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ENHANCING BUSINESS DECISION-MAKING THROUGH ACCOUNTING INFORMATION SYSTEMS: THE ROLE OF BUSINESS ENVIRONMENTAL UNCERTAINTY IN CULINARY MSMEs

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Abstract

This study aims to examine the influence of Accounting Information Systems (AIS) on Business Decision-Making, the effect of Business Environmental Uncertainty (BEU) on Business Decision-Making, and the moderating role of BEU in the relationship between AIS and Business Decision-Making among culinary MSMEs in Bandar Lampung City. A quantitative approach was employed using a survey method, with a sample of 120 culinary MSME owners selected through purposive sampling. Data were collected via structured questionnaires and analyzed using Structural Equation Modeling based on Partial Least Squares (SEM-PLS) with the assistance of SmartPLS software. The findings reveal that AIS has a positive and significant effect on Business Decision-Making. Similarly, BEU exerts a positive and significant effect on Business Decision-Making. However, BEU does not moderate the relationship between AIS and Business Decision-Making. These results indicate that greater utilization of AIS enhances the quality of business decisions, while BEU directly influences decision-making but does not alter the strength of the AIS–decision-making relationship. This study contributes to the literature on MSME management by clarifying the role of AIS and BEU in decision-making under uncertain business conditions. Practically, the findings provide implications for MSME owners to

optimize the use of AIS as a reliable information source to support strategic decision-making, while simultaneously developing adaptive strategies to manage environmental uncertainty.

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I. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are a sector that plays a strategic role in the Indonesian economy. MSMEs not only play a role in job creation but also play a vital role in the community's economic activities. Nugraheny and Setuningsih (2024) report that the number of MSMEs in Indonesia has reached approximately 65 million business units and absorbs approximately 97% of the national workforce. This large number of MSMEs demonstrates that business continuity and the ability of MSMEs to navigate changes in the business environment are crucial for maintaining economic activity.

The increasingly dynamic business environment has forced MSMEs to face various changes, such as changes in consumer behavior, technological advancements, business competition, changing market conditions, and changes in raw material prices. These conditions require business actors to be able to make decisions quickly and accurately. Decisions made by MSMEs can relate to pricing, cost control, inventory management, production volume, marketing strategies, and business development. Hermawati and Febriana (2024) explain that in a dynamic business environment, MSMEs require accurate information as a basis for planning, controlling, evaluating, and making decisions. Sari et al. (2023) also show that relevant accounting information can help business actors make more informed business decisions. One MSME sector facing these dynamics is the culinary sector. The Central Statistics Agency (BPS) (2025), through its 2024 Food and Beverage Supply Statistics, recorded that the number of food and beverage businesses in Indonesia reached approximately 5.28 million. This large number indicates that the culinary sector has extensive economic activity. At the same time, culinary businesses face changing consumer tastes, market trends, competition, and fluctuating raw material prices. These conditions make culinary MSMEs a relevant object for studying the use of accounting information to support business decision-making. In such situations, Accounting Information Systems (AIS) play a crucial role in providing information to business actors. Accounting Information Systems not only function as transaction recording tools but also collect, record, process, store, and present information that can be used for planning, controlling, evaluating, and decision-making. Romney and Steinbart (2021) explain that AIS processes transaction data into useful information for users in planning, controlling, and decision-making.

Information regarding revenue, costs, inventory, cash flow, and financial condition can help MSMEs understand the condition of their businesses. This information can serve as a basis for determining selling prices, controlling costs, evaluating sales, managing inventory, and planning business development. Noviani et al. (2023) explain that Accounting Information Systems can be used as a basis for decision-making in MSME activities because they help organize records and reports to produce necessary financial information. Research by

Sari et al. (2023) also shows that Accounting Information Systems influence business decision-making in MSMEs. However, the development of MSME activities is not always accompanied by optimal utilization of accounting information. Some MSMEs still face limitations in recording, compiling, and utilizing financial information. Listyaningsih et al. (2024) show that the ability of MSMEs to manage financial information remains a challenge. These limitations can result in the unoptimal use of available financial information to evaluate business conditions and make business decisions. This phenomenon is increasingly relevant with the development of MSME digitalization. Bank Indonesia (2025) reported that QRIS usage has grown widely, with MSMEs becoming the dominant user group in the digital payment ecosystem. By 2025, QRIS had been used by nearly 60 million users, approximately 93% of whom were MSMEs. In Lampung Province, the Bank Indonesia Lampung Provincial Representative Office (2026) reported that as of December 2025, there were 799,379 QRIS merchants with 1,427,760 users.

