AIS and Financial Sustainability in Jordanian Logistic Firms: The Role of Management Support

ALA'A ABDULLAH SALEH ALOMARI[1], MOHD RIZUAN ABDUL KADIR[1], RAEDAH BTE. SAPINGI[2], GHADEER WASFI MOHAMMAD ALBDOUR[1], AHMAD AL-DALAIEN[3]
[1]Graduate Business School,
Universiti Tenaga Nasional (UNITEN),
MALAYSIA

[2]Business School,
Universiti Tenaga Nasional (UNITEN),
MALAYSIA

[3]Cyber Security Department, Faculty of Science and Information,
Jerash University,
JORDAN

Abstract: - The study's objective is to determine the effect of the Accounting Information System (AIS) adoption on the financial sustainability of logistics companies in Jordan and to explore the mediation role of Top Management Support (TMS). The study uses the Technology Acceptance Model, Diffusion of Innovation and Contingency Theory to assess the influence of perceived usefulness, perceived ease of use, organisational readiness, system compatibility, and system complexity. The method used was quantitative research with data collection from 412 accountants in the logistics companies in Jordan. Structural Equation Modelling (SEM) software SmartPLS 4 was used to analyse the data. The results indicate that the perceived usefulness, perceived ease of use, organisational readiness, system compatibility, AIS adoption, and financial sustainability have positive direct effects on financial sustainability, while system complexity does not have a significant direct impact. TMS has a significant mediating effect on some of the relationships between AIS-related factors and financial sustainability. The research emphasizes the need for the management's support and technological preparedness in increasing financial sustainability of logistics companies in the process of adopting AIS.

Key-Words: - Accounting Information System, Financial Sustainability, Top Management Support, Logistics Firms, Jordan, Technology Acceptance Model, Structural Equation Modeling.

Received: May 23, 2025. Revised: August 14, 2025. Accepted: September 29, 2025. Published: June 10, 2026.

1 Introduction

The logistics and the transportation infrastructure in Jordan are significant to the economy, to the recovery of the economy and to boosting the productivity, standards of living and quality of the available public services. The transport sector, which is one of the key sectors in the economic development of the Kingdom, constitutes more than 9 percent of the Jordan GDP and is likely to increase at a rate of 5-6 percent per year up to 2030. Especially land transport accounts 70 percent of the GDP of the transport sector and has about 7.2 percent of the workforce. Moreover, based on the analysis by [1], the potential of this sector as a key growth engine and creator of employment opportunities, in particular with reference to the strategic geographical location of Jordan, [2]. is emphasized. This book of knowledge preconditions the analysis of the acute financial problems and opportunities of the logistics industry.

The concept of financial sustainability when applied to Jordanian firms is the ability to maintain and enhance economic sustainability of the business as time goes by. Moreover, it is made up of the capacity of the company to generate sufficient revenues, manage costs, and utilize resources efficiently to ensure uninterrupted operations, expansion, and sustainability amid a wide range of challenges including economic recessions, business disruptions, and external shocks, [3]. This definition

can help us examine how logistics companies have to change to be resilient to external forces.

The topicality of financial sustainability was even enhanced in the context of the effects of the COVID-19 pandemic. The COVID-19 pandemic has caused a lot of adverse effects in the logistics sector of Jordan which has resulted in severe economic recessions and destabilizations in most industries. The Jordanian Logistics Network (JLN) recently hosted a symposium to discuss the impact of the pandemic on the logistics sector, emphasising its importance in ensuring food security during high-demand periods. The pandemic underscored the need for efficient oversight, regular assessment, and strategic formulation to tackle immediate obstacles and long-term growth requirements, [4]. Such developments have highlighted the urgency of equipping logistics enterprises with adaptive financial mechanisms and resilience strategies.

The JLN highlighted the pivotal role of universities in cultivating essential human capital and expertise for the logistics industry through academic courses and programs. Financial sustainability is crucial for Jordan's logistics sector, as it plays a vital role in the country's economic resilience and recovery. To control the global COVID-19 pandemic's economic effects, logistics enterprises can support financial stability and use targeted financial measures, [5]. Financial sustainability methods may include reducing operational expenditures, diversifying revenue sources, and capitalising on government incentives to support economic recovery, [6]. A thorough financial strategy and calibrated investments in technology and infrastructure would strengthen the industry's capacity to adapt and grow despite hazards, [7].

Over the last decade, Jordan's logistics sector has faced significant challenges from a stagnant economy, disrupted trade routes, and a small domestic market (Jordan Strategy Forum, 2022). Effective AIS are crucial for enhancing financial sustainability, and organisational design and management support are essential for encouraging AIS adoption and boosting operational effectiveness in Jordanian logistics firms, [1].

The current state of the Jordanian Transport Sector has revealed a stark disparity between its potential and financial sustainability. Exponential population growth and urbanisation have outpaced the expansion of Jordan's physical infrastructure, leading to a gradual decline in the country's road network and related infrastructure. Congestion, reliability issues, and safety concerns further exacerbate these challenges, necessitating urgent policy interventions, [8].

In this context, the importance of financial sustainability is further underscored by the substantial income losses experienced in the sector, primarily due to the ongoing crisis. According to [9], these losses are conservatively estimated at approximately USD 57 million per year. Within this figure, land transport contributes to losses of USD 44 million, while the aviation sector incurs losses of USD 13 million. The pressing need for financial sustainability in Jordan's logistics and transportation sector becomes evident when considering its vital role in the national economy and its severe challenges, [9].

In the dynamic and ever-changing logistics environment, where competitive pressures, technology breakthroughs, and the dynamics of global markets regularly redefine the rules of engagement, obtaining and maintaining financial stability has become an ongoing problem for logistic enterprises, [10]. This challenge is compounded by the fact that the rules of engagement are continually being redefined. AIS has evolved as an essential tool for managing financial operations, improving decision-making procedures, and optimising resource allocation, [11]. However, the extent to which AIS adoption directly affects financial sustainability remains a complex and underexplored phenomenon. Although adopting AIS presents a promising route for logistic enterprises to solve these difficulties, it is essential to note that this phenomenon has several facets, [12]. These lessons are an indication of the strategic importance of technology, innovation, and skilled human capital in ensuring future sustainability.

This notwithstanding the increased significance of digital financial systems, most logistics companies in the developing economies still have difficulties in the successful adoption of Accounting Information Systems in their operations and financial procedures. Past literatures have studied the practice of technology adoption in different settings, but little empirical data has investigated the role of AIS adoption in financial sustainability in the logistics industry. In addition, the literature that is available tends to look at technological adoption and fails to look adequately at the organisational and managerial processes that turn the use of technology into sustainable financial results.

The logistic industry pursues financial sustainability based on a number of complex forces, including the perceived usefulness and ease of use of AIS, organisational readiness to absorb technological change, compatibility of AIS with

existing system and practices, and complexity involved in implementation of AIS, among others, [5]. The input of these individual variables has a cumulative effect on the process of making decisions with regards to the implementation of AIS. Nevertheless, the relationship between these variables, how AIS is implemented, and the impact that generates in its turn on the financial sustainability of the organisation are not fully understood yet.

To worsen the situation, there is an existing skills deficit in the area of information technology, which is one of the setbacks of numerous logistics firms. This fault makes it difficult to hire and retain experienced IT professionals who are critical in the management and operation of AIS. Such a shortage may result in delays and higher operation costs. The process of AIS implementation in logistic companies is complicated and is associated with financial, technological, organisational and regulatory risks. In order to successfully overcome these challenges, logistics companies should consider the comprehensive planning and allocation of resources, implementing the effective change management policies, and being determined to achieve the long-term advantages of AIS. All these advantages are not confined to greater financial sustainability but also gaining a competitive advantage in the competitive logistics market.

Moreover, AIS is not just a technological platform but a complex system which unites the processing of accounting data, financial reporting, decision-support mechanisms and internal control procedures. AIS is beneficial to a number of organizational users such as accountants, financial managers, auditors, operational managers, and the top executives. AIS helps in processing transactions, budgetary controls, monitoring performance, regulatory controls and strategic planning through these applications. It is the good interaction between the users of the system and the AIS applications that is therefore imperative to guarantee the provision of accurate financial information and sustainable financial decision making in organizations.

