while also allowing organizations to fine-tune their sustainability strategy and make sure that zakat monies are used to their fullest potential (Alam et al., 2023). The interplay of various digital technologies highlights their potential to encourage sustainable

behavior and build stakeholder trust, eventually promoting sustainability from a financial and social perspective. Additionally, the incorporation of digital zakat platforms into corporate strategies has demonstrated the potential to bolster social responsibility efforts and engage with stakeholders in a meaningful way, further aligning with sustainability objectives. Combining these two elements within a single model could provide a holistic approach to corporate sustainability, where financial transparency and responsible financial practices are interlinked with charitable giving and community engagement. As organizations strive to socially and environmentally become more responsible, this integrated model has the potential to offer a comprehensive framework for achieving and measuring corporate sustainability outcomes. In addition. Stakeholder Theory indicates that companies and organizations should take into account the interests of all parties involved when making decisions, including shareholders, workers, clients, suppliers, and the larger community (Almatarneh et al., 2022; Jarah et al., 2022). In the context of digital zakat and digital accounting, taking stakeholder interests into account through accurate financial reporting made possible by digital accounting and strategically allocating zakat contributions to sustainable projects can have a positive impact on a company's capacity to maintain Businesses can demonstrate itself. social responsibility, improve stakeholder engagement, and contribute to sustainable development in line with stakeholder expectations by using digital platforms for effective zakat collection and This will ultimately benefit the allocation. organization's long-term sustainability. However, the literature confirms the research hypothesis. However, Fig. 1 shows the research model followed by the research hypothesis.

H1: Digital zakat positively affects the corporate sustainability.

H2: Digital accounting positively affects the corporate sustainability.

4. Methodology

In this paper, a quantitative study methodology was used to try to understand how digital accounting and digital zakat improve company sustainability. Questionnaire items were adopted from previous studies to collect quantitative information on various elements of these practices. The questions were designed to collect important information on digital accounting, digital zakat, and its effects on business sustainability. The target group for data collection was 328 experienced participants who worked for firms that used Islamic and digital accounting in Malaysia and the Middle East. In addition, structured questionnaires were used in the study (Appendix A) as the primary data collection instrument, and the SmartPLS 4 software was employed for data analysis. A total of 328 experienced participants were involved in the study, focusing on companies following Islamic and digital accounting practices in the Middle East and Malaysia. The data was analyzed using SmartPLS 4, a software that effectively identifies the relationship between variables through a single test (Al-Zaqeba et al., 2022). In addition, non-response bias testing shows that the tests are trustworthy and no biases were found. Through Cronbach's Alpha, composite reliability, and average variance extracted (AVE) values, the study reveals good reliability. The variables are reliable and appropriate for future investigation since all constructs have high Cronbach's Alpha coefficients, composite reliability values over 0.70, and AVE values considerably above 0.5. These findings support the underlying ideas' veracity, internal coherence, and dependability while reiterating the study's legitimacy and objectivity.



Fig. 1: Proposed research model

5. Results

5.1. Path coefficients

The path coefficient is evaluated to demonstrate the magnitude of the independent variable's impact on the dependent variable. The amount by which an exogenous variable will affect an endogenous variable is measured by the determination coefficient (R-Square). Endogenous latent variables in the structural model have an R² value of 0.67 and higher, which shows a strong correlation between exogenous and endogenous variables.

The outer loading values of different study variables are extremely important in establishing their relevance and suitability for future investigation. These numbers show how strongly and significantly each variable is correlated with its relevant indicators. The indicators chosen for the variables are strongly indicative of the underlying construct being examined, as indicated by an outer loading value of more than 0.7, which denotes a strong and substantial link. However, the route coefficients on the accomplishment motivation research framework are described as follows in Fig. 2. All the indicators related to the research variables exhibit outer loading values greater than 0.7 in this particular circumstance. This is a very favorable result since it shows a strong correlation between each variable and its corresponding indicators. The

strength of this correlation indicates that the selected indicators successfully reflect the essence of the variables they stand for, making them appropriate and dependable for use in research. Another noteworthy aspect is the absence of any indications with outer loading values lower than 0.5. An indicator and its related variable may have a weaker association if the outer loading value is less than 0.5. None of the indicators fall below this criterion, which shows that all of the variables chosen are very relevant and applicable to the research.

