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THE IMPORTANCE OF COLLABORATIVE NETWORKS DIGITAL LEADERSHIP TO IMPROVE AIS OUTCOMES AND SUSTAINABILITY IN SMES

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ABSTRACT

SMEs have a significant role in economic growth, especially in developing countries, including Indonesia. In Indonesia, SMEs can contribute to the gross domestic product by> 60% to increase economic growth. Despite having a strategic role, SMEs have many obstacles to surviving in an uncertain environment, so they need the right strategy to maintain good performance. Low technology adoption is also an obstacle for SMEs to compete due to inefficient company operations. Therefore, referring to the RBV theory, this study will describe the efficient use of resources so that the organization runs optimally. This study will test several factors that can improve AIS outcomes and be sustainability-oriented. This study will analyze whether collaboration and leadership networks can encourage the application of technology in SMEs. Researchers distributed 104 questionnaires to SME owners in Yogyakarta, which consisted of one city and four districts. This study uses primary data and the Smart PLS tool to test the hypothesis. This study was conducted for four months, from September to December 2024. This study provides methodological novelty because it tests the mediation effect of AIS outcomes that previous research still needs to explain. The study results indicate that collaboration networks and digital leadership can improve AIS outcomes and business sustainability. The results of this study provide an overview to SME owners that digital capabilities are critical because they can encourage SMEs to survive and compete with competitors. Furthermore, the most crucial point is support from the government to provide training so SME owners can improve their skills and understanding of the importance of technology.

INTRODUCTION

Various studies have explained that small and medium enterprises (SMEs) have a significant contribution, especially in developing countries, because they are a source of employment and income (Arsawan et al., 2022; Lutfi, Al-Khasawneh et al., 2022; Mulyana & Wasitowati, 2021). Although 84.8% of small firms ran as usual before the pandemic, they have suffered massive losses and lack adequate resources. They have financial and managerial limitations and must prepare to face disruptions that may continue unpredictably. Although technology is increasing rapidly, the level of technology adoption in MSMEs in Indonesia still needs to improve, with only 39% of provinces in Indonesia using the Internet in their business operations (Kurniasari et al., 2023). Therefore, MSMEs must be ready to face technological developments and digitalization to meet demand quickly and achieve sustainability.

Sustainability is an important issue SMEs face today, so they must focus on their business due to uncertainty on the demand and supply side and the increasing number of competitors (Zhou et al., 2023). Previous findings showed that the survival rate of SMEs was meager in the first five years of their business, which hurt the number of jobs and national income (McGrath & McManus, 2020). Therefore, SMEs must increase productivity to successfully maintain the sustainability of national economic development (Lutfi, Al-Khasawneh, et al., 2022). Other findings explain that

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organizations that successfully disclose sustainability measures can increase employee morale by 55%, efficiency in business processes by 43%, and loyalty by 38% (Almuqrin et al., 2023). Furthermore, SMEs can expand their markets, increase production capacity, strengthen organizational advantages and prosperity, and develop sound business strategies to ensure sustainability (Kurniasari et al., 2023).

To achieve sustainable growth, MSMEs can expand the application of digital technologies such as accounting information systems (AIS) and interact with stakeholders (Nassani et al., 2023). Accounting information has proven essential for businesses, especially micro, small, and medium enterprises, to resolve complexities and short-term decision-making. Accounting information will produce output details to drive the rules of running a business in various vital fields such as revenue, expenses, and financial position (Lutfi, Al-Khasawneh et al., 2022). Information technology or information systems can open up paths and opportunities and benefit both large and small businesses (Lutfi, Al-Okaily, et al., 2022). The most crucial thing in using accounting information systems is the owner's commitment because it can inspire and motivate the implementation of accounting information systems for small businesses (Lutfi, 2022).

Entrepreneurs usually utilize digital technology for their business. Still, there are usually obstacles because it is rare to find SME owners with a vision for digital transformation leadership due to their limited abilities and expertise (McGrath & McManus, 2020; Ramadan et al., 2023). Leaders who can do digital transformation, or "digital leadership," can build collaborative networks and have higher digital competencies. Digital leadership will drive the growth of small businesses by making strategic changes, creating more flexible organizational structures, and improving self-abilities to deal with changes in the global era (Hung et al., 2023). The owner's commitment to digital leadership is significant for business continuity because an ineffective strategy in adopting technology at various phases can produce less than optimal output and result in termination (Lutfi, 2022).