This study addresses existing knowledge gaps by employing a comprehensive research framework. Its primary objective is to explore the direct relationships between independent variables, perceived utility, perceived ease of use, organisational readiness, system compatibility, and system complexity - and the adoption of AIS. Subsequently, the study will examine the link between AIS usage and ongoing financial sustainability, considering the latter as the dependent variable. It also aims at determining the variables that influence the mediating variable AIS adoption on financial sustainability. The study will explore the mediating role of top management support and examine the relationship between AIS adoption and financial sustainability on the basis of the logistics industry.

2 Literature Review

The introduction of digital technologies into organizational contexts has become the focus of more and more academic interest over the last few years especially in terms of financial performance and organizational sustainability. The adoption of technology has been explored in various perspectives in the past. As an example, [13] examined the use of social media among small and medium enterprises (SMEs) and showed that the use of technology has a positive impact on financial sustainability. The strong aspect of this research is that it emphasizes how digital platforms can enhance business performance but the research is mostly based on the social media technologies as opposed to accounting systems at the enterprise level. On the same note, [14] investigated the concept of technology adoption within the hospitality industry and affirmed that it has a positive correlation with financial sustainability. Even though the research is quite informative on the advantages of technology adoption, it fails to focus on the accounting information systems in particular and the managerial processes that facilitate their adoption. In other articles, like [15], the role of organisational preparedness and the backing of the top management in the process of adopting emerging technologies is stressed. Although these studies emphasise essential organisational facilitators of technological adoption, they seldom research the particular financial performance related to the implementation of AIS. Hence, although the literature on adoption of technology is increasing, there is little empirical research that addresses the role of Accounting Information Systems in enhancing financial sustainability in the logistics sector, especially in developing economies like Jordan. This gap presents the necessity of additional research on the interaction between the factors of technology, organisations and management to determine its effect on AIS adoption and financial sustainability.

2.1 AIS Adoption and Financial Sustainability

The association between financial sustainability and AIS adoption is intricate and multidimensional. Financial sustainability is the capacity of an organization to sustain its financial well-being and sustainability in both short and long-term. Implementation of an AIS can also create a great influence on the financial sustainability of an organization as it enhances control and accuracy of financial data and processes. Financial transactions are automated with the help of AISs; fewer errors are made; financial information can be accessed in real-time, which contributes to better financial control and prevents mismanagement and fraud. Such credibility of financial information improves the decision making, which is also part of the long-term financial health of the organization.

The other effect of AIS adoption is that it improves operational efficiency through data entry, data reconciliation, and reporting automation, which results in cost savings that improve the bottom line of the organization. Furthermore, the effectiveness of AISs in compliance with financial regulations is that they guarantee precise reporting and minimize the risk of legal liability that is essential to financial sustainability. These systems help with financial planning and forecasting since they enable financial modelling and budgeting, helping companies to allocate their resources. AIS adoption fosters trust among the stakeholders by promoting transparency and better management of risks and ensuring that the organization can survive financial difficulties to achieve a lasting growth and stability in the long run. When the people feel that AIS is helpful, they will tend to be more effective. With the help of effective AIS use, there is a possibility of improved management of financial data, which, in its turn, may influence financial sustainability. In addition, When the AIS is user friendly, there is a higher chance that people will embrace it. This ease of use can stimulate mass adoption, which will result in increased accuracy and efficiency in financial data, which will positively affect financial sustainability. In addition, Organisational readiness is essential for successful AIS implementation. The more the organization is prepared and offers the resources and support required, the more chances that the AIS will be adopted and utilized successfully, thus, influencing financial sustainability. Interoperability with the current systems will make integration of the AIS easier. With a compatible AIS, there are greater chances of adopting and using it efficiently and this can positively influence financial sustainability. A complex system may hinder adoption. When the AIS is adopted, the organization may face challenges due to complexity. However, if the complexity can be managed, and the AIS is effectively adopted, it can influence financial sustainability.

The main objective of the study conducted by [13] is to construct a comprehensive model that examined the role of different factors in the adoption of Social Media by SMEs in developing countries and how this adoption will affect the financial sustainability. The findings revealed that the effect of Social Media adoption on SMEs' financial sustainability was also tested and found to be positive and significant, [13]. Furthermore, the study of [14] aims to identify the effect of SMEs Technology Adoption on the Financial Sustainability of hospitality and tourism industry firms. The findings revealed that SMEs Technology Adoption predict the implementation of downsizing strategies during economic distress as financial sustainability, [14]. Therefore, one could hypothesise the following:

H1: There is a positive relationship AIS adoption and Financial Sustainability.

2.2 Perceived Usefulness

Perceived usefulness of an AIS influences adoption. Popular framework for studying technology and information system adoption. Perceived usefulness is how much potential AIS users believe it will help them work. It's about how individuals believe the system can improve work or decision-making. Implementing, employing, and integrating an accounting information system into daily operations, finances, and decision-making is AIS adoption. Perceived usefulness is the degree to which individuals believe a technology, such an AIS, can improve productivity, effectiveness, and goal-setting.

Moreover, [16] mainly includes ease of use, perceived usefulness, facilitating conditions, social influences, adoption readiness and intention to use financial technology (FinTech) in India. This paper aims to discuss FinTech and its dynamic changes in the banking sector. This study tests the mediation influence of perceived trust on adoption readiness and intention to use FinTech in India. The proposed impact of mediation of perceived trust was significant but small on adoption readiness and intention to use FinTech. The study reveals the significance of ease of use, perceived usefulness and facilitating the service condition, which means that vendors prefer to use compatible devices that are easy to use with other devices, [16].

H1: There is a positive relationship between Perceived Usefulness and Financial Sustainability

2.3 Perceived Ease of Use (PEOU)

Computer and technology adoption depend on perceived ease of use (PEOU) and AIS adoption. PEOU predicts how people will adopt new IT technologies like AIS under the Technology Acceptance Model (TAM). A person's subjective assessment of a technology or system's usability is PEOU. It relies on the user's perception of the system's usability, friendliness, and learning and use complexity. AIS adoption involves integrating and using an Accounting Information System. A typical AIS uses software, hardware, protocols, and people to store, process, and report accounting and financial data.

The purpose of the paper conducted by [17] is to investigate the role of trust and perceived enjoyment in the technology acceptance model by distinguishing distinct stages of adoption among street vendors (initial and advanced adoption stage). The findings reveal significant similarities and dissimilarities between the two groups of vendors. Both initial and advanced adopters emphasize trust of service providers. The first group relies more on perceived ease of use and perceived enjoyment in motivating m-commerce adoption but depends less on perceived usefulness. On the contrary, for the latter group, the influence of perceived ease of use and perceived enjoyment significantly decreases, but the effect of perceived usefulness significantly increases [17]. Therefore, one could hypothesize the following:

H2: There is a positive relationship between Ease of Use and Financial Sustainability.

2.4 Organisational Readiness

Organisational readiness and AIS adoption are linked. Organizational readiness is the organization's desire and capacity to adopt and employ a new system or technology. This idea incorporates several factors that affect AIS adoption. Organisational readiness encompasses financial and human resources for AIS adoption. An organization will devote funding, manpower, and infrastructure for AIS deployment and maintenance if it is ready. The adoption process might be difficult without these materials. Organisational readiness requires strong leadership support. Senior management and key decision-makers supporting AIS adoption may help all staff buy in. Organizational readiness to adopt the system depends on leadership's commitment.

The purpose of [15] paper is to elucidate the impact of organisational factors on the adoption of blockchain and the adoption of blockchain in companies based in Ireland. The case study findings identified three patterns: top management support and organisational readiness are enablers for blockchain adoption, and large companies are more likely to adopt blockchain than small to medium-sized enterprises (SMEs). Therefore, one could hypothesize the following:

H3: There is a positive the relationship between Organisational Readiness and Financial Sustainability.

2.5 System Compatibility

The relationship between system compatibility and AIS adoption is essential for the successful integration of AIS within an organization. System compatibility refers to the extent to which the new AIS aligns with and can effectively operate within the organisation's existing technological and operational environment. This compatibility is a very important determinant in the decision-making process in relation to AIS adoption. System compatibility is the ability to evaluate the capability of the AIS to integrate smoothly with the existing technology infrastructure in the organization. This incorporates compatibility with the existing hardware, software, databases and networking systems. If the AIS is compatible with the organisation's existing technology, it is more likely to be adopted, as it reduces the need for significant and costly technology overhauls.