The increasing use of digital payment technology demonstrates the broader use of technology in MSME transaction activities. However, the use of payment technology does not automatically indicate that transaction data has been processed into accounting information for decision-making. Payment digitization focuses on ease and efficiency of transactions, while AIS has a broader function in processing transaction data into information that can be used in business management. Therefore, it is important to assess the extent to which AIS truly plays a role in supporting business decisions.This situation also occurs in culinary MSMEs in Bandar Lampung City. Based on data from the Bandar Lampung City Investment and One-Stop Integrated Services Office published by ANTARA Lampung, in 2026 there were approximately 5,670 culinary businesses that had obtained a Business Identification Number (NIB), while Sukarame District had the largest number of culinary businesses, namely 1,297 businesses. This large number of businesses indicates that the culinary sector is a significant part of Bandar Lampung City's economic activity and also has a high level of activity and competition. In addition to competition, culinary MSMEs also face changing economic conditions. The Bandar Lampung City Central Statistics Agency (2024) recorded that in October 2024 there was year-on-year inflation of 1.83%. During the same period, the food, beverage, and tobacco group experienced a 2.21% price increase, while the food and beverage or restaurant supply group experienced a 0.65% increase. These price changes can influence business decisions regarding selling prices, cost control, inventory, and business strategy.

The changing and unpredictable business environment is related to Business Environmental Uncertainty. Duncan (1972) explains that environmental uncertainty occurs when organizations experience difficulty in predicting changes in the external environment due to limited information available. Uncertainty can arise from changes in market demand, consumer behavior, competition, technological developments, regulations, and economic conditions. In an uncertain environment, business actors need relevant, accurate, and timely information to understand changes and determine appropriate actions. Yasmin and Ulfah (2024) showed that environmental uncertainty affects the quality of Management Accounting Information Systems in MSMEs. Ramadhan and Sundari (2025) also showed that environmental uncertainty is related to the use of Accounting Information Systems in MSMEs. These findings indicate that the business environment is an important factor in understanding the use of accounting information. The relationship between AIS and decision-making

in different environmental conditions can be explained through Contingency Theory . Contingency Theory explains that system effectiveness depends on the fit between organizational characteristics, the system used, and the environment faced. Lawrence and Lorsch (1967) explain that there is no single system that is most effective for all organizations because system effectiveness depends on environmental conditions. Donaldson (2001) also emphasizes the importance of fit between the organization and the environment in achieving effectiveness.

In the context of MSMEs, AIS can be viewed as an information processing mechanism that helps transform transaction data into usable information for decision-making. Previous research has demonstrated a relationship between AIS and decision-making. Sari et al. (2023) demonstrated that AIS influences business decision-making in MSMEs in Sibolga City. Anto et al. (2024) also found a positive and significant influence of AIS on business decision-making in micro and small culinary businesses in Kendari City. Meanwhile, research on environmental uncertainty indicates that environmental conditions are related to the quality and use of accounting information.However, there is still a research gap. Previous studies have often placed MSME performance, managerial performance, organizational effectiveness, or financial performance as dependent variables. Meanwhile, research by Sari et al. (2023) and Anto et al. (2024) which used decision-making as the dependent variable has not tested Business Environment uncertainty as a moderating variable in the relationship between AIS and business decision-making in the context of culinary MSMEs in Bandar Lampung City. Thus, there is still room to test whether environmental conditions can strengthen or weaken the relationship between AIS and business decision-making.

This study offers novelty by positioning Business Environmental Uncertainty (BEU) as a moderating variable in the relationship between Accounting Information Systems and Business Decision-Making among culinary micro, small, and medium enterprises (MSMEs) in Bandar Lampung City, Indonesia. Unlike previous studies that generally examined the direct effect of Accounting Information Systems on business decisions (Anto et al. 2024), the effect of environmental uncertainty on the quality of Accounting Information Systems (Yasmin & Ulfah, 2024; Sari et al. 2023), or the effect of Accounting Information Systems on MSME performance (Firman, 2024), this study empirically examines the extent to which business environmental uncertainty strengthens or weakens the influence of Accounting Information Systems on business decision-making. The culinary MSME context was selected because this sector faces high dynamics, including changes in consumer preferences, business competition, fluctuations in raw-material prices, and demand uncertainty. Consequently, the availability and effective utilization of accounting information become increasingly important for managerial decision-making.