5.2. Reliability testing and AVE

It is crucial for research techniques to guarantee the validity and dependability of the variables being examined. In this study, Cronbach's Alpha, composite reliability, and AVE are used to evaluate the dependability of the variables shown in Table 1. Several metrics are frequently used for this purpose. The convergent validity, overall reliability, and internal consistency of the Structural Equation Modeling-Partial Least Squares (SEM-PLS) study are all evaluated using these measures. However, in this study, the high Cronbach's Alpha coefficients observed for all constructs in Table 1 indicate a strong internal consistency among the variables, demonstrating their reliability. Cronbach's Alpha is a commonly utilized metric for internal consistency, indicating the degree to which items within a construct are related to each other. Another crucial metric is composite reliability, which evaluates how consistently a construct's indicators measure that construct. A composite reliability score of more than 0.70, as found in this study, indicates that the indicators accurately and dependably assess the corresponding structures. When compared to the measurement error, AVE measures how much variation the indicators have been able to collect. An AVE score greater than 0.50 denotes good convergent validity since it shows that the indicators of the concept capture more variation than the measurement error. The AVE values in this study were determined to be acceptable, further supporting the validity and reliability of the constructs.



Fig. 2: Validity testing (measurement model)

Table 1: Reliability testing and AVE						
	Cronbach's Alpha	Composite reliability (CR) (ρ_A)	AVE			
Corporate sustainability	0.892	0.895	0.607			
Digital accounting	0.842	0.849	0.613			
Digital zakat	0.853	0.871	0.629			

In Table 1, three regularly employed metrics are utilized to assess variable dependability: Cronbach's Alpha, composite reliability, and AVE. These metrics evaluate the SEM-PLS analysis's constructs' convergent validity, overall reliability, and internal consistency. The strong Cronbach's Alpha coefficients, the composite reliability (more than 0.70), and the average extracted variance all indicate that the constructs in Table 1 are reliable and trustworthy for the SEM-PLS study. These steps provide a guarantee for the required ideas' precision, internal coherence, and reliability.

5.3. Structural model

In statistical analysis, a variety of indicators are looked at to evaluate hypotheses. The original value sample estimates (O), t-statistics (T), and p-values (P) are some examples of these indicators. They shed light on the importance and direction of the link between the variables. The numerical estimate derived from the sample data is shown in the original value sample estimate (O). A score around +1 denotes a positive correlation between the variables, whereas a value near -1 denotes an adverse correlation.

The hypothesis testing procedure, which comprises evaluating the research hypotheses, is shown in Fig. 3. For this testing, the previously indicated route coefficients offer critical information. The findings of the hypothesis testing for direct impacts are presented in Table 2. Table 2 enables the examination of the hypotheses and offers a thorough description of the correlations between the variables. Researchers can decide if the study hypotheses have been supported or rejected based on the direct effects seen between variables by looking at the data in Table 2. Table 2 is an invaluable comprehending the resource for conclusions reached throughout the hypothesis testing procedure.

In testing the hypothesis, a significance level of 5% (α =0.05) was utilized, with a p-value below 0.05 deemed statistically significant. All p-values were below 0.05, supporting the acceptance of the hypothesis. The study investigated the impact of digital accounting and digital zakat on corporate sustainability. The significance and direction of these relationships were determined by beta coefficients,

t-values, and p-values. For example, a positive beta coefficient and a low p-value suggest a significant

positive relationship between the variables. Consequently, Hypotheses 1 and 2 are accepted.