The study of [18] investigates the influence of the early-stage users' personal traits (specifically personal innovativeness and technology anxiety) and ex-post instrumentality perceptions (specifically price value, hedonic motivation, compatibility and perceived security) on social diffusion of smart technologies measured by the intention to recommend artificial intelligence-based voice assistant systems (AIVAS) to others. In this study, compatibility is significant predictor of satisfaction, which lead to use continuance and, eventually, intention to recommend. Moreover, the study of [19] examines the key drivers of the adoption of disruptive technologies (DTs) in the digital supply chain (DSC) in developing nations. The compatibility and IT expertise were the two key factors in adopting the DTs in DSC in developing nations. The organizations with higher compatibility and internal IT expertise and competence witness a higher level of adoption of DT. Therefore, one could hypothesize the following:

H4: There is a positive relationship System Compatibility and Financial Sustainability

2.6 System Complexity

System Complexity and AIS adoption: The interrelationship between the system complexity and adoption of AIS is an important issue that should be considered when an organization is deciding on whether to adopt a new AIS. System Complexity is the degree of sophistication and complexity of the AIS itself, and it is indeed a big factor in affecting the decision to adopt the system. The explanation of this relation is as follows: the more complex the AIS is, the more advanced features and sophisticated data structures and functionalities it tends to have. Although a complex system can provide a broad spectrum of functionality and possible value, it can also introduce a host of issues to implementation; a complex AIS can possess a steep learning curve. The system might require more in-depth training to the employees in order to learn how to operate it, and this may be costly and time-consuming. Moreover, the employees can be opposed to the implementation of a complex system because the latter can interfere with the usual work processes and the staff members will have to adjust to the new and, possibly, difficult procedures. The installation and support of a very sophisticated AIS could require a considerable amount of time, financial resources, and technical skills. It can be more difficult to manage and troubleshoot a complex system which may cause technical problems and downtime. Complex systems might be more customized to fit into the needs of the organization and integration with the existing systems can be complex and expensive.

The aim of the research by [20] is to investigate how the technological, organisational and environmental (TOE) conditions impact the adoption of CAATs in the public sector of developing countries like Jordan in the circumstances of the COVID-19 pandemic. The findings showed that in the case of the environmental factors, both the government regulation and the complexity of the audit tasks affect the adoption of Computer-Assisted Audit Tools and Techniques. Therefore, one could hypothesize the following:

H5: There is a positive relationship between System Complexity and Financial Sustainability

2.7 Top Management Support

The mediation effect of top management support on AIS adoption-financial sustainability relationship is a concept that is important in management, information systems, and accounting. Accounting Information System (AIS) is a term that is used to refer to the technology, methods, and systems that organizations adopt to collect, store, process and report financial and accounting information. An AIS is adopted in organizations to simplify accounting and financial processes and enhance efficiency and accuracy.

Financial sustainability refers to the long-term financial health and stability of an organization which entails profitability, liquidity, solvency as well as financial stability in general. Top management support is the participation of the top management and leaders in the process of making decisions regarding adoption and implementation of an AIS in the organization.

Top management support as a mediating variable is a significant factor in the process of successful implementation and use of AIS. Good top management support aids in the distribution of resources, strategic alignment and the development of an organizational culture that is friendly to the adoption of the AIS. This consequently results in improved adoption and integration of AIS, which enhances the quality of financial information, operational performance, and decision-making. The heightened effectiveness of AIS with the support of the top management is bound to lead to increased financial sustainability.

On the other hand, weak top management support may lead to resistance to AIS adoption, lack of sufficient resources, and misalignment with organizational goals. When this happens, the implementation of AIS may not play a significant role in the financial sustainability because the desired gains of enhanced financial management and decision making may not be achieved. Thus, to the extent to which the adoption of AIS has a positive impact on long-term financial results, top management support plays a key role in mediating the relationship between AIS adoption and financial sustainability.

For instance, the study done by [21] examines the adoption of artificial intelligence (AI) technology for talent acquisition. This study demonstrates that "cost-effectiveness, relative advantage, top management support, HR preparedness, competitive pressure, and vendor support all influence AI technology adoption for talent acquisition positively". Additionally, the goal of [22] is to examine the elements that influence organisations' intentions to implement BDA in their everyday operations. The research categorises possible elements into four groups: technical, organisational, environmental, and SC characteristics. The empirical findings indicate that perceived advantages and senior management support might have a substantial effect on adoption

intention. Furthermore, contextual variables such as "competitor adoption, government policy, and SC connection" all have the potential to dramatically moderate the direct correlations between driving factors and adoption intention.

Moreover, [23] examined the impact of information technology capabilities (ITC) on organisational performance (OP) in the hotel business in their article. It examines the indirect impacts of sustainability practises (SP) and "service quality" (SQ) on "the relationship between ITC and OP" in more detail. Also investigated is the moderating influence of top management support (TMS). This research indicates that ITC is positively associated with OP. Additionally, the research discovered that SP and SQ act as mediators of the ITC-OP relationship. TMS acts as a moderator of the positive relationship between ITC and OP and also between SQ and OP. Additionally, TMS moderates SQ's indirect influence on the link between ITC and OP, with the mediating effect being higher when TMS is elevated.

Furtheremore, the purpose of [24] is "to empirically distinguish the influence of individual factors (pleasure in assisting others and knowledge self-efficacy) on knowledge-sharing processes, organisational factors (top management support and organisational rewards), and technology factors (information and communication technology use)". The empirical study indicates that individual satisfaction with assisting others, organisational support from top management, and ICT usage as a technology component all have a substantial impact on knowledge-sharing procedures. Additionally, the findings imply that an employee's desire to give and acquire knowledge assists the organisation to boost its innovation capabilities. This study discovered no effect of the individual component knowledge self-efficacy on employee knowledge sharing behaviour.

Moreover, [25] study draws on the job demands-resources and information systems literatures to discover organisational elements that alleviate technostress in the human resources department and to assess how technostress and techno-insecurity influence technology's effect on work satisfaction. As expected, when HR technology (HRT) governance was involved and senior management supported this class of technologies, department job stress was less likely to grow. Increased technological insecurity had the opposite impact, which was another expected conclusion. Contrary to expectations, HR's IT expertise actually raised technostress. In turn, when technostress and techno-insecurity were high, HRTs were less likely to increase work satisfaction. Support from top management for HRT and an environment conducive to human resource innovation allowed portfolios to improve customer satisfaction. Additionally, moderating factors were observed. Therefore, one could hypothesize the following (as portrayed in Figure 1):

H6: There is a positive relationship between top management support for system implementation and financial sustainability

H6a: There is a mediating effect of Top Management support on the relationship between Perceived usefulness and AIS adoption

H6b: There is a mediating effect of Top Management support on the relationship between perceived ease of use and AIS adoption

H6c: There is a mediating effect of Top Management support on the relationship between Organisational readiness and AIS adoption

H6d: There is a mediating effect of Top Management support on the relationship between system compatibility and AIS adoption

H6e: There is a mediating effect of Top Management support on the relationship between System Complexity and AIS adoption

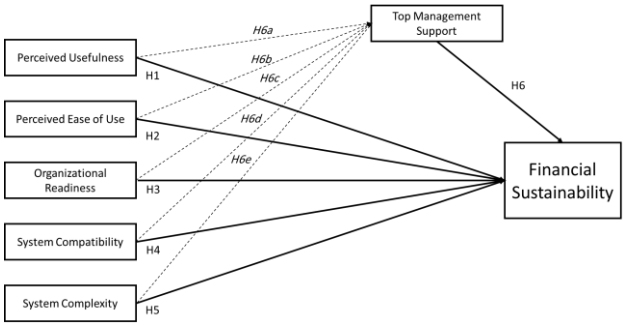

Fig. 1: The Study Framework
Source: Created by Author

3 Research Methodology

This study used quantitative research methods, in which a sample of a population was studied to produce a quantitative or numeric description of trends, attitudes, or views. The researcher extrapolates or makes conclusions about the whole population based on sample data. Furthermore, information obtained via the use of a questionnaire, which is a printed set of questions to which respondents must reply and record their responses. In this research, a total of 412 respondents participated in this study, the respondents were accountants working for Logistics firms Jordan. The data is collected and updated in real time when surveys are received. The findings are arranged in Google sheets using the code sheet produced to

assess respondents' views. As noted earlier, the data is arranged into distinct rows and columns based on the associated attitude score. For analysis purposes, the responses to each question were given numerical numbers.

