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Entrepreneurial Drivers and Performance in Indonesia's Creative Sector

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ABSTRACT

The creative industry stands out as a key sector with strong potential to foster sustainable national economic development by generating employment, boosting exports, and strengthening cultural identity. Nevertheless, it encounters considerable obstacles, especially in relation to entrepreneurial capabilities, which are often hindered by limited education, insufficient experience, and restricted access to resources and business networks. **The frequent incidence** of the "valley of death" during the early phases of business formation underscores the critical need for robust and adaptable entrepreneurial competency development. This research explores the key factors that shape entrepreneurial competence and examines their influence on building sustainable business performance in West Java's creative industries. **It focuses on** assessing the roles of knowledge, skills, entrepreneurial orientation, social capital, and entrepreneurial personality in shaping entrepreneurial competence, and how these competencies, in turn, impact various dimensions of business performance. A total of 259 creative entrepreneurs, each with a minimum of 3.5 years of business experience, participated in the study. **The data** were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). Results indicate that knowledge, skills, entrepreneurial orientation, and social capital significantly contribute to the development of entrepreneurial competence, whereas entrepreneurial personality does not present a meaningful effect. **Moreover, enhanced** entrepreneurial competence is shown to positively affect business outcomes such as sales growth, profit margins, customer satisfaction, and loyalty. The model exhibits strong predictive accuracy, explaining 70.4% of the variance in entrepreneurial competence and 36.2% in business performance. **These findings highlight** the critical role of fostering entrepreneurial competence through targeted improvements in knowledge, skills, entrepreneurial orientation and social capital to advance the creative economy sector.

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1. INTRODUCTION

The creative economy has emerged as one of the most dynamic and innovative sectors in the digital era [1]. According to the United Nations Conference on Trade and Development (UNCTAD), this sector has become a strategic driver of economic growth while supporting the Sustainable Development Goals (SDGs)

through job creation, poverty reduction, social inclusion, and cultural diversity (UNCTAD, 2022). In 2020, the creative economy contributed approximately 3.1% to global GDP, generated more than 50 million jobs, employed more young people (aged 15–29) than any other sector, and accounted for 21% of global service exports [2]. Its contribution varies across countries, ranging from 0.5% to 7.3% of GDP and 0.5% to 12.5% of employment, highlighting its resilience and strategic role in global trade and economic development, particularly during the COVID-19 pandemic [3]. In Indonesia, the creative economy has become a key contributor to national economic growth. In 2022, it contributed IDR 1,280 trillion to GDP and employed 23.98 million workers, comprising 10.18 million men and 13.80 million women. The workforce has grown by an average of 6.33% annually, accounting for 17.73% of total employment [4]. West Java recorded the largest share of creative economy employment (23.2%), followed by Central Java (18.22%) and East Java (16.11%) (Ministry of Tourism and Creative Economy, 2023) [5].

The development of entrepreneurial competence by the Indonesian government is proven by the issuance of Presidential Regulation No.2/2022 concerning National Entrepreneurship Development 2021-2024 and the 2025 Indonesian Creative Economy Development by the Indonesian Ministry of Trade [6]. National Medium Term Development Plan (RPJMN) 2025-2029 also prioritizes the development of entrepreneurship, creative industries, Human Resources (HR), science, technology, education, health, sports achievements, gender equality, as well as strengthening the role of women, youth (millennial generation and generation Z), and people with disabilities The Industrial Revolution 4.0 influences the creation of creativity and innovation in the creative industry. Technology that has the opportunity to increase the growth of the creative and creative industry is the application of Artificial Intelligence (AI). However, technology can also create ethical and legal challenges related to copyright, privacy and the authenticity of the work produced [7]. Digital skills can provide an advantage for technical tasks but do not result in recognition of leadership or creativity. The balinghou generation's fascination with digital devices is considered less "creative", thereby limiting their potential for career advancement in creative fields [8].

Building comprehensive and sustainable entrepreneurial competencies requires not only strategic planning from various relevant agencies but also a basic competency development plan that is systematically structured and adaptive to changes in the business environment. Numerous studies have been conducted to develop entrepreneurial competency models involving various antecedent factors [9], [10], and along with several previous studies, have identified entrepreneurial competency as a key variable in business success. However, these studies generally discuss entrepreneurial competencies [11]. Research conducted by [12] and [13] discusses the relationship between digital innovation and entrepreneurial competency, also focuses more on business performance, but does not explicitly map the components that form competencies to support business performance achievement.

Social capital/network-based perspective can better explain success in the creative industry than a resource-based or knowledge and skills based perspective. However, research by [14] suggests the importance of equipping entrepreneurs with the knowledge to run a company and empowering them to recognize their strengths and weaknesses [15]. demonstrate that to support business performance in the creative economy, in addition to dynamic capabilities, entrepreneurial orientation is also necessary. Concluded that four of the five personality traits, extraversion, agreeableness, conscientiousness, and openness to experience have a positive influence, while a neuroticism personality has a negative influence on the performance of small and medium enterprises. Referring to this, it is necessary to reexamine the factors that influence entrepreneurial competence in the creative industry [16].

