

The Role of Open Innovation and Accounting Competency in Enhancing the Sustainability of Micro, Small, and Medium Enterprises in the Religious Tourism Area

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Abstract. This research aims to understand how open innovation and strong accounting skills contribute to the long-term success of micro, small, and medium-sized enterprises (MSMEs) in the religious tourism sector of Banjarmasin, South Kalimantan. Given the importance of sustainable business practices in this industry, this study explores the factors that support the sustainability of these MSMEs. This research combined quantitative and qualitative methods. Surveys were used to gather data from MSME owners and managers, while in-depth interviews provided a more detailed perspective on the impact of open innovation and accounting competency. The findings indicate that both open innovation and strong accounting skills positively influence the sustainability of these MSMEs.

Keywords: Open innovation, Accounting competency, Business sustainability, MSMEs

1 Introduction

Tourism and Creative Economy Minister Sandiaga Uno has named Kuin Utara Tourism Village in Banjarmasin as one of the top 75 tourism villages in Indonesia for 2023. The village's main attractions are the Tomb of Sultan Suriansyah and the Sultan Suriansyah Mosque. Minister Uno visited the village on August 3, 2023, and expressed his hope that this recognition will help Kuin Utara develop its tourism and creative economy potential. The ultimate goal is to make tourism the driving force of the local economy and attract both domestic and international visitors.

Recognizing the economic potential of the Sultan Suriansyah Tomb Religious Tourism Area in South Kalimantan requires concerted efforts from the local community and government to optimize its management and deliver positive regional impacts. Support from the community and local businesses is essential for effective implementation of tourism regulations [1]. Local communities

can significantly contribute to economic growth by leveraging MSMEs and promoting community-based initiatives [2].

Indonesian MSMEs often struggle with low performance due to various factors such as external environment, internal resources, entrepreneurial skills, cultural influences, and strategic shortcomings [3]. A significant challenge for MSMEs is ensuring long-term sustainability. According to Alsehi et al. [4], sustainability involves meeting present needs without compromising future generations' ability to do the same. Corporate sustainability encompasses financial, environmental, and social dimensions. Organizations must develop comprehensive business strategies and organizational skills to integrate sustainable practices that balance these three dimensions. In the context of MSMEs, business sustainability implies the ability to thrive in competitive markets, expand into broader markets, and maintain a balance between economic growth, environmental protection, and socio-cultural preservation.

In this context, open innovation and accounting competency may play a significant role in enhancing the sustainability of MSME businesses. However, there is a lack of in-depth research on the impact of these two factors, particularly within the Religious Tourism Area of the Tomb of Sultan Suriansyah, South Kalimantan. According to Arief and Anisah [5], open innovation is a strategic approach where MSMEs seek ideas, knowledge, and technology from external sources, often through collaboration with other entities. Innovation is crucial not only for business survival but also for fostering competition and customer loyalty [6]. Innovation can be applied in various aspects, such as product, process, design, packaging, volume, size, and pricing [7].

A company can collaborate with various external partners, including suppliers, customers, competitors, professional associations, academic institutions, and research centers. Open innovation offers diverse collaboration models, such as business partnerships, financial support, innovation networks, and joint innovative projects [8]. By embracing open innovation, MSMEs can foster product innovation, ensuring business sustainability and customer loyalty. Hence, this research is crucial to gain a deeper understanding of how open innovation and accounting competency can influence the sustainability of MSMEs within the religious tourism sector. This study aims to contribute significantly to fostering the development of sustainable MSMEs and enhancing tourism potential in South Kalimantan.

MSMEs are a crucial pillar of the Indonesian economy, contributing significantly to GDP, employment, and exports. In 2021, MSMEs accounted for 60.3% of the national GDP [9] and employed 97% of the workforce, according to the Ministry of Cooperatives and SMEs. However, South Kalimantan's MSMEs face challenges such as limited capital and a lack of accounting knowledge. One major issue is the inadequate utilization of accounting information. This weakness is often attributed to low levels of education, insufficient accounting training, and misconceptions about the complexity of accounting implementation. Many MSMEs only record income and expenses without preparing comprehensive financial reports as mandated by the Financial Accounting Standards (SAK) for Micro, Small, and Medium Entities (EMKM).

This research is grounded in Stakeholder Theory, which posits that companies must consider the interests of all stakeholders, including employees, creditors, and the government. Accounting information is a vital tool that provides insights into a company's financial health, influencing decision-making by stakeholders. The research also draws on Business Sustainability Theory, which focuses on an organization's long-term viability. This theory is rooted in the Triple Bottom Line (TBL) approach, introduced by John Elkington in 1994. TBL emphasizes the importance of

achieving business sustainability by balancing economic, social, and environmental considerations[10].

Safrida et al. [11] found that accounting training significantly impacts the use of accounting information by South Kalimantan MSMEs. However, factors like business size, age, owner education, and accounting knowledge had no significant influence. Open innovation is a paradigm that involves leveraging external knowledge to drive innovation, contrasting with traditional innovation which relies solely on internal research. This approach offers various benefits, such as accelerating innovation, reducing research costs, and expanding access to new knowledge and technologies. As highlighted by Arief and Anisah [5] open innovation is a strategy employed by MSMEs to acquire ideas, knowledge, and technology from external sources, often through collaboration. Innovation is crucial not only for business survival but also for fostering competition and enhancing customer loyalty [6].

