The Impact of Accounting Information System Usage on Financial Performance of SMEs: The Moderating Role of Firm Age and Resource Acquisition

Aliaa Abdelbadea mohammed elfedawy

Lecturer in Business faculty – Delta university

Alya.elfedawwy@yahoo.com

Abstract

To better understand the elements influencing the financial health of Small and Medium-sized Enterprises in Jordan, this study looks at the factors that come before the deployment of Accounting Information Systems (AIS). Thus, the author proposed a unified model that utilized the technology–organization–environment (TOE) paradigm and the Resource Based View to investigate the effects of AIS adoption among Jordanian SMEs. The proposed method combines the components of efficacy and application of AIS into a unified framework. Furthermore, firms that acquire resources with the passage of time may have more opportunity to invest in accounting information system. A questionnaire survey that participants self-administered was used to collect the data for the current investigation. The study model was verified using information gathered from 384 respondents in an actual setting of Jordanian SMEs. The results showed the significance of various factors, including the relative benefit of using AIS, compatibility of using AIS, commitment of using AIS, organizational readiness of using AIS, and competitive pressure of using AIS on the financial performance of SMEs. In addition to that AIS usage impact over financial performance increases with the age of the SME. The findings of the study identified the importance about the use of AIS to boost productivity.

Keywords: Accounting information system, Resource acquisition, Firm age, Financial performance.

Introduction

Enterprises in the current era can handle the long term and short-term challenges with the help of Accounting Information System (AIS). AIS offer important knowledge for monitoring as well as control purposes (Ahmad & Al-Shbiel, 2019). AIS is helpful in strategic planning for the

businesses operating in a competitive environment (Alkhuzaie, et al., 2024). Since the arrival of Information technology (IT) enterprises are finding IT-based solutions for gaining competitive advantage through the utilization of innovative solutions (Khan, Asad, Khan, Asif, & Aftab, 2021). These solutions allow AIS to gather and communicate data for achieving superior financial performance of Small and Medium Enterprises (SMEs) (Ullah, et al., 2021). In terms of how accounting-based tasks are carried out, IT now operates as a comprehensive and integrated tool for the Jordanian SMEs (Ahmad & Al-Shbiel, 2019).

It is valuable to businesses in general and (SMEs) in particular because it may enhance accounting functions (Sulaiman & Asad, 2023). When IT is used properly, managers can have guaranteed access to accurate and timely accounting reports and financial data that is reflected in the impact of their decisions and operations on financial performance of their SMEs (Asif, Asad, Kashif, & Haq, 2021). The persistent concern for SMEs' existence stems from their growing importance to national economies (Khushi, din, & Sulaiman, 2020). SMEs need to step up their efforts to increase their productivity and competitive advantages because they constitute a vital component of the economies of most of the countries (Asad, Asif, Bakar, & Altaf, 2021). Researchers stressed that one key factor that separated a successful SME from a failure one about these concerns was the way the SME used AIS (Gofwan, 2022).

Prior research has indicated that an SME's primary information sources are financial outcomes (reports) and accounting performance (Hla & Teru, 2015). The tasks of gathering, processing, and storing accounting and financial data as well as producing informative reports intended For those who make decisions (management or other interested parties), accounting information systems (AISs) serve as IT/AIS tools. (Anggraeni & Winarningsih, 2021). Therefore, using sufficient and superior AIS and financial reporting systems would make it possible for SMEs to accomplish their objectives more profitably and successfully. Computerized AIS has revolutionized the supply and management of artificial intelligence and money data as the possibilities of IT have grown (HA, 2020).

In line with other developing nations worldwide, SMEs in Jordan utilize AIS at a comparatively low degree despite heavily relying on IT for their day-to-day operations. It has been observed that only about 14% of Jordanian SMEs have AISs for internal reporting purposes (Lutfi, Al-

Okaily, Alsyouf, Alsaad, & Taamneh, 2020). The limited use of IT/AIS to support corporate operations, particularly accounting processes, has made it more difficult for businesses to strengthen their competitive advantages and properly utilize their assets which negatively influence their performance (Damer, Al-Znaimat, Asad, & Almansour, 2021).