This study aims to analyze the factors that influence entrepreneurial competence and its impact on the performance of creative industry businesses. Previous studies generally examined entrepreneurial competence using isolated antecedents such as knowledge, entrepreneurial orientation, or social capital separately. In contrast, this study proposes an integrated framework that simultaneously combines knowledge, skills, entrepreneurial orientation, social capital, and entrepreneurial personality to explain entrepreneurial competence and business performance. This comprehensive integration extends previous models by providing a more holistic understanding of entrepreneurial capability development within the creative industry [17]. By using Partial Least Squares Structural Equation Modeling (PLS-SEM), the final results of this study are expected to not only improve the performance of creative industry businesses but also achieve the target of (SDGs) 8 point 3 "decent work and economic growth" through the development of policies that support productive activities, decent job creation, entrepreneurship, creativity, and innovation, as well as encouraging the formalization and growth of micro, small, and medium enterprises, including through access to financial services.

2. LITERATURE REVIEW

The conceptual model in this study is designed to address various identified challenges. Based on a review of the literature, elements such as knowledge, skills, entrepreneurial orientation, social capital, and entrepreneurial personality play a significant role in shaping entrepreneurial competence, which supports business performance. Therefore, this study integrates these elements into a conceptual model to provide a comprehensive understanding of the factors influencing entrepreneurial competence and their impact on business performance. Figure 1 presents the conceptual model in this study.

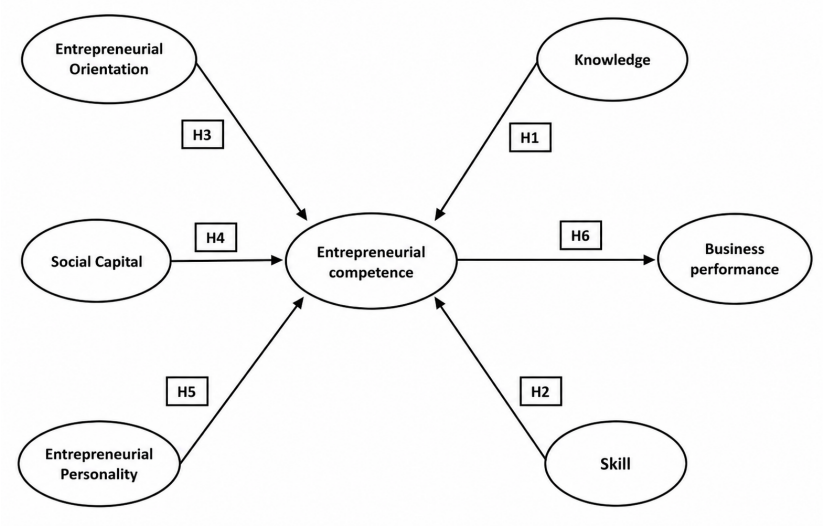


Figure 1. Conceptual Model

Knowledge plays a crucial role in the development of entrepreneurial competence. Demonstrate that knowledge management mediates the positive relationship between entrepreneurial competence and sustainable business performance in MSMEs. Furthermore, [14] emphasize that women's entrepreneurial competence enhances business performance by equipping them with operational knowledge and empowering them to recognize their capabilities and limitations [18]. These findings suggest that knowledge is a vital supporting factor for entrepreneurial competence. Therefore, the following hypothesis can be formed:

H1: Knowledge has a positive effect on entrepreneurial competence.

Skills are another fundamental factor contributing to entrepreneurial competence. Research by [12] highlights that innovation capabilities influence the competitiveness and performance Indonesian entrepreneurs [19]. confirm that the indirect impact of e-commerce maturity Indonesia's creative industry performance through innovation capabilities is stronger than the direct impact [20]. This underscores the importance of skills in the development of entrepreneurial competence. Therefore, the following hypothesis can be formed:

H2: Skills have a positive effect on entrepreneurial competence.

Entrepreneurial orientation significantly affects entrepreneurial competence [21]. confirmed that key elements of entrepreneurial competencies, such as communication, problem solving, initiative, planning, and organization, influence entrepreneurial orientation. Similarly, a positive relationship between entrepreneurial orientation and entrepreneurial competence. This indicates a reciprocal relationship between entrepreneurial orientation and competence, where both elements enhance each other. Therefore, the following hypothesis can be formed:

H3: Entrepreneurial orientation has a positive effect on entrepreneurial competence.

Social capital influences the development of entrepreneurial competencies. stated that social capital positively influences culinary business performance and innovation, while knowledge sharing mediates the effect of social capital on innovation [22]. This finding who revealed that social capital has a significant positive influence on entrepreneurial competency, innovation, and competitive advantage. Therefore, the following hypothesis can be formed:

H4: Social capital has a positive effect on entrepreneurial competence.

