







ORIGINAL

## Digitalization and Sustainable Development Goals: Enhancing Electronic Financial Reports Quality in Banking

### Digitalización y Objetivos de Desarrollo Sostenible: Mejorar la calidad de los informes financieros electrónicos en la banca

Abdul Razzak Alshehadeh<sup>1</sup> , Murad Al-Zaqeba<sup>2</sup>  , Ali Qtaishat<sup>3</sup> , Haneen Al-khawaja<sup>4</sup> , Eman Al-Wreikat<sup>3</sup> 

<sup>1</sup>Faculty of Business. Al-Zaytoonah University of Jordan. Amman, Jordan.

<sup>2</sup>Faculty of Economics and Muamalat (FEM). Universiti Sains Islam Malaysia (USIM). Nilai, Negeri Sembilan, Malaysia.

<sup>3</sup>Private Law Department. Faculty of Law. Al-Ahliyya Amman University. Amman, Jordan.

<sup>4</sup>Department of Financial Technology and Banking. Faculty of Business. Ajloun National University. Ajloun, Jordan.

**Cite as:** Razzak Alshehadeh A, Al-Zaqeba M, Qtaishat A, Al-khawaja H, Al-Wreikat E. Digitalization and Sustainable Development Goals: Enhancing Electronic Financial Reports Quality in Banking. Data and Metadata. 2025; 4:734. <https://doi.org/10.56294/dm2025734>

Submitted: 27-04-2024

Revised: 17-08-2024

Accepted: 20-03-2025

Published: 21-03-2025

Editor: Dr. Adrián Alejandro Vitón Castillo 

Corresponding author: Murad Al-Zaqeba 

#### ABSTRACT

**Introduction:** this study captures the effect of digitalization and Sustainable Development Goals (SDGs) on the quality of electronic financial reports in one developing nation, specifically the Jordanian banking sector. Given the ever-evolving landscape where financial institutions embrace digital technologies while integrating sustainability principles into their operations, it is essential to examine the interplay of both trends in enhancing the transparency and accuracy of their financial reporting.

**Method:** data were collected from the banking professionals in Jordan using a structured questionnaire. The responses of two hundred and four valid respondents were analyzed accordingly using the Partial Least Squares Structural Equation Modeling (PLS-SEM). It tested the relationships of digitization, SDG integration, and the quality of electronic financial reporting.

**Results:** the results indicate that digitalization and SDG integration positively affect the quality of electronic financial reports. On the other hand, SDG integration (Coefficient = 0,214) was more substantial than digitalization (Coefficient = 0,150), which indicates that good governance, environmental, and social improvements add value to financial reporting by providing more transparency and accuracy. Moreover, these digital technologies facilitate the finance departments' data governance, reporting, and regulatory compliance.

**Conclusions:** this study contributes to the literature on the importance of digitalization and sustainability integration for SME financial reporting in Jordanian banks. Banks that adopt digital tools and align with SDGs are also better prepared to meet stakeholder expectations and comply with regulatory requirements. Further research can investigate these factors in determining the long-term economic sustainability of these variables and how they ultimately shape the financial reporting standards of these developing economies.

**Keywords:** Sustainability; ODS; ESG; FinTech; SmartPLS4; Audit; Financial Reports.

#### RESUMEN

**Introducción:** este estudio captura el efecto de la digitalización y los Objetivos de Desarrollo Sostenible (ODS) en la calidad de los informes financieros electrónicos en un país en desarrollo, específicamente en el sector bancario jordano. Dado el panorama en constante evolución, donde las instituciones financieras

adoptan tecnologías digitales mientras integran principios de sostenibilidad en sus operaciones, es esencial examinar la interacción de ambas tendencias para mejorar la transparencia y precisión de sus reportes financieros.

**Método:** se recopilaron datos de profesionales bancarios en Jordania utilizando un cuestionario estructurado. Las respuestas de doscientos cuatro encuestados válidos se analizaron utilizando el modelo de ecuaciones estructurales basado en mínimos cuadrados parciales (PLS-SEM, por sus siglas en inglés). Este método evaluó las relaciones entre la digitalización, la integración de los ODS y la calidad de los reportes financieros electrónicos.

**Resultados:** los resultados indican que la digitalización y la integración de los ODS afectan positivamente la calidad de los informes financieros electrónicos. Por otro lado, la integración de los ODS (Coeficiente = 0,214) tuvo un impacto más significativo que la digitalización (Coeficiente = 0,150), lo que sugiere que una buena gobernanza, junto con mejoras ambientales y sociales, agregan valor a los reportes financieros al proporcionar mayor transparencia y precisión. Además, estas tecnologías digitales facilitan la gobernanza de datos, la elaboración de informes y el cumplimiento normativo en los departamentos financieros.

**Conclusiones:** este estudio contribuye a la literatura sobre la importancia de la digitalización y la integración de la sostenibilidad en los reportes financieros de las pymes en los bancos jordanos. Los bancos que adoptan herramientas digitales y se alinean con los ODS están mejor preparados para cumplir con las expectativas de las partes interesadas y los requisitos regulatorios. Investigaciones futuras podrían explorar cómo estos factores determinan la sostenibilidad económica a largo plazo y cómo moldean los estándares de reportes financieros en estas economías en desarrollo.

**Palabras clave:** Sostenibilidad; ODS; ESG; FinTech; SmartPLS4; Auditoría; Reportes Financieros.

## INTRODUCTION

The ubiquitous impact of digital technology is causing a fundamental upheaval in the global financial environment. Banking institutions are increasingly adopting digitalization in this age of unheard-of technological innovation in order to stay competitive, improve client experiences, and streamline their operations.<sup>(1)</sup> In order to accommodate the increasing demand of consumers who choose digital platforms for their social and economic activities, banking services must become more digitally connected. This is a matter of preference; these technologies have the power to completely transform the financial industry and provide a host of advantages in terms of social impact and operational effectiveness. Nevertheless, to end poverty, alleviate inequality, and stop environmental degradation, these Sustainable Development Goals (SDGs) demand for coordinated measures. The banking industry is given a unique chance to be a key player in attaining sustainable development as countries and organizations throughout the world work to align with these goals. Moreover, for stakeholders, electronic financial reports are a major source of information that provide important details on the performance and financial health of businesses.<sup>(2)</sup> The globalization of capital markets has increased the need for high-quality information in financial reporting. Even if there is more data available than ever before, it can be difficult to guarantee that it is reliable and pertinent enough to help consumers make wise judgements.<sup>(3)</sup> Building investor trust and recruiting money require clear, accurate, and comprehensible financial information.<sup>(4)</sup> Thus, reports must include information that is timely, accurate, unbiased, comparable, verifiable, consistent, and understandable in order to attain high-quality financial reporting. In addition, the quality of financial reports has a significant impact on their worth and reliability. But excellent financial reporting goes beyond following accounting rules such timely financial reporting and adhering to disclosure laws.<sup>(5)</sup> However, these forces still affect banks, and their shift to digital financial services has brought with it a number of new opportunities as well as difficulties. Digitalization alone does not ensure profitability, even if it might improve performance and efficiency. An entrepreneurial mindset that prioritizes creativity and taking calculated risks must direct the transition.