2 Methods

This study was conducted in the Sultan Suriansyah Tomb Area, located on Kuin Utara Street, Kuin Utara Village, North Banjarmasin District, Banjarmasin City, South Kalimantan Province. To address the identified research problems, multiple research methods were employed. The flowchart below illustrates the research implementation process.

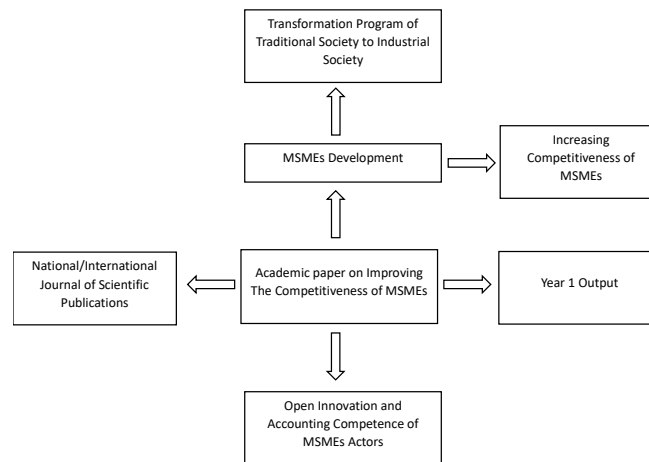


Fig. 1. Research Implementation Flowchart

To assess respondents' perceptions of open innovation and accounting competency, we utilized a questionnaire employing a Likert scale. This scale, ranging from "Strongly Disagree" to "Strongly Agree," generated ordinal data. Prior to distribution, the questionnaire underwent validity and reliability testing. Both primary and secondary data were collected through questionnaires and interviews with relevant respondents. SPSS was employed to analyze the impact of open innovation and accounting competency on MSME sustainability within the Sultan Suriansyah Tomb Religious

Tourism Area. Before hypothesis testing, a classical assumption test was conducted to ensure data normality.

3 Results and Discussion

3.1 Respondent's Characteristics

This descriptive analysis of respondent data consists of seven single tables as follow.

Table 1. Respondent Characteristics Based on Age

Age	Frequency	Percentage
10-20 years	0	0.00%
21-30 years	1	2.17%
31-40 years	6	13.04%
41-50 years	11	23.91%
51-60 years	21	45.65%
>60 years	7	15.22%
Amount	46	100.00%

Table 1 presents the age distribution of respondents. The majority of respondents, 45.65% or 21 individuals, were aged between 51 and 60 years. Conversely, the smallest group, comprising just 2.17% or one person, was aged between 21 and 30 years.

Table 2. Respondent Characteristics Based on Gender

Gender	Frequency	Percentage
Man	1	2.17%
Woman	45	97.83%
Amount	46	100.00%

Table 2 illustrates the characteristics of respondents based on their genders. Based on the table, most respondents are women for 45 people or 97.83 % while the minority of respondents are men, which only one person or 2.17 %.

Table 3. Respondent Characteristics Based on Last Education Level

Last education	Frequency	Percentage
Elementary School	13	28.26%
Junior High School	8	17.39%
Senior High School	22	47.83%
Diploma / Bachelor	2	4.35%
Did Not Finish School	0	0.00%
Do not know	1	2.17%
Amount	46	100.00%

Table 3 presents the educational background of the respondents. The majority, 47.83% or 22 respondents, have completed high school. One respondent, or 2.17%, did not provide an answer.

Table 4. Respondent Characteristics Based on Length of Business

Length of Business	Frequency	Percentage
0-5 years	12	26.09%
6-10 years	16	34.78%
11-15 years	4	8.70%
16-20 years	4	8.70%
>20 years	8	17.39%
Do not know	2	4.35%
Amount	46	100.00%

Table 4 displays the duration of business operation for the respondents. The majority, 34.78%, have been in business for 6-10 years. The remaining 4.35% did not provide an answer.

Table 5. Respondent Characteristics Based on Marital Status

Marital status	Frequency	Percentage
Married	42	91.30%
Not Married	3	6.52%
No answer	1	2.17%
Amount	46	100.00%

Table 5 presents the marital status of the respondents. The majority, 91.30% or 42 individuals, are married. The remaining 2.17% did not provide an answer.

Table 6. Respondent Characteristics Based on Business Ownership Status

Business Status	Frequency	Percentage
Private ownership	38	82.61%
Owned by other people	2	4.35%
No answer	6	13.04%
Amount	46	100.00%

Based on the data, most respondents run their own business by 38 people or 82.61 %, while 4.35 % of respondents answered that they didn't own the business.