The structural equation model (SEM), which is subsequently used to examine the overall model fit and, additionally, the consistency between the theoretical model and the estimated model, is constructed using the measurement model and the structural model. SEM may be seen as a versatile modeling technique for performing multivariate statistical analyses including regression analysis, path analysis, and component analysis. A sequence of regressions described in terms of path vectors is the Partial Least Squares (PLS) regression method, also referred to as the PLS-SEM algorithm. The weight vectors obtained during convergence satisfy equations for fixed points.

Within the context of this research, the creation of instruments was carried out with great attention in order to accurately represent nature. As a result, the questionnaire was created with 25 items, and the variables were scored using a five-point Likert scale, where five represents “Strongly Agree” and one represents “Strongly Disagree”. Because the individuals who filled out the questionnaire were native Arabic speakers, it was very necessary for the questionnaire to be translated from English to Arabic in an accurate manner. In order to test the accuracy of the translation in a cross-cultural survey, a back translation was carried out, which is a method that is often used, [26]. In addition, the validated instruments that are shown in Table 1 were adopted from similar earlier research in order to measure the variables that are being investigated in this investigation. In addition, the validated instruments shown in Table 1 were adopted from earlier research to measure the variables investigated in this study.

Table 1. Summary of Constructs, Measurement Items, and Supporting Citations.

Variables	No. items	Citation
Perceived Usefulness	6	[27], [28]
Perceived ease of use	6	[29]
Organisational readiness	6	[30]
System compatibility	6	[31], [32]
System complexity	6	[31]
Top management support	6	[33]

Source: Created by Author

4 Data Analysis

4.1 Respondent Profile

The first segment of the instrument collected information on respondents' background, including their Gender, Age, Level of Employment, and Years of Experience. The characteristics of each demographic profile are described in Table 2.

Table 2. Demographic Characteristics of Respondents (n = 412)

Item	Options	Frequency	Percentage
Gender	Male	269	65.29
	Female	143	34.71
Age	Below 25	13	3.16
	26-35 years old	105	25.49
	36-45 years old	165	40.05
	46-55 years old	97	23.54
	56 years and above	32	7.77
Years of Experience	below 2 years	7	1.70
	2-4 years	67	16.26
	4-6 years	192	46.60
	6-10 years	101	24.51
	10 years and above	45	10.92
Type of logistics	Land	107	25.97
	Air	72	17.48
	Sea freight	32	7.77
	Multiple	201	48.79

Source: Created by Author

4.2 Measurement Model

For the purpose of testing the research model in this study, Smart PLS 4 was employed. The analysis was conducted in two stages: the measurement model, which assessed the validity and reliability of the constructs, and the structural model, which examined the hypothesized relationships among the variables. During the initial assessment, several items exhibited low factor loadings and were therefore considered for removal. Specifically, COM5 (0.381), ORR2 (-0.092), PU4 (0.238), and TMS4 (0.288) recorded values below the acceptable threshold for factor loadings, as suggested by [34]. Consequently, these items were excluded in the subsequent run to improve the overall measurement quality. Once the low-loading items were eliminated, all constructs recorded satisfactory factor loading values, Cronbach alpha, Composite Reliability and Average Varied Extracted (AVE), which means good internal consistency and convergent validity. The results are summarized in Table 3.

A discriminant validity analysis was performed in the second stage of the process. This analysis was performed to determine the degree to which a certain construct is distinct from other constructs. A significant factor to consider in determining validity is the correlation between the variables. Measures of the correlations between constructs and the square root of the average variance extracted for a construct were used to evaluate the validity of the constructs, [35], [36]. In addition, [36] reports that the model's estimate did not surpass 0.95. Moreover, the model did not provide any statistically significant results. As a consequence, the Fornell-Larcker Criterion findings are presented in Table 4, which shows that no value exceeds the suggested cut-off point of 0.95, [35].

Table 3. Convergent Validity Results

Items	Outer loadings	Cronbach's alpha	Composite reliability	AVE
COM1	0.726	0.877	0.908	0.666
COM2	0.863			
COM3	0.776			
COM4	0.852			
COM6	0.854			
COX1	0.704	0.818	0.866	0.519
COX2	0.773			
COX3	0.729			
COX4	0.703			
COX5	0.723			
COX6	0.686			
FS1	0.759	0.845	0.886	0.565
FS2	0.77			
FS3	0.786			
FS4	0.773			
FS5	0.638			
FS6	0.774			
ORR1	0.815	0.921	0.94	0.758
ORR3	0.873			
ORR4	0.901			
ORR5	0.855			
ORR6	0.908			
PEOU1	0.802	0.902	0.925	0.672
PEOU2	0.869			
PEOU3	0.858			
PEOU4	0.777			
PEOU5	0.789			
PEOU6	0.818			
PU1	0.716	0.797	0.861	0.555
PU2	0.814			
PU3	0.616			
PU5	0.818			
PU6	0.743			
TMS1	0.519	0.774	0.848	0.537
TMS2	0.813			
TMS3	0.815			
TMS5	0.861			
TMS6	0.591			

Source: Created by Author

Table 4. Discriminant validity (Fornell and Larcker Criterion)

	COM	COX	FS	ORR	PEOU	PU	TMS
COM	0.816						
COX	0.097	0.720					
FS	0.118	0.131	0.752				
ORR	0.015	0.090	0.096	0.871			
PEOU	0.068	0.114	0.226	0.625	0.820		
PU	0.048	0.115	0.486	0.035	0.076	0.745	
TMS	0.043	0.180	0.729	0.127	0.186	0.462	0.733

Source: Created by Author

Moreover, in case both constructs were assumed to have been completely reliable or measured correctly, the Heterotrait-Monotrait Ratio (HTMT) can estimate the actual correlation between the two. The HTMT is the average of all correlations or cross-correlations between indicators that measure different constructs, relative to the geometric mean of the average correlations between indicators that measure the same construct. The HTMT may be used to assess discriminant validity. The level of HTMT that is deemed "acceptable" in the literature is 0.90. For further details (Table 5).

Table 5. HTMT Discriminant validity

	COM	COX	FS	ORR	PEOU	PU	TMS
COM							
COX	0.121						
FS	0.148	0.154					
ORR	0.063	0.146	0.106				
PEOU	0.109	0.156	0.252	0.690			
PU	0.105	0.158	0.584	0.083	0.101		
TMS	0.064	0.232	0.888	0.135	0.212	0.561	

Source: Created by Author

4.3 Structural Model

The structural model illustrates the theoretical or conceptual aspects of the path model. In PLS-SEM, the inner model is synonymous with the structural model, as stated by [34]. This model includes latent variables and the paths connecting them. The evaluation of the structural model occurs after the measurement model. Moreover, [34] argues that to assess the structural model, four specific tasks must be performed. These stages involve evaluating the path coefficients (step 2), assessing collinearity (step 4), evaluating the coefficient f^2, and determining the effect size (R^2). Full results are shown in Table 6 (Appendix).

4.3.1 Assessment of the Structural Model for Collinearity Issues

Collinearity assessment is a vital assumption to ensure that multicollinearity does not exist. Collinearity diagnostics were performed to assess and identify multicollinearity among the predictors. This can be done by investigating the Variance Inflation Factor (VIF). The VIF should be 3.3 or lower, and not less than 1, [37]. Table 6 (Appendix) provides the results of the multicollinearity test values and shows no VIF value above 3.3.

