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Optimizing Control Management: The Role of Sustainability Accounting Information Systems in Singapore's Manufacturing Sector

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Abstract

This study aims to find out the factors that affect the sustainability of the performance of accounting information systems with information technology as a moderation variable. This research was conducted in the Manufacturing Industry of Blue Pearls Pte Ltd using a quantitative method with primary data sources obtained from the distribution of questionnaires. The respondents in this study were selected based on the purposive sampling method of 78 employees who work using the accounting information system. Data were processed using SPSS 29. We found that employees who have personal technical skills and attend training and development as well as internal control support lead to positive sustainability for Accounting Information System performance. This research contributes to the literature and contributes managerial information about information technology to companies. The results of hypothesis testing with multiple linear regression analysis show that internal control , personal technical skills, training and development programs have a positive effect on the performance of accounting information systems (AIS). Information technology as a moderation variable cannot moderate the influence of top management support, personal technical skills, training and education programs on the performance of accounting information systems.

Keywords: *Training and Development Programs, Internal Control, Information Technology, AIS.*

Introduction

Sustainability and Performance of Accounting Information Systems (AIS) in industry companies refers to how these systems are designed, implemented, and managed to support the companies long-term operations while still meeting dynamic business and regulatory needs. Sustainability and optimal SIA performance in industry companies is critical as the sector has very stringent requirements regarding compliance, speed of service, and data security. Company can manage financial operations more efficiently with a sustainable and well-performing SIA, comply with regulations and ultimately support customer satisfaction and the company's reputation.

New discoveries can be influenced by technological advances in the era of contemporary globalization. Before the advancement of information technology, users of accounting information systems had to do most of their work manually. With the rapid development of the technology sector, many businesses have turned to computerized accounting information systems. So that it makes the input of company data easier and faster for the management (Warda, 2018). Another benefit of computer technology is also useful in making it easier for customers to transact which previously required meeting or visiting a bank location. In addition, sector industry companies have built a system based on computer technology that can be accessed through the internet, saving activities such as checking balances and others can also be done more easily, can be more effective and efficient. This makes it possible to determine whether or not the company's management is good based on the information system used. (Faisal et al., 2021).

In the Manufacturing Industry, Blue Pearls Pte Ltd is experiencing the development of the company, in this case the development of a system is very concerned, the sustainability of the performance of the accounting information system is made the main focus to support the company's success in improving financial reporting. For this reason, the company conducts a training program that aims to improve the

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performance of employees who play a role in the accounting information system as well as top management support in providing facilities and adequate allocation of funds to finance training activities, making the goals easier to achieve. (Fery Riyanto, 2023) Singapore's manufacturing sector is still struggling due to a lack of knowledge and broad understanding of sustainable practices. Problems with Blue Pearls Trading Ltd's employee performance data have shown less significant performance for three years. In 2021, employee performance was recorded at 65.5%. In 2022, employee performance was recorded to have decreased by 70%, and in the first quarter of 2023 employee performance was recorded to have decreased slightly to 69.5% (Blue Pearls Trading Pte Ltd performance data). In this case, it provides an overview of how employee performance is an important factor for the company's sustainability, especially in the field of accounting information systems.

The level of user satisfaction in using an accounting information system can be used as one of the determining factors for the success of a system's performance. The overall performance of accounting tools can be analyzed to avoid failure of the company's overall performance. Some of the elements that affect the overall performance of accounting information systems include community participation in introducing information systems, school programs and community training, as well as the skills of information system users to run computers so that they can be skilled and good in using software and hardware that is useful for managing data making good, quality and reliable information known as personal technical skills. The education and training component will also affect the quality of the accounting information system whose users will benefit from this educational strategy, which can advance their ability to use the system well will have an impact on the ability to use it well(Dewi & Wiratmaja, 2020),(Ratnasih et al., 2017). Nugroho's statement that (2018) technology must be developed in the form of customization to meet the current needs of its users; Failure to upgrade information technology can result in asynchronous repairs, and the data provided by the system will ultimately be useless to the company's management. The user's abilities are obtained from their training and education, training and educational activities are supported by information technology which will bring significant benefits to users in the form of increasing the capacity to operate information systems. because of their effectiveness and efficiency of work.