According to the mixed results and research gaps above, this study develops a model that examines three relationships, there are: first, the effect of AIS on Business Decision-Making, *second,* the effect of Business Environment Uncertainty on Business Decision-Making, and third, the role of Business Environment Uncertainty as a moderator of the relationship between AIS and Business Decision-Making. This study aims to analyze the influence of Accounting Information Systems on Business Decision-Making, analyze the influence of Business Environmental Uncertainty on Business Decision-Making, and test whether Business Environmental Uncertainty moderates the relationship between Accounting Information Systems and Business Decision-

Making in culinary MSMEs in Bandar Lampung City. AIS is viewed as an internal system that provides information for MSMEs, while Business Environmental Uncertainty is an external condition that can influence the need for and utilization of information. The relationship between the system and organizational performance can depend on the system's suitability to the environmental conditions faced (Donaldson, 2001). Therefore, Contingency Theory provides a basis for examining whether the relationship between AIS and Business Decision Making differs under different conditions of environmental uncertainty.

II. LITERATURE REVIEW

a. Information Processing Theory

Information Processing Theory, developed by Galbraith (1973), explains that organizations need information processing capacity appropriate to the level of uncertainty they face. The greater the uncertainty, the greater the organization's need for information to help understand environmental conditions and determine actions (Galbraith, 1973).In this study, AIS is viewed as an information processing mechanism in MSMEs. AIS transforms transaction data into information that can be used in planning, controlling, evaluating, and decision-making (Romney & Steinbart, 2021). When MSMEs face changes in demand, raw material prices, competition, and economic conditions, relevant information can help reduce information limitations in determining actions. Thus, Information Processing Theory supports the hypothesis that the use of AIS can improve MSMEs' ability to make business decisions.

b. The effect of Accounting Information Systems on Business Decision Making

An Accounting Information System (AIS) produces information that can help businesses understand their financial and operational conditions. Information generated through the collection, processing, and presentation of transaction data can be used in planning, controlling, evaluating, and decision-making (Romney & Steinbart, 2021). Relevant, accurate, and timely information can help businesses evaluate business conditions, consider various alternatives, and determine appropriate actions. In the context of MSMEs, an AIS is a mechanism that can improve the ability of businesses to obtain and process the information needed for decision-making. The better the information available, the greater the ability of businesses to reduce information limitations and determine alternative actions.

Empirically, this relationship is supported by research by Sari et al. (2023) which shows that Accounting Information Systems influence business decision-making in MSMEs. These results indicate that information generated through the accounting system can be used as a basis for determining business decisions. This finding is reinforced by research by Anto et al. (2024) which found that Accounting Information Systems have a positive and significant effect on business decision-making in micro and small culinary businesses. The results of this study are relevant to the characteristics of culinary MSMEs because decisions regarding prices, costs, inventory, sales, and business development require adequate information. AIS is seen as improving the ability of MSMEs to obtain the information needed to evaluate business conditions and make decisions. Therefore, the better the utilization of AIS, the better the information

support available for the business decision-making process. Thus, the first hypothesis is formulated as follows:

H1: Accounting Information Systems have a positive effect on Business Decisio-Making in culinary MSMEs in Bandar Lampung City.

c. The Effect of Business Environmental Uncertainty on Business Decision-Making

Business Environmental Uncertainty is a condition where business actors experience difficulty in predicting changes occurring in the external environment. These changes can include changes in market demand, consumer behavior, competitor strategies, technological developments, government regulations, and economic conditions. This uncertainty can increase the difficulty for business actors in predicting the conditions they will face, so the ability to respond to changes through appropriate decisions is needed. The relationship between environmental uncertainty and decision-making can be explained through *Contingency Theory* . In the context of MSMEs, increasingly unpredictable environmental changes require business actors to adapt their decisions to the conditions they face. Environmental uncertainty also increases the need for information as a basis for decision-making. *Information Processing Theory* explains that the greater the uncertainty faced by an organization, the greater the need for information to help understand environmental conditions and determine actions. Thus, environmental uncertainty can encourage business actors to pay more attention to external changes before making business decisions.Research by Yasmin and Ulfah (2024) demonstrated a relationship between environmental uncertainty and the quality of Management Accounting Information Systems in MSMEs. These results indicate that environmental conditions are a factor that must be considered in meeting MSMEs' information needs. Furthermore, Ramadhan and Sundari (2025) demonstrated the importance of environmental uncertainty in the use of Accounting Information Systems. These findings reinforce the view that environmental changes can affect the need for and use of information in conducting business activities. In the context of culinary MSMEs, changes in raw material prices, consumer demand, competition, technology, and economic conditions can encourage business owners to make adjustments in pricing, production, marketing, and resource management decisions. Therefore, the higher the perceived environmental uncertainty, the greater the need for business actors to make decisions responsive to environmental changes.
Thus, the second hypothesis is formulated as follows:

H2: Business Environmental Uncertainty has a positive effect on Business Decision-Making in culinary MSMEs in Bandar Lampung City.

d. *The Moderating Effect of Business Environmental Uncertainty on Accounting Information Systems* *and* *Business Decision-Making*

In an increasingly uncertain environment, the need for relevant and timely information increases. This aligns with *Information Processing Theory* , which explains that increased uncertainty increases an organization's need for information processing capacity (Galbraith, 1973). An AIS can be an information processing mechanism that helps MSMEs process transaction data into information for planning, control, evaluation, and decision-making (Romney &

Steinbart, 2021). Therefore, as environmental uncertainty increases, the information generated by an AIS is expected to become increasingly important in helping businesses understand changes and determine actions. Conversely, in relatively stable environments, the need for information to respond to change may be less significant than in conditions of high uncertainty. Therefore, environmental uncertainty can theoretically alter the strength of the relationship between an AIS and business decision-making. Yasmin and Ulfah (2024) found a relationship between environmental uncertainty and the quality of Management Accounting Information Systems in MSMEs. Ramadhan and Sundari (2025) also demonstrated that environmental uncertainty is a factor that needs to be considered in the use of an AIS. These findings provide the basis for understanding how the business environment can influence the need for and utilization of information within an organization. However, research specifically examining the role of environmental uncertainty as a moderating variable in the relationship between AIS and business decision-making in culinary MSMEs is still limited. This condition forms the basis for testing the moderating effect in this study. Therefore, the third hypothesis is formulated as follows:

H3: Business Environment Uncertainty moderates effect on Accounting Information Systems on Business Decision Making in culinary MSMEs in Bandar Lampung City.

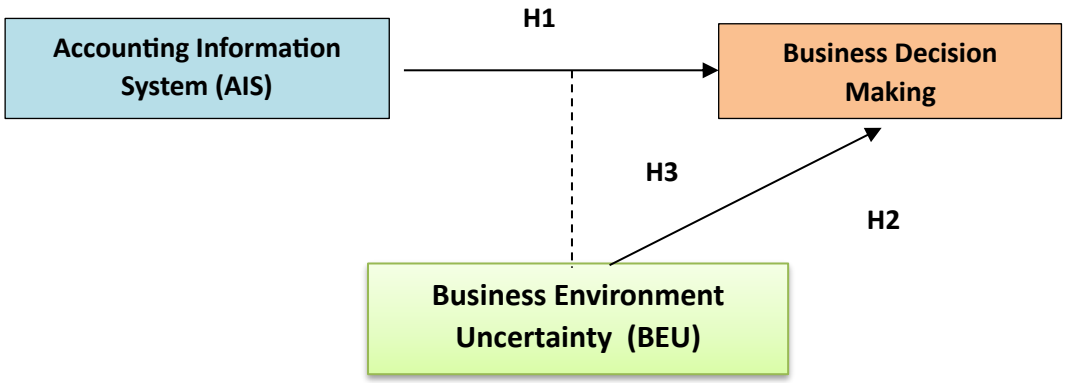


Figure 1. Research Framework

III. RESEARCH METHODS

This study uses a quantitative approach with an *explanatory research design* to examine the relationship between Accounting Information Systems (AIS) and Business Decision Making and the role of Business Environmental Uncertainty as a moderating variable. AIS is used as the independent variable (X), Business Decision Making as the dependent variable (Y), and Business Environmental Uncertainty as the moderating variable (Z).The research population was the culinary sector MSMEs in Bandar Lampung City that carried out business activities and were recorded in the Business Identification Number (NIB) issuance data. Based on data from the DPMPTSP of Bandar Lampung City published by ANTARA Lampung, there were 5,670 culinary businesses that had NIB in 2026. The sample was determined using a *purposive sampling technique* with the following criteria: (1) culinary MSMEs that were still active; (2) recording or managing financial information; (3) owners or managers were aware of business activities; and (4) willing to be respondents. Based on the data collection process, 120 respondents were obtained, all of whom met the