4.3.2 Assessing the Significance of Structural Model Relationships

The model's structural paths were evaluated to determine the significance of the path coefficients. The importance of these paths was assessed by examining the path coefficients and t-values. To test the hypothesis, the PLS algorithm and bootstrapping were performed. The path coefficients and R2 values were derived from the PLS analysis, while the t-values came from the bootstrapping process. As recommended [34], if the p-value is less than or equal to .05, the minimum acceptable t-value is 1.645. Additionally, the Beta value should be within -1 and +1; however, since the hypothesis in this study is positive, it should be positive. As shown in Table 6 (Appendix), all t-value scores meet the accepted level.

4.3.3 The Coefficient of Determination (R^2)

Furthermore, [34] describes three levels of R^2 scores: .25, .50, and .75, representing weak, moderate, and substantial predictive accuracy. As shown in Table 7, **Σφάλμα! Το αρχείο προέλευσης της αναφοράς δεν βρέθηκε.**the scores of R^2 for FS are considered at in substantial level.

Table 7. Coefficient of Determination (R^2)

Variable	R-square	R-square adjusted
FS	0.755	0.751

Source: Created by Author

4.3.4 Assessment of the Effect Size (f^2)

The summary and inference on the f^2 estimate for independent (exogenous) constructs across the model are presented in Table 6 (Appendix). As recommended [20], an f^2 value below 0.02 indicates no effect. An f^2 value of 0.02 or higher is considered a weak effect, while values above 0.15 and 0.35 indicate medium and substantial effects, respectively, [38]. Based on this classification, H1 (AIS → FS) and H2 (PEOU → FS) demonstrated weak effect sizes. H1 (PU → FS), H3 (ORR → FS), and H4 (COM → FS) showed medium effect sizes. A substantial effect was observed for H6 (TMS → FS). Meanwhile, H5 (COX → FS) recorded no effect.

4.3.5 The Mediating Assessment

Overall, in the current study, to assess the mediating effect of Top Management Support (TMS) (Namely; H6a, H6b, H6c, H6d, and H6e). The researcher will run PLS bootstrapping to get the direct effect and indirect effects through Top Management Support (TMS). The researcher will run assigned the Bias-correlated and accelerated (BCa) for confidence interval method as recommended by researchers, [39]. Table 8 (Appendix) represents the results of PLS bootstrapping for the direct and indirect effect.

As shown in Table 8 (Appendix), the current study presented 5 hypotheses were constructed in order to assess the mediating effect of Top Management Support (TMS). In the current study, the mediating effect analysis carried out using Smart PLS found the following:

In H6a: Task Management System (TMS) plays a significant mediating role on the relationship between Perceived Usefulness (PU) and Financial Sustainability (FS) with partial mediation level and complementary mediating.

In H6b: Task Management System (TMS) plays a significant mediating role on the relationship between Perceived Ease of Use (PEOU) and Financial Sustainability (FS) with partial mediation level and complementary mediating.

In H6c: Task Management System (TMS) has no significant mediating role on the relationship between Organizational Readiness (ORR) and Financial Sustainability (FS) as the mediating analysis results showed that no effect was noticed.

In H4d: Task Management System (TMS) has no significant mediating role on the relationship between Communication (COM) and Financial Sustainability (FS) as the mediating analysis results showed that no effect was noticed.

In H6e: Task Management System (TMS) plays a significant mediating role on the relationship between Complexity (COX) and Financial Sustainability (FS) with full mediation level and indirect-only mediating.

5 Findings Discussion and Conclusion

This study investigated the relationship between Accounting Information System (AIS) adoption and financial sustainability within logistics firms in Jordan. The empirical findings demonstrate that key

technological factors, including perceived usefulness, perceived ease of use, organisational readiness, and system compatibility, significantly contribute to improving financial sustainability. These results highlight that successful AIS implementation depends not only on technological features but also on the organisational environment supporting system integration.

On the other hand, weak top management support may lead to resistance to AIS adoption, lack of sufficient resources, and misalignment with organizational goals. When this happens, the implementation of AIS may not play a significant role in the financial sustainability because the desired gains of enhanced financial management and decision making may not be achieved. Thus, to the extent to which the adoption of AIS has a positive impact on long-term financial results, top management support plays a key role in mediating the relationship between AIS adoption and financial sustainability, [40], [41] and [42].

Perceived Ease of Use also showed a positive effect, indicating that when AIS is user-friendly and requires minimal effort to operate, firms are more likely to utilise it effectively, thereby supporting sustainable financial performance. This outcome aligns with earlier research emphasising the importance of both usefulness and usability in technology adoption [43] and [44]. Additionally, organisations with greater readiness were found to be better positioned to successfully integrate AIS and achieve long-term financial benefits, highlighting the significance of preparedness as a foundation for stability and growth [45] and [46]. AIS compatibility with existing organisational processes and infrastructure was found to contribute positively to financial sustainability. Conversely, low compatibility can cause operational disruptions, increased costs, and underutilisation of the system, supporting previous evidence that stresses the critical importance of system–environment fit, [45] and [47].

In contrast to the positive and significant effects observed for the preceding variables, the analysis of the relationship between System Complexity and financial sustainability produced a different outcome. The fifth segment of this study examines this relationship, and H5 was ultimately rejected, indicating that AIS complexity does not directly enhance financial sustainability in logistics companies. This observation implies that advanced or technologically advanced systems do not necessarily result in better financial performances but it is the usability of the system, its compatibility, and alignment with the requirements of the organisations that are more decisive forces [48] and [49].

Top management support is critical towards the success of the system implementation and finally, financial sustainability of organisations. Top managers have the role of giving strategic direction, resource allocation and encouraging technological change. The top management showing high level of support is an indication of the importance of system initiatives at all levels within the company, employee commitment and low resistance to change. When considering Accounting Information Systems (AIS), their participation may make or break the system to be considered as a strategic resource enabling efficiency and sustainability over the long term or may be just a technical instrument with minimal effect.

In addition, H6a was about the mediating effect of top management support on the relationship between perceived usefulness and AIS adoption, which was supported. This implies that employees who view AIS as very beneficial will motivate the top management to give it more support and hence improve its adoption. It illuminates the interaction between user perceptions and leadership behaviour and reveals that managers react to value demonstrated. To the researcher, this was a positive finding, and it supports the idea that demonstrating usefulness of the system can be a potent means of executive buy-in.

Moreover, the mediation hypothesis between the perceived ease of use and AIS adoption by the top management support was also confirmed (H6b). This observation means that the top management will be ready to support and encourage their adoption when the systems are perceived to be user-friendly, which will eventually lead to easier implementation. It discloses that usability does not only lead to the acceptance of the end-users, but also to decisions made by the executives. This finding is, in the opinion of the researcher, quite logical because managers will be more willing to promote technologies that reduce training requirements and operational interference.

Also, H6c the mediating power of top management support on the relationship between Organisational readiness and AIS adoption was rejected. This finding suggests that despite the organisational structural and technical readiness to adopt AIS, it does not always translate into the increased rates of managerial support of adoption. It does not seem that organisational readiness is a sufficient factor to trigger leadership engagement. This is an interesting result according to the researcher, because it implies that the readiness has

to be supplemented by purposeful actions to engage and mobilize top management towards the strategic objectives of the system.

In addition, the hypothesis that top management support plays the mediating role between the AIS adoption and system compatibility, H6d, was also rejected. This demonstrates that despite the fact that AIS may be technically integrated into the current processes, this integration alone does not imply that the executives will turn out to be active proponents of adoption. As compatibility can touch upon the operational issues, it does not necessarily trigger managerial backing. The researcher finds this result understandable, as the decision-makers tend to focus on greater strategic or financial considerations rather than on technical fit in their decision to invest their support.

Last, the hypothesis of H6e, which studies the mediating effect of top management support on the correlation between system complexity and AIS adoption, was confirmed. Interestingly, this finding shows that despite discouraging adoption, complexity can lead to more managerial involvement, potentially as complex systems need more management and strategic alignment. The top management in these situations takes more interest to implement the changes and reduce risks. This result is interesting to the researcher because it suggests that complexity can also serve as a source of executive attention, transforming the possible challenges into a potential to engage in stronger leadership. This discovery underscores the fact that although compatibility is effective in isolation, complex systems would enjoy structural support to realize their potential, [50], [51], [52], [53], [54], and [55].

