

Factors Influencing Accounting Information System Implementation among Small and Medium-Sized Enterprises in Malaysia

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Abstract

This study aims to investigate the factors influencing the implementation of the accounting information system (AIS) among small and medium-sized enterprises in Malaysia. The conceptual framework that is applied in this study is the Technology–Organization–Environment (TOE) model. The factors in this study have been developed into three perspectives, including technological context, organizational context and environmental context. Compatibility and relative advantage are included in the technological context, whereas top management support and competitive pressure are included in the organizational and environmental contexts, respectively. A total of 100 responses were collected. The tests that are utilized to analyse the data are descriptive analysis, correlation analysis, and regression analysis. This study finds that compatibility, relative advantage, top management support and competitive pressure have a significant impact on the implementation of AIS. It is believed that this study has contributed to the knowledge regarding AIS implementation and has provided useful insights for individuals who are willing to incorporate AIS into their business operation.

Keywords: Accounting Information System, Small and Medium-Sized Enterprises, The Technology–Organization–Environment (TOE) Model

Introduction

Accounting plays a crucial role in businesses because it can provide accounting information by preparing financial statements for users such as stakeholders and investors to make decisions. In modern times, the increasing internationalisation and technological advancements has led to an innovation of a system, known as the accounting information system (AIS). The arrival of AIS has assisted the operation of businesses by gathering, organizing, controlling, manipulating, accessing and summarizing the financial data and information (Al-Okaily et al., 2020). AIS is also acknowledged as a valuable instrument for managing both internal and external changes by generating useful information along with analysing the data and transactions. The generated information will then be utilized to schedule, coordinate, and manage organizational activities, which ultimately enhance the performance of the business. Besides, the information can also benefit the financial statement users such as investors to make informed decisions.

The small and medium-sized enterprises (SMEs) play an essential role in developing the economy in a nation. The Second Industrial Master Plan (IMP2) and the Third Industrial Master Plan (IMP3), which began in 2005 and 2006 to 2020 respectively in accordance with Malaysia's 2020 goal, demonstrate the government's dedication to the growth of SMEs. These IMPs were designed to promote the cluster-based industrial developments and the manufacturing sector's expansion along the whole value chain. Therefore, these plans offer chances for SMEs to develop successfully (Saleh and Ndubisi, 2006).

AIS is one of the most widely utilized information systems among the businesses since AIS can relieve the workload of complicated and tedious accounting processes. However, the tremendous progress in technology has made it easier to develop and use accounting information from an operational standpoint. Considering all businesses require the information, SMEs in particular need to emphasize this information to cope with a greater level of unpredictable nature in the competitive market. To fulfil their information requirements adequately, SMEs should enhance their IT infrastructure and information analysis skills. Besides, contributing to employee education and training, strengthening internal procedures and the overall quality of goods along with boosting investment in AIS are the keys to creating durable company culture that can deal with continuous environmental changes (Urquía, Pérez and Muñoz, 2011). However, the problem is that SMEs may not be ready or may not have sufficient resources to implement AIS. This could be due to insufficient capital, lack of awareness of AIS implementation, limited availability of management and technology, poor efficiency, etc (Saleh and Ndubisi, 2006). Based on Mahama and Dahlan (2022), the main reason that cause SMEs become underperforming is poor bookkeeping and accounting standards. In other words, SMEs will not have a proper record of transactions without AIS. The low implementation rate of AIS will affect the contributions of SMEs to Malaysia's economy negatively. Hence, it is vital that SMEs should implement and utilize AIS efficiently and effectively to solve the issue. Therefore, the main objective of this study is to examine the factors that drive the implementation of AIS among SMEs in Malaysia.

Although there are some studies that examine the factors that influence AIS implementation among SMEs, for example in Africa such as Jordan, Ghana, Somalia, etc (Mahama and Dahlan, 2022; Abdinur and Karcioglu, 2023; Al-dmour, Al-dmour and Masa'deh, 2016) and in Malaysia, for example Ismail and King (2014) and Ma et al. (2021). This study extends prior research on AIS implementation among SMEs in Malaysia (i.e. Ma et al., 2021) by employing a newly collected dataset and re-testing the TOE framework in a more recent context. The findings offer updated empirical insights and an independent contribution to the literature.

