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Barriers self-efficacy and performance of creative industry SME: The role of accounting information system

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ABSTRACT

This research aimed to understand the effects of the accounting information system (AIS) and barriers self-efficacy on small and medium-sized enterprise (SME) performance. A total of 243 SME owners and managers participated in a cross-sectional survey using a questionnaire. Furthermore, the data was collected using a purposive sampling method as part of an explanatory causality investigation. For complex models, structural equation modeling (SEM) was used and was suitable for estimating the data. The results of this study showed that business strategy significantly impacted SME performance and AIS usage. Additionally, AIS usage indirectly affected SME performance through barriers self-efficacy as a mediator. SME performance was also directly proportional to the confidence of actors in overcoming obstacles, while barriers self-efficacy increased the influence of AIS. Furthermore, the inability to deal with accounting and finance issues could be explained by barriers self-efficacy through the elaboration of theories. The use of the theory aligned with the empirical problems and could help solve the obstacles. In conclusion, stakeholders were supported in decision-making to enhance modulation and the use of AIS for sustainable SME management. AIS provided the knowledge needed to make better choices about the goods and services supplied to utilize AIS efficiently.

Contribution/Originality: This research contributes to the literature on how AIS can diminish the negative effects of barriers and enhance self-efficacy in creative industry SMEs. It extends current literature by presenting AIS as enablers of performance rather than merely for compliance or record-keeping.

1. INTRODUCTION

Small and medium-sized enterprises (SMEs) are the primary drivers of economic development in developed and developing countries worldwide (Utama, Yusfiarto, Pertiwi, & Khoirunnisa, 2024; Widjaja, Wibowo, Narmaditya, Wardoyo, & Saptono, 2022). Indonesia has the most SMEs according to the ASEAN Investment Report 2022. These businesses are the foundation of the Indonesian economy, accounting for 61.9% of GDP and employing 97% of the country's workforce (Utari & Hutasuhut, 2024). However, SMEs face several obstacles that reduce their level of competitiveness, namely restricted access to capital, marketing limitations, and a lack of technological adoption (Fanelli, 2021).

Accounting information systems (AIS) help SMEs record, process, and present relevant, timely, accurate, and reliable financial information for making strategic decisions (Ogundana et al., 2017). Operational efficiency and

business planning can be improved through an effective AIS (Latifah, Setiawan, Aryani, & Rahmawati, 2021). However, many SME in Indonesia have not used AIS due to a lack of financial literacy and accounting training (Puji Handayati & Restuningdyah, 2023).

In the application, AIS has important components, namely human resources and technology (Monteiro & Cepêda, 2021). With the latest developments in accounting information technology, AIS serves as the backbone of digital transformation, which faces complex challenges related to human resource capacity in its implementation (Fenwick, Molnar, & Frangos, 2024). AIS increases operational efficiency in SME to increase the accuracy of financial reporting (Vo Van, Abu Afifa, & Saleh, 2024).

The contingency perspective views organizations as open systems connected to business strategy, environment, and structures influencing internal processes. An organization cannot be managed or structured universally. The particular context and circumstances faced by businesses determine the success of strategy, structure, or management style. This theory is concerned with the effect of strategy on organizational performance and the provision of attempts to recognize the most appropriate control system for relevant situations. In this context, no control system is constant under all conditions (Otley, 1980), leading to the application of adaptations to enhance advantages in each situation.

AIS is an integral component of the management control system to pinpoint standardization and direct the accomplishment of SME organizational goals (Latifah et al., 2021). Furthermore, this component plays a role in improving control and coordination within the organization (Al-Hattami, 2024), identifying customer and supplier bills, and predicting future performance (Al-Hattami, 2024; Latifah et al., 2021). Gray, Chiu, Liu, and Li (2014) argued that AIS had the inherent to drive managers to make the right and productive decisions in developing a strategy for organizations.

Developing distinctive goods or services that set SMEs apart from rivals is the focus of the differentiation strategy (Okwaro, King'oo, & Kinyanjui, 2025). A management control system design is required in high environmental uncertainty (Davila, Foster, & Oyon, 2009). AIS plays a role in supporting internal decision-making, assessing manager strategy (Blomkvist, Johansson, & Malmström, 2016) and building capacity (Latifah et al., 2021). According to the previously cited research, an evolving company strategy improves the caliber of data generated by AIS and facilitates decision-making (Handayati, Soetjipto, Soesilowati, & Nastiti, 2023).

AIS assists SMEs in strengthening differentiation since the concept serves as a mediator between strategy and company performance (Latifah et al., 2021). This is relevant for the creative industry, which is highly dependent on innovation and creativity. The industry covers various sectors such as design, fashion, art, and digital media. This sector has great potential to drive economic growth, but faces challenges in financial management and maintaining structured accounting records.

The individual abilities of AIS users play a role in supporting performance achievement. These abilities include overcoming obstacles experienced by system users. Afrizal, Hidayanto, Handayani, Budiharsana, and Eryando (2019) emphasized that personal obstacles were experienced by users in implementing AIS. In this context, personal obstacles include factors such as lack of knowledge, feelings of unfamiliarity with the existing system, rejection within the individual, as well as lack of willingness to learn and awareness. User confidence in operating AIS depends on the ability to overcome barriers and self-efficacy (Angkat, Adhikara, & Dian, 2023). This important determinant is reported in the linkage between the use of AIS and the performance of SMEs (Puji Handayati et al., 2021).

The novelty of this research lies in the collaboration of contingency theory (CT) and the adoption of the fundamental attributes of self-efficacy from social cognitive theory, in the form of barriers self-efficacy theory (BSET), to predict preventive behavior. Barriers self-efficacy is used to overcome the behavior of SMEs that are unable to adopt IT-based accounting information and the obstacle of lack of confidence in AIS. The combination of CT with BSET has not been widely applied, especially in research involving SMEs.