In general, the results indicate that AIS can be treated as a strategic organizational resource, but not just a technical accounting tool. With a high managerial commitment, and organizational preparedness, AIS can greatly increase financial transparency, operational effectiveness and long-term sustainability. The findings hence add to the theory of AIS adoption as well as managerial practice as they show that the interplay of technological and managerial considerations have a collective impact on the financial sustainability of logistics organizations.

This research has a number of limitations. The decision to study logistics companies in Jordan can limit the generalizability of the results to other sectors or areas where technology, regulations, or cultures are different. The cross-sectional design does not allow following the changes in AIS adoption and financial sustainability with time and self-reported data may cause bias in the responses. Even though the study relies mostly on Technology Acceptance Model and Contingency Theory, the other theoretical perspectives, including the Resource-Based View, Institutional Theory or the Technology-Organisation-Environment (TOE) model, which could provide further explanatory value, are not mentioned.

6 Future Research Recommendations

Based on the findings and limitations of this study, there are a number of directions in which future research should be taken. One, the future research might expand the scope of the present study to other sectors in Jordan like manufacturing, health services, financial services, and higher education. These sectors are distinct in terms of their processes, regulatory demands and competitive forces that could affect the use and success of Accounting Information Systems (AIS). Cross-industry comparisons would not only increase the external validity of the results but also identify the best practices in the sector to use AIS to become financially sustainable.

Second, the study should be carried out in other geographical areas and institutional settings to determine the generalizability of the model. Nations possessing different degrees of digital infrastructure, regulatory policies, and culture towards technological adoption could show different trends in AIS utilization and performance. A wider view on the role of institutional environments in the AIS adoption and financial sustainability could be gained through cross country comparative studies or regional studies in the Middle East, Southeast Asia or developed economies.

Third, longitudinal designs might be used in the future to be able to describe the dynamic character of AIS adoption and its long-term impact on financial sustainability. Because the advantages of AIS implementation are usually realized over time, tracking organizations over several years would enable the researchers to trace the development of adoption, organizational learning and performance results. This type of research would be more successful in establishing the causation and determining the steps at which firms can attain sustainable value out of AIS.

Fourth, it is advisable to diversify methodologically. Although this research was based on a quantitative survey method, future studies might consider the mixed-method methodology, which incorporates large-scale surveys with detailed interviews, case studies, or ethnographic

observations. Managerial, IT experts, and end-user qualitative data would give more comprehensive information about the issues and facilitators of AIS adoption, which would supplement the statistical data and provide a bigger picture.

Fifth, the theoretical framework should be expanded in the future research. This research paper has used TAM, DOI and Contingency Theory to elucidate the outcome of adoption and sustainability. Nevertheless, other frameworks like the Resource-Based View (RBV), Institutional Theory, or Technology Organization Environment (TOE) can be used to offer extra information. As an example, RBV may be useful in revealing how AIS capabilities are related to sustained competitive advantage, whereas Institutional Theory may be used to shed light on how regulatory forces and industry norms impact adoption.

Lastly, future research might address the question of how AIS can be combined with new technology, including cloud computing, blockchain, artificial intelligence, and big data analytics. It would be an interesting direction to study the interaction of these technologies with the existing AIS in ways that affect financial sustainability as companies are progressively moving toward digitalization. This research would not just revise the model to be in line with the technological changes, but it would also offer useful instructions to organizations that have to survive the next wave of digitalization.

The other potential area of future research is the analysis of the role of user competencies and training programs in enhancing the effectiveness of AIS. As AIS is dependent mostly on human interaction with financial technologies, exploring the ways in which user skills, digital literacy, and professional training affect the system usage may shed more light on the success of AIS implementation and its effects on financial sustainability.

The part of cybersecurity and data governance in AIS environments can also be explored in future research. Due to increasing reliance on cloud computing and integration of financial databases, the issue of safety of financial data will play a very important role in acceptance of AIS.

References:

[1] The Jordan Strategy Forum, "Transportation & Logistics Sector: Jordan's Economic Vision Roadmap," Amman, 2022, [Online]. https://jsf.org/uploads/2022/12/transportation-logistics.pdf (Accessed Date: December 30, 2025).

[2] S. A. AbuAkel and M. Ibrahim, "The Effect of Relative Advantage, Top Management Support and IT Infrastructure on E-Filing Adoption," *Journal of Risk and Financial Management*, vol. 16, no. 6. 2023. http://dx.doi.org/10.3390/jrfm16060295.

[3] L. Owais and J. T. Kiss, "Developing a Financial Sustainability Model of the Performance Indicators Applied by Jordan Water Company (Miyahuna)," *Int. J. Eng. Manag. Sci.*, vol. 5, no. 3, pp. 75–87, 2020, https://doi.org/10.21791/IJEMS.2020.3.8.

[4] *(text on Arabic)* AmmanNet, "Recommendations for drawing up a road map to revive the logistics sector in Jordan to support its recovery from (COVID-19) (توصيات تبرسم خارطة طريق لإنعاش قطاع الخدمات اللوجستية في الأردن لدعم تعافيه من كورونا)," *News*, 2020, [Online]. https://ammannet.net/توصيات-تبرسم-خارطة-طريق-لإنعاش-قطاع-الخدمات-اللوجستية-في-الأردن-لدعم-تعافيه-من-كورونا (Accessed Date: December 30, 2025).

[5] A. M. Alshawabkeh, M. R. B. A. Kadir, W. NORI, and H. B. Hassan, "The Moderating Effect of the Cloud Computing on the Relationship between Accounting Information Systems on the Firms' Performance in Jordan," *WSEAS Trans. Bus. Econ.*, vol. 19, pp. 1155–1169, 2022, https://doi.org/10.37394/23207.2022.19.101.

[6] M. Yuan, Z. Li, X. Li, X. Luo, X. Yin, and J. Cai, "Proposing a multifaceted model for adopting prefabricated construction technology in the construction industry," *Eng. Constr. Archit. Manag.*, vol. 30, no. 2, pp. 755–786, Jan. 2023, https://doi.org/10.1108/ECAM-07-2021-0613.

[7] W. Gleißner, T. Günther, and C. Walkshäusl, "Financial sustainability: measurement and empirical evidence," *J. Bus. Econ.*, vol. 92, no. 3, pp. 467–516, 2022, https://doi.org/10.1007/s11573-022-01081-0.

[8] M. A. Gharaibeh and A. Alkhatatbeh, "Modeling, analysis and forecasting of the Jordan's transportation sector energy consumption using artificial neural networks," *Environ. Dev. Sustain.*, vol. 28, no. 1, pp. 385–408, 2026, https://doi.org/10.1007/s10668-024-04984-w.

[9] Central Bank of Jordan, "The Financial

Stability Report 2021," Amman, 2022, [Online]. http://cbj.gov.jo/EN/List/Financial_Stability_Report (Accessed Date: December 30, 2025).

[10] A. P. Monteiro, J. Vale, E. Leite, M. Lis, and J. Kurowska-Pysz, "The impact of information systems and non-financial information on company success," *Int. J. Account. Inf. Syst.*, vol. 45, p. 100557, 2022, https://doi.org/10.1016/j.accinf.2022.100557.

[11] J. Tingey-Holyoak, J. Pisaniello, P. Buss, and W. Mayer, "The importance of accounting-integrated information systems for realising productivity and sustainability in the agricultural sector," *Int. J. Account. Inf. Syst.*, vol. 41, p. 100512, 2021, https://doi.org/10.1016/j.accinf.2021.100512.

[12] B. J. A. Ali and M. S. Oudat, "Accounting Information System And Financial Sustainability Of Commercial And Islamic Banks: A Review Of The Literature," *J. Manag. Inf. Decis. Sci.*, vol. 24, no. 5, 2021, https://doi.org/10.2139/ssrn.5147108.

[13] R. Ur Rahman, S. M. A. Shah, H. El-Gohary, M. Abbas, S. H. Khalil, S. Al Altheeb, and F. Sultan, "Social media adoption and financial sustainability: Learned lessons from developing countries," *Sustainability*, vol. 12, no. 24, pp. 10–16, 2020, https://doi.org/10.3390/su122410616.