The factors that will be examined in this study include compatibility, relative advantage, top management support and competitive pressure. Koundal et al. (2024) claimed that AIS is important to SMEs as it can assist SMEs in enhancing decision making, adherence to law and financial operations, which lead to overall development and achievement of SMEs. In other words, AIS can help SMEs to achieve a better performance and make contributions to the country's economic development. Without conducting this research, it is unlikely to find out the factors that can encourage SMEs to implement AIS. Hence, this study is necessary because the findings of this study can raise the usage of AIS among SMEs by identifying the

critical factors to motivate them to implement AIS. It is believed that this study can provide valuable insight on the knowledge on AIS implementation among SMEs in Malaysia.

Literature Review

Theoretical Framework

The Technology–Organization–Environment (TOE) model will be applied in this study. The TOE model was developed by Tornatzky and Fleischer in 1990. In the context of industrial implementation and scale of organization, the TOE model is more flexible and effective than other theories such as Innovation Diffusion Theory which simply takes technological and organizational aspects of technology implementation into consideration (Li et al., 2024). Nguyen, Le and Vu (2022) stated that TOE model incorporates a wide variety of relevant usages due to its capacity to reflect the effects of both internal and external factors on the implementation decisions based on three main contextual aspects, including technology, organization, and environment, which makes it outstanding among other behaviour models. The original TOE model, which was then modified for application in technological implementation research, offers an insightful analytical structure for examining how various information technologies (IT) innovations are embraced and integrated. Although components discovered within the three contexts might be different from other research, the TOE model has a strong theoretical foundation, reliable empirical findings, and the capacity to be implemented in information system (IS) innovation areas (Oliveira and Martins, 2011). The variables of the three aspects are shown in Figure 1.

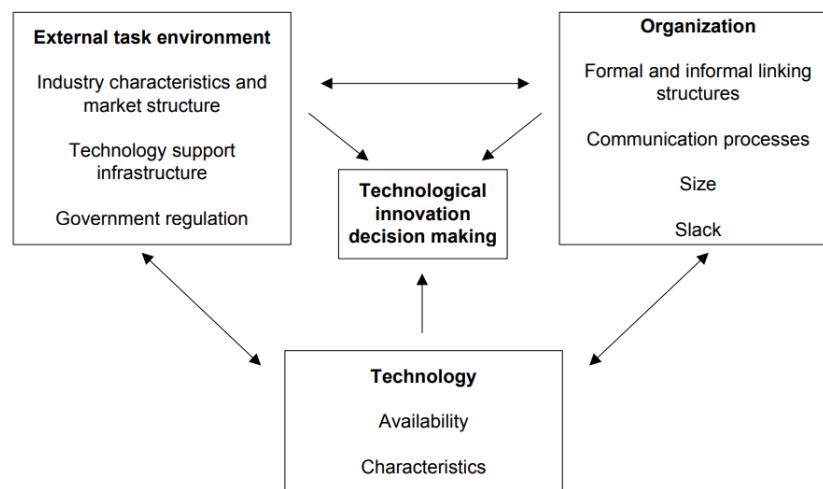


Figure 1 TOE model (Tornatzky and Fleischer 1990)

Using Figure 1 as a foundation, the theoretical framework for this study is shown in Figure 2:

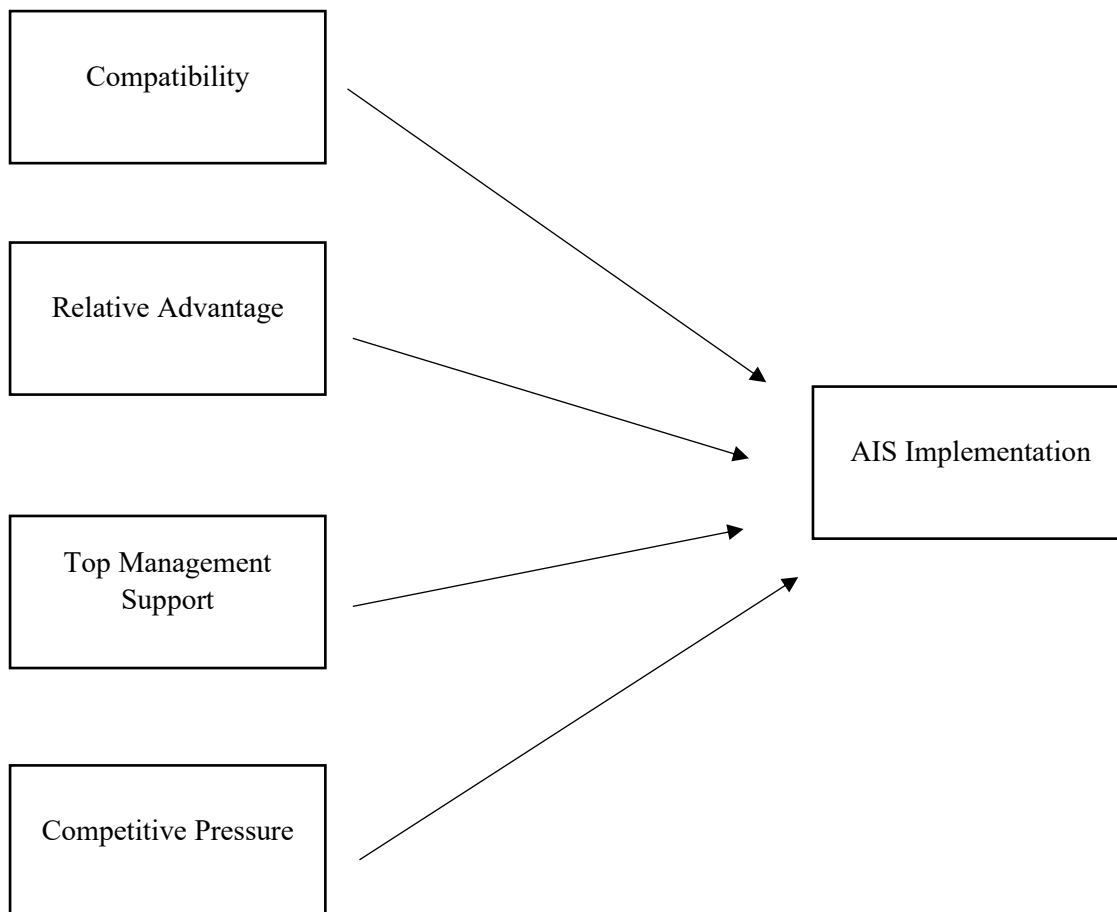


Figure 2 Research Framework

Accounting Information System (AIS)

AIS is defined as a group of instruments and personnel that aim to convert financial and other data into useful information that can be provided to various decision makers. AIS is also a collection of interconnected responsibilities, records, and technological instruments that are intended to gather, analyse, and deliver information to a variety of internal and external decision makers in the company (Fitrios, 2016). Soudani (2012) claimed that AIS is an instrument that is utilized in the IT domain to assist in handling and monitoring issues related to the monetary and financial aspects of a business. AIS is essential for all the businesses (whether profit or non-profit oriented), given that it is the entirety of the related components that are designed to gather information, regardless of whether the data is normal or raw, and then convert it into monetary information to ensure that decision makers have access to it. According to Patel (2015), AIS is also known as a company's information subsystem which collects data from the company's several subsystems and distributes it to the company's information processing subsystem. The primary objective of AIS is to allocate a numerical value to past, present, and future company activities. The financial statements such as statements of profit or loss, balance sheet, and cash flow statements are generated by AIS with the assistance of an automated accounting system. Once the data has been processed, the data will then be converted into accounting information which will be utilized by users in decision-making.

Small and Medium-Sized Enterprises (SMEs)

The term “SMEs” is vaguely defined and has multiple definitions. Ndesaulwa and Kikula (2016) claimed that SMEs do not have a generally common definition as different countries define SMEs in different ways, based on their degree of national development. However, the overall number of workers, the total amount of money invested, and the sales turnover are the most frequently applied indicators when classifying SMEs. According to Moorthy et al. (2012), Malaysian SMEs are categorized according to the number of full-time employees or the annual sales turnover. Akbar et al. (2017) also claimed that SMEs are defined under two simple categories, which are manufacturing sector as well as service and other sectors. The details of SMEs’ operation size are illustrated in Table 1.

Table 1

Definition of SME by Operation Size

Types / Size	Micro	Small	Medium
Manufacturing	Sales turnover (< RM300,000) OR Full-time employees (< 5)	Sales turnover (RM300,000 – RM15,000,000) OR Full-time employees (5 – 75)	Sales turnover (RM15,000,000 – RM50,000,000) OR Full-time employees (75 - 200)
Services & Other Industries		Sales turnover (RM300,000 – RM3,000,000) OR Full-time employees (5 – 30)	Sales turnover (RM3,000,000 – RM20,000,000) OR Full-time employees (30 – 75)

Source: Akbar, et al. (2017) & SME Corporation Malaysia (n.d.)

SMEs act as a catalyst for economic expansion, leading to a significant impact on the overall performance of the economy (Keskin et al., 2010). Besides, SMEs are often seen as the starting point of any economy (nationally or internationally) because these SMEs act as a vital driver for economic development, vitality, and adaptability in highly developed countries (Robu, 2013). Mahama and Dahlan (2022) declared that 99% of all the companies around the world are SMEs since they are the driving force of economic development, social harmony, and revenue capacity in the nation. Additionally, SMEs not only can generate employment opportunities for workers, but they also assist large companies to generate goods and services effectively by providing specific services and prioritize innovation in technology and management.