The contributions of this research are twofold: first, CT by Otley (1980) emphasizes that no business strategy fits all situations. An effective strategy must be directed toward the specific conditions and contexts of an

organizational operation to gain knowledge. Second, contingency factors propose the function of an adequate control system and its relationship to performance. This expands the spectrum of barriers and self-efficacy in providing a strategic role for the perception of prevention behavior.

The introduction is covered in the first part, followed by the literature review and methods. The results and discussion are presented in the fourth and fifth sections, respectively. Meanwhile, the research concludes with the conclusions and implications in the last section.

2. LITERATURE REVIEW

2.1. Underpinning Theories

This research includes CT and BSET. CT is related to business strategy affecting organizational dispatch through planning, control, and decision-making (Pires & Alves, 2022). The efficacy of an organization depends on a business plan with situational elements, including the external environment and internal attributes. Additionally, there is no single control system that works in every circumstance (Otley, 1980). AIS is an essential part of the management control system and must be adaptable to change within the business to enhance performance. This variable plays a role in improving control and coordination within the organization (Nicolaou, 2000) and in predicting future performance. BSET explains the process of impacting individual behavior through perception to overcome obstacles. This theory was developed by Bandura (1997) as part of social cognitive theory, based on the idea that self-efficacy is a crucial determinant of motivation and behavior change. The implementation of AIS plays a role in increasing control and depends on the ability to overcome obstacles. Barriers are factors that prevent individuals from performing the desired behavior. The beliefs or self-confidence of individual information system users are shaped by their responses and perceptions of accepting or rejecting impediments. Barrier self-efficacy refers to the confidence of SME actors in their ability to overcome challenges associated with AIS.

2.2. Business Strategy and AIS

Lechner and Gudmundsson (2014) view the sustainability of SMEs and start-ups as quite low; therefore, strategic business development must be conducted. The cause of the hampered sustainability and performance of SMEs is the lack of a clear and coherent strategic orientation (Ratnawati, Soetjipto, Murwani, & Wahyono, 2018; Shirokova, Bystrov, Vlasova, & Morris, 2024). Therefore, this requires a coherent business strategy to increase competitiveness and performance. Research has developed a variety of competitive strategy models, such as the competitive strategy typology made known by Porter (1980), and it is often used by SMEs and large organizations (Parnell, 2013). In changes and evaluation of business strategy, managers need AIS to formulate the right strategy to gain competitiveness and improve dispatch (Latifah et al., 2021; Verbeeten, 2010). In this context, the following hypothesis was developed.

H_1: Business strategy has a significant impact on how AIS is used.

2.3. AIS and Barriers Self-Efficacy

SMEs use AIS to forecast the risk of company failure and develop business procedures. According to Turner, Weickgenannt, and Copeland (2016), computerized AIS offers several advantages, such as quick access to financial data, accurate and reliable information, and simplicity of transaction execution. This supports SMEs in completing and increasing the quantity and quality of financial reports (Ye & Hu, 2020). However, the success of AIS raises obstacles preventing electronic recording. Afrizal et al. (2019) stated that individual obstacles affected the implementation of AIS, including a lack of knowledge, ignorance, user rejection, willingness to learn new skills, and limited awareness. Individual reactions to the obstacles, in the form of beliefs in the ability to overcome obstacles, are referred to as barriers to self-efficacy (Qurrata, Soetjipto, Puspitasari, Yusida, & Saputra, 2024). According to Afrizal et al. (2019), there are five aspects identified as barriers to self-efficacy, including lack of knowledge, ignorance, user

rejection of the existence of the system, reluctance to learn new skills, and cognitive limitations. Therefore, the following hypothesis was developed.

H_2: The use of AIS has a significant effect on barriers to self-efficacy.

2.4. AIS and SME Performance

AIS aims to guide organizations in achieving their stated goals (Davila et al., 2009) and serves as an instrument for achieving company objectives (Esparza-Aguilar, García-Pérez-de-Lema, & Duréndez, 2016). The success of business players impacting performance is also based on AIS (Lucas, 1975). According to Soudani (2012), AIS is an element of a management control system aimed at enhancing performance by evaluating, measuring, and considering different choices throughout the decision-making process (Esparza-Aguilar et al., 2016). In addition, the use of high-quality accounting data reduces the establishment of knowledge asymmetry in agent-principal interactions. The possibility of obtaining funds from creditors may increase with high-quality accounting data, affecting organizational operations (Gorji, Ghodrati, Arabzadeh, & Panahian, 2023). Alnajjar (2017) showed a favorable correlation between performance and the adoption of AIS. Meanwhile, Budiarto et al. (2018) proved that AIS was positively correlated with the non-financial performance of SME. Therefore, the following hypothesis was developed.

H_3: The use of AIS has a significant effect on SME performance.

2.5. Business Strategy and SME Performance

Business strategy, including differentiation methods and cost leadership plans, plays a prominent role for SMEs. However, the incorporation of a cost leadership strategy is difficult to implement because production efficiency is the primary factor (Kharub, Mor, & Rana, 2022) and requires significant financial resources. Differentiation strategies relying on speed, customer service, and flexibility are the best alternatives for SMEs. Research results show that low-cost and differentiation business strategies affect SME performance (Latifah et al., 2021). According to Leitner and Güldenberg (2010), SMEs implementing low-cost and differentiation strategies have higher growth. Therefore, the following hypothesis was developed.

H_4: Business strategy has a significant effect on SME performance.

2.6. Barriers Self-Efficacy and SME Performance

AIS improves SME dispatch Laudon and Laudon, 2004) and its implementation is highly dependent on the success of the process and the identification of various barriers. Personal barriers include low knowledge, unfamiliarity, and rejection of AIS, which cause attitudes and beliefs among SME actors regarding their inability to overcome these barriers. Empirical research results examining barriers, self-efficacy, and performance in small and medium enterprises are very rare. However, research in the health industry conducted by Afrizal et al. (2019) stated that low competence of information system actors, lack of desire to undergo training, poor literacy, and limited technology skills increase the difficulty of adopting existing technological changes (Tsai, Hung, Yu, Chen, & Yen, 2019). Therefore, system users are resistant to AIS, which has implications for performance, developing the following hypothesis.