Fig. 3: Structural model results

Table 2: Results of hypothesis testing	
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Tuble 2: Results of hypothesis testing							
Path	Original sample (0)	Sample mean (M)	Standard deviation (STDEV)	T statistics (0/STDEV)	P-values		
Digital accounting -> Corporate sustainability	0.614	0.618	0.043	14.301	0.000		
Digital zakat -> Corporate sustainability	0.147	0.151	0.062	2.378	0.017		

6. Discussion

This paper clarifies how using digital accounting and zakat may advance business sustainability, offering insightful contributions to the sustainability conversation. It highlights the potential benefits of combining digital accounting procedures with online zakat projects in order to strengthen sustainability activities inside enterprises. The study's conclusions highlight the important role that developments in digital accounting systems and zakat, a type of Islamic social funding, may play in fostering sustainable company practices. The study emphasizes the value of utilizing technology and morally sound financial strategies to advance sustainability goals and provides a road map for companies looking to improve their ESG performance using cutting-edge digital technologies. However, previous studies have repeatedly emphasized the beneficial impact of digital zakat on company sustainability. For instance, Al-Malkawi and Javaid (2018) showed how interacting with digital zakat may promote positive interactions with stakeholders, a crucial component of business sustainability initiatives. The outcomes of this investigation support and broaden these conclusions. Further supporting the beneficial impact shown in this study, Alam et al. (2023) emphasized the role of digital zakat in sustainable development projects. The outcomes of this study and the agreement in earlier work highlight the

potential of digital zakat to further sustainability objectives in business settings. Similarly, the beneficial effects of digital accounting for corporate sustainability are consistent with past studies. According to Alsaqri et al. (2018), digital accounting systems improve financial efficiencv and transparency, which are essential elements supporting business sustainability goals. The necessity of transparent financial practices for supporting sustainable business operations was also emphasized by Alattass (2023) in their discussion of the role of accounting in corporate social responsibility. The outcomes of this study are consistent with findings from other studies, which support the beneficial relationship between corporate sustainability and digital accounting.

7. Conclusions

This study highlights the tremendous benefits of digital accounting and digital zakat for increasing corporate sustainability. This work, which supports prior research, encourages organizations to use these digital components to support their sustainability initiatives, foster positive stakeholder relations, and promote open financial practices, ultimately advancing sustainability in the corporate sphere. A more sustainable and ethical corporate environment is depicted by the findings from this study and other research, which emphasizes the possibility of incorporating digital technology into

sustainability plans. This study emphasizes how important digital accounting and digital zakat are for achieving corporate sustainability. This work encourages organizations to use these digital support their sustainabilitv components to initiatives, foster positive stakeholder relations, and promote open financial practices, ultimately advancing sustainability in the corporate sphere. It does this by corroborating prior research. The results of this study and other studies provide evidence that incorporating digital technology into sustainability initiatives may be beneficial, showing a possible route to a more sustainable and ethical corporate environment. Digital accounting solutions also improve accuracy and efficiency while providing a powerful instrument for cost-cutting thanks to streamlined procedures, decreased paper use, and decreased administrative costs. The resulting cost may deliberately invested savings be in sustainability programs, supporting a more responsible and eco-conscious method of conducting dual effect highlights business. This how environmental goals and technology-driven costsaving strategies coexist in the modern corporate world. However, digital accounting has emerged as a powerful instrument for promoting corporate sustainability. It offers the advantages of enhanced financial efficiency, transparency, and accountability. These attributes not only bolster a company's financial health but also align seamlessly with sustainability goals. By streamlining financial processes and providing real-time data, digital accounting contributes to sound resource allocation, reduces waste, and facilitates better decision-making for sustainability initiatives. Digital zakat, on the other hand, offers a unique dimension to corporate sustainability. It allows corporations to engage in charitable activities grounded in Islamic principles, fostering social responsibility and community wellbeing. Furthermore, the alignment of zakat contributions with SDGs emphasizes its role in addressing broader global sustainability challenges. This charitable aspect not only enhances a company's reputation but also demonstrates a