Technological Context*Compatibility*

Rogers (1983) defined compatibility as the extent to which a new technology is compatible with the requirements, previous experience, and current beliefs of possible users. A potential user will seem less unsure about a concept if it is more appropriate. Morteza, Daniel and Jose (2011) clarified that the compatibility of AIS refers to the degree to which AIS is consistent with the company’s current technological capabilities, beliefs, values, and desired job preferences. Similarly, compatibility in AIS also indicates to the extent that current practices are relevant to those procedures which are crucial to implementation and

application of AIS (Lutfi, Idris and Mohamad, 2017). Wong and Yap (2024) also stated that the degree to which an organization's technological adoption is consistent with its business operations and environment is a measure of compatibility. Gutierrez, Boukrami and Lumsden (2015) also declared that compatibility has been recognized as a crucial element for acceptance of new IS technologies. Accordingly, this study indicates that if companies perceive that technology is consistent with their current standards and procedures, they are more inclined to implement it throughout all of their departments. Therefore, Hypothesis 1 (H1) was developed as:

H1: The level of compatibility is positively related to the implementation of AIS among SMEs.

Relative Advantage

The term "relative advantage" is defined by Rogers (1983) as the extent to which an innovation is perceived to be better than the concept it replaces and the ability to provide various perks for businesses. Relative advantage is crucial in the decision of innovation adoption as businesses will consider whether the perceived relative advantage is appropriate with their current operation and practices. Gutierrez, Boukrami and Lumsden (2015) declared that if businesses perceive that implementing innovation within their operation allow them to gain relative advantage, the businesses are more inclined to implement innovative technology to enhance their performance. Based on Ganyam and Ivungu (2019), it is claimed that implementing AIS can provide various advantages for companies such as allowing them to use computerized system to keep track of and record financial transactions, resulting in strengthening internal control, the quality of financial statements and decision-making processes. On top of that, it is logical to suggest that companies will first evaluate the pros and possible cons to ensure that embracing innovation is able to create more pros than cons, which provide them relative advantages to become outstanding among their competitors (Gutierrez, Boukrami and Lumsden, 2015). Therefore, the Hypothesis 2 (H2) was formulated as:

H2: Relative advantage is positively related to the implementation of AIS among SMEs.

Organizational Context

Top Management Support

The term "top management support" is broadly defined as the supporting behaviour of management, especially when it involves allocating resources, taking part in auditing strategies, and providing an example for employees to adhere to at the workplace (Alazzabi, Mustafa and Karage, 2020). According to Lutfi, Idris and Mohamad (2017), top management support also refers to the degree of dedication, participation, and assistance which the leadership team demonstrates in relation to the preparation and execution of technological systems in a company that ensures employees to make use of technologies. SMEs usually have straightforward and centralized organizational structures since the CEO, proprietor, and primary manager are typically the same individual (Anand, Rottman and Lacity, 2006). The assistance of a company's management committee and top management are generally necessary for an important decision to be applied. Hence, it is strongly believed that the top management support is vital for businesses, especially SMEs that support the system innovations (Ma et al., 2021). In other words, there is a greater opportunity that organizations with top management support are more likely to implement innovative technologies in their operation (Lutfi, 2022). Thus, Hypothesis 3 (H3) was constructed as:

H3: Top management support is positively related to the implementation of AIS among SMEs.

Environmental Context*Competitive Pressure*

Sin et al. (2016) defined competitive pressure as the level of competition in the marketplace in which companies operate. It also stated that businesses are more inclined to accept technology in the view of the severe rivalry in this highly competitive setting. According to Zhu et al. (2003), it has been widely acknowledged that the acceptance of innovations is influenced by competitive pressure. Businesses are more inclined to accept technology in this competitive environment due to the intense rivalry. It is often viewed that organizations that are under pressure are more likely to embrace technologies in order to create a successful organization by setting themselves apart from their rivals (Mahama and Dahlan, 2022). Competitive advantage is vital for businesses to survive in this competitive environment because they also need to compete with both domestic and foreign businesses in this globalization era. Therefore, it is important that businesses must set themselves apart from their competitors to become outstanding among them (Choiriah and Sudibyo, 2020). Hence, it is believed that the pressure from competitors will drive companies to embrace novel technologies in their operation in order to gain competitive advantage and stand out from their rivals (Arfan et al., 2023). Hence, Hypothesis 4 (H4) is designed as:

H4: Competitive pressure is positively related to the implementation of AIS among SMEs.