H_5: Barriers to self-efficacy have a significant effect on SME performance.

Nicolaou (2000) stated that the effect of the method on performance through technology-based AIS improved organizational control and coordination. SME are unable to detect supplier and customer bills, improve performance, and forecast future delivery (Amidu, Effah, & Abor, 2011; Kharuddin, Ashhari, & Nassir, 2010). The implementation of a business strategy equipped with AIS produces better information quality and becomes a step in company control, improving company performance. Therefore, the following hypothesis was developed.

H_6: AIS mediates business strategy and SME performance.

The implementation of AIS is faced with several obstacles. The most prominent obstacle to the use of AIS is factors within system actors during the process of implementation such as skills, knowledge, attitudes, and self-confidence (Afrizal et al., 2019). This is due to individuals' inability to adapt to AIS technology, unfamiliarity, and lack of knowledge, which causes resistance to existing changes. The system remains unadopted when SME actors cannot use AIS to improve performance. Self-efficacy barriers influence the relationship between AIS use and SME performance. This variable significantly affects the growth of hospital information systems and the success rate of EMR deployment in hospitals, as reported by Tsai et al. (2019) and Angkat et al. (2023), to improve performance.

H7: Barriers to self-efficacy mediate AIS and SME performance.

3. RESEARCH METHODOLOGY

3.1. Research Design

This research employs explanatory causality to clarify respondents' views and opinions on SME performance, including business strategy, use of AIS, and barriers to self-efficacy in the creative industry sector. Structural Equation Modeling (SEM) was adopted to test the causal relationship between business strategy and the effects of each variable on SME performance. A total of 243 respondents, who are owners and managers of SMEs in various parts of Indonesia such as Batu, Malang City, and Regency, participated in the study. Data collection was conducted through a Google Form questionnaire to gather primary data, including opinions and perspectives on the use of AIS and SME performance. This research used a one-shot design, with the individual analysis unit serving as a proxy for SME. Subsequently, data analysis was performed using AMOS as the SEM analysis tool.

3.2. Operational Definition and Measurement

AIS is used to process user-provided data and financial transactions. The use of AIS demonstrates the qualities of accounting information, including timeliness, relevance, and dependability, as tools created by Sori (2009). SME uses AIS, according to seven indications on the Likert scale, where 1 and 5 represent strongly disagree and strongly agree, respectively. Barriers to self-efficacy refer to the belief of SME actors in overcoming challenges that prevent the use of AIS. This instrument was modified from previous research (Afrizal et al., 2019; Angkat et al., 2023), which consisted of five statement items, namely lack of knowledge, unfamiliarity, and rejection of AIS. The results of the convergent validity test showed three valid statement items, while the other two were removed.

Business strategy relates to the differentiation method defined as the development of a unique product, offering consumers more value. The measurement of this variable was carried out by Camisón and Villar-López (2010), consisting of nine indicators including innovation and creativity, focus on providing customer satisfaction, building a consistent image, differentiation method in designing products, utilization of unique technology, quality assessment, innovation by introducing new products, a specific budget for research and development, and creating new features according to market needs.

Based on the convergent validity test, only seven statement items were valid, while the other two were removed. SME performance is the perception of actors regarding the achievement of financial and non-financial productivity compared to the achievements of the previous three years.

This variable was adopted from the instrument developed by Kantur (2016), and it includes eight indicators such as increasing return on investment, percentage profit on sales, reducing the cycle time for the delivery of goods or services, speed in responding to consumer or market demand, confirming orders, customer satisfaction, profit growth, market share expansion, and reducing operational costs. Based on the convergent validity test, only six statement items are valid, while the remaining two were removed.

4. RESULT AND DISCUSSION

4.1. Demographic Respondents

Data were collected from 243 respondents, of whom 202 were married (90.2%) and 142 were male (63.1%). Furthermore, 99 respondents, or 44%, are in the age range of 41 to 50, which constitutes the largest proportion. Among the respondents, the highest level of education is a bachelor's degree, master's degree, or diploma (151, or 62%), while the lowest level is high school, junior high school, and elementary school (92, or 38%).

Table 1. The characteristics of the respondents.

Information	Total	Percentage
Types of business		
Food & beverage	81	33%
Fashion & batik	43	18%
IT and application development, creative media & digital marketing, publishing	41	17%
Leather industry and handicrafts	43	18%
Furniture	23	9%
Others	12	5%
Amount	243	100%
Number of employees		
5 - 19 people	144	59%
20-99 people	99	41%
Respondent status		
Owner	59	24%
Manager	85	35%
Owner & manager	99	41%
Respondent education		
Bachelor's degree, master's degree, and doctoral degree	101	42%
Diploma	50	20%
High school, junior high school, and elementary school	92	38%
Gender		
Female	102	42%
Male	141	58%
Respondent's education field		
Economics, management, business, and accounting	60	40%
Engineering, socio-humanities, agriculture, animal husbandry	91	60%
Respondent age		
18 – 28	10	4%
29 -39	39	16%
40 - 50	124	51%
51 - 61	65	27%
62 - 72	5	2%
Length of business		
<5 years	12	5%
5.1 -10 years	25	10%
10.1 -15 years	47	19%
15.1 – 20 years	98	40%
>20 years	61	25%

Research data can be obtained based on gender, number of employees, respondent status, education, field of diploma, bachelor, master, doctoral degree, age, and length of business. Table 1 shows that the majority of respondents are male entrepreneurs (58%) employed as owners and managers (41%), and 33% work in the food and beverage sector. In the context of education, 60% work in engineering, socio-humanities, agriculture, and animal husbandry. The majority of respondents (51%) are aged 51-61 years, and the length of the company business (40%) is 15.1 - 20 years.

Table 2. Descriptive statistics.