In COVID-19 period, social distancing measures hastened the transition to online banking<sup>(6)</sup> which highlighted the significance of digitization. Although the effects of digitalization on the banking industry have been the subject of several studies, little is known about these dynamics in the particular context of Jordan. Moreover, this study looks at how the quality of electronic financial reporting is affected by the level of digitalization and the rate at which digital technology is adopted by the banking industry, particularly in a developing nation like Jordan. Besides, this paper has significance as it has the ability to clarify the complex connections among digitalization, alignment with the SDGs, and the quality of electronic financial reporting in the banking industry of Jordan.

*Literature review*

The financial reporting is critical for investors, stakeholders, creditors, and community. In this study, we propose that the digitalization and sustainable development goals are critical for improving the financial reporting quality in the context of Jordanian banks. This proposition is supported by the notion that in the rapidly evolving landscape, the intersection of digitalization and SDGs has become a focal point for all different industries, especially the banking sector. As financial institutions increasingly embrace digital transformation, aligning their practices with the SDGs, a critical aspect of this integration is enhancing the quality of electronic financial reporting, which also plays a pivotal role in achieving broader societal and environmental goals. However, Shatnawi et al.<sup>(7)</sup> emphasized that the potential of digitalization to improve financial institutions' overall performance, client experience, and operational efficiency. Pazarbasioglu et al.<sup>(8)</sup> found that digital technology integration and utilization in banking has improve customer accessibility to financial services, expedite processes, and reduces expenses. Furthermore, digitization is thought to spur innovation and fundamentally alter traditional banking procedures. Simultaneously, the need to connect banking practices with the SDGs of the United Nations has led to a considerable increase in the importance of sustainability in the banking industry.<sup>(9)</sup> Promoting sustainable development now depends critically on Integrating Environmental, Social, and Governance (ESG) factors into day-to-day activities<sup>(10,11)</sup> and there is a favorable correlation between sustainability-focused methodologies and improved financial outcomes within the banking sector. Banks are demonstrating their commitment to social and environmental obligations by incorporating the SDGs into their strategic objectives on a growing basis.<sup>(12)</sup>

Digital technology has significantly changed the banking sector in recent years, especially with the rise of Fin-Tech challenger banks. Innovative bank-to-Fin-Tech cooperation models have resulted from these digital shocks that have profoundly affected traditional banking practices.<sup>(13,14)</sup> The banking industry has seen a transition in reaction to these developments, moving towards smaller, multi-directional, and multi-modal banking models. This has created new opportunities, especially for foreign banks from established economies. The quickening speed of technical advancement, however, might restrict the applicability of the findings. In addition, customer behaviour has been greatly impacted by the internet and mobile devices, highlighting the significance of digital media interaction in modern banking.<sup>(15)</sup> The widespread use of digital technology to several operational facets, such as customer service, transactions, data administration, and communication, characterizes the digitization of the banking sector.<sup>(16,17,18)</sup> A greater level of digitalization is indicated by the use and integration of cutting-edge technologies in banking operations, such as automated systems, blockchain, mobile banking, artificial intelligence, and data analytics. However, a key measure of how rapidly banks adopt digital tools and platforms which may result in better services, quicker transactions, more accessibility, and a competitive edge in the market is the pace of technology adoption in the banking industry.<sup>(19)</sup> In addition, a further factor driving digitalization in the banking industry is the COVID-19 pandemic, which has highlighted the necessity of digital transformation for sustaining corporate operations as well as consumption and sustainable production.<sup>(20,21)</sup> Digital technology adoption has been studied, particularly as it relates to industrial enterprises and elderly persons.<sup>(22,23)</sup>

In reaction to the sustainable development goals (SDG) of the United Nations, the incorporation of sustainability into banking strategy and operations has become increasingly important. These global objectives address important issues and call on all economy sectors, including the banking industry, to safeguard the environment, promote social justice, and maintain economic viability. Adams<sup>(24)</sup> and Hamour et al.<sup>(25)</sup> indicated that sustainability disclosures are becoming more and more important for the banking industry, and that they are important for economic growth, transparency, and environmental stewardship. To assess sustainability reporting performance and link it with the SDGs, a number of frameworks and models have been put forth by Jan et al.<sup>(26)</sup> The banking industry's growing openness and reporting of sustainable contributions demonstrate its commitment to social responsibility, sustainability, and alignment with the SDGs<sup>(27)</sup>. Stakeholder management and ethical issues are being prioritized by big businesses as they connect their strategy with the SDGs.<sup>(28,29)</sup> To enhance sustainability education in line with the SDGs, integrated and multidisciplinary approaches are encouraged.<sup>(30)</sup> Recognized is the significance of comprehending how businesses incorporate the SDGs into their strategy, particularly in light of demographic ageing and differing degrees of digital adoption.<sup>(28,31)</sup>

In contemporary banking, the quality of computerized financial reporting plays a crucial role in influencing the decision-making processes of stakeholders. Ensuring accuracy, dependability, integrity, and adherence to reporting guidelines and standards are essential for producing high-quality financial reports. Pangaribuan et al.<sup>(32)</sup> indicated that compliance with accounting standards and efficient internal control frameworks have a favourable influence on the quality of financial reporting. Uniform and consistent financial communication and evaluation are ensured by adhering to reporting standards and rules.<sup>(33)</sup> For the stock market to be functional and for the financial system to run smoothly, reliable and accurate financial data is essential.<sup>(34)</sup> Rajaobelina et al.<sup>(35)</sup> also demonstrated that implementing IFRS (International Financial Reporting Standards) improves the quality of financial reporting by facilitating the comparison of the financial outcomes of various businesses and offering accurate accounting data. But there are still problems, particularly in poor nations where improving

the accuracy of financial reporting requires addressing problems like earnings management.<sup>(4,36)</sup>

The quality of electronic financial reporting is anticipated to improve as the banking becomes more digitalized and adopts more digital technology.<sup>(37,38,39)</sup> However, the quality and dependability of financial data given in electronic reports are predicted to increase as banking operations grow more technologically sophisticated. SDGs on the other hand, will improve the quality of the electronic financial reports produced by Jordanian banks. A bank's commitment to ethics, openness, and adherence to reporting standards and rules are likely to increase when banking practices are in accordance with sustainability goals. This will have an impact on the quality and dependability of the financial data shown in electronic reports. Likewise, the correctness and dependability of the financial data given in these reports, as well as conformity with reporting rules and norms in digital financial reporting, are used to assess the electronic financial reports quality. Based on the review of the literature, there is a gap related to the effect of digitalization and SDGs on electronic financial reports in Jordanian banks. This gap is more evident in the context of Jordan banking sector and other developing countries. Therefore, the purpose of this study is to examine the effect of digitalization and SDGs on the quality of electronic financial reports in the context of Jordanian banks. This is because there is a notable gap exists when considering the specific context of Jordan, as there has been a lack of direct focus on SDGs and their impact on the variables under examination within the banking sector of Jordan.<sup>(40,41,42)</sup> Based on the above discussion, this study proposes two hypotheses that are related to the effect of digitalization and SDGs on quality of electronic financial reports in Jordanian banks. The statement of the hypotheses are as follows: H1: Digitalization affects positively the quality of electronic financial reports in Jordanian Banks. H2: SDGs affect positively the quality of electronic financial reports in Jordanian Banks. The research model, represented below in figure 1.