Research Methodology

This research paper aims to examine the factors that can influence the implementation of AIS among SMEs in Malaysia. Quantitative research is applied in this study, meaning that the data will be analysed in an evaluation of numerical trends. The data were analysed using IBM SPSS Statistic (IBM, 2023). Primary data is collected by conducting an online questionnaire. An online questionnaire was chosen because it is convenient for respondents to answer the questionnaire since they can answer the questionnaire anytime and anywhere. Furthermore, with the assistance of technology advancement, the questionnaire can be distributed through several online platforms such as email, Teams, social media and more. This allows the questionnaire to reach many respondents efficiently and effectively without any obsolescence. This questionnaire consists of seven sections, including 2 sections for demographic information, 1 section for dependent variable and 4 sections for each independent variable. The questionnaire items were adapted from relevant literature in this field and refined to suit the study context. Reliability was tested using Cronbach's alpha, and all variables exceeded the acceptable threshold of 0.7 (refer to Table 4). The targeted respondents are people who have working experience in Malaysian SMEs. Besides that, they must also fulfil the conditions of having relevant accounting knowledge or the experience to use AIS in order to answer the questionnaire. Non-probability sampling method is applied in this study. This indicates that only individuals who are appropriate will have the chance to answer the questionnaire. The sample size of this study will be 100. As a result, a total of 100 responses were collected back through the questionnaire. Once the data is completely collected, the researchers will analyse the collected data by using a statistical analysis software called SPSS. The statistical analysis methods that will be utilized in this research paper are descriptive analysis, correlation analysis as well as regression analysis.

Results and Findings

Profile of Respondents

The respondents' demographic is shown in Table 2 and Table 3. Table 2 covers the profile of the respondents whereas Table 3 covers the profile of the respondents' business. According to Table 2, most of the respondents are female, which consists of 59% and 41% of the respondents are male. Following by age, Table 2 illustrates that most of the respondents are 21 to 30 years old, which consists of 42%. Looking into highest educational level, it is highlighted that more than half of the respondents (66%) are degree holders. In terms of working experience, majority of the respondents (32%) have 1 to 5 years of working experience. Moreover, 100% of the respondents possess relevant accounting knowledge and they also have the experience of using AIS. In other words, all of the respondents have fulfilled the conditions to answer this questionnaire.

Based on Table 3, a large number of the participants (67%) are working in SMEs in the services and other industries whilst 33% of the participants are working in SMEs in the manufacturing sector. Among all of the participants, 45% of the participants have employment in small sized SMEs. In addition, 33% of the participants are employed in medium sized SMEs while the remaining 22% of the participants work in micro sized SMEs.

Table 2

Profile of Respondents

Respondent's Profile		Frequency	Percentage
Gender	Male	41	41%
	Female	59	59%
Age	18 to 20	8	8%
	21 to 30	42	42%
	31 to 40	34	34%
	41 to 50	11	11%
	51 and above	5	5%
Highest Educational Level	< or = Secondary	9	9%
	Diploma or Certificate	10	10%
	Undergraduate (Bachelor's Degree)	66	66%
	Master or above	15	15%
Working Experience	< 1 year	21	21%
	1 to 5 years	32	32%
	6 to 10 years	28	28%
	11 to 15 years	10	10%
	> 15 years	9	9%
Do you possess any accounting knowledge?	Yes	100	100%
	No	0	0%
Have you used AIS before?	Yes	100	100%
	No	0	0%

Table 3

Profile of Respondents' Business

Respondent's Business Profile		Frequency	Percentage
Which type of SME do you work in?	Manufacturing	33	33%
	Services and Other Industries	67	67%
Which operation size of SME do you work in?	Micro	22	22%
	Small	45	45%
	Medium	33	33%

Cronbach's Alpha analysis

Table 4

Result of Reliability Statistics

Variables	Cronbach's Alpha	N of items
AIS Implementation	0.821	5
Compatibility	0.887	5
Relative Advantage	0.734	5
Top Management Support	0.937	5
Competitive Pressure	0.874	5

The result of Cronbach's Alpha analysis for this study is illustrated in Table 4. Alpha was introduced in 1951 by Lee Cronbach to evaluate the internal consistency of a measurement or size accurately. It is crucial to verify the internal consistency in order to ascertain its reliability and validity before a test is utilized for research study or inspection. Furthermore, reliability predictions can indicate the extent of inaccurate measurement in a test (Tavakol and Dennick, 2011).

