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THE MODERATING ROLE OF LOCAL GOVERNMENT POLICIES ON TECHNOLOGY ADOPTION AND FINANCIAL REPORTING QUALITY IN IRAN, IRAQ AND OMAN

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Abstract
The purpose of this study is to examine the impact of technological changes and digital transformation on the quality of financial reporting in three countries: Iran, Iraq, and Oman. Given the critical role of modern technologies in enhancing the accuracy, transparency, and reliability of financial information, this study aims to identify the current state and analyze the relationships between key variables in the field of financial reporting, to provide both practical and theoretical recommendations. The research methodology is applied, descriptive-survey, and quantitative, with field data collected through structured questionnaires. The statistical population consists of professional auditors and certified accountants in the three countries under study, and the sampling was done using a proportional stratified method. A total of 271 valid questionnaires were collected, including 110 from Iran, 77 from Iraq, and 84 from Oman. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), and the validity, reliability, and model fit were thoroughly assessed. The results of the study indicate that technological changes and digital transformation have a significant positive impact on the quality of financial reporting. These effects were observed in Iran, Iraq, and Oman, although the strength of the effect of the variables varied across the countries. The findings emphasize the importance of developing technological infrastructures and increasing organizational and cultural readiness for the adoption of modern technologies as key factors in improving the quality of financial reporting.The main innovation of this research lies in the synergistic examination of two key technological variables, namely technological changes and digital transformation, simultaneously in three Middle Eastern countries, and the use of Structural Equation Modeling to comprehensively analyze their relationships with the quality of financial reporting. This approach enables a more precise and comprehensive understanding of the impact of technology on financial reporting in developing countries.

Keywords: Local government, technological changes; digital transformation; quality of financial reporting.

1. Introduction

In today's complex and dynamic world, organizations must embrace and apply modern technologies in all aspects of their operations, including finance and accounting, to maintain a competitive advantage and survive in global markets (Al Shanti and Elessa, 2023). In this context, the widespread emergence of digital transformation goes beyond the automation of processes and the use of accounting software; technology has now become one of the main pillars in enhancing the transparency, accuracy, and timeliness of financial reporting. Digital transformation can be viewed as a process of redefining organizational activities based on new

technologies such as artificial intelligence, blockchain, cloud computing, big data, machine learning, and the Internet of Things. These technologies increase access to high-quality data, improve internal controls, reduce human error, speed up information flow, and enhance the reliability and comparability of financial statements (Yang et al., 2024). Within this framework, financial reporting quality, which has long been a key indicator for assessing financial health and the decision-making capability of information for investors, creditors, and other stakeholders, is profoundly influenced by technological changes. The quality of reporting can no longer be analyzed without considering the level of digital maturity of companies and financial institutions (Chen et al., 2024). International research (Fernandez & Aman, 2018; Kaya et al., 2019; Otia&Bracci, 2022; Potryvaieva et al., 2022; Aboelfotoh et al., 2025; Fang et al., 2024; Pedroso & Gomes, 2024) has confirmed that digital technologies are capable of transforming processes such as disclosure, reporting, auditing, and even accounting estimates. However, what has received less attention is how these changes manifest and affect countries with unique economic and institutional conditions, particularly in the Middle East— a region that, alongside geopolitical pressures, institutional instability, and differing economic structures, is also striving to transition to a digital economy. In recent decades, digital technology and new informational tools have fundamentally transformed the traditional structure of accounting and financial reporting. Digital transformation (DT) is now recognized as a multidimensional process through which organizations, leveraging new technologies like artificial intelligence, big data, blockchain, cloud computing, and ERP systems, redesign workflows, increase productivity, enhance transparency, and improve financial decision-making (Loang& Ahmad, 2023). Financial reporting, which was once primarily based on paper documents, manual processes, and traditional procedures, has now reached an unprecedented level of automation, accuracy, and speed with the introduction of digital technologies. Information technology has automated repetitive tasks such as data entry, ledger recording, and account reconciliation. At the same time, tools like accounting software and ERP systems, with real-time and data-driven reports, have significantly enhanced the quality of financial reporting (Mosteanu&Faccia, 2020).

Digital transformation has not only reduced human errors but also streamlined operations such as auditing, financial compliance, tax calculation, and information sharing, making them easier and more consistent. Additionally, technology like AI and advanced data analytics helps accountants and financial managers look at financial trends more closely and make better judgments (Loang et al., 2024). However, using and adopting new technologies does not just have benefits; it also has problems. The high costs of getting infrastructure and software, the need for ongoing employee training, the organization's resistance to change, and the difficulties of integrating data are some of the biggest obstacles to digital transformation in financial reporting (Liu et al., 2019). Consequently, an exhaustive analysis of this process across many economic and institutional frameworks is required.

Most previous studies (Yigitbasioglu et al., 2023; Nguyen et al., 2024; Pedroso & Gomes, 2024; Aguguom&Ebun, 2021; Albawwat&Frijat, 2021; Deniz & Jeffery, 2022) have primarily examined the impact of digital technologies on financial reporting in developed countries, whereas developing countries, with their unique institutional, economic, and technological characteristics, have received less attention from researchers in this field. Therefore, this study aims to comprehensively examine the effects of technological changes and digital transformation on the quality of financial reporting in three countries—Iran, Iraq, and Oman—taking a new step toward filling this research gap. Each of these countries has been selected for specific reasons:

Iran, as a country with a relatively advanced financial system but facing international sanctions; Iraq, as a post-war country with an institutional structure under reconstruction; and Oman, as a country with relative stability and a structured effort to develop e-government and digital infrastructures. The selection of these three countries enables a comparative analysis of institutional conditions, policymaking, technological capacities, and their effects on the quality of financial reporting. In Iran, despite sanctions, significant efforts have been made in recent years to digitize tax, auditing, and public disclosure processes. The establishment of national systems such as the Taxpayer System, Point-of-Sale System, and the shift toward electronic reporting are indicators of this progress. Iran, with its professional history in accounting, has recently taken significant steps toward digitalizing its financial reporting system, despite international sanctions. The launch of systems like the Taxpayer System, Point-of-Sale terminals, and online reporting to the Tax Administration signals Iran's commitment to improving the quality of financial reporting through technology. Despite facing institutional weaknesses and post-war challenges, Iraq is working to improve the transparency and reliability of its financial reporting by utilizing digital technologies in rebuilding its financial system and attracting foreign investment. While challenges such as structural corruption, a lack of skilled professionals, and infrastructure weaknesses persist, the country has begun its digital transformation journey. Oman, on the other hand, as a country with greater political and economic stability, has made extensive investments in e-government development and the digitization of its financial system. The implementation of International Financial Reporting Standards (IFRS), the expansion of ERP systems, and the development of digital skills within its organizational structure have made Oman a model for digital transformation in the financial sector in the region. A comparative examination of these three countries provides a deeper understanding of the conditions and factors influencing the quality of financial reporting in digital contexts. This research aims to answer the fundamental question of how technological changes and the level of digital transformation maturity have impacted the quality of financial reporting in Iran, Iraq, and Oman.

The innovation of this research can be highlighted in three fundamental areas: first, the simultaneous focus on three countries with distinct institutional, economic, and technological conditions; second, the qualitative and quantitative analysis of the impact of digital technologies on various dimensions of financial reporting quality (including transparency, reliability, timeliness, and comparability); and third, the use of updated theoretical frameworks and hybrid models for data analysis in a multi-country environment. These innovations could open new perspectives in the international literature on accounting and financial management and be valuable for policymakers, financial managers, and auditors in similar countries. From a theoretical standpoint, this research relies on theories such as "institutional theory," "dynamic capabilities theory," and "technology sustainability theory" to demonstrate how institutional, contextual, and technological factors can transform the form and content of financial reports in different cultural and economic settings. Furthermore, this study aims to empirically assess financial reporting quality in a digital context and reveal the gaps that exist between developing countries compared to international standards. From an operational perspective, this research offers multiple practical applications. Financial managers can design methods for optimizing reporting performance in a digital environment based on the study’s findings. Regulatory bodies such as central banks, stock exchanges, or audit courts can use the results to design efficient regulatory frameworks. Additionally, auditors can assess their alignment with new technological tools and enhance their performance effectiveness in the digital environment. Furthermore, the

comparative analysis of this research can provide a clearer picture of the digital gap between countries in the Middle East and lay the groundwork for the development of regional policies for digital convergence in financial sectors. This analysis could be particularly useful for regional bodies such as the Islamic Development Bank or the Gulf Cooperation Council in making coordinated decisions. By considering these dimensions, the selection of the three countries—Iran, Iraq, and Oman—not only aims to represent a diverse range of digital statuses in the region, but also serves the purpose of examining the impact of local, cultural, and institutional factors on the implementation of technology in financial reporting. This research seeks to clarify why technology becomes a tool for enhancing quality in some contexts while remaining merely a symbolic tool in others. In other words, in a world where technological transformations are rapidly advancing and the demand for transparency and financial accountability is increasing, addressing the question of how and to what extent digital transformation can improve the quality of financial reporting in the context of Middle Eastern countries is of paramount importance. This paper is an attempt to provide a scientifically grounded and data-driven response to this fundamental question.