Entrepreneurial personality is another key determinant in the development of entrepreneurial competence. Research by [23] highlights that entrepreneurial characteristics such as the need for achievement,

internal drive, extraversion, and openness contribute to the enhancement of entrepreneurial capabilities. These findings indicate that entrepreneurial personality is an important factor in the development of entrepreneurial competence [24]. Entrepreneurial competence itself has a direct impact on business performance. Therefore, the following hypothesis can be formed:

H5: Entrepreneurial personality has a positive effect on entrepreneurial competence.

Demonstrate that competence dimensions such as organization, leadership, learning, entrepreneurial commitment significantly impact SME performance. Stated that entrepreneurial competencies, particularly organizational, conceptual, learning, strategic, opportunity, and risk taking competencies, are crucial for achieving higher innovation performance. Entrepreneurial competencies are useful for mitigating environmental pressures resulting from operational turbulence and uncertain policy changes [10]. These studies highlight the vital role of entrepreneurial competence in enhancing business performance [25].

H6: Entrepreneurial competence has a positive effect on business performance [26].

3. RESEARCH METHOD

This research uses PLS SEM, a statistical modeling method designed to analyze simultaneous relationships between variables in linear and cross sectional designs. PLS-SEM was selected because the primary objective of this study is prediction and theory development rather than theory confirmation [27]. The proposed model consists of multiple latent variables and exploratory relationships that are more appropriately estimated using variance-based SEM. Furthermore, SmartPLS 4 was employed using the Path Weighting Scheme with 5,000 bootstrap subsamples, bias corrected and accelerated confidence intervals, and two tailed significance testing at $\alpha = 0.05$. Even though the number of respondents is appropriate, the CB SEM justification requires very strict requirements. In addition, this research model combines several theories that still require further proof and have not been fully confirmed, so the use of SEM-PLS in this research is very appropriate [28].

This study employs a correlational approach using a 5-point Likert scale to examine the relationships among knowledge, skills, entrepreneurial orientation, social capital, entrepreneurial personality, entrepreneurial competence, and business performance [29]. The knowledge variable is measured through five dimensions: market, environmental, people, production, and financial knowledge. Skills comprise market orientation, creativity, and flexibility, while entrepreneurial orientation includes innovation, proactiveness, and risk-taking. Social capital is assessed through participation in local communities, social agency, trust and safety, environmental connections, family and friend connections, tolerance of diversity, life values, and work connections [30]. Entrepreneurial personality is measured using openness, conscientiousness, extraversion, agreeableness, and neuroticism. Entrepreneurial competence consists of strategic, organizing and leadership, opportunity, commitment, learning, and relational competencies [10]. Finally, business performance is measured through sales growth, profit margins, return on investment, customer satisfaction, and customer loyalty [31].

The data analysis process was carried out using PLS-SEM, involving three main stages. First, instrument validation and reliability testing were performed through Confirmatory Factor Analysis (CFA) to ensure the alignment of variable measurements with theoretical dimensions [6]. Second, relationships between variables were tested using path analysis to identify significant relationships. Third, a structural model was developed to predict the relationships among the research variables. This approach follows the principles of Partial Least Squares (PLS) as outlined, which provides a distribution free method for estimating latent variables and predicting manifest indicators, allowing greater flexibility compared to covariance based structural equation modeling such as LISREL [29].

4. RESULT AND DISCUSSION

4.1. Respondent Profile

This study was conducted in West Java Province, which has the largest concentration of creative industry workers and makes a significant contribution to Indonesia's GDP, according to the Central Statistics Agency [32]. Primary data were collected through online and offline questionnaires distributed to creative industry entrepreneurs [33]. The initial population consisted of 1,935 businesses registered by the Central Statistics Agency in 2020. Purposive sampling was employed to select entrepreneurs with at least 3.5 years of business experience. Based on the survey, 94.12% of businesses operate in the creative sector, with 36.05% established since 2011. A total of 656 businesses met the minimum experience criterion [34]. These businesses were classified according to the Indonesian Standard Industrial Classification to ensure balanced representation

across creative subsectors. Using the Slovin formula with a 5% margin of error, the minimum sample size was determined to be 259 respondents, which is consistent with the recommended range of 200–400 respondents for SEM analysis. Finally, the respondent distribution was proportionally adjusted based on the composition of creative industry subsectors [35].

4.2. Outer Model Result

Outer Model Analysis is carried out to ensure that the measurements used are deemed suitable for use as measurements (valid and reliable). Analysis outer model also aims to analyze the specifications of the relationship between latent variables and their indicators, which are referred to outer relation or measurement model [36]. The tests performed on the outer model are Convergent Validity, Composite Reliability, Cronbach Alpha, Average Variance Extracted (AVE), and Discriminant Validity. The analysis of the measurement model in this study revealed that all indicators in the variables of knowledge (X5), skills (X6), entrepreneurial orientation (X2), social capital (X3) and personality (X4), met the convergent validity threshold of 0.50, so that no indicators were removed. While for the Competence variable (X1), there are two indicators, namely X153 (0.359) and X154 (0.468) that do not meet the threshold of 0.50 so these indicators are removed from the measurement model [37].