research criteria and were used in the analysis. The data used were primary data obtained through distributing questionnaires to owners or managers of culinary MSMEs. The research instrument used a five-level Likert scale with a score of 1–5. The SIA variable was measured through information quality, ease of use, data integration, speed of information access, and reporting effectiveness. Business Decision Making was measured through speed, accuracy, information quality, effectiveness, and rationality of decisions. Meanwhile, Business Environment Uncertainty is measured through uncertainty in market demand, competitors, technology, regulations, and economic conditions.

Data analysis was performed using *Partial Least Squares-Structural Equation Modeling (PLS-SEM)* with the help of SmartPLS 4. Evaluation of the measurement model (*outer model*) includes convergent validity, discriminant validity, and construct reliability. Evaluation of the structural model (*inner model*) includes the R-Square value, *effect size* (f^2), *predictive relevance* (Q^2), and hypothesis testing through a *bootstrapping procedure*. The evaluation criteria refer to Hair et al. (2019) and Hair et al. (2022), with an AVE value > 0.50 and Cronbach's Alpha and Composite Reliability > 0.70 as the basis for construct evaluation. Hypothesis testing is carried out based on *the path coefficient*, T-statistic, and P-value. The hypothesis is stated to be supported if the T-statistic > 1.96 and the p-value < 0.05.

IV. RESULTS AND DISCUSSION

4.1. Data and Respondents

This study involved 120 respondents from culinary MSMEs in Bandar Lampung City. Respondent characteristics based on business tenure, number of employees, and owner education are presented in Table 1.

Table 1. Respondent Characteristics

No	Characteristics	Category	Amount	Percentage
1	Length of business	1–3 years	62	51.7%
		4–6 years	20	16.7%
		> 6 years	25	20.8%
2	Number of employees	1–5 people	13	10.8%
		6–10 people	107	89.2%
		>10 people	10	8.3%
3	Owner's education	HighSchool/ Equivalent	3	2.5%
		Diploma	98	81,6%
		Bachelor	7	5.8%
		Postgraduate	15	12.5%

Source: Processed primary data, 2026.

The table above shows that the majority of respondents were MSMEs with a business history of less than one year, namely 62 respondents (51.67%). Based on the number of employees, most businesses had 1–5 employees, namely 107 respondents (89.17%). Meanwhile, in terms of owner education, 98

respondents (81.8%) had a high school education or equivalent. These characteristics indicate that most respondents were businesses with a relatively small workforce and a simple management structure. Measurement model evaluation was conducted to assess the validity and reliability of the research constructs. Test results showed that all constructs met the established criteria.

Table 2. Construct Validity and Reliability

Construct	Cronbach's Alpha	Composite Reliability	AVE
Accounting Information System (AIS)	0.984	0.985	0.871
Business Decision Making	0.966	0.970	0.766
Business Environment Uncertainty (BEU)	0.981	0.983	0.854

Source: Primary data processed using SmartPLS 4, 2026.

The AVE values for all constructs were above 0.50, namely 0.871 for AIS, 0.766 for Business Decision Making, and 0.854 for Business Environmental Uncertainty. These values indicate the fulfillment of convergent validity. Furthermore, the Cronbach's Alpha and Composite Reliability values for all constructs were above 0.70, indicating good internal consistency. Thus, the measurement model met the validity and reliability criteria and can proceed to the evaluation of the structural model. The evaluation of the structural model was carried out through the R-Square value, *effect size* (f^2), and *predictive relevance* (Q^2). The R-Square value of Business Decision Making was 0.890 with an Adjusted R-Square of 0.887. This indicates that AIS, Business Environmental Uncertainty, and the interaction of the two were able to explain 89.0% of the variation in Business Decision Making, while the remaining 11.0% was explained by other factors outside the research model.

Table 3. Effect Size

Connection	f^2	Information
AIS→ Business Decision Making	5,490	Big
Business Environmental Uncertainty → Business Decision Making	1,526	Big
AIS * BEU → Business Decision-Making	0.003	Very small

Source: Primary data processed using SmartPLS 4, 2026.