The main objectives of this study are as follows:

- To examine the relationship between digital technology changes and the quality of financial reporting.
- To evaluate the role of digital transformation in improving the quality of financial reporting.

This study seeks to contribute to the development of both theoretical and practical literature in the field of digital accounting, offering a detailed picture of the digital transformation status and the quality of financial reporting in the three selected countries. Its findings could assist policymakers, regulatory bodies, auditors, financial managers, and investors in making informed decisions and improving the financial performance of organizations in a digital environment.

2. Theoretical foundations and hypothesis development

With the rapid advancement of new technologies, the business world—particularly the fields of accounting and financial reporting—has undergone fundamental and significant changes. Technological changes, as the primary driving force behind these transformations, have created an environment where financial data is generated and processed with greater speed, accuracy, and transparency. Technologies such as Enterprise Resource Planning (ERP) systems, big data analytics, artificial intelligence, machine learning, and blockchain have revolutionized the traditional structure of financial reporting, with far-reaching implications for the quality of information provided to stakeholders (Marota, 2021; Hadi et al., 2023). The quality of financial reporting is essential for making economic decisions since it means that the information is accurate, correct, precise, reliable, and easy to compare. Changes in technology make data more reliable, reduce human errors, and make it less likely that information is altered, which makes investors, managers, and other stakeholders more likely to trust financial reports (Fernandez & Aman, 2018; Kaya et al., 2019). Using contemporary technology enhances internal control systems and regulatory procedures, thereby reducing the risk of fraud and increasing transparency in reporting (Fang et al., 2023). According to the Technology Acceptance Model (TAM), people are more likely to acquire and employ technology if they think it is useful and easy to use (Davis, 1989). This adoption leads to more effective integration of technology into financial reporting processes, improving the quality of the final financial information (Kocsis et

al., 2022). In this regard, developed countries such as the United States and Canada, through the adoption of advanced technologies, have witnessed a reduction in earnings management practices and a continuous improvement in the quality of financial reporting (Morris &Laksmana, 2010; Saleh et al., 2023). Ultimately, given that the quality of financial reporting relies on accuracy, speed, and transparency, the critical role of technological changes in enhancing these indicators cannot be overlooked. These changes have not only transformed accounting processes but have also fostered trust and transparency in financial markets, ultimately contributing to sustainable economic growth. Therefore, it can be concluded that technological changes have had and continue to have a positive and significant impact on the quality of financial reporting. Thus, the first hypothesis of the study is as follows:

H1: Technological changes have a positive and significant impact on the quality of financial reporting.

Digital Transformation is a concept that goes beyond the simple adoption of modern technologies. It is considered a strategic and comprehensive process that forms the foundation for the development of new business models and organizational performance, particularly in the areas of accounting and financial reporting. This transformation, which encompasses technologies such as artificial intelligence, machine learning, the Internet of Things (IoT), blockchain, cloud computing, and big data analytics, has radically changed the structure and execution of accounting operations and financial reporting. It has made it possible to provide more accurate, transparent, and reliable financial information (Shenen, 2023; Asikpo, 2023).

The quality of financial reporting, as one of the key pillars of transparency, accountability, and trust in financial markets, holds immense importance. Digital transformation, by enabling fast and accurate data processing, reducing operational costs, and enhancing the precision and reliability of information, effectively improves this quality (Abhishek et al., 2024; Gao et al., 2025). Furthermore, modern technologies provide the opportunity to create transparent audit trails, automate oversight processes, and reduce the likelihood of errors and fraud, all of which play a pivotal role in reducing agency costs and increasing investor confidence (Danielson & Scott, 2007; Raza et al., 2023).

From the standpoint of agency theory, diminishing information asymmetry between managers and investors constitutes one of the most critical effects of the digital revolution in financial reporting. This level of openness about information is fundamental in developing nations, where problems like insufficient technology and bad financial reporting are common (Bora et al., 2021; Kenetey&Popesko, 2025). Digital transformation is seen as a unique chance to enhance reporting, increase transparency, and improve the performance of organizations in these markets.

Moreover, digital transformation strengthens internal control systems and attracts greater attention from analysts, thereby enhancing the accuracy and comparability of accounting information (Yang et al., 2024; Zhang et al., 2024). The increased automation of processes also improves the efficiency and effectiveness of managerial controls, which significantly contributes to the overall enhancement of financial reporting quality (Papiorek&Hiebl, 2024). The success of implementing digital transformation, like other modern technologies, largely depends on the adoption and readiness of users and employees. According to the Technology Acceptance Model (TAM), awareness of the technology's benefits and ease of use are two key factors in forming a positive attitude and ultimately ensuring the acceptance of these technologies by employees (Venkatesh et al., 2003; Venkatesh&Bala, 2008). Furthermore, an organizational culture that is compatible with digital technologies and the development of employees' skills is a critical

prerequisite for the success of digital transformation and the improvement of financial reporting quality (Albukhitan, 2020).

In other words, digital transformation, by creating new opportunities for automation, enhancing transparency, improving oversight and control, and accelerating data processing, plays a fundamental role in improving the quality of financial reporting. This positive and significant impact has been emphasized in numerous international studies, both in the private and public sectors. Therefore, based on the discussion mentioned above, the second hypothesis is as follows:

H2: Digital transformation has a positive and significant impact on the quality of financial reporting.

3. Methodology

This study is applied in terms of its objective, descriptive-survey in nature, and correlational in method. The research adopts a quantitative approach and uses field data to examine the impact of technological changes and digital transformation on the quality of financial reporting in the three countries of Iran, Iraq, and Oman. The focus of the research is on understanding the current situation and analyzing the relationships between key variables in the field of financial reporting to provide both practical and theoretical recommendations.

3.1. Statistical population and sampling

The statistical population of this research consists of all professional auditors and certified accountants working in the three countries of Iran, Iraq, and Oman. To obtain a representative sample from the entire population, a proportional stratified sampling method was used to ensure a balanced distribution of respondents across the three countries. A total of 271 valid questionnaires were collected, including 110 responses from Iran, 77 responses from Iraq, and 84 responses from Oman.

The sample size was determined using the Cochran formula, with the Morgan table taken into account, and the statistical adequacy of the sample for structural equation modeling analysis was confirmed. The Cochran formula is as follows:

3.1.1.Data collection tool and variable definition

To measure the research variables, a structured questionnaire was used, consisting of three main sections:

- Technological Changes: Derived from the standard tool by Robert (2010), including dimensions such as satisfaction and agreement, job security, adaptability, informal learning, resistance to change, discussion about change, and formal learning.
- Digital Transformation: Based on the standard questionnaire by Li et al., (2021), assessing the extent of digitalization of financial processes and modern technologies in accounting.
- Quality of Financial Reporting: Constructed by the researcher and based on the literature, including dimensions such as political and tax costs, earnings management incentives, corporate governance systems, company life cycle, and macroeconomic conditions.

Each variable was operationalized through multiple dimensions and indicators.

A) The Technological Changes variable includes the following components:

- Job satisfaction and the degree of technology acceptance

- Job security against technological changes
- Adaptability and flexibility towards innovation
- Informal learning
- Resistance to change
- Discourse around changes
- Formal education and technological learning

B) The Digital Transformation variable includes:

- The level of digitalization of financial processes and reporting
- The degree of automation, system integration, and use of smart technologies
- Alignment of organizational infrastructures with the needs of the digital age
- The level of investment in information technology and analytical tools

C) The Quality of Financial Reporting variable includes:

- Reduction in political and tax costs
- Limitations of earnings management and opportunistic managerial incentives
- Improvement of the corporate governance structure
- Consideration of the firm's life cycle
- Sensitivity to macroeconomic conditions

All questionnaire items were measured using a five-point Likert scale (from very low = 1 to very high = 5).