Due to the rapidly changing environment, SMEs need the power of information and experience to support collaborative network strategies and development (Mulyana & Wasitowati, 2021). Organizations can develop collaborative networks by producing graded and easy-to-use strategies. Collaborative networks will help SMEs be more independent and able to incorporate various resources (Bastos et al., 2023). One of the benefits of collaborative networks at the micro and macro levels is a more effective work system in generating products to achieve competitiveness and organizational survival (Durugbo, 2016).

Research on collaborative networks, digital leadership, accounting information systems outcomes, and sustainability performance has been conducted by several researchers (Camarinha-Matos et al., 2019; Mulyana & Wasitowati, 2021; Nassani et al., 2023; Shin et al., 2023); however, it is still interesting because: First, the use of accounting information systems in MSMEs in developing countries is still relatively low (Lutfi, Al-Khasawneh, et al., 2022). Second, the development of digital start-ups is very rapid, but they still need to pay attention to environmental damage due to low digital leadership (Sarfraz et al., 2022). Third, many organizations fail to reach digital transformation because they start digital changes without a holistic design and a coherent strategy (Niu et al., 2022). Fourth, several research results show that technology reduces sustainability and damages the environment (Alataş, 2021; Almuqrin et al., 2023; Tikam, 2013).

Based on the various problems explained in the previous section, this study will analyze how collaborative networks and digital leadership improve AIS outcomes, which then affect organizational sustainability. To achieve this goal, this study will be presented in several stages, namely introduction, literature review, method, results, discussion, and finally, the conclusion of the analysis. The introduction section contains empirical phenomena, variable rationalization, and research motivation. The literature review section contains the grand theory used, an explanation of the variables and previous research results, and the research model. The method section consists of sampling techniques and definitions of variable measurements that can be used as references for other researchers. The research results explain the analysis and then provide an empirical explanation of why the hypothesis is accepted or rejected. The final section contains conclusions, limitations, and suggestions for future researchers interested in this research area.

LITERATURE REVIEW

Teori Resource-Based View (RBV)

This study refers to previous findings using the Resource-Based View (RBV) theory, which explains the importance of resources and internal capabilities of an organization to win the competition (Freeman et al., 2021). RBV theory states that enterprises can improve their performance only when they have something precious and unique so others cannot imitate it (Mendez-Vega et al., 2021). The Resource-Based View (RBV) theory is the basis for this study because it explains a company's performance dependence on the ability to manage its resources. Based on RBV theory, companies can remain competitive by responding quickly to environmental changes by using existing assets and employing new methods to maintain competitiveness. Competitive advantage means that a company can gain profits with certain risks, but other companies can achieve the same earnings with more significant risks (Farida & Setiawan, 2022).

Collaborative Networks are groups of people and organizations connected by sharing their knowledge and resources (Bansal et al., 2023). Collaborative networks are also formulated as a new strategy to measure the capabilities of external network partners, namely academics, enterprises, and the government (Mulyana & Wasitowati, 2021; Varrichio et al., 2012). Collaborative networks are an essential factor that enables the effective implementation of the circular economy concept, but they require the support of external parties interested in the company. In addition, collaborative networks require a better association of employee ability and artificial intelligence in business networks to achieve increased capacity and better organizational performance (Camarinha-Matos et al., 2019). Collaborative networks are widely considered essential to maintaining competitiveness in an increasingly turbulent business environment, and researchers argue that organizations are not only fighting as individual companies but now as part of a business collective (Durugbo, 2016).

Collaboration is an important factor for company operations in global and modern business operations with

production systems spread across various geographical locations. Collaborative networks will encourage companies and industries to adopt information and communication technology to exchange data and information. Companies with collaborative networks must be able to utilize technology in intra- and inter-organizational environments to increase efficiency in their business operations. In collaborative networks, technology can support collaboration through cumulative knowledge and stakeholder logic to manage program-based, product-based, and process-based benefits (Durugbo, 2016). Research on SMEs in Spain states that the ability of SMEs to integrate collaborative networks with technology will provide benefits, especially in terms of launching new products on the market (Fernández-Olmos & Ramírez-Alesón, 2017).