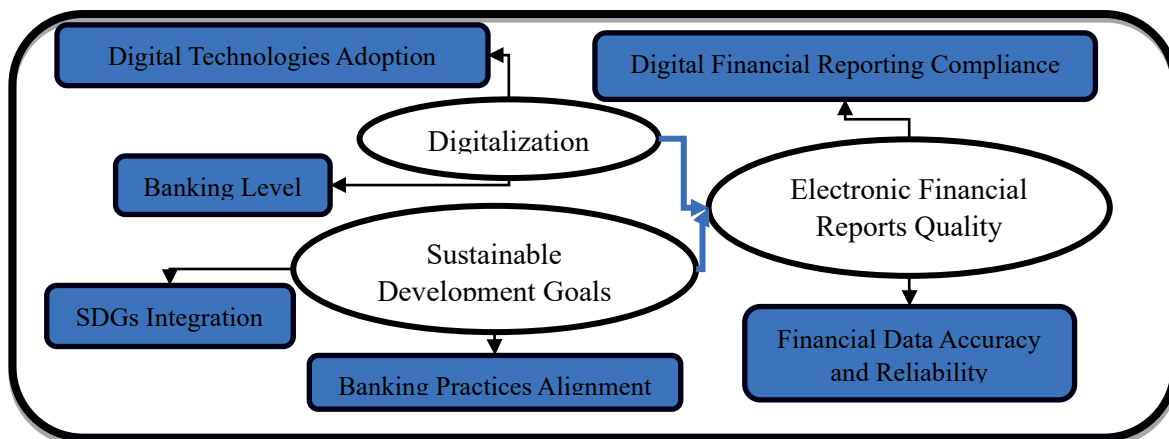


Figure 1. Research Model

## METHOD

This article adopted a quantitative research approach design to examine the relationship between digitalization, the quality of electronic financial reporting, and the banking sector's alignment with SDGs in Jordan. The population of this study includes professionals and stakeholders directly involved in financial reporting, sustainability efforts, and digital transformation within the Jordanian banking industry. This included individuals like IT specialists, sustainability officers, financial managers, and financial analysts. Based on statistical considerations for establishing sufficient statistical power and dependability in the study's conclusions, the sample size was chosen randomly based on their accessibility to the questionnaire, as well as their ability to answer the questionnaire within the specified time, with a time interval of two weeks for each submission. To guarantee that the study's findings can be applied to a larger population, the sample size must be more than 200 observations to use SmartPLS4.

The study collects the data using a questionnaire. The questionnaire was designed to measure the study variables. A structured questionnaire was distributed to professionals working in the banking industry in Jordan. Structural Equation Modeling (SEM) were used to analyses the data. Smart PLS 4 software specifically were used to analyze the data. The selection of Smart PLS 4 for research involving latent variables is based on its aptitude for handling variance-based analyses and predictive modelling.<sup>(43)</sup> Utilizing Smart PLS 4 allows a thorough and in-depth analysis of the study components, offering insightful information on how digitalization, SDG alignment, and the quality of electronic financial reporting interact in the context of Jordanian banks.<sup>(44)</sup> A total of 356 surveys were circulated via social media, WhatsApp, and email, we were left with 204 legitimate replies for analysis after excluding 15 responses that had errors or misleading information. Therefore, 204 responses were used in this study.

**RESULTS**

The demographic study of the chosen sample showed that the Jordanian banking has a wide representation of professionals. As evidence of the study's interdisciplinary nature, the respondents represented a variety of professions, including financial analysts, sustainability officers, financial managers, and IT professionals. The participants' degree of expertise varied, but a sizable percentage had more than five years of experience in the banking, indicating a pool of seasoned experts. Nevertheless, 42,1 % of the respondents are younger than 39 and older than 29 years old. The vast majority of respondents (41,7 %) have a bachelor's degree, followed by 38,5 % who have a master's degree and 13,4 % who have a PhD, and 6,4 % who have a diploma.

Analyzing the route coefficients is necessary to determine how much effect independent factors have on dependent variables. The degree and direction of these impacts are clarified by the route coefficients, which offer critical insights into the interactions inside the model. The determination coefficient, commonly known as R-Square, is a helpful statistic that expresses the proportion of variance in the dependent variable that can be explained by the independent variable(s). The endogenous latent variables in this study had an R-Square value of 0,67, indicating a strong effect and a positive correlation between the exogenous variables and endogenous variables. This shows that the exogenous factors are important in determining the outcomes since they account for around 67 % of the variation in the endogenous variable. However, figure 2 offers and explain these crucial route coefficients and their importance in the context of achievement motivation research.

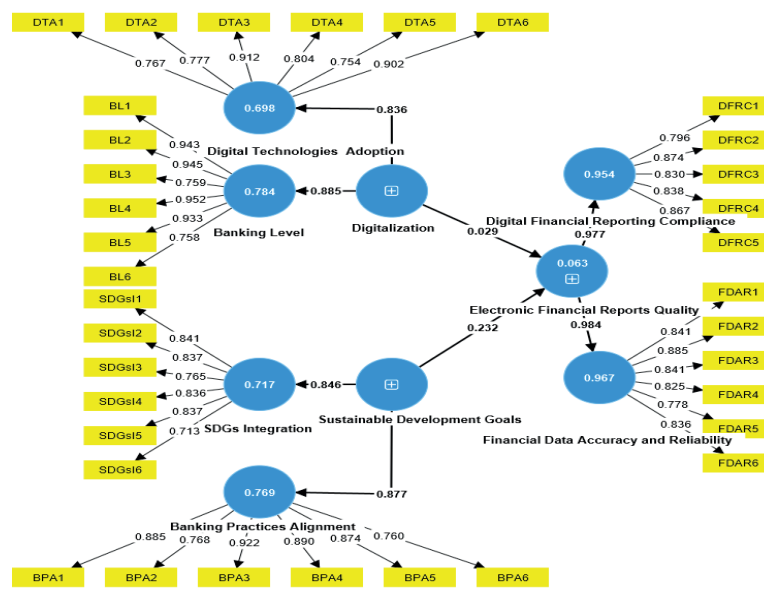


Figure 2. Measurement Model

The degree to which observable variables and the underlying constructs in this paper are related may be determined in large part by looking at the outer loading values linked to each indicator. Generally speaking, a strong correlation exists between the observable variables and the corresponding latent constructs when the outer loading value is more than 0,7. Notably, every indicator of the variables under study shows outer loading values over the 0,7 cutoff, indicating a robust relationship between the variables as seen and the underlying structures. Even indicators with values between 0,5 and 0,6 are thought to satisfy the criteria for convergent validity, demonstrating a reasonable degree of correlation with the pertinent constructs.<sup>(45,46)</sup>

The figure unequivocally shows that no variable indicator falls below 0,5, substantiating the relevance and significance of each indicator for a comprehensive examination of the related constructs. In order to accurately evaluate the reliability of the variables used in this study, three measures were used: average variance extracted (AVE), composite reliability, and Cronbach's alpha. As shown in table 1, it is clear from the table that these measures are pivotal measures for assessing the reliability of constructs in the context of SEM-PLS4 analysis. Cronbach's alpha measures the internal consistency of the construct's elements, with values higher than 0,70 indicating adequate reliability. Composite reliability also provides a comprehensive assessment of construct reliability. Finally, AVE determines the convergent validity of the constructs. Table 1 also shows the strong reliability of each construct examined using SEM-PLS; Where Cronbach's alpha exceeded 0,70; This confirms the reliability and internal consistency of the constructs measured. Furthermore, the AVE values provide additional evidence for the constructs' convergent validity. The study's conclusions are validated by the high reliability and convergent validity metrics, which give rise to trust in the precision and accuracy of the measurement of the theoretical notions.