Table 7. Respondent Characteristics Based on the Number of Family Members

Number of Family Members	Frequency	Percentage
1 Child	6	13.04%
2 Children	12	26.09%
3 Children	16	34.78%
4 Children	4	8.70%
>4 Children	5	10.87%
No answer	3	6.52%
Amount	46	100.00%

Table 7 presents the number of children for each respondent. The majority, 34.78%, have three children, followed by two, one, and more than four children, respectively. The smallest group, 6.52%, did not provide an answer.

3.2 Research Instrument Test

3.2.1 Validity Test

To assess the validity of each statement item, a Pearson Product Moment correlation was employed. If the correlation coefficient of a statement item exceeds the critical r-value of 0.3, it is deemed valid. The following table presents the results of the questionnaire validity test:

Table 8. Summary of Results of Validity Test of Open Innovation Variable (X1)

Statement Items	r count	r critical	Information
Statement 1	0.811	0.3	Valid
Statement 2	0.888	0.3	Valid

Statement Items	r _{count}	r _{critical}	Information
Statement 3	0.820	0.3	Valid
Statement 4	0.891	0.3	Valid
Statement 5	0.707	0.3	Valid
Statement 6	0.687	0.3	Valid
Statement 7	0.748	0.3	Valid
Statement 8	0.861	0.3	Valid
Statement 9	0.779	0.3	Valid
Statement 10	0.914	0.3	Valid

Table 9. Summary of Validity Test Results for Accounting Competency Variables (X2)

Statement Items	r _{count}	r _{critical}	Information
Statement 1	0.703	0.3	Valid
Statement 2	0.917	0.3	Valid
Statement 3	0.940	0.3	Valid
Statement 4	0.947	0.3	Valid
Statement 5	0.955	0.3	Valid

Table 10. Summary of Validity Test Results for Business Sustainability Variables (Y)

Statement Items	r _{count}	r _{critical}	Information
Statement 1	0.889	0.3	Valid
Statement 2	0.874	0.3	Valid
Statement 3	0.867	0.3	Valid
Statement 4	0.879	0.3	Valid
Statement 5	0.876	0.3	Valid
Statement 6	0.842	0.3	Valid
Statement 7	0.849	0.3	Valid
Statement 8	0.734	0.3	Valid
Statement 9	0.896	0.3	Valid
Statement 10	0.777	0.3	Valid

Based on Table 8-10 above, the results of the instrument validity test show that all statement items have a validity coefficient greater than the r_{critical} of 0.3. It can be concluded that all statement items that are stated as valid can be used in further analysis.

3.2.2 Reliability Test

To assess reliability, the instrument was tested using the Alpha-Cronbach method. A reliability coefficient exceeding 0.7 indicates a reliable questionnaire. The following table presents the results of the reliability test:

Table 11. Results of the Research Questionnaire Reliability Test

Variables	Reliability Index	Critical Value	Information
Open Innovation (X1)	0.941	0.7	Reliable
Accounting Competence (X2)	0.937	0.7	Reliable
Business Sustainability (Y)	0.956	0.7	Reliable

As shown in Table 11, the reliability values for all statement items on the research variables exceed 0.7. This indicates that the questionnaire items are reliable for measuring the variables.

3.2.3 Descriptive Analysis

To further enrich the discussion, we analyzed the respondent data to understand their responses to each variable. To facilitate interpretation, we categorized respondent scores based on the average value. This average value was used to determine the classification of assessment categories and to identify trends in responses to each variable. The following equation was used to calculate the class length at each interval:

$$P = \frac{X_{\max} - X_{\min}}{b} = \frac{R}{b}$$

P = Class Length of each Interval

$X_{\max}$ = Maximum Value

$X_{\min}$ = Minimum Value

R = Range

b = Many Classes

In this study, the maximum assessment value is five, and the minimum research value is one, so if the values are substituted into the previous equation, the following results are obtained:

$$P = \frac{5 - 1}{5} = 0,8$$

Based on the results of the calculation of the class length for each interval, table 12 presents the classification of assessment categories for the average arithmetic value, as follows:

Table 12. Descriptive Analysis Categories

No	Interval	Assessment criteria
1	1.00 - 1.79	Very Bad
2	1.80 – 2.59	Not good
3	2.60 – 3.39	Pretty good
4	3.40 – 4.19	Good
5	4.20 - 5.00	Very good

3.3 Respondents' Responses Regarding the Open Innovation Variable (X1)

The Open Innovation variable (X1) with a total of 10 statement items. The following presents the overall results regarding the Open Innovation variable (X1) :

Table 13. Descriptive Analysis of Open Innovation Variables (X1)

No	Statement Items		Respondent Answer Score					Total Score	Mean
			5	4	3	2	1		
1	Item 1	F	19	19	1	6	1	187	4.07
		%	41.30%	41.30%	2.17%	13.04%	2.17%		
2	Statement Item 2	F	13	27	0	2	4	181	3.93
		%	28.26%	58.70%	0.00%	4.35%	8.70%		
3	Statement Item 3	F	9	31	2	4	0	183	3.98
		%	19.57%	67.39%	4.35%	8.70%	0.00%		
4	Statement Item 4	F	14	28	0	0	4	186	4.04
		%	30.43%	60.87%	0.00%	0.00%	8.70%		
5	Statement Item 5	F	8	30	3	5	0	179	3.89
		%	17.39%	65.22%	6.52%	10.87%	0.00%		
6		F	7	25	6	4	4	165	3.59