The f^2 value shows that AIS has a very strong effect on Business Decision Making with a value of 5.490, while Business Environmental Uncertainty has an effect of 1.526. In contrast, the AIS × Business Environmental Uncertainty interaction only has an f^2 value of 0.003. This shows that the contribution of the interaction effect to Business Decision Making is very small. The Q^2 value of Business Decision Making is 0.025. Because this value is greater than zero, the model has *predictive relevance* , although its predictive ability is relatively low.

4.2. Hypothesis Testing Results

Hypothesis testing was conducted using the *bootstrapping procedure* in SmartPLS 4. The test results are presented in Table 4.

Table 4. Hypothesis Testing Results

Connection	Coefficient	T-statistic	P-value	Decision
SIA → Business Decision Making	0.788	24,062	0,000	***Supported***
KLB → Business Decision Making	0.415	12,186	0,000	***Supported***
SIA × BEU → Business Decision Making	-0.018	0.632	0.528	***Not supported***

Source: Primary data processed using SmartPLS 4, 2026.

The results show that AIS has a positive and significant influence on business decision-making. Business environmental uncertainty also has a positive and significant influence on business decision-making. However, the interaction between AIS and business environmental uncertainty does not show a significant effect.

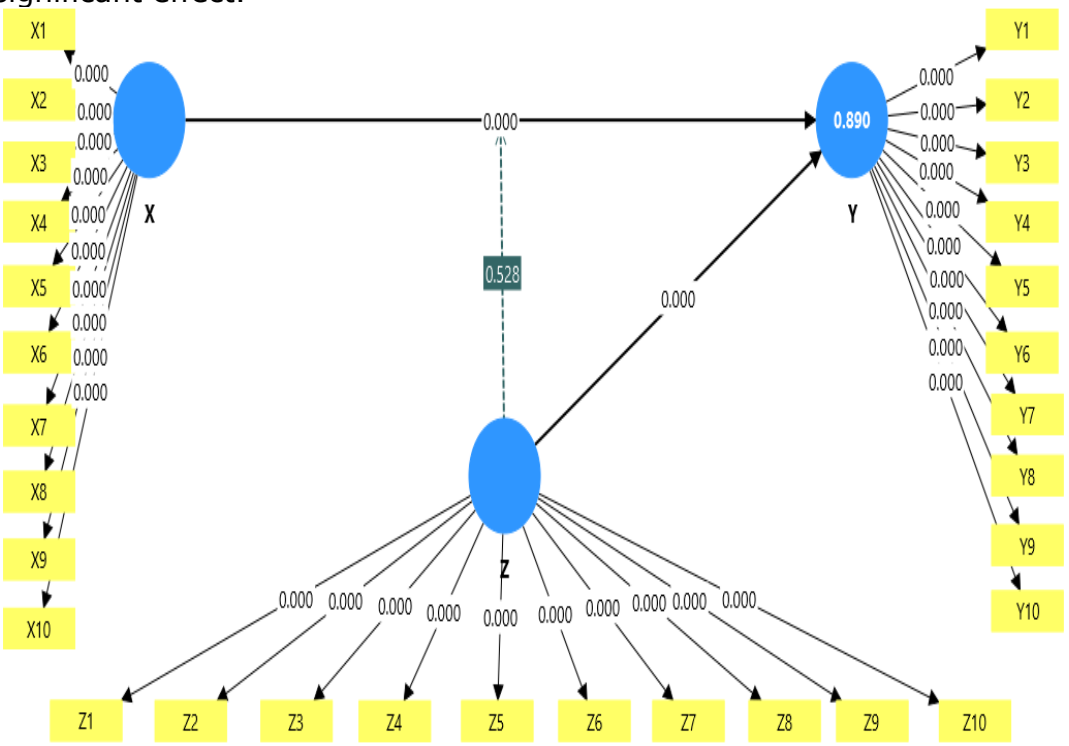


Figure 2. Hypothesis Testing Results using SEM-PLS

The results of the study indicate that the H1 test, namely Accounting Information Systems, has a positive and significant effect on business decision making, with a coefficient of 0.788, t-statistic of 24.062, and P-value of 0.000. These results indicate that H1 is accepted. The results of the study indicate that business environmental uncertainty has a positive and significant effect on business decision-making, with a coefficient of 0.415, a t-statistic of 12.186, and a p-value of 0.000. These results indicate that H2 is accepted. In contrast to H1 and H2, the results of the H3 test indicate that the interaction of AIS on Business Environmental Uncertainty does not have a significant effect on Business Decision Making. The interaction coefficient is -0.018, the T-statistic of

0.632, and the P-value of 0.528. Because T-statistic <1.96 and P-value> 0.05, H3 is not supported.