Howard (2016) declared that if the value of the Cronbach's Alpha is 0.70 or above, it is regarded as acceptable. According to the rules of thumb, the values of Cronbach's Alpha are indicated as excellent ($\alpha \geq 0.9$), good ($0.9 > \alpha \geq 0.8$) and acceptable ($0.8 > \alpha \geq 0.7$) Cronbach (1951). Based on Table 4, all the variables have a Cronbach's Alpha value that is more than 0.7, indicating that all the variables are acceptable. The Cronbach's Alpha values of AIS implementation, compatibility and competitive pressure are 0.821, 0.887 and 0.874 respectively, which are considered as good. Additionally, the Cronbach's Alpha values of relative advantage is 0.734, which is viewed as acceptable. Lastly, the Cronbach's Alpha value of top management support is 0.937, which is regarded as excellent. Since all the variables have acceptable Cronbach's Alpha value, this highlights that all the items in the questionnaire are valid as well as reliable. Therefore, they can be utilized in further research and analysis.

Descriptive Analysis

Table 5

Descriptive Statistics (Top 10 Highest Mean)

	Variables	N	Minimum	Maximum	Mean	Std. Deviation
SMEs will suffer from competitors if they do not implement AIS.	Competitive Pressure	100	4	5	4.89	.314
AIS allows SMEs to accomplish particular duties more quickly.	Relative Advantage	100	4	5	4.86	.349
AIS allows SMEs to enhance their productivity.	Relative Advantage	100	3	5	4.85	.411
AIS will influence SMEs competitiveness.	Competitive Pressure	100	3	5	4.85	.411
AIS would allow the SMEs stronger competitive advantage.	Competitive Pressure	100	3	5	4.84	.395
SMEs will implement AIS to improve service delivery.	AIS Implementation	100	4	5	4.83	.378
SMEs will implement AIS to reduce data duplication.	AIS Implementation	100	4	5	4.78	.416
SMEs is being pressured by the competition to introduce AIS.	Competitive Pressure	100	3	5	4.77	.468
SMEs will implement AIS to improve operation.	AIS Implementation	100	3	5	4.76	.452
Some of the competitors are already utilizing AIS.	Competitive Pressure	100	3	5	4.75	.458

Descriptive statistics refer to an approach that utilizes both historical and current data to depict the development and correlations of the data (Cote, 2021). It is very helpful in data research as it can assist to define, highlight or effectively summarize each data point with the objective of ensuring that the trends can develop to fulfil all of the criteria of the data (Villegas, 2022).

The result of descriptive statistics is shown in table 5. The data is presented in a descending manner and the researchers selects 10 statements with the highest mean to analyse and elaborate. Among the 10 statements, 5 statements are from competitive pressure, 3 statements are from AIS implementation and 2 statements are from relative advantage. It can be seen that the respondents are more likely to be able to make connections with the three variables (competitive pressure, relative advantage and AIS implementation) among all of the independent variables and dependent variable. More specifically, competitive pressure is the variable that majority of the respondents can relate to since all the 5 statements from competitive pressure are included in the top 10 highest mean.

Correlation Analysis

Table 6

Result of Correlation Analysis

		Correlations				
		AIS_Imple mentation	Compatibility	Relative_Adva ntage	Top_Manage ment_Support	Competitive_P ressure
AIS_Implementation	Pearson Correlation	1	.538**	.503**	.331**	.528**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001
	N	100	100	100	100	100
Compatibility	Pearson Correlation	.538**	1	.777**	.718**	.551**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001
	N	100	100	100	100	100
Relative_Advantage	Pearson Correlation	.503**	.777**	1	.750**	.503**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001
	N	100	100	100	100	100
Top_Management_Support	Pearson Correlation	.331**	.718**	.750**	1	.539**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001
	N	100	100	100	100	100
Competitive_Pressure	Pearson Correlation	.528**	.551**	.503**	.539**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	
	N	100	100	100	100	100

** Correlation is significant at the 0.01 level (2-tailed).

Correlation analysis, which is also called bivariate analysis, is used to determine the degree of relationship between two variables. It enables the researcher to find out whether the changes in the independent variable can affect the dependent variable. Pearson correlation analysis can measure the direction, magnitude, and the statistical significance of the bivariate associations between all the variables that were evaluated at a level of ratio or interval (DX Adobe, 2021).