The results of the analysis using Smart PLS in Table 1 show that the value of Cronbach's Alpha and Composite Reliability in this study was more than 0.7 [38]. This indicates a strong level of internal consistency and high reliability in measuring the construct [39].

Table 1. Output Model Result

Variable	Cronbach's Alpha	Composite Reliability (ρ_A)	Composite Reliability (ρ_C)	Average Variance Extracted (AVE)
Knowledge	0.935	0.936	0.942	0.462
Skills	0.922	0.924	0.933	0.540
Entrepreneurship Orientation	0.855	0.857	0.885	0.435
Social Capital	0.944	0.946	0.949	0.369
Entrepreneurial Personality	0.936	0.942	0.942	0.377
Entrepreneurship Competence	0.917	0.920	0.927	0.392
Business Performance	0.763	0.767	0.841	0.516

Estimation results cross loading in this study shows that the value loading of each indicator item towards its construct is greater than the value cross cross loading. Thus, it can be concluded that all constructs or latent variables already good discriminant validity, where the indicators in the construct indicator block are better than the other blocks [40].

4.3. Inner Model Result

A test inner model was conducted to see whether the relationship between latent variables, namely exogenous and endogenous constructs, can provide answers to questions regarding the relationship between latent variables that have been hypothesized previously. Test inner model or this structural test is seen from three types of values in the Smart PLS data processing that was carried out previously, namely by looking at the value of the Determination Coefficient or R Square, Prediction Relevance (Q2) and value Goodness of Fit (Gof).

The coefficient of determination or R-square (R^2) value measures the extent to which a model explains the variance of a particular variable. In this study, the R^2 value for the entrepreneurial competency variable is 0.704, while for the business performance variable it is 0.362. Both values exceed zero, indicating that the model has good predictive relevance. Specifically, the R^2 value of 0.704 indicates that 70.4% of the variance in entrepreneurial competency is explained simultaneously by the independent variables, namely knowledge, skills, entrepreneurial orientation, social capital, and entrepreneurial personality. Meanwhile, the R^2 value of 0.362 implies that 36.2% of the variance in business performance is explained by entrepreneurial competency. In the framework of Structural Equation Modeling, R^2 values above 0.7 indicate substantial explanatory power, while R^2 values exceeding 0.3 indicate moderate predictive relevance in management research. Therefore, these findings confirm that the proposed model exhibits strong predictive ability, with entrepreneurial competence playing an important role in explaining venture performance [41].

Table 2. R-square Values

Variables	R-square	R-square Adjusted
Competence	0.704	0.698
Business Performance	0.362	0.360

R-squared model compared with the AVE root value which can be seen in the Fornell Larcker Table 3. The square root of the Average Variance Extracted (AVE) was compared with the correlations among constructs to assess discriminant validity. The results indicate that several constructs do not fully meet the Fornell–Larcker criterion, suggesting that further evaluation is required to establish adequate discriminant validity. Mark R-square Adjusted for each variable above 0.2 which is considered high in the discipline. The R-square value was then compared with the square root of the Average Variance Extracted (AVE), as presented in the Fornell–Larcker criterion table. This comparison was conducted to further evaluate the discriminant validity of the measurement model by ensuring that the square root of each construct's AVE exceeded its correlations with other constructs. The results provide additional evidence that each latent variable is empirically distinct and adequately represents its corresponding indicators.

Table 3. Fornell-Larcker Criterion

Variables	Knowledge	Skills	Entrepreneurship Orientation	Social Capital	Personality	Competence	Business Performance
Knowledge	0.679						
Skills	0.781	0.735					
Entrepreneurship Orientation	0.589	0.564	0.660				
Social Capital	0.677	0.644	0.563	0.607			
Personality	0.686	0.643	0.536	0.661	0.614		
Competence	0.710	0.691	0.712	0.724	0.618	0.626	
Business Performance	0.468	0.488	0.420	0.567	0.452	0.602	0.719

The f^2 test is conducted to evaluate the magnitude of the influence of exogenous latent variables on endogenous latent variables. An f^2 value of 0.02 indicates a small influence, 0.15 indicates a medium influence, and 0.35 indicates a large influence. The results show that the entrepreneurial competency variable (X1) has a large influence on business performance (Y), with an f^2 value of 0.568. Entrepreneurial orientation (X2) and social capital (X3) have a moderate influence, with values of 0.232 and 0.137, respectively. Meanwhile, knowledge (X5) and skills (X6) have a small influence, with f^2 values of 0.033 and 0.027, respectively, while the personality variable does not have an influence, with an f^2 value of 0.000. Predictive relevance (Q2), known as Stone Geisser, explains the model's predictive capability when the value is above 0. This value is obtained using the formula, Q2 = 1-(1-R12) (1-R22) (1-Rp2) Where R12, R22, and Rp2 are the R-squared values of the exogenous variables in the equation model. If $Q2 > 0$, the model has predictive relevance, whereas if $Q2 < 0$, the model lacks predictive relevance. Based on this formula, the calculation for Q2 is 1-(1-0.362) (1-0.704), with a result of 0.8111. Therefore, this study has predictive relevance [42], indicating that the exogenous latent variables are capable of explaining the endogenous variables in the model. Furthermore, the model fit analysis shows a good match between the saturated model and the estimated model, as presented in Table 4.