and commitment to social environmental responsibility. Nevertheless, the synergy created by the combination of digital accounting and digital zakat holds substantial promise for corporations seeking to integrate sustainability into their core business practices. These tools complement each other, offering financial transparency, efficiency, and charitable engagement, all of which are vital components of a holistic sustainability strategy. Furthermore, this study's findings corroborate and extend the existing body of knowledge regarding the positive effects of digital zakat and digital accounting on corporate sustainability. This contributes significantly to the growing understanding of how digital tools can play a pivotal role in promoting sustainabilitv within corporate environments. However, future research can delve deeper into the specific mechanisms through which digital zakat and digital accounting influence sustainability, exploring their implications for diverse industries and contexts. This ongoing research will undoubtedly provide valuable insights and pave the way for more comprehensive sustainability practices in the corporate world, ultimately contributing to a more sustainable and responsible global business landscape. In addition, there is a need to include Financial Transparency as a moderator factor. In addition, future studies should dive into the particulars of this concept, investigating its application in real life and the resulting effects on business practices and sustainability measures. Understanding the nuances of putting these integrated digital solutions into practice will provide organizations priceless insights into how to use technology to promote sustainability and ethical business practices, eventually influencing a more sustainable future.

Appendix A. Structured questionnaire

Structured questionnaires were developed and used in this study based on previous studies and literature, as shown in Table A1.

	Table A1: Questionnaire used Based on Sources		
Digital zakat	How, in your view, might the use of technology improve the effectiveness with which zakat money is distributed to deserving parties? How well-versed are you in the idea of digital zakat as a means of sponsoring social causes in Islam? Have you ever used or made a donation to a platform for digital zakat for charitable purposes?	Yusuf et al. (2022)	
Ū	How do you think digital platforms improve the usability and effectiveness of zakat contributions?	Akinlabi and Habeebullah (2022)	
	How much, in your opinion, can digital platforms increase the accountability and traceability of zakat donations?	Ajmal et al. (2023)	
How Corporate sustainability How How	Community development and social responsibility programs are important to our organization Our organization actively uses sustainable technology and procedures and makes investments in them	Masum et al. (2020)	
	How important do you think it is for your company to integrate sustainability practices into its daily operations? Do you think sustainability measures help an organization's brand image and reputation?	Chilufya et al. (2019)	
	How crucial do you think it is for businesses to include sustainability objectives in their long-term strategy plans? How does your organization now update stakeholders and the public on its sustainability initiatives and progress	Mamo et al. (2023)	
	communication that is thorough and open?		
	How much do you think sustainable business practices may improve an organization's long-term financial performance?	Čater et al. (2023)	
	What effects has the introduction of digital accounting had on your organization's decision-making procedures? How well-versed are you in modern technology and digital accounting systems?	Al-Okaily et al. (2023)	
	What part, in your opinion, does real-time financial data play in helping organizations to promptly react in order to boost their sustainability and financial performance?	Al-Zaqeba et al. (2023)	
	Have you noticed that using digital accounting solutions has increased efficiency and accuracy in financial		
_	reporting?	Lutfi et al. (2022)	
	How do digital accounting systems, in your opinion, affect resource optimization and cost reduction inside an	Lutil et al. (2022)	
	organization?		