Top Manager support is the extent to which the highest leadership in an organization provides commitment, resources, and support to the development and use of information systems. This covers various aspects, from providing budgets, providing decision-making authority, to being actively involved in the system development process. According to Mahardika & Suardhika, (2018) Top management support includes not only the technical aspects, but also the social and cultural aspects within the organization. Leaders need to create a work environment that is conducive to the use of information technology and encourage employees to actively participate in system development. Trimah et al (2020) also explained that top management also needs to provide adequate training and support to employees so that they can make effective use of information systems. Thus, top management support can increase the adoption of information technology, as well as increase the productivity and efficiency of the organization.

This study explicitly included information technology as a moderation variable to test its effect on the relationship between top management support, personal technical skills, and training and education programs on SIA performance. This kind of research is rarely conducted, especially in the specific context of a company like Blue Pearls Pte Ltd. The focus on SIA sustainability as the core of the research, including examining factors such as user engagement, technical capabilities, and training, provides a new perspective on similar research that generally focuses only on short-term system performance. Does the support of top management have any influence on the performance of the accounting information system used by Blue Pearls Pte Ltd? Personal technical skills have an influence on the performance of accounting information systems at Blue Pearls Pte Ltd. The user training education program has an influence on the performance of the accounting information system at Blue Pearls Pte Ltd. User engagement moderated by information technology has an influence on the performance of accounting information systems at Blue Pearls Pte Ltd. Personal technical abilities moderated by information technology have an influence on the performance of accounting information systems at Blue Pearls Pte Ltd. Training and education programs moderated by information technology have an influence on the performance of accounting information systems at Blue Pearls Pte Ltd.

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Literature Review And Development Hypothesis

Literature Review And Hypothesis Development

Internal Control

The support of internal control management is a key factor in the successful implementation of information systems. With strong support good internal control, organizations can make optimal use of information technology to achieve their business goals (Zulaika, 2020). Top management support is a form of managerial support for information system users. Internal control from top management support describes the rights, duties, obligations, and behaviors that are appropriate to people who hold certain positions in certain social content, where the role of top management is to influence the successful implementation of new systems and the development of subordinates' innovative power (Sri & Wibi, 2021). Deumes & Knechel (2018) measured the effectiveness of internal control in 4 questions. The assessment was carried out with 4 question instruments, including: Is internal control discussed by the board of commissioners? Are the company's objectives clearly defined? Does management ensure its effectiveness? Is there an internal control unit for the implementation of risk management? Scoring was carried out using a likert scale where the highest score was a score of 5 for respondents who answered strongly agree that company information is fully disclosed, then a score of 4 for agreeing answers, and so on, a score of 3 for neutral, a score of 2 for disagreeing, a score of 1 for strongly disagreeing. Internal Control in a computer-based accounting information system is vital in maintaining the quality of financial reports and improving the company's reputation (FBrown, Pott & Woempener, 2014).

Sustainability of Accounting Information Systems

AIS sustainability in the context of manufacturing sector relates to the system's ability to survive and continue to evolve in the face of technological changes, business needs, and regulations. Dagiliene & Šutiene (2019) state some of the key components of sustainability in SIA include:

Scalability means the system must be able to grow as large transaction and the complexity data. Adaptability means system must be able to adapt to strict regulatory changes including changes in accounting standards and tax provisions. Resource Efficiency also means that the system can optimize the use of resources, such as labor, time, and infrastructure. Data Security and Compliance means Accounting information system must be able to maintain the security of customer data.

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) theory has been developed three times, the first by Davis defines TAM as user acceptance of the use of information technology systems. The concept in this theory talks about how easy it is to handle the personal technical skills possessed by the person who uses the information system. Personal technical skills can make it easier for people to use information systems and increase user satisfaction with accounting information systems. This benefits the business and can increase user engagement in improving the system (1993) (Faisal et al., 2021).

Accounting Information System (AIS)

According to Romney et al (2018) An accounting information system is a procedure for storing, recording, collecting, and handling various information that generates data for leaders. Individuals, cycles and directions, information, programming, the foundations of data innovation, internal controls, and safety efforts are all included in this class. Accounting information systems, according to Turner et al (2020), includes cycles, strategies, and systems that capture accounting information into accurate records, process accounting information by sorting, summarizing, combining, detailing a summary of accounting information to internal and external users.