The results are more reliable because of the careful attention to measurement accuracy and construct definition, which highlights the representativeness and integrity of the underlying theoretical notions.

**Table 1.** Reliability and AVE Testing

	Cronbach's alpha	Composite reliability	AVE
Banking Level	0,943	0,948	0,785
Banking Practices Alignment	0,923	0,925	0,726
Digital Financial Reporting Compliance	0,897	0,898	0,708
Digital Technologies Adoption	0,902	0,907	0,675
Digitalization	0,922	0,925	0,543
Electronic Financial Reports Quality	0,952	0,952	0,675
Financial Data Accuracy and Reliability	0,913	0,914	0,697
SDGs Integration	0,891	0,894	0,650
Sustainable Development Goals	0,912	0,914	0,511

R<sup>2</sup> values, which range from 00 to 1, are important indicators that represent how well independent factors account for variance in the dependent variable. R<sup>2</sup> values are used in regression modelling to assess the ability of the Independent Variables (IV) to explain the data. A grading of "weak," "moderate," and "good" is constructed to provide a qualitative evaluation of the model fit based on R<sup>2</sup> values. R<sup>2</sup> values at particular thresholds are used in this classification to indicate the level of explanatory power: 0,19 for "weak," 0,33 for "moderate," and 0,67 for a "good" model fit.

**Table 2.** R<sup>2</sup> and adjusted R<sup>2</sup> values results

	R-square	R-square adjusted
Banking Level	0,784	0,783
Banking Practices Alignment	0,769	0,768
Digital Financial Reporting Compliance	0,954	0,954
Digital Technologies Adoption	0,698	0,697
Electronic Financial Reports Quality	0,631	0,582
Financial Data Accuracy and Reliability	0,967	0,967
SDGs Integration	0,717	0,716

The crucial R-square and R-square adjusted values for different constructs in a statistical analysis or regression model are shown in table 2. The proportion of dependent variable's (DV) variation explained by the independent variables is shown by R<sup>2</sup>, which ranges from 0 to 1. A model that fits the data better and accounts for more variance in the dependent variable has a higher R<sup>2</sup> score. In order to address overfitting problems by taking the number of predictors into account, adjusted R<sup>2</sup>, a variation of R<sup>2</sup>, penalizes the addition of extra independent variables. After examining the data shown, we see that "Digital Financial Reporting Compliance" has the highest R<sup>2</sup> value, coming in at about 0,954, which means that the independent factors account for a sizable 95,4 % of the variation in DV. This number is mirrored by the adjusted R<sup>2</sup>, indicating a solid fit. In contrast, "Electronic Financial Reports Quality" has an extremely low R<sup>2</sup> of 0,631, which means that digitalization and SDGs can explain 63,1 % of the variation in Electronic Financial Reports Quality. The reduced explanatory power of IV for this construct is shown by the corrected R<sup>2</sup>'s even lower value of 0,582. On the other hand, "Financial Data Accuracy and Reliability" has a high R<sup>2</sup> of around 0,967, which indicates that the model satisfactorily explains 96,7 % of the variation in the DV. This number is mirrored by the adjusted R<sup>2</sup>, indicating a good model fit. These R<sup>2</sup> and modified R<sup>2</sup> values play a key role in evaluating and contrasting various models in statistical studies and are essential for understanding how effectively the model captures the variability in the dependent variables.

In addition, the hypotheses are examined in the area of statistical analysis by evaluating a variety of significant indicators. These metrics, which reveal the direction and significance of correlations between variables, including t-statistics (T), the original value sample estimates (O), and p-values (P). The original value sample estimate (O) reflects the numerical estimate derived from the sample data. A figure that is getting close to +1 indicates a good association, whereas getting close to -1 suggests a negative relationship. T are also used to determine association significance. If T result is greater than 1,96, there is a significant link between the variables (with a 95 % confidence level). The values of P are also important in assessing significance. A p-value that is less than the chosen significance level (often 0,050) illustrates the statistical significance of the effect variables. Utilizing the original value sample estimates (O), researchers may evaluate the direction of the connection as well as the level of significance using the T and P. Figure 3 and table 3 below, which illustrate the values obtained for the aforementioned indicators, summarizes the findings of this hypothesis testing. These discoveries provide critical understanding of the interactions between factors, allowing researchers to draw conclusions backed by data.

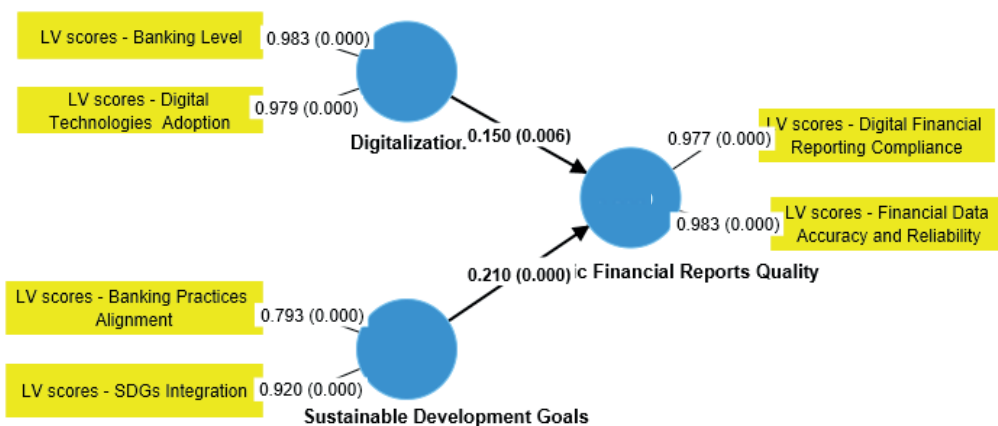


Figure 3. Structural Model (SM)

The hypothesis testing procedure, which involves evaluating the study hypotheses, is shown in figure 3. The route coefficients described earlier offer crucial data for this testing. The findings of the hypothesis testing for direct affects are shown in table 3 below. This table allows for the examination of the hypotheses and offers a thorough justification of how the variables relate to one another. Researchers can assess if the hypotheses rejected or supported by looking at the data in table 3 based on the direct relationships between variables. Table 3 is a crucial tool for understanding the judgements made throughout process of hypothesis testing.