Furthermore, poor data quality resulted from the limited use of AIS, will ultimately negatively influence decision-making (Ta'Amnha, Magableh, Asad, & Al-Qudah, 2023). Thus, in certain respects, the limited use of IT/AIS-related solutions has retarded Jordanian SMEs' ability to gain or retain their competitiveness or boost organizational efficiency (Majali, Alkaraki, Asad, Aladwan, & Aledeinat, 2022). In this regard, several studies have demonstrated that a deficiency of precise financial data and accounting records is among the primary reasons SMEs fail (Asad & Kashif, 2021). Several academics from many countries contend that inadequate accounting records are one of the main causes of SMEs' failure.

According to some researchers, upgrading accounting systems can lead to better financial management and bookkeeping, which can help resolving the issue of SMEs failure. The most obvious difference between SMEs that succeed and those that fail is how they manage and utilize accounting data (Sulaiman & Asad, 2023). An essential instrument for supporting and streamlining a variety of business operations is artificial intelligence and big data (Asad, Majali, Aledeinat, & Almajali, 2023). AIS is widely acknowledged as an effective way to guarantee survival of SMEs through attaining long-term competitiveness (Anwar & Shah, 2020). When utilized effectively, AIS can analyse accounting data, provide timely and high-quality financial reports, and give SME owners and managers the input they need to make better decisions and have an impact on performance assessment (Anwar & Shah, 2020).

Employing AIS effectively is crucial for businesses as it allows them to cut expenses, boost revenue over time, become more competitive, and boost productivity (Peter, et al., 2018). Effective AIS may, therefore, result in increased user satisfaction in a given system, which has a favorable effect on overall operations (Anggraeni & Winarningsih, 2021). Although producing accounting reports through AIS is thought to improve performance, not all SMEs in Jordan generate them, according to several research carried out in the country—the inadequate quality of information obtained from Jordanian SMEs' use of AIS. Only 14% of SMEs in Jordan

prepared AIS internally using accounting software (Lutfi, Al-Okaily, Alsyouf, Alsaad, & Taamneh, 2020).

There are currently no empirical studies or a common opinion on how SMEs might evaluate the possible benefits and impacts of AIS, even though AIS has been studied extensively from the perspective of SMEs in developed countries (Al-Hattami, et al., 2022; Al-Hattami, 2022). Despite the potential of AIS, more work needs to be done to justify, demonstrate, and prove its effectiveness and value for the SMEs in Jordan. Therefore, it is essential to carry out additional research to comprehend the potential of the topics associated with AIS utilization and its efficacy among SMEs (Bartolacci, Caputo, & Soverchia., 2020). Moreover, despite the extensive corpus of information on AIS during the phases of adoption and pre-adoption, the post-adoption stage of this system (utilization and implementation challenges) continues to receive less attention, especially in developing nations (Hammami , Ahmed , Johny, & Sulaiman, 2021). Consequently, in a booming economy like Jordan, which is also regarded as a hub for SMEs, Further study is necessary to completely comprehend the effects of AIS usage (post-adoption stage) in SMEs, with a focus on the implications of development and full-scale deployment on AIS efficiency. (Majali, Alkaraki, Asad, Aladwan, & Aledeinat, 2022; Alkhuzaie, et al., 2024).

Furthermore, according to the RBV, businesses possess unique resources that ought to be fully leveraged to gain a competitive edge (Damer, Al-Znaimat, Asad, & Almansour, 2021). Not every player will always share this presumption, and SMEs might not always fall into this category. SMEs often have limited resources due to their age, namely in terms of financial and technological expertise (Asad, Aledeinat, Majali, Almajali, & Shrafat, 2024). SMEs are unable to efficiently use their resources due to these limitations. The impact of AIS/IS varies considerably with firm age (Asad, Aledeinat, Majali, Almajali, & Shrafat, 2024).

The current study challenges the assumption that SMEs are a homogeneous collection of enterprises, even though most AIS/IT studies have assumed this. It examines whether AIS usage differs depending on age because of acquisition of resources while distinguishing between older and younger firms. Therefore, more focus should be placed on how age of SMEs influences the connection between AIS usage and financial performance specifically in the context of Jordan.

Literature Review

Due to the extensive benefits that AIS provides, many businesses are trying to make use of these advantages, and the SME sector is not an exception (Asatiani, Apte, Penttinen, Rönkkö, & Saarinen, 2019). Systems known as AIS gather, store, record, and interpret data to provide reports and information that are helpful to management and decision-makers (Asad, Altaf, Israr, & Khan, 2020). Managers can utilize this information to improve controlling and planning tasks and to lessen uncertainty in decision-making.