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Accounting Information System Performance

Performance is an overview of the level of achievement of implementation as well as activities or policies in realizing the system, goals, missions and vision of the organization contained in the formulation of strategic schemes (Sari & Ratna, 2009). Performance appraisal deals with the completion of certain tasks, whether successful or unsuccessful by workers. Higher performance involves a combination of quality improvements. Better performance will be achieved if individuals can meet individual needs in carrying out and completing tasks (Satria & Dewi, 2019).

Information Technology

According to Putri et al, (2020), the adequacy of the use of accounting information systems can be influenced by the improvement of data innovation. Data innovation is important in company associations, where data innovation will be important if used in associations to achieve the main and functional goals of the association. The data innovation system will help companies to further develop the company's application involving an original and efficient data innovation system (Alsharari & Ikem, 2023).

Personal Technical Skills

The ability of information system users to use the system is obtained from education and experience (Zulaika, 2020). Users who have adequate knowledge and abilities will encourage higher performance of accounting information systems. Users of accounting information systems who have technical skills either obtained from education or from experience using the system will increase satisfaction in using accounting information systems (Faisal, Basyri & hero, 2021).

User Training and Development Program

Requires training and development so that employees are more proficient in utilizing the system, so that training and development programs can provide benefits for employees and system users in carrying out the company's operational activities (Rahadian, Mahmud, 2014). The purpose of the training and development program is to improve the user's ability and understanding of the accounting information system that will be used. In addition, it will also make the user feel more satisfied and will use a system that has been mastered well and smoothly. So that it helps to complete the user's work more effectively and efficiently (Sri & Wibi, 2021).

Internal Control Management Influences Accounting Information System Performance

Management with internal control plays a role as the captain in the development of information systems. According to Novandalina, Yuli, & Khayatun (2022) Management is responsible for formulating visions, strategies, and policies related to the use of information technology in the organization. In addition, Management also needs to ensure and control the availability of the necessary resources, both financial and non-financial, to support the development and implementation of information systems. In other words, the internal control support of management is essential to ensure that the information system developed is in accordance with the needs of the organization and provides optimal benefits. According to Krismiaji (2015), control is an effort to influence or direct certain activities, objects, organizations, or systems. In the context of the relationship between internal control and accounting information systems (AIS), with good internal control will increase effectiveness accounting information performance. AIS functions as a tool for management to direct and control business organizations, with the aim of improving operational efficiency. Based on the definition given by the American Institute of Certified Public Accountants (AICPA), an internal control system is a series of procedures that are coordinated and implemented by an organization to ensure the accuracy and reliability of accounting data, protect assets, encourage compliance with organizational policies, and improve operational effectiveness. Previous research, Susanto & Fitriati (2024), Albertina.P.M et.al (2022) stated that an effective internal control system will improve the quality of high AIS in improving the success of decision making and non-financial performance.

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H1: Internal control management has an impact on the performance of accounting information systems

Personal Technical Skills Influences Accounting Information System Performance

Employees who work on accounting information systems will also have better technical skills if they are satisfied. However, users of information systems are less satisfied as a result of employees' inadequate accounting information preparation skills or lack of resources. To complete a task, abilities and skills are inseparable (Kusumawati & Ayu, 2019). Mc Cellaland's (1961) motivation theory explains that every individual has a strong support to succeed. This encouragement leads the person to try harder to get the award. Research results of Ruslinda and Amelia (2021), that the specific capacity of the individual affects the presentation of the data system. Faisal, Basyri & hero (2021) It was also revealed that the special capacity of the accounting information system had a positive relationship with the presentation of the accounting information system.

H2: Personal technical skills affect the performance of accounting information systems.

User Training and Development Program Influences Accounting Information System Performance

Before accepting changes to the new system, one will initially know about the development and then try to understand it, this can be achieved through legitimate preparation. Preparation can increase workers' confidence in facing the new system. Through this preparation, employees feel better with the new system and they will also feel less laid off and they will feel more confident in fulfilling their business obligations with the new hardware. With a worker who has a satisfactory level of training, he will have a big mind in learning new things (Sukriani et al., 2018). Research results from Dewi & Wiratmaja (2020) that the preparation and training program has a great influence on the performance of system accounting innovation. And the follow-up research from Maryani, (2020) and Ash (2024) which states that the preparation and training program has a great influence on the performance of system accounting innovation.