No	Statement Items	Respondent Answer Score					Total Score	Mean
			5	4	3	2	1	
7	Statement Item 6	%	15.22%	54.35%	13.04%	8.70%	8.70%	182
	Statement Item 7	F	15	21	3	7	0	
8	Statement Item 8	%	32.61%	45.65%	6.52%	15.22%	0.00%	177
	Statement Item 9	F	14	22	3	3	4	
9	Statement Item 9	%	30.43%	47.83%	6.52%	6.52%	8.70%	185
	Statement Item 10	F	14	25	1	6	0	
10	Statement Item 10	%	30.43%	54.35%	2.17%	13.04%	0.00%	191
	Statement Item 10	F	22	18	1	1	4	
Total Score and Average							1816	3.95

According to Table 13, the total score is 1816. The average response for the Open Innovation variable (X1) is 3.95, categorized as "good." Figure 2 outlines the criteria for interpreting scores on the Open Innovation variable (X1).

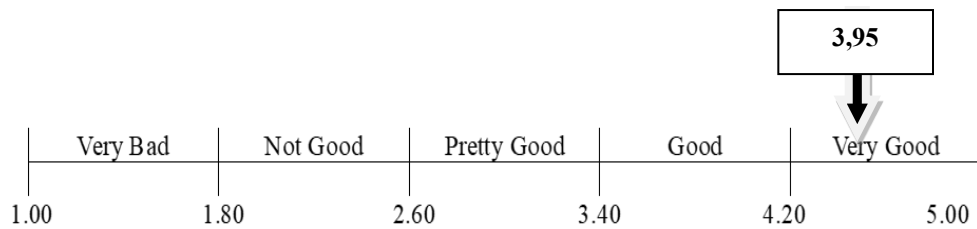


Fig. 2. Open Innovation Variable Continuum Line (X1)

Based on Figure 2, it can be concluded that the respondents' responses regarding the Open Innovation variable (X1) are included in the good category.

3.4 Respondents' Responses Regarding Accounting Competency Variables (X2)

The following presents the overall results regarding the Accounting Competency variable (X2):

Table 14. Descriptive Analysis of Accounting Competency Variables (X2)

No	Statement Items	Respondent Answer Score						Total Score	Mean
		5	4	3	2	1			
1	Statement Item 1	F	7	22	9	8	0	166	3.61
		%	15.22%	47.83%	19.57%	17.39%	0.00%		
2	Statement Item 2	F	7	24	3	12	0	164	3.57
		%	15.22%	52.17%	6.52%	26.09%	0.00%		
3	Statement Item 3	F	4	21	9	8	4	151	3.28
		%	8.70%	45.65%	19.57%	17.39%	8.70%		
4	Statement Item 4	F	3	24	7	11	1	155	3.37
		%	6.52%	52.17%	15.22%	23.91%	2.17%		
5	Statement Item 5	F	5	22	8	11	0	159	3.46
		%	10.87%	47.83%	17.39%	23.91%	0.00%		
Total Score and Average								795	3.46

Based on Table 14, the total score is 795. The average response for the Accounting Competency variable (X2) is 3.46, categorized as "good." Figure 3 outlines the criteria for interpreting scores on the Accounting Competency variable (X2).

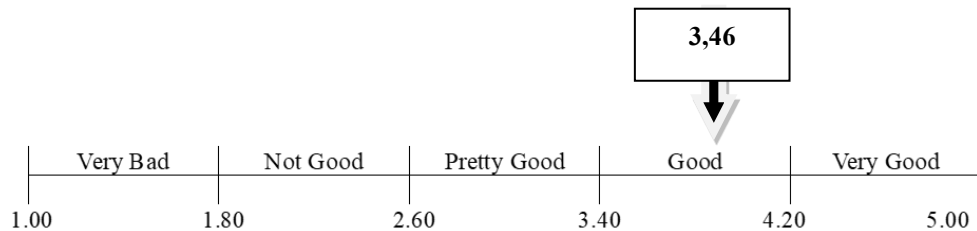


Fig. 3. Accounting Competency Variable Continuum Line (X2)

Based on Figure 3, it can be concluded that the respondents' responses regarding the Accounting Competency variable (X2) are included in the good category.