3.1.2.Data analysis method

To analyze the collected data, Structural Equation Modeling (SEM) with a Partial Least Squares (PLS-SEM) approach was employed. The reason for using this method is the complexity of the research's conceptual model and the relatively limited sample size. Data analysis was conducted using SmartPLS version 4 software. In this stage, the indicators of convergent and discriminant validity, construct reliability (using Cronbach's alpha and composite reliability), model fit for both the measurement and structural models, and path coefficients were examined. Additionally, the bootstrap test was used to assess the significance of the coefficients.

3.1.3.Conceptual model of the study

Based on the studies by Robert (2010), Li et al.,(2021), and Zhang et al. (2024), the conceptual model of the research is as follows Figure 1:

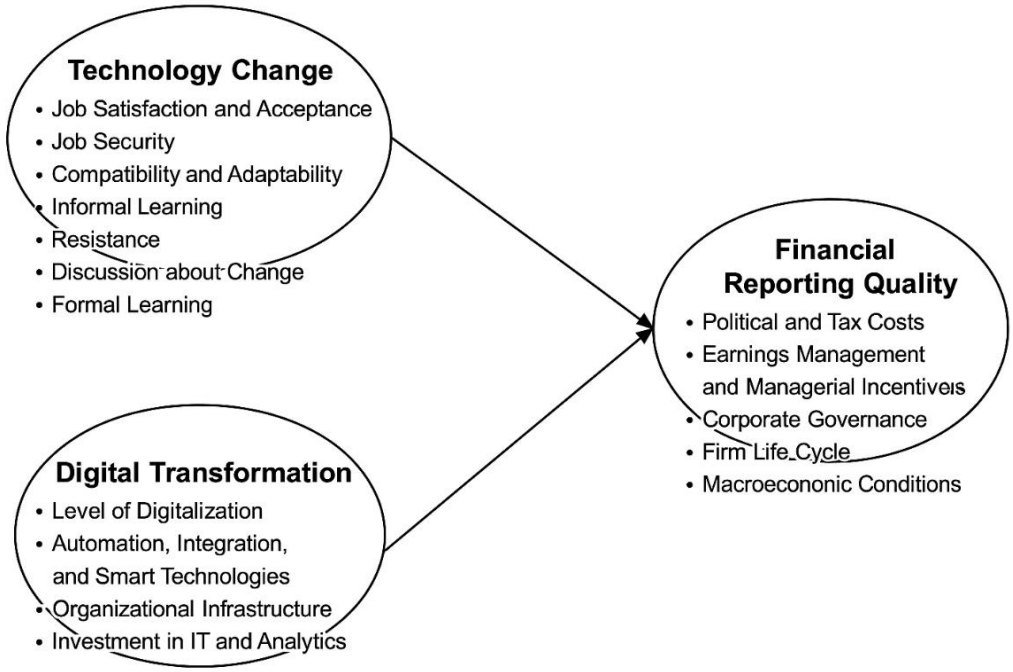

Figure 1. The conceptual model
Source: Findings of the researcher based on the studies of Robert (2010), Li et al., (2021), Zhang et al. (2024)

4. Data analysis

4.1.Descriptive statistics

The first five questions of the questionnaire were designed to gather demographic information about the participants. Table 1 illustrates the frequency distribution of demographic data. The questionnaires were completed by 110 individuals in Iran, 77 in Iraq, and 84 in Oman. In Iran and Iraq, 80% of the respondents were male, while in Oman, 84% of the respondents were male. In all three countries, the majority of the participants were between the ages of 30 and 40. The majority of respondents in Iran and Oman held a Master's degree, while around 80% of participants in Iraq had a Bachelor's degree. The highest length of service in Iran and Iraq was less than 10 years, while in Oman, the most common length of service ranged from 16 to 20 years.

Table 1. Frequency of demographic data

	Iran	**Iraq**	**Oman**		**Iran**	**Iraq**	**Oman**
Sex:				**Education:**			
Female	22 (20.00)	15 (19.48)	13 (15.48)	Less than a Bachelor's Degree	2 (1.82)	2 (2.60)	0 (0.00)

Male	88 (80.00)	62 (80.52)	71 (84.52)	Bachelor's Degree	1 (0.91)	61 (79.22)	0 (0.00)
Age:				Master's Degree	82 (74.55)	14 (18.18)	53 (63.10)
Under 30 years	26 (23.64)	18 (23.38)	8 (9.52)	PhD	25 (22.73)	0 (0.00)	31 (36.90)
30-40 years	48 (43.64)	32 (41.56)	38 (45.24)	**Year of Experience:**			
41-50 years	31 (28.18)	25 (32.47)	33 (39.29)	Less than 10 years	37 (33.64)	28 (36.36)	20 (23.81)
51-60 years	4 (3.64)	1 (1.30)	5 (5.95)	10-15 years	32 (29.09)	23 (29.87)	25 (29.76)
Over 60 years	1 (0.91)	1 (1.30)	0 (0.00)	16-20 years	29 (26.36)	20 (25.97)	27 (32.14)
Expertise:				21-25 years	12 (10.91)	6 (7.79)	12 (14.29)
1	31 (28.18)	23 (29.87)	26 (30.95)	More than 25 years	0 (0.00)	0 (0.00)	0 (0.00)
2	38 (34.55)	20 (25.97)	26 (30.95)				
3	31 (28.18)	29 (37.66)	27 (32.14)				
4	10 (9.09)	5 (6.49)	5 (5.95)	**Total**	110 (100.00)	77 (100.00)	84 (100.00)

The designed questionnaire consists of three main sections: Technological Changes, Digital Transformation, and Quality of Financial Reporting. Technological changes are measured by the following components: agreement and satisfaction, job security, adaptability and alignment, informal learning, resistance, discussion about change, and formal learning. The quality of financial reporting encompasses several key factors, including political and tax costs, earnings management, managerial motivation, the corporate governance system, the company's life cycle, and macroeconomic conditions. The response options for each question are: very low, low, moderate, high, and very high, coded as numbers 1 through 5, respectively.

4.2.Inference from the data

Before testing the research hypotheses, the validity and reliability of the research questionnaires are evaluated. The Cronbach's alpha coefficient for the questionnaires administered in Iran, Iraq, and Oman was 0.887, 0.869, and 0.884, respectively, indicating that they fall within an

acceptable range, and the questionnaires exhibit adequate internal consistency. To assess the construct validity, the Average Variance Extracted (AVE) index and the Fornell-Larcker criterion were used. The AVE values presented in Table 2 show that the average variance extracted for each dimension of the models is greater than 0.5. Therefore, convergent validity of the models is confirmed. Hence, it can be concluded that the convergent validity of the measurement models has been established using Cross-validation-communality.

Table 2. Reliability and validity findings of the study

Questionnaire	**Cronbach's Alpha**	**Composite Reliability**	**AVE**
Iran	0.887	0.806	0.712
Iraq	0.869	0.797	0.709
Oman	0.884	0.802	0.715

To evaluate the overall fit of the hypothesized models with the observed data, goodness-of-fit indices are used. The goodness-of-fit indices for the measurement models are reported in Table 3. It can be inferred that the model fit for the data is appropriate, and the results obtained from it can be considered reliable.

Table 3. Goodness-of-Fit Indices

Index Name	**Symbol**	**Iran**	**Iraq**	**Oman**	**Acceptable Range**	**Ideal Range**
Chi-Square Significance	χ^2	0.002	0.006	0.005	$0.05 < p \leq 1.00$	$0.01 < p \leq 0.05$
Optimized Chi-Square	χ^2/df	3.010	3.002	3.023	$0 < \chi^2/df \leq 5$	$0 \leq \chi^2/df \leq 3$
Goodness of Fit (GFI)	GFI	0.838	0.811	0.829	$0.80 \leq GFI < 0.95$	$0.95 \leq GFI \leq 1.00$
Adjusted Goodness of Fit (AGFI)	AGFI	0.822	0.803	0.817	$0.80 \leq AGFI < 0.95$	$0.95 \leq AGFI \leq 1.00$
Root Mean Square Residual (RMR)	RMR	0.067	0.088	0.072	$0 < RMR \leq 0.10$	$0 \leq RMR \leq 0.05$
Comparative Fit Index (CFI)	CFI	0.921	0.901	0.914	$0.90 \leq CFI < 0.97$	$0.97 \leq CFI \leq 1.00$
Root Mean Square Error of Approximation (RMSEA)	RMSEA	0.051	0.063	0.059	$0.05 < RMSEA \leq 0.08$	$0 \leq RMSEA \leq 0.05$

Following this, Table 4 presents the main components of the questionnaire and the number of questions forming each of them. Each of these components was derived through averaging. Additionally, Cronbach's alpha for each section of the questionnaire was calculated separately for each country. Given that the Cronbach's alpha values ranged from 0.703 to 0.919, it can be concluded that the questionnaires possess an appropriate internal structure.