A sustainable enterprise is a business that develops continuously and produces long-term profitability, which is increasingly important and an issue globally (Niu et al., 2022; Ye & Kulathunga, 2019). Sustainable performance integrates various systems such as society, social relations, and economic conditions to improve the quality of life and thus ensure the earth's sustainability (Huy & Phuc, 2020). The company's goal is to pursue short-term financial performance and consider social and ecological aspects (Mujtaba & Mubarik, 2022). Companies must make long-term plans for success and economic sustainability (Almuqrin et al., 2023). In addition, an organization's implementation of environmental sustainability must align with the company's objectives, comply with the law, and not disserve other parties (Kump, 2021).

To face disruptive disruptions to sustainability, the business ecosystem and collaborative networks must take the right approach so that the company's goals will be easily achieved (Camarinha-Matos et al., 2019). Previous research states that collaborative networks will make it easier for companies to obtain partners to make operations more efficient (Susanto et al., 2023). Studies in Indonesia on SMEs show that collaborative networks still influence sustainable competitiveness through companies' developing innovations, especially collaboration with suppliers, competitors, and the government (Najib et al., 2014). Based on the previous description, we propose the following hypothesis:

H_1: Collaborative networks affect AIS outcomes
H_2: Collaborative networks affect sustainability-oriented

Digital leadership is the capability of a company manager to push the change of digital technology and discover opportunities, develop digital businesses, and increase company value (Zeike et al., 2019). Digital leadership combines leadership and technological ability to utilize digital information to increase organizational effectiveness fully (Shin et al., 2023). Although leadership is still a matter of debate, in practice, many MSMEs do not pay attention to leadership types because their organizational structure is straightforward. However, leadership is essential because good leaders will provide psychological motivation for employees to work better (Arsawan et al., 2022). Many enterprises have used digital leadership ability and modern technology to address environmental transformation, thus affecting the company's sustainability. Digital leadership is the most effective way to achieve organizational advantage because it can manage resources and increase benefits (Artuz & Bayraktar, 2021). Organizational leaders must create agile organizations to foster a digital mindset and respond quickly to environmental changes by developing new strategies that increase the company's value to compete with competitors in the market (Ramadan et al., 2023).

Digital leadership is an essential factor in improving the quality of information technology because it will lead to integrating leaders' abilities with the enterprise's technological resources (Mihardjo et al., 2019; Mohamed, 2022). Using information technology, digital leadership can achieve the same goals as other leaders with conventional approaches (Mohamed, 2022). Digital leadership in the area of technological change can provide additional insight for companies to encourage effective accounting practices in decision-making (Hung et al., 2023). In line with the findings in South Korea on manufacturing industry employees, it explains that information technology has a vital role in the relationship between leadership and sustainability performance (Shin et al., 2023). Digital leadership will accelerate the digital transformation by utilizing accounting information systems because leaders' understanding of technology is improving. Other findings in large companies in Vietnam show that digital leadership can strengthen the influence of digital transformation on AIS outcomes (Hung et al., 2023).

To realize corporate sustainability, SMEs can achieve digital leadership through environmental, social, good governance, and innovation management. In a study in China on general companies, digital leadership has no significant impact on organizational ability because digitalization is changing very quickly (Niu et al., 2022). A study on employees working in South Korean organizations showed empirical evidence that digital leadership significantly improves sustainable organizational performance (Shin et al., 2023). Based on the previous description, we propose the following hypothesis:

H_3: Digital leadership affects AIS outcomes
H_4: Digital leadership affects sustainability-oriented

An accounting information system (AIS) is a tool that a company must own; with this system, the owner or manager can make alternative decisions quickly and produce high-level output for the company. The accounting system will deliver information to drive efficiency, achieve higher competitiveness, and follow evolution in a diverse economic environment (Qatawneh, 2023). AIS is a part of technology that generates valuable assistance for administrative work such as budgeting, strategy implementation, organizing, and controlling (Qatawneh & Bader, 2020). Compared to traditional methods, AIS can enable the collection of more significant amounts of information, reduce the amount of unfinished work, and help maintain transparency in recording to improve the organization's strategic performance (Nassani et al., 2023). Implementing an accounting system will drive efficiency in various aspects, such as output according to target, increased employee productivity, and correct decision-making to improve company performance (Lutfi, Al-Okaily et al., 2022).