Compliance with ethical standards

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

References

- Ababneh A, Almarashdah M, Jebril I, Al-Zaqeba M, and Assaf N (2023). Driving sustainable supply chains: Blockchainenabled eco-efficiency for resilient customs ports. Uncertain Supply Chain Management, 11(4): 1719-1734. https://doi.org/10.5267/j.uscm.2023.6.018
- Abdalla AAM, Aljheme ED, and Abdulhadi FAG (2022). The impact of using visual materials in enhancing learning English vocabulary at Libyan preparatory schools. Al-Zaytoonah University of Jordan Journal for Human and Social Studies, 3(1): 217-229.
- Adomako S and Tran MD (2023). Beyond profits: The linkages between local embeddedness, social legitimacy, and corporate philanthropy in the mining industry. Corporate Social Responsibility and Environmental Management, 31(1): 555-565. https://doi.org/10.1002/csr.2585
- Ajina AS, Roy S, Nguyen B, Japutra A, and Al-Hajla AH (2020). Enhancing brand value using corporate social responsibility initiatives: Evidence from financial services brands in Saudi Arabia. Qualitative Market Research: An International Journal, 23(4): 575-602. https://doi.org/10.1108/QMR-11-2017-0145
- Ajmal S, Muzammil MB, Shoaib M, and Mehmood MH (2023). Empowering donors: How blockchain technology can help ensure their contributions reach the right recipients. In the International Conference on Business Analytics for Technology and Security, IEEE, Dubai, UAE: 1-6. https://doi.org/10.1109/ICBATS57792.2023.10111126
- Akinlabi HA and Habeebullah AA (2022). Implementation of zakat collection and distribution system in Ibadan metropolis using WordPress core architecture and architectonics. Fountain Journal of Natural and Applied Sciences, 11(1): 22-28. https://doi.org/10.53704/fujnas.v11i1.444
- Alam A, Ratnasari RT, Ryandono MN, Prasetyo A, Santosa IW, and Bafana FA (2023). Systematic literature review on Malaysia zakat studies (2011-2023). Multidisciplinary Reviews, 6(4): 2023044. https://doi.org/10.31893/multirev.2023044
- Alattass MI (2023). The impact of digital evolution and FinTech on banking performance: A cross-country analysis. International Journal of Advanced and Applied Sciences, 10(8): 71-77. https://doi.org/10.21833/ijaas.2023.08.008
- Alflaieh M (2022). Electronic Fraud in the context of e-commerce under Jordanian legislation. Al-Zaytoonah University of Jordan Journal for Legal Studies, 3(3): 67-82. https://doi.org/10.15849/ZUJJLS.221130.04
- Ali IM, Jusoh YY, Abdullah R, and Ahmed YA (2023). Exploring the performance measures of big data analytics systems. International Journal of Advanced and Applied Sciences, 10(1): 92-104. https://doi.org/10.21833/ijaas.2023.01.013
- Allah Pitchay A (2022). Factors influence intention of management of Shariah-compliant companies to participate in Islamic voluntary charity. International Journal of Islamic and Middle Eastern Finance and Management, 15(5): 967-985. https://doi.org/10.1108/IMEFM-11-2019-0466
- Al-Malkawi HAN and Javaid S (2018). Corporate social responsibility and financial performance in Saudi Arabia: Evidence from zakat contribution. Managerial Finance, 44(6): 648-664. https://doi.org/10.1108/MF-12-2016-0366
- Almatarneh Z, Ineizeh N, Jarah B, and Al-Zaqeba M (2022). The relationship between corporate social responsibility

accounting and supply chain management. Uncertain Supply Chain Management, 10(4): 1421-1426. https://doi.org/10.5267/j.uscm.2022.6.014