3.5 Respondents' Responses Regarding Business Sustainability Variables (Y)

The Business Sustainability variable (Y) has 10 statement items. The following table presents the overall results regarding the Business Sustainability variable (Y) :

Table 15. Descriptive Analysis of Business Sustainability Variables (Y)

No	Statement Items	Respondent Answer Score						Total Score	Mean
		5	4	3	2	1			
1	Item 1	F	6	28	3	5	4	165	3.59
		%	13.04%	60.87%	6.52%	10.87%	8.70%		
2	Item 2	F	7	23	4	8	4	159	3.46
		%	15.22%	50.00%	8.70%	17.39%	8.70%		
3	Item 3	F	8	22	6	6	4	162	3.52
		%	17.39%	47.83%	13.04%	13.04%	8.70%		
4	Item 4	F	6	25	7	4	4	163	3.54
		%	13.04%	54.35%	15.22%	8.70%	8.70%		
5	Item 5	F	7	21	9	5	4	160	3.48
		%	15.22%	45.65%	19.57%	10.87%	8.70%		
6	Item 6	F	5	24	8	9	0	163	3.54
		%	10.87%	52.17%	17.39%	19.57%	0.00%		
7	Item 7	F	14	22	4	6	0	182	3.96
		%	30.43%	47.83%	8.70%	13.04%	0.00%		
8	Item 8	F	7	22	6	10	1	162	3.52
		%	15.22%	47.83%	13.04%	21.74%	2.17%		
9	Item 9	F	5	30	5	2	4	168	3.65
		%	10.87%	65.22%	10.87%	4.35%	8.70%		
10	Item 10	F	8	25	6	7	0	172	3.74
		%	17.39%	54.35%	13.04%	15.22%	0.00%		
Total Score and Average								1656	3.60

According to Table 15, the total score is 1656. The average response for the Business Sustainability variable (Y) is 3.60, categorized as "good." Figure 4 outlines the criteria for interpreting scores on the Business Sustainability variable (Y).

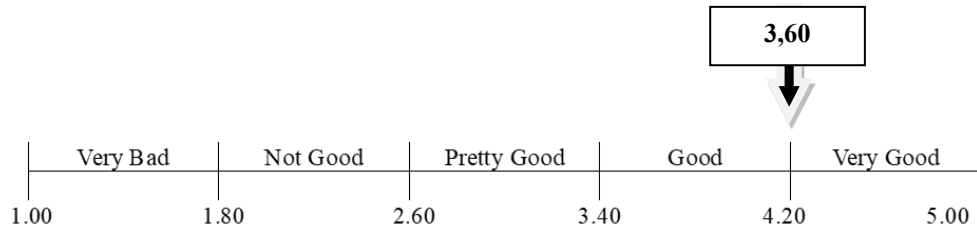


Fig.4. Business Sustainability Variable Continuum Line (X2)

As illustrated in Figure 4, the continuous line for the Business Sustainability variable (Y) indicates that respondents' responses fall within the "good" category.

3.6 Verification Analysis

This verification analysis involves constructing a structural equation model, which will be tested using the PLS-SEM method. The PLS-SEM method is suitable for estimating complex models with numerous constructs, indicator variables, and structural paths, without requiring specific data distribution assumptions. The following diagram depicts the PLS-SEM model for this study.

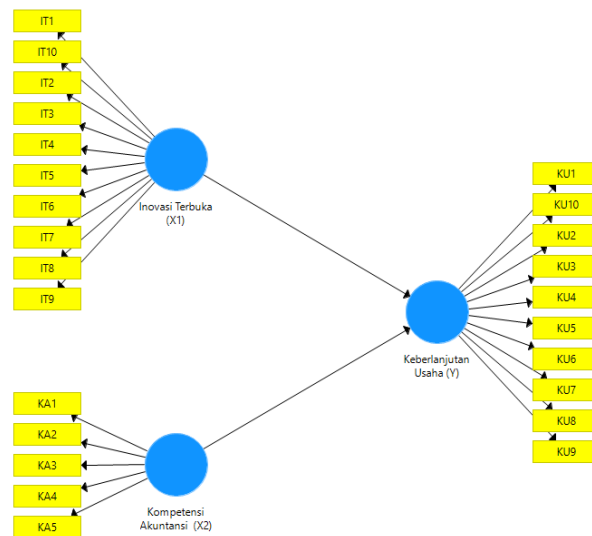


Fig. 5. Conceptual Diagram of PLS-SEM Model

The SmartPLS 3 program was used to estimate the above model. The following presents the results of the PLS-SEM test.

3.7 Outer Model Testing (Measurement Model)

3.7.1 Convergent Validity

The first stage assesses convergent validity, a measure of construct validity. An indicator is considered valid if its loading factor exceeds 0.70. However, a loading factor of 0.60 may be acceptable for models in development. The following initial calculation results were obtained using the SmartPLS 3 program.