Variable	N	Minimum	Maximum	Mean	Standard deviation
SME performance	243	2	5	4.251	0.620
AIS	243	1	5	4.319	0.638
Barriers self-efficacy	243	1	5	2.441	0.954
Business strategy	243	1	5	4.235	0.708

Table 2 presents descriptive data showing the behavioral inclinations of managers and owners of SMEs. Therefore, high SME performance is attributed to the use of AIS, the implementation of a differentiation strategy, and a strong sense of barriers self-efficacy, reflecting confidence in overcoming challenges associated with utilization.

4.2. Normality Test

The results of the data normality test are summarized in Table 3. To ascertain the normality of the data distribution, the test examines the CR value. According to the calculation, a normal data distribution is indicated by a critical ratio value of $1.239 < 2.58$.

Table 3. Data normality.

Variable	Min.	Max.	Skew	CR	Kurtosis	CR
SME performance	2.000	5.000	-0.466	-2.964	0.520	1.656
Barriers self-efficacy	1.000	5.000	0.276	1.754	-0.254	-0.807
Business strategy	1.000	5.000	-0.833	-5.301	1.100	1.500
AIS	2.000	5.000	-0.696	-4.429	0.445	1.415
Multivariate					44.550	1.239

4.3. Data Quality Test

The validity aims to ensure that constructs are measured using a loading factor value higher than 0.5. However, the purpose of dependability estimation is to guarantee consistency achieved with a composite value greater than 0.60. According to Table 4, the outcome shows that the variable indicator has the lowest and maximum loading factors of 0.853 and 1.487, with reliability estimations of 0.8942 and 0.90825, respectively. The goodness-of-fit measures are shown in Table 5, where the proposed model meets the cut-off values.

Table 4. Instrument quality test data.

No.	Variable	Loading factor	Composite reliability
1	SME performance	0.99- 1.231	0.90
2.	Barrier self-efficacy	0.853-1.043	0.89
3.	Business strategy	0.925-1.311	0.89
4.	AIS	1.00- 1.488	0.90

Table 5. Goodness of fit test results.

No.	Criteria	Results	Conclusion / Decision
1	Chi-Square statistic. The Chi-square criterion is expected to be small.	Chi-square = 194.094	Fit
2	Cut-off value p> 0.05	0.585	Fit
3	RMSEA ≤ 0.08	0.000	Fit
4	GFI ≥ 0.90	1.000	Fit
5	CMIN/DF < 2	0.975	Fit
6	TLI ≥ 0.95	1.000	Fit
7	CFI ≥ 0.95	1.000	Fit

4.4. Hypothesis Testing

Table 6 provides an overview of hypothesis testing regarding the link between SME performance and barriers to self-efficacy, as well as the connection between organizational performance, AIS, and business strategy. Figure 1 depicts the final model to show the linkage between variables.

Table 6. Hypothesis test result.

Variable	Estimating	S.E.	C.R.	P	Information
Business strategy → AIS	0.207	0.062	3.364	0.000	H1 accepted
AIS → Barriers self-efficacy	-0.786	0.241	-3.263	0.001	H2 accepted
AIS → SME performance	0.144	0.098	1.476	0.140	H3 rejected
Business strategy →SME performance	0.406	0.081	5.038	0.000	H4 accepted
Barriers self-efficacy) → SME performance	-0.067	0.032	-2.066	0.039	H5 accepted
Multiple of square R^2 Using of AIS = 0.093 Barrier self-efficacy = 0.078 SME performance =0.350			Chi-square = 194.094 Sign p = 0.585 [Matches above 0.05]		

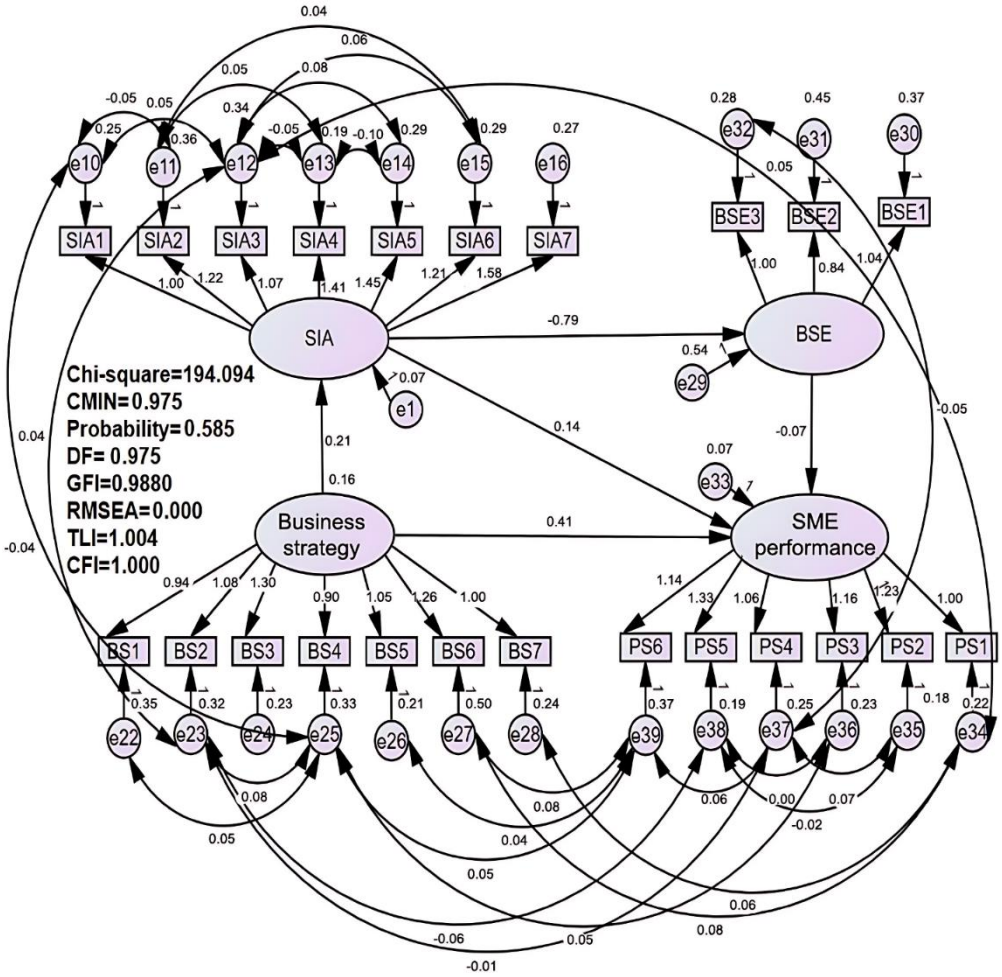

Figure 1. Result model.