[14] F. Shwedeh, A. Aburayya, R. Alfaisal, A. A. Adelaja, G. Ogbolu, A. Aldhuhoori, and S. Salloum, "SMEs' Innovativeness and Technology Adoption as Downsizing Strategies during COVID-19: The Moderating Role of Financial Sustainability in the Tourism Industry Using Structural Equation Modelling," *Sustainability*, vol. 14, no. 23. 2022. https://doi.org/10.3390/su142316044.

[15] T. Clohessy and T. Acton, "Investigating the influence of organizational factors on blockchain adoption: An innovation theory perspective," *Ind. Manag. Data Syst.*, vol. 119, no. 7, pp. 1457–1491, 2019, https://doi.org/10.1108/IMDS-08-2018-0365.

[16] P. H. Haritha, "Mobile payment service adoption: understanding customers for an application of emerging financial technology," *Inf. Comput. Secur.*, vol. 31, no. 2, pp. 145–171, Jan. 2023, https://doi.org/10.1108/ICS-04-2022-0058.

[17] T. Pipitwanichakarn and N. Wongtada, "Leveraging the technology acceptance model for mobile commerce adoption under distinct stages of adoption," *Asia Pacific J. Mark. Logist.*, vol. 33, no. 6, pp. 1415–1436, Jan. 2021, https://doi.org/10.1108/APJML-10-2018-0448.

[18] K. Y. Lee, L. Sheehan, K. Lee, and Y. Chang, "The continuation and recommendation intention of artificial intelligence-based voice assistant systems (AIVAS): the influence of personal traits," *Internet Res.*, vol. 31, no. 5, pp. 1899–1939, Jan. 2021, https://doi.org/10.1108/INTR-06-2020-0327.

[19] T. Mitra, R. Kapoor, and N. Gupta, "Studying key antecedents of disruptive technology adoption in the digital supply chain: an Indian perspective," *Int. J. Emerg. Mark.*, vol. ahead-of-p, no. ahead-of-print, Jan. 2022, https://doi.org/10.1108/IJOEM-07-2021-1052.

[20] M. Al-Okaily, H. M. Alqudah, A. A. Al-Qudah, and A. F. Alkhwaldi, "Examining the critical factors of computer-assisted audit tools and techniques adoption in the post-COVID-19 period: internal auditors perspective," *VINE J. Inf. Knowl. Manag. Syst.*, vol. 54, no. 5, pp. 1062–1091, Jan. 2022, https://doi.org/10.1108/VJIKMS-12-2021-0311.

[21] R. Pillai and B. Sivathanu, "Adoption of artificial intelligence (AI) for talent acquisition in IT/ITeS organizations," *Benchmarking An Int. J.*, vol. 27, no. 9, pp. 2599–2629, Jan. 2020, https://doi.org/10.1108/BIJ-04-2020-0186.

[22] Y. Lai, H. Sun, and J. Ren, "Understanding the determinants of big data analytics (BDA) adoption in logistics and supply chain management," *Int. J. Logist. Manag.*, vol. 29, no. 2, pp. 676–703, Jan. 2018, https://doi.org/10.1108/IJLM-06-2017-0153.

[23] H. B. Alkatheeri, F. Jabeen, K. Mehmood, and G. Santoro, "Elucidating the effect of information technology capabilities on organizational performance in UAE: a three-wave moderated-mediation model," *Int. J. Emerg. Mark.*, vol. 1, no. 1, pp. 1–10, Jan. 2021, https://doi.org/10.1108/IJOEM-08-2021-1250.

[24] N. Podrug, D. Filipović, and M. Kovač, "Knowledge sharing and firm innovation capability in Croatian ICT companies," *Int. J. Manpow.*, vol. 38, no. 4, pp. 632–644, Jan. 2017, https://doi.org/10.1108/IJM-04-2016-0077.

[25] G. W. Florkowski, "HR technologies and HR-staff technostress: an unavoidable or combatable effect?," *Empl. Relations Int. J.*, vol. 41, no. 5, pp. 1120–1144, Jan. 2019, https://doi.org/10.1108/ER-08-2018-0214.

[26] R. W. Brislin, "Back-Translation for Cross-Cultural Research," *J. Cross. Cult. Psychol.*, vol. 1, no. 3, pp. 185–216, Sep. 1970, https://doi.org/10.1177/135910457000100301.

[27] S. Wang, J. Li, and D. Zhao, "Understanding the intention to use medical big data processing technique from the perspective of medical data analyst," *Inf. Discov. Deliv.*, vol. 45, no. 4, pp. 194–201, Jan. 2017, https://doi.org/10.1108/IDD-03-2017-0017.

[28] R. Izuagbe and S. O. Popoola, "Social influence and cognitive instrumental factors as facilitators of perceived usefulness of electronic resources among library personnel in private universities in South-west, Nigeria," *Libr. Rev.*, vol. 66, no. 8/9, pp. 679–694, Jan. 2017, https://doi.org/10.1108/LR-09-2016-0086.

[29] J. Kim, A. Hardin, and S. Lee, "Factors influencing resistance to hospitality information system change," *J. Hosp. Tour. Insights*, vol. 6, no. 5, pp. 1926–1945, Jan. 2023, https://doi.org/10.1108/JHTI-04-2022-0129.

[30] G. Paré, C. Sicotte, P. Poba-Nzaou, and G. Balouzakis, "Clinicians' perceptions of organizational readiness for change in the context of clinical information system projects: insights from two cross-sectional surveys," *Implement. Sci.*, vol. 6, no. 1, p. 15, 2011, https://doi.org/10.1186/1748-5908-6-15.

[31] N. L. Atkinson, "Developing a questionnaire to measure perceived attributes of eHealth innovations," *Am. J. Health Behav.*, vol. 31, no. 6, pp. 612–621, 2007, https://doi.org/10.5555/ajhb.2007.31.6.612.

[32] T. S. H. Teo, M. Tan, and W. K. Buk, "A contingency model of Internet adoption in Singapore," *Int. J. Electron. Commer.*, vol. 2, no. 2, pp. 95–118, 1997, https://doi.org/10.1080/10864415.1997.11518310.

[33] M. F. Hassan and A. Shukri, "The Mediating Effect of Top Management Support on the Relationship between Organizational Culture and Enterprise Risk Management Effectiveness among Malaysian Public Listed Companies: A Conceptual Framework," *Res. J. Financ. Account.*, vol. 10, no. 2, pp. 103–111, 2019, https://doi.org/10.716/RJFA/10-2-11.

[34] J. Hair, G. T. M. Hult, C. Ringle, and M. Sarstedt, *A primer on partial least squares structural equation modeling (PLS-SEM)*, 2nd ed. Los Angeles: SAGE, [Online]. https://uk.sagepub.com/en-gb/eur/a-primer-on-partial-least-squares-structural-equation-modeling-pls-sem/book270548 (Accessed Date: January 17, 2026).

[35] C. Fornell and D. F. Larcker, "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *J. Mark. Res.*, vol. 18, no. 1, pp. 39–50, 1981, https://doi.org/10.2307/3151312.

[36] R. B. Kline, *Principles and practice of structural equation modeling*. New York: The Guilford Press, 2023, [Online]. https://www.guilford.com/books/Principles-and-Practice-of-Structural-Equation-Modeling/Rex-Kline/9781462551910 (Accessed Date: January 17, 2026).

[37] A. Diamantopoulos and J. A. Siguaw, "Formative Versus Reflective Indicators in Organizational Measure Development: A Comparison and Empirical Illustration," *Br. J. Manag.*, vol. 17, no. 4, pp. 263–282, Dec. 2006, https://doi.org/10.1111/j.1467-8551.2006.00500.x.

[38] J. J. Cohen, *Statistical power analysis for the behavioral sciences*, 2nd ed. Hillsdale, N.J.: L. Erlbaum Associates, 1988, [Online]. https://www.taylorfrancis.com/books/mono/10.4324/9780203771587/statistical-power-analysis-behavioral-sciences-jacob-cohen (Accessed Date: January 17, 2026).

[39] T. Ramayah, J. Cheah, F. Chuah, H. Ting, and M. A. Memon, "Partial least squares structural equation modeling (PLS-SEM) using smartPLS 3.0," in *An Updated Guide and Practical Guide to Statistical Analysis*, Pearson., 2018, [Online]. http://smartpls.com/documentation/literature/books/ (Accessed Date: January 17, 2026).