The result of correlation analysis is shown in Table 6. Based on the outcomes, the values of Pearson correlation between the independent variables (compatibility, relative advantage and competitive pressure) and AIS implementation are 0.538, 0.503 and 0.528 respectively. This indicates that the three relationships between the independent variables and AIS implementation are moderate positive correlations. Furthermore, the value of Pearson correlation between top management support and AIS implementation is 0.331, showing that it is a low positive correlation. The results show that if the independent variables increase, the dependent variable will also increase due to all the relationships are positive. Additionally, Table 6 highlights that compatibility, relative advantage, top management support and competitive pressure are positively and significantly correlated with AIS implementation. Hence, the null hypotheses can be rejected since all the significance levels are at < 0.001, which are less than 0.05.

Regression Analysis

Regression analysis is defined as the process of quantitatively and reliably determining which of the variables truly has an effect on the dependent variable. It can be applied to address the following queries, such as which of the variables contributes the most, which of the variables can be ignored due to lack of contribution, what relationships occur between the variables, and the most important query, the variables are at which level of confidence (Gallo, 2015).

Table 7
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.649 ^a	.421	.397	1.33699

a. Predictors: (Constant), Competitive_Pressure, Relative_Advantage, Top_Management_Support, Compatibility

Table 7 highlights the summary of regression analysis. R Square helps to measure if the model fits the data well. It highlights the proportion of the variance in the dependent variable that the independent variables explain. Based on Table 7, the R-square value is 0.421, indicating that 42.1% of the variation of the AIS implementation can be explained by the independent variables. The remaining 57.9% can be explained by other factors that are not included in this study (Sekaran and Bougie, 2016).

Table 8
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	123.424	4	30.856	17.262	<.001 ^b
	Residual	169.816	95	1.788		
	Total	293.240	99			

a. Dependent Variable: AIS_Implementation
b. Predictors: (Constant), Competitive_Pressure, Relative_Advantage, Top_Management_Support, Compatibility

ANOVA, also known as analysis of variance, is a statistical method that analyses the variances among the means or average of multiple groups. It is usually used in several settings to discover whether the means of multiple groups differ in any way (Spotfire, n.d.). According to Table 8, the p-value is < 0.001, which is less than the significance level of 0.05. This outcome shows that there are statistically significant variations between the groups. More specifically, the null hypotheses can be rejected, claiming that there are no substantial differences (Williams, 2023).

Table 9
Coefficients

		Coefficients ^a						Collinearity Statistics	
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF	
		B	Std. Error	Beta					
1	(Constant)	8.232	2.124		3.875	<.001			
	Compatibility	.231	.091	.341	2.533	.013	.337	2.969	
	Relative_Advantage	.272	.121	.312	2.259	.026	.319	3.130	
	Top_Management_Support	-.224	.083	-.347	-2.720	.008	.374	2.672	
	Competitive_Pressure	.379	.099	.371	3.836	<.001	.653	1.531	

a. Dependent Variable: AIS_Implementation

The coefficient of this model is shown in Table 9. VIF, also known as variance inflation factor, is used to evaluate the intensity and the relationship between the independent variables in a regression model. According to the general guideline, it states that a value of 1 means that there is no relationship between the independent variables. A value between 1 and 5 shows that there is moderate relationship between the independent variables. A value more than 5 represents that there are some relationships between the independent variables, but the p-values and the coefficients will mostly be unreliable. Based on Table 9, it illustrates that the VIF values between the independent variables are 2.969, 3.130, 2.672 and 1.531 respectively. All the values are within the scale from 1 to 5, indicating that the extent of relationship is sufficient for fitting and interpreting the regression model (Zach, 2020).

According to the results, the p-values of compatibility, relative advantage, top management support and competitive pressure are 0.013, 0.026, 0.008 and < 0.001. All the p-values are less than the significance level of 0.05, which indicate that all the developed hypotheses can be accepted. In other words, all the independent variables (compatibility, relative advantage, top management support and competitive pressure) are positively and significantly related to AIS implementation.

Discussions

Table 10

Summary of Findings

Hypothesis	Regression	Decision
H1: The level of compatibility is positively related to the implementation of AIS among SMEs.	P = 0.013 (< 0.05)	Cannot reject the null of H1
H2: Relative advantage is positively related to the implementation of AIS among SMEs.	P = 0.026 (< 0.05)	Cannot reject the null of H2
H3: Top management support is positively related to the implementation of AIS among SMEs.	P = 0.008 (< 0.05)	Cannot reject the null of H3
H4: Competitive pressure is positively related to the implementation of AIS among SMEs.	P = < 0.001 (< 0.05)	Cannot reject the null of H4