4.5. Intervening Test

The data normalcy test results are shown in Table 3. To ascertain when the data distribution is normal, the CR value is examined using a normality test. The calculation suggests that normal data distribution is indicated by a crucial ratio value of 1.239 < 2.58. In addition, Table 7 reports the influence of the intervening variable. The performance of SMEs is unaffected by the direct impact of AIS, while the indirect influence is negligible. Furthermore,

the indirect impact of the mediating variable, barriers self-efficacy, reported a higher value of 0.121, and the substantial direct influence of AIS on SMEs was 0.044. As a mediating variable, barriers self-efficacy enhanced the impact of AIS implementation on SME performance.

Table 7. The influence of intervening variable.

Variable	Direct		Indirect	
	AIS	Barrier self-efficacy	AIS	Barrier self-efficacy
Barrier self-efficacy	-0.280	0.000	0.000	0.000
SME performance	0.044	0.500	0.121	0.000

4.6. Discussion

The results show that company strategy has a positive impact on the adoption of AIS. By offering unique products or services, SMEs following the execution of a differentiation business strategy with optimism attract more customers. The positive attitude towards differentiation strategy views AIS as an important tool to support SME business goals.

CT Otley (1980) can be applied universally in all organizations. There are three main components of this theory, namely organizational structure, managerial strategy, and information system. Based on the results, AIS is a crucial part of the management control system. The variable assists SMEs in creating and implementing an efficient control system within the framework of a differentiating strategy. The management control system comprises several instruments and methods for tracking performance, managing expenses, and ensuring the implementation of company plans.

AIS provides the information needed for cost analysis, performance measurement, and decision-making supporting the differentiation strategy. The results are similar to Pollard and Morales (2015) and Setiawati, Novyandra, and Bawana (2022), where business strategy requires a sophisticated AIS to monitor market information or trends. Historical accounting information is also necessary to maintain market stability. To control and sustain market share stability, a management accounting system is needed concerning product differentiation and the focus of SMEs on building competitive advantages. This type of strategy aims to serve consumer needs through integration with the management accounting system.

The subsequent result shows a negative effect of AIS on barriers to self-efficacy. A positive attitude towards using AIS increases the self-confidence of SME actors in overcoming obstacles. In this context, the obstacles faced by SME business actors include reactions and rejection of AIS or technology. These obstacles also encompass a lack of knowledge in operating AIS, unfamiliarity, and rejection (Afrizal et al., 2019). SME actors have a positive attitude toward using AIS to make work easier. The existence of automation in accounting software can input, process, store data, and compile financial reports automatically (Virtanen, 2021).

Social cognitive theory, Bandura (2000), shows that SMEs believe in their ability to overcome obstacles when using AIS. SMEs may be unable to operate AIS effectively due to insufficient understanding or skills, which reduces self-confidence. SMEs with limited experience may not understand the various aspects. This lack of understanding causes discomfort and confusion, increasing feelings of unfamiliarity. According to Afrizal et al. (2019) and Tsai et al. (2019), increased use of AIS is associated with the implementation of more complex features and modules. In this context, users are more confident in their ability to overcome barriers to effectively using AIS.

SME performance is not significantly impacted by the adoption of AIS. This variable is unaffected by the attitude of actors towards using AIS. CT states that the impact of AIS on SME performance is situational and depends on the adaptation of internal and external circumstances of the business (Otley, 1980). The deployment of AIS may not always have a significant effect on SME performance since external factors influence the effectiveness of implementation (Lutfi, Al-Khasawneh, Almaiah, Alsyouf, & Alrawad, 2022). The effectiveness of a management

system or practice is influenced by environmental conditions, organizational characteristics, and available resources (Al-Okaily, Al-Okaily, Shiyyab, & Masadah, 2020).

SME with limited resources cannot use AIS optimally due to minimal impact on performance. A key factor in the effectiveness of technology deployment is human resource competencies (Nicolás-Agustín, Jiménez-Jiménez, & Maeso-Fernandez, 2022), including personal barriers experienced by users (Afrizal et al., 2019). Lutfi et al. (2022) reported a strong and favorable correlation between SME performance and AIS adoption, which conflicted with the results.

Based on the description above, business strategy has a significant positive effect on SME performance. SME actors with a positive attitude towards differentiation strategy can innovate and create new products or services relevant to market needs to increase competitiveness and performance. The fit between strategy and available resources is important to implement a differentiation strategy effectively (Rehman, Bresciani, Ashfaq, & Alam, 2022). From a CT perspective, differentiation business strategy has a strong connection with SME performance. This is because of the fit between strategy, market context, customer needs, internal resources, organizational culture, and adaptability (Anning-Dorson, 2021). The implementation of the right differentiation strategy allows SMEs to create added value and increase customer satisfaction, achieving better performance. In the context of SMEs, CT offers a foundation for understanding the impact of situational circumstances on the efficacy of differentiation strategy. The output of work supports Rehman and Anwar (2019) and Setiawati et al. (2022).