Accounting Information Systems can significantly improve financial and non-financial performance by providing

users with financial information that adds value for planning, controlling, and decision-making, especially for sustainable development goals. Research in Vietnam in the public sector states that technology affects sustainability (Huy & Phuc, 2020). In developing countries such as Saudi Arabia, research on the relationship between technology and sustainability in government institutions is still limited, while implementing new technologies, such as proficient and communicative cloud-based information systems, makes it simple to run efficient sustainability action (Almuqrin et al., 2023). Based on the description above, the following hypothesis is proposed:

H_5: AIS outcomes affect sustainability performance

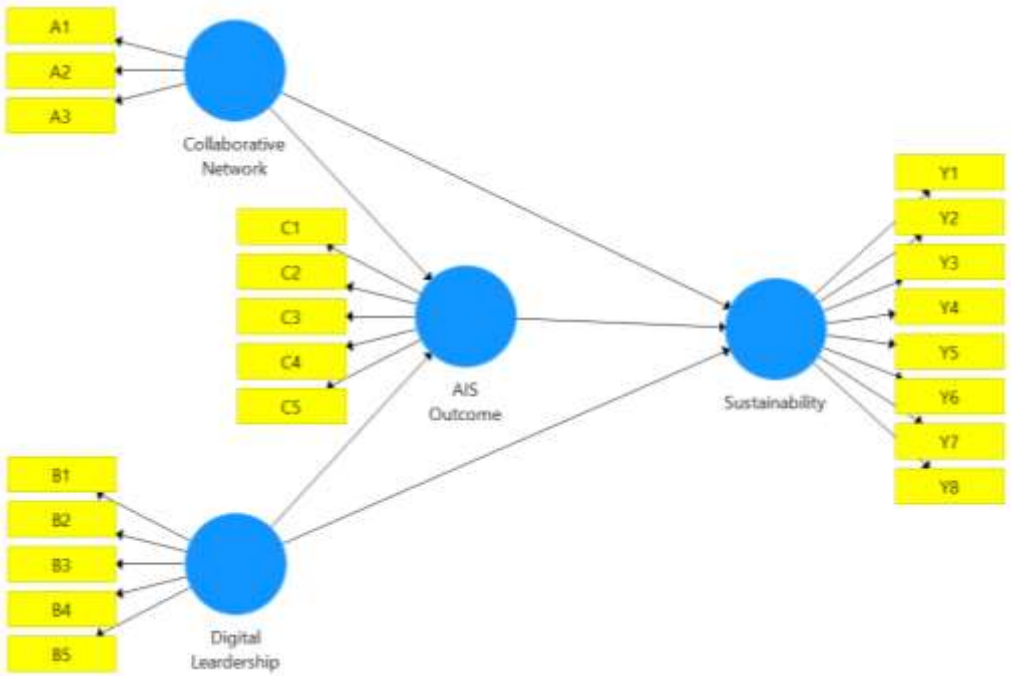

Figure 1. Research Model

Figure 1 explains the hypothesis using images that show the relationship between research variables according to previous research findings. Collaborative network and digital leadership variables will increase AIS outcomes; then, AIS outcomes will encourage increased sustainability orientation. Previous research findings indicate that SME owners can utilize collaborative networks to obtain information supporting AIS outcomes. In addition, understanding digital technology will help owners increase AIS outcome capacity, ultimately supporting the organization in achieving long-term sustainability.

MATERIALS AND METHODS

This quantitative study uses primary data sources by distributing questionnaires to MSME owners who use information technology in the Special Region of Yogyakarta, especially in the tourism sector. Yogyakarta was chosen because Yogyakarta and Bali are Indonesia's most prominent tourist destinations. In 2021, the number of tourists in Yogyakarta reached 24 million, more than in Bali, which had only 9 million. MSMEs are spread across five districts in the Special Region of Yogyakarta Province: Yogyakarta City, Sleman, Bantul, Kulon Progo, and Gunung Kidul Regency. The purposive sampling method used in this study is based on specific criteria to ensure that the samples used follow the data needs of this study. The total number of questionnaires conducted in this study was 116. Still, only 104 questionnaires could be processed and met the characteristics of the research data because 12 questionnaires were incomplete.

Collaborative networks are collaborations with external parties to the company that enable ongoing strategies to be implemented, thereby ensuring sustainability. The collaborative networks variable is measured using 3 question items adopted from research (Mulyana & Wasitowati, 2021). Digital leadership can direct and manage organizations in the digital field and lead to sustainable organizational goals. Digital leadership adopts five questions from research (Shin et al., 2023). Accounting information systems (AIS) outcomes are the benefits of using computerized information systems.