The summary of findings is shown in Table 10. Firstly, the table shows that the p-value of H1 is 0.013, which is below the significance level of 0.05. This indicates that compatibility has a significant impact on AIS implementation and therefore H1 is accepted. Having a system that is compatible with AIS in a company allows the company to integrate AIS into its business operation. This finding is supported by Nguyen, Le and Vu (2022), Maroufkhani, Iranmanesh and Ghobakhloo (2023), Tajudeen, Jaafar and Ainin (2018) where all the studies have similar results which indicate that compatibility is positively and significantly related to AIS implementation. Maroufkhani, Iranmanesh and Ghobakhloo (2023) declares that the companies will also take into account whether AIS is consistent with their existing practices. If AIS is compatible with their existing practices, this allows the companies to incorporate AIS into their existing practices easily. Not only that, but the employee in the companies is also able to use AIS with ease since it is compatible with their existing practices. Therefore, the companies are more likely to implement AIS due to the compatibility of AIS.

Secondly, the table demonstrates that the p-value of H2 is 0.026, which is less than the significance level of 0.05. This shows that relative advantage has a significant influence on AIS implementation and thus H2 is accepted. This finding aligns with previous studies where Nguyen, Le and Vu (2022), Ardeshir, Mehrdad and Shady (2024), Aligarh, Sutopo and Widarjo (2023) claims that relative advantage is positively and significantly related to AIS implementation. Companies are more likely to implement AIS if they find that implementing AIS is able to provide them substantial relative advantages. In this regard, the expected advantages can encourage companies to implement AIS. Managers are more inclined to embrace the innovation if they believe that AIS implementation can improve the performance of their companies conceptually and functionally.

For H3, where the table outlines that its p-value is 0.008, which is below the significance level of 0.05. This shows that top management support has a significant impact on AIS implementation and hence H3 is accepted. This result is consistent with previous studies where Abdinur and Karcioğlu (2023), Ma et al. (2021), Nguyen, Le and Vu (2022) state that top management support is positively and significantly related to AIS implementation. Top management is the level that is crucial for decision making. If top management have favourable impression on AIS implementation, they may decide to integrate AIS into their business operation. For example, in order for their company to implement AIS, the top management will supply funds and resources to implement. Some top management will even strongly encourage the accounting department to integrate and utilize AIS. It is seen that AIS implementation is based on the decision of the top management.

Lastly, the p-value of H4 is < 0.001 , which is less than the significance level of 0.05, This illustrates that competitive pressure has a significant influence on AIS implementation and thus H4 is also accepted. This result is supported by Ma et al. (2021), Aligarh, Sutopo and Widarjo (2023), Salah and Ayyash (2023). The outcomes of the studies show that competitive pressure is positively and significantly related to AIS implementation. Due to technology advancement, some of the businesses are now integrating AIS to reduce the burden of overloaded accounting transactions. This has posed a threat for businesses which have not implemented AIS because their competitors can provide better quality of products and services for their customers. Businesses which have not implemented AIS will eventually be eliminated due to the intense competition. Thus, in order to survive in this competitive

business environment, businesses are more likely to implement AIS so that they can gain competitive advantage to survive in this competitive environment.

Conclusion

In a nutshell, the main objective of this research is to examine the factors influencing AIS implementation among SMEs in Malaysia. This research paper uses a quantitative approach. In addition, a primary data approach is applied to collect data by distributing an online questionnaire to the targeted respondents. As a result, a total of 100 responses are retrieved. After analysing the collected data, this study identifies that compatibility, relative advantage, top management support and competitive pressure are the significant factors that can affect the implementation of AIS among SMEs in Malaysia. The study supported the findings of Ma et al. (2021) that top management and competitive pressure influence the adoption of AIS among SMEs in Malaysia, but the finding on compatibility is in contrast with Ma et al. (2021). It is believed that this study is able to provide significant contribution to the knowledge on the implementation of AIS. Besides that, this study is also able to deliver some beneficial information concerning the AIS implementation among Malaysian SMEs for various individuals, such as managers, accounting professionals, government, etc. Thus, the individuals are able to gain a better understanding regarding the factors that drive AIS implementation among SMEs and this will allow them to have the awareness of incorporating AIS into their business operation in the future.

However, this study has some limitations. Firstly, the sample size of this study is only 100. In order to enhance the reliability, it is crucial to increase the sample size. Moreover, the future studies can include open-ended questions in the questionnaire for the respondents to elaborate their opinions. This can allow the researchers to gain better understanding of why the respondent rate the scale given their perspectives on their opinions, making the findings of this study to become more precise and meaningful.

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