Table 4. Components; number of questions, cronbach's alpha, and factor analysis results

Components	**Questions**	**Iran (α)**	**Factor Analysis (Iran)**	**Iraq (α)**	**Factor Analysis (Iraq)**	**Oman (α)**	**Factor Analysis (Oman)**
Technological Changes	43	0.835	0.784-0.911	0.807	0.749-0.896	0.824	0.745-0.904
Agreement and Satisfaction	10	0.907	0.869-0.964	0.913	0.857-0.944	0.911	0.851-0.933
Job Security	14	0.813	0.672-0.791	0.805	0.714-0.898	0.905	0.861-0.917
Adaptability and Alignment	6	0.855	0.762-0.974	0.841	0.736-0.915	0.902	0.849-0.928
Informal Learning	4	0.902	0.883-0.928	0.887	0.783-0.912	0.811	0.711-0.879
Resistance	4	0.836	0.711-0.897	0.858	0.735-0.879	0.807	0.708-0.860
Discussion About Change	3	0.715	0.685-0.857	0.732	0.644-0.819	0.728	0.689-0.871
Formal Learning	2	0.728	0.633-0.798	0.708	0.614-0.759	0.703	0.665-0.799
Digital Transformation	13	0.908	0.877-0.942	0.911	0.847-0.947	0.919	0.859-0.928
Quality of Financial Reporting	20	0.861	0.714-0.928	0.823	0.701-0.885	0.825	0.745-0.894
Political and Tax Costs	4	0.868	0.699-0.912	0.842	0.705-0.938	0.872	0.784-0.912
Earnings Management and Managerial Motivation	5	0.889	0.835-0.917	0.859	0.718-0.894	0.841	0.740-0.896
Corporate Governance System	4	0.845	0.712-0.899	0.789	0.698-0.817	0.837	0.697-0.881
Company Life Cycle	3	0.738	0.641-0.799	0.760	0.672-0.780	0.728	

In Table 5, the descriptive statistics for each of the variables and their corresponding Latin equivalents for Iran are presented. To obtain the latent variables of the study, as each of these variables includes several questions, the mean of the received responses was used to derive the latent variables. Since a lower mean indicates a higher level of agreement with the indicator, based on the obtained means, it is expected that adaptability and alignment may have the most significant impact on technological changes. Additionally, earnings management and managerial

motivations may likely have the most significant effect on the quality of financial reporting. Other information, including the standard deviation, minimum, and maximum values for the latent variables in Iran, is also provided. Table 6 presents the descriptive statistics for the variables in Iraq, and Table 7 provides the descriptive statistics for the variables in Oman. Based on the average observations, in both of these countries, it is also expected that adaptability and alignment may have the most significant impact on technological changes, and earnings management and managerial motivations may have the most significant effect on the quality of financial reporting.

Table 5. Descriptive statistics of latent variables for Iran

Variables	**Latin Equivalent**	**Observations**	**Mean**	**Standard Deviation**	**Minimum**	**Maximum**
Technological Changes	TECH	110	2.195	0.200	1.804	2.361
Agreement and Satisfaction	ACCH	110	2.104	0.432	1.500	2.700
Job Security	JSCH	110	2.157	0.348	1.714	2.714
Adaptability and Alignment	HACH	110	2.915	0.404	2.333	3.333
Informal Learning	ILCH	110	2.070	0.505	1.000	2.750
Resistance	RECH	110	1.952	0.300	1.500	2.500
Discussion about Change	DCCH	110	2.509	0.595	1.667	3.333
Formal Learning	FLCH	110	1.659	0.345	1.000	2.000
Digital Transformation	DIGT	110	1.973	0.325	1.615	2.385
Quality of Financial Reporting	AUQU	110	3.829	0.484	2.65	5.000
Political and Tax Costs	PTQU	110	3.927	0.588	1.500	5.000
Earnings Management and Managerial Motivations	PMQU	110	4.038	0.601	2.200	5.000
Corporate Governance System	GSQU	110	3.743	0.582	2.250	5.000
Company Life Cycle	LCQU	110	3.755	0.665	2.000	5.000
Macroeconomics	MEQU	110	3.682	0.736	1.500	5.000

Table 6. Descriptive statistics of latent variables for Iraq

Variables	Latin Equivalent	Observations	Mean	Standard Deviation	Minimum	Maximum
Technological Changes	TECH	77	2.262	0.210	1.971	2.653
Agreement and Satisfaction	ACCH	77	1.986	0.341	1.500	2.500
Job Security	JSCH	77	2.067	0.280	1.714	2.500
Adaptability and Alignment	HACH	77	3.039	0.336	2.333	3.333
Informal Learning	ILCH	77	2.445	0.580	1.500	3.500
Resistance	RECH	77	2.006	0.367	1.500	2.500
Discussion about Change	DCCH	77	2.359	0.621	1.667	3.333
Formal Learning	FLCH	77	1.929	0.491	1.000	3.000
Digital Transformation	DIGT	77	1.864	0.306	1.385	2.385
Quality of Financial Reporting	AUQU	77	3.818	0.371	2.903	4.543
Political and Tax Costs	PTQU	77	3.877	0.488	2.500	5.000
Earnings Management and Managerial Motivations	PMQU	77	4.047	0.534	2.600	4.800
Corporate Governance System	GSQU	77	3.769	0.582	2.250	5.000
Company Life Cycle	LCQU	77	3.805	0.581	2.333	5.000
Macroeconomics	MEQU	77	3.594	0.606	2.250	5.000

Table 7. Descriptive statistics of latent variables for Oman

Variables	Latin Equivalent	Observations	Mean	Standard Deviation	Minimum	Maximum
Technological Changes	TECH	84	2.229	0.236	1.697	2.810
Agreement and Satisfaction	ACCH	84	2.011	0.432	1.500	3.200
Job Security	JSCH	84	2.092	0.370	1.714	3.214
Adaptability and	HACH	84	2.976	0.376	2.333	3.333

Alignment						
Informal Learning	ILCH	84	2.292	0.584	1.000	3.500
Resistance	RECH	84	2.009	0.337	1.500	2.500
Discussion about Change	DCCH	84	2.405	0.576	1.667	3.333
Formal Learning	FLCH	84	1.821	0.489	1.000	3.000
Digital Transformation	DIGT	84	1.854	0.325	1.385	2.385
Quality of Financial Reporting	AUQU	84	3.835	0.234	3.283	4.447
Political and Tax Costs	PTQU	84	3.693	0.500	2.000	4.500
Earnings Management and Managerial Motivations	PMQU	84	4.081	0.631	3.000	5.000
Corporate Governance System	GSQU	84	3.827	0.522	2.250	5.000
Company Life Cycle	LCQU	84	4.028	0.324	3.667	5.000
Macroeconomics	MEQU	84	3.533	0.536	2.250	5.000

To ensure that the comparison of the means between the three countries is more justified and reliable, a t-test was used. In Table 8, the mean responses from the three countries for each section of the questionnaire were calculated separately. Then the null hypothesis of equality of means between these countries was tested. The mean responses for technological changes and quality of financial reporting did not show a significant difference across the three countries. In contrast, the mean responses for digital transformation in Iran were higher than those in the other two countries, while the responses from Iraq and Oman did not differ significantly from each other in this regard.

Table 8. Comparison of means across the three countries

Variables	**Latin Equivalent**	**Mean Iran**	**Mean Iraq**	**Mean Oman**	**Conclusion**
Technological Changes	TECH	2.195	2.262	2.229	The means are equal across the three countries
Agreement and Satisfaction	ACCH	2.104**	1.986	2.011	Iran's mean is higher than the other two countries
Job Security	JSCH	2.157	2.067	2.092	The means are equal across the

					three countries
Adaptability and Alignment	HACH	2.915	3.039	2.976	The means are equal across the three countries
Informal Learning	ILCH	2.070***	2.445***	2.292	Iran's mean is the lowest, and Iraq's is the highest
Resistance	RECH	1.952	2.006	2.009	The means are equal across the three countries
Discussion About Change	DCCH	2.509**	2.359	2.405	Iran's mean is higher than the other two countries
Formal Learning	FLCH	1.659***	1.929***	1.821	Iran's mean is the lowest, and Iraq's is the highest
Digital Transformation	DIGT	1.973**	1.864	1.854	Iran's mean is higher than the other two countries
Quality of Financial Reporting	AUQU	3.829	3.818	3.835	The means are equal across the three countries
Political and Tax Costs	PTQU	3.927	3.877	3.693**	Oman's mean is lower than the other two countries
Earnings Management and Managerial Motivation	PMQU	4.038	4.047	4.081	The means are equal across the three countries
Corporate Governance System	GSQU	3.743	3.769	3.827	The means are equal across the three countries
Company Life Cycle	LCQU	3.755	3.805	4.028**	Oman's mean is higher than the other two countries
Macroeconomic Factors	MEQU	3.682	3.594	3.533	The means are equal across the three countries

Note: ** and *** indicate significance levels of 95% and 99%, respectively.