Path	B	STDEV	T-values	P-Values	Remark
Digitalization -> Electronic Financial Reports Quality	0,150	0,055	2,733	0,006	Supported
Sustainable Development Goals -> Electronic Financial Reports Quality	0,214	0,049	4,267	0,000	Supported

The results of a hypothesis test are economically significant since they provide insight into how digitalization and SDG alignment affect the quality of electronic financial reports produced by Jordanian banks as shown in table 3. However, the first path investigates digitization effects on the quality of electronic financial reports, producing a (Beta) coefficient of 0,150 and a standard deviation (STDEV) of 0,055. It is supported by the associated T-value of 2,733 and low P-value of 0,006 that the quality of electronic financial reporting is positively correlated with digitalization in a statistically meaningful way. This association makes sense given that digital technologies have the ability to improve openness, reporting efficiency, and data accuracy all of which are essential for high quality financial reporting. Thus, adopting digital technology in banking operations appears to increase the quality of financial reporting, as evidenced by the positive correlation found between digitization and the quality of electronic financial reports. This development might result in improved financial reporting's dependability, correctness, and openness, which would boost stakeholder and investor confidence. Therefore, Jordanian banks that put a high priority on digitization are probably going to achieve higher quality financial reporting, which might have an impact on the economy by drawing in more investors and lowering the cost of capital. In addition, the relation between the SDGs and the electronic financial reports quality is the subject of the second path, the significant T-value of 4,267 and the extremely low P-value of 0,000 highlight the strong correlation between SDG alignment and the electronic financial reports quality. This finding implies that the quality of financial reporting is much enhanced by the implementation of sustainable practices, as evidenced by their alignment with the SDGs. The financial reporting of a bank is positively impacted by sustainable and ethical practices that are consistent with global ideals. The assertion that the SDGs have a major impact on the electronic financial reporting quality is supported by the strong and statistically significant relationship indicated by the much higher T-value of 4,267 and the P-value of 0,000. As evidence of the significance of these interactions, the table's remarks label both as "Supported." This highlights the importance of the SDGs by demonstrating that they have a statistically significant effect on the quality of Electronic Financial Reports. Thus, the correlation shown between adherence to the SDGs and the quality of electronic financial reporting highlights the financial significance of sustainable practices in the banking industry. Banks that operate in accordance with the SDGs typically provide electronic financial reporting of better quality. This alignment shows a dedication to ethical and sustainable company practices, which might draw in ethical clients and investors. Additionally, it can improve the bank's reputation and corporate image, which might have a favorable impact on the bottom line by boosting brand value and client loyalty.

## DISCUSSION

This paper offers valuable insights into the influence of digitalization and alignment with SDGs on the quality of electronic financial reports within the Jordanian banking sector, carrying significant economic implications. <sup>(11,47)</sup> However, the results confirm the validity of H1, indicating a positive association between digitization and the quality of electronic financial reports. These findings are consistent with prior research by Alalwan et al. <sup>(45)</sup>, Umamaheswari and Valarmathi, <sup>(46)</sup> Akpan et al. <sup>(48)</sup> emphasizing the improvements in accuracy and efficiency brought about by digitization. Likewise, the increased use of digital banking services ensures more comprehensive and up-to-date data, enhancing the depth and comprehensiveness of electronic financial reporting. This supports the claims made by Rajaobelina et al. <sup>(35)</sup> that digital channels enable a more thorough and accurate representation of financial transactions. Jordanian banks that prioritize digitalization are likely to achieve higher-quality financial reporting, potentially attracting more investors and reducing the cost of capital. <sup>(49,50,51,52,53)</sup> In addition, digitization has fundamentally altered data collection, processing, and reporting, enhancing accuracy, efficiency, and transparency. <sup>(54,55,56,57,58)</sup> Automated systems provide real-time data, improving the timeliness and relevance of financial reporting, as well as enabling more insightful analysis. <sup>(59,60,61)</sup> Similarly, this paper supports H2, revealing a positive relationship between alignment with SDGs and electronic financial reports the quality. This alignment leads to financial reporting that is conducted with greater care and integrity, which is reinforced by studies conducted by Feng et al. <sup>(62)</sup>, Osei et al. <sup>(63)</sup>, and Wang. <sup>(64)</sup> This connection underscores the growing importance of environmental and ethical issues in business, especially banking. Additionally, in order to adhere to the SDGs requires effective management and compliance. Banks that integrate these goals will likely have more stringent controls and settings to improve the quality and reliability of digital financial data. <sup>(65,66,67)</sup> The bank's commitment to sustainability is often evident in performance reports, which depict precise operations, as the governance improving reporting quality supports. <sup>(39,38)</sup> The continued alignment of the findings of this paper with previous studies emphasizes the role of digital and SDG alignment in raising the quality of financial reporting. Positive associations are also likely to stem from digital technology that enhances data transparency, efficiency, and accuracy. Likewise, SDG alignment raises the bar by promoting principles, openness, and investments in policies and processes that ensure data is valid. This has significant economic implications. Banks can benefit from this by giving priority to digitization and its links with the sustainable development goals in terms of improving the quality of reports, and the bank can also work to attract ethical investors and consumers, which leads to reducing capital costs. This paper suggests that banking must embrace digital technology and sustainability to remain competitive and socially responsible. <sup>(68,69,70)</sup> This provides Jordanian banks with a roadmap to enhance the quality of reports. <sup>(71)</sup> However, there is a need to examine the SDGs alignment and digitalization towards financial reporting quality for long term economic effects. <sup>(72,73)</sup>

## CONCLUSIONS

This study examines the effect of digitalization and sustainable development goals on electronic financial reporting quality in Jordanian banks. The findings of analysis using Smart PLS 4 indicated the importance of digitization and the integration of sustainable development goals to raise the level of electronic financial reporting in Jordanian banks. It has been found that digital technology is emerging as a key driver of outstanding financial reporting; this means that, digital technology has a strongly effect on services of banking. Thus, technology adoption in Jordanian banks has significantly improved both electronic financial reports quality and accuracy. However, digitization has been enabled more efficient data management and powerful analytics as well as faster operations. By doing so, Banks can meet evolving and changing stakeholder requirements and expectations by providing accurate, timely and in-depth financial reporting through the use of digitization. On the other hand, SDGs also have positive effect on digital financial reporting quality in Jordanian banks. This was also supported by previous literature by shown that links between increased commitment to governance, ethics, and sustainability goals, as well as data integrity in banking operations; this gives more compliance with reporting standards in addition to significant improvement of reliability and consistency in financial reporting terms as well. This indicates that adopting digitization and aligning with sustainability goals is an urgent necessity in order to raise the quality of financial reports, in addition to its vital role from a strategic perspective. In the context of the global agenda for technological advancement and sustainability to remain at the top, banks must demonstrate both flexibility and innovation in reporting practices to excel. Although providing valuable insights into digitally transforming banking towards sustainability, this study only provides a snapshot of a rapidly evolving landscape. Therefore, it is necessary to conduct more research, scientific investigations and empirical investigations to fully understand these relationships and identify regional or banking-specific differences. Hence, the financial reporting environment may adapt more effectively to the dynamic needs of a world characterized by rapid change and development, especially in the emergence of artificial intelligence and its use in all journals, as well as through increased awareness of these critical aspects.