H3: User training and development programs have an impact on the performance of accounting information systems.

Internal Control influences Accounting Information System Performance with Information Technology as a Moderation Variable

It is estimated that the level of top management's support for the development and implementation of accounting information systems will significantly affect the performance of the system. The higher the level of top management support, the better the performance of the accounting information system (Novandalina et al., 2022) . In addition, it is predicted that the influence of top management support will be even stronger in organizations that have adopted information technology widely. This shows that information technology can be a strengthening factor in the relationship between top management support and accounting information system performance. Research from Nugroho (2018) explaining that top management support and information technology have an effect on the performance of accounting information systems, while research Marina & Erlina (2021), Trimah et al (2020), information technology cannot moderate accounting information systems.

H4: Information technology as a moderation variable in relationship internal control on the performance of accounting information systems

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Personal Technical Ability impact to the Performance of Accounting Information Systems with Information Technology as a Moderation Variable

The user's ability to operate the information system can be helpful, but if it is not supported by qualified information technology, then the user's ability will be wasted, on the other hand, if the information technology used is too sophisticated and the ability is lacking, the performance of the system will decrease (Warda, 2018). The Human Organization Technology (HOT) hypothesis made by Moradi et al. (2020). Another structure that can be used to assess data frameworks, this hypothesis places an important part in accounting information systems especially (people), (associations), and innovation. (innovation) and the fairness of relationships with each other. Marina & Erlina Research (2021) and Bhagaskara & Damayanthi, (2020) Obtaining the results of data innovation as a guiding variable in the special capacity of the private sector in the presentation of accounting information systems.

H5: Information technology as a moderation variable in the relationship personal technical skill to the performance of accounting information systems.

Education and Development Program impact to the Performance of Accounting Information Systems with Information Technology as a Moderation Variable

Training and education programs supported by information technology can provide more benefits for users and companies, with the new skills that users gain from training and education will improve the performance of accounting information systems (Kusumawati & Ayu, 2019) (Alsharari & Ikem, 2023). The Innovation Acceptance Model (TAM) created by Fred Davis (1989) is a model for client recognition of the use of data innovation systems. The motivation behind this model is to understand the fundamental variables of data innovation client behavior towards the introduction of data innovation itself. Research by Muliana et al. (2017) which reveals the impact of data innovation as a guiding variable in schools and program preparation on the presentation of accounting information systems. Kusumawati & Ayu (2019) also received research on the type of data innovation as a guiding variable in teaching and program preparation for the accounting innovation performance system.

H6: Information technology as a moderation variable in the relationship user education and development programs on the performance of accounting information systems.

Research Outline

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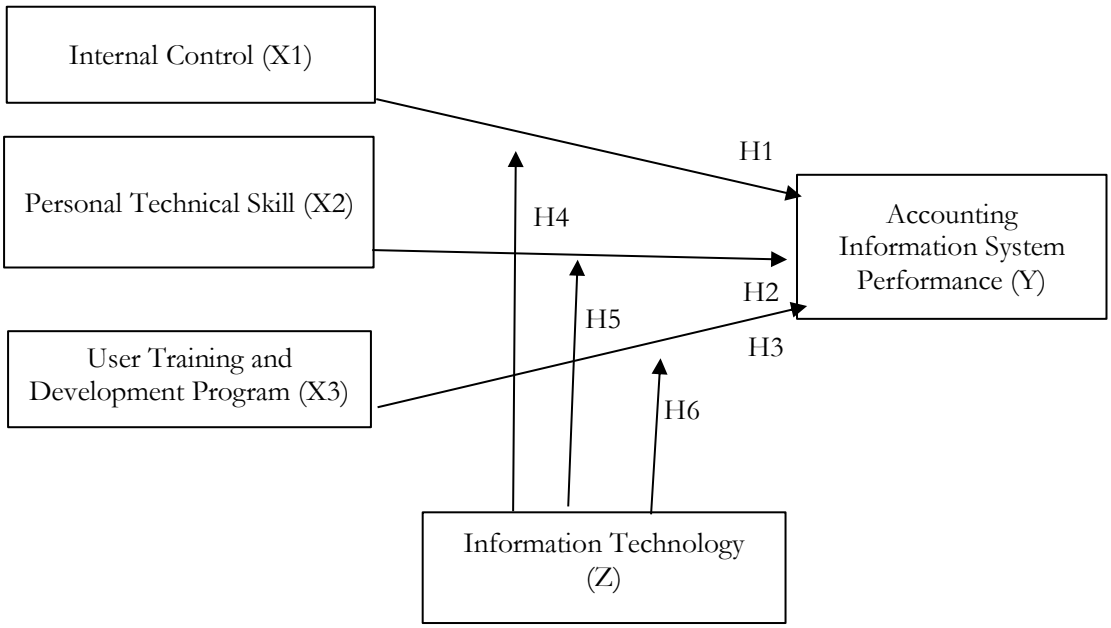