Barriers to self-efficacy significantly impair the performance of SMEs. The variable indicates the confidence of SME actors in their ability to overcome obstacles in using AIS. The significance of these results is that SME actors' confidence in their ability to overcome obstacles affecting AIS use is crucial. High confidence encourages SME actors to learn, adapt, and seek support from professional accountants and business consultants (Holmes & Nicholls, 1988; Ismail & King, 2007), which is necessary to overcome obstacles to using AIS. Therefore, SME actors can use AIS effectively, contributing to improved performance. These obstacles include a lack of knowledge about AIS, unfamiliarity, and rejection of AIS (Afrizal et al., 2019).

The performance of SMEs and elements of business strategy are not mediated by AIS usage. Although SME actors assist in creating distinctive business strategies to improve performance, the employment of AIS does not mediate the relationship. The usage of AIS does not significantly affect performance when the concept is inadequately incorporated into the business plan. In this context, AIS may not function as an effective tool to support business strategy. SME actors believe that there are barriers to AIS deployment, such as inadequate technology infrastructure, management support, or training. The output of this research does not support Latifah et al. (2021) and Setiawati et al. (2022).

Barriers self-efficacy variable interacts with the behavior of SME through psychological, environmental, and other normative factors. Therefore, this mediating variable enhances the impact of AIS adoption on performance. Employees possess high self-efficacy in overcoming barriers to using AIS (Lutfi et al., 2022). SME actors are more proactive in using AIS with training and assistance from advisors such as professional accountants, business consultants, and accounting application vendors (Ismail & King, 2007) to maximize benefits and increase performance. Some research supports barriers such as self-efficacy as a mediator and faces challenges such as technical difficulties, lack of knowledge, unfamiliarity, and system rejection due to overconfidence (Adhikara, Maslichah, & Nur Diana, 2022; Angkat et al., 2023).

5. CONCLUSION, LIMITATION, AND RECOMMENDATION

In conclusion, this research advanced CT to identify optimal conditions for the implementation of AIS and facilitate necessary adjustments based on organizational characteristics and specific contextual variables. The results provided credence to social cognitive theory, where SME performance was impacted by barriers, self-efficacy, and business strategy mediated through the usage of AIS. Empirically, the results showed that the inability to overcome

accounting and finance challenges could be explained by barriers, self-efficacy through the elaboration of theories. The use of the theory was in line with the empirical problems and could address the obstacles. Furthermore, SME performance was impacted by business strategy through self-efficacy. AIS provided the knowledge needed to make better choices about the goods and services supplied to make efficient use of AIS.

The conclusions cannot be generalized to SMEs in other social and economic contexts since this research only analyzed a sample from the Malang Raya area. Barriers influencing the use of AIS are personal and organizational issues impacting usage, including managerial, ethical, and financial barriers. Future research could develop a research model by expanding the sample size. Additionally, environmental uncertainty, computer self-efficacy, AIS development, innovation, implementation of EMKM SAK, voluntary use, age, and gender should also be incorporated into the theoretical model. These independent, dependent, intervening, or moderating variables explain the relationship within the AIS usage model for SME actors.

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REFERENCES

Adhikara, A., Maslichah, M., & Nur Diana, M. B. (2022). Organizational performance in environmental uncertainty on the Indonesian healthcare industry: A path analysis. *Academic Journal of Interdisciplinary Studies*, *11*(2), 365-377. https://doi.org/10.36941/ajis-2022-0058

Afrizal, S. H., Hidayanto, A. N., Handayani, P. W., Budiharsana, M., & Eryando, T. (2019). Narrative review for exploring barriers to readiness of electronic health record implementation in primary health care. *Healthcare Informatics Research*, *25*(3), 141-152. https://doi.org/10.4258/hir.2019.25.3.141

Al-Hattami, H. M. (2024). Impact of AIS success on decision-making effectiveness among SMEs in less developed countries. *Information Technology for Development*, *30*(3), 472-492. https://doi.org/10.1080/02681102.2022.2073325

Al-Okaily, A., Al-Okaily, M., Shiyyab, F., & Masadah, W. (2020). Accounting information system effectiveness from an organizational perspective. *Management Science Letters*, *10*(16), 3991-4000.

Alnajjar, M. I. (2017). Impact of accounting information system on organizational performance: A study of SMEs in the UAE. *Global Review of Accounting and Finance*, *8*(2), 20–38.

Amidu, M., Effah, J., & Abor, J. (2011). E-accounting practices among small and medium enterprises in Ghana. *Journal of Management Policy and Practice*, *12*(4), 146-155.

Angkat, E. H., Adhikara, M. A., & Dian, W. (2023). The influence of SI-RS development and computer self-efficacy on the implementation of EMR mediated by barrier self-efficacy at Firdaus Hospital. *Jurnal Cinta Nusantara*, *1*(2), 1-11.

Anning-Dorson, T. (2021). Organizational culture and leadership as antecedents to organizational flexibility: Implications for SME competitiveness. *Journal of Entrepreneurship in Emerging Economies*, *13*(5), 1309-1325. https://doi.org/10.1108/JEEE-08-2020-0288

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

Bandura, A. (2000). Cultivate self-efficacy for personal and organizational effectiveness. In E. A. Locke. Handbook of principles of organization behavior. In (pp. 120-136). Oxford: UK Blackwell.

Blomkvist, M., Johansson, J., & Malmström, M. (2016). Accounting knowledge in innovative firms-direct contacts with external auditors for strategic actions. *International Journal of Managerial and Financial Accounting*, *8*(3-4), 209-229. https://doi.org/10.1504/IJMFA.2016.10002742

Budiarto, D. S., Rahmawati, Prabowo, M. A., Bandi, Djajanto, L., Widodo, K. P., & Herawan, T. (2018). *Accounting information system (ais) alignment and non-financial performance in small firm: A contingency perspective*. Paper presented at the Computational Science and Its Applications–ICCSA 2018: 18th International Conference, Melbourne, VIC, Australia, July 2-5, 2018, Proceedings, Part II 18.