## REFERENCES

1. Wilter, M. M. (2023). Effect of Financial Technology Adoption on Performance of Commercial Banks in



Meru County, Kenya (Doctoral dissertation, KeMU). <http://repository.kemu.ac.ke/handle/123456789/1612>

2. Gilchrist, D. J., West, A., & Zhang, Y. (2023). Barriers to the Usefulness of Non-profit Financial Statements: Perspectives From Key Internal Stakeholders. *Australian Accounting Review*. <https://doi.org/10.1111/auar.12401>

3. Morched, S., Ezzeddine, B. M., & Jarboui, A. (2023). The impact of innovation type on the performance and social responsibility of French manufacturing companies. *Environment Systems and Decisions*, 1-20. <https://doi.org/10.1007/s10669-023-09905-2>

4. AlZakwani, M. H. H., Al-Zaqeba, M. A. H., Bashatweh, A. D., Al-Refai, O., & Abdo, K. K. (2025). The effect of sustainable development goals and fintech adoption on financial reports quality in Jordanian Islamic banks. *International Journal of Innovative Research and Scientific Studies*, 8(1), 1874-1889. <https://ijirss.com/index.php/ijirss/article/view/4800/717>. <https://doi.org/10.53894/ijirss.v8i1.4800>

5. Saleh, I., Marei, Y., Ayoush, M., & Afifa, M. M. A. (2022). Big Data analytics and financial reporting quality: qualitative evidence from Canada. *Journal of Financial Reporting and Accounting*, (ahead-of-print). <https://doi.org/10.1108/JFRA-12-2021-0489>

6. Moşteanu, D. N. R., Faccia, D. A., Cavaliere, L. P. L., & Bhatia, S. (2020). Digital technologies' implementation within financial and banking system during socio distancing restrictions-back to the future. *International Journal of Advanced Research in Engineering and Technology*, 11(6). <https://ssrn.com/abstract=3650810>

7. Shatnawi, M., Masadeh, A., Alsawalhah, J., & Al-Zaqeba, M. (2024). Corporate environmental responsibility and corporate performance in Jordan. *Uncertain Supply Chain Management*, 12(1), 307-314. doi: 10.5267/j.uscm.2023.9.020

8. Pazarbasioglu, C., Mora, A. G., Uttamchandani, M., Natarajan, H., Feyen, E., & Saal, M. (2020). Digital financial services. World Bank, 54. <http://pubdocs.worldbank.org/en/230281588169110691/Digital-Financial-Services.pdf>

9. Falaha, M. A. (2024). The impact of strategic organizational challenges on human resource management in Jordanian logistics companies. *Universal Journal of Green Human Resources and Sustainable Humanities (UJGHRSH)*. Tanmeah Bassmah TBP. 1(1), 3-12. <https://doi.org/10.70568/UJGHRSH1.1.3>

10. Aloqaily, A. N., Qawasmeh, E. F., Masa'd, F. M., Alrousan, A., & Al-Zaqeba, M. A. A. (2024). The mediating effect of green culture on the relationship between GHRM and green sustainable performance in Jordanian SME logistics companies. *International Journal of Advanced and Applied Sciences*, 11(10), 232-240. <https://doi.org/10.21833/ijaas.2024.10.025>.

11. Al-Zaqeba, M., Jarah, B., Al-Bazaiah, S., Malahim, S., Hamour, A., Alshehadeh, A., ... & Al-Khawaja, H. (2022). The effect of reverse factoring financial changes on supply chain. *Uncertain Supply Chain Management*, 10(4), 1331-1338. <https://doi.org/10.5267/j.uscm.2022.7.006>

12. Jarah, B. A. F., AL Jarrah, M. A., Al-Zaqeba, M. A. A., & Al-Jarrah, M. F. M. (2022). The Role of Internal Audit to Reduce the Effects of Creative Accounting on the Reliability of Financial Statements in the Jordanian Islamic Banks. *International Journal of Financial Studies*, 10(3), 60. <https://doi.org/10.3390/ijfs10030060>

13. Sibanda, W., Ndiweni, E., Boulkeroua, M., Echchabi, A., & Ndlovu, T. (2020). Digital technology disruption on bank business models. *International Journal of Business Performance Management*, 21(1-2), 184-213. <https://doi.org/10.1504/IJBPM.2020.10027639>

14. Shubailat, O., Al-Zaqeba, M., Madi, A., & Khairi, K. (2024). Investigation the effect of digital taxation and digital accounting on customs efficiency and port sustainability. *International Journal of Data and Network Science*, 8(1), 61-68. <http://dx.doi.org/10.5267/j.ijdns.2023.10.017>

15. Cuesta, C., Ruesta, M., Tuesta, D., & Urbiola, P. (2015). The digital transformation of the banking industry. BBVA research, 1, 1-10. [https://www.researchgate.net/profile/David-Tuesta/publication/291357544\\_The\\_digital\\_transformation\\_of\\_the\\_banking\\_industry/links/56a2cc6f08ae1b65112cbdb9/The-digital-transformation-of-the-banking-industry.pdf](https://www.researchgate.net/profile/David-Tuesta/publication/291357544_The_digital_transformation_of_the_banking_industry/links/56a2cc6f08ae1b65112cbdb9/The-digital-transformation-of-the-banking-industry.pdf)

16. Wafa'Q, A. J., Mustafa, A. M., & Ali, M. Z. (2022, June). Sarcasm Detection in Arabic Short Text using Deep Learning. In 2022 13th International Conference on Information and Communication Systems (ICICS) (pp. 362-366). IEEE. <https://doi.org/10.1109/ICICS55353.2022.9811153>
17. Al-Zaqeba, M., Inezeh, N., Jarah, B., Hamour, H & Zeyad, Z. (2022). Intelligent matching: Supply chain management and financial accounting technology. *Uncertain Supply Chain Management*, 10(4), 1405-1412. <http://dx.doi.org/10.5267/j.uscm.2022.6.016>
18. Lootah, R.E.A. (2024). The Impact of Blockchain Technology on Financial Reporting Practices in UAE. *International Journal of Digital Accounting and Fintech Sustainability*, 1 (1), 2-12. <https://tanmeah.com/wp-content/uploads/2024/07/PAPER-1-TBP-1.pdf>
19. Sharma, B., & Dubey, M. (2022). Digital banking: a need of time. *International Journal of and Applied Research*, 9(3), 504-513. <https://ijaar.co.in/wp-content/uploads/2022/05/090374.pdf>
20. Al-Zaqeba, M.A.A. (2024). Taxation and Customs Strategies Towards Enhancing Environmental Responsibility. In: Mansour, N., Bujosa Vadell, L.M. (eds) *Green Finance and Energy Transition. Contributions to Finance and Accounting*. Springer, Cham. [https://doi.org/10.1007/978-3-031-75960-4\\_53](https://doi.org/10.1007/978-3-031-75960-4_53)
21. Bai, C., Quayson, M., & Sarkis, J. (2021). COVID-19 pandemic digitization lessons for sustainable development of micro-and small-enterprises. *Sustainable production and consumption*, 27, 1989-2001. <https://doi.org/10.1016/j.spc.2021.04.035>
22. Pirhonen, J., Lolich, L., Tuominen, K., Jolanki, O., & Timonen, V. (2020). "These devices have not been made for older people's needs"-Older adults' perceptions of digital technologies in Finland and Ireland. *Technology in Society*, 62, 101287. <https://doi.org/10.1016/j.techsoc.2020.101287>
23. Wen, H., Zhong, Q., & Lee, C. C. (2022). Digitalization, competition strategy and corporate innovation: Evidence from Chinese manufacturing listed companies. *International Review of Financial Analysis*, 82, 102166. <https://doi.org/10.1016/j.irfa.2022.102166>
24. Adams, C. A. (2017). The Sustainable Development Goals, integrated thinking and the integrated report. *Integrated Reporting (IR)*, 1-52. <http://integratedreporting.org/resource/sdgs-integrated-thinking-and-the-integrated-report/>
25. Hamour, H., Alensou, J., Abuzaid, A., Alheet, A., Madadha, S., & 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. <http://dx.doi.org/10.6007/IJARBS/v13-i10/19027>
26. Jan, A. A., Lai, F. W., Asif, M., Akhtar, S., & Ullah, S. (2023). Embedding sustainability into bank strategy: Implications for sustainable development goals reporting. *International Journal of Sustainable Development & World Ecology*, 30(3), 229-243. <https://doi.org/10.1080/13504509.2022.2134230>
27. Chagas, E. J. M. D., Albuquerque, J. D. L., Maia Filho, L. F. A., & Ceolin, A. C. (2022). Sustainable development, disclosure to stakeholders and the Sustainable Development Goals: Evidence from Brazilian banks' non-financial reports. *Sustainable Development*, 30(6), 1975-1986. <https://doi.org/10.1002/sd.2363>
28. Santos, M. J., & Silva Bastos, C. (2021). The adoption of sustainable development goals by large Portuguese companies. *Social Responsibility Journal*, 17(8), 1079-1099. <https://doi.org/10.1108/SRJ-07-2018-0184>
29. Issaa, A. B. I. 2024. Exploring the Transformative Impact of AI Across Industries and Its Role in Shaping Global Advancements. *Universal Journal of Future Intelligence: Innovations and Artificial Intelligence (UJFIIAI)*. Tanmeah Bassmah TBP. 1 (1). PP 1-8. <https://tanmeah.com/exploring-the-transformative-impact-of-ai-across-industries-and-its-role-in-shaping-global-advancements/>
30. Annan-Diab, F., & Molinari, C. (2017). Interdisciplinarity: Practical approach to advancing education for sustainability and for the Sustainable Development Goals. *The International Journal of Management Education*, 15(2), 73-83. <https://doi.org/10.1016/j.ijme.2017.03.006>