Figure 1. Conceptual Framework

Method

The type of data used in this study is primary data. This data was obtained directly by researchers from respondents, in this case, employees who use the Blue Pearls accounting information system. Sample selection uses purposive sampling technique. The hypothesis was tested using the multiple linear regression analysis method and using SPSS 29 as an analysis tool.

Sampling for Purpose

Sample criteria 1. Using accounting information system software in completing work. 2. Participating in training and development in the field of accounting information systems. 3. Have the ability to operate accounting information systems. 4. Participate in the development of accounting information systems. 5. Keeping up with the development of information technology. Based on the questionnaire distributed by the researcher, the data processed was 78 questionnaires.

Table 1. Purposive Sampling Method

NOT	Information	Sum
1.	Respondents	150
2.	Samples that meet the criteria	98
3.	Sample answer	81
4.	Sample is not suitable	3
5.	Samples used	78

Source: Data processed by researchers

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Variable Measurement

Table 2. Definition Operational Variable

Variable	Instruments Indicators	Measure Scale		Reference
Internal Control (X1)	1.Internal control discussed by the board of commissioners 2.The company's objectives clearly defined 3.Management ensure its effectiveness 4.Internal control unit for the implementation of risk management	5-Scale likert		Deumes & Knechel (2018)
Personal Technical Skill (X2)	1.The ability of users to use the accounting information system with special skills 2. The ability of users with influence of work experience 3. The ability of specialist skills can easy to use the accounting information system. 4. User ability with work completion 5. Using SIA and work quality.	5-Scale likert		Faisal Basyri & Hero (2021)
User Training & Development Program (X3)	1.User understanding how to use the system correctly. 2.Training and education programs improve user competency. 3.Benefit for employee from self-development through training and education programs 4. Training and education program impact on accounting information system performance.	5-Scale likert		Faisal Basyri & Hero (2021)
Accounting Information System Performance (Y)	1.The accounting information system used is adequate 2.The information system is in accordance with the needs. 3.Accounting information systems can make your work easier. 4.The use of accounting information systems can increase performance satisfaction. 5.The quality of accounting information produced			Dharmawan & Ardianto (2017)
Information Technology (Z)	1.The internet network is working well 2.The use of advanced computer technology to operate accounting information systems properly. 3.The company has a main system in operating the accounting system. 4.Utilizing technology to produce more accurate information. 5.Accounting software with complete features and fast response times.	5-Scale likert		Nugroho(2018)

Source: Data processed by researchers (2025)

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Results and Discussion

Descriptive Statistics

The data obtained will be used as analysis material using the SPSS 20 analysis tool. Table 3 presents the average, minimum, maximum and standard deviation values.

Table 3. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Internal Control	78	17	25	21.94	2.085
Personal Technical Skills	78	18	25	22.24	1.752
User Training and Development Programs	78	17	25	22.42	1.755
Accounting Information System Performance	78	18	25	22.05	1.823
Information Technology	78	18	25	22.10	2,099 t

Source: Data processed by researchers (2025)

Table 4 shows the conclusion that all variables have a Tolerance value of > 0.10 and VIF < 10 which means that it is free from multicollinearity symptoms.