Table 4. Suitability Analysis (Goodness of Fit Test) Overall Model

GOF	Cut-off Value	Saturated Model	Estimated Model	Remarks
SRMR	≤ 0.08	0.084	0.089	Good (Good Fit)
d_ULS	> 0.05	245.511	275.246	Good (Good Fit)
d_G	> 0.05	0.473	0.489	Good (Good Fit)
Chi-square	Preferably less than df	11.6	12.1	Good (Good Fit)
NFI	≥ 0.90	0.95	0.98	Good (Good Fit)

According to [12], model fit is assessed based on the extent to which the Goodness of Fit Index (GFI) satisfies the recommended cut-off values. Based on the analysis, the proposed model demonstrates a good overall fit. Furthermore, the structural model was evaluated by examining the direct relationships among the latent variables, where a relationship is considered significant if the t-statistic is > 1.960 or the p-value is < 0.050. As presented in Table 5, entrepreneurial knowledge (t = 2.247, p = 0.025), skills (t = 2.456, p = 0.014), entrepreneurial orientation (t = 4.713, p = 0.000), and social capital (t = 5.167, p = 0.000) have significant positive effects on entrepreneurial competence. In contrast, entrepreneurial personality does not have a significant effect on entrepreneurial competence (t = 0.255, p = 0.799). In addition, entrepreneurial

competence has a significant positive effect on business performance (t = 9.738, p = 0.000), confirming its important role in improving business performance [43].

Table 5. Values of Path Coefficients Influence of Latent Variables

Direct Influence	Original Sample (O)	T Statistics (—O/STDEV—)	P Values
Knowledge – Entrepreneurship Competence	0.161	2.247	0.025
Skills – Entrepreneurship Competence	0.165	2.456	0.014
Entrepreneurship Orientation – Entrepreneurship Competence	0.344	4.713	0.000
Social Capital – Entrepreneurial Competence	0.305	5.167	0.000
Entrepreneurial Personality – Entrepreneurial Competence	0.016	0.255	0.799
Entrepreneurship Competence – Business Performance	0.602	9.738	0.000

Based on the results of the structural model analysis, the relationships among the latent variables can be represented in the form of structural equations. These equations describe the direct effects of knowledge, skills, entrepreneurial orientation, social capital, and personality on entrepreneurial competence, as well as the effect of entrepreneurial competence on business performance. The structural equations derived from the analysis are presented as follows.

$$\begin{aligned}\text{Entrepreneurship Competence} &= 0.161 \times \text{Knowledge} + 0.165 \times \text{Skills} \\ &\quad + 0.344 \times \text{Entrepreneurial} \\ &\quad \text{Orientation} + 0.305 \times \text{Social Capital} \\ &\quad + 0.016 \times \text{Entrepreneurial Personality} + \varepsilon\end{aligned} \tag{1}$$

$$\text{Business Performance} = 0.602 \times \text{Entrepreneurial Competence} + \varepsilon \tag{2}$$

The entrepreneurial personality variable was declared to have no direct influence on the entrepreneurial competency variable due to the t-statistic value of $0.255 < 1.960$ and p-value of $0.799 > 0.050$. Referring to these conditions, further analysis was conducted regarding the direct influence between personality variables and personality dimensions on entrepreneurial competency, and the results obtained were as shown in Table 6.

Table 6. Value of the Direct Influence of Personality Variables

Direct Influence	Original Sample (O)	T Statistics (—O/STDEV—)	P Values
Entrepreneurial Personality – Entrepreneurship Competence	0.627	10.379	0.000
Openness to Experience Dimension – Entrepreneurship Competence	0.851	41.839	0.000
Conscientiousness Dimension – Entrepreneurship Competence	0.827	26.587	0.000
Extraversion Dimension – Entrepreneurial Competence	0.782	14.217	0.000
Agreeableness Dimension – Entrepreneurial Competence	0.861	30.212	0.000
Neuroticism Dimension – Entrepreneurial Competence	0.221	2.488	0.013

Based on the data in Table 6, the personality variable has a significant direct influence entrepreneurial competence, with a t-statistic of $10.379 > 1.960$ and a p-value of $0.000 < 0.050$. Likewise, all personality dimensions openness to experience (t = 41.839 p = 0.000), conscientiousness (t = 26.587 p = 0.000), extraversion (t = 14.217 p = 0.000), agreeableness (t = 30.212 p = 0.000), and neuroticism (t = 2.488 p = 0.013) have significant direct effects on entrepreneurial competence, as all t-statistics exceed 1.960 and all p-values are below 0.050. These findings indicate that entrepreneurial personality has a significant direct effect on entrepreneurial competence when examined independently. Among its five dimensions, neuroticism has the lowest original sample value, consistent with [12]. Therefore, the model was re-analyzed excluding neuroticism, with the results presented in Table 7.