Before distributing the questionnaire, we involved student researchers and experts to ensure that the questionnaire could be used to measure the indicators. In addition, we asked for opinions directly from several SME owners on whether the questionnaire was easy to understand. Furthermore, we modified several questions according to the conditions faced by SME owners. Initially, there were ten questions in the sustainability indicator; then, we only used eight indicators by reducing indicators 1 and 7 related to environmentally friendly packaging and carbon waste. In previous research, the AIS outcomes variable was measured with six questions, but we made several modifications, and only five questions were most appropriate to the needs (Nassani et al., 2023; Qatawneh, 2023). The sustainability orientation related to this research is the continuity of SMEs; sustainability consists of 8 questions adopted. The questions use a Likert scale, namely 1 = (Strongly Disagree) to 5 (Strongly Agree).

Table 1. Variable Measurement

Variable	Indicators
Collaborative Networks (Mulyana & Wasitowati, 2021)	1. The company builds cooperation with suppliers. 2. The company builds cooperation with customers so that the product is better known. 3. The company always cooperates with the local government
Digital Leadership (Mollah et al., 2023)	1. Digital leadership can encourage employee awareness of information technology risks. 2. Digital leadership can increase awareness of the importance of technology for the company. 3. Digital leadership can decide the ethical behavior needed for the company's technology implementation. 4. Digital leadership has a role in reducing resistance to technological innovation. 5. Digital leadership can increase participation in the use of technology to achieve the company's vision.
Accounting Information Systems Outcomes (Nassani et al., 2023; Qatawneh, 2023).	1. All data in the accounting information system is available as required and reliable. 2. All data is accurate and up-to-date. 3. The accounting system saves costs, speeds up transactions, and reduces human error. 4. With a well-built accounting information system infrastructure, revenue continues to increase. 5. The information system helps evaluate past, present, and future performance.
Sustainability Orientation (Jin et al., 2019).	1. The surrounding community well receives the products I sell 2. When developing new products, it does not hurt the environment. 3. We use buyer testimonials to ensure they appreciate the product. 4. I will increase the quality of the product to ensure sustainability. 5. I implement rules that apply to sustainability for future enterprise operations. 6. In planning the manufacture of new products, I use the Triple-Bottom-Line strategy, considering profit, society, and the environment. 7. In developing products in the future, I have set a detailed budget. 8. We ensure the availability of raw materials by selecting the right suppliers.

RESULTS

Based on the previously set time and target, the researcher tabulated the data from the successfully collected questionnaires. The results of the data tabulation will be processed to determine the characteristics of the respondents, test the validity and reliability, and test the research hypothesis. The results of the analysis of the respondents' characteristics are shown in Table 2.

Table 2. Respondent Characteristics

	Category	Total	Percentage (%)
Gender	Male	37	35.6
	Female	67	64.4
Business Sector	Culinary	46	44.2
	Fashion	11	10.6
	Fine Arts	1	1
	Tour & Travel	7	6.7
	Crafts	12	11.5
	Others	27	26
Running of Business	< 3 Years	42	40.4
	3 - 5 Years	23	22.1
	> 5 Years	39	37.5
Duration of using IT	≤ 1 Year	21	20.2
	1 - 3 Years	34	32.7
	3 -5 Years	24	23.1
	≥ 5 Years	25	24

The analysis of the respondents' profiles shows that women, 64.4%, dominated the respondents in this study. The most significant number of respondents in this study was in the Sleman Regency area, namely 39.4%, while the most prominent business type was the culinary business, 44.2%. Lastly, the duration of technology use is between 1 and 5 years, with the number of SME owners between 20 and 30.

Table 3. Outer Loading

Collaborative Networks	Digital Leadership	AIS Outcomes	Sustainability Orientation
A.1: 0.848	B.1: 0.856	C.1: 0.709	Y.1: 0.758
A.2: 0.842	B.2: 0.798	C.2: 0.695	Y.2: 0.761
A.3: 0.596	B.3: 0.832	C.3: 0.832	Y.3: 0.748
	B.4: 0.726	C.4: 0.725	Y.4: 0.752
	B.5: 0.843	C.5: 0.766	Y.5: 0.758
			Y.6: 0.766
			Y.7: 0.732
			Y.8: 0.740

Next, we conducted an outer model analysis, namely the validity and reliability testing, and an inner model analysis, namely the structural model testing. The validity test results using the outer loading value (Table 3) show that all instruments have an outer loading value > 0.5. The results of the validity test show that all the questions used are valid, while the reliability test shows that all the answers are consistent. The analysis results showed that the cross-loading and outer loading

values met the requirements for further analysis (Table 3).