4.3. Discussion

The Effect of Accounting Information Systems on Business Decision Making

The results of the study indicate that the Accounting Information System has a positive and significant effect on Business Decision Making. Thus, H1 is supported. These results indicate that the better the utilization of AIS, the greater its support for the business decision-making process of culinary MSMEs in Bandar Lampung City. This finding can be explained through *Information Processing Theory*. Galbraith (1973) explained that organizations require adequate information processing capacity to meet information needs in facing environmental conditions. In the context of MSMEs, AIS helps process transaction data into information that can be used to understand business conditions and determine actions. Information regarding revenue, costs, inventory, and financial conditions can be a basis for business owners in determining prices, controlling costs, evaluating sales, and planning business development (Romney & Steinbart, 2021).

The results of this study align with those of Sari et al. (2023), who demonstrated the influence of AIS on MSME business decision-making. These findings are also consistent with those of Anto et al. (2024), who found that AIS had a positive and significant impact on business decision-making in micro and small culinary businesses. These similar results reinforce the argument that accounting information plays a crucial role in helping MSMEs make decisions based on available business conditions. Therefore, AIS serves not only as a transaction recording tool but also as a source of information that can be used in the evaluation and decision-making process. For culinary MSMEs, the use of AIS is crucial because decisions regarding pricing, costs, inventory, sales, and business development require adequate information.

The Effect of Business Environmental Uncertainty on Business Decision Making

The results of the study indicate that business environmental uncertainty has a positive and significant effect on business decision-making, or H2 is supported. These results indicate that environmental change and uncertainty are related to the decision-making process of MSMEs. In the culinary sector, uncertainty can arise through changes in consumer demand, raw material prices, competition, technological developments, and economic conditions. These changes require business actors to adjust decisions related to prices, products, inventory, marketing, and resource use. This finding can be explained through *Contingency Theory*. Lawrence and Lorsch (1967) explain that organizational effectiveness is related to the ability to adapt to the environmental conditions faced. Donaldson (2001) also emphasizes the importance of fit *between* organizational systems and the environment. In the context of MSMEs, changing environmental conditions encourage business owners to adjust their actions and decisions to the conditions currently faced.

These results align with Yasmin and Ulfah (2024), who demonstrated a relationship between environmental uncertainty and the quality of Management Accounting Information Systems in MSMEs. Ramadhan and Sundari (2025) also demonstrated the importance of environmental uncertainty in the use of AIS. These findings demonstrate that environmental conditions are a factor that must be considered in the management and decision-making process of a business

(Jatiningrum et al, 2025) Therefore, environmental uncertainty in this study is not only an external condition faced by MSMEs but also relates to how business actors make decisions in response to changes.

The Role of Business Environmental Uncertainty in Moderating the Effect of AIS on Business Decision Making

The study reveals that Business Environmental Uncertainty (BEU) does not significantly moderate the relationship between AIS and business decision-making. This result does not necessarily reject contingency theory; rather, it suggests that the moderating role of environmental uncertainty may be conditional on the quality, sophistication, and actual use of the accounting information produced by the system. Contingency theory proposes that there is no universally effective accounting system; its effectiveness depends on the fit between organizational systems and contextual factors such as uncertainty, strategy, technology, and structure (Chenhall, 2003). Therefore, AIS may improve decision-making regardless of the level of environmental uncertainty if the information generated is already perceived as relevant and reliable by MSME owners. The insignificant moderation effect can be explained by several theoretical and contextual arguments. First, culinary MSMEs may rely not only on formal accounting information but also on informal sources, such as direct customer feedback, supplier relationships, social media trends, personal experience, and daily observation of market conditions. Under high uncertainty, owners may supplement AIS information with external, non-financial, and real-time information rather than relying solely on the accounting system. This is consistent with contingency research indicating that managers facing greater uncertainty tend to seek broader and more externally oriented information.