The Pearson correlation coefficients among the latent components of the study, calculated for Iran, Iraq, and Oman, are presented in Tables (9) to (11). In Iran, the discussion about changes shows the highest positive correlation with technological changes. Additionally, the company lifecycle exhibits the strongest positive correlation with the quality of financial reporting. The correlation coefficients between technological changes and digital transformation with the

quality of financial reporting were calculated as 0.075 and 0.168, respectively, at a 95% confidence level. Therefore, digital transformation demonstrates a stronger correlation with the quality of financial reporting. Figure (2) also illustrates the output and the way the latent and observed variables from the questionnaire interact, based on previous results, to clarify how the variables are formed and influence one another for the country of Iran.

Table 9. Correlation matrix of latent variables of Iranian research

	TECH	**ACCH**	**JSCH**	**HACH**	**ILCH**	**RECH**	**DCCH**	**FLCH**	**DIGT**	**AUQU**	**PTQU**	**PMQU**	**GSQU**	**LCQU**	**MEQU**
TECH	1														
ACCH	0.383***	1													
JSCH	0.379***	0.992***	1												
HACH	0.568***	0.191**	0.187**	1											
ILCH	0.078	-0.238**	-0.204**	0.478***	1										
RECH	0.655***	-0.172	-0.155	0.042	0.079	1									
DCCH	0.746***	-0.042	-0.065	0.111	-0.352***	0.715***	1								
FLCH	0.491***	-0.241**	-0.202**	0.235**	0.890***	0.307***	-0.197**	1							
DIGT	0.094	0.020	0.004	0.167	0.113	0.029	0.011	0.082	1						
AU	0.075**	0.028	0.032	-0.15	-0.09	-0.0	-0.0	-0.1	0.168*	1					

QU				0	5	64	16	13	*						
PTQU	-0.045	-0.027	-0.014	-0.028	0.025	-0.056	-0.035	-0.010	-0.072	0.672***	1				
PMQU	-0.172***	-0.066	-0.070	-0.250***	-0.197**	-0.089	-0.004	-0.220**	-0.075	0.783***	0.368***	1			
GSQU	-0.144	0.030	0.029	-0.160	-0.104	-0.087	-0.098	-0.092	-0.103	0.737***	0.416***	0.526***	1		
LCQU	-0.010	0.161	0.155	-0.095	-0.073	-0.102	-0.029	-0.095	-0.144	0.822***	0.418***	0.617***	0.486***	1	
MEQU	0.053	-0.002	0.012	-0.053	-0.023	0.068	0.082	-0.025	-0.221**	0.788***	0.403***	0.492***	0.433***	0.580***	1

Note: ** and *** indicate significance levels of 95 and 99 percent, respectively.

For Iraq, formal learning exhibits the highest positive correlation with technological changes. Additionally, the corporate governance system shows the strongest positive correlation with the quality of financial reporting. The correlation coefficients between technological changes and digital transformation with the quality of financial reporting were calculated as 0.092 and 0.105, respectively, at a 99% confidence level. Therefore, similar to Iran, digital transformation demonstrates a stronger correlation with the quality of financial reporting. Figure (3) also illustrates the output and the interaction of the latent and observed variables from the questionnaire for Iraq.

Table 10. Correlation matrix of latent variables of the Iraqi research

	TECH	**ACCH**	**JSCH**	**HACH**	**ILCH**	**RECH**	**DCCH**	**FLCH**	**DIGT**	**AUQU**	**PTQU**	**PMQU**	**GSQU**	**LCQU**	**MEQU**
TECH	1														
ACCH	0.452***	1													
JSC	0.420*	0.995**	1												

H	**	*													
HACH	0.545***	0.847***	0.794***	1											
ILCH	0.728***	0.256**	0.229**	0.407***	1										
RECH	0.569***	-0.294***	-0.306***	-0.224**	0.183	1									
DCCH	-0.023	-0.513***	-0.512***	-0.495***	-0.520***	0.639***	1								
FLCH	0.805***	0.076	0.056	0.216**	0.926***	0.458***	-0.210	1							
DIGT	-0.043	-0.010	0.008	-0.090	-0.155	0.019	0.141	-0.072	1						
AUQU	0.092***	-0.020	-0.026	0.003	0.041	0.078	0.098	0.072	0.105***	1					
PTQU	0.009	0.063	0.068	0.020	-0.080	-0.051	0.090	-0.051	0.164	0.499***	1				
PMQU	0.120	-0.074	-0.088	0.004	0.087	0.173	0.089	0.113	-0.076	0.621***	0.076	1			
GSQU	0.017	-0.143	-0.140	-0.141	0.137	0.042	-0.017	0.155	0.095	0.767***	0.272**	0.323***	1		
LCQU	0.161	0.083	0.075	0.088	0.117	0.047	0.014	0.127	0.047	0.759***	0.181	0.508***	0.501***	1	
MEQ	-0.001	0.011	0.004	0.041	-0.130	0.042	0.151	-0.11	0.120	0.649***	0.221	0.163	0.403***	0.290**	1

U								0							

Note: ** and *** indicate significance levels of 95 and 99 percent, respectively.

According Table 11, for Oman, adaptability and alignment exhibit the highest positive correlation with technological changes. Additionally, similar to Iraq, the corporate governance system shows the strongest positive correlation with the quality of financial reporting. The correlation coefficients between technological changes and digital transformation with the quality of financial reporting were calculated as 0.097 and 0.060, respectively, at 95% and 99% confidence levels. Therefore, unlike Iran and Iraq, technological changes show a stronger correlation with the quality of financial reporting. Figure (4) also illustrates the output and the interaction of the latent and observed variables from the questionnaire for Oman.

Table 11. Correlation matrix of latent variables of Oman research

	TECH	**ACCH**	**JSCH**	**HACH**	**ILCH**	**RECH**	**DCCH**	**FLCH**	**DIGT**	**AUQU**	**PTQU**	**PMQU**	**GSQU**	**LCQU**	**MEQU**
TECH	1														
ACCH	0.545***	1													
JSCH	0.526***	0.992***	1												
HACH	0.624***	0.638***	0.592***	1											
ILCH	0.554***	-0.094	-0.111	0.219**	1										
RECH	0.583***	-0.154	-0.155	-0.042	0.327***	1									
DCCH	0.298***	0.061	0.062	0.033	-0.408***	0.560***	1								
FLCH	0.604***	-0.139	-0.146	0.053	0.928***	0.513***	-0.197	1							
DI	0.19	0.00	-	0.0	-	0.32	0.46	-	1						

GT	7	4	0.015	48	0.096	9***	3***	0.023							
AUQU	0.097**	-0.120	-0.131	-0.028	-0.101	0.062	0.076	-0.111	0.060***	1					
PTQU	-0.075	-0.074	-0.087	-0.126	-0.037	0.046	0.030	-0.049	-0.155	0.442***	1				
PMQU	-0.051	-0.093	-0.098	-0.073	-0.083	0.076	0.119	-0.054	-0.107	0.508***	0.031	1			
GSQU	-0.054	0.070	0.054	0.030	-0.072	-0.072	-0.065	-0.093	0.097	0.534***	-0.055	0.087	1		
LCQU	0.035	-0.140	-0.146	-0.028	0.036	0.182	0.126	0.057	0.156	0.221**	0.046	-0.239**	0.047	1	
MEQU	-0.042	-0.065	-0.052	0.116	-0.060	0.003	0.018	-0.087	-0.011	0.520***	0.022	-0.017	0.120	0.041	1

Note: ** and *** indicate significance levels of 95 and 99 percent, respectively.