Table 4. Convergent Validity and Reliability

	Cronbach's Alpha	Rho_a	Rho_c	Average Variance Extracted (AVE)
AIS Outcomes	0.801	0.810	0.863	0.558
Collaborative Networks	0.656	0.712	0.810	0.593
Digital Leadership	0.870	0.874	0.906	0.660
Sustainability Performance	0.752	0.753	0.843	0.574

Table 4 shows that the Cronbach alpha value on each instrument is > 0.5 and the Rho value is > 0.7; it can be concluded that the instrument used is reliable and follows applicable provisions. Validity testing can also use the AVE value and the outer loading value. The AVE value on all variables (Table 4) is > 0.5, meaning the instrument used is valid. Furthermore, a model test will be carried out to determine the strength of the collaborative network and digital leadership variables, as Tables 5 and 6 explain.

Table 5. R-Square

	R-Square	Adj. R-Square
AIS Outcomes	0.404	0.392
Sustainability Orientation	0.486	0.471

The first structural model test was conducted with R-Square, which showed a value of 0.404 in the AIS outcome equation, meaning that collaborative networks and digital leadership can explain the variation in AIS outcomes by 40.4%. The R-Square value of 0.486 in the sustainability orientation equation indicates that AIS outcomes can explain the variation in sustainability orientation by 48.6%, while other factors outside the research model explain the rest. Therefore, it can be concluded that this research model is a fit.

Table 6. VIF Testing

	AIS Outcomes	Sustainability Orientation
Collaborative Networks → AIS Outcomes	1.409	
Digital Leadership → AIS Outcomes	1.409	
AIS Outcomes → Sustainability Performance		1.678
Collaborative Networks → Sustainability Orientation		1.513
Digital Leadership → Sustainability Orientation		1.773

Table 6 explains the second structural model test by looking at each hypothesis's VIF (Variance Inflation Factor) value with a cut-off <3. The test results for hypotheses 1 and 2 show a VIF value of 1.409, while for hypothesis 3, it is 1.678; for hypothesis 4, it is 1.513; and for hypothesis 5, it is 1.773. Based on the analysis results, the VIF value for all indicators is <3, so it can be concluded that the structural model used follows the criteria for the fit model so that it can be continued with hypothesis testing.

Table 7. Hypotheses Testing

	Beta	Mean	SD	t Statistics	P Value
Collaborative Networks → AIS Outcomes (H1)	0.249	0.264	0.109	2.280	0.023**
Collaborative Networks →Sustainability Orientation (H2)	0.211	0.210	0.121	1.741	0.082*
Digital Leadership → AIS Outcomes (H3)	0.466	0.460	0.097	4.811	0.000***
Digital Leadership →Sustainability Orientation (H4)	0.275	0.275	0.109	2.518	0.012**
AIS Outcomes → Sustainability Orientation (H5)	0.349	0.353	0.136	2.554	0.011**

*** Sig< 1%; ** Sig < 5%; * Sig < 10%

Table 7 is the result of the structural model regression analysis using PLS for each hypothesis listed in order from hypothesis 1 to hypothesis 5. Hypothesis 3 proves that digital leadership affects AIS outcomes with a significance of <1%. The following explanation is Hypothesis 1, which shows a significant effect between collaborative network and AIS outcome; Hypothesis 4, which shows a significant effect between digital leadership and sustainability orientation; and Hypothesis 5, which shows the effect between AIS outcome and sustainability orientation with a significance of <5% each. Furthermore, hypothesis 2 proves that a collaborative network affects sustainability orientation with a significance of <10%.