- Al-Okaily M, Alsmadi AA, Alrawashdeh N, Al-Okaily A, Oroud Y, and Al-Gasaymeh AS (2023). The role of digital accounting transformation in the banking industry sector: An integrated model. Journal of Financial Reporting and Accounting. https://doi.org/10.1108/JFRA-04-2023-0214
- Alsaqri SH, Albaqawi HM, and Alkwiese MJ (2018). Strategies for improving patient fulfilment with quality of nursing care in northwestern hospitals of Saudi Arabia. International Journal of Advanced and Applied Sciences, 5(7): 123-130. https://doi.org/10.21833/ijaas.2018.07.015
- Alsharari NM and Ikem F (2023). Digital accounting systems and information technology in the public sector: Mutual interaction. Journal of Systems and Information Technology, 25(1): 53-73. https://doi.org/10.1108/JSIT-09-2021-0190
- Al-Zaqeba MAA and Al-Rashdan MT (2020). Extension of the TPB in tax compliance behavior: The role of moral intensity and customs tax. International Journal of Scientific and Technology Research, 9(4): 227-232.
- Al-Zaqeba MAA, Abdul Hamid S, Ineizeh NI, Hussein OJ, and Albawwat AH (2022). The effect of corporate governance mechanisms on earnings management in Malaysian manufacturing companies. Asian Economic and Financial Review, 12(5): 354–367. https://doi.org/10.55493/5002.v12i5.4490
- Al-Zaqeba MAA, Shubailat OM, Abdul Hamid S, Jarah BAF, Ababneh FAT, and Almatarneh Z (2023). The influence of board of directors' characteristics on corporate social responsibility disclosures in Jordanian Islamic banks. International Journal of Advanced and Applied Sciences, 10(11): 1-13. https://doi.org/10.21833/ijaas.2023.11.001
- Alzaqebah M and Abdullah S (2015). Hybrid bee colony optimization for examination timetabling problems. Computers and Operations Research, 54: 142-154. https://doi.org/10.1016/j.cor.2014.09.005
- Alzaqebah M, Alrefai N, Ahmed EA, Jawarneh S, and Alsmadi MK (2020). Neighborhood search methods with moth optimization algorithm as a wrapper method for feature selection problems. International Journal of Electrical and Computer Engineering (2088-8708), 10(4): 3672-3684. https://doi.org/10.11591/ijece.v10i4.pp3672-3684
- Alzaqebah M, Jawarneh S, Mohammad RMA, Alsmadi MK, Al-Marashdeh I, Ahmed EA, and Alghamdi FA (2021). Hybrid feature selection method based on particle swarm optimization and adaptive local search method. International Journal of Electrical and Computer Engineering, 11(3): 2414-2422. https://doi.org/10.11591/ijece.v11i3.pp2414-2422
- Arens AA, Elder RJ, and Beasley MS (2012). Auditing and assurance services: An integrated approach. Prentice-Hall, Hoboken, USA.
- Bakarich KM, Burke JA, and Polimeni RS (2021). Modifying the collegiate accounting curriculum to prepare for the CPA evolution project: Incorporating advances in technology into accounting programs. The CPA Journal, 91(8/9): 32-39.
- Bose S, Dey SK, and Bhattacharjee S (2023). Big data, data analytics and artificial intelligence in accounting: An overview. In: Akter S and Wamba SF (Eds.), Handbook of big data research methods: 32-51. Edward Elgar Publishing, Cheltenham, UK. https://doi.org/10.4337/9781800888555.00007
- Čater T, Čater B, Milić P, and Žabkar V (2023). Drivers of corporate environmental and social responsibility practices: A comparison of two moderated mediation models. Journal of Business Research, 159: 113652. https://doi.org/10.1016/j.jbusres.2023.113652
- Cherrafi A, Elfezazi S, Govindan K, Garza-Reyes JA, Benhida K, and Mokhlis A (2017). A framework for the integration of Green

and Lean Six Sigma for superior sustainability performance. International Journal of Production Research, 55(15): 4481-4515. https://doi.org/10.1080/00207543.2016.1266406

- Chilufya A, Hughes E, and Scheyvens R (2019). Tourists and community development: Corporate social responsibility or tourist social responsibility? Journal of Sustainable Tourism, 27(10): 1513-1529. https://doi.org/10.1080/09669582.2019.1643871
- Gunarathne N, Wijayasundara M, Senaratne S, Kanchana PK, and Cooray T (2021). Uncovering corporate disclosure for a circular economy: An analysis of sustainability and integrated reporting by Sri Lankan companies. Sustainable Production and Consumption, 27: 787-801.