31. Qahman, A. I. A., & Abdu, M. (2024). Addressing ethical considerations, governance, and societal impacts in AI development and application. *International Journal of Digital Accounting and Fintech Sustainability*, 1(3), 24-32. <https://doi.org/10.70568/UJFIAl.1.3.24>
32. Pangaribuan, H., Sunarsi, D., Santoso, A., Wahyuni, E. S., & Yoewono, H. (2023). Quality Of Financial Statement And The Factors That Influence It. *Jurnal Akuntansi*, 27(1), 176-196. <https://ecojoin.org/index.php/EJA/article/download/1206/931>
33. Baumüller, J., & Sopp, K. (2021). Double materiality and the shift from non-financial to European sustainability reporting: Review, outlook and implications. *Journal of Applied Accounting Research*, 23(1), 8-28. <https://doi.org/10.1108/JAAR-04-2021-0114>
34. Abuhamdah, A., Alzaqebah, M., Jawarneh, S., Althunibat, A., & Banikhalaf, M. (2021). Moth optimisation algorithm with local search for the permutation flow shop scheduling problem. *International Journal of Computer Applications in Technology*, 65(3), 189-208. <https://doi.org/10.1504/IJCAT.2021.116008>
35. Rajaobelina, L., Prom Tep, S., Arcand, M., & Ricard, L. (2021). The relationship of brand attachment and mobile banking service quality with positive word-of-mouth. *Journal of Product & Brand Management*, 30(8), 1162-1175. <https://doi.org/10.1108/JPBM-02-2020-2747>
36. Maabreh, H. M. A. (2024). The Role of Financial Technology (Fintech) in Promoting Financial Inclusion A Literature Review. *International Journal of Digital Accounting and Fintech Sustainability*, 1 (1), 2-12. <https://tanmeah.com/wp-content/uploads/2024/08/PAPER-2-TBP.pdf>
37. Manita, R., Elommal, N., Baudier, P., & 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>
38. Zouari, G., & Abdelhedi, M. (2021). Customer satisfaction in the digital era: evidence from Islamic banking. *Journal of Innovation and Entrepreneurship*, 10(1), 1-18. <https://doi.org/10.1186/s13731-021-00151-x>
39. Kurniawan, T. A., Othman, M. H. D., Hwang, G. H., & Gikas, P. (2022). Unlocking digital technologies for waste recycling in Industry 4.0 era: A transformation towards a digitalization-based circular economy in Indonesia. *Journal of Cleaner Production*, 357, 131911. <https://doi.org/10.1016/j.jclepro.2022.131911>
40. Jebiril, I., Al-Zaqeba, M.A.A., Al-Khawaja, H.A., Al Obaidy, A.L.A., Marashdah, O.S. Enhancing estate governance using blockchain technology through risk management in estate governance of business sustainability, *International Journal of Data and Network Science*, 2024, 8(3), pp. 1649-1658. <https://ideas.repec.org/a/npk/hassle/v12y2024i3p703-722id3878.html>
41. Alshehadeh, A.R., Al-Khawaja, H.A., Yamin, I., Jebiril, I. The Impact of Financial Technology on Customer Behavior in the Jordanian Commercial Banks, *WSEAS Transactions on Business and Economics*, 2023, 20, pp. 2263-2275. <https://doi.org/10.37394/23207.2023.20.195>
42. Jarah, B.A.F., Alshehadeh, A.R., Al-Zaqeba, M.A.A., Al-Bataineh, F.A., Al-Khawaja, H.A. Review of the literature related to audit quality and integrated reporting quality in Jordanian companies, *Edelweiss Applied Science and Technology*, 2024, 8(6), pp. 124-133. <https://ideas.repec.org/a/ajp/edwast/v8y2024i6p124-133id2029.html>
43. Othman, A. A. A., Bin Jalil, A., & Bin Sabri, H. (2024). The impact of Islamic finance contracts and modes on sustainable economic development. *International Journal of Digital Accounting and Fintech Sustainability*, 1(2), 1-15. DOI: 10.70568/TBP.IJDAFS1.2.1.2024
44. Ahmed, E. A., Alzaqebah, M., Jawarneh, S., Alqurni, J. S., Alghamdi, F. A., Alfagham, H., & Almarashdeh, I. (2023). Comparison of specific segmentation methods used for copy move detection. *International Journal of Electrical and Computer Engineering*, 13(2), 2363. <https://doi.org/10.11591/ijece.v13i2.pp2363-2374>
45. Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., & Simintiras, A. C. (2016). Jordanian consumers' adoption of telebanking: Influence of perceived usefulness, trust and self-efficacy. *International Journal of Bank Marketing*, <https://doi.org/10.56294/dm2025734>

34(5), 690-709. <https://doi.org/10.1108/IJBM-06-2015-0093>

46. Umamaheswari, S., & Valarmathi, A. (2023). Role of Artificial Intelligence in The Banking Sector. *Journal of Survey in Fisheries Sciences*, 10(45), 2841-2849. <https://doi.org/10.17762/sfs.v10i45.1722>

47. Qahman, A. I. A., Dahlan, H. A., Hussin, M., & Al-Zaqeba, M. A. A. (2025). AI-enabled adaptive e-learning systems adoption in conflict zones: Case study of Palestinian schools. *TEM Journal*, 14(1), 789-804. <https://doi.org/10.18421/TEM141-70>

48. Akpan, I. J., Soopramanien, D., & Kwak, D. H. (2021). Cutting-edge technologies for small business and innovation in the era of COVID-19 global health pandemic. *Journal of Small Business & Entrepreneurship*, 33(6), 607-617. <https://doi.org/10.1080/08276331.2020.1799294>

49. Bernedo-Moreira DH, Gonzales-Lopez JN, Romero-Carazas R. Urban Revitalization: The Challenge of Integrating Cultural Heritage into the Growth of Cities. *Land and Architecture*. 2023; 2:52.