The advantages that SMEs have gained by employing an AIS have been acknowledged by numerous studies. An SME can improve and grow its sales and revenue as well as improve customer service with the use of AISs. It has been discovered that AIS improves the effectiveness of corporate management by providing all kinds of knowledge and supporting decision-making tasks required by internal and external users (Xie, Z., Qalati, et al., 2023). Scholars have attempted to ascertain the nature of the connection between company performance and AIS usage in a more comprehensive setting. The application of AIS reduced mistakes, increased user happiness, and enhanced information availability. However, there is still not much research that focuses on how (Al-Hattami & Kabra, 2022)AIS utilization affects AIS effectiveness.

One of the most often utilized dependent variables (constructs) in the context of AIS studies is the idea of AIS efficacy (Lutfi, Al-Okaily, Alsyouf, Alsaad, & Taamneh, 2020; Ullah, et al., 2021). The extent to which AIS helps a company achieve its goals is what determines how effective it is. However, because different works define and conceptualize AIS efficacy differently, the AIS literature continues to struggle with the question of which characteristic has the greatest impact on AIS (Hla & Teru, 2015; Riphah, Ali, Danish, & Sulaiman, 2022).

Across the world, practitioners and academic researchers alike are becoming concerned about the efficacy of AIS (Fatima, Ishtiaq, & Javed, 2021; Zuhaib , Wenyuan, Sulaiman, Siddiqu, & Qalati, 2022). Previous studies have investigated several variables that are assumed to affect AIS effectiveness (Anna, Eka, & Zaky, 2020). However, this study has identified a critical gap—that is, not many works have attempted to understand how AIS usage affects AIS effectiveness—based on an analysis

of the available literature (Baah, Jin, & Tang, 2020). Therefore, it makes perfect sense to investigate the relationship between AIS efficacy and usage in Jordanian SMEs, as well as the potential influence of company size on this relationship.

Use of Accounting Information System

How much data processing and decision-making is done by computer-based systems when managing and coordinating organizational activities is known as artificial intelligence application (AIS) (Al-Hattami, 2022). Organizations that effectively employed an AIS were more likely than other organizations to use an AIS sparingly to demonstrate the substantial effects of an AIS on financial performance of Jordanian SMEs. The TOE suggests that the degree to which an AIS is utilized to carry out company operations determines a technology's influence (Anna, Eka, & Zaky, 2020; Fatima, Ishtiaq, & Javed, 2021). To understand how this usage affects the effectiveness of the AIS, enterprises must first use an AIS (Anggraeni & Winarningsih, 2021; Gofwan, 2022). The RBV theory is used in the current study to propose that there is a connection between the use of AIS and its effects (Cram, Wang, & Yuan, 2923). As a result, it is projected that an efficient AIS might raise system user satisfaction, which would then have an impact on an organization's overall operations and performance in the long run.

The Contingent Role of Resource Acquisition with Firm Age on the Association Between the Usage of AIS and Performance of SMEs

According to Resource Based View viewpoint, a firm's acquisition of resources may be dependent on the age of the SMEs and may have an impact on how AIS affect competitiveness influence financial performance of SMEs. One of the many variables that can affect performance is firm age (Abdi, Li, & Càmara-Turull, 2022). Older businesses are generally more likely to employ AIS extensively. Because of the use of IS/AIS, age is therefore a crucial factor impacting performance (Huang, et al., 2022; Asad, Asif, Sulaiman, Satar, & Alarifi, 2023). Computer systems are used by younger businesses for shorter durations of time than by older businesses (Eldridge, Nisar, & Torchia, 2021). Because older companies have greater resources and more established organizational structures than younger ones, computerization efforts in older companies are more likely to succeed (Asad, Aledeinat, Majali, Almajali, & Shrafat, 2024).

Since older firms are more capable and resourceful, there is a correlation between firm age and IS/AIS effectiveness (Ramadani, et al., 2019; Asad & Ahmed, 2024). This is because older businesses tend to be more risk-tolerant and frequently form tight ties with suppliers and customers (Riphah, Ali, Danish, & Sulaiman, 2022). Growing also gives a company more financial power, human capital, and management know-how to enter new markets and areas of business (Bilal & Sulaiman, 2021). Moreover, compared to younger organizations, older firms use IS at a more sophisticated level (Salem, Alanadoly, & Sulaiman, 2023). The complexity of the production processes has expanded because of these changes, raising more managerial problems (Asif, Asad, Bhutta, & Khan, 2021; Qalati, Ostic, Sulaiman, Gopang, & Khan, 2022). For older businesses to be more successful in producing a wide range of both non-financial and financial data, AIS must be used extensively.