https://doi.org/10.1016/j.spc.2021.02.003

- Hamour H, ALensou J, Abuzaid A, Alheet A, Madadha S, and Al-Zaqeba M (2023). The effect of strategic intelligence, effective decision-making and strategic flexibility on logistics performance. Uncertain Supply Chain Management, 11(2): 657-664. https://doi.org/10.5267/j.uscm.2023.1.015
- Hasan Z (2020). Distribution of zakat funds to achieve SDGs through poverty alleviation in Baznas republic of Indonesia. AZKA International Journal of Zakat and Social Finance, 1(1): 25-43. https://doi.org/10.51377/azjaf.vol1no01.7
- Jarah B, Jarrah MAAL, and Al-Zaqeba M (2022). The role of internal audit in improving supply chain management in shipping companies. Uncertain Supply Chain Management, 10(3): 1023-1028. https://doi.org/10.5267/j.uscm.2022.2.011

Kan E and Serin ZV (2022). Analysis of cointegration and causality relations between gold prices and selected financial indicators: Empirical evidence from Turkey. International Journal of Advanced and Applied Sciences, 9(3): 1-9.

- https://doi.org/10.21833/ijaas.2022.03.001 Listiana L and Edrivanti R (2023). Digitalisation and sustainable
- finance in Indonesian Islamic banks. In: Almunawar MN, Pablos PO, and Anshari M (Eds.), Digital transformation for business and society: 179-195. Routledge, London, UK. https://doi.org/10.4324/9781003441298-9
- Lutfi A, Alkelani SN, Al-Khasawneh MA, Alshira'h AF, Alshirah MH, Almaiah MA, and Ibrahim N (2022). Influence of digital accounting system usage on SMEs performance: The moderating effect of COVID-19. Sustainability, 14(22): 15048. https://doi.org/10.3390/su142215048
- Malkawi R, Alzaqebah M, Al-Yousef A, and Abul-Huda B (2019). The impact of the digital storytelling rubrics on the social media engagements. International Journal of Computer Applications in Technology, 59(3): 269-275. https://doi.org/10.1504/IJCAT.2019.10020111
- Mamo YA, Sisay AM, Dessalegn B, and Angaw KW (2023). The Socio-economic effect of corporate social responsibility on local community development in Southern Ethiopia. Cogent Business and Management, 10(1): 2159749. https://doi.org/10.1080/23311975.2022.2159749
- Manita R, Elommal N, Baudier P, and Hikkerova L (2020). The digital transformation of external audit and its impact on corporate governance. Technological Forecasting and Social Change, 150: 119751. https://doi.org/10.1016/j.techfore.2019.119751
- Masum A, Hanan H, Awang H, Aziz A, and Ahmad MH (2020). Corporate social responsibility and its effect on community development: An overview. Journal of Accounting Science, 22(1): 35-40.
- McManus T (2008). The business strategy/corporate social responsibility "mash-up." Journal of Management Development, 27(10): 1066-1085. https://doi.org/10.1108/02621710810916312
- Menne F, Surya B, Yusuf M, Suriani S, Ruslan M, and Iskandar I (2022). Optimizing the financial performance of SMEs based on Sharia economy: Perspective of economic business

sustainability and open innovation. Journal of Open Innovation: Technology, Market, and Complexity, 8(1): 18. https://doi.org/10.3390/joitmc8010018