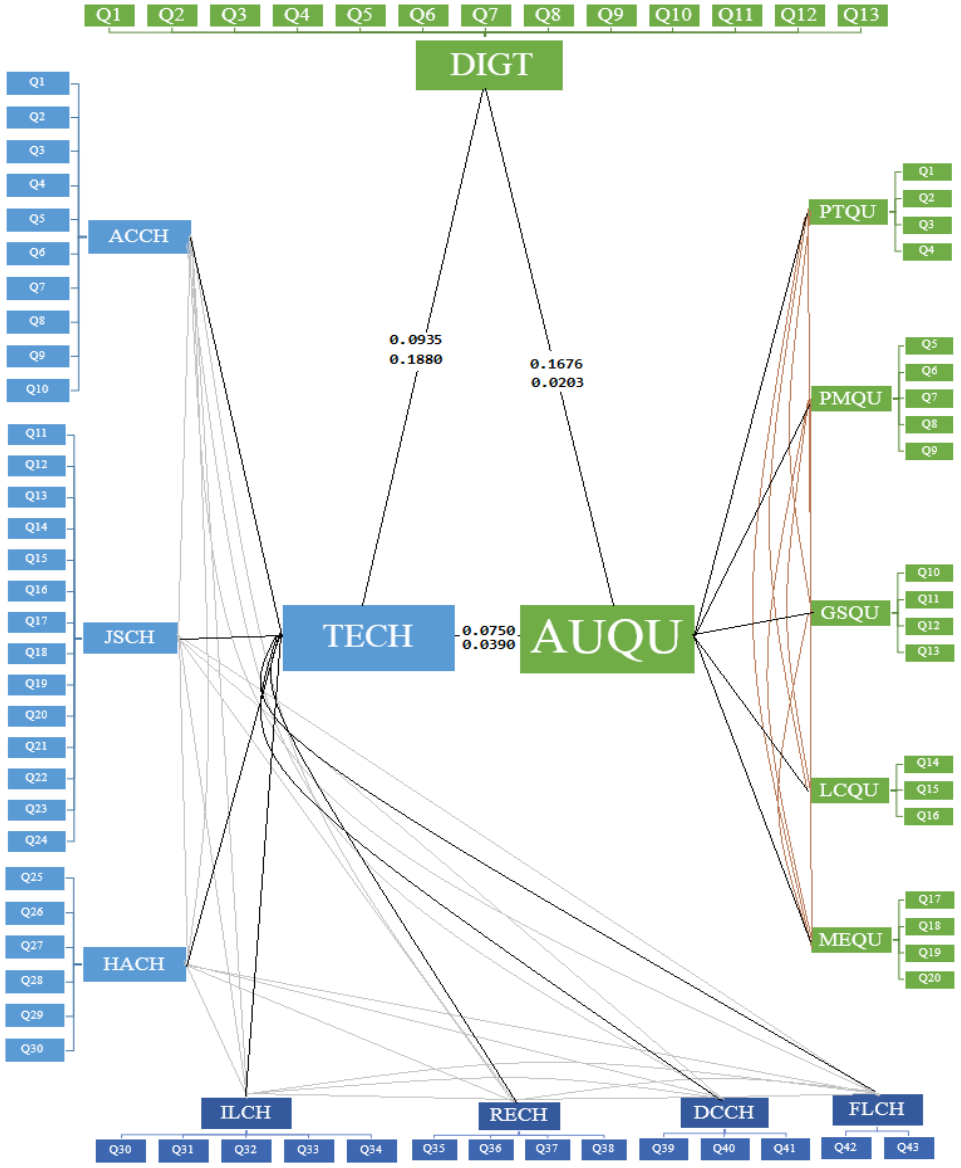

Figure 2. The effect of explicit and latent variables of the Iranian questionnaire

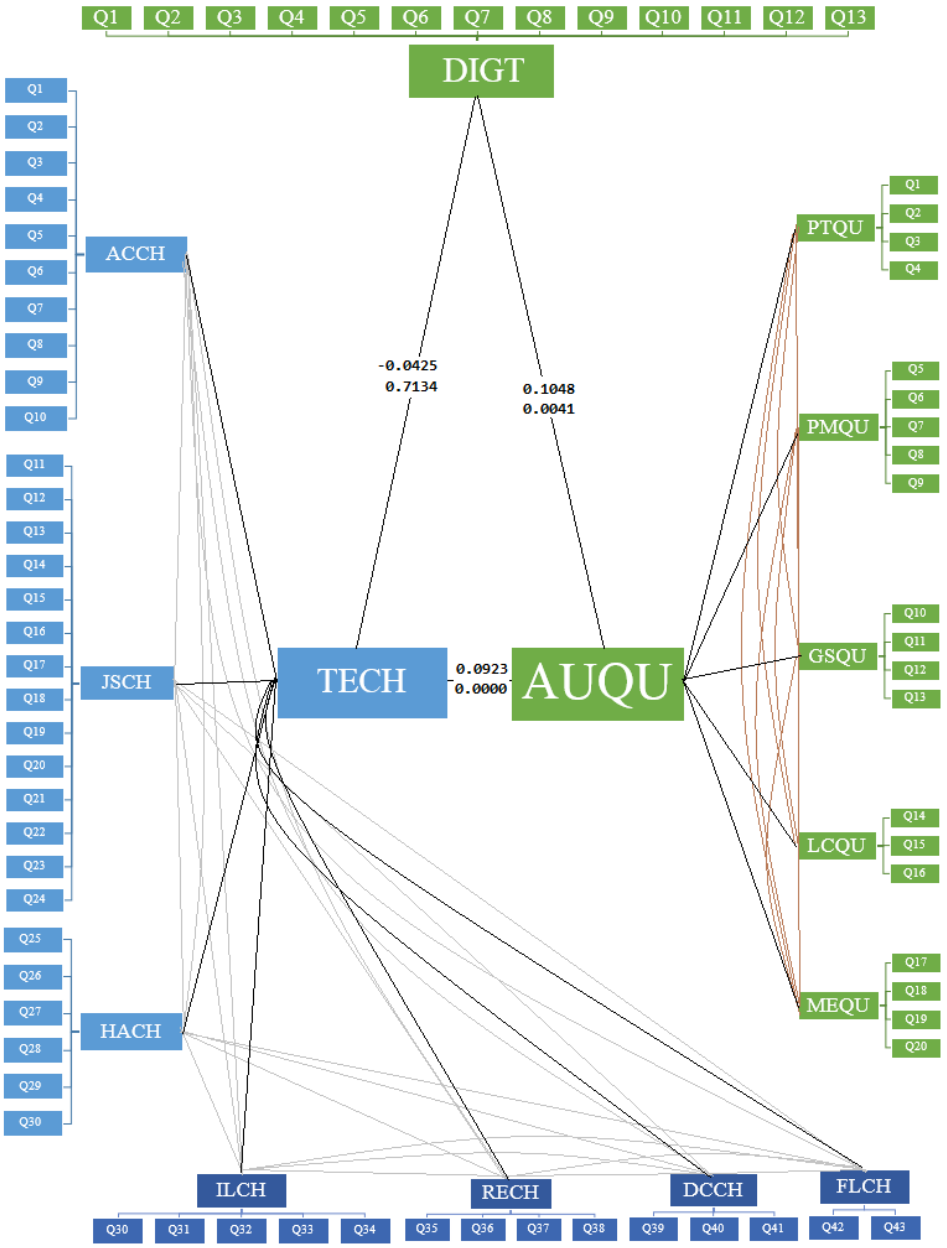

Figure 3. The effect of the manifest and latent variables of the Iraq questionnaire