Camisón, C., & Villar-López, A. (2010). Effect of SMEs' international experience on foreign intensity and economic performance: The mediating role of internationally exploitable assets and competitive strategy. *Journal of Small Business Management*, *48*(2), 116-151. https://doi.org/10.1111/j.1540-627X.2010.00289.x

Davila, A., Foster, G., & Oyon, D. (2009). Accounting and control, entrepreneurship and innovation: Venturing into new research opportunities. *European Accounting Review*, *18*(2), 281-311. https://doi.org/10.1080/09638180902731455

Esparza-Aguilar, J. L., García-Pérez-de-Lema, D., & Duréndez, A. (2016). The effect of accounting information systems on the performance of Mexican micro, small and medium-sized family firms: An exploratory study for the hospitality sector. *Tourism Economics*, *22*(5), 1104-1120. https://doi.org/10.5367/te.2015.0515

Fanelli, R. M. (2021). Barriers to adopting new technologies within rural small and medium enterprises (SMEs). *Social Sciences*, *10*(11), 430. https://doi.org/10.3390/socsci10110430

Fenwick, A., Molnar, G., & Frangos, P. (2024). The critical role of HRM in AI-driven digital transformation: A paradigm shift to enable firms to move from AI implementation to human-centric adoption. *Discover Artificial Intelligence*, *4*(1), 34. https://doi.org/10.1007/s44163-024-00125-4

Gorji, M. R., Ghodrati, H., Arabzadeh, M., & Panahian, H. (2023). Investigating the effect of earnings quality on the company's trade credit with an emphasis on the moderating role of accounting information comparability. *International Journal of Finance & Managerial Accounting*, *8*(29), 133-146.

Gray, G. L., Chiu, V., Liu, Q., & Li, P. (2014). The expert systems life cycle in AIS research: What does it mean for future AIS research? *International Journal of Accounting Information Systems*, *15*(4), 423-451. https://doi.org/10.1016/j.accinf.2014.06.001

Handayati, P., & Restuningdyah, N. (2023). *The role of self-efficacy and financial attitude to financial well-being: Mediation of MSME financial behavior*. Paper presented at the BISTIC Business Innovation Sustainability and Technology International Conference (BISTIC 2022).

Handayati, P., Soetjipto, B. E., Soesilowati, E., & Nastiti, R. D. (2023). Strategy for an increase of original regional income through changes in waste retribution in Mojokerto City. *Jurnal Riset Akuntansi dan Bisnis Airlangga*, *8*(2), 1505-1520. https://doi.org/10.20473/jraba.v8i2.48484

Handayati, P., Wibowo, A., Narmaditya, B. S., Kusumojanto, D. D., Setiawan, A. B., & Tung, D. T. (2021). The university students enterprises development: Lesson from Indonesia. *Cogent Education*, *8*(1), 1973286. https://doi.org/10.1080/2331186X.2021.1973286

Holmes, S., & Nicholls, D. (1988). An analysis of the use of accounting information by Australian small business. *Journal of Small Business Management*, *26*(2), 57.

Ismail, N. A., & King, M. (2007). Factors influencing the alignment of accounting information systems in small and medium sized Malaysian manufacturing firms. *Journal of Information Systems and Small Business*, *1*(1-2), 1-20.

Kantur, D. (2016). Strategic entrepreneurship: Mediating the entrepreneurial orientation-performance link. *Management Decision*, *54*(1), 24-43. https://doi.org/10.1108/MD-11-2014-0660

Kharub, M., Mor, R. S., & Rana, S. (2022). Mediating role of manufacturing strategy in the competitive strategy and firm performance: Evidence from SMEs. *Benchmarking: An International Journal*, *29*(10), 3275-3301. https://doi.org/10.1108/BIJ-05-2021-0257

Kharuddin, S., Ashhari, Z. M., & Nassir, A. M. (2010). Information system and firms' performance: The case of Malaysian small medium enterprises. *International Business Research*, *3*(4), 28-35. https://doi.org/10.5539/ibr.v3n4p28

Latifah, L., Setiawan, D., Aryani, Y. A., & Rahmawati, R. (2021). Business strategy–MSMEs' performance relationship: Innovation and accounting information system as mediators. *Journal of Small Business and Enterprise Development*, *28*(1), 1-21. https://doi.org/10.1108/JSBED-04-2019-0116

Laudon, K. C., & Laudon, J. P. (2004). *Management information systems: Managing the digital firm* (16th ed.). Upper Saddle River, NJ: Pearson Educación.

Lechner, C., & Gudmundsson, S. V. (2014). Entrepreneurial orientation, firm strategy and small firm performance. *International Small Business Journal*, *32*(1), 36-60. https://doi.org/10.1177/0266242612455034

Leitner, K.-H., & Güldenberg, S. (2010). Generic strategies and firm performance in SMEs: A longitudinal study of Austrian SMEs. *Small Business Economics*, *35*, 169-189. https://doi.org/10.1007/s11187-009-9239-x

Lucas, H. C. (1975). The use of an accounting information system, action and organizational performance. *The Accounting Review*, *50*(4), 735-746.

Lutfi, A., Al-Khasawneh, A. L., Almaiah, M. A., Alsyouf, A., & Alrawad, M. (2022). Business sustainability of small and medium enterprises during the COVID-19 pandemic: The role of AIS implementation. *Sustainability*, *14*(9), 5362. https://doi.org/10.3390/su14095362

Monteiro, A., & Cepêda, C. (2021). Accounting information systems: Scientific production and trends in research. *Systems*, *9*(3), 67. https://doi.org/10.3390/systems9030067

Nicolaou, A. I. (2000). A contingency model of perceived effectiveness in accounting information systems: Organizational coordination and control effects. *International Journal of Accounting Information Systems*, *1*(2), 91-105. https://doi.org/10.1016/S1467-0895(00)00006-3

Nicolás-Agustín, Á., Jiménez-Jiménez, D., & Maeso-Fernandez, F. (2022). The role of human resource practices in the implementation of digital transformation. *International Journal of Manpower*, *43*(2), 395-410. https://doi.org/10.1108/IJM-03-2021-0176

Ogundana, O., Okere, W., Ayomoto, O., Adesanmi, D., Ibidunni, S., & Ogunleye, O. (2017). ICT and accounting system of SME in Nigeria. *Management Science Letters*, *7*(1), 1-8. http://dx.doi.org/10.5267/j.msl.2016.11.007

Okwaro, V. O., King'oo, R., & Kinyanjui, W. (2025). Influence of differentiation strategies on the growth of small and medium enterprises in Makueni County, Kenya. *Fluent Publishers*, *1*(1), 57-76.