Second, the insignificant result may reflect limited AIS sophistication and low intensity of accounting information utilization among culinary MSMEs. Many MSMEs use simple bookkeeping, spreadsheets, or basic digital applications rather than integrated enterprise systems. If AIS data are incomplete, delayed, or not interpreted systematically, environmental uncertainty may not translate into a stronger AIS–decision-making relationship. Prior research similarly finds that the benefits of accounting information and management accounting practices depend on whether their implementation and use are properly aligned with environmental (Lutfi, 2016; Yasmin & Ulfah, 2024). Third, the result may indicate that the direct effect of AIS is sufficiently strong and stable across different environmental conditions. In other words, AIS may function as a general decision-support mechanism rather than as a context-dependent resource. This interpretation is supported by evidence that management accounting systems can have significant positive effects on managerial effectiveness even when environmental uncertainty itself does not significantly affect performance (Agbejule, 2005; Mia & Chenhall, 1994) Thus, the availability of structured accounting information may help culinary MSME owners make better decisions irrespective of whether the business environment is relatively stable or uncertain.

In other words, although environmental uncertainty has a significant direct influence on business decisions, this condition does not statistically change the strength of the relationship between AIS and decision-making. Theoretically, these results differ from the assumptions of *Contingency Theory*, which emphasizes that the effectiveness of a system can depend on environmental

conditions (Lawrence & Lorsch, 1967; Donaldson, 2001). *Information Processing Theory* also explains that the higher the uncertainty, the greater the organization's need for information (Galbraith, 1973).

These results indicate that Business Environmental Uncertainty neither strengthens nor weakens the influence of AIS on Business Decision-Making in culinary MSMEs in Bandar Lampung City. Based on these two perspectives, it was initially predicted that AIS would become increasingly important when MSMEs face higher uncertainty. However, empirical results show that this assumption is not proven in this study. One possible explanation is that AIS has become an internal requirement for MSMEs in carrying out business activities, so its benefits in supporting decisions are relatively independent of high or low environmental uncertainty (Jatiningrum et al, 2024). Information regarding revenue, costs, inventory, and financial condition is still needed to run a business, both when environmental conditions are relatively stable and when changes occur (Zakiyah et al, 2026).

The effect size results also support these findings. This indicates that the contribution of the interaction of the two variables to Business Decision Making is very small. These findings provide interesting empirical results because they indicate that Business Environmental Uncertainty has a direct influence on Business Decision Making, but does not function as a moderating variable on the relationship between AIS and Business Decision Making. Thus, environmental conditions are indeed important for MSME business decisions, but have not been proven to change the benefits of AIS in supporting these decisions. These results also suggest the possibility that other factors beyond environmental uncertainty are more decisive in determining the strength or weakness of the relationship between AIS and business decisions, such as owner competence, financial literacy, digital capabilities, information quality, or the level of technology utilization. These factors can be considered for further research. Overall, the results of the study indicate that AIS is the strongest factor in the research model in explaining Business Decision Making, indicated by a path coefficient of 0.788 and f^2 of 5.490. Business Environmental Uncertainty also has a direct influence with a coefficient of 0.415, but is not proven to moderate the relationship between AIS and Business Decision Making.

V. CONCLUSION

Based on the results of research on 120 culinary MSMEs in Bandar Lampung City, it can be concluded that the Accounting Information System has a positive and significant effect on Business Decision Making. The path coefficient of 0.788 indicates that increased AIS utilization is related to improved business decision-making capabilities. This finding indicates that relevant, accurate, and timely accounting information can help MSMEs understand business conditions and determine business actions. Second, Business Environmental Uncertainty has a positive and significant effect on Business Decision Making. These findings indicate that changes in the business environment are conditions related to the decision-making process of MSMEs. The greater the changes faced, the more important the ability of business actors to pay attention to and respond to environmental conditions. Third, business environmental uncertainty has not been shown to moderate the influence of accounting information systems on business decision-making. Statistical results indicate that the moderating effect is insignificant. Thus, environmental uncertainty has not been shown to strengthen or weaken the relationship between AIS and business decision-

making. Overall, the study shows that AIS remains an important factor in supporting culinary MSMEs' business decision-making, while Business Environment Uncertainty is more visible through its direct influence on decisions, rather than as a condition that changes the relationship between AIS and business decisions. The main implication of the study is the need for MSMEs to increase the use of AIS as a source of information in determining prices, controlling costs, managing inventory, evaluating businesses, and planning business development. Meanwhile, further research can expand the objects and areas of research and consider other variables that may explain the relationship between AIS and Business Decision Making.

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