- Mikai A and Onagun AI (2020). Qitmeer network enhances zakat tracebility in Nigeria. AZKA International Journal of Zakat and Social Finance, 1(1): 164-179. https://doi.org/10.51377/azjaf.vol1no01.18
- Mosteanu NR and Faccia A (2020). Digital systems and new challenges of financial management–FinTech, XBRL, blockchain and cryptocurrencies. Quality–Access to Success, 21(174): 159-166.
- Nabi MG, Islama MA, Waheduzzaman M, and Sarderb MMR (2021). Estimation of zakat and its use as an effective tool for socio-economic development in Bangladesh. Thoughts on Economics, 31(1): 33-56.
- Narulitasari D, Mulya ASM, and Subagyo T (2023). Zakat accounting and public accountability: Evidence from Indonesia. Journal of Islamic Finance and Accounting, 6(1): 45-59. https://doi.org/10.22515/jifa.v6i1.6805
- Patel R, Migliavacca M, and Oriani ME (2022). Blockchain in banking and finance: A bibliometric review. Research in International Business and Finance, 62: 101718. https://doi.org/10.1016/j.ribaf.2022.101718
- Pham QM and Thu Ho TT (2022). Impacts of factors affecting the business efficiency of seafood companies listed on the stock market of Vietnam. International Journal of Advanced and Applied Sciences, 9(3): 165-171. https://doi.org/10.21833/ijaas.2022.03.019
- Rabbani MR, Bashar A, Nawaz N, Karim S, Ali MAM, Rahiman HU, and Alam MS (2021). Exploring the role of Islamic Fintech in combating the aftershocks of COVID-19: The open social innovation of the Islamic financial system. Journal of Open Innovation: Technology, Market, and Complexity, 7(2): 136. https://doi.org/10.3390/joitmc7020136 PMCid:PMC9906483
- Salehi M, Ammar Ajel R, and Zimon G (2022). The relationship between corporate governance and financial reporting transparency. Journal of Financial Reporting and Accounting, 21(5): 1049-1072. https://doi.org/10.1108/JFRA-04-2021-0102
- Sari DF, Beik IS, and Rindayati W (2019). Investigating the impact of zakat on poverty alleviation: A case from West Sumatra, Indonesia. International Journal of Zakat, 4(2): 1-12. https://doi.org/10.37706/ijaz.v4i2.180
- Shubailat OM, Al-Zaqeba MA, Madi A, and Khairi KF (2024). Investigation the effect of digital taxation and digital accounting on customs efficiency and port sustainability. International Journal of Data and Network Science. International Journal of Data and Network Science, 8(1): 61-68. https://doi.org/10.5267/j.ijdns.2023.10.017
- Spilnyk I, Brukhanskyi R, Struk N, Kolesnikova O, and Sokolenko L (2022). Digital accounting: Innovative technologies cause a new paradigm. Independent Journal of Management and Production, 13(3): s215-s224. https://doi.org/10.14807/ijmp.v13i3.1991
- Thakker P and Japee G (2023). Emerging technologies in accountancy and finance: A comprehensive review. European Economic Letters, 13(3): 993-1011.
- Wachira MM, Berndt T, and Romero CM (2020). The adoption of international sustainability and integrated reporting guidelines within a mandatory reporting framework: Lessons from South Africa. Social Responsibility Journal, 16(5): 613-629. https://doi.org/10.1108/SRJ-12-2018-0322
- Yáñez-Valdés C and Guerrero M (2023). Equity crowdfunding platforms and sustainable impacts: Encountering investors and technological initiatives for tackling social and environmental challenges. European Journal of Innovation Management. https://doi.org/10.1108/EJIM-03-2022-0127

- Yeo WJ, van der Heever W, Mao R, Cambria E, Satapathy R, and Mengaldo G (2023). A comprehensive review on financial explainable AI. ArXiv Preprint ArXiv: 2309.11960. https://doi.org/10.48550/arXiv.2309.11960
- Yusuf SSN, Sanawi NH, Ghani EK, Muhammad R, Daud D, and Kasim ES (2022). Examining technology improvement, procedural application and governance on the effectiveness zakat distribution. International Journal of Ethics and Systems, 40(1): 103-126. https://doi.org/10.1108/IJOES-02-2022-0031
- Zhou N and Wang H (2020). Foreign subsidiary CSR as a buffer against parent firm reputation risk. Journal of International Business Studies, 51: 1256-1282. https://doi.org/10.1057/s41267-020-00345-7
- Zobi M, Al-Zaqeba M, and Jarah B (2023). Taxation and customs strategies in Jordanian supply chain management: Shaping sustainable design and driving environmental responsibility. Uncertain Supply Chain Management, 11(4): 1859-1876. https://doi.org/10.5267/j.uscm.2023.6.005