Otley, D. T. (1980). The contingency theory of management accounting: Achievement and prognosis. *Accounting, organizations and society*, *5*(4), 413-428. https://doi.org/10.1016/0361-3682(80)90040-9

Parnell, J. A. (2013). Uncertainty, generic strategy, strategic clarity, and performance of retail SMEs in Peru, Argentina, and the United States. *Journal of Small Business Management*, *51*(2), 215-234. https://doi.org/10.1111/jsbm.12010

Pires, R., & Alves, M.-C. G. (2022). The impact of environmental uncertainty on accounting information relevance and performance: A contingency approach. *Economies*, *10*(9), 211. https://doi.org/10.3390/economies10090211

Pollard, C. E., & Morales, M. (2015). Exploring the impact of aligning business and IS strategy types on performance in small firms. *Journal of Small Business Strategy (archive only)*, *25*(1), 26-45.

Porter, M. E. (1980). *Competitive advantage: Creating and sustaining superior performances*. New York: Free Pres.

Qurrata, V. A., Soetjipto, B. E., Puspitasari, D. N., Yusida, E., & Saputra, J. (2024). Perception of SME in East Java on digitalization transformation in business. *KnE Social Sciences*, *9*(21), 1–19. https://doi.org/10.18502/kss.v9i21.16653

Ratnawati, Soetjipto, B. E., Murwani, F. D., & Wahyono, H. (2018). The role of SMEs' innovation and learning orientation in mediating the effect of CSR programme on SMEs' performance and competitive advantage. *Global Business Review*, *19*(3_suppl), S21-S38. https://doi.org/10.1177/0972150918757842

Rehman, S. U., Bresciani, S., Ashfaq, K., & Alam, G. M. (2022). Intellectual capital, knowledge management and competitive advantage: A resource orchestration perspective. *Journal of Knowledge Management*, *26*(7), 1705-1731. https://doi.org/10.1108/JKM-06-2021-0453

Rehman, W. U., & Anwar, M. (2019). High-performance work practices and organizational performance in Pakistan. *International Journal of Manpower*, *41*(3), 318–338.

Setiawati, E., Novyandra, R., & Bawana, A. D. B. (2022). *The role of business strategy, environmental uncertainty, and decentralization on managerial performance with management accounting information systems as mediating variables.* Paper presented at the Proceeding of 3rd International Conference on Business, Education, Social and Technology (ICBEST2022), Kuala Lumpur, Malaysia 15 January 2022, 95-104.

Shirokova, G., Bystrov, A., Vlasova, V., & Morris, M. H. (2024). Business model innovation and SME performance and performance variability: The role of CEO persistence. *Journal of Small Business Management*, 1-36. https://doi.org/10.1080/00472778.2024.2436978

Sori, Z. M. (2009). Accounting information systems (AIS) and knowledge management: a case study. *American Journal of Scientific Research*, *4*(4), 36-44.

Soudani, S. N. (2012). The usefulness of an accounting information system for effective organizational performance. *International Journal of economics and Finance*, *4*(5), 136-145. http://dx.doi.org/10.5539/ijef.v4n5p136

Tsai, M. F., Hung, S. Y., Yu, W. J., Chen, C. C., & Yen, D. C. (2019). Understanding physicians' adoption of electronic medical records: Healthcare technology self-efficacy, service level and risk perspectives. *Computer Standards & Interfaces*, *66*, 103342. https://doi.org/10.1016/j.csi.2019.04.001

Turner, L., Weickgenannt, A. B., & Copeland, M. K. (2016). *Accounting information systems: The processes and controls.* Hoboken, NJ: John Wiley & Sons.

Utama, S., Yusfiarto, R., Pertiwi, R. R., & Khoirunnisa, A. N. (2024). Intentional model of MSMEs growth: A tripod-based view and evidence from Indonesia. *Journal of Asia Business Studies*, *18*(1), 62-84. https://doi.org/10.1108/JABS-08-2022-0291

Utari, D., & Hutasuhut, S. (2024). The role of micro, small, and medium enterprises (MSMEs) in Indonesia's economic development. *Journal of Indonesian Economic Studies*, *15*(2), 123–145.

Verbeeten, F. H. (2010). The impact of business unit strategy, structure and technical innovativeness on change in management accounting and control systems at the business unit level: An empirical analysis. *International Journal of Management*, *27*(1), 123.

Virtanen, V. (2021). *Effects of intelligent process automation implementation on used time and manual work in Finnish accounting software.* Retrieved from

Vo Van, H., Abu Afifa, M., & Saleh, I. (2024). Accounting information systems and organizational performance in the cloud computing era: Evidence from SMEs. *Sustainability Accounting, Management and Policy Journal.* https://doi.org/10.1108/SAMPJ-01-2024-0044

Widjaja, S. U. M., Wibowo, A., Narmaditya, B. S., Wardoyo, C., & Saptono, A. (2022). Identifying factors affecting entrepreneurship education and entrepreneurial intention among Indonesian university students. *Entrepreneurial Business and Economics Review*, *10*(3), 89-104. https://doi.org/10.15678/EBER.2022.100306

Ye, Z., & Hu, J. (2020). Internal control of enterprise computer accounting information system in the age of big data. In Z. Xu, R. M. Parizi, M. Hammoudeh, & O. Loyola-González (Eds.), Cyber security intelligence and analytics. In (pp. 515–522). Switzerland: Springer.