50. Estrada Meza RU, Carrillo Regalado S. Macrobus and urban mobility: challenges and achievements in the ZMG. *Transport, Mobility & Society*. 2022; 1:23. <https://doi.org/10.56294/tms202223>

51. Arteaga Quistial JE, Velásquez Bravo M Ángel, Revelo Zambrano OA. Application of predictive models for territorial planning in Pasto, Colombia. *Land and Architecture*. 2024; 3:110. Available from: <https://la.ageditor.ar/index.php/la/article/view/110>

52. Zambrano Farias LK, Cabrera Olvera JL. Clinical Simulation in health care training: barriers to efficacy and impact on health care safety. *Nursing Depths Series*. 2025 Jul. 9 ;4:390.

53. Magalhaes de Paiva EM, Correa FJM. Evaluation of Health-Related Quality of Life in Villa Piletones: A Public Health Approach. *South Health and Policy*. 2025; 4:217.

54. Castro Mejía PJ, Barranzuela Crisant JP, Cisneros Távara MA, Gómez Castillo FF, Manayalle Mera DN, Quintanilla Paico LA, et al. Renewable Energy and the Utilization of Agricultural Waste in Chiclayo. *Environmental Research and Ecotoxicity*. 2023; 2:53.

55. Hernández Bridón N, Pallerols Mir M. Oral cancer, a health risk. *Nursing Depths Series*. 2025; 1:18.

56. Jaramillo Arvilla SJ, Urresta Aragón JD, Mena Guerrero NL, Cárdenas Bustos CS. Quantitative study of the variable pollutant load in hospital wastewater from the Imbanaco Clinic in the city of Cali. *eVitroKhem*. 2022; 1:66.

57. Díaz Cruz SA, Batista Villar T, Valido-Valdes D, Núñez Núñez Y, Fernández González JL. Factors that impact in the answer of the ulcers from the diabetic foot to the Heberprot-P®. *Podiatry (Buenos Aires)*. 2025; 4:151.

58. Acero Flores SM, Hidalgo Lazo KM. Socioeconomic and environmental effects of the mining sector in Peru (2007-2022). *Environmental Research and Ecotoxicity*. 2024; 3:134.

59. Piñerez Díaz FJ, Sorrentino E, Caldera Molleja OA. Implementation of a Process-Based Quality Management System. *Transport, Mobility & Society*. 2025; 4:163: <https://doi.org/10.56294/tms2025163>

60. Tirado J. Big data and artificial intelligence for innovation in management in the agricultural industry in Extremadura. *EthAlca*. 2022; 1:38.

61. Sanchez Carrillo SE, Rosso Cerón AM. Optimization of the drinking water treatment system in Bochalema: a technical and operational proposal. *eVitroKhem*. 2024; 3:38.

62. Osei, L. K., Cherkasova, Y., & Oware, K. M. (2023). Unlocking the full potential of digital transformation in banking: a bibliometric review and emerging trend. *Future Business Journal*, 9(1), 30. <https://doi.org/10.1186/s43093-023-00207-2>

63. Wang, W., Zhang, H., Sun, Z., Wang, L., Zhao, J., & Wu, F. (2023). Can digital policy improve corporate

<https://doi.org/10.56294/dm2025734>

sustainability? Empirical evidence from China's national comprehensive big data pilot zones. *Telecommunications Policy*, 102617. <https://doi.org/10.1016/j.telpol.2023.102617>

64. Al-Omari, R., Oroud, Y., Makhlof, M.H., Alshehadeh, A.R., Al-Khawaja, H.A. The impact of profitability and asset management on firm value and the moderating role of dividend policy: Evidence from Jordan, *Asian Economic and Financial Review*, 2024, 14(1), pp. 1-11. <https://doi.org/10.55493/5002.v14i1.4937>

65. Alves Leal R. Paediatric retinoblastoma care between 2020 and 2024: a national perspective. *South Health and Policy*. 2022; 1:13.

66. Malagón Silva B. Trends in the use of artificial intelligence in the treatment of diabetic foot. *Podiatry (Buenos Aires)*. 2025; 4:152.

Juárez GE, Gambino N. Professionalization and Artificial Intelligence in Family Businesses. *EthAlca*. 2024; 3:13

67. Feng, S., Chong, Y., Yu, H., Ye, X., & Li, G. (2022). Digital financial development and ecological footprint: Evidence from green-biased technology innovation and environmental inclusion. *Journal of Cleaner Production*, 380, 135069. <https://doi.org/10.1016/j.jclepro.2022.135069>

68. Alshehadeh, A.R., Elrefae, G.A., Belarbi, A.K., Qasim, A., Al-Khawaja, H.A. The impact of business intelligence tools on sustaining financial report quality in Jordanian commercial banks, *Uncertain Supply Chain Management*, 2023, 11(4), pp. 1667-1676. <https://doi.org/10.5267/j.uscm.2023.7.002>

69. Gill, S. A., Raza, A., Farooq, K., Alhoul, M. A. Y. A., Alshebami, A. S., & Al Marri, S. H. (2024). Effects of People Equity and Entrepreneurial Orientation on Firm Performance: The Mediation Role of Social Capital. *Journal of the Knowledge Economy*, 1-28. <https://doi.org/10.1007/s13132-024-01842-y>

70. Hidayah, R., Sholih, A., Agustina, L., & Rahayu, R. (2020). The Determinant of Earning Quality Using State Ownership as Moderating Variable on Companies in Malaysia. *Journal Economic*, 17(1), 34-48. <https://doi.org/10.21831/economia.v17i1.33147>

71. Rayyan, I. F., Hazeem, M. S. A., & Alamawi, M. A. (2024). The Application Basis of International Trade Law Rules Before National Judiciary: A Jordanian Legal Perspective. *Revista de Gestão Social e Ambiental*, 18(7), e05558-e05558. <https://doi.org/10.24857/rgsa.v18n7-034>

72. Al-Kasassbeh, F. Y., Awaisheh, S. M., Odeibat, M. A., Awaesheh, S. M. A., Al-Khalaileh, L., & Al-Braizat, M. (2024). Digital Human Rights in Jordanian Legislation and International Agreement. *International Journal of Cyber Criminology*, 18(1), 37-57. [10.5281/zenodo.4766803](https://doi.org/10.5281/zenodo.4766803)

## FINANCING

The authors did not receive financing for the development of this research.

## CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

## AUTHORSHIP CONTRIBUTION

*Conceptualization:* Alshehadeh, Al-Zaqeba.

*Data curation:* Al-khawaja.

*Formal analysis:* Al-Zaqeba.

*Research:* Alshehadeh, Al-Zaqeba, Al-khawaja, Al-Wreikat, and Al-Wreikat.

*Methodology:* Qtaishat.

*Project management:* Al-Zaqeba.

*Resources:* Al-Wreikat.

*Software:* Alshehadeh.

*Supervision:* Al-Zaqeba.

*Validation:* Alshehadeh.

*Display:* Qtaishat, Al-Wreikat.

*Drafting - original draft:* Al-Zaqeba.

*Writing - proofreading and editing:* Qtaishat, Al-khawaja.