Table 4. Multicollinearity Test

Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	B
Internal Control	.089	.120	.102	.744	.459	.238	4.204
Personal Technical Skills	.360	.157	.346	2.287	.025	.196	5.105
User Training & Developments Programs	.520	.112	.501	4.627	.016	.382	2.616
Information Technology	-.066	.108	-.076	-.609	.544	.288	3.469

Source: Data processed by researchers (2025)

Table 5 shows that the variables of top management support in improving the information system have a positive effect on the performance of the accounting information system which must be seen from the t-test has a level of 0.033 or < 0.05 so it is very possible to assume that H1 accepted. This shows that the supporting internal control has a positive impact on the performance of SIA according to this conclusion, the support good internal control of management in the development of the system Influential on the performance of accounting information systems. In line with the TAM3 theory presented in the research The results of this study are in accordance with the research Galang & Amir (2014) and Novandalina et al (2022), Susanto & Fitriati (2024), Albertina.P.M et.al (2022) who said that the internal control support of management has a positive effect on the performance of accounting information systems. The variable of top management support is seen as one of the factors that can measure how successful the level of performance of the accounting information system is. According to Nugroho (2018) If the performance of the accounting information system in a company is poor, then the company needs to see whether the management support from internal control that has been given to employees who use the accounting information system in the company is suitable or not, so that it has a direct impact on the performance assessment of the accounting information system in the company. Companies or organizations need to pay attention to top management support in the development and use of accounting information systems to

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improve the performance of the information system. From the results of the study, it can be concluded that there is a positive relationship between internal control and the performance of accounting information systems. The good internal control of the level management support in using the accounting information system, the better the performance of the information system.

The variable of personal technical skill has a positive influence on the performance of the accounting information system which can be seen in the t-test which has a significance level of 0.030 or < 0.05. H2 accepted. In line with the TAM3 theory proposed in the research Wopat & Needham, (2021) It was found that the user's personal technical ability had a positive influence on the performance of the accounting information system. The results of this study show that the higher the user's personal technical ability in using the accounting information system, the better the performance of the information system. So that personal technical skills affect the performance of accounting information systems. Strengthened by the research of Faisal et al. (2021), Tevi Maryani (2020), Trimah et al (2020) and Praptiningsih & Danang (2018) The results show that the higher user involvement in system development has an impact on the performance of accounting information systems. The performance of the accounting information system can also be seen from the satisfaction of the users of the accounting information system and the support of the top management of the information system itself. Ida Bagus Research (2018) It is mentioned that the personal technical ability of information system users affects the performance of accounting information systems. Companies or organizations need to pay attention to the user's personal technical abilities in the development and use of accounting information systems to improve the performance of information systems.

The variables of user training and development program have a positive effect on the performance of the accounting information system which can be seen in the t-test which has a significance level of 0.014 or < 0.05, then H3 accepted. This means that training and development programs Influential on the performance of accounting information systems. This research was supported by Trimah et al. (2020), Wiratmaja et al (2020) and Putu Ardiwinata et al. (2019) proving that the higher the education and training, the better the performance of the accounting information system will be. Training and developments programs have a positive effect on the effectiveness of the use of accounting information systems. This study shows that effective training and education programs can improve individual performance in the use of SIA. The TAM3 theory also supports education and training for users of accounting information systems that aim to facilitate work. Education and training programs also affect the performance of accounting information systems. In addition to training and development programs, other factors such as top management support, user engagement, personal technical skills, superior support, organizational size, and the sophistication of information technology also affect the performance of accounting information systems (Mahardika & Suardhika, 2018).

Table 5. Multiple Regression Analysis and Moderation Test

Type	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	B
Internal Control	.070	.115	.080	.605	.033
Personal Technical Skills	.329	.148	.316	2.218	.030
User training and Development Programs	.503	.108	.484	4.644	.014
Interaction between Internal Control Support and Information Technology	.013	.057	.627	.234	.816
The Interaction between Personal Technical Abilities of Accounting Information Systems and Information Technology	.051	.077	2.239	.660	.511
Interaction between User Training and Development Programs and Information Technology	.008	.070	.364	.119	.906

Source: Data processed by researchers (2025)