As a result, the impact of IS/AIS on performance is more pronounced in older businesses, which ought to have more backing from the administration and possess more advanced infrastructure, resources, and other means to enable AIS utilization to maximize performance (Zhou, Mavondo, & Saunders, 2019; Asad, et al., 2024). The effect of IS/IT on performance increases with a company's age. Based on this perspective, the argument suggests that managers at older companies will be more receptive to the use of AIS, which will ultimately result in increased AIS efficacy.

Theoretical Framework and Rational for the Study

The utilization and impacts of AIS are examined in the current study from an organizational standpoint. Previous IT/IS research in this area has looked at the topic from two separate angles. The initial analysis focused over the reliability and validity of the instrument however the second step focused over internal model for analysing the hypothesis.

In the initial step, reviewed literature suggested that the TOE model provides helpful framework for examining AIS usage in decisions (Zhang, Sun, Yang, & Wang, 2020; Satar, Alharthi, Asad, Alenazy, & Asif, 2024). TOE model is useful to determine types of components like technological, organizational, and environmental which are commonly used by the businesses (Moradi & Nia, 2020; Qalati, Qureshi, Ostic, & Sulaiman, 2022). Furthermore, researchers have expanded TOE model by including and accounting for the impact of technology use (Khobi, Mtebe, &

Mbelwa, 2020). The framework has been developed with the help of RBV. According to RBV enterprises can achieve competitive advantage by adding value through the combination of resources that are difficult for the others in the same industry (Asad, Majali, Aledeinat, & Almajali, 2023).

Hence, TOE and RBV, the two most commonly used theories have been used in the current research to support the IT/IS variables in the current research framework. This article has also modified their theoretical frameworks to evaluate the applications and effects of AIS on Jordanian SMEs. This study, hence, investigated the factors that affect SMEs' use of AIS in various circumstances and the effects of use of AIS and its efficacy, utilizing the information gathered from the literature review. A model was created following a review of previously researched variables, and it acted as a roadmap for this investigation. (See Figure 1).