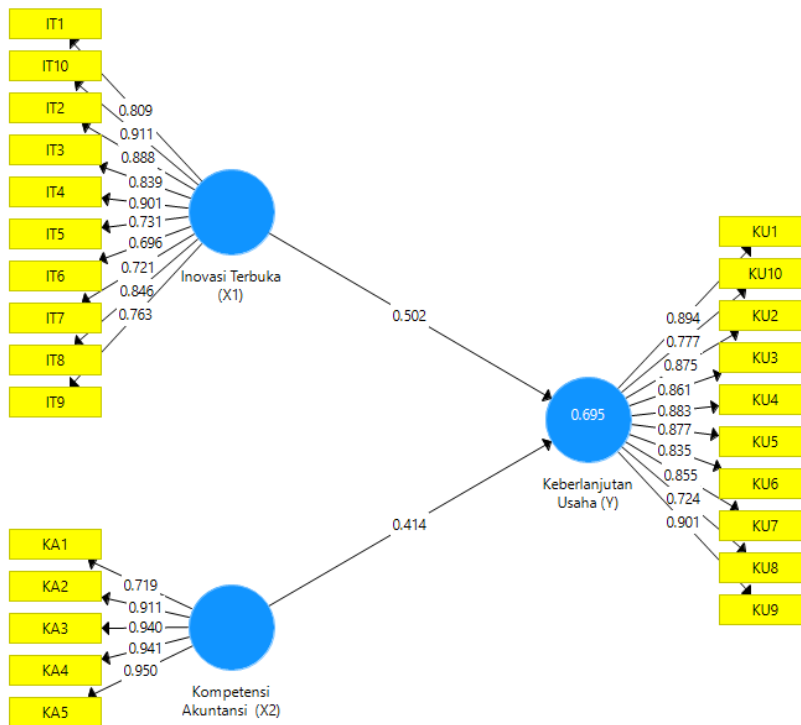


Fig. 6. Outer Evaluation Loading Factor Value Diagram

The test results indicate that all observed variables have loading factor values exceeding 0.60, demonstrating good construct validity for the SEM-PLS model. The following table provides a detailed breakdown of the loading factor values.

Table 16. Loading factor

Indicator	Loading Factor	R critical	Criteria (Loading Factor) > 0.6)
IT1 <- Open Innovation (X1)	0.809	0.7	Valid
IT10 <- Open Innovation (X1)	0.911	0.7	Valid
IT2 <- Open Innovation (X1)	0.888	0.7	Valid
IT3 <- Open Innovation (X1)	0.839	0.7	Valid
IT4 <- Open Innovation (X1)	0.901	0.7	Valid
IT5 <- Open Innovation (X1)	0.731	0.7	Valid
IT6 <- Open Innovation (X1)	0.696	0.7	Valid
IT7 <- Open Innovation (X1)	0.721	0.7	Valid
IT8 <- Open Innovation (X1)	0.846	0.7	Valid
IT9 <- Open Innovation (X1)	0.763	0.7	Valid
KA1 <- Accounting Competency (X2)	0.719	0.7	Valid
KA2 <- Accounting Competency (X2)	0.911	0.7	Valid
KA3 <- Accounting Competency (X2)	0.940	0.7	Valid
KA4 <- Accounting Competency (X2)	0.941	0.7	Valid
KA5 <- Accounting Competency (X2)	0.950	0.7	Valid
KU1 <- Business Sustainability (Y)	0.894	0.7	Valid
KU10 <- Business Sustainability (Y)	0.777	0.7	Valid
KU2 <- Business Sustainability (Y)	0.875	0.7	Valid
KU3 <- Business Sustainability (Y)	0.861	0.7	Valid
KU4 <- Business Sustainability (Y)	0.883	0.7	Valid
KU5 <- Business Sustainability (Y)	0.877	0.7	Valid
KU6 <- Business Sustainability (Y)	0.835	0.7	Valid
KU7 <- Business Sustainability (Y)	0.855	0.7	Valid
KU8 <- Business Sustainability (Y)	0.724	0.7	Valid
KU9 <- Business Sustainability (Y)	0.901	0.7	Valid

Table 16 presents the loading factor values for each construct. All loading factors exceed 0.6, indicating good validity for each construct. To further strengthen convergent validity, we conducted an Average Variance Extracted (AVE) test. AVE value greater than 0.5 signifies construct validity. The following table presents the results of the AVE test using SmartPLS 3:

Table 17. Average Variance Extracted Value

Latent	Average Variance Extracted (AVE)	R critical	Criteria (AVE) > 0.5)
Open Innovation (X1)	0.662	0.5	Valid
Accounting Competency (X2)	0.804	0.5	Valid
Business Sustainability (Y)	0.722	0.5	Valid

As shown in Table 17, the AVE values for all latent variables exceed 0.5, indicating good convergent validity for the indicators forming each latent construct.

3.7.2 Discriminant Validity Test

Discriminant validity assesses the extent to which a construct is distinct from other constructs. The Fornell-Lacker Criterion is used for this test, comparing the correlation between variables or constructs with the square root of the AVE. A good AVE value is indicated when the square root of each latent variable's AVE is greater than the correlation with other latent variables. The following table presents the Fornell-Lacker Criterion results:

Table 18. Fornell Larcker Criterion

	Open Innovation (X1)	Business Sustainability (Y)	Accounting Competency (X2)
Open Innovation (X1)	0.814		
Business Sustainability (Y)	0.773	0.850	
Accounting Competency (X2)	0.655	0.742	0.897

The Fornell-Lacker criterion confirms discriminant validity, as the square root of each construct's AVE exceeds the correlation with other constructs. Alternatively, discriminant validity can be assessed by comparing the correlation of indicators with their associated constructs to the correlation with other constructs. The correlation coefficient of indicators with their associated constructs must be higher. The following table presents the results of the cross-loading analysis:

Table 19. Cross-Loading Discriminant Validity Test Values

	Open Innovation (X1)	Accounting Competency (X2)	Business Sustainability (Y)
IT1	0.809	0.448	0.663
IT10	0.911	0.564	0.672
IT2	0.888	0.543	0.608
IT3	0.839	0.509	0.653
IT4	0.901	0.579	0.751
IT5	0.731	0.571	0.669
IT6	0.696	0.484	0.599
IT7	0.721	0.552	0.500
IT8	0.846	0.620	0.589
IT9	0.763	0.449	0.512

	Open Innovation (X1)	Accounting Competency (X2)	Business Sustainability (Y)
KA1	0.590	0.719	0.685
KA2	0.547	0.911	0.642
KA3	0.701	0.940	0.745
KA4	0.504	0.941	0.615
KA5	0.547	0.950	0.595
KU1	0.763	0.797	0.894
KU10	0.579	0.457	0.777
KU2	0.656	0.725	0.875
KU3	0.620	0.653	0.861
KU4	0.697	0.629	0.883
KU5	0.701	0.727	0.877
KU6	0.481	0.576	0.835
KU7	0.697	0.583	0.855
KU8	0.508	0.505	0.724
KU9	0.783	0.572	0.901

As shown in Table 19, all indicators exhibit a higher correlation with their respective constructs compared to other constructs. This indicates good discriminant validity for the research model in cross-loading analysis.

3.7.3 Reliability Test

Cronbach's Alpha and Composite Reliability are used to assess construct reliability. A construct is considered reliable if its Cronbach's Alpha and Composite Reliability exceed 0.70, although 0.60 is also acceptable. The following table presents the results of the reliability test using SmartPLS 3.

Table 20. Cronbach's Alpha and Composite Reliability Values

Latent Variables	<i>Cronbach's Alpha</i>	<i>Composite Reliability</i>
Open Innovation (X1)	0.942	0.951
Accounting Competency (X2)	0.936	0.953
Business Sustainability (Y)	0.957	0.963

As shown in Table 20, all Cronbach's Alpha values exceed 0.7, indicating good reliability for the latent constructs. Additionally, the composite reliability values for all latent constructs are also greater than 0.70, further supporting the model's reliability.

3.8 Structural Model Testing (Inner Model)

Inner model evaluation assesses the relationships between constructs. This involves analyzing R-square, f-square, Q-square predictive relevance, and hypothesis testing.

3.8.1 R-Square

The following R-square results were obtained using SmartPLS 3:

Table 21. R Square

	R Square	Connection
Business Sustainability (Y)	0.695	Strong

R-Square value of 0.67 indicates a strong model, 0.33 indicates a moderate model, and 0.19 indicates a weak model. Table 21 shows an R-Square of 0.695 for business sustainability, meaning that open innovation and accounting competency influence 69.5% of business sustainability, with the remaining 30.5% attributed to other factors beyond the scope of this study.

3.8.2 f-Square

A f-Square value of 0.02 indicates a small effect size, 0.15 indicates a medium effect size, and 0.35 indicates a large effect size. The following f-Square results were obtained using SmartPLS 3:

Table 22. f Square

Variables	Effect Size	Rating
Business Sustainability (Y)		
Open Innovation (X1)	0.472	Big
Accounting Competency (X2)	0.321	Moderate

Q-square predictive relevance assesses a model's predictive ability based on parameter estimates. A Q-square value greater than zero indicates predictive relevance, while a value less than

zero suggests less predictive relevance. The following table presents the calculated Q-square values using the R² values:

Table 23. Q² Predictive Relevance

	SSO	SSE	Q ² (=1-SSE/SSO)
Open Innovation (X1)	460,000	460,000	
Business Sustainability (Y)	460,000	248,312	0.460
Accounting Competency (X2)	230,000	230,000	

Based on the calculations, the Q-square value is greater than 0, indicating that the model effectively reconstructs observed values and has predictive relevance. This means that the structural model accounts for 46.0% of the variation in the endogenous latent variables, while the remaining 54.0% is attributed to model error.

3.8.3 Goodness of Fit (GoF)

This index assesses both the measurement and structural models, providing a simple measure of overall model prediction. A GoF value of 0.10 indicates a small effect, 0.25 indicates a medium effect, and 0.36 indicates a large effect. The GoF index is calculated as the square root of the average communality index and average R-square values:

$$\begin{aligned}
 \text{GoF} &= \sqrt{\text{Avrg AVE} \times \text{Avrg R}^2} \\
 &= \sqrt{0,729 \times 0,695} \\
 &= 0.712
 \end{aligned}$$

Based on the calculation above, it is known that the GoF value obtained is 0.712, so the GoF value is in the *large* (high) category.

3.8.4 Hypothesis Testing

This study uses path coefficients, t-values, and p-values for hypothesis testing. According to Kock[12], path coefficients and t-values indicate significance and prediction in hypothesis testing, while p-values assess prediction and significance. The following table provides the t-table values.

Table 24. T-table Values

	<i>Two-tailed</i>
t-table	1.96

With a confidence level of 95% (alpha 5%) and *two-tailed*, the following rules are:

- If the t-statistic value ≥ 1.96 (used for direct effect), then H_0 is rejected and H_1 is accepted.
- If the t-statistic value < 1.96 (used for direct effect), then H_0 is accepted and H_1 is rejected.