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The fourth hypothesis test (H4) was carried out using a residual test with information technology moderation variables. The results of the residual test state that the variable of information technology Anonymous on the company's performance. on the top management support variable (X1) on the performance of the accounting information system with a significance level of 0.816 or > 0.05. These results are supported by research from Permana (2020) which states that information technology will not make top management support better and cannot maximize the performance of accounting information systems. Information technology must also be paid attention to by users, because technological advances today are very rapid. So the support of top management must always keep up with technological developments. Research states that top management support in information systems does not affect the performance of accounting information systems, especially if information technology is used as a moderation variable. Putu Ardiwinata & Sujana, (2019)

The fifth hypothesis test (H5) was carried out using a residual test with information technology as a moderating variable. The results of the residual test show that the variable of information technology Anonymous on the company's performance. The variable of personal technical ability (X2) on the performance of the accounting information system with a significance level of 0.511 or > 0.05. According to Ratnasih et al (2017) If the user of an information system is able to operate the system, the system will be more helpful in supporting activities. However, the user's ability becomes less useful if the system used is not in accordance with his ability. Therefore, it is necessary to improve the ability and understanding of the system. The personal technical ability of the user of the information system affects the performance of the accounting information system, especially if information technology is used as a moderation variable. (Mahardika & Suardhika, 2018) Research conducted The Caliph (2017) stated that personal technical ability, user engagement, training, top management support, and technological sophistication affect the performance of accounting information systems. With the help of information technology, the support of top management will be further helped in its implementation.

The sixth hypothesis test (H6) was carried out using a residual test with information technology moderation variables. The results of the residual test state that the variable of information technology It has no influence on the company's performance. on the variable of the training and education program (X3) on the performance of the accounting information system with a significance level of 0.906 or > 0.05. According to I Putu Deddy et al (2020), the term education and training for users of accounting information systems refers to a short-term educational process system that teaches current users how to use basic skills to get the job done and achieve goals. Training and education programs can provide new skills and insights that make it easier for users to operate accounting information systems. And research by Ida Bagus (2018), Mahardika & Suardhika (2018) and Sukriani et al (2018) also said that education and training programs have no effect on the performance of accounting information systems, especially if information technology is used as a moderation variable. Training and education programs, personal technical skills, user engagement, top management support, and technological sophistication have an effect on the performance of accounting information systems.

Conclusion

The results of the data analysis show that (1) Internal Control is proven to have an effect on the performance of accounting information systems. (2) Personal technical skills are proven to have an effect on the performance of accounting information systems. (3) User training and developments programs are proven to have an effect on the performance of accounting information systems. (4) Information technology as a moderation variable has not been tested for its influence on internal control on the performance of accounting information systems. (5) Information technology as a moderation variable has not been tested for its influence on personal technical ability on the performance of accounting information systems. (6) Information technology as a moderation variable has not been tested for its influence on user training and development programs on the performance of accounting information systems. With a sustainable and well-performing SIA, supported by employees who have good personal technical skills supported by good training and education programs, Blue Pearls can manage financial operations more efficiently and ultimately support customer satisfaction and the company's reputation.

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This research has practical implications for company management, information system developers, the manufacturing industry, as well as policy and technology. For management, it is important for internal control to enhance effectiveness performance and important to optimize ongoing training, increase user involvement in SIA development, and ensure adequate technical skills through training. System developers need to design systems that are easy to use and flexible to support training. For the industry, the results of the research encourage the strengthening of regulations and standards for technology training. In terms of policy, regulations are needed that require regular training programs and standardization of technological competencies. Technology must also support users, improve automation, and ensure system sustainability amid evolving business needs.

This research has several limitations, including its limited coverage in the manufacturing sector, especially in Blue Pearls Pte Ltd, so the results are difficult to generalize to other sectors or locations. The moderation variable of information technology did not show a significant influence, likely due to the inaccuracy of the measurement model or the lack of data variation. The quantitative approach with questionnaires also limits the exploration of qualitative aspects, such as subjective user experience or organizational dynamics. In addition, other factors such as top management support, task complexity, and organizational culture were not studied. The small sample size (78 respondents) and the collection of data over a given time are other limitations, in addition to the potential for bias in the data reported by the respondents themselves. further can be carried out qualitatively to complement the quantitative findings and explore the SIA user experience in depth, as well as expand the geographical and sector coverage to increase generalization. In addition, he added that it varies such as top management support or the complexity of the task and the use of larger and representative examples can help expand understanding as well as increase the validity of research results.

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