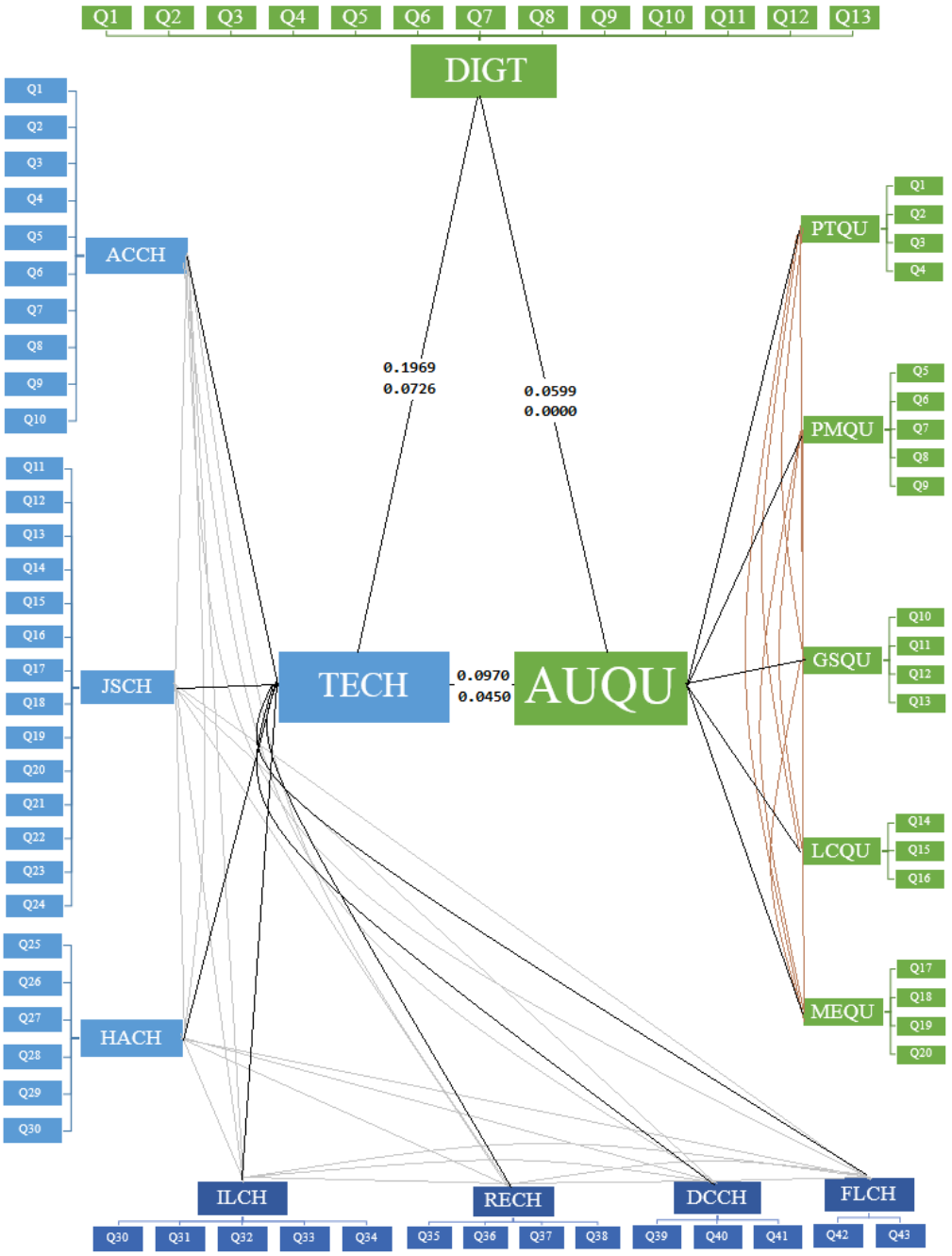

Figure 4. The effect of the manifest and latent variables of the Oman questionnaire

Subsequently, analysis of covariance, specifically the MANOVA method, was employed. To apply this method, the normality of the distribution of the variables was first tested using the Kolmogorov-Smirnov test. All variables in the three countries follow a normal distribution. Another critical assumption is the homogeneity of regression coefficients. The test for

homogeneity of regression coefficients was examined through the interaction of the pre-test and the research hypotheses in the post-test phase. The interaction between these pre-tests and the hypotheses of each group was not significant, indicating the homogeneity of the regression coefficients for the three countries. Given the fulfillment of the assumptions for the analysis of covariance, the use of this statistical test is permissible. Furthermore, according to the results, the significance value of the analysis of variance test, which was calculated to be greater than 0.05, indicates that the research hypotheses cannot be rejected. Finally, the results of the covariance test presented in Table 12 for the three countries show that the F-value is significant at the 99% confidence level for all the research hypotheses. Therefore, both technological changes and digital transformation have a positive and significant impact on the quality of financial reporting. Only the hypothesis regarding the positive effects of digital transformation on the quality of financial reporting in Iran is confirmed at the 95% confidence level.

Table 12. Results of the between-group effects test

Country	Hypotheses	Sum of Squares	Mean Squares	F-Statistic	df	Significance
Iran	Positive and significant impact of technological changes on the quality of financial reporting	6.752	6.752	9.400	1	0.000
	Positive and significant impact of digital transformation on the quality of financial reporting	3.462	3.462	2.050	1	0.015
Iraq	Positive and significant impact of technological changes on the quality of financial reporting	35.716	35.716	3.926	1	0.000
	Positive and significant impact of digital transformation on the quality of financial reporting	32.736	2.046	7.650	1	0.000
Oman	Positive and significant impact of technological changes on the quality of financial reporting	2.426	0.202	4.790	1	0.000
	Positive and significant impact of digital transformation on the quality of financial reporting	2.539	0.212	4.440	1	0.000

To further examine the research hypotheses and analyze the intensity and direction of the impact of technological changes and digital transformation on the quality of financial reporting, the Ordinary Least Squares (OLS) regression method was used, as shown in Table 13. Based on the testing of each variable in the three countries, it can be concluded that using the OLS method, both main hypotheses of the study are confirmed at the 99% confidence level for these countries. Among these, technological changes in Iran have the most significant positive effect on the quality of financial reporting, followed by Oman and Iraq. Additionally, digital transformation in Oman has the most significant positive impact on the quality of financial reporting, followed by Iraq, and finally Iran. Furthermore, in the OLS method, in all three countries, digital

transformation has a stronger impact on the quality of financial reporting compared to technological changes.

Table 13. Direction of impact of variables based on research hypotheses

Direction of Impact	Iran	Iraq	Oman	Conclusion
AUQU ← TECH	1.728***	1.676***	1.700***	Technological changes have a positive and significant impact on the quality of financial reporting in all three countries.
AUQU ← DIGT	1.883***	1.998***	2.001***	Digital transformation has a positive and significant impact on the quality of financial reporting in all three countries.

To conduct a more detailed analysis and consider demographic control variables, the Structural Equation Modeling (SEM) method was employed. The advantage of this method over OLS is that in SEM, models are considered as a system and are fitted simultaneously, making the calculated coefficients more reliable. The results of the model fit for the three countries are presented in Table 14. In all three countries, technological changes have a positive and significant impact on the quality of financial reporting. Therefore, the first hypothesis of the study is confirmed for these countries. The calculated coefficients at a 99% confidence level for Iran, Iraq, and Oman were 0.261, 0.236, and 0.113, respectively. Consequently, technological changes have the most significant effect on the quality of financial reporting in Iran, followed by Iraq and Oman.

The calculated coefficients for digital transformation are also positive and significant at the 99% confidence level. Therefore, the second hypothesis is also accepted for all three countries. The calculated coefficients for Iran, Iraq, and Oman were 0.250, 0.097, and 0.017, respectively. Thus, digital transformation has the most significant effect on the quality of financial reporting in Iran, followed by Iraq and Oman. Among the control variables, the higher the education level and work experience in Iran and Oman, and the older individuals in Iraq, the more they evaluate the quality of financial reporting. All three models are significant at the 99% confidence level, with the explanatory power of the model being greatest for Iraq.

Table 14. Structural equation fitting of three countries

Variable	Iran		Iraq		Oman	
	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
TECH	0.261	0.007	0.236	0.003	0.113	0.006
DIGT	0.250	0.000	0.097	0.001	0.017	0.008
Age	0.097	0.256	0.217	0.038	-0.127	0.084
Major	0.004	0.930	-0.019	0.670	-0.021	0.444
Education	0.105	0.002	0.085	0.304	0.019	0.036
Experience	0.074	0.025	-0.035	0.544	0.023	0.039
Constant	4.523	0.000	2.637	0.000	4.261	0.000
Obs	110		77		86	

R2	26.34	32.72	26.52

4.3.Additional analyses

For further analysis, the research hypotheses were examined separately for groups with low (Low AUQU) and high (High AUQU) quality of financial reporting in each country (Table 15). In all three countries, both technological changes and digital transformation are factors that improve the quality of financial reporting in both groups. In Iran, however, there is a distinction: the impact of technological changes is more substantial than that of digital transformation for both groups. Additionally, the effect of both technological changes and digital transformation is more significant in the group with low quality of financial reporting compared to the group with high quality. In Iraq, the impact of technological changes is particularly significant for groups with low-quality financial reporting. At the same time, the effect of digital transformation is more substantial for the group with high quality of financial reporting. In contrast, in Oman, the impact of digital transformation is more significant for the group with low quality of financial reporting. At the same time, the effect of technological changes is more substantial for the group with a high quality of financial reporting.

Table 15. Estimation of research hypotheses by high and low financial reporting quality

Variable	**Iran**		**Iraq**		**Oman**	
	Low AUQU	High AUQU	Low AUQU	High AUQU	Low AUQU	High AUQU
TECH	0.267***	0.266***	0.186**	0.087**	0.003***	0.117***
DIGT	0.258***	0.145***	0.019**	0.108**	0.140**	0.003**
Obs	55	55	39	38	42	42

Note: Control variables are included in all models but are not reported for summarizing their results. Also, *, **, and *** indicate significance levels of 90, 95, and 99 percent, respectively.