The magnitude of the significance value between the tested variables is presented in the form of a value on the arrow that connects one of the variables to the target variable.

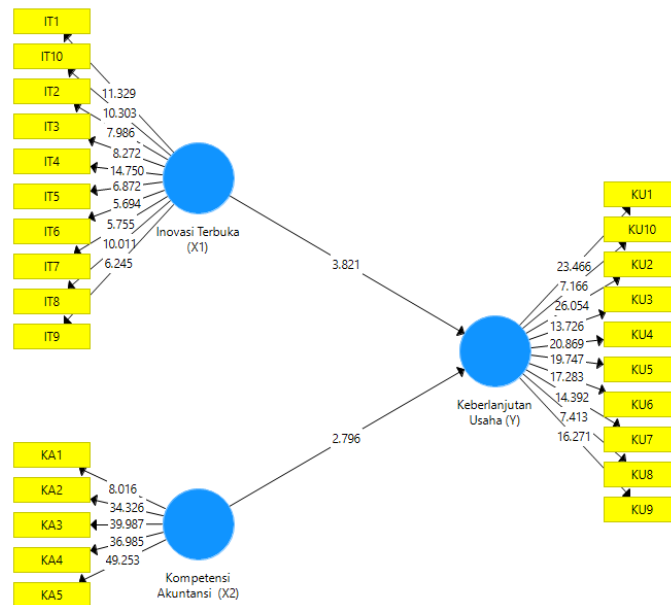


Fig. 7. Significance Value (t-count)

Table 25. Path Coefficient and P-values

	Variables	Original sample (O)	T statistics (O/STDEV)	P-values 5%	Results
H1	Open Innovation (X1) -> Business Sustainability (Y)	0.502	3,821	0,000	Accepted
H2	Accounting Competency (X2) -> Business Sustainability (Y)	0.414	2,796	0.005	Accepted

A. Hypothesis 1: Open Innovation has a positive impact on Business Sustainability

The calculated path coefficient of 0.502 indicates a positive, unidirectional relationship between open innovation and business sustainability. This means that higher levels of open innovation lead to higher levels of business sustainability. The t-statistic of 3.821, which is greater than the critical t-value of 1.96, and the p-value of 0.000, which is less than 0.05, support the significance of this relationship. Therefore, Hypothesis 1 is accepted, confirming that open innovation positively impacts business sustainability. This finding aligns with previous research which suggests that MSMEs can benefit from seeking external ideas, knowledge, and technology to drive innovation [5], [6], [7], [8]. By embracing open innovation, MSMEs can develop innovative products, thereby ensuring long-term business sustainability and customer satisfaction.

B. Hypothesis 2: Accounting Competency has a positive impact on Business Sustainability

The calculated path coefficient of 0.414 indicates a positive, unidirectional relationship between accounting competency and business sustainability. This suggests that higher levels of accounting competency lead to higher levels of business sustainability. The t-statistic of 2.796, which is greater than the critical t-value of 1.96, and the p-value of 0.005, which is less than 0.05, support the significance of this relationship. Therefore, Hypothesis 2 is accepted, confirming that accounting competency positively impacts business sustainability. This finding aligns with previous research by Safrida et al.[11] which emphasizes the importance of accounting training in improving the use of accounting information among MSMEs. Based on these results, it is recommended that MSME actors actively participate in accounting training and apply accounting knowledge to enhance the quality of their financial reports.

C. H3: Open Innovation and Accounting Competency influence Business Sustainability

The R- square value is 0.695, so the F count as follows:

$$\begin{aligned} \text{F count} &= \frac{(n-k-1)R^2}{k(1-R^2)} \\ \text{F count} &= \frac{(46-2-1)0,695}{2(1-0,695)} \\ \text{F count} &= 48.992 \end{aligned}$$

Based on the calculations, the F-statistic is 48.992. At a significance level of 0.05 with degrees of freedom $df1 = 2$ and $df2 = 43$, the critical F-value is 3.214. Since $48.992 > 3.214$, we accept H3, indicating that both open innovation and accounting competency significantly impact business sustainability. This results show that both open innovation and accounting competency can affect the sustainability of MSMEs. Regarding the development of tourism area, this study is expected to contribute significantly to supporting the development of sustainable MSMEs and increasing tourism potential in South Kalimantan Province as a whole.

4 Conclusions

Religious tourism in Banjarmasin can attract domestic and foreign tourists. Tourism plays an important role in increasing the local economy. So, the local community around the tourism area

has the potential to improve the regional economy through their MSMEs. One of the biggest challenge to MSMEs is sustainability business, or the ability of MSMEs to survive in a competitive market and maintaining the trade-off between economic growth, environmental, and socio-cultural aspects. This study shows that open innovation and accounting competency can improve the sustainability of MSME businesses. Hence, the owner of MSMEs should pay attention to become more creative in running their business, and also join collaboration with other parties. Moreover, they need to enhance their ability in using accounting knowledge in their daily operations, which in turn can make their business last longer.

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