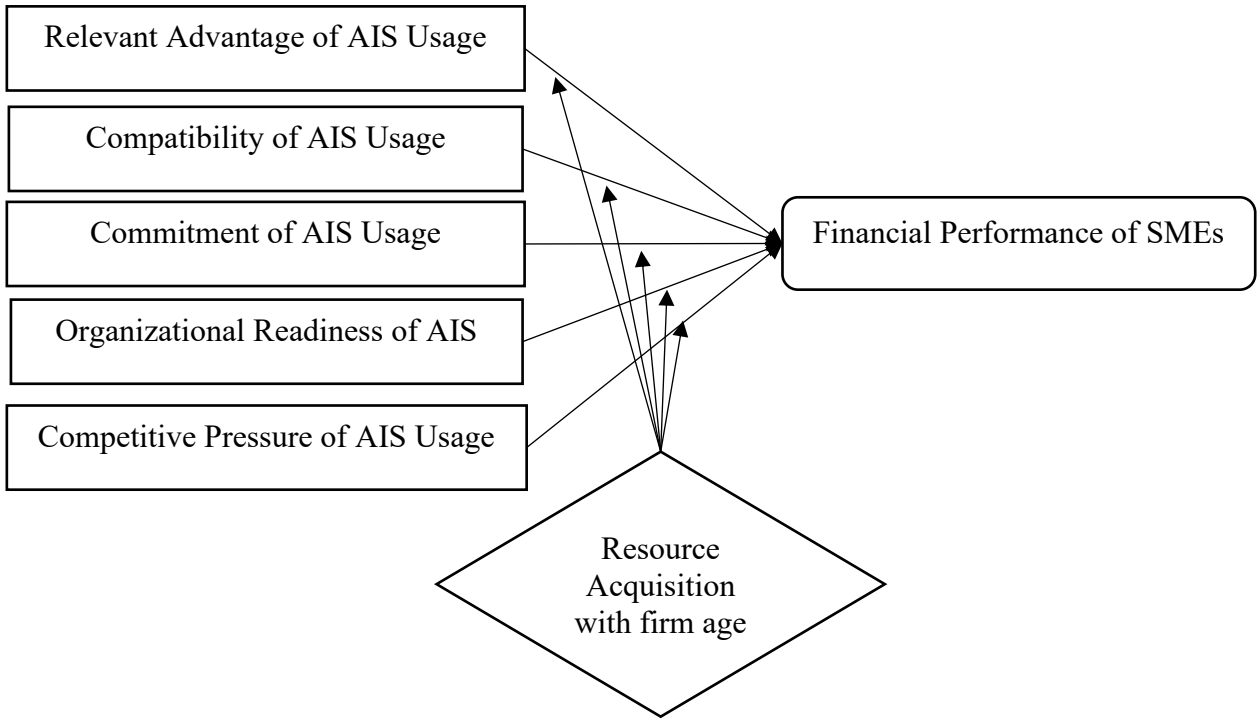

Figure 1 Research Framework

Methodology

The purpose of the study was to identify the impact of AIS usage on the financial performance of SMEs. Since the focus of this study is on how a firm perceives its use of AIS, thus, the unit of analysis is organization represented the owners and managers who were the respondents. This is because a manager is usually the SME's owner and would probably be involved in decisions about AIS usage. The data has been collected by utilizing a survey technique.

The study consisted of seven sections: Relevant advantage of AIS usage, compatibility of AIS usage, Commitment of AIS usage, Organizational readiness of AIS usage, and competitive pressure of AIS Usage, were considered as independent variables, whereas, resource acquisition with firm age was considered as a moderating variable and financial performance was considered as a dependent variable. The items were adopted from the prior studies. All the independent variables were adopted from Sori (2009) and Al-Hattami and Kabra (2022). The items for measuring the moderating variable were adopted from Asad, Aledeinat, Majali, Almajali, and Shrafat (2024). Finally, the items for measuring financial performance of SMEs were adopted from Asif, Asad, Kashif, and Haq (2021). The questionnaire was self-administered to obtain data. All major latent components were measured using a 5-point Likert- scale that was modified from earlier research.

Examining the impact of AIS usage on financial performance of SMEs, the current study uses enterprises listed in Amman Chamber Industry Directory as a sampling frame. A probability sampling technique has been applied for choosing the respondent firms from the list provided by Amman Chamber of Commerce and Industry. 941 SMEs that were taken from the sample frame found in the directory were given the questionnaire by hand by the researchers. Phone calls were made to the SMEs whose surveys were still unanswered after these four manual delivery mailings. Following multiple follow-up procedures, 384 were determined to be genuine in total. 40.08% was the effective response rate. For a model with five independent variables, one moderating variable and one dependent variable the number of valid responses met the minimal sample criterion of 384 responses, which allowed for additional analysis using the partial least square (PLS-SEM) technique (Hair et al., 2014).

Analysis and Findings

The PLS-SEM method was employed in this study to evaluate the hypothesis. Multiple variables can be evaluated simultaneously in a single model thanks to the multivariate statistical technique known as Partial Least Squares (PLS-SEM). This method also performs well with relatively smaller sample sizes and sophisticated models with several latent variables and moderating variables. For the previously indicated reasons, PLS was preferred over other techniques for data analysis in the present investigation for assessing the theories that were put forth. This is a result of the moderating variables included in the suggested model, which raise model complexity. Furthermore, the study's sample size of 384 was within the suggested range for research in the social sciences. The combination of TOE and RBV necessitates the employment of a path modelling technique because several academics have recommended using the PLS-SEM approach when a the study is either an expansion of an existing theory or prediction-focused.

Assessment of Measurement Model

An important phase in the PLS-SEM approach is the evaluation of the measurement model, also known as the outer model. This evaluation helps determine the reliability or unreliability of the observed indicator constructs. This in turn limits the ability to further assess the structural model (inner model) if it turns out to be faulty. The validity and reliability of the items and constructs are assessed by the measurement model.

Cronbach's alpha (CA) and composite reliability (CR) were used to measure the constructs' dependability. All of the constructs' CA and CR findings were above the cut-off value of 0.70, demonstrating the constructs' appropriateness and internal consistency (Hair, Sarstedt, Ringle, & Mena, 2012). Using average variance extracted (AVE), convergent validity was shown. All the constructs' AVE values are greater than 0.50, proving the measuring model's convergent validity (Hair, Hult, Ringle, & Sarstedt, 2017). All factor loadings must be more than 0.70 to attain indication reliability (Hair, Hult, Ringle, & Sarstedt, 2017). According to Table 1, all loadings are more than 0.70, indicating that the reliability criteria were met. Additionally, by comparing the AVE squared roots and the correlation between the constructs, the discriminant validity of the constructs was demonstrated using the Fornell-Larcker criterion (Henseler, Ringle, &

Sarstedt, 2015). The AVE squared root of each variable (diagonal line) was greater than the correlation between the variables. As a result, the construct's discriminant validity is verified. Upon consideration of all the indicators, it can be concluded that the measurement model satisfies the criteria for discriminant validity, convergent validity, and reliability at the construct and item levels. It is therefore safe to move on with evaluating the structural model and verifying the proposed theories. The outcomes validate the measuring model's construct validity and reliability. As a result, using the constructs to evaluate the structural model was safe. Loadings of Table Items Average Variance, Composite Reliability, and Cronbach's Alpha were extracted.