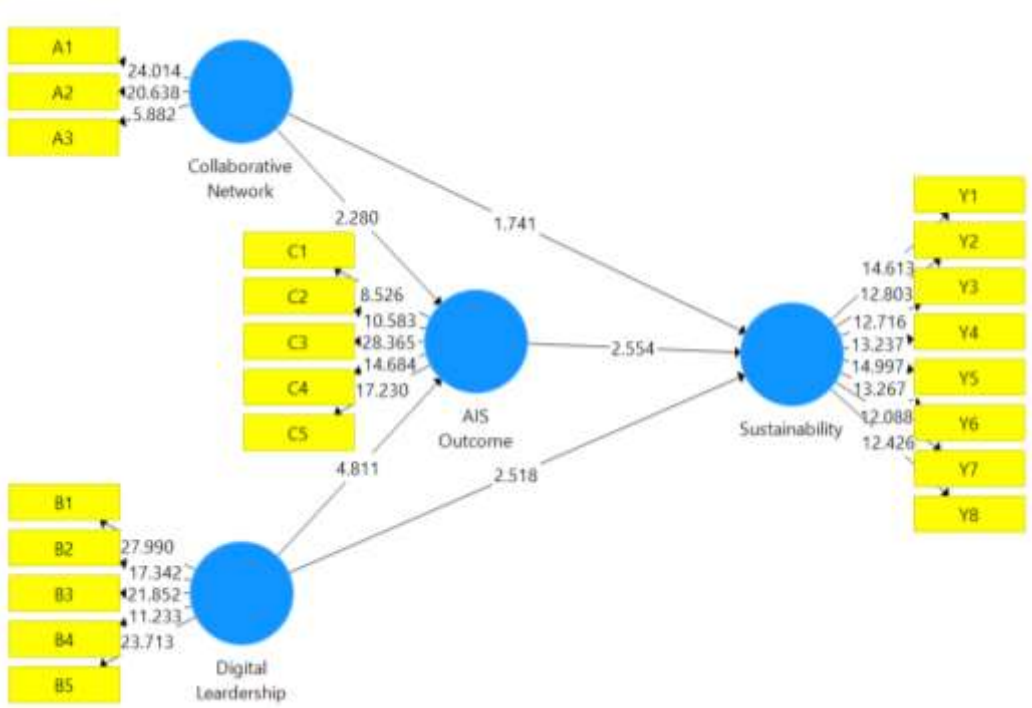

Figure 2. Hypothesis Testing

Figure 2 shows the test results for each hypothesis with a t-value > 1.96; the influence of collaborative network on AIS outcome (H1) shows a t-value of 2.280, the influence of collaborative network on sustainability orientation (H2) shows a t-value of 1.741, the influence of digital leadership on AIS outcome (H3) shows a t-value of 4.811, the influence of digital leadership on sustainability orientation (H4) shows a t-value of 2.518, and finally the influence of AIS outcome on Sustainability orientation (H5) shows a t-value of 2.554.

DISCUSSIONS

The hypothesis test results show that collaborative networks affect AIS outcomes and sustainability. The level of information exchange in collaborative networks with other individuals or institutions in the supply chain organization increases positive relationships in the network (Susanto et al., 2023). Addressing sustainability, transparency, and increasing social responsibility, which is increasingly challenging the business world, requires collaborative solid ties between industry companies and other societal entities (Camarinha-Matos et al., 2019). According to the RBV theory, technological collaboration networks enable newly established SMEs to survive if they can manage their business effectively. They can innovate by creating creativity so that companies remain flexible with the information systems they have. These results support previous research on SMEs in Spain, which stated that SME participation in collaborative networks on technology provides more benefits to SMEs, especially in terms of launching new products in the market (Fernández-Olmos & Ramírez-Alesón, 2017). Based on these findings, it can be concluded that collaborative networks significantly affect AIS outcomes (**Hypothesis 1 is accepted**). Therefore, owners can utilize collaborative networks with external parties such as business practices, universities, and the government. Previous research findings explain that collaborative networks will make it easier for organizations to obtain raw materials to make business processes more efficient. Therefore, RBV theory can help explain that collaboration between various resources in an organization, such as culture, technology, and people, is essential and can drive sustainability (Bhatta et al., 2023). SME owners can also utilize collaborative networks to determine consumer tastes so that the products or services produced follow market tastes and raise sustainability (Mulyana & Wasitowati, 2021). Other findings show that collaborative networks can help owners transfer knowledge and find the most efficient resources so that technology will produce output in the form of accurate information (Najib et al., 2014). Furthermore, based on the analysis results, the study's conclusion shows that collaborative networks affect sustainability (**Hypothesis 2 is accepted**).

The test results show that digital leadership significantly affects AIS outcome and sustainability orientation. RBV theory enables enterprises to make themes and associations, reinforcing the company's innovative abilities, competitiveness, and sustainability with information systems. AIS is a resource that will enable digital technology to work independently, but it can also affect company performance. Digital leadership requires leaders who can strengthen their capabilities and actively participate in sustainability actions. Furthermore, other studies also state the importance of the owner's ability to drive digital change by emphasizing digital leadership to achieve long-term sustainability (Niu et al., 2022). Therefore, to get digitally sustainable enterprises, they must appreciate the task of digital leadership in raising organizational success (Sarfraz et al., 2022). Hence, it can be concluded that digital leadership significantly influences AIS outcomes (**Hypothesis 3 is accepted**). In the digital era, businesses continue to transform, so digital leadership must improve information technology abilities and organizational learning for sustainable organizational competitiveness (Shin et al., 2023). Theoretically, this research contributes to leadership behavior and RBV theory by presenting the results of the task of digital leadership in sustainable enterprises' capability.