Table 7. Path Coefficient Values of the Direct Influence of Competency Variables

Direct Influence	Original Sample (O)	T Statistics (—O/STDEV—)	P Values
Knowledge – Entrepreneurship Competence	0.169	2.325	0.019
Skills – Entrepreneurship Competence	0.133	1.993	0.046
Entrepreneurship Orientation – Entrepreneurship Competence	0.364	5.154	0.000
Social Capital – Entrepreneurial Competence	0.290	5.496	0.000
Entrepreneurial Personality (without Neuroticism Dimension) – Entrepreneurial Competence	0.043	0.667	0.505

Based on Table 7, similar results were obtained to the previous test, where the variables of knowledge, skills, entrepreneurial orientation, and social capital have a direct influence on entrepreneurial competence. Meanwhile, the personality variable, when tested simultaneously with other components of entrepreneurial competence, was proven to have significant influence on entrepreneurial competence, both when including the personality dimensions of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism, or when the neuroticism dimension was removed from the personality variable components [44].

4.4. Hypothesis Result

The data analysis model used to prove the hypothesis in this study is SEM (Structural Equation Modeling) with the PLS analysis tool (Partial Least Squares). Based on the research variables, a structural model is then built to answer the research objectives. The exogenous variables in this study are knowledge, skills, entrepreneurial orientation, social capital and personality. The variables intervening (connector/between) is entrepreneurial competence. The endogenous variable is business performance. The significance of the prediction model in testing the structural model can be seen from the direct influence value (path coefficient) and the t-statistic value of the exogenous variables against the endogenous variables as seen in Table 8 and Figure 2.

Table 8. Results of Hypothesis Testing

Hypothesis	Path (Relationship)	Original Sample (O)	T Statistics (—O/STDEV—)	Conclusion
H1	Knowledge – Entrepreneurship Competence	0.161	2.247	Accepted
H2	Skills – Entrepreneurship Competence	0.165	2.456	Accepted
H3	Entrepreneurship Orientation – Entrepreneurship Competence	0.344	4.713	Accepted
H4	Social Capital – Entrepreneurial Competence	0.305	5.167	Accepted
H5	Entrepreneurial Personality – Entrepreneurial Competence	0.016	0.255	Rejected
H6	Entrepreneurship Competence – Business Performance	0.602	9.738	Accepted

Based on the results presented in Table 8, five of the six proposed hypotheses are supported. Entrepreneurial knowledge (H1), skills (H2), entrepreneurial orientation (H3), and social capital (H4) have significant positive effects on entrepreneurial competence, with t-statistic values of 2.247, 2.456, 4.713, and 5.167, respectively, all exceeding the threshold of 1.960. Among these variables, entrepreneurial orientation has the strongest influence on entrepreneurial competence, with the highest path coefficient (O = 0.344). In contrast, entrepreneurial personality (H5) does not significantly affect entrepreneurial competence, as indicated by a t-statistic of 0.255, resulting in the rejection of the hypothesis. Furthermore, entrepreneurial competence has a significant positive effect on business performance (H6), with the highest path coefficient (O = 0.602) and a t-statistic of 9.738, indicating that entrepreneurial competence is the strongest predictor of business performance in this study.

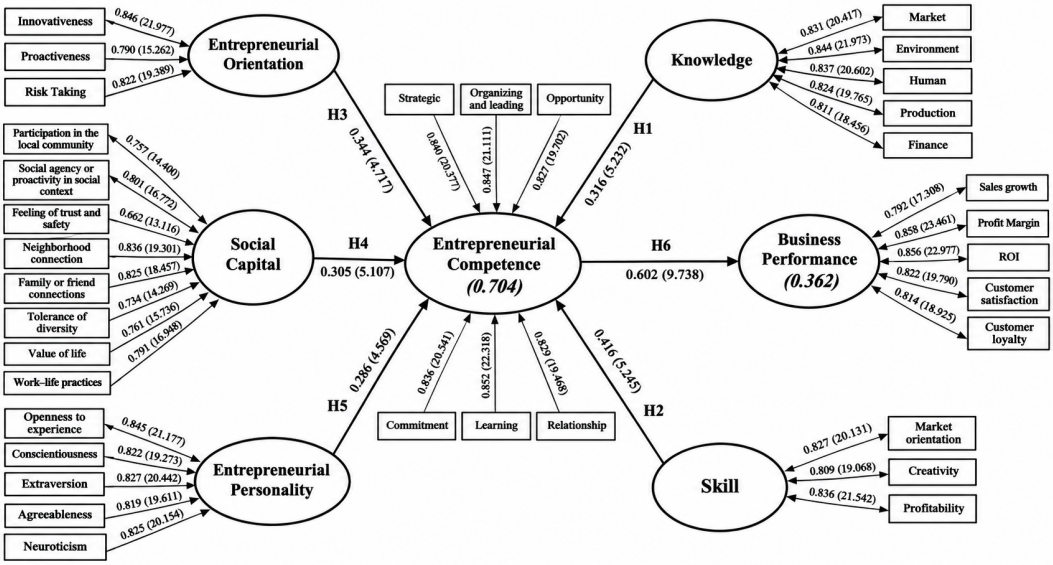


Figure 2. Output Dimensionality of Research Variables

Based on the results of the analysis in figure 2, it is known that the knowledge variable has an effect on entrepreneurial competence with a t-statistic value of $2.247 > 1.960$ so that hypothesis 1 can be declared proven or accepted. While the value original sample of 0.161 illustrates that every increase in knowledge by one unit will increase entrepreneurial competence by 0.161 units. This relationship has previously been highlighted by [45] and [14], and supported by various other studies. Showed that knowledge management practices significantly affect entrepreneurial performance through mechanisms such as dynamic capabilities and opportunity recognition. This finding is reinforced by [46], which revealed that the knowledge management process integrated with intellectual capital increases entrepreneurial orientation and innovation outcomes. The validity of this relationship is proven in diverse organizational contexts. showed that executive knowledge management enhances innovation capabilities, while concluded that knowledge management orientation strengthens the intensity of ambidextrous entrepreneurship. In the context of education, [47, 48] found that knowledge transfer in a diverse learning environment directly enhances entrepreneurial competence through the mediation of self-efficacy and cognitive flexibility. Recent research in developing countries, such as [49], emphasized that entrepreneurial knowledge, when combined with appropriate networking skills and capabilities, significantly improves MSME performance. This finding is in line with [50], who emphasized the specific impact of knowledge based competencies on business performance metrics.

The skill variable has a significant effect on entrepreneurial competence with a t-statistic value of $2.456 > 1.960$ so that Hypothesis 2 can be declared proven or accepted. While the original sample of 0.165 illustrates that every increase in skills by one unit will increase entrepreneurial competence by 0.165 units. This relationship was first introduced, showed that entrepreneurial skills, especially when combined with market orientation and networking capabilities, significantly improve entrepreneurial competence and micro-enterprise performance [31]. Recent research also highlights the interaction between innate and acquired skills in entrepreneurial development. Skills contribute to entrepreneurial competency through multiple pathways, such as productive thinking, motivation, interpersonal skills, and leadership, all of which are interdependent. Furthermore, research has shown that these skills are dynamic, developing through experiential learning and practical application in an entrepreneurial context.

The entrepreneurial orientation variable has a significant effect on entrepreneurial competence with a t-statistic value of $4.713 > 1.960$, so that Hypothesis 3 can be declared proven or accepted. While the original sample of 0.305 illustrates that every increase in entrepreneurial orientation by one unit will increase entrepreneurial competence by 0.305 units. This relationship, strengthened by [21], and supported by various methodological approaches. The core dimensions of entrepreneurial orientation, such as creativity, innovation, proactivity, and autonomy, show a significant positive correlation with the development of entrepreneurial competencies. Research also confirms that entrepreneurial competence functions as a significant mediating variable between entrepreneurial orientation and organizational performance [23]. In addition, this relationship is positively moderated by the availability of organizational resources, highlighting the complex interaction between entrepreneurial orientation and resource utilization capabilities. Overall, the existing empirical evidence consistently supports this hypothesis, confirming that entrepreneurial orientation is an important factor in developing entrepreneurial competencies, with validated applications across a variety of organizational contexts.

The social capital variable has a significant effect on entrepreneurial competence with a t-statistic value of $5.167 > 1.960$ so that Hypothesis 4 can be declared proven or accepted. While the value original sample of 0.305 illustrates that every increase in social capital by one unit will increase entrepreneurial competence by 0.305 units. This relationship was initially established and has been confirmed by various contemporary studies. Social capital, particularly through network diversity, shows a significant positive correlation with entrepreneurial performance. This relationship operates through mechanisms such as increased access to resources, increased opportunity recognition, and strengthened operational capabilities. At the individual level, an entrepreneur's social skills and network relationships significantly enhance access to critical resources and the development of core competencies. Meanwhile, at the institutional level, national and regional social capital frameworks support entrepreneurial activities by facilitating resource mobilization and opportunity utilization.

The entrepreneurial personality variable does not have a significant effect on entrepreneurial competence (t-statistic = $0.016 < 1.960$), indicating that Hypothesis 5 is rejected. This finding differs from previous studies that reported a positive relationship between personality traits and entrepreneurial competencies [51]. The results suggest that entrepreneurial competence is influenced more by entrepreneurial orientation, education, training, and continuous self-development than by inherent personality traits. Furthermore, technological advances, social media, and Artificial Intelligence (AI) enable entrepreneurs with diverse personalities to im-

prove business performance, thereby reducing the direct role of personality in competency development [52]. In contrast, entrepreneurial competence has a significant positive effect on business performance (t-statistic = $9.738 > 1.960$; $\beta = 0.602$), confirming that higher entrepreneurial competence leads to better business performance, consistent with previous studies [10, 53].

5. MANAGERIAL IMPLICATIONS

The findings of this study provide important managerial implications for policymakers, educational institutions, business support organizations, and creative industry entrepreneurs in strengthening the sustainability of Indonesia's creative economy. Since entrepreneurial competence was identified as the strongest predictor of business performance, competency development should become the primary focus of entrepreneurship development programs rather than relying solely on financial assistance or infrastructure support. The results further indicate that entrepreneurial orientation and social capital are the most influential drivers of entrepreneurial competence, followed by knowledge and entrepreneurial skills. Therefore, government agencies and entrepreneurship development institutions should design integrated competency-based programs that emphasize innovation capability, opportunity recognition, strategic decision-making, digital transformation, and collaborative networking. Business incubation, mentoring, and entrepreneurship training should be implemented continuously to enable entrepreneurs to adapt to dynamic market conditions while improving their competitiveness and long-term business sustainability.

For educational institutions and entrepreneurial communities, the findings suggest that entrepreneurial success depends more on competencies that can be developed than on inherent personality traits. Consequently, entrepreneurship education should adopt experiential learning approaches through project-based learning, startup incubation, business simulations, and industry collaboration to strengthen innovation, leadership, opportunity recognition, and networking capabilities. At the same time, business associations and entrepreneurial communities should facilitate knowledge sharing, mentoring programs, and cross-sector collaboration to strengthen social capital and improve access to business opportunities, markets, and external resources. By integrating the roles of government, academia, industry, communities, and the media through a pentahelix collaboration model, the entrepreneurial ecosystem can be strengthened to foster continuous competency development, improve business performance, and support the achievement of Sustainable Development Goal (SDG) 8 through sustainable economic growth, employment creation, and innovation in Indonesia's creative industry sector.

6. CONCLUSION

This study highlights the relationship between entrepreneurial competency and business performance in the creative industry, particularly in West Java, Indonesia. The results demonstrate that entrepreneurial competency plays a significant role in improving business performance in the creative industry. This is evidenced by an R^2 value of 0.362, indicating that 36.2% of the variance in business performance is explained by entrepreneurial competency. Improving the competency or quality of human resources in the creative industry not only improves business performance and economic growth but can also contribute to the creation of decent employment for women and men, including youth and people with disabilities, as targeted by Sustainable Development Goal (SDG) 8 "decent work and economic growth". Knowledge, skills, entrepreneurial orientation, and social capital were shown to have a positive and significant influence on the development of entrepreneurial competency, with an R^2 value of 0.704. Conversely, entrepreneurial personality, when tested simultaneously with knowledge, skills, entrepreneurial orientation, and social capital, was shown to have no significant influence on entrepreneurial competency. However, when entrepreneurial personality was the sole exogenous variable analyzed in relation to entrepreneurial competency, the results indicated a direct influence between personality and entrepreneurial competency. This indicates that entrepreneurial personality is not a factor in determining entrepreneurial competency.

The PLS SEM results highlight that innovation, in the entrepreneurial orientation variable, is the primary dimension with the highest influence on improving entrepreneurial competency. The managerial implications of these findings are the need for development policies that support productive, creative, and innovative activities in promoting local culture and products, thus significantly impacting the sustainability of creative industry businesses. The government and academics also need to design entrepreneurship education and training programs that focus on the creation of innovation and diversification of technology based products/services to

minimize the impact of the valley of death and the dynamic business environment. Implementation of these programs should involve communities, media, and businesses (pentahelix) to strengthen business networks and foster cross sectoral/regional collaboration. This study provides a strategic contribution to the development of the creative economy sector by fostering entrepreneurial competencies. However, this study has certain limitations. Future research is recommended to expand the research area with a longitudinal approach to observe the long term impact of entrepreneurial competency development programs on the sustainability and growth of creative industry businesses. Research can also enrich the model by incorporating the entrepreneurial ecosystem as a moderator in the relationship between entrepreneurial competency and business performance in the creative industry.

7. DECLARATIONS

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7.3. Data Availability Statement

The dataset supporting the findings of this study is publicly available in the Zenodo repository at https://doi.org/10.5281/zenodo.21232129. Additional information is available from the corresponding author upon reasonable request.

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7.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

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