Table 1 Item Loadings, Reliability, and Validity

Variable	Items	Loadings	Cronbach's Alpha	Composite Reliability	AVE
Relevant Advantage of AIS Usage	RAAISU1	0.807	0.765	0.769	0.524
	RAAISU2	0.863			
	RAAISU3	0.899			
	RAAISU4	0.837			
	RAAISU5	0.857			
	RAAISU6	0.897			
Compatibility of AIS Usage	CAISU1	0.809	0.780	0.718	0.636
	CAISU2	0.855			
	CAISU3	0.873			
Commitment of	COAISU1	0.849	0.823	0.736	0.519

AIS Usage	COAISU2	0.807			
	COAISU3	0.853			
Organizational Readiness of AIS Usage	ORAIS1	0.880	0.833	0.745	0.585
	ORAIS2	0.857			
	ORAIS3	0.844			
	ORAIS4	0.849			
	ORAIS5	0.801			
Competitive Pressure of AIS Usage	CPASI1	0.778	0.723	0.718	0.527
	CPASI2	0.768			
	CPASI3	0.826			
	CPASI4	0.757			
	CPASI5	0.817			
	CPASI6	0.810			
Resource Acquisition with Firm Age	RAFA1	0.779	0.785	0.764	0.564
	RAFA2	0.739			
	RAFA3	0.892			
Financial Performance of	FPSMEs1	0.703	0.756	0.723	0.598
	FPSMEs2	0.849			

SMEs	FPSMEs3	0.923			
	FPSMEs4	0.834			
	FPSMEs5	0.756			
	FPSMEs6	0.758			
	FPSMEs7	0.881			
	FPSMEs8	0.810			
	FPSMEs9	0.779			

The findings of the discriminant validity are mentioned in the table 2 below

Table 2 Discriminant Validity

Variables	1	2	3	4	5	6	7
1 Relative Advantage of AIS Usage	0.851						
2 Compatibility of AIS Usage	0.631	0.858					
3 Commitment of AIS Usage	0.602	0.702	0.787				
4 Organizational Readiness of AIS	0.659	0.613	0.548	0.828			
5 Competitive Pressure of AIS	0.583	0.594	0.528	0.621	0.831		
6 Resource Acquisition with	0.502	0.606	0.693	0.701	0.653	0.82	

firm age						7	
7 Financial Performance of SMEs	0.497	0.634	0.581	0.643	0.651	0.593	0.907

Assessment of Structural Model

The structural model (inner model) is evaluated in the PLS-SEM analysis after the measurement model (outer model) has been analysed. In fact, for models with and without the presence of a moderator, the character of the relationships between correlations between both autonomous and reliant variables varies. Since one objective of the current study is to determine the significance of the primary correlations between AIS usage and financial performance of SMEs, PLS analysis should be carried out without the moderator first. The results are listed in the table.

Table 3 Path Coefficients Direct Effects

Path Coefficients	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Relative Advantage -> FPSMEs	0.264	0.266	0.118	2.242	0.025
Compatibility -> FPSMEs	0.631	0.634	0.139	4.546	0.000

Commitment -> FPSMEs	0.536	0.541	0.135	3.962	0.000
Organizational Readiness -> FPSMEs	0.167	0.168	0.079	2.112	0.035
Competitive Pressure -> FPSMEs	0.707	0.715	0.174	4.063	0.000

After ensuring the direct effects the interaction term was introduced in the model to analyse the moderating effect of resource acquisition with firm age. Table 4 demonstrates the results.