[40] E. D. Lestari, N. A. Hamid, N. Rizkalla, P. Purnamaningsih, and S. B. T. Urus, "The Effect of Financial Literacy, Cost of Technology Adoption, Technology Perceived Usefulness, and Government Support on MSMEs' Business Resilience.," *Glob. J. Bus. Soc. Sci. Rev.*, vol. 10, no. 3, 2022, https://doi.org/10.35609/gjbssr.2022.10.3(3).

[41] E. K. Ghani, M. M. Ali, M. N. Musa, and A.

A. Omonov, "The Effect of Perceived Usefulness, Reliability, and COVID-19 Pandemic on Digital Banking Effectiveness: Analysis Using Technology Acceptance Model," *Sustainability*, vol. 14, no. 18. 2022. https://doi.org/10.3390/su141811248.

[42] J. Luo, S. F. Ahmad, A. Alyaemeni, Y. Ou, M. Irshad, R. Alyafi-Alzahri, G. Alsanie, and S. T. Unnisa, "Role of perceived ease of use, usefulness, and financial strength on the adoption of health information systems: The moderating role of hospital size," *Humanit. Soc. Sci. Commun.*, vol. 11, no. 1, pp. 1–12, 2024, https://doi.org/10.1057/s41599-024-02976-9.

[43] H. Vo Van, M. Abu Afifa, and I. Saleh, "Accounting information systems and organizational performance in the cloud computing era: evidence from SMEs," *Sustain. Accounting, Manag. Policy J.*, Jul. 2024, https://doi.org/10.1108/SAMPJ-01-2024-0044.

[44] I. Budiherwanto, "The Influence of Artificial Intelligence and the Technology Acceptance Model on Sustainable Financial Governance," *J. Ilm. Manaj. Kesatuan*, vol. 13, no. 3, pp. 1791–1802, 2025, https://doi.org/10.37641/jimkes.v13i3.3256.

[45] A. Lutfi, A. L. Al-Khasawneh, M. A. Almaiah, A. Alsyouf, and M. Alrawad, "Business sustainability of small and medium enterprises during the COVID-19 pandemic: The role of AIS implementation," *Sustainability*, vol. 14, no. 9, p. 5362, 2022, https://doi.org/10.3390/su14095362.

[46] X. Wang and W. Zhu, "Exploring the Relationship Between Accounting Information System (AIS) Quality and Corporate Sustainability Performance Using the IS Success Model," *Sustainability*, vol. 17, no. 4. 2025. https://doi.org/10.3390/su17041595.

[47] S. Hosseinikhah Choshaly, "Applying innovation attributes to predict purchase intention for the eco-labeled products: A Malaysian case study," *Int. J. Innov. Sci.*, vol. 11, no. 4, pp. 583–599, Nov. 2019, https://doi.org/10.1108/IJIS-04-2019-0038.

[48] A. Lutfi, A. Alsyouf, M. A. Almaiah, M. Alrawad, A. A. Abdo, A. L. Al-Khasawneh, N. Ibrahim, and M. Saad, "Factors Influencing the Adoption of Big Data Analytics in the Digital Transformation Era: Case Study of Jordanian SMEs," *Sustainability*, vol. 14, no. 3. 2022. https://doi.org/10.3390/su14031802.

[49] A. Chtioui, I. Bouhaddou, and A. Benghabrit, "From Adopting Industry 4.0 Technologies to Improving Operational Performance in Hospital Supply Chain: The Moderating Effect of HSC Complexity," *Logistics*, vol. 9, no. 2. 2025. https://doi.org/10.3390/logistics9020053.

[50] A. Alghfeli, G. S. A. Khalifa, A. Ameen, and A. Ghosh, "The effect of B2B SERVQUAL on PMC performance: the mediating role of top management support in UAE Executive Council," *Int. J. Recent Technol. Eng.*, vol. 8, no. 4, pp. 2796–2802, 2019, https://doi.org/10.35940/ijrte.D8060.118419.

[51] O. Jayeola, S. Sidek, Z. Abdul-Samad, N. N. Hasbullah, S. Anwar, N. B. An, V. T. Nga, O. Al-Kasasbeh, and S. Ray, "The Mediating and Moderating Effects of Top Management Support on the Cloud ERP Implementation–Financial Performance Relationship," *Sustainability*, vol. 14, no. 9. 2022. https://doi.org/10.3390/su14095688.

[52] J. Dai, F. L. Montabon, and D. E. Cantor, "Linking rival and stakeholder pressure to green supply management: Mediating role of top management support," *Transp. Res. Part E Logist. Transp. Rev.*, vol. 71, pp. 173–187, 2014, https://doi.org/10.1016/j.tre.2014.09.002.

[53] L. Li and X. Wang, "M-Commerce Adoption in SMEs of China: The Effect of Institutional Pressures and the Mediating Role of Top Management," *J. Electron. Commer. Organ.*, vol. 16, no. 2, pp. 48–63, 2018, https://doi.org/10.4018/JECO.2018040103.

[54] E. Entsie, I. B. Hurson, and A. Vaz, "Assessing the mediating role of top management support in the adoption of cloud computing in the public sector: The case of Ghana," *Multidiscip. Sci. J.*, vol. 7, no. 8, p. 2025345, 2025, https://10.31893/multiscience.2025345.

[55] M. F. A. Hassan, A. H. Ngah, and M. B. Y. Tio, "Third-party logistics intention to provide cold transportation services. The mediating effect of top management support and organizational readiness in TOE framework," *OPSEARCH*, vol. 60, no. 4, pp. 1603–1625, 2023, https://doi.org/10.1007/s12597-023-00683-8.

APPENDIX

Table 6. Structural Model Path Coefficients

H	Path	Beta	STD Error	T-Value	P-values	Decision	Confidence Interval		VIF	f^2	R^2
							5.00%	95.00%			
H1	PU -> FS	0.172	0.038	4.518	0.000	Supported	0.108	0.235	1.411	0.361	0.755
H2	PEOU -> FS	0.096	0.047	2.048	0.020	Supported	0.018	0.172	2.271	0.111	
H3	ORR -> FS	0.116	0.043	2.690	0.004	Supported	0.042	0.182	1.829	0.315	
H4	COM -> FS	0.086	0.033	2.630	0.004	Supported	0.033	0.139	1.025	0.321	
H5	COX -> FS	0.012	0.035	0.336	0.368	Rejected	-0.066	0.046	1.055	0.001	
H6	TMS -> FS	0.623	0.032	19.177	0.000	Supported	0.571	0.677	1.436	0.596	

Source: Created by Author

Table 8. The results of PLS bootstrapping for the indirect effect

H	Relationship	Path P1 Beta	Path P2 Beta	Path P3 Beta	Indirect P1*P2	Std Error	t value	Confidence Interval		P value	Decision	Is P1*P2 significant?	Is P3 significant?	P1*P2*P3	Mediation size of effect
								Lower	Upper						
H6a	PU -> TMS -> FS	0.440	0.623	0.172	0.274	0.083	3.249	0.063	0.200	0.000	Supported	Yes	Yes	Positive	Complementary (Partial mediation)
H6b	PEOU -> TMS -> FS	0.097	0.623	0.096	0.060	0.042	2.409	0.046	0.306	0.041	Supported	Yes	Yes	Positive	Complementary (Partial mediation)
H6c	ORR -> TMS -> FS	0.002	0.623	0.116	0.001	0.078	0.602	-0.068	0.089	0.483	Rejected	No	Yes	Positive	Direct only (No mediation)
H6d	COM -> TMS -> FS	0.044	0.623	0.086	0.028	0.046	1.949	0.002	0.110	0.197	Rejected	No	Yes	Positive	Direct only (No mediation)
H6e	COX -> TMS -> FS	0.119	0.623	0.012	0.074	0.033	1.851	0.000	0.200	0.001	Supported	Yes	No	Positive	Indirect only (Full mediation)

Source: Created by Author

Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

The authors equally contributed in the present research, at all stages from the formulation of the problem to the final findings and solution.

Sources of Funding for Research Presented in a Scientific Article or Scientific Article Itself

No funding was received for conducting this study.

Conflict of Interest

The authors have no conflicts of interest to declare that are relevant to the content of this article.