Subsequently, in Table 16, the impact of the two main components, technological changes and digital transformation, on the sub-indicators of financial reporting quality is evaluated. These indicators include political and tax costs (PTQU), earnings management and managerial incentives (PMQU), corporate governance system (GSQU), company lifecycle (LCQU), and macroeconomics (MEQU). In Iran, technological changes have a positive and significant impact on all five sub-indicators of financial reporting quality, with the most substantial effect observed on the macroeconomics sub-indicator, followed by the company lifecycle and political and tax costs. In contrast, digital transformation has a significant impact on earnings management and managerial incentives, the corporate governance system, and macroeconomics, but has no significant effect on political and tax costs or the company lifecycle.

Table 16. The effect of technological changes and digital transformation on financial reporting quality sub-indicators

Country	**Variable**	**PTQU Model**	**PMQU Model**	**GSQU Model**	**LCQU Model**	**MEQU Model**
Iran	TECH	1.483*	1.356*	1.373*	1.557*	1.732*

		**	**	**	**	**
	DIGT	0.325	0.518**	0.353***	0.155	0.076**
Iraq	TECH	1.126***	1.485***	1.146***	1.307***	1.041***
	DIGT	0.703***	0.357**	0.621***	0.448**	0.655***
Oman	TECH	1.393***	1.527***	1.178***	1.303***	1.210***
	DIGT	0.294	0.342	0.628***	0.587***	0.431**

Note: Control variables are included in all models but are not reported for summarizing their results. Also, ** and *** indicate 95% and 99% significance levels, respectively.

In Iraq and Oman, similar to Iran, technological changes have a positive and significant impact on all sub-indicators of financial reporting quality. In both countries, the most significant effect of technological changes is on earnings management and managerial incentives. In Iraq, digital transformation also has a positive and significant effect on all sub-indicators of financial reporting quality, with the strongest impact on political and tax costs. In Oman, digital transformation affects only the corporate governance system, company lifecycle, and macroeconomics sub-indicators.

According Table 17, As the final analysis, the impact of technological sub-indicators on financial reporting quality was examined to identify the influential sub-indicators, separated by country. In Iran and Iraq, only the sub-indicator of resistance and, in Oman, the sub-indicators of discussion about change and formal learning do not affect the quality of financial reporting. In all three countries, job security has the most significant impact on the quality of financial reporting, followed by the sub-indicator of agreement and satisfaction.

Table 17. The effect of the following indicators of technological change on the quality of financial reporting

Variable	**Iran**	**Iraq**	**Oman**
ACCH	4.305***	3.672***	3.765***
JSCH	5.786***	4.070***	4.171***
HACH	0.187**	0.525**	0.663***
ILCH	0.544**	0.536**	0.068**
RECH	0.151	0.192	0.445**
DCCH	0.378**	0.380**	0.004
FLCH	0.512**	0.372**	0.194

Note: Control variables are included in all models but are not reported for summarizing their results. Also, ** and *** indicate 95% and 99% significance levels, respectively.

5. Discussion and conclusion

The findings of the present study confirm that both technological changes and digital transformation have a positive and significant impact on the quality of financial reporting. These

results are not only statistically significant but also align conceptually and theoretically with the existing scientific body of knowledge. The results obtained for the first hypothesis show that technological changes have been able to enhance the quality of financial reporting in all three countries under study. This finding is consistent with the views of Marota (2021) and Hadi et al. (2023), who consider modern technologies to be fundamental factors in the transformation of financial reporting. Furthermore, the research by Kaya et al. (2019) and Fernandez & Aman (2018), which emphasized that technology contributes to improving reporting quality by reducing human errors and increasing the reliability of information, is fully supported by the results of this study. Among the three countries, Iran has shown the most significant positive impact from technological changes, which may indicate a relatively advanced stage of technological maturity in the financial reporting infrastructure of this country. Compared to developed countries, the present findings align with the work of Morris &Laksmana (2010), which showed that in the United States, technology had also reduced earnings management and increased financial transparency. Thus, even in countries with varying levels of development, the impact of technological changes as a key factor operates similarly. From the perspective of the Technology Acceptance Model (TAM), this finding is also explainable. As Davis (1989) and Kocsis et al. (2022) have stated, if users of accounting systems perceive technology as functional and user-friendly, its adoption and usage increase, which directly contributes to the improvement of the financial reporting process and the enhancement of the quality of information.

Based on the results of the hypothesis testing, it has been confirmed that the second hypothesis is fully supported, and the results show that digital transformation has a positive and significant impact on the quality of financial reporting in all three countries. These findings are consistent with the research by Asikpo (2023) and Shenen (2023), who consider digital transformation a fundamental process in redesigning accounting operations and enhancing financial information transparency. Additionally, the studies by Gao et al. (2025) and Abhishek et al. (2024), which emphasize the role of digital transformation in improving the accuracy, reliability, and comparability of financial information, are also supported by the results of this study. The comparative analysis of the countries shows that while Oman has experienced the most significant impact from digital transformation, Iran has demonstrated the lowest level of this impact. This difference can be attributed to barriers such as organizational culture resistant to technology, a lack of digital training, or weaknesses in implementing digital policies in Iran. From this perspective, the findings of the study align with those of Albukhitan (2020), who highlighted the role of culture and employee readiness in the success of digital transformation. From the viewpoint of agency theory, the results of this study are consistent with the perspectives of Raza et al. (2023) and Danielson & Scott (2007). They argued that digital transformation reduces information asymmetry and facilitates internal controls, which in turn reduces agency costs and ultimately leads to improved financial reporting quality. This aspect is particularly evident in developing countries like Iraq, where infrastructure weaknesses are a significant challenge, and the results of this study confirm this. However, it is noteworthy that the findings related to Iran regarding digital transformation are somewhat in contrast with studies such as Venkatesh et al. (2003) and Venkatesh&Bala (2008) in the TAM model, as despite the presence of technology, the level of impact has been lower.

This problem may arise because employees do not fully understand the value of technology or its ease of use in reporting systems. To fix this, training, support systems, and system designs need to be changed. In general, the conclusions of this study are in line with the existing theoretical

literature and most worldwide empirical research. Simultaneously, they disclose substantial disparities across the countries examined. The validation of both hypotheses suggests that technological advancements, whether at the technological or digital level, can improve the quality of financial reporting. Nonetheless, the magnitude and character of their influence are contingent upon the degree of institutional, cultural, and human preparedness within any nation. These findings, while being scientifically valuable, have significant consequences for policy. Countries undergoing digital transformation must foster a culture that embraces technology, develop infrastructure, train workers, and establish rules that facilitate the integration of technology into their financial reporting systems. The study's findings indicate that technological advancements and digital transformation significantly influence the quality of financial reporting. Consequently, it is advisable for companies, particularly in developing nations like Iran, Iraq, and Oman, to formulate targeted strategies to adapt to evolving digital trends. Some of these tactics could include investing in information technology infrastructure, training and empowering people to use digital accounting and financial reporting tools, and changing the way audits are done to take advantage of new technologies. Regulatory and standard-setting agencies should also focus on developing financial reporting frameworks that are effective in digital contexts and gradually incorporate compliance with new technologies into their agendas. On the other side, firm leaders should understand that digital transformation can help build confidence among stakeholders and improve openness and accountability. Utilizing technologies such as blockchain, AI, and big data analytics in financial processes can help reduce errors, enhance information accuracy, and make it more readily available, which may help people make better decisions both inside and outside the company. A purely technical approach to digital transformation is insufficient; it must be undertaken strategically and holistically, involving both internal and external stakeholders.

This research, while yielding reliable data, possesses certain limitations that may facilitate future studies. First, the data only come from Iran, Iraq, and Oman, hence the conclusions may not apply to other countries or regions. This study's control variables were restricted to specific demographic data, excluding other environmental, institutional, and cultural elements that could affect the quality of financial reporting. Moreover, despite the variety and thoroughness of the statistical analysis methods employed, the incorporation of longitudinal data and the testing of more intricate models could augment the depth and dependability of the results.

For subsequent study, it is advisable to broaden the geographic reach and sampling to encompass additional countries and industries, thereby examining the effects of technical advancements and digital transformation across a more extensive array of scenarios. Furthermore, intermediary and moderating factors such as organizational culture, technology acceptance, or the maturity of information technology infrastructure could be integrated into the models to yield a more sophisticated comprehension of the influence these variables exert on financial reporting quality. Using mixed-methods and qualitative approaches could also help us learn more about the problems and challenges that come with digital transformation and help us come up with valid hypotheses.

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