Path Coefficients	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Moderating Effect 1 -> FPSMEs	0.264	0.254	0.118	2.239	0.025
Moderating Effect 2 -> FPSMEs	0.551	0.541	0.180	3.061	0.004
Moderating Effect 3 -> FPSMEs	0.357	0.354	0.163	2.193	0.028

Moderating Effect 4 -> FPSMEs	0.536	0.522	0.107	5.010	0.000
Moderating Effect 5 -> FPSMEs	0.551	0.547	0.180	3.061	0.004

To further ensure the effect of the moderating variable i.e. resource acquisition with firm age, effect size has also been calculated. If the calculated value of f is equal to or above 0.15, it is suggested that the effect is moderate; however, a value above 0.35 shows a large effect size. The effect size is calculated by dividing the difference in r2 with and without moderator by 1 minus moderator included in the model. The calculated value is 0.181 which shows that effect size of the moderator is unignorable. After ensuring that all the moderating effects are significant. The predictive relevance of the model was analysed using blindfolding technique.

	SSO	SSE	Q^2(=1-SSE/SSO)
Financial Performance of SMEs	900	613.791	0.318

The findings of the blindfolding revealed that the model holds strong predictive relevance as the calculated value is above 0.3 (Joseph F. Hair, Hult, Ringle, & Sarstedt, 2013).

Discussions and Conclusions

In this study, the components of AIS (perceived impact) and their effectiveness were studied from an organizational perspective, as it lacks a theoretical foundation from that perspective. Because of this, the current study offered an integrated model that used the TOE framework is used to describe AIS usage, and the RBV hypothesis is used to explain the relationship between AIS usage and perceived harms. The study concludes that relative advantage of AIS usage, compatibility of AIS usage, commitment of AIS usage, organizational readiness of AIS usage, and

competitive pressure of AIS usage were important antecedents of AIS usage among the TOE factors based on the statistical analysis results.

As previously said, of all the TOE elements seen in this study as prescribed by AIS, all the variables having a great and significant impact on the financial performance of SMEs in the technological domain. According to this finding, businesses typically employ AIS more widely when they believe it to be extremely well matched with their current IT infrastructure, work procedures, and business practices. However, both TOE's forecast and earlier research that demonstrated resource acquisition had a significant impact on several other IT/IS applications (Cram, Wang, & Yuan, 2923). Nonetheless, the results are consistent with earlier research that indicated resource acquisition as a moderator holds a significant moderating role (Asad, Aledeinat, Majali, Almajali, & Shrafat, 2024).

One reason for this could be that, despite the varying affordability of SMEs, AIS appears to be accessible now (Al-Hattami, 2022). This could be the result of intense competition driving down the cost of various AISs over time. Therefore, an owner or manager of an SME would be inspired and encouraged to adopt a system regardless of any benefits and advantages considered due to the inexpensive and convenience of possession of AIS as well as the desire to mimic rivals in related industries (Asad, et al., 2021).

Businesses that possess higher levels of resources due to more age are more likely to use AIS to a larger extent. Previous research has indicated that a SME's adoption and use of IS/IT would be influenced by their age in AIS usage and their understanding of its significance. These findings provide strong support for this conclusion. Similarly, the results demonstrated that SMEs with greater resources also tended to adopt AIS more widely. Businesses are therefore, encouraged to utilize AIS to boost their performance, but the successful implementation of AIS is confirmed by the resources' preparedness and accessibility (financial and technical). As a result, this study highlights how SMEs that have increased preparedness and resources—both human and equipment—utilize AIS more frequently which are mostly gained with the age.

One plausible explanation for this result is that, when looking for guidance and assistance on AIS-related issues, SMEs appear to favour formal forms of networking, such as government networks, over informal forms of

networking. The Jordanian government is actively working to encourage the use of accounting software, such as AIS, through several initiatives and incentives. Additionally, the government offers reasonably priced services for advice and consultation, which may contribute to the decreased reliance of SMEs on unofficial networks.

Fascinatingly, the results showed proof that AIS effectiveness is significantly influenced by AIS usage. According to the results, SMEs who use AIS more frequently likely to get more value out of it, which is consistent with the RBV theory's prediction. This result is consistent with several other research in many IS/IT technology sectors that showed high IS/IT utilization strongly affects the significance and effects of technology, hence validating the RBV theory prediction.

To investigate the above hypotheses, the moderation analysis of resource acquisition with firm age was evaluated. Nonetheless, the moderating effect of resource acquisition with firm age between AIS usage and performance was verified, in line with earlier predictions. The results of the moderation analysis showed that resource acquisition with firm age had a substantial impact on the relationship between AIS utilization and performance. For older enterprises compared to younger firms, the impact of AIS usage on performance was comparatively higher. The previous study provided support for this conclusion. This assumes that the performance of Jordanian SMEs is impacted using AIS. A plausible explanation for this positive correlation could be that an organization's reliance on information flow may grow and its job coordination may get more complex as it gets older. This raises the need for information that is more accurate and timelier. This would therefore result in the efficient use of AIS to gather enough data.