Along with the development of technology, digital leadership has a vital role; besides encouraging employee technological capabilities, it also fosters digitalization in the organization (Shin et al., 2023). RBV assumes that ownership and control of strategic assets, such as AIS dynamic capacity, drive organizations to gain advantages and competitive advantages over others (Al-Matari et al., 2022). Digital leadership is essential in driving a company's digital transformation because a leader's understanding of technology will facilitate the efficient use of technology to make the company more flexible (Hung et al., 2023). Furthermore, SME owners must improve digital literacy and become facilitators in the transformation process because they can instill an understanding of the importance of technology for business sustainability. The analysis results show that digital leadership affects sustainability (**Hypothesis 4 is accepted**).

The constructions related to the success of information systems with organizational sustainability include: First, when information technology generates valid and reliable data, stakeholders will find it easier to create conclusions supporting business work faster and easier. Second, the facility of obtaining information and the utility of statements resulting from information systems allow managers to identify individual issues in the company. Third, the system's reports, graphs, tables, and narratives allow management to design solutions to make work easier and improve organizational and economic sustainability (Almuqrin et al., 2023). Based on RBV theory, SMEs that use digital accounting systems extensively tend to obtain higher values than their competitors (Lutfi, Alkelani, et al., 2022). The challenges faced by information systems, such as accounting information systems, are the effective delivery of information that can reach and be useful for decision-makers so that managers can select new strategies. Therefore, implementing AIS will push organizations to operate more efficiently and provide faster services and optimal governance (Lutfi, 2022). Hence, SME owners must realize that industrial transformation will dash in the digital era, so understanding technology plays a role in determining strategy. Applying the right technology will produce more efficient information that will open up opportunities to create new strategies in competition. Based on the analysis results, the AIS outcome is sustainability-oriented (**Hypothesis 5 is accepted**).

CONCLUSIONS

The purpose of this study is first to test the influence of collaborative networks on AIS outcomes and sustainability-oriented, second to test the effect of digital leadership on AIS outcomes and sustainability-oriented, and third to test the impact of AIS outcomes on sustainability-oriented. The analysis of the five hypotheses indicates that collaborative networks and digital leadership significantly impact AIS Outcomes. An accounting system is an essential resource in an organization, without which a company will have difficulty processing data, providing information, monitoring, and making alternative decisions (Lutfi, Al-Okaily et al., 2022). Further results show that collaborative networks and digital leadership significantly affect sustainability orientation. The level of information exchange in cooperative networks with other individuals or institutions in the supply chain organization increases positive relationships in the network (Susanto et al., 2023). SME owners must improve their capabilities and have continuous initiatives to achieve a digitally sustainable business; they must appreciate the task of digital leadership in raising organizational performance (Sarfraz et al., 2022). Digital leadership simultaneously seeks to improve information technology abilities and business knowledge for sustainable enterprises' work (Shin et al., 2023). The results of further studies show that AIS Outcomes significantly affect sustainability orientation. These results confirm that accounting systems can increase short- and long-term performance by providing users with accounting data for new strategies and decision-making choices, mainly long-term goals (Huy & Phuc, 2020). The survival and sustainability of MSMEs in the future can be promising if their technology and resources are available and used correctly to be cost-effective (Lutfi, Al-Khasawneh et al., 2022). Organizations with larger budgets tend to be more committed to environmental, cultural, social, economic, and administrative sustainability (Almuqrin et al., 2023).

The limitation of this study is that it only examines digital leadership in general terms so that researchers can investigate it further by considering the combination of corporate leader capability with technological capability (Niu et al., 2022). The second limitation is that this study does not measure the organization's running. Further research suggestions can be divided into two categories, namely old and new organizations because old companies tend to be more mature in sustainability and gain more benefits from collaboration (Almuqrin et al., 2023; Fernández-Olmos & Ramírez-Alesón, 2017). The third limitation is that this study only examines the collaborative network of the organization; further researchers can add a discussion related to ad-hoc collaboration (Camarinha-Matos et al., 2019)

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