Implications

The current study provides thorough information on the factors influencing the use of AIS among Jordanian SMEs, the impact of AIS usage that maximizes its value (AIS effectiveness) to the firms, and the moderating role of resource acquisition with company age on the aforementioned linkages. Few studies are especially focused on the topic of AIS, despite the abundance of research on the use of AIS/IT applications. The results of this study have many theoretical and practical implications for the performance of SMEs and AIS.

In theory, the study provides researchers with a verified model of the causes and effects of AIS usage. As a result, the study supports the value of RBV theory and TOE frameworks for organizational research. Thus, the current study is in favour of using RBV as the theoretical basis for investigations into the effects and worth of AIS. The new study also builds on earlier research on the assessment of AIS/IT usage, which did not consider the whole impact of AIS/IT developments in addition to utilization. The explanatory and predictive powers of the TOE model and RBV theory might be strengthened by combining TOE and RBV into a single study model to examine the use and effects of different kinds of technology. This would also result in discoveries that would be beneficial to academics and practitioners alike. Additionally, it was argued in the current study that business size influences the relationship between AIS efficacy and usage. In this study, the moderating effect of firm size was only strongly supported ($p < 0.10$). This result has a thought-provoking theoretical implication. Although business size is referenced in the literature as one antecedent of AIS usage and AIS effectiveness, there has been little empirical research that particularly examines the moderating effect of firm size across innovation studies. This report presents empirical evidence regarding the moderating effect of firm size. This suggests that AIS effectiveness and usage are influenced by the size of the firm, among other significant variables.

The study's findings also have several significant ramifications for SME managers, practitioners, business executives, and policymakers who wish to know why Jordanian SMEs use AIS less frequently than their bigger counterparts. More concentrated efforts should be made to inform firms about the importance of formal networking support, such as government agencies, financial institutions, IT consultants, and SME advisory centres, to facilitate AIS usage, as firm respondents indicated that both RA and IN played insignificant roles. Furthermore, the established and verified model aids SMEs in determining the elements that are more crucial in encouraging AIS usage and how that usage affects AIS efficacy. They can focus on the possible effects of AIS usage on a corporation that they might have overlooked in the past thanks to the model. They can use this to support their judgments regarding AIS efforts and to assess the value and impact of AIS. Additionally, small businesses appear to anticipate fewer advantages from AIS implementation in their processes than medium-sized

businesses, based on the results of the current study. When compared to medium-sized businesses, fewer smaller businesses are efficiently utilizing AIS.

From the perspective of a legislator, the state may play a bigger role by assisting small companies and improving their expertise so they can have better access to AIS technologies. The government of Jordan must raise small business owners' understanding of the value of AIS usage and the advantages of putting it into practice. It could be necessary to motivate those businesses to respond to AIS usage more quickly.

Limitations Recommendations and Future Directions

The present study includes limitations, as is typically the case when doing research, which should be considered when interpreting the results. However, these restrictions also present chances for more research to be considered. Initially, SMEs in Jordan's industrial sector participated in this survey. As a result, it's possible that the conclusions cannot be applied to SMEs in other industries or nations. Replicating the research in different industries and nations is one potential area of future investigation. The conclusions of this study could be identical or equivalent if it were replicated in different industries and nations, which would improve knowledge of the usage and impact problem. It would also encourage further verification of the conceptualizations, measurement scales, and applicability of the results. Second, despite multiple follow-up efforts, the study's conclusions were based on a dataset consisting of 186 responses. Greater samples that allow the use of covariance-based SEM in future research could be utilized to validate the study's findings and produce more trustworthy results, even though this sample size was believed to be adequate to evaluate the model fit and proceed with the statistical inferences. Similarly, a bigger sample size would boost confidence in the findings and provide a deeper comprehension of the relationships between the latent variables. Third, because the study only included cross-sectional data, it was not possible to determine a causal relationship between the variables. This restriction may be overcome by using longitudinal data. Ultimately, this research examined the relationship between TOE factors and AIS usage, as well as the relationship between AIS efficacy and usage. To better understand these potential direct links, future research should look at how the TOE variables directly affect